IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

STATE OF NEW YORK, et al.,))
Plaintiffs,))
v.) Civil Action No. 98-1233 (CKK)
MICROSOFT CORPORATION,)))
Defendant.) Next Court Deadline: March 18, 2002) Remedies Hearing

DIRECT TESTIMONY OF PETER ASHKIN (REMEDIES 1, 2, 8, 10, 18)

Table of Contents

INTRODUCTION	4
MY BACKGROUND	8
MICROSOFT HAS DICTATED PC PRODUCT CONFIGURATION TO OEMS, INCLUDING SEVERE LIMITS ON OEMS' ABILITY TO DISTRUBUTE NON-MICROSOFT SOFTWARE	10
Microsoft Used Its Windows Operating System License and Related Agreements to Financially Reward OEMs for Carrying Only Microsoft's Middleware and Applications.	12
Microsoft Affirmatively Restricted Gateway's Attempts to Innovate and Offer Customized PC Configurations Including Rival Middleware	13
THE REMEDY MUST PROHIBIT MICROSOFT FROM MAINTAINING ITS MONOPOLY BY LIMITING OEMS FROM CONFIGURING PCS WITH NON-MICROSOFT MIDDLEWARE AND APPLICATIONS	17
OEMs Need Product Flexibility Without Being Financially Disadvantaged by Microsoft	17
Gateway's Experience Shows Why Strong Protections for OEM Flexibility Are Needed	21
"Go-Back"	22
Gateway.Net	23
Connected Touchpad	24
Small Business Server	24
Destination	25
MICROSOFT'S PROPOSED REMEDY PERMITS MICROSOFT TO CONTINUE TO UNDULY INFLUENCE OEM CHOICE	27
Microsoft's Proposed Remedy Will Not Eliminate Retaliation Against OEMs	30
Microsoft's Proposed Remedy to Eliminate End User Access is Not Sufficient to Promote Non-Microsoft Applications	30
THE STATES' PROPOSED REMEDY ALLOWS OEMS TO CUSTOMIZE PCS AND TO DISTRIBUTE NON-MICROSOFT MIDDLEWARE	32

Proposal No. 2(c) Will Give OEMs and Third-Party Licensees Broad Flexibility in Product Configuration	32
Proposal No. 1 Allows OEMs to Remove Microsoft Middleware and Applications	35
THE STATES' PROPOSED REMEDY ALSO CONTAINS A MUCH NEEDED THIRD PARTY LICENSING PROVISION TO PROMOTE CONSUMER CHOICE BECAUSE THE OEMS CANNOT ADEQUATELY PROMOTE COMPETITION ON THEIR OWN	37
STATES' PROPOSED REMEDY No. 2(a) PROVIDES OEMs A TRUE UNIFORM LICENSING REGIME FOR MICROSOFT WINDOWS	42
Microsoft's Proposed Remedy Defies Uniformity By Allowing Market Development Programs (MDPs)	42
States' Proposed Remedy No. 2 (a)(ii) Allows "Reasonable Volume Discounts"	49
OEMS AND THIRD PARTY LICENSEES NEED TO BE ASSURED THAT MICROSOFT CANNOT DISFAVOR THEM FOR SUPPORTING COMPETING PRODUCTS	50
Microsoft's Proposed Remedy's Non-Retaliation Provision is Insufficient	50
States' Proposed Remedy No. 8, In Combination With Other Provisions, Prohibits Any Retaliatory Action By Microsoft Against OEMs	52
The States' Proposed Remedy No. 10 Protects OEM Choices, Including Default Choices	54
Microsoft's Proposed Remedy Enables Microsoft To Alter OEM Default Choices	55
States' Proposed Remedy No. 4(a) Is Important to OEM Innovation and Product Configuration	58
A PROPER REMEDIAL DECREE MUST HAVE A TOUGH ENFORCEMENT REGIME CAPABLE OF SWIFT ACTION	59
MICROSOFT'S REMEDY CONTAINS OTHER DEFICIENCIES	62
CONCLUSION	64

DIRECT TESTIMONY OF PETER ASHKIN President of AOL Brand Products, America Online, Inc. (Formerly Senior Vice President and Chief Technology Officer of Gateway, Inc.)

INTRODUCTION

- 1. My name is Peter Ashkin. I have two decades of experience in the computer industry with companies including Apple, Toshiba, Hewlett-Packard, and Gateway. I am currently President, AOL Brand Products at America Online. I testify today based primarily upon my experience at Gateway, Inc., from mid-1998 through 2000. As Senior Vice President and Chief Technology Officer, I directly participated in negotiations of contracts and licensing agreements with Microsoft.
- 2. During the past decade, I have experienced first-hand the effects of Microsoft's domination of the desktop operating system and systematic control of any form of potential competition to Windows. Original equipment manufacturers (OEMs), such as Gateway, are an important distribution channel for operating systems, software, middleware products and applications. Microsoft exercises substantial control over the OEM distribution channel. Microsoft instituted financial incentives to reward OEMs for using Windows operating system products and middleware products, such as Internet Explorer (IE), to the exclusion of competing middleware products and applications. Microsoft took retaliatory actions against OEMs that supported competing products.

- 3. Among the effects of Microsoft's conduct in maintaining its monopoly of the desktop operating system have been Microsoft's successful efforts to dictate what personal computer (PC) products are available to consumers and how those products are configured. The effect of these efforts has been to greatly limit consumer choice and stifle technological innovation. Microsoft's monopoly in the desktop operating system has enabled it to control PC hardware, software, features and functions.
- 4. I have carefully reviewed the two remedial proposals that have been offered in this case—the proposal offered by Microsoft ("Microsoft's Proposed Remedy") on the one hand and the Plaintiff States' First Amended Remedial Proposal ("States' Proposed Remedy") on the other. The States' Proposed Remedy incorporates mechanisms that are needed to give PC manufacturers flexibility to provide hardware and software choices to meet customer requests and needs. This includes the selection of non-Microsoft middleware products as well as the freedom to control the PC registration sequence, initial start up, product launch, desktop icons, etc. My testimony supports the States' Proposed Remedy and the definitions referenced therein, which include:
 - A Restriction on Binding Microsoft Middleware Products to Windows
 Operating Systems Products (Proposal No. 1);
 - Mandatory, Uniform Licensing for Windows Operating System
 Products, and Equal Access to Licensing Terms (Proposal No. 2(a) & Proposal No. 2(b));

- OEM and Third-Party Licensee Flexibility in Product Configuration (Proposal No. 2(c));
- A Ban on Adverse Actions for Supporting Competing Products (Proposal No. 8);
- Respect for User, OEM, and Third-Party Licensee Choices (Proposal No. 10); and
- the Appointment of a Special Master to Supervise Enforcement Issues (Proposal No. 18).

These proposals are needed to provide OEMs with the flexibility to configure PCs with non-Microsoft applications and features and to provide consumers choice in product offerings. These proposals will also help prevent Microsoft from engaging in similar conduct in the future that would control the desktop hardware and software configurations, including product offerings, through coercion of OEMs via operating system and related license agreements, fees, and discounts.

- 5. In contrast, the Microsoft Proposal does not adequately address Microsoft's restrictive and anti-competitive dealings with OEMs. If adopted by the Court, the provisions of the Microsoft/DOJ proposal will do little, if anything, to change Microsoft's behavior toward PC manufacturers, leaving both OEMs and consumers at the mercy of Microsoft.
- 6. For over two years at Gateway, I repeatedly asked Microsoft for the flexibility to allow Gateway to configure PCs to meet specific consumer needs. The

- answer was almost always "no." Microsoft insisted on its anti-competitive restrictions, even when it meant denying to us the right to create products requested by consumers.
- 7. Because they must meet Microsoft's specifications, milestones, and requirements, PC manufacturers are unable to differentiate their PC hardware products. All PCs today look, feel, and act alike—not because that is what consumers want, but because Microsoft has used its control of the operating system market to thwart competition and eliminate consumer choice.
- 8. PC manufacturers face a dilemma: they can license the Windows Operating System and give up the ability to differentiate their PCs from any other PC running Windows, or they can choose not to load Windows onto their PCs, in which case only very few applications or software would run on their PCs. Consumers likewise have little or no choice but to purchase the Windows Operating System, software and applications selected by Microsoft packaged in a computer "box" that looks, feels, and provides the function of any other computer "box" regardless of who has manufactured that computer "box." Because Microsoft has hampered the ability of OEMs to configure their PCs according to an end user's or consumer's requirements, consumers are not getting the full range of choices and options that a competitive market would provide.

9. By giving the OEMs greater and more meaningful flexibility, and by creating a regime of third-party licensing, the States' Proposed Remedy will make available to OEMs a wide array of choices, which they in turn can pass on to consumers. The States' Proposed Remedy, including the third-party licensing proposal, will lessen Microsoft's ability to dictate choices to the OEMs, and will facilitate OEMs' ability to promote non-Microsoft middleware products.

MY BACKGROUND

- 10. I began my career in the technology sector after graduating from MIT in 1973 and have worked in the industry ever since. I hold a number of patents for computer-related innovations and have created award-winning computer products. I led the development team for the Toshiba Infinia PC, which won the Comdex Product of the Year Award in 1996, and of the Gateway Connected Touchpad, which won the same Product of the Year Award in 2000.
- 11. Directly after my graduation, I held several engineering and marketing positions with Hewlett-Packard Corporation and Zilog, a semiconductor manufacturer.
- 12. In 1984 I moved to Apple Computer, where I was employed for over nine years. I first held an engineering position at Apple, but soon moved into a management position in the engineering sector of the company. By the end of my tenure at Apple, I was the Director of Macintosh Technology.

- 13. I left Apple in November of 1993 to become the General Manager of Computer Systems Engineering at Toshiba. In that position, I served as the head of Toshiba's PC engineering for the United States. At the time, Toshiba primarily manufactured laptop computers, although it also manufactured desktop PCs and servers. While at Toshiba, I had regular contact with Microsoft representatives.
- 14. I left Toshiba in August of 1998 to join Gateway, Incorporated. My first position at Gateway was the Vice President of Gateway Products, in which I was responsible for the engineering of Gateway PCs. Later, I became Senior Vice President of Gateway Products, and took on additional engineering responsibility. I also had responsibility for procurement. I then served as Senior Vice President and Chief Technology Officer for Gateway.
- 15. During the period at Gateway when I had responsibility for procurement, my duties included oversight of the company's licensing and other contracts with Microsoft. I oversaw Gateway's Microsoft account team and directly participated in licensing and technical discussions with Microsoft when issues were elevated to my level. My counterpart at Microsoft was Richard Fade, who still holds the position of Senior Vice President of the OEM Division.
- 16. I left Gateway in January 2001 when the company's founder, Ted Waite, returned to the company as CEO and brought in his own senior management team. In March of 2001, I became President of Product Strategy at AOL, where I assumed responsibility for defining the feature sets of the America

- Online product. In August of 2001, I became President of AOL Brand Products, where I continue to oversee defining the feature sets of the AOL product, and have approximately 140 employees reporting to me.
- 17. I have become very familiar with Microsoft and its licensing and contracting practice through my long tenure in the computer industry, and my testimony is based primarily on my employment at Gateway. Through my current position at AOL Brand Products, I remain knowledgeable about PC industry developments. The remedial proposals related to OEM flexibility in providing variety in terms of hardware and pre-loaded software programs and applications, as well as the proposals that would prevent retaliation by Microsoft, are as needed today as they were in January 2001.

MICROSOFT HAS DICTATED PC PRODUCT CONFIGURATION TO OEMs, INCLUDING SEVERE LIMITS ON OEMS' ABILITY TO DISTRUBUTE NON-MICROSOFT SOFTWARE

- 18. A key focus of my testimony is that Microsoft's control over OEMs has resulted in the standardization of the personal computer (PC) which has limited consumer choice, stifled innovation and impeded distribution of non-Microsoft middleware. Microsoft's monopoly in the desktop operating system, and its efforts to protect that monopoly, enable it to control PC hardware, software, features and functions.
- 19. OEMs are the primary source of Microsoft's Windows for most end-users.
 Microsoft has taken substantial steps to control OEMs to ensure that they do

- not jeopardize Microsoft's monopoly in the PC operating system by supporting competing middleware applications.
- 20. Microsoft's efforts have been successful, in part, because OEMs heavily depend on access to the Windows Operating System. Because consumers have come to expect PCs to include an operating system, and because Windows holds a monopoly in the operating system market, OEMs like Gateway are virtually obliged to ship almost all of their PC products with Microsoft's Windows desktop operating system. Because Microsoft holds the only key to a necessary piece of their product, Microsoft holds immense power over the OEMs.
- 21. Because OEMs like Gateway depend upon licenses to Microsoft's Windows desktop operating system, Microsoft has used its Desktop Operating System (DTOS) license agreements (its primary Windows license agreement) and related agreements to create severe economic disincentives for PC manufacturers to do anything other than succumb to Microsoft's offering of applications, products and features. In order to meet Microsoft's specifications, milestones and requirements, PC manufacturers are unable to differentiate their PC hardware products. As a result, all PCs today look, feel, and act alike.
- 22. Ultimately, Microsoft has prevented PC manufacturers from developing brand loyalty. Consumers, for the most part, buy computers pre-loaded with software. Due to Microsoft's exploitation of its monopoly power, that software

- bundle is largely standardized. It is the software bundle provided by Microsoft with its latest version of the desktop operating system.
- 23. If Microsoft had permitted PC manufacturers to develop brand loyalty by differentiating their products, then consumers would have supported Gateway or Dell or IBM regardless of what operating system its computers carried. A consequence of Microsoft's ability to exploit its operating system monopoly is that consumers are largely indifferent to what *brand of computer* they buy because they all run the same *brand of operating system*.
- 24. Microsoft uses its ability to extend or withhold Windows' licenses (and to dictate the terms of those licenses) to constrain competition from rival middleware, or from anything else that Microsoft deems a threat to its operating system monopoly.

Microsoft Used Its Windows Operating System License and Related Agreements to Financially Reward OEMs for Carrying Only Microsoft's Middleware and Applications.

- 25. Microsoft tightly controlled OEMs like Gateway from offering anything other than the standard "Windows experience." By keeping customers bound to a consistent PC experience solely defined by Microsoft Microsoft maintained the ability to cut off the distribution channel for middleware competitors.
- 26. Microsoft developed and implemented many interlocking operating system, logo, and application licenses, as well as marketing development programs to provide financial incentives to every OEM's adoption of Microsoft's standardized PC experience. Although many of these agreements did not

- contain provisions related to specific rival products, these agreements were one mechanism through which Microsoft did reward certain OEMs. Through these agreements, Microsoft penalized OEMs that chose to ship PCs with non-Microsoft applications or competing middleware products.
- 27. As we at Gateway had confirmed to us during the liability phase of this case, Microsoft charged different royalty rates to different OEMs depending, among other things, on whether the OEM was "favored" by Microsoft for complying with its restrictions. Findings of Fact ¶ 64.
- 28. Microsoft also used marketing, joint development, and other programs as opportunities to provide financial reward to favored OEMs. Those OEMs that did not comply with Microsoft's restrictions or challenged Microsoft's selection of applications faced financial penalties in comparison. Gateway was charged a higher fee by Microsoft for its Windows license than were Compaq, Dell and Hewlett-Packard. Findings of Fact ¶ 64.

Microsoft Affirmatively Restricted Gateway's Attempts to Innovate and Offer Customized PC Configurations Including Rival Middleware

29. While at Gateway, I experienced first-hand on several occasions how Microsoft used its Windows operating system monopoly to dictate what products and services Gateway carried on its PCs. Gateway's niche in the personal computer marketplace is direct sales of computers to consumers, primarily for use at home or in small businesses. Through its direct contact with customers, as well as through consumer research, Gateway came to

understand consumer desires and needs. Gateway offered, and continues to offer to the extent that it is able, built-to-order personal computers, loaded with the software, programs, applications and features chosen by each customer. Gateway led the industry in providing consumer choice in the configuration of PCs, for both hardware and software.

- 30. Gateway understood that many consumers wanted to purchase a computer that was already loaded with certain types of software and hardware so that they could take the computer out of its box at home, turn the computer on, and use it. Most users of home PCs would rather have the computer already loaded with their software choices than have to separately purchase software and load it onto the computer themselves.
- 31. As a build-to-order company, Gateway did not produce a single configuration of the PC. Rather, Gateway asked the user what his or her needs were and configured the product accordingly. Gateway did this for any aspect of the PC including whether to use an Intel processor or an AMD processor. Gateway offered vast flexibility to the user.
- 32. Because Gateway employed a business model that focused on providing built-to-order products for its customers, I and others at Gateway repeatedly asked Microsoft for the ability to modify the Windows desktop and user interface to better meet the needs and demands of our customers. These requests were routinely denied.

- 33. For example, Gateway repeatedly asked Microsoft to remove Internet

 Explorer because Gateway believed many customers would have preferred

 other browsers such as Netscape's Navigator. Microsoft repeatedly denied

 this request stating that the IE code was integrated into the operating

 system. Thus, Microsoft only allowed Gateway to offer customers the choice of
 an additional browser, rather than an alternative browser.
- 34. In this example, even though Gateway believed that some customers wanted PC configurations without certain Microsoft software, we could not meet that customer demand, because we could not remove the Microsoft product in question. Thus, consumers were stuck with the Microsoft product on their machine whether they wanted it or not. For example, IE code on a machine can be automatically invoked in many instances despite a user's expectations or preference, creating customer confusion. This type of customer confusion not only decreases satisfaction with the product, but it also increases the number of Gateway's customer service calls. Those calls, in turn, increase Gateway's support costs.
- 35. Even simple requests by Gateway for product changes, such as changing the icons at the start sequence, were rejected by Microsoft. The result was that Gateway too often was at the mercy of Microsoft to configure its PCs with Microsoft products and in the manner Microsoft ordained.
- 36. Gateway's efforts to provide differentiated products that met specific customer needs were continually frustrated by Microsoft. Even though Gateway could

- add a component, we could not change the look and feel of the "Windows experience" regardless of what the customer wanted. If we sold a PC targeted to a pre-schooler, its desktop display looked just like the PC desktop display sold to the work-at-home customer. Microsoft's licenses and specifications prevented any real product differentiation.
- OEMs from this constricting embrace by Microsoft. While it purports to provide flexibility to OEMs, that flexibility is in the end illusory. Also, because it relies only on OEMs to promote desktop competition and does not create a role for better-suited third parties it is unlikely to succeed in promoting consumer choices.
- 38. The States' Proposed Remedy, on the other hand, incorporates mechanisms that are needed to provide real consumer choice in the personal computer marketplace. This choice is important to foster competition.
- 39. OEMs will distribute the non-Microsoft middleware applications that their customers want only if Microsoft is prohibited from using the Windows platform to stop them from doing so.
- 40. The States' Proposed Remedy will also help prevent Microsoft from engaging in similar lines of conduct, including controlling the desktop hardware and software configurations through coercion of OEMs via operating system and related license agreements, fees, and discounts. The States' Proposed Remedy also fosters consumer choice by opening existing barriers to entry in the

middleware and applications market, and by enabling Third-Party Licensees to help foster competitive software markets.

THE REMEDY MUST PROHIBIT MICROSOFT FROM MAINTAINING ITS MONOPOLY BY LIMITING OEMS FROM CONFIGURING PCS WITH NON-MICROSOFT MIDDLEWARE AND APPLICATIONS

41. An appropriate remedy in this case must give OEMs the maximum degree of flexibility to produce hardware and to configure software applications and programs that are differentiated and able to meet varying consumer needs.
OEMs must have this ability to define their own products free from the concern of retaliation by Microsoft.

OEMs Need Product Flexibility Without Being Financially Disadvantaged by Microsoft

- 42. Consider why the PCs marketed today to teenagers seeking high performance games and music capabilities look essentially the same as the PCs marketed to business executives seeking to anchor home offices. A teenager and a business executive seek to do very different things with a new PC and have different needs and tastes. Invariably, however, our teenagers and our business executives have little choice but to purchase nearly identical Windows-based PCs.
- 43. In today's PC world, the user experience is standardized, largely as a result of Microsoft's control, exerted through its Windows Desktop Operating Licensing

- Agreements (DTOS) and related agreements. (Copies of the DTOS and related Microsoft licensing agreements from my time at Gateway are attached as Exhibit 1,2,4 and 5.)
- 44. Because there is no viable alternative to the Windows desktop operating system for PCs, OEMs need to reach agreement with Microsoft to license its Windows Operating System. I understand, based on my experience at Gateway, that OEMs are concerned about possible termination by Microsoft of the Windows Operating System license. Microsoft has been able to use its licensing and related agreements and programs to control OEMs choices in product configuration, including strong financial disincentives for OEMs that carry alternative operating systems in addition to Windows or alternative applications and middleware.
- 45. As an OEM, Gateway was concerned that Microsoft varied the net royalty fees, through marketing development programs and other discounts, that OEMs paid for the Windows Operating System license. OEMs like Gateway were motivated to try to receive favorable economic treatment, or at least to not be economically disadvantaged by Microsoft compared to other OEMs.
- 46. Microsoft implemented Market Development Agreements (MDA), now called Market Development Programs (MDP), to provide substantial economic incentives for OEMs to meet Microsoft-imposed conditions and features.
 Through the MDAs, Microsoft has been able to financially reward favored OEMs that comply with Microsoft's product offerings. In the PC

manufacturer market, a few dollars per computer makes a big difference. MDP funds, although deemed by Microsoft to be voluntary programs, are significant. By meeting Microsoft's "milestones" or requirements, an OEM in 2000 could earn a discount of up to \$16 per license. For Gateway, this meant a potential discount of approximately \$80 million in 2000. (A copy of Gateway's 2000 MDP is attached as Exhibit 3.)

- 47. Microsoft also used its licensing agreements to threaten retaliation against OEMs that did not comply with their terms and restrictions. Microsoft interlocked its licensing agreements so that a breach of one contract is a breach of every contract. For example, Gateway during our negotiations with Microsoft in 2000 refused to sign the Office license agreement. Microsoft responded by telling us that by breaching of our Office contract, we were breaching our Windows license as well. In that case, if our Windows license had been terminated, our entire company could have been shut down.
- 48. Microsoft also uses the Logo Licensing Agreement and Windows Hardware Quality Labs (WHQL) certification or lack of certification of the PC as a licensed Windows system to reward OEM compliance with Microsoft's imposed requirements for PCs. WHQL certification of an OEM's PC systems is also commonly included as an independent MDP milestone. OEMs have a strong financial incentive to be certain that its PCs carry the Microsoft Windows Logo.

- 49. Through compliance with Microsoft's inter-locking agreements and programs, OEMs have been unable to distinguish their products in the marketplace.

 Today, all PCs look pretty much the same and the "PC experience" is controlled largely by Microsoft through the desktop operating system and related license agreements. In order to provide choices in software and applications on the PC, the OEMs must have the ability to configure the "PC experience" for the customer, including the look and feel of the desktop.
- 50. Microsoft controls the PC experience to protect its operating system monopoly. Thus, to Microsoft, it was also important to control the "out of the box experience" or OOBE. This refers to the initial start-up of the computer. This experience is important because it is the user's first interaction with the computer. Actions are taken by the user during the initial start-up that do not have to be taken again. For example, this is when the user registers his or her Windows licenses. This is also when the user activates certain functions and sets up the desktop. As the user makes choices, the computer gathers and stores data about the user. This is also an important time to promote brand loyalty, offer choices to the user, and obtain registration information.
- 51. Currently, the OOBE is controlled by Microsoft, and OEMs are allowed very little opportunity even for their brands to appear. The OEM should have the flexibility to customize the OOBE in a way that makes sense for a particular PC configuration for the user. For example, a PC manufacturer might want to

bundle a PC with video and/or still camera capabilities. The OOBE might then focus on how to use the digital camera as well as how to use the computer, and might accomplish registration of both the computer and camera. Another PC configuration might be focused on Internet access, and then the OOBE might focus on Internet access providers and content providers. Yet another PC configuration might have everything preloaded for the user, and the OOBE could be designed so that the user's choices are all activated during the OOBE process.

- 52. The OOBE registration sequence currently provides the user's registration of the Windows Operating System license. However, OEMs could decide to include a registration sequence that would enable the user to sign up for other things. It could include registration of the PC as hardware or registration of an Internet Service Provider (ISP) or other pieces of software or applications.
- 53. In sum, by controlling the OOBE process, Microsoft has effectively prohibited OEMs from providing innovative services that might build PC brand loyalty and from featuring non-Microsoft middleware products that might erode the applications barrier to entry.

Gateway's Experience Shows Why Strong Protections for OEM Flexibility Are Needed

54. While at Gateway, I encountered numerous examples of how Microsoft's conduct resulted in its control and standardization of the desktop, stifling

innovation and denying consumers' choices. These experiences are instructive as I compare the States' Proposed Remedy with Microsoft's Proposed Remedy.

"Go-Back"

- 55. A prime example I encountered of Microsoft's effort to limit OEM flexibility involved Gateway's "Go-Back" software. This software, developed by Gateway in 1999 and 2000, enabled consumers to restore their computer to a previous state if the computer crashed or if the consumers made an error that they wanted to reverse.
- 56. To get the full benefit of "Go Back," it was Gateway's intention to have the application always running on the computer. Otherwise, its "automatic" ability to reverse errors or restore the system would be ineffective if it wasn't activated. However, under Microsoft's Windows Desktop Operating System licensing, Gateway could not automatically launch any application code during the initial start-up sequence (also called Out of Box Experience or OOBE) even when, like "Go Back," it would be a central piece of the product offering. Thus, Microsoft forced the end-user to initiate the "Go Back" application.
- 57. Moreover, Microsoft did not allow Gateway the flexibility to differentiate the "Go Back" application with a prominent icon. The benefit of "Go Back" was primarily for users who are unaccustomed to computers. Microsoft's restrictions prevented those consumers from receiving the full benefit of this application, because it prevented Gateway from installing the product in a

manner in which it was automatically invoked or easily activated. Because Gateway was unable to pre-install it in a way that consumers could easily find and use it, the "Go Back" program did not succeed.

Gateway.Net

- 58. Another example of Microsoft's efforts to prevent OEMs from differentiating their products involved Gateway's "Gateway.net" initiative. As Gateway began to understand that a significant number of customers were using the computer to access the Internet, Gateway in the summer of 1999 started its own Internet Service Provider ("ISP") and enabled consumers to order Gateway.Net ISP service with their PCs.
- 59. Microsoft frustrated the project by imposing overly restrictive OS licensing requirements on Gateway. For example, Microsoft limited Gateway's ability to modify the boot-up sequence, which made it confusing for consumers to realize that their machine included our ISP and increased the chance that they would inadvertently switch to MSN. The result was that customers would order Gateway.net, but would then fail to register for it when they booted-up the PC because they did not know that registration was necessary or understand how to do it. Thus, Microsoft's restrictions frustrated consumers, built ill will toward our product, and made it difficult to execute our business plan.

Connected Touchpad

Gateway Connected Touchpad, which was a simple device without PC capability for connecting to the Internet. Because the device did not need to run Windows-compatible applications, we used the Linux Operating System on this product instead of Windows. Gateway's decision to go with Linux on the Connected Touchpad, which won the Comdex Product of the Year award in 2000, often was referenced in a negative way by Microsoft in discussions. I concluded that Gateway received less favorable royalty fees and discounts than some other OEM and that this was one of the reasons why. Gateway partnered with AOL on the Connected Touchpad, which Microsoft also referred to as a reason that Gateway was not a good partner with Microsoft.

Small Business Server

61. Similarly, in the same 1999-2000 time frame, Gateway faced threats of retaliation in the operating system/applications/desktop market for its actions in other markets. One example involved Gateway's development of a small business server appliance targeted at small businesses. Gateway sought Microsoft's support and discussed using Windows NT embedded as the product's operating system. However, Microsoft imposed non-technically-based restrictions on the number of users it would allow a Windows-based small server to support. Therefore, Gateway chose to run the product on the Linux Operating System

- 62. Our decision to choose Linux over Windows was often cited by Microsoft executives when explaining why they considered Gateway to be a "bad partner," which in turn was often the basis for Microsoft's action in denying Gateway requests that would have promoted desktop competition. Thus, Gateway was punished for using Linux instead of Windows in this other market, even though Microsoft did not permit Gateway to use its Windows Operating System for the product Gateway developed.
- 63. Gateway's decisions to use Linux in these two products, and to partner with AOL on the Connected Touchpad, were often cited by Microsoft when asked for reasons as to why Gateway had been removed from its list of approved vendors. This is the sort of retaliation that must be prevented by any effective remedy. The narrow anti-retaliation provision in the Microsoft Proposal would not prevent Microsoft from retaliating against Gateway in this situation as the Microsoft Proposal only prevents retaliation for carrying competing middleware products.

Destination

64. Another example of Microsoft's control over OEMs through its licensing agreements was its decision to prohibit Gateway from selling its "Destination" Product. Destination was a convergence PC with multi-media functions incorporated into the PC, qualified with Windows 98. This was a pre-built, low volume product. Because Microsoft chose to upgrade its operating system, Gateway was precluded from shipping any product with Windows 98 on it

after December 31, 1999. Gateway sought Microsoft's approval to allow it to continue to ship its several hundred Destination products that were in inventory into the first quarter of 2000. Microsoft refused to grant the brief extension, demanding that Gateway requalify any remaining machines for Windows 98 SE in order to sell them. This would have been very expensive and would have provided no consumer benefit. As a result of Microsoft's actions, Gateway could not ship its existing pre-built inventory of these PCs.

65. These incidents illustrate how Microsoft worked to limit OEM flexibility in providing variety in terms of hardware and pre-loaded software applications, as well as how Microsoft retaliated against OEMs that dared to support non-Microsoft products. They show why a broad anti-retaliation provision is needed, as well as why it would be desirable for OEMs to have a non-Microsoft source for obtaining Windows' based products, such as Third-Party Licensees. If, while I was at Gateway, we had known that there was another source to which we could turn to get a Windows Operating System-based bundle, we would have been more aggressive in promoting competitive challenges to Microsoft, and in resisting Microsoft's retaliatory threats.

MICROSOFT'S PROPOSED REMEDY PERMITS MICROSOFT TO CONTINUE TO UNDULY INFLUENCE OEM CHOICE

- 66. Although Microsoft's remedy proposal purports to provide OEMs with product flexibility, ultimately Microsoft's Proposed Remedy will not provide OEM's the flexibility they need to bring an end to the Microsoft restrictions discussed above.
- 67. OEMs are undoubtedly offered some flexibility to display icons, shortcuts and menu entries for non-Microsoft middleware in Section III.C.1. However, for every grant of flexibility to the OEM, Microsoft has imposed restrictions. The end result is that Microsoft retains the ability to dictate to the OEMs what is on the PC desktop and where.
- 68. In Section III.C.1., Microsoft retains the right to restrict OEMs from displaying icons, shortcuts or menu entries to the desktop or Start menu "or anywhere else in a Windows Operating System product where a list of icons, shortcuts, or menu entries for applications are generally displayed." The provision goes on to provide "that Microsoft may restrict an OEM from displaying icons, shortcuts, or menu entries" for any product in any list "as being limited to products that provide particular types of functionality...". For example, an OEM can only put the icon for a media player product in the place where Microsoft puts media player icons.
- 69. Section III.C.3. of the Microsoft Proposal severely limits an OEM's ability to launch a competing middleware product. Non-Microsoft Middleware can

launch automatically only "if a Microsoft Middleware Product that provides similar functionality would otherwise be launched automatically at that time. . .". This means Microsoft still has the final say about whether an OEM can launch a competing middleware product automatically. If an OEM wanted to develop a PC for the teenage market and wanted to have Real Media Player to launch automatically after the initial boot up, the OEM could not do so under this proposal.

- 70. Thus, the Microsoft Proposal does not protect an OEM's right to install an automatically invoked middleware product if that product is an innovation for which no similar Microsoft product exists. Similarly, if a new and innovative middleware product were developed by a vendor other than Microsoft, there is no protection for an OEM's choice to display an icon or otherwise feature the new product.
- 71. Further, if any competing product were to seriously challenge a Microsoft product, Microsoft could discontinue any automatic launch feature of its middleware product and thereby thwart the automatic launch of a competing product. For example, if an OEM wanted to enable the Real Media Player to launch automatically after boot up because the consumer chose the Real Media product, Microsoft allows the OEM to automatically launch the Real Media Player only if Microsoft's Windows Media Player (WMP) would otherwise automatically launch at that time. Furthermore, the OEM could only put a Real Media icon on the desktop with "a user interface of similar

size and shape to the user interface displayed by the corresponding Microsoft Middleware Product." So, even if the consumer selected Real Media, the OEM could have it automatically launch only if Microsoft would otherwise automatically launch WMP, and the OEM could either put no Real Media icon on the desktop or put one on that is the same size and shape of Microsoft's WMP.

- 72. OEMs should have the flexibility to design icons and user interfaces that fit the consumer and the product. It is simple common sense that applications or middleware products selected by the consumer through the OEM should be configured and placed on the PC desktop to be easy to identify and to minimize confusion.
- 73. The Microsoft Proposal likewise fails to protect an OEM's right to add things to the desktop if Microsoft does not have a similar product, or if it chooses not to have any such product accessible via an icon, shortcut or menu entry. The Microsoft Proposal continues to give Microsoft substantial authority over the desktop. Consumers and OEMs should have the ability to display and launch whatever functions and applications that best fit the user's need, regardless of how, where or if Microsoft displays features or applications of similar functionality. (The "Go-Back" example discussed in ¶ 51-53 is illustrative of the importance of this point.)

Microsoft's Proposed Remedy Will Not Eliminate Retaliation Against OEMs

- 74. Microsoft's remedy does not explicitly allow OEMs to alter Windows features to promote competing products, nor does it prevent Microsoft from retaliating against OEMs if they go beyond a very narrow set of actions. The Microsoft Proposal prevents retaliation against OEMs only for the selection of Non-Microsoft Middleware. The BIOS, start up, registration sequence, etc. are not defined in the proposal as "middleware." Therefore, under the Microsoft Proposal, OEMs would innovate and exert control over any of these areas at their own risk.
- 75. Gateway had numerous discussions with Microsoft about possible ways to change the look and feel of the desktop to make some things easier and simpler for the user. In the case of "Go Back", our first choice (as discussed above) was to have the program automatically invoked. Alternatively, we wanted to put a larger icon on the desktop for "Go Back", so that the user could always find the "Go Back" function. Microsoft would not permit us to display any icon that was different in size from the Microsoft icons. Forced similarity in prominence of the icons defeated the ability to make this important function easy for the user to find.

Microsoft's Proposed Remedy to Eliminate End User Access is Not Sufficient to Promote Non-Microsoft Applications

76. If OEMs are to ever distribute rival middleware over Microsoft's middleware,
OEMs must also be able to actually remove Microsoft's middleware from PC

systems. Currently, as this Court has already determined, Microsoft has commingled the code to its middleware into the operating system. Internet Explorer is currently bound to Windows. Microsoft's Proposed Remedy, however, does not permit the OEMs to remove the code for these Middleware programs; it only allows PC OEMs to remove end-user access to Microsoft's middleware.

- 77. OEMs cannot reliably distribute rival middleware if they are not allowed to remove the code of Microsoft middleware providing the same functionality.

 Including two middleware platforms performing the same functions on a new PC causes customer confusion, which in turn increases OEM product support costs.
- 78. When a PC contains code for two rival middleware programs, consumers especially those unfamiliar with PCs may accidentally trigger one program when they mean to trigger another. This is especially so when, under Microsoft's Proposed Remedy, Windows is allowed to launch Microsoft middleware on a system on which a consumer has not chosen Microsoft's program to be the default version of the application.
- 79. While Microsoft does have a product support operation, as a practical matter, Windows product support is largely the responsibility of OEMs. The result is that OEMs pay a great financial price if their products create consumer confusion. Product support is expensive to OEMs. Selling PCs is a very low

- margin business. The cost of three or four support calls on a PC can easily extinguish the entire profit from a PC system.
- 80. Thus, OEMs are unlikely to install two versions of middleware with similar functionality. Microsoft's use of its operating system monopoly to insist that the code for its middleware applications be placed on PC and Microsoft's Proposed Remedy's failure to empower OEMs to remove that code means, as a practical matter, that OEMs are unlikely to back competitive challenges to Microsoft middleware.

THE STATES' PROPOSED REMEDY ALLOWS OEMS TO CUSTOMIZE PCS AND TO DISTRIBUTE NON-MICROSOFT MIDDLEWARE

81. Under the States' Proposed Remedy, however, OEMs will have the financial incentive to develop PCs that are differentiated from others and, thereby, to distribute rival middleware.

Proposal No. 2(c) Will Give OEMs and Third-Party Licensees Broad Flexibility in Product Configuration

82. Proposal No. 2(c) goes a long way toward freeing OEMs from Microsoft's restrictions. In general, Proposal No. 2(c) grants OEMs and Third-Party licensees broad flexibility in modifying the Windows desktop on new PCs.

Specifically, Proposal No. 2(c) forbids Microsoft from preventing OEMs or Third Party Licensees from modifying critical user interfaces and sequences, such as the boot sequence, the startup folder, the desktop, the start page – i.e.,

the various mechanisms that PC consumers employ to select which applications they will use. These Windows licensees are given the flexibility to include registration sequences, display or arrange icons in a manner helpful to consumers, and launch non-Microsoft applications. Most importantly, Proposal No. 2(c) lacks the carve-outs found in Microsoft's Proposed Remedy discussed above.

- 83. Proposal No. 2(c) allows OEMs to truly differentiate their PCs in accord with consumer wishes. The list of examples in 2(c) includes the most important ways in which Microsoft has controlled OEMs in the past, such as through its WHQL requirements, logo license agreements, MDP milestones, operating system license agreements, operating system pre-installation kit (OPK), and related contractual obligations imposed upon OEMs. Microsoft has controlled the BIOS and boot sequence, for example, to standardize the user experience and orient the user to Windows rather than to the PC brand.
- 84. Under Proposal No. 2(c), OEMs finally will be free to create software packages with Windows that are customized to users' tastes and needs. For example, about two years ago, Mattel created "Barbie" and "Hot Wheels" computers. However, Microsoft's restrictions prohibited Mattel from customizing such computers in anything more than superficial respects: these boxes, painted colors and covered with decals, had essentially the same functionality as a small business computer. By contrast, under Proposal No. 2(c) an OEM could

- target the childrens' market and make computers that appeal to that market, such as Lego computers, or Harry Potter computers, or Barbie computers.
- 85. For young people, OEMs might design special features, including big buttons or icons, or features that make it very difficult to delete things. Applications could be added as children mature, so that the program for the twelve-year-old is different from the application set for the ten-year-old, which is different from the feature set for the eight-year old. Most importantly, OEMs could supply new PCs with innovative products without fear of Microsoft restrictions.
- 86. The States' Proposed Remedy also provides OEMs the opportunity to be innovative and flexible in these areas because it prohibits retaliation for any OEM choice of non-Microsoft products or features. As discussed above, the Microsoft Proposal prevents retaliation against OEMs only for selection of "Non-Microsoft Middleware."
- 87. Proposal No. 2(c) is also important because it allows third-party licensees, such as software developers, the same flexibility as OEMs. Microsoft's Proposed Remedy does not include a third-party licensing provision: only OEMs and others chosen by Microsoft will get Windows licenses. My belief is that a Third-Party Licensing is an essential part of an effective remedy. I discuss this in more detail below.

Proposal No. 1 Allows OEMs to Remove Microsoft Middleware and Applications

- 88. The States' Proposed Remedy also encourages OEMs to distribute rival middleware by requiring Microsoft, in Proposal No. 1, to provide the OEMs with a version of Windows from which they can remove Microsoft middleware products. This requirement that Microsoft make available a version of the operating system with Microsoft's middleware unbound, so that applications such as Media Player or Internet Explorer can be removed, is very important to enable an OEM to be able to configure a computer that best meets a customer's needs or specifications. This proposal provides for consumer choice as well as OEM flexibility in selecting competing middleware products that can run on the Windows Operating System.
- 89. Nothing in the provision prevents Microsoft from continuing to innovate and develop new middleware products and applications. In fact, Proposal No. 1 specifically permits Microsoft to develop middleware and to offer versions of its Windows Operating System with the new middleware products bound to it. It only requires that Microsoft also provide the new version of the operating system with the middleware unbound, so that an OEM or third-party licensee can remove those applications. Of course, the "unbound" version must run without degradation except for the absence of whatever functionality the middleware product would have added.
- 90. The requirement in Proposal No.1 that Microsoft support directly and indirectly the unbound version of the operating system, (with the disclosure

provisions of Proposal No. 4 discussed below, and the Equal Access provision in Proposal No. 2(b)), should enable OEMs and third-party licensees to be able to run the unbound Windows Operating System product with alternative middleware products. OEMs and third-party licensees would have access to the technical information, APIs, and support that Microsoft today provides to third-party software developers (ISVs) who are developing products to run with Windows operating systems and middleware.

- 91. It is an important to OEMs like Gateway that Proposal No. 1 requires

 Microsoft to remove the code for the middleware product in the unbundled

 version of its Windows Operating System product. Gateway made many

 requests to Microsoft that it remove the code for IE, but to no avail. If the

 code is not removable, then the OEM is not really provided flexibility in being

 able to configure a computer with competing products, as the Microsoft

 middleware would always be present and might well be automatically invoked

 (or remotely activated).
- 92. The availability of unbound versions of Windows Operating System products also makes economic sense and would increase market variety in computing devices. This would provide for the option of low-end personal computers that would run on "stripped down" versions of Windows, and could be geared to specific uses. Manufacturers could use hardware that meets consumer needs, to create products that meet consumer needs, without having to design both hardware and software around Microsoft's edicts. Consumers would get a

- broad range of products to choose from, not just the products that Microsoft believes that those consumers should have.
- 93. Additionally, insofar as Microsoft complies with the remedy and makes it possible for OEMs and third-party licensees to remove its middleware from Windows, the States' Proposed Remedy No. 7 additionally bars Microsoft from forcing OEMs to include the code to that middleware on their PC systems through contractual restrictions. Microsoft used similar contractual restrictions to prevent OEMs like Gateway from removing Internet Explorer from PCs. This provision is important to stop Microsoft from accomplishing by contract what it cannot accomplish technically the distribution of its middleware at the expense of its rival.
- 94. Microsoft's contractual restrictions remain the centerpiece of its efforts to entrench its operating system monopoly. A remedy that does not forbid such tying cannot be said to be effective.

THE STATES' PROPOSED REMEDY ALSO CONTAINS A MUCH NEEDED THIRD PARTY LICENSING PROVISION TO PROMOTE CONSUMER CHOICE – BECAUSE THE OEMS CANNOT ADEQUATELY PROMOTE COMPETITION ON THEIR OWN

95. Gateway is a manufacturer of computers but is not a software company. For the most part, Gateway purchased software from independent software vendors and loaded software onto computers to meet customer needs.

Gateway, during my tenure, had several hundred engineers working on

- hardware design and development, but probably only thirty working on software. Most OEMs probably had an even smaller percentage of engineers working on software.
- 96. This is in part a result of Microsoft's dominance in the operating system market and its ability to dictate the software and middleware that OEMs can carry on PCs if the OEMs want to license the Windows Operating System.

 Under Microsoft's Desktop Operating System License (DTOS), the OEM installs the Windows "kit" and perhaps application software. There was virtually no software engineering for the OEMs to do related to the Windows Operating System and middleware products and applications.
- 97. Despite the many provisions in the States' Proposed Remedy that would create greater OEM flexibility and encourage competition, they may not without more be enough to unfetter the market from Microsoft's control, as the OEMs may not be able, without help, to create real choice for consumers. OEMs need the assistance of the software developers to create the various applications and programs to meet customer needs.
- 98. It is my experience that OEMs focus almost exclusively on being efficient providers of hardware. The PC market is tight enough that a few dollars per computer makes a big difference. Many OEMs do not have the economic ability to undertake software development in addition to hardware development.

- 99. For this reason, the States' Proposed Remedy allows for Third Party

 Licensing, giving entities such as software developers the same opportunity

 given to OEMs to obtain a Windows license, removing Microsoft Middleware,

 and then create a bundled offering of the Windows Operating

 System/applications to compete with the Microsoft bundle at retail.
- 100. By contrast, the Microsoft Proposal grants rights only to OEMs to license, reconfigure the Windows defaults, and market that product.
- 101. OEMs need independent software vendors and developers (ISVs) to develop products and applications that provide competition to Microsoft middleware and software applications. To develop competing products and applications, ISVs must also have access to technical information and the freedom from Microsoft's leveraging tactics to develop, modify and change software features and then make those products available to OEMs for incorporation onto PCs. This is why the States' Third-Party Licensing and Equal Access provisions are so important.
- 102. Third-party licensing is critical because it both promotes this case's remedial objectives directly, and makes the OEM remedies more effective. It promotes this case's remedial objectives directly by creating another group of entities that will partner with, and promote non-Microsoft middleware products, as well as creating another means of distribution of such products. Thus, third party licensing will directly and immediately promote the distribution on non-Microsoft Middleware.

- 103. At the same time, the third-party licensing also contributes to the remedy's effectiveness indirectly, by making the remedies that promote OEM flexibility more effective, in three critical respects. First, by creating an alternative source of Windows Operating System licenses beyond Microsoft, the Third-Party Licensing provision removes the sword hanging over an OEM's head: it will know that, no matter what Microsoft threatens, there is another vendor from whom it can get a Windows-based product. This will empower the OEMs to take advantage of the flexibility the remedy otherwise provides. Second, by allowing an OEM to obtain a bundled offering easily and without substantial investment, it ensures that the economics of constructing a Windows bundle do not result in OEMs facing "all or nothing" choices regarding the use of such non-Microsoft products: an OEM can test the market appeal of such competitive offerings by diverting a percentage of its production to such units. Third, by bringing their unique corporate assets, financial resources and technical expertise to the market, Third-Party Licensees are likely to create a range of competitive offerings that are unlikely to otherwise be created.
- 104. Conversely, the Microsoft Proposal is entirely dependent on OEMs to be the agent for achieving desktop competition. This dependency is unsatisfactory for a number of reasons. First, the margins in the PC business are thin and many OEMs do not have the financial resources to facilitate, without help, serious competitive challenges to Microsoft's dominance. Second, as a result of the fact that OEMs have never had a need to develop software engineering

- capabilities (given the limited options they have under Microsoft's restrictive licensing agreements), many OEMs are presently lacking the technical expertise to develop and implement their own software solutions.
- 105. Many OEMs do not currently have the in-house capability to take advantage of the opportunity to develop new software and middleware applications. At least initially, OEMs will be heavily reliant upon third-party software providers to develop and market software and middleware products that compete with Microsoft products. OEMs will not have the in-house capabilities to take on the task of developing or modifying other media players. However, it is reasonable to expect that a cottage industry of software developers will grow into the space to innovate and extend middleware and other applications and programs. OEMs will select from third-party software providers those features, products and applications that fit its customers' needs.
- 106. Third-party licensing creates an additional means of distributing middleware in three ways. First, by rendering the OEM flexibility remedies more effective (see above), third-party licensing creates a market where more non-Microsoft middleware will obtain distribution directly via OEMs. Second, by allowing additional industry participants to license Windows and bring competitive retail products to market with the same bundling advantages as Microsoft's products, middleware vendors that cannot afford to pay for placement on the PC desktop directly from OEMs can try to seek inclusion in the bundles that

are put together by third-party licensees. Third, the third-party licensees, who will be seeking to differentiate their products, will seek out new and innovative middleware offerings in order to compete with Microsoft.

107. Third-party licensing will promote OEM flexibility in product configuration and consumer choices, and will promote opportunities for development and distribution of rival middleware products and applications.

STATES' PROPOSED REMEDY No. 2(a) PROVIDES OEMS A TRUE UNIFORM LICENSING REGIME FOR MICROSOFT WINDOWS

108. Both the States and Microsoft agree that the remedy in this case must include a provision requiring OEM licensing agreements to be uniform. This is based upon the finding that Microsoft has used its various interlocking licensing agreements and related programs with OEMs to favor those OEMs that abide with its wishes and punish those that support rival products or operating systems. Finding of Fact 62-64.

Microsoft's Proposed Remedy Defies Uniformity By Allowing Market Development Programs (MDPs)

109. One of Microsoft's important tools for controlling OEMs through economic incentives is the Market Development Agreements (now called Market Development Programs or MDP). Market Development Programs provide financial rebates to OEMs for reaching "milestones" established by Microsoft. The milestones vary from year to year, but generally include non-marketing

- substantive restrictions on OEMs such as boot-times, computer memory allocation, and product configuration. Determining an OEM's compliance with the MDP milestones was within Microsoft's sole discretion, as was the "penalty" or amount of the discount the OEM would lose for less than full compliance with any MDP milestone.
- 110. While I never saw the actual agreements presented by Microsoft to other OEMs, I understood that the agreements were unequal because Microsoft was willing to renegotiate the contract presented to Gateway each year. When I asked if changes made to accommodate Gateway were presented to other OEMs, Microsoft refused to respond to my inquiries.
- 111. Gateway periodically performed cost analyses to calculate our competitors' pricing breakdown, including the price they paid for Microsoft's Windows Operating Systems and related products. Without fail, our calculations suggested that Gateway paid a higher price for Windows than "favored" OEMs.
- 112. It was my experience that Microsoft often referred to OEMs that were "good partners" and those that were not. A "good partner" is an OEM that "toes the Microsoft line": for example, by shipping Microsoft products and middleware in the way dictated by Microsoft, or by avoiding business with Microsoft's competitors. When Gateway shipped an Internet appliance using AOL and Linux software, Microsoft told me that we were not acting like "good partners." We knew that "good partners" were offered important benefits,

- including a more favorable "effective" price for Windows i.e., the "price" that was a composite of the actual price of Windows, less marketing allowances and other discounts that helped offset the licensee fee.
- 113. Among the most serious flaws of the Microsoft Proposal is that it does not eliminate market development payments, which are Microsoft's means of setting the de facto price of Windows. Section III.B of Microsoft's Proposed Remedy continues to allow "market development allowances, programs, or other discounts" provided that those discounts are "offered equally" to all the top-twenty OEMs. It thereby allows Microsoft to continue to reward OEMs who do not offer non-Microsoft Middleware products on their PCs and/or to financially disadvantage those OEMs who do support non-Microsoft middleware.
- 114. Microsoft refers to the Market Development Program (MDP) as a voluntary program. An OEM can choose to participate or not. Because of the large financial incentives at stake, the MDP is more a necessity for OEMs than it is a voluntary program. It is an effective mechanism by which Microsoft restricts OEMs' choices.
- 115. Attached as Exhibit 3 is Gateway's Market Development Program for 2000, the negotiation of which I supervised while I was at Gateway.¹

¹ The contract refers to the program as a "Market Development Agreement" or "MDA." During my time at Gateway, Microsoft used that terminology as opposed to "Market Development Program" or "MDP." I use the term MDP in my testimony because I understand that is Microsoft's current term for this type of contract.

- 116. As the attached MDP contract demonstrates, Microsoft offers OEMs several "rebates" off of the price of each Windows license for meeting specific "Milestone Activities." Although Gateway would achieve the milestones, and thus earn discounts in year 2000, the discounts would actually be applied to the royalty fees paid by Gateway during 2001.
- 117. The 2000 MDP contained six specific milestones that Gateway could meet to obtain a discount of up to \$16 per Windows license. Gateway shipped approximately five million products with Windows licenses in the year 2000. Therefore, achievement of the milestones in this MDP were worth somewhere around \$80 million to Gateway.
- 118. A \$16 discount per Windows license is an enormous amount of money for an OEM. No OEM can ignore such a large sum of money, especially if their competitors are earning these discounts. Achieving the MDP milestone discounts could mean the difference between making a profit and losing money on a particular unit. The ability to save up to \$16 per license was a tremendous incentive to meet the milestones set forth in the MDP.
- 119. As the attached contract also demonstrates, "market development agreement" is a misnomer. MDPs have little to do with marketing and much more to do with controlling the configuration of OEM-manufactured PCs. For example, milestone 1 of the 2000 MDP provided a hefty \$5.00 discount for OEMs that carry the Windows logo. To obtain that logo, an OEM must receive certification from Microsoft's Windows Hardware Quality Labs (WHQL). To

obtain WHQL certification, an OEM must subject itself to a meticulous checklist of technical requirements established by Microsoft. During my time at Gateway, the WHQL checklist contained both hardware and software configuration requirements. Indeed, it would be fair to say that WHQL established a uniform design blueprint for PCs. Therefore, to obtain this necessary \$5 discount per license, OEMs had to allow Microsoft to essentially dictate the design of their PCs.

- 120. Milestone 2 of this agreement similarly sets substantive requirements for OEM PC systems. Indeed, the \$2.00 discount of Milestone 2 is specifically tailored to keep competitive middleware off of OEM PCs. The milestone first requires that OEM PCs complete the initial boot-up sequence within 10 minutes. This milestone is important because it effectively stops OEMs from inserting their own content into the boot-up. Microsoft's boot-up sequence already took almost the entire 10 minutes; by requiring boot-up within ten minutes, Microsoft was essentially prohibiting OEMs from altering Microsoft's sequence at boot up.
- 121. Similarly, the milestone requires that OEM Windows PCs power-up within 10 seconds. This milestone restricted OEMs from launching their own middleware automatically as part of the power-up sequence. Launching competitive products would have extended the time for power-up beyond the required 10 seconds established by the milestone.

- 122. As well, Microsoft's requirement of 85% free system memory effectively stopped OEMs from pre-installing their own applications or middleware.

 Windows already consumed close to 15% of a system's memory. Any significant program installed by an OEM would bring the machine beyond the 85% benchmark and deny the OEM the milestone.
- 123. Microsoft changed the MDP milestones every year. Microsoft freely imposed new requirements or altered requirements as the perceived threats to its business changed. The MDP provided a flexible and powerful means to control OEMs with detailed orders.
- 124. Allowing such discounts by Microsoft, as Microsoft's Proposed Remedy would do, but then suggesting that Microsoft cannot use them for anti-competitive ends, or must offer them "equally," is ineffective. That is, Microsoft can almost inevitably proffer some allegedly neutral reason for denying to a disfavored OEM participation in this program of economic incentives. OEMs will have neither the time nor resources to engage in disputes over whether their exclusion from a particular marketing programs was due to retaliation or for genuinely neutral reasons.
- 125. For example, while I was at Gateway, when we were out of Microsoft's favor for promoting competitive challenges to Microsoft, we were often told that we could not participate in a particular marketing program for one reason or another. While some reasons were legitimate, others were doubtlessly "shams" to "punish" Gateway because it was not acting as a "good partner."

- Allowing Microsoft to use its financial might to favor one OEM over another will almost always be justified by Microsoft by some "neutral" and "equal" rationale, and will substantially vitiate the effectiveness of the remedy.
- 126. Continuing to allow MDPs will enable Microsoft to continue to stifle competition in middleware products. It will allow Microsoft to continue to protect its monopoly in the operating system market. To be effective, the remedy in this case must enable the OEM to use and support non-Microsoft middleware and other applications and features without fear that it will be financially penalized for doing so.
- 127. Therefore, through the use of the market development programs, the Microsoft Proposed Remedy eliminates the potential good that might come from uniformity. Moreover, the MDP also allows Microsoft to reward OEMs for taking actions that they otherwise would no longer be able to require. For example, although Microsoft could no longer require OEMs to include Microsoft middleware icons on the PC desktop, it can simply reward those OEMs that do. Given the tight margins under which OEMs operate, these "rewards" will act as requirements.
- 128. Ultimately, although Microsoft's Proposed Remedy appears to require uniformity, it does not.
- 129. The States' Proposed Remedy, however, prohibits Microsoft from using side agreements, such as the MDP to provide financial incentive for OEMs to stick

to the Microsoft software configurations and hardware specifications rather than to innovate with alternative computer configurations.

States' Proposed Remedy No. 2 (a)(ii) Allows "Reasonable Volume Discounts"

- 130. This proposal does not require Microsoft to treat all OEMs alike or even to enable every OEM to pay the same royalty fee for the Windows Operating System license. Proposal No. 2 (a)(ii) allows for "reasonable, uniform volume discounts to be offered on a non-discriminatory basis . . .". This comports with industry expectations and standards where the large-volume purchases of Windows Operating System licenses (in other words, the high-volume OEMs) would be expected to pay a royalty fee that is somewhat less than lower-volume purchasers.
- 131. However, it does require that any OEM that purchases 1 million copies would pay the same royalty fee as any other OEM that purchases 1 million copies of the Windows Operating System licenses, without regard to whether that OEM is currently in Microsoft's favor for not supporting competing middleware products.
- 132. Moreover, the States' Proposed Remedy permits Microsoft to engage in unique bona fide joint development programs which require an OEM to expend a high degree of effort. It also provides for legitimate joint development of products and technologies, or other joint ventures, for which there is a separate business purpose other than simply leveraging maintenance of its operating

system monopoly by financially rewarding OEMs for not carrying competing products. Legitimate joint development programs are good for innovation and should be encouraged. Microsoft should be, and under this proposal would be, permitted to engage with OEMs or other third-parties in legitimate joint development efforts.

OEMS AND THIRD PARTY LICENSEES NEED TO BE ASSURED THAT MICROSOFT CANNOT DISFAVOR THEM FOR SUPPORTING COMPETING PRODUCTS

133. Both Microsoft's Proposed Remedy and the States' Proposed Remedy include prohibitions against retaliation. Prohibiting retaliation against OEMs is obviously important. Microsoft has used many mechanisms in the past to leverage OEMs to carry only Microsoft's operating system, middleware products and other applications, including but not limited to its use of Market Development Programs or Agreements as discussed above. Microsoft has also used the sharing of technical information or support to benefit OEMs who were compliant. This involved both whether or not to share certain technical information with an OEM at all, as well as the timing of sharing the technical information.

Microsoft's Proposed Remedy's Non-Retaliation Provision is Insufficient

134. Microsoft's anti-retaliation provision, III.F, however, is narrower than what is adequate. Microsoft's Proposed Remedy only prohibits retaliation for

- "developing, using, distributing, promoting or supporting" Windows or middleware.
- 135. The States' Proposed Remedy No. 8 prevents Microsoft from retaliating against or punishing, whether by price for royalty for the Windows Operating System or other methods, PC manufacturers who incorporate non-Microsoft products, service, feature, or technology. As discussed above, Microsoft has defined middleware so narrowly that it is still free to retaliate against OEMs for conduct not expressly part of distributing middleware.
- 136. For example, under Microsoft's Proposed Remedy, Microsoft could retaliate against an OEM for setting rival middleware as a default application. It also can still retaliate for the distribution of what Microsoft defines as an "application," such as Word Perfect.
- 137. Microsoft, however, has interlocked its contracts so that a breach of one contract is a breach of every contract. During my tenure at Gateway, for example, we once refused to sign our Office license agreement. Microsoft responded by telling us that because we were in breach of our Office contract, we could be found to be in breach of our Windows license as well; if so found, our entire company could have been shut down. Because of these interlocking contractual arrangements, which the Microsoft Proposal does not forbid, Microsoft retains powerful weapons to retaliate against any behavior that Microsoft considers not to be "good partner" conduct.

States' Proposed Remedy No. 8, In Combination With Other Provisions, Prohibits Any Retaliatory Action By Microsoft Against OEMs

- 138. The States' Proposed Remedy also is important for making clear that retaliation includes discrimination in the release of technical information.

 The timing of the release of technical information is important to all PC manufacturers. This is because so few ways currently exist for OEMs to differentiate their products in the marketplace. One remaining advantage is to be first to market with a new software or technology. Thus, if Microsoft were allowed to differentiate at will among OEMs as to when it releases technical information as it has in the past Microsoft would still possess an important tool for leveraging OEMs. Early release of technical information can help a favored OEM, one that is favored because it has not supported non-Microsoft middleware, be first to market with a new or improved product or application.
- 139. Likewise, the States' Proposed Remedy No. 2(b) is an important part of the remedy because it prevents Microsoft from discriminating among OEMs or Third-Party Licensees when it is sharing technical support, information, and future plans with these entities without requiring the OEMs or Third Parties to prove that the basis for withholding that information is discriminatory.
- 140. Nothing in Proposal No. 2(b) requires Microsoft to disclose its proprietary information to third parties. Rather, the proposal merely requires that if Microsoft is going to share some information with some of these third parties,

- OEMs and Third-Party Licensees is essential to making any disclosure provision effective. If Microsoft can withhold critical information from Third-Party Licensees that it is sharing with OEMs, then those Licensees will find themselves at a severe disadvantage in bringing their products to market.
- 141. I also note that the States' Proposed Remedy does not prohibit different treatment among OEMs based upon legitimate volume-based reasons. For example, if an OEM is shipping a large volume of operating systems and numerous system types, it is reasonable to expect that Microsoft might have more technical support personnel available to that OEM than to a small volume OEM that ships few different systems. This would constitute a reasonable business practice if it had nothing to do with providing favorable treatment to leverage OEMs to not support competitor products and thereby to protect the Microsoft operating system monopoly. Nothing here tries to restrict Microsoft's ability to provide service to OEMs that is proportional to the OEMs' volume.
- 142. Perhaps the most onerous provision is what could be called the "two strikes and you're out provision" in Microsoft's Proposed Remedy at III.A. This is critical because an OEM has virtually no where to go today for a PC operating system other than to Microsoft. (That would change under the States' Proposed Remedy for Third Party Licensing.) The threat of having your operating system license withdrawn is a terrifying threat for an OEM.

- 143. Section III.A of the Microsoft Proposal says that if the OEM violates any provision of the licensing agreements, the OEM has only 30 days after notice of the violation to cure. The proposal does not require the violation to be material. But it goes on to provide that if a second notice has been given, Microsoft can terminate the license. Thus, by the words set forth in the Microsoft Proposal, if Microsoft sent two notices simultaneously to an OEM, no 30-day cure period would be required. Upon the second notice, termination is within Microsoft's sole discretion.
- 144. Thus, an OEM that does undertake to provide desktop flexibility in terms of the configuration of software products and applications is subject to retaliation by Microsoft under the Microsoft Proposal. That threat is made perfectly clear in the "two strikes and you're out" provision.

The States' Proposed Remedy No. 10 Protects OEM Choices, Including Default Choices

145. Part of Microsoft's effort at controlling the PC desktop has included control of which middleware software will be considered the "default." Default software is that software launched by Windows to perform a certain functions where the end-user does not otherwise specify a program. For example, the default media software is that software Windows chooses to launch when a user clicks on a music file to play it. Although several middleware programs may exist on that user's computer that are capable of playing the file, the user will only

- ever see the program considered the default unless he or she intentionally tells the computer to pick another program.
- 146. Microsoft has tightly restricted OEM's ability to choose which programs are considered by Windows to be the default. OEMs like Gateway are generally not provided with the ability to change default settings and are otherwise restricted from altering the defaults set by Microsoft.
- 147. States' Proposal No. 10 is so important because it requires that Microsoft respect the competitive choices made by users, OEMs and Third Party Licensees. If those individuals or entities select a non-Microsoft product to be the default for a functionality, Microsoft cannot change that selection, or press the user to do so. Likewise, if Microsoft makes its own Middleware the default application, it must allow OEMs and Third-Party licensees the opportunity to override that choice, and the opportunity to allow users to override that choice. Such a remedy is an integral part of protecting consumer choice.

Microsoft's Proposed Remedy Enables Microsoft To Alter OEM Default Choices

148. Section III.H, Microsoft's Proposed Remedy purports to allow OEMs to alter default settings to include non-Microsoft middleware products in the place of Microsoft's middleware. OEMs, however, may only "designate a non-Microsoft Middleware Product to be invoked in place of that Microsoft Middleware Product (or vice versa) in any case where the Windows Operating System

- Product would otherwise launch the Microsoft Middleware product in a separate Top-Level Window and display either (i) all of the user interface elements or (ii) the Trademark of the Microsoft Middleware Product."
- 149. In other words, Microsoft is free to continue to use its software as the default regardless of the default set by the OEM or end-user so long as it launches its product within another window or without its interface or trademark.

 OEM's have little ability to offer non-Microsoft middleware as a default under this proposal because Microsoft can easily design its software around this carve-out. Simply put, this carve out rewards Microsoft for further integrating its middleware into its the operating system.
- 150. In fact, as anyone familiar with the Internet can easily observe, Microsoft already frequently launches middleware in a manner compliant with the III.H carve-out. Many web sites, for example, provide streaming media files (such as video clips) inside of a web page. Windows defaults to the Windows Media Player to launch these media files. In playing the file within a browser window, Window Media Player neither opens a top level window nor provides a user interface or Windows Media Player trademark.
- 151. Moreover, Microsoft's remedy also allows Microsoft to alter default settings established by an OEM only 14 days after a computer has been purchased by the consumer. In essence, after an OEM sets a computer's applications and features, Microsoft can effectively change them back to the default version of Windows in a mere 14 days.

- 152. Under the Microsoft Proposal, an OEM like Gateway could, within restrictions discussed above, configure a personal computer to a customer's specifications, say with Netscape Navigator added as the browser, because this is the programs the customer chose. The customer must actually start up the computer to launch the programs. After 14 days, Microsoft could send a message to the user offering Internet Explorer, perhaps even by suggesting that IE works better with Windows. Except for the most computersophisticated users, some consumers may check the IE box offered by Microsoft and therefore end up with IE. The consumer may then wonder what happened to Netscape Navigator, which the consumer would remember ordering with the purchase of the PC. The consumer would be confused, and dissatisfied, and would call the OEM customer service line.
- 153. This scenario can be played out for various Microsoft Middleware Products under the Microsoft proposed remedy. The inevitable result of Microsoft's remedy will be consumer confusion and likely additional expense to consumers. It also will result in additional cost to OEMs when confused consumers call customer support for help.
- 154. The States' Proposed Remedy, in contrast, allows true flexibility of product configuration by OEMs, third-party licensees and consumers. The States' Proposed Remedy No. 10 allows OEMs to freely configure default middleware without any of the carve-outs found in the Microsoft remedy. The States' Proposed Remedy prohibits Microsoft from altering defaults chosen by the

OEM or end-user. Therefore, unlike under Microsoft's Proposed Remedy, the end-user will not find his or her computer reconfigured by Microsoft without meaningful consent.

155. The States' Proposed Remedy will give PC manufacturers confidence that

Microsoft will not override the configurations and software, application, and

middleware choices they make in developing different computers and product

configurations for customers. This will allow them to invest time and

resources into providing consumers with the best configurations for their

needs. The result will be the wider distribution of rival middleware software.

States' Proposed Remedy No. 4(a) Is Important to OEM Innovation and Product Configuration

156. Microsoft also restricted OEMs from freely configuring PCs with products and rival middleware by obscuring the APIs and other interfaces OEMs need to configure those PC systems. For example, when I was at Gateway, we had difficulties configuring Gateway.net. After spending substantial time to solve the problem, a Microsoft engineer decided to be helpful and showed us a hidden API known to Microsoft that was helpful to us. Although this time Microsoft chose to be helpful by providing the API, the experience demonstrated to me that many more hidden APIs exist that are used by Microsoft and that OEMs need to configure their PCs the same way that Microsoft does.

- 157. Microsoft's Proposed Remedy provides for the publication only of APIs used by middleware to "interoperate" with Windows.
- 158. The States' Proposed Remedy in Proposal No. 4(a) includes a broad API disclosure remedy without the exemptions included in Microsoft's Proposed Remedy. This remedy is broad enough to include disclosures of APIs that OEMs like Gateway would need to freely configure their Windows PCs.

A PROPER REMEDIAL DECREE MUST HAVE A TOUGH ENFORCEMENT REGIME CAPABLE OF SWIFT ACTION

- 159. Obviously, the remedy selected by this Court will only be effective if it can be adequately enforced. Given the quickness with which technology moves in this industry, fast and effective enforcement is all the more critical to ensuring that Microsoft can no longer abuse its monopoly power.
- 160. The Microsoft proposed enforcement mechanism is inadequate for two important reasons. First, it does not provide timely relief. Microsoft's remedy provides for a technical committee to essentially study allegations of noncompliance for what may be many months before any action is taken.

 Whenever that committee writes a report noting non-compliance, that report will simply be provided to the United States to petition this court for a remedy. The report of the technical committee, moreover, is not even admissible in that proceeding. This process is, at best, slow and cumbersome for an industry that is fast moving. By the time Microsoft's non-compliance

- can be corrected, the harm it will have caused can have potentially driven its rivals out of business or so eroded their market share to make withdrawal from the market inevitable.
- 161. Second, the technical committee has no power enforce the remedy. Not only is the technical committee partially appointed by Microsoft, it cannot itself take any action beyond noting deficiencies in Microsoft's performance. Its reports cannot be used against Microsoft. It can, essentially, do nothing to enforce compliance.
- 162. The Microsoft Proposal also provides for a compliance officer within Microsoft, but doesn't give the compliance officer any authority. It is not clear to whom the compliance officer reports. It does not even require that the compliance officer is a management level position. It doesn't give the compliance officer any teeth. In the end, it only provides that somewhere in the Microsoft organization, there will be a compliance officer, with some authority.
- 163. The provision requiring the selection of a technical committee fails to provide any efficient or timely resolution mechanism for disputes about how the remedy will be effectuated. In addition to the question of how the technical committee is selected, and how to prevent pro-Microsoft bias if the technical committee is housed at the Microsoft complex, the serious flaw is that the technical committee has no power over Microsoft. If the technical committee finds there has been an infraction or violation by Microsoft, the technical

- committee can return the matter to the complaining OEM who is then left with the prospect of taking Microsoft to court.
- 164. As this case has demonstrated, once anti-competitive conduct has driven a competitor out of business, or nearly out of business, there is no way in this industry to turn back the clock. This toothless enforcement mechanism in Microsoft's Proposed Remedy could enable Microsoft to continue its anti-competitive conduct for years. It is a necessary condition in the efforts to remove barriers to entry and to level the playing field that there be the mechanism for swift resolution of complaints by third-parties that Microsoft has violated the remedy proposal.
- 165. The States, on the other hand, propose a Special Master that can take action quickly to enforce compliance with the decree. In an industry where time is everything, the States' Proposed Special Master Provision is very important. PC manufacturers must have a mechanism for presenting claims of Microsoft's non-compliance with the remedy and for obtaining timely relief.
- 166. The States also propose an internal compliance officer who reports to the CEO of Microsoft, ensuring that compliance with the decree is taken seriously within Microsoft.
- 167. Overall, the States' Proposed Remedy ensures real enforcement of the decree because it enables fast resolution of Microsoft non-compliance. Microsoft cannot stall for time under the States' Proposed Remedy, as it can under Microsoft's.

MICROSOFT'S REMEDY CONTAINS OTHER DEFICIENCIES

- 168. Another major shortcoming of the Microsoft Proposal is its definition of Microsoft Middleware. Section VI.K. identifies five examples of middleware. There will likely never be any Microsoft middleware in addition to these five examples. This is because the definition of middleware leaves so much discretion to Microsoft that it can manipulate the factors set forth in the definition to avoid any new program or application from fitting the middleware definition. Moreover, the only Middleware products eligible to gain the full protection of the Microsoft Proposal are products that have shipped a million units of it the previous year.
- 169. This is of critical importance in an industry that is as rapidly changing and developing as the PC industry. Voice recognition middleware and imaging processing middleware are being developed and will become application platforms. The failure of the Microsoft Proposal to provide for future middleware except under Microsoft's discretion is a huge problem. Microsoft's claim that the States' Proposed Remedy would make everything middleware is unjustified. Everything is not middleware. But clearly there are more middleware examples today that just the five identified in the Microsoft proposed remedy. Voice recognition software, for example, like browsing, adds functionality to other applications and would meet the industry definition of middleware.

- 170. Another key deficiency of the Microsoft Proposal is the lack of timeliness. The PC business is a dynamic business. It is literally 10 years old and rapidly changing. It is a business where time truly is of the essence. In the Microsoft Proposal, the failure to provide for timely resolution of matters between Microsoft and OEMs or other third-parties is a significant problem if the goal of the proposal is to bring about change and unfettering the effects of Microsoft's monopoly. There is no high-level escalation path to resolve issues in a timely manner.
- 171. The Microsoft Proposal allows Microsoft and a third-party to create a joint venture. Such a joint venture would enable Microsoft to avoid many of the consequences of this proposed remedy. For example, Microsoft and an OEM could establish a joint venture to develop a version of the operating system and including certain pieces of middleware, then buy the commingled operating system from the joint venture. It would permit exclusive arrangements through side agreements and joint venture agreements.

 Conversely, the Microsoft Proposal forbids that OEM from effectively partnering with a third-party that is not Microsoft, by forbidding it from sublicensing its Windows license. Thus, under the Microsoft Proposal, OEM-Microsoft partnerships are authorized (even if anti-competitive), but OEM-Third Party partnerships are impeded (even if pro-competitive).

CONCLUSION

- 172. Overall, having considered both Microsoft's Proposed Remedy and the States' Proposed Remedy, it is my view that the States' Proposed Remedy is far superior to Microsoft's. The States' Proposed Remedy promises to free OEMs from the restrictions imposed upon them by Microsoft. Under it, OEMs can configure PC systems including non-Microsoft middleware that consumers desire. And these OEM efforts will be reinforced, fostered, and made more effective by the presence of Third Party Windows Licensees. Both the marketplace and consumers will benefit, as consumers will finally have the choices in PC configuration that they want and deserve.
- 173. Microsoft's Proposed Remedy, on the other hand, will be of little use to OEMs. Although it purports to provide freedom to OEMs to configure PCs and to include rival middleware, it takes away with one hand through carve-outs and loopholes what it gives with the other. It fails to prevent differential treatment of OEMs by Microsoft. It leaves Microsoft with tools and economic programs to continue to control OEMs configuration of PCs. Microsoft's Proposed Remedy promises to leave OEMs as dependant upon Microsoft as they were before ensuring that consumers receive the same uniform Windows PCs they have always received and that middleware other than Microsoft's never reaches distribution through the most important distribution channel in the PC world.

I declare under penalty of perjury of the laws of the United States that the foregoing is true and correct.
Executed this day of March 2002 at Washington, D.C.
Peter Ashkin