

Strategies Used by Microsoft to Leverage its Monopoly Position in Operating Systems to Internet Browser Markets

Michael Baye and Patrick Scholten prepared this case to serve as the basis for classroom discussion rather than to represent economic or legal fact. The case is a condensed and slightly modified version of the public copy of the Complaint filed in Civil Action No. 94-1546 on July 15, 1994 in United States of America v. Microsoft Corporation.

MICROSOFT

Microsoft is the world's largest supplier of computer software for personal computers (PCs), may have engaged in anti-competitive conduct and created anti-competitive effects of its past unlawful conduct. Microsoft sells and licenses PC operating systems throughout the United States and the world and delivers copies of its operating systems to PC manufacturers (often referred to as Original Equipment Manufacturers or "OEMs") and retail customers across state lines and international borders. Microsoft is engaged in, and its activities substantially affect, interstate and foreign commerce.

Microsoft may possess (and for several years may have possessed) monopoly power in the market for personal computer operating systems. Microsoft's "Windows" operating systems are used on over 80% of Intel-based PCs, the dominant type of PC in the United States. More than 90% of new Intel-based PCs are shipped with a version of Windows pre-installed. OEMs have no commercially reasonable alternative to Microsoft operating systems for the PCs that they distribute.

There are high barriers to entry in the market for PC operating systems. One of the most important barriers to entry is the barrier created by the number of software applications that must run on an operating system in order to make the operating system attractive to end users. Because end users want a large number of applications available, because most applications today are written to run on Windows, and because it would be prohibitively difficult, time-consuming, and expensive to create an alternative operating system that would run the programs that run on Windows, a potential new operating system entrant faces a high barrier to successful entry.

Accordingly, the most significant potential threat to Microsoft's operating system monopoly is not from a direct, frontal assault by existing or new operating systems, but from new software products that may support, or themselves become, alternative "platforms" to which applications can be written, and which can be used in conjunction with multiple operating systems, including but not limited to Windows.

To protect its valuable Windows monopoly against such potential competitive threats, and to extend its operating system monopoly into other software markets, Microsoft may have engaged in a series of anticompetitive activities. Microsoft's conduct includes

agreements tying other Microsoft software products to Microsoft's Windows operating system; exclusionary agreements precluding companies from distributing, promoting, buying, or using products of Microsoft's software competitors or potential competitors; and exclusionary agreements restricting the right of companies to provide services or resources to Microsoft's software competitors or potential competitors.

One important current source of potential competition for Microsoft's Windows operating system monopoly comes from the Internet, described by Microsoft's CEO, Bill Gates, in May 1995 as "the most important single development to come along since the IBM PC was introduced in 1981." As Mr. Gates recognized, the development of competing Internet browsers -- specialized software programs that allow PC users to locate, access, display, and manipulate content and applications located on the Internet's World Wide Web ("the web") -- posed a serious potential threat to Microsoft's Windows operating system monopoly. Mr. Gates warned his executives:

A new competitor "born" on the Internet is Netscape. Their browser is dominant, with a 70% usage share, allowing them to determine which network extensions will catch on. They are pursuing a multi-platform strategy where they move the key API [applications programming interface] into the client to commoditize the underlying operating system.

Internet browsers pose a competitive threat to Microsoft's potential operating system monopoly in two basic ways. First, as discussed above, one of the most important barriers to the entry and expansion of potential competitors to Microsoft in supplying PC operating systems is the large number of software applications that will run on the Windows operating system (and not on other operating systems). If application programs could be written to run on multiple operating systems, competition in the market for operating systems could be revitalized. The combination of browser technology and a new programming language known as "Java" hold out this promise. Java is designed in part to permit applications written in it to be run on different operating systems. As such, it threatens to reduce or eliminate one of the key barriers to entry protecting Microsoft's potential operating system monopoly.

Non-Microsoft browsers are perhaps the most significant vehicle for distribution of Java technology to end users. Microsoft has recognized that the widespread use of browsers other than its own threatens to increase the distribution and use of Java, and in so doing threatens Microsoft's potential operating system monopoly. For this reason, a presentation to Microsoft CEO Bill Gates on January 5, 1997, on how to respond to the Java threat emphasized "Increase IE share" as a key strategy.

Second, Microsoft recognized that Netscape's browser was itself a "platform" to which many applications were being written -- and to which (if it thrived) more and more applications would be written. Since Netscape's browser could be run on any PC operating system, the success of this alternative platform also threatened to reduce or eliminate a key barrier protecting Microsoft's potential operating system monopoly. This is the threat that Microsoft's CEO Bill Gates referred to as the threat that Netscape would "commoditize" the operating system.

To respond to the competitive threat posed by Netscape's browser, Microsoft embarked on an extensive campaign to market and distribute Microsoft's own Internet browser, which it named "Internet Explorer" or "IE." Microsoft executives have described this campaign as a "jihad" to win the "browser war."

Because of its resources and programming technology, Microsoft was well positioned to develop and market a browser in competition with Netscape. Indeed, continued competition on the merits between Netscape's Navigator and Microsoft's Internet Explorer would have resulted in greater innovation and the development of better products at lower prices. Moreover, in the absence of Microsoft's anticompetitive conduct, the offsetting advantages of Microsoft's size and dominant position in desktop software and Netscape's position as the browser innovator and the leading browser supplier, and the benefit to consumers of product differentiation, could have been expected to sustain competition on the merits between these companies, and perhaps others that have entered and might enter the browser market.

Microsoft, however, has not been willing simply to compete on the merits. For example, as Microsoft's Christian Wildfeuer wrote in February 1997, Microsoft concluded that it would "be very hard to increase browser share on the merits of IE 4 alone. It will be more important to leverage the OS asset to make people use IE instead of Navigator." Thus, Microsoft might have began, and might continue today, a pattern of potential anticompetitive practices designed to thwart browser competition on the merits, to deprive customers of a choice between alternative browsers, and to exclude Microsoft's Internet browser competitors.

Microsoft's conduct with respect to browsers is a prominent and immediate example of the pattern of potentially anticompetitive practices undertaken by Microsoft with the purpose and effect of maintaining its PC operating system monopoly and extending that monopoly to other related markets.

Initially, Microsoft attempted to eliminate competition from Netscape by seeking an express horizontal agreement not to compete. In May 1995, Microsoft executives met with top Netscape personnel in an attempt to induce Netscape not to compete with Microsoft and to divide the browser market, with Microsoft becoming the sole supplier of browsers for use with Windows 95 and successor operating systems and with Netscape becoming the sole supplier of browsers for operating systems other than Windows 95 or its successors. Netscape refused to participate in Microsoft's illegal scheme.

Having failed simply to stop competition by agreement, Microsoft set about to exclude Netscape and other browser rivals from access to the distribution, promotion, and resources they needed to offer their browser products to OEMs and PC users pervasively enough to facilitate the widespread distribution of Java or to facilitate their browsers becoming an attractive programming platform in their own right.

First, Microsoft invested hundreds of millions of dollars to develop, test, and promote Internet Explorer, a product which it distributes without separate charge. As Paul Maritz, Microsoft's Group Vice President in charge of the Platforms Group, was quoted in the New York Times as telling industry executives: "We are going to cut off their air supply."

Everything they're selling, we're going to give away for free." As reported in the Financial Times, Microsoft CEO Bill Gates likewise warned Netscape (and other potential Microsoft challengers) in June 1996: "Our business model works even if all Internet software is free. . . . We are still selling operating systems. What does Netscape's business model look like? Not very good."

But Mr. Gates did not stop at free distribution. Rather, Microsoft purposefully set out to do whatever it took to make sure significant market participants distributed and used Internet Explorer instead of Netscape's browser -- including paying some customers to take IE and using its unique control over Windows to induce others to do so. For example, in seeking the support of Intuit, a significant application software developer, Mr. Gates was blunt, as he reported in a July 1996 internal e-mail:

I was quite frank with him [Scott Cook, CEO of Intuit] that if he had a favor we could do for him that would cost us something like \$1M to do that in return for switching browsers in the next few months I would be open to doing that.

Second, Microsoft unlawfully required PC manufacturers, as a condition of obtaining licenses for the Windows 95 operating system, to agree to license, preinstall, and distribute Internet Explorer on every Windows PC such manufacturers shipped. By virtue of the monopoly position Windows enjoys, it was a commercial necessity for OEMs to preinstall Windows 95 -- and, as a result of Microsoft's illegal tie-in, Internet Explorer -- on virtually all of the PCs they sold. Microsoft thereby unlawfully tied its Internet Explorer software to the Windows 95 version of its monopoly operating system and unlawfully leveraged its operating system monopoly to require PC manufacturers to license and distribute Internet Explorer on every PC those OEMs shipped with Windows.

Third, Microsoft intends now unlawfully to tie its Internet browser software to its new Windows 98 operating system, the successor to Windows 95. Microsoft has made clear that, unless restrained, it will continue to misuse its operating system monopoly to artificially exclude browser competition and deprive customers of a free choice between browsers.

Microsoft designed Windows 98 so that removal of Internet Explorer by OEMs or end users is operationally more difficult than it was in Windows 95. Although it is nevertheless technically feasible and practicable to remove Microsoft's Internet browser software from Windows 98 and to substitute other Internet browser software, OEMs are prevented from doing so by Microsoft's contractual tie-in.

Internet browsers are separate products competing in a separate product market from PC operating systems, and it is efficient to supply the two products separately. Indeed, Microsoft itself has consistently offered, promoted, and distributed its Internet browser as a stand-alone product separate from, and not as a component of, Windows, and intends to continue to do so after the release of Windows 98. For example, Microsoft will make available separately the same Internet browser that is bundled with Windows 98, through an upgraded version of Internet Explorer 4 that will be distributed and installed wholly apart from Windows 98, including for non-Windows, non-Microsoft operating systems. In addition Microsoft already plans to introduce a subsequent version of IE (Internet Explorer 5)

that also will be distributed and installed separately from Windows 98, including for non-Windows, non-Microsoft operating systems.

Microsoft's tying of its Internet browser to its potential monopoly operating system reduces the ability of customers to choose among competing browser products because it forces OEMs and other purchasers to license or acquire the tied combination whether they want Microsoft's Internet browser or not. Microsoft's tying -- which it can accomplish because of its monopoly power in Windows -- impairs the ability of its browser rivals to compete to have their browsers preinstalled by OEMs on new PCs and thus substantially forecloses those rivals from an important channel of browser distribution.

Microsoft executives have repeatedly recognized the significant advantage that Microsoft (and only Microsoft) receives by tying its Internet browser to its operating system, rather than having to compete on the merits. As Microsoft Senior Vice President James Allchin wrote to Microsoft Group Vice-President Paul Maritz on January 2, 1997:

You see browser share as job 1 I do not feel we are going to win on our current path. *We are not leveraging Windows from a marketing perspective. . . . We do not use our strength -- which is that we have an installed base of Windows and we have a strong OEM shipment channel for Windows.* Pitting browser against browser is hard since Netscape has 80% market share and we have < 20% *I am convinced we have to use Windows — this is the one thing they don't have ...* (emphasis added)

Fourth, Microsoft has possibly misused its Windows operating system monopoly by requiring PC OEMs to agree, as a condition of acquiring a license to the Windows operating system, to adopt the uniform "boot-up" sequence and "desktop" screen specified by Microsoft. This sequence determines the screens that every user sees upon turning on a Windows PC. Microsoft's exclusionary restrictions forbid, among other things, any changes by an OEM that would remove from the PC any part of Microsoft's Internet Explorer software (or any other Microsoft-dictated software) or that would add to the PC a competing browser (or other competing software) in any more prominent or visible way (including by highlighting as part of the startup sequence or by more prominent placement on the desktop screen) than the way Microsoft requires Internet Explorer to be presented.

Virtually every new PC that comes with Windows, no matter which OEM has built it, presents users with the same screens and software specified by Microsoft. As a result of Microsoft's restrictive boot-up and desktop screen agreements, OEMs are deprived of the freedom to make competitive choices about which browser or other software product should be offered to their customers, the ability to determine for themselves the design and configuration of the initial screens displayed on the computers they sell, and the ability to differentiate their products to serve their perceptions of consumers' needs.

These restrictive agreements also maintain, and enhance the importance of, Microsoft's ability to provide preferential placement on the desktop (or in the boot-up sequence) to various Internet Service Providers ("ISPs") and Internet Content Providers

("ICPs"), in return for those firms' commitments to give preferential distribution and promotion to Internet Explorer and to restrict their distribution and promotion of competing browsers.

As a result, these restrictions further exclude competing Internet browsers from the most important channels of distribution, substantially reduce OEMs' incentives and abilities to innovate and differentiate their products in ways that could facilitate competition between Microsoft products and competing software products, and enhance Microsoft's ability to use the near-ubiquity of its Windows operating system monopoly to gain dominance in both the Internet browser market and other software markets.

Fifth, Microsoft has entered into anticompetitive agreements with virtually all of the nation's largest and most popular ISPs, including particularly Online Service Providers ("OLs"), firms which provide the communications link between a subscriber's PC and the Internet and sometimes related services and content as well. Windows 95 (and soon Windows 98) presents PC users with "folders" or lists including the names of certain of these ISPs that have entered into agreements with Microsoft and enable users readily to subscribe to their services. Because Windows is preinstalled on nearly all PCs in the United States, inclusion in these folders and lists is of substantial value to ISPs. As a result, almost all of the largest and most significant ISPs in the United States have sought placement on the Windows desktop.

Microsoft's agreements with ISPs allow Microsoft to leverage its operating system monopoly by conditioning these ISPs' inclusion in Windows' lists on such ISPs' agreement to offer Microsoft's Internet Explorer browser primarily or exclusively as the browser they distribute; not to promote or even mention to any of their subscribers the existence, availability, or compatibility of a competing Internet browser; and to use on their own Internet sites Microsoft-specific programming extensions and tools that make those sites look better when viewed through Internet Explorer than when viewed through competing Internet browsers.

Microsoft's anticompetitive agreements with ISPs have substantially foreclosed competing browsers from this major channel of browser distribution. Over thirty percent of Internet browser users have obtained their browsers from ISPs.

Microsoft has recently modified certain of its ISP agreements to reduce some of these restrictions. However,

- the modifications do not affect Microsoft's illegal agreements with On-Line Service Providers (e.g., America Online, CompuServe), which serve the majority of Internet users in the United States;
- even the modified agreements remain unlawful in other respects;
- the modifications do not address the anticompetitive effects such agreements have already caused; and
- there is no assurance that Microsoft will not re-impose the restrictions in the future.

Sixth, Microsoft has entered into anticompetitive agreements with Internet Content Providers (“ICPs”). Prominent “channel buttons” advertising and providing direct Internet access to select ICPs appear on the “Active Desktop” feature that is shipped with the Windows operating system.

Microsoft’s agreements condition an ICP’s placement on one of these buttons on the ICP’s agreement to not pay or otherwise compensate Microsoft’s primary Internet browser competitors (including by distributing their browsers) for the distribution, marketing, or promotion of the ICP’s content; to not promote any browser produced by any of Microsoft’s primary browser competitors; to not allow any of Microsoft’s primary browser competitors to promote and highlight the ICP’s “channel” content on or for their browsers; and to design its web sites using Microsoft-specific, proprietary programming extensions so that those sites look better when viewed with Internet Explorer than when viewed through a competing browser. These illegal agreements further inhibit competition on the merits between Internet Explorer and other Internet browsers.

As with some of its restrictive ISP agreements, Microsoft has recently announced certain modifications of its anticompetitive ICP agreements. However, these modifications do not remedy the anticompetitive effects such agreements have had and do not prevent Microsoft from entering into the same or similar agreements in the future.

Collectively, Microsoft’s contracts with OEMs, ISPs, and ICPs may have unreasonably restrained and may continue to unreasonably restrain competition in the market for Internet browsers. They artificially increase the share of the market held by Microsoft’s Internet Explorer, and they threaten to “tip” the market permanently to Internet Explorer, not because OEMs or PC customers have freely chosen Microsoft’s product in a competitive marketplace, but because of the illegal exercise of monopoly power by Microsoft.

This case challenges Microsoft’s concerted attempts to maintain its monopoly in operating systems and to achieve dominance in other markets, not by innovation and other competition on the merits, but by tie-ins, exclusive dealing contracts, and other anticompetitive agreements that deter innovation, exclude competition, and rob customers of their right to choose among competing alternatives.

Microsoft’s conduct may adversely affect innovation, including by:

- impairing the incentive of Microsoft’s competitors and potential competitors to undertake research and development, because they know that Microsoft will be able to limit the rewards from any resulting innovation;
- impairing the ability of Microsoft’s competitors and potential competitors to obtain financing for research and development;
- inhibiting Microsoft’s competitors that nevertheless succeed in developing promising innovations from effectively marketing their improved products to customers;
- reducing the incentive and ability of OEMs to innovate and differentiate their products in ways that would appeal to customers; and
- Reducing competition and the spur to innovation by Microsoft and others that only competition can provide.

The purpose and effect of Microsoft's conduct with respect to Internet browsers have been and, if not restrained, might be:

- to preclude competition on the merits between Microsoft's browser and other browsers;
- to preclude potential competition with Microsoft's operating system from competing browsers and from other companies and software whose use is facilitated by these browsers;
- to extend Microsoft's Windows operating system monopoly to the Internet browser market; and
- To maintain Microsoft's Windows operating system monopoly.

HISTORY OF CASES AGAINST MICROSOFT

The July 1994 Monopolization Case

On July 15, 1994, the United States commenced an action against Microsoft for unlawfully maintaining its monopoly in the market for PC operating systems. The complaint alleged, among other things, that Microsoft had engaged in anticompetitive agreements and marketing practices directed at OEMs. These agreements included agreements that required OEMs to pay Microsoft for each non-Microsoft operating system that they distributed and long-term agreements that required unreasonably large minimum commitments from OEMs. The effect of Microsoft's practices and agreements was unlawfully to maintain its monopoly in the PC operating system market.

The Final Judgment prohibited Microsoft from continuing the challenged practices and agreements and prohibited Microsoft from engaging in certain other conduct that could have similar anticompetitive results, including enjoining Microsoft from conditioning licenses to its operating system on an OEM's either licensing another Microsoft product or agreeing not to license or distribute a non-Microsoft product. The purpose of this part of the judgment was to prevent Microsoft from conditioning access to its monopoly operating system in order to protect or extend that monopoly.

On October 20, 1997, the United States petitioned the court to show why Microsoft should not be found in civil contempt for violating the 1995 Final Judgment by requiring OEMs to license and distribute Microsoft's Internet browser as a condition of obtaining a license for Microsoft's Windows 95 operating system.

On December 11, 1997, the Court entered a preliminary injunction enjoining Microsoft "from the practice of licensing the use of any Microsoft personal computer operating system software (including Windows 95 or any successor version thereof) on the condition, express or implied, that the licensee also license and preinstall any Microsoft Internet browser software (including Internet Explorer 3.0, 4.0, or any successor versions thereof) pending further order of Court."

The December 1997 Contempt Proceeding

On December 15, 1997, Microsoft -- without seeking any modification or clarification of the Court's order and without consulting the United States -- publicly announced that any OEM that did not agree to license and distribute Microsoft's Internet Explorer could not obtain a license to a working, current version of Microsoft's Windows operating system. Microsoft announced that the only versions of Windows 95 available to OEMs that declined to license and distribute Microsoft's Internet browser would be (1) a version of Windows 95 that Microsoft itself admitted would not work and (2) a two-and-a-half-year-old version of Windows 95 that Microsoft admitted was not commercially viable.

On December 17, 1997, the United States moved to have Microsoft held in contempt for this clear violation of the Court's December 11, 1997 Order. On January 21, 1998, the United States entered an order that required Microsoft to provide OEMs with two options in addition to those previously provided by Microsoft:

- the option of installing on their PCs a version of Windows 95 that was the same as the current December 1997 version of Windows 95 (OEM Service Release 2.5) "with the sole exception of Internet Explorer 4.0 functionality" not included; and
- the option of shipping their PCs after removing the Internet Explorer "icon" from the desktop and from the "Start menu" within Windows 95.

The Appeal of the Court's December 1997 Order

Microsoft appealed the Court's December 1997 order, arguing that since the United States had there brought an action for contempt and for permanent injunctive relief and not explicitly for a preliminary injunction, it was improper for the Court to have entered a preliminary injunction (even though the restraint of a preliminary injunction was less than the restraint that would have been imposed by a finding of contempt); that since the United States was there seeking to enforce the Final Judgment and had not commenced a new action under the antitrust laws, the alleged "integration" of Windows 95 and Microsoft's IE browser was a complete defense; and that antitrust tie-in principles and precedents could not be used to construe the Final Judgment.

Microsoft believed the Court's December Order "prima facie applied to Windows 98." Nevertheless, Microsoft did not seek a "further order" of the Court regarding Windows 98, nor did it plan to offer an unbundled version of Windows 98. When the United States was informed of Microsoft's Windows 98 plans, it offered to join Microsoft in a motion to the Court seeking clarification of the December Order. Instead, Microsoft moved on May 5, 1998, in the Court of Appeals for a stay of the December Order as it applied to Windows 98.

On May 12, 1998, the Court of Appeals granted Microsoft's application for a stay, holding: "To the extent that the preliminary injunction awards the United States relief to which it has made no effort to show an entitlement under the consent decree, we must grant the stay." The Court also held: "The United States presented no evidence suggesting that Windows 98 was not an 'Integrated Product' and thus exempt from the prohibitions of Section IV (E) (I)."

THE RELEVANT MARKETS

There are two relevant product markets: The market for personal computer operating systems, and the market for Internet browsers.

The PC Operating System Market

The market for personal computer operating systems consists of operating systems written for the Intel x86/Pentium (or "PC") class of microprocessors. These microprocessors perform central processing unit ("CPU") functions for the vast majority of personal computers, and their operating systems manage the interaction between the CPU and the various pieces of hardware, such as a monitor or printer, attached to such computers. Operating systems also control and direct the interaction between applications, such as word processing or spreadsheet programs, and the CPU. No other product duplicates or fully substitutes for the operating system. The geographic market for PC operating systems is worldwide.

Because of the complex interactions among operating system software, applications software, and the hardware attached to the PC, an operating system written for one class of microprocessors typically will not work on another class of microprocessors without significant modification. Thus, OEMs and PC users do not consider an operating system that runs a non-Intel-based personal computer to be an effective substitute for an operating system that runs an Intel-based personal computer.

The Internet Browser Market

Internet browsers are specialized software programs that allow PC users conveniently to locate, access, display, and manipulate content and applications located on the web. Internet browsers are essential for quick, easy, and efficient use of the web and have been instrumental in building the Internet's popularity. No other product duplicates or fully substitutes for the functionality of Internet browsers. The geographic market for Internet browsers is worldwide.

Microsoft's Windows Operating System Monopoly

Microsoft markets a variety of PC operating systems, including MS-DOS, Windows 3.11, Windows for Workgroups, Windows NT Workstation, and Windows 95. Beginning in or around June 1998, Microsoft will introduce to the market the latest version of its operating system for Intel-based PCs, Windows 98.

Microsoft has maintained a monopoly share (in excess of 80%) of the PC operating system market over an extended period of time. The durability of Microsoft's market power in part reflects the fact that the PC operating system market is characterized by certain economies of scale in production and by significant "network effects." In other words, the PC operating system for which there are the greatest number, variety, and quality of applications will be selected by the large majority of PC users, and in turn writers of applications will write their programs to work with the most commonly used operating

system, in order to appeal to as many potential customers as possible. Economies of scale and network effects, which reinforce one another, result in high barriers to entry.

The primary channel through which Microsoft distributes its operating systems is pre-installation on new PCs by OEMs. Because a PC can perform virtually no useful tasks without an operating system, OEMs consider it a commercial necessity to preinstall an operating system on nearly all of the PCs they sell. And because there is no viable competitive alternative to the Windows operating system for Intel-based computers, OEMs consider it a commercial necessity to preinstall Windows on nearly all of their PCs. Both OEMs and Microsoft recognize that OEMs have no commercially viable substitute for Windows, and that they cannot preinstall Windows on their PCs without a license from Microsoft. For example:

- Packard Bell executive Mal Ransom said that there were no commercially feasible alternative operating systems to Windows 98;
- Micron executive Eric Browning asserted: “I am not aware of any other non-Microsoft operating system product to which Micron could or would turn as a substitute for Windows 95 at this time.”
- Hewlett Packard executive John Romano said that “absolutely there’s no choice” except to install Windows on HP’s PCs; and
- Gateway executive James Von Holle said that Gateway had to install Windows because “We don’t have a choice.” Mr. Von Holle has said that if there were competition to Windows he believed such competition “would drive prices lower” and promote innovation.

When Windows 98 is released, it will most likely quickly succeed to Windows 95's monopoly position because, among other things, applications written for Windows 95 will run on Windows 98 and most consumers who purchase PCs want and expect their PCs to have the latest Microsoft operating system. OEMs will begin shipping most PCs, particularly for non-corporate users, with the Windows 98 operating system as soon as it is released. For example, Hewlett Packard executive Webb McKinney said that even Windows 95 would be a commercially feasible alternative to Windows 98 “[o]nly for a short period of time.”

Microsoft’s Position in the Internet Browser Market

The first Internet browser widely used by the general public was Netscape Navigator, which was introduced to the market in 1994. Microsoft responded by introducing its own Internet browser, which it called the Internet Explorer. Microsoft released the initial version of Internet Explorer (version 1.0) in or around July 1995. Microsoft has since released three subsequent versions (2.0, 3.0, 4.0), in each case adding features and functionality to the product.

Internet Explorer is, and always has been, viewed by Microsoft and by the market as an Internet “browser” — a separate software program that allows computer users to efficiently locate, access, display, and manipulate content displayed on the World Wide Web. Microsoft and other industry participants carefully track Internet browser market share, and Microsoft has frequently and unequivocally stated that increasing its Internet browser share is its “number one” corporate goal. Internet browsers have product requirements, market

usage, demand, distributors, and suppliers distinct from other products, including PC operating systems. These separate attributes, and Microsoft's separate commercial treatment of its Internet browser, all will continue after Microsoft releases Windows 98. Microsoft plans to continue to distribute and upgrade a stand-alone version of its Internet Explorer browser, and it has distributed (and plans to continue to distribute) versions of Internet Explorer for use on the Apple Macintosh, Sun Solaris, and other non-Windows operating systems.

Microsoft's share of the Internet browser market has grown steadily from less than 5% in early 1996 to approximately 50% or more today. With the growth of the Internet and the World Wide Web, consumer demand for Internet browsers has increased dramatically. Indeed, because of the extraordinary growth and importance of the Internet, the Internet browser market is itself a substantial source of potential profits to any company that might achieve a durable dominant position and be able to charge monopoly prices for the efficient use of the Internet or the web. The importance of the Internet and the significant public benefits resulting from its use, make the potential benefit to a monopolist and the potential economic and social cost of monopolization in this market very high.

THE COMPETITIVE THREAT THAT BROWSERS POSE TO THE WINDOWS OPERATING SYSTEM

Much of Microsoft's present monopoly power reflects the fact that Windows is the "platform" on which most popular applications software must run. Internet browsers, however, offer the potential to become alternative platforms on which software applications and programs could run instead. In addition, browsers can be an "interface" -- the primary visual environment in which a user performs most computing tasks -- to which both the operating system and application programs can be connected. The browser thus can be a software "layer" between the operating system and application programs. Application programs can be and are written to the browser instead of the operating system interface.

Because competing browsers operate not only on Windows but also on a variety of other operating systems, their widespread adoption and use would create significant potential to reduce the dependence of most PC users on any particular operating system, such as Windows. The development of numerous software applications not specific to Windows that could ultimately result from the widespread use of non-Microsoft Internet browsers would therefore greatly reduce or eliminate a key barrier that maintains Microsoft's Windows operating system monopoly (because application programs written to interface to a competing browser could run on any operating system).

Competing Internet browsers also threaten Microsoft's Windows monopoly because such browsers are a primary distribution vehicle for Java virtual machines ("JVMs"), the software programs necessary to run programs written in the Java programming language. JVMs that use Java enable any application written in the Java language to run regardless of the operating system on top of which the JVM and application are installed. The widespread distribution of Java virtual machines along with non-Microsoft Internet browsers could provide another avenue by which applications developers could write programs that are not dependent on Windows, thereby weakening the network effects that help entrench Windows' monopoly position in the operating system market.

MICROSOFT'S ANTICOMPETITIVE CONDUCT

Faced with the threat browsers posed to its operating system monopoly, and desiring to monopolize the browser market itself, Microsoft undertook steps possibly designed to ensure that it would win what it considers a “browser war.” For example:

- Microsoft CEO Bill Gates declared on January 5, 1996: “Winning Internet browser share is a very, very important goal for us.” On August 20, 1996, Mr. Gates directed: “Internet Explorer will be distributed every way we can. . . . Bundled with Windows 95 upgrade and included by OEMs.” and
- In September 1996, Microsoft’s General Manager for the Windows PC Platform, Carl Stork, noted: “Browser share is job 1 at this company.”

Market and Induce Netscape Not to Compete

In May 1995, not long before Microsoft released the first version of Internet Explorer, Microsoft executives visited Netscape and met with its top executives. During this meeting, Microsoft offered Netscape a deal: For Windows 95, Microsoft proposed to draw a hypothetical line between the operating system and the browser. If Netscape agreed not to compete below the line (*i.e.*, in operating systems) or alternatively, in the production of browsers in the Windows 95 “space,” Microsoft would agree not to compete above the line (*i.e.*, in browser applications) or, alternatively, in the production of browsers for platforms other than Windows 95. As one participating Microsoft executive has subsequently admitted, Microsoft “absolutely” hoped to persuade Netscape not to compete with Microsoft.

Microsoft’s proposal would have divided the browser market between Netscape, the early leader, and Microsoft, which was then on the verge of entering, and would have eliminated the competitive threat potentially posed by Netscape’s competing browser to Microsoft’s operating system monopoly. Microsoft’s proposal was not intended to advance, and would not have advanced, any legitimate pro-competitive interest. Rather, it was a blatant and illegal attempt to monopolize the Internet browser market. Indeed, if accepted, it would readily have enabled Microsoft to monopolize that market.

Netscape’s executives refused Microsoft’s proposal. They chose instead to continue to compete to serve all computer users, with successive versions of Navigator that work on Windows 95 as well as other PC operating systems.

Netscape’s refusal of Microsoft’s proposed scheme meant that its competing browser would continue to have the potential to become an alternative platform to Windows; would continue to facilitate the development and distribution of other software with the potential to support applications regardless of the identity of the underlying operating system; and would, thus, continue to threaten to “commoditize” the operating system and ultimately reduce or eliminate Microsoft's monopoly power.

It seems that Microsoft thereafter embarked on a coordinated course of conduct aimed at eliminating this threat by leveraging its monopoly power to drive competing Internet browsers from the market and to extend its monopoly to the browser market.

Exclusionary Agreements with Internet Service Providers and On-Line Services

Microsoft unlawfully leverages its Windows operating system to require Online Service Providers (such as America Online and CompuServe) and other major Internet Service Providers (such as AT&T WorldNet, MCI, and Earthlink) to enter into agreements to distribute Internet Explorer to their subscribers, either exclusively or nearly exclusively. ISPs, including OLSs, are sometimes referred to as Internet Access Providers (“IAPs”).

Starting in early 1996, Microsoft began to condition the granting to an ISP of placement in the “Internet Connection Wizard” screens or the Online Services folder in Windows 95 on the service provider’s agreement to deny most or all of its subscribers a choice of Internet browser. Because nearly all PCs in the United States are shipped with a copy of Windows preinstalled, and because Microsoft prohibits OEMs from replacing or materially modifying the default “desktop” screen on Windows PCs, nearly all U.S. computer users are guaranteed to see the Windows desktop when they turn on their PCs. Accordingly, placement on the Windows desktop is unique among the numerous ways that software firms, including ISPs and ICPs, promote and distribute their products and services because only this placement offers near ubiquitous distribution and advantageous promotion in exactly the place and context in which users are deciding which software to use. Promotion or distribution of a software product or service through a Windows desktop icon is perhaps unrivaled in its ability to reach the vast majority of PC users in a manner that ensures their attention. No other distribution channel matches the level of convenience, the number of users reached, or the premium placement that Microsoft’s Windows desktop offers.

In return for attractive placement by Microsoft in its Internet Connection Wizard or Online Services Folder, ISPs agreed:

- to distribute and promote to their subscribers Internet Explorer exclusively or nearly exclusively;
- to eliminate links on their web sites from which their subscribers could download a competing browser over the Internet;
- to abstain from expressing or implying to their subscribers that a competing browser is available (and from displaying a logo for a non-Microsoft browser on the service provider’s home page or elsewhere);
- to include Internet Explorer as the *only* browser they shipped with their access software (*i.e.*, the software that enables a PC user to subscribe to the service) most or all of the time; and
- to limit the percentage of competing browsers they distributed, even in response to specific requests from customers.

Microsoft’s agreements with ISPs also require the ISPs to use Microsoft-specific programming extensions and tools in connection with the ISPs’ own web sites. Web sites developed with these Microsoft-specific programming extensions and tools will look better when they are viewed with IE than with a non-Microsoft browser. Under Microsoft’s ISP

contracts, the penalty for promoting a competing browser, distributing a competing browser more than the maximum permitted percentage, or otherwise failing to provide preferential treatment for Microsoft's Internet browser, is deletion from the Windows desktop -- a penalty even the largest ISPs are unwilling to risk.

Microsoft recognizes the importance to ISPs of favorable placement on Windows screens. For example:

- Brad Silverberg (Microsoft's former Senior Vice-President of its Applications and Internet Client Group) described such placement as "a distribution facility" for service providers that was "a tremendous value to them."; and
- In order to induce AOL to prefer IE and disadvantage Netscape's browser, Microsoft agreed to give AOL preferential placement in Windows at the expense of Microsoft's own online service (Microsoft Network, or "MSN") that competed with AOL -- thereby effectively, according to Microsoft's CEO Bill Gates, "putting a bullet through MSN's head." The "browser war" was so critical to Microsoft that it was prepared to retreat in other markets in order to win it.

In late April 1998, on the eve of hearings before a committee of the United States Senate and immediately following news reports that the United States had issued civil subpoenas to various ISPs about their agreements with Microsoft, Microsoft announced that it was modifying its contracts with certain ISPs. Significantly, Microsoft has not changed its exclusionary contract requirements with the largest and most important ISPs -- the Online Service Providers, including AOL and CompuServe. Microsoft's exclusionary agreements continue in full force and effect for these firms.

Even as to the ISPs whose contracts Microsoft has chosen to change, Microsoft's belated announcements, made on the eve of Congressional scrutiny and under the threat of litigation, do not correct the anticompetitive effects of the provisions which have been in place for almost two years; nor do the announcements provide any assurance that Microsoft will not reinstitute the exclusionary restrictions in the future. Moreover, they do not eradicate all of the unlawfully restrictive aspects of even the ISP agreements they modify because they leave intact (according to Microsoft's Cameron Myhrvold, the executive responsible for dealing with ISPs) requirements that ISPs distribute and promote Internet Explorer at least at parity with any other browser. Finally, and perhaps most significantly, Microsoft's modifications, by its own admission, do not apply *at all* to OLSs, which as a group provide Internet access to more than fifty percent of Internet users in the United States. Thus, the modifications provide no relief from Microsoft's anticompetitive restrictions as to most browser distribution through ISPs.

Approximately one-third of Internet browser users obtained the browser they use from their service provider, and Microsoft's exclusionary agreements with these firms substantially foreclose Microsoft's browser competitors from a vital means of distribution. As Microsoft has itself acknowledged, distribution of Internet browsers through the largest online services providers is critical to the competitive success and viability of any browser. Microsoft's Cameron Myhrvold testified that for browsers "the ISP channel and the OEM channel are the two most important channels for distribution." Microsoft substantially

foreclosed the ISP channel with agreements with ISPs, and (as discussed below) Microsoft substantially foreclosed the OEM channel through agreements with OEMs. The exclusionary restrictions in Microsoft's ISP agreements are not reasonably necessary to further any legitimate, pro-competitive purpose.

Potentially Exclusionary Agreements with Internet Content Providers

Microsoft has also entered into exclusionary agreements with Internet Content Providers ("ICPs") -- firms such as Disney, Hollywood Online, and CBS Sportsline that provide news, entertainment, and other information from sites on the web. One of the new features included in Internet Explorer 4.0 is the provision of "channels" that appear on the right side of the Windows desktop screen after Internet Explorer 4.0 has been installed on a Windows 95 PC. The same channels will appear automatically on the Windows 98 desktop screen if Microsoft is permitted to tie Internet Explorer 4.0 to Windows 98 in license agreements with OEMs and in sales to consumers.

Microsoft provides different levels of channel placement, "platinum" being the most prominent. Under Microsoft's Internet Explorer 4.0 channel agreements, beginning in mid-1997, ICPs who desired "platinum" placement (and even some seeking lower-level placement) were required to agree:

- not to compensate in any manner the manufacturer of an "Other Browser" (defined as either of the top *two* non-Microsoft browsers), including by distributing its browser, for the distribution, marketing, or promotion of the ICP's content;
- not to promote any browser produced by any manufacturer of an "Other Browser";
- not to allow any manufacturer of an "Other Browser" to promote and highlight the ICP's "channel" content on or for its browsers; and
- to design its web sites using Microsoft-specific, proprietary programming extensions so that those sites look better when viewed with Internet Explorer than when viewed through a competing browser.

These exclusionary restrictions are not reasonably necessary to further any legitimate, pro-competitive purpose. Notwithstanding these restrictions on their dealings with competing browsers, ICPs have entered into Internet Explorer 4.0 channel agreements with Microsoft. ICPs had to agree to these restrictions in order to gain placement on the Windows desktop, which provides a valuable distributional and promotional mechanism for their content.

Microsoft's exclusionary ICP contracts, expressly targeted at its primary Internet browser competitors, further foreclose these firms from access to customers, and further impede their ability to compete against Internet Explorer on the merits of the respective products.

Microsoft has recently announced that it intends to change its agreements with ICPs. However, the changes announced by Microsoft will not remedy the anticompetitive effects the exclusionary provisions of those agreements have had to date, and there is no certainty that Microsoft will not re-impose the same or similar restrictions in the future.

Microsoft's Contractual Restrictions on OEM Modification or Customization of PC Boot-Up Sequence and PC Screens

In or around August 1996, Microsoft imposed on OEMs licensing terms that restrict OEMs' ability to alter the Windows 95 boot-up sequence. Specifically, among other things, Microsoft's license agreements prohibit OEMs from:

- modifying or obscuring the sequence or appearance of any screens displayed by Windows from the time the user first begins the boot-up process with a new PC until the "Welcome to Windows" screens have run and the Windows desktop screen first appears;
- modifying or obscuring the sequence or appearance of any screens displayed by Windows in all subsequent boot-ups unless the user initiates some action to change the sequence;
- displaying any content, including visual displays, sound, welcome or tutorial screens, until after the Windows desktop screen first appears;
- modifying or obscuring the appearance of the Windows desktop screen, beyond a narrowly limited set of permitted changes; or
- adding a screen that would automatically appear after the initial boot-up sequence or in place of the Windows desktop screen.

These contractual restrictions have (and were intended by Microsoft to have) two basic effects on competing browser suppliers. First, they enhance Microsoft's control over the screens presented to users and thus increase Microsoft's ability to require preferential treatment for Internet Explorer from ISPs and ICPs in return for such ISPs' and ICPs' access to the Windows desktop. Second, these contractual restrictions greatly limit an OEM's ability to modify or customize the screens or initial "boot-up" sequence on a new PC either in response to customer demand or in an attempt to differentiate their products, or to substitute or feature a non-Microsoft browser, alternative user interface, or other Internet offerings.

The Windows desktop screen is the screen through which most PC users access application programs and the other functionality on their PCs. The desktop screen contains, among other things, icons (*i.e.*, graphical representations of certain features or functions) that, when selected by "clicking" on the icon with the left button of the "mouse," provide quick access to other installed software. Microsoft places a number of icons on the Windows desktop screen, prohibits OEMs from removing any of them, and permits OEMs to add others only subject to strict limitations.

Although Microsoft allows some customization of the "Active Desktop" in Windows 98 and Internet Explorer 4.0, an OEM may not delete icons or folders. Furthermore, an OEM that does not preinstall the Active Desktop may not add to Windows desktop screens new icons or folders that are of a size or appearance different from those already placed on the desktop by Microsoft.

Through these restrictions, Microsoft leverages its Windows monopoly to ensure that Microsoft-designated applications or other software reach all new Windows users, and that no software not designated by Microsoft receives preferential placement, no matter which OEM has built the computer or what options the OEM would like to have in presenting

software products to its customers. Moreover, these restrictions ensure that users of Windows continue to see the Microsoft-specified Windows desktop unless and until they take affirmative steps to change the screens presented.

The restrictions preserve the advantageous desktop positioning that Microsoft secures for Internet Explorer and other Microsoft or Microsoft-designated software, foreclose competing Internet browsers from securing preferential placement, and foreclose OEMs from choosing among competing browsers on the merits. Microsoft's refusal to permit OEMs to alter the initial boot-up sequence and screens, or to install an alternative user interface, precludes OEMs from developing such alternative interfaces on their own or with competing browser suppliers. The effect of these restrictions is to significantly restrict the access of competing browsers to the important OEM channel and further perpetuate Microsoft's operating system monopoly by making the successful introduction of a new platform more difficult.

OEMs (including Micron, Hewlett Packard, and Gateway) have requested that Microsoft allow them to provide new PC purchasers with an alternative user interface, boot-up sequence, or initial or default screens, but Microsoft has refused.

Microsoft recognizes and intends that these restrictions consolidate its strategic power over the valuable real estate that the desktop screen represents for the provision of software, advertising and promotion. Indeed, Microsoft's Vice President of Marketing and Developer Relations made clear in an internal document that the underlying purpose of the restrictions was to prevent OEMs or others from ultimately gaining control over the desktop: "In order to protect our position on the desktop and increase the likelihood that IE gets the prominent position with the end user we should move the [Internet] Sign Up Wizard into the boot-sequence some where, before we give control over to the OEM. . . ."

In Windows 98, Microsoft has done exactly as its Vice President of Marketing and Developer Relations urged, moving the Internet Connection Wizard feature of Internet Explorer, which presents new users with the ability to sign up (at the time of the initial boot and before the Windows desktop appears) with any of a number of ISPs, none of which (according to Microsoft's Cameron Myhrvold) is permitted to distribute or promote any other browser more favorably than Internet Explorer.

Microsoft's boot-up and first-screen restrictions make it more difficult for competing browsers to attract users and have resulted in fewer choices for OEMs and PC end users. These restrictions are not reasonably necessary to serve any legitimate, pro-competitive purpose.

The Tying of Microsoft's Internet Browser Software to Windows 95

Internet Explorer is recognized by both Microsoft and the industry as a product separate and apart from Windows. For example:

- Microsoft has always sold Internet Explorer separately at retail, distributed it separately through the Internet, and paid for it to be distributed separately;

- Microsoft has distributed Internet Explorer as a separate product through ISPs and other channels and has tied and conditioned the access of numerous companies (e.g., ICPs and ISPs) to Windows facilities on such companies' distribution of Internet Explorer as a separate product;
- Microsoft and the industry separately track browser market share and operating system market share;
- Microsoft bundles, and plans to continue to bundle, the stand-alone version of IE 4.0 with other application programs (e.g., Word, Works, Encarta) in a package that will be the successor to the Microsoft Works and Microsoft Home Essentials packages;
- Microsoft promotes, and enlists others to promote, the distribution and use of Internet Explorer as a separate product;
- ISPs consider IE to be a separate product from Windows, and, recognizing the demand for a browser separate from the operating system, Microsoft deliberately markets it as such to ISPs;
- Internet browsers and operating systems perform different functions; and
- Microsoft markets Internet Explorer for non-Windows operating systems, including operating systems produced by Apple Computer and Sun Microsystems. Indeed, Microsoft devoted a substantial effort towards developing these versions of its Internet Explorer -- a counter-intuitive step (i.e., enhancing the capabilities and functionality of non-Windows, non-Microsoft operating systems) that is in Microsoft's interest because it is part of Microsoft's effort to foreclose opportunities for non-Microsoft browsers to establish themselves. Microsoft's Paul Maritz believed in June 1996 that in order to accomplish its browser share objectives: "In addition to shipping IE 3 on W95/NT, we need to get AOL & CompuServe shipping IE3. We need to ship IE3 on Win 3.1 & Mac."

There is separate demand for Internet browsers from the demand for operating systems. For example:

- many PC users (who, of course, require an operating system) do not need or want a browser;
- for a significant number of customers, the forced inclusion of a browser with the operating system is a significant negative -- including corporate customers who do not want their employees connected to the Internet and customers that would prefer only a different browser. Microsoft has acknowledged that some OEMs and PC users want to be able to delete Internet Explorer from Windows 95 and has provided the ability, through the Add/Remove utility, for them to do so;
- many customers who want a browser do not need another operating system -- a majority of all browsers distributed to date have been distributed to users who already had a PC with an operating system installed; and
- other PC customers want an up-to-date Windows operating system together with non-Microsoft browsers.

Microsoft has consistently treated and referred to its browser software as a separate product, and not merely as a component of the operating system, both internally and in agreements with other companies.

However, over "the last couple of years" Microsoft was told by its counsel to be "careful" not to refer to its browser software in such a way that it appeared that the software was a separate product. Microsoft executives became "very concerned" that statements in the ordinary course of business made IE "appear separate" and concluded it was "critical" that there be "a thorough walk-through looking for places in the UI that can be corrected" and that there be a "sweep" of the IE web site to remove references inconsistent with Microsoft's present legal position. It was agreed that there would be "a review of win 98" by Microsoft executives and "someone from legal staff" to "ensure IE is properly presented."

Microsoft recognized that there was a potential danger that a competing Internet browser could eventually "obsolete Windows." Microsoft also recognized that Netscape was initially the leading browser supplier and that Netscape's "survival depends on their ability to upgrade a significant chunk of their installed base."

Microsoft's top executives internally declared that gaining browser market share for Internet Explorer and depriving Netscape of market share was a top priority. Microsoft recognized, however, that it could not win what it described as the "browser war" on the merits alone, even if it gave its browser away for free — indeed, even if it paid bounties for its distribution. Microsoft concluded that to win the browser war and preserve its Windows monopoly it would have to tie its Internet browser to the Windows 95 operating system that was being preinstalled on most new PCs. For example, Microsoft's Megan Bliss and Rob Bennett recognized that designing Windows 95 "to win the browser battle" required "a very substantial set of trade-offs." Nevertheless, they concluded the "key factors to keep in mind" were, first, the need to increase browser share and, second, that the way to do that was: "Leveraging our strong share on the desktop will make switching costs high (if they get our technology by default on every desk then they'll be less inclined to purchase a competitive solution. . .)."

Accordingly, Microsoft tied Internet Explorer to Windows 95 and continued to do so until January of this year, when it came into compliance with an Order of the Court prohibiting it from distributing its Internet Explorer browser as a condition of licensing Windows 95. Microsoft effectuated this tie, among other things, by requiring, as a condition of licensing Windows 95, that OEMs also license, install and distribute Microsoft's Internet browser software, including software that provides the Internet Explorer icon and the other means by which users may readily use IE to browse the web. It is this software that establishes Internet Explorer's identity for commercial purposes as a separate product.

Microsoft's internal documents make clear that Microsoft tied that software to its Windows operating system, and refused to give OEMs an unbundled option, not because Microsoft believed the market wanted only a bundled product, but rather in order to foreclose OEM choice. For example:

- Microsoft executive Chris Jones noted in 1995 concerning “Internet Explorer” that OEMs “want to remove the icon from the desktop” but that the OEMs should be told “this is not allowed;”
- in the Spring of 1996, Micron asked if it could delete IE from Windows. Microsoft refused;
- in June 1996, Compaq wanted to (and, for a time, did) remove the IE icon from the Windows desktop. Microsoft compelled Compaq to restore the icon by threatening to terminate Compaq's license to install the Windows operating system if Compaq did not comply; and
- “On several occasions, Gateway representatives have asked [Microsoft] to remove the icon for IE from the desktop, but [Microsoft] representatives have refused each request, saying that the browser cannot be removed or sold separately. . . .”

By tying Internet Explorer to Windows 95 in this way, Microsoft has substantially foreclosed competing Internet browsers from a significant channel of distribution. Among other things, tying Internet Explorer to Windows 95 has significantly reduced the willingness of OEMs to install or distribute other browsers because of concerns about customer confusion and increased support costs; and the forced tying has made it impossible for OEMs to differentiate their products by, or to receive consideration for, distributing only a non-Microsoft browser on some or all of their products. Tying Internet Explorer to Windows 95 also reduced demand for other browsers, even by users and OEMs that would otherwise have preferred another browser.

Microsoft’s tying of Internet Explorer to Windows 95, and its refusal until ordered by the Court to permit OEMs to utilize the Add/Remove utility to remove IE from Windows 95, furthered no legitimate pro-competitive purpose. Microsoft has distributed and continues to distribute Internet Explorer separate from its Windows 95 operating system, and it is efficient for it to do so. Microsoft can also efficiently distribute or permit the distribution of Windows 95 without Microsoft’s Internet browser software.

The Tying of Microsoft’s Internet Browser Software to Windows 98

Microsoft concluded in January 1997 that, for Windows 98, priority “#1 is to build IE 4 share via OEM distribution.” Microsoft considered not bundling IE with Windows 98 (code named “Memphis”) as late as the Spring of 1997. However, it was decided (as Microsoft Senior Vice President James Allchin had previously proposed) “to tie IE and Windows together.” For example:

- Microsoft’s Christian Wildfeuer wrote on February 24, 1997: “It seems clear that it will be very hard to increase browser market share on the merits of IE 4 alone. *It will be more important to leverage the OS asset to make people use IE instead of Navigator*” (emphasis added);
- Microsoft Senior Vice President James Allchin had similarly written on December 20, 1996, that unless Microsoft was to “leverage Windows I don’t understand how IE is going to win Maybe being free helps us, but once people are used to a product it is hard to change them My conclusion is that we must leverage Windows more. Treating IE as just an

add-on to Windows which is cross-platform loses our biggest advantage — Windows market share. We should dedicate a cross group team to come up with ways to leverage Windows technically more We should think first about an integrated solution — that is our strength;”

- on January 2, 1997, Mr. Allchin wrote concerning “IE and Windows” that Microsoft needed to begin “leveraging Windows from a marketing perspective” if it was to defeat Netscape. Allchin complained that without leveraging Windows from a marketing standpoint: “We do not use our strength — which is that we have an installed base of Windows and we have a strong OEM shipment channel for Windows.” Allchin emphasized: “I am convinced we have to use Windows — this is the one thing they don’t have We have to be competitive with features, but we need something more — Windows integration. If you agree that Windows is a huge asset, then it follows quickly that we are not investing sufficiently in finding ways to tie IE and Windows together.” Using Microsoft’s code name, Memphis, for the next version of Windows, Allchin concluded that, “Memphis must be a simple upgrade, but most importantly it must be a killer on OEM shipments so that Netscape never gets a chance on these systems.”
- on March 25, 1997, Microsoft’s Megan Bliss wrote: "I thought our #1 strategic imperative was to get IE share (they’ve been stalled and their best hope is tying tight to Windows, esp. on OEM machines). That is, unless I’ve woken up in an alternate state and now work for Netscape."
- on March 27, 1997, Microsoft’s Kumar Mehta, after analyzing "how people get and use IE" concluded that "based on all the IE research we have done . . . it is a mistake to release Memphis without bundling IE with it."
- Microsoft concluded in late March 1997 that if Windows 98 and IE "are decoupled, then Navigator has a good chance of winning" and that "if we take away IE from the O/S, most nav users will never switch to us."
- as Microsoft Vice President Brad Chase recognized in an April 21, 1997, memorandum, "Memphis is a key weapon in the IE share battle." and
- as a January 5, 1997, presentation to Microsoft CEO Bill Gates had emphasized: "Integrate with Windows" was a way to "Increase IE share."

For several weeks after entry of the Court’s December 1997 Order, published reports quoted Microsoft as saying that it planned to offer Windows 98 in two versions – one with Internet Explorer included and one with Internet Explorer removed. However, Microsoft has since made clear that it intends to tie Internet Explorer to Windows 98. Microsoft intends to offer only a single, bundled version of Windows 98 and to require, as a condition of licensing Windows 98, that OEMs license, install and distribute Microsoft’s Internet browser software.

Microsoft has acknowledged that some OEMs and PC users want to be able to delete Microsoft’s Internet browser software from Windows 98 (and Microsoft provided the ability to remove such software from Windows 95 for this reason). Nevertheless, in order not to facilitate such a deletion from Windows 98, even by end users, Microsoft has designed Windows 98 so that the Add/Remove utility will not remove all or any part of IE.

Microsoft is tying its Internet browser software to the Windows 98 operating system, possibly in order to achieve a monopoly in the Internet browser market and to stifle the

potential competition to Microsoft's operating system monopoly that competing Internet browsers might generate. Microsoft has distributed and continues to distribute Internet Explorer separately from its Windows operating system, and it is efficient for it to do so. Microsoft intends to continue marketing the Internet Explorer browser separately through retail outlets. Microsoft also intends to release an updated version of Internet Explorer, 5.0, in multiple distribution channels and for multiple non-Windows operating systems as a stand-alone product, without Windows.

Microsoft can, at a minimum, efficiently distribute or permit the distribution of Windows 98 without its Internet browser software. Microsoft's refusal to permit OEMs to delete such software from Windows 98, or to offer OEMs a version of Windows 98 from which it has already been deleted or in which it is not included, furthers no legitimate competitive interest. Microsoft can, at a *de minimis* cost per copy of Windows 98, either include in Windows 98 a ready means for OEMs and users to delete its Internet browser software or test any such means that are developed by or on behalf of OEMs. The deletion of such software will not impair any non-web browsing function of Windows 98.

Indeed, if including Microsoft's Internet browser software with Windows 98 is efficient, the combined product should thrive in a competitive market in which the two products are also available separately. A competitive browser market in which customers are free to choose among alternative Internet browsers or to choose no browser at all will lead to continuing innovation and price competition as suppliers compete on the merits for customers' favor. Microsoft has chosen to deprive customers of the competitive options of obtaining Windows 98 with Internet Explorer, with a competitive Internet browser, or with no Internet browser at all.

One consequence of tying Internet Explorer to Windows is that the Internet browser is made available to purchasers of Windows at no additional charge. Microsoft is devoting more than a thousand people and hundreds of millions of dollars to various aspects of browser development, and Microsoft has recognized that it would ordinarily be desirable for the company to earn a direct return on some of this investment by charging customers of Windows 98 separately for Internet browser functionality. Even though the leading browser supplier (Netscape) was charging OEMs for its browser, Microsoft made a decision to forgo the revenue that would have resulted from charging separately for Internet browsing functionality in Windows in order to gain Internet browser market share and exclude competition.

Microsoft could have charged for Internet Explorer separately, and it considered doing so. Microsoft's Vice President of Advanced Technology Sales Cameron Myhrvold testified that there was "a time where we thought we could charge for the browser" but that view was disavowed "quickly." A proposal to separately price the "Active Desktop" shell (believed at the time to be an important way for Windows 98 users to use IE for web browsing) was made by Microsoft's Joe Belfiore and supported by Microsoft's Moshe Dunie. Microsoft Group Vice President Paul Maritz acknowledged that the proposal was "tempting" and "had merit" but ultimately rejected it because requiring customers to pay for the "shell" would impair Microsoft's ability to achieve its "number 1 goal" of becoming dominant in the Internet browser market.

Throughout Microsoft's internal analyses there is one consistent theme: Building a dominant Internet browser market share and restraining browser competition will protect Microsoft's Windows operating system monopoly. Microsoft has repeatedly recognized that the reason to win the browser war is to maintain the revenues and profits that flow from the PC operating system monopoly. For example:

- In a June 20, 1996, memo entitled "windows & internet issues" Microsoft Group Vice President Paul Maritz explained that among the reasons why "job #1 is browser share" was that: "No matter what happens, we have to slow Netscape's ability to drive new protocols/stds down." Mr. Maritz went on to explain that it was necessary "to fundamentally blunt Java/AWT momentum" (momentum supported by cross-platform browsers) to "protect our core asset Windows – the thing we get paid \$'s for." (emphasis in original); and
- Similarly, in an April 4, 1997, Planning Memo entitled "Preserving the desktop paradise," Microsoft Vice President Brad Chase warned that, unless stopped, browsers could "obsolete Windows," "commoditize the OS," and "make the NC [network computer] viable."

If it is permitted to tie Internet Explorer and Windows 98 -- by forcing OEMs to license and distribute, with Windows 98, Microsoft's Internet browser software -- Microsoft will substantially foreclose its Internet browser competitors from a significant channel of distribution, thereby restraining competition on the merits and depriving customers of choice.