From: Scott M. Fulton, III
To: Microsoft ATR
Date: 12/18/01 4:30pm
Subject: Microsoft Settlement

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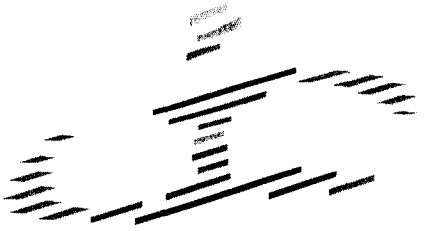
Gentlepersons:

Attached to this e-mail are my comments with regard to the Proposed Final Judgment in the Microsoft antitrust matter. I am a published author, editor, and developer of software, currently in partnership with Ingenus. My credentials are explained in the attached comments. I thank you for directing this document to the proper authority, and wish you the best of holidays.

Yours sincerely,

Scott M. Fulton, III
Senior Partner, Ingenus
5664 Fen Court
Indianapolis, IN 46220 USA
voice: (317) 475-0212



Ingenus

5664 FEN COURT
INDIANAPOLIS, IN 46220 USA
(317) 475-0212
smfulton3@apexmail.com

Scott M. Fulton, III
Jennifer Fulton

PROFESSIONAL I.T. SERVICES
Editorial Consulting
Engineering Training
Research

18 December 2001

Renata B. Hesse
Antitrust Division
United States Dept. of Justice
601 D. Street NW
Suite 1200
Washington, DC 20530-0001

Dear Ms. Hesse:

I am submitting to you this document in accordance with the U.S. District Court's request for public commentary in the matter of the proposed settlement in *U.S. v. Microsoft*, Civil Action No. 98-1232, and *New York v. Microsoft*, Civil Action No. 98-1233.

I am currently a computer book author and private computing consultant, and until very recently, was employed with CMP Media, Inc. as a Senior Editor for the Planet IT Web site–one of the recent victims of the "dot-com fallout." I have been a published author, editor, and correspondent in the field of computing for over 17 years, several of those years having been spent as one of *Computer Shopper* magazine's original contributors. Under the pseudonym "D. F. Scott," I am the author of 13 books, nine of which are on the subject of Microsoft Visual Basic, one of that company's most prominent programming languages. I am currently working on my fourteenth title, on the subject of the Microsoft Access 2002 database. As an author, programmer, and private consultant, I am intimately familiar with Microsoft's products, applications architecture, and corporate history. I have developed software using Microsoft products for 23 years.

I know Microsoft, and I know my industry. I thoroughly comprehend how Microsoft's products, agendas, and conduct have shaped and defined computing as we know it today. I have friends and colleagues who work at Microsoft, and I have others who work with its current partners, its former partners, and its direct competitors. Having read Judge Thomas Penfield Jackson's Findings of Fact in the

civil matter as rendered 5 November 1999, and having shared my opinions at length with others directly affected by those Findings since that time, I can state without hesitation that there is nothing in those Findings to which I take exception, or about which I personally can find any reason to disagree. I call your attention to the fact that these Findings of Fact were given deference by the Court of Appeals, despite that certain elements were called into question, and despite the disqualification of the judge. The Appeals Court's thorough study of the Findings of Fact, as well as the other evidence in the case before the District Court, uphold a quintessential truth whose importance transcends any scrutiny of judicial misconduct: **Microsoft's conduct as a corporation and a manufacturer of computing products, is predicated upon an internal policy of deception, which includes deceiving customers, deceiving competitors, deceiving partners, deceiving its own vendors, and at some level, deceiving its own staff.**

Although the Appeals Court—with reluctance—deferred to Judge Jackson's Findings of Fact, it appears to me that the settlement currently proposed by Microsoft and the Justice Dept. has ignored the basic tenets of those Findings. This proposed settlement does not specify the actions of a company that has violated the Sherman Antitrust Act—a fact which has been upheld by the Appeals Court. Instead, it is a document with ample evidence of being scripted by a company entangled in its own self-importance and intoxicated by a fundamental belief in its own immunity, and having been agreed to by a plaintiff that no longer represents the cause of fairness in free enterprise originally championed by Joel Klein and Janet Reno.

That Microsoft Corp. has monopoly power in key markets is not in dispute. To hold monopoly power in this country is not illegal, and in certain conceivable circumstances, it may even be justified. Microsoft achieved its monopoly power through means which stand the test of legitimacy under the closest scrutiny. Throughout its history, the company has shrewdly and wisely taken advantage of imminent and remarkable opportunities. Its initial agreement in 1981 with IBM, allowing it to produce compatible operating systems for non-IBM computers, actually created an industry where there had not been one before, and which actually might never have been. That competitors, including IBM, have been unable to produce viable alternatives to MS-DOS or Microsoft Windows, can indeed be attributed to failures in foresight, design, and marketing solely on the part of those competitors. Generally, the prominence of Microsoft Corp. can be credited to its own legitimate successes, and to its competitors' legitimate shortcomings, wild notions, and simply wrong ideas.

But once Microsoft attained its lofty position, the measures it took to fortify, protect, and defend that position were clearly immoral, unethical, and as the Court of

Appeals has upheld, illegal. The antitrust case against Microsoft has been mainly about *deception* as a means not of attaining prominence, but of ensuring it. Any remedy imposed upon Microsoft, or settled upon by Microsoft and the Justice Dept., must acknowledge this deception, must take steps to completely disable and render defunct Microsoft's means of deception in the future, and must in some measure compensate those who were harmed–if not monetarily, then through good faith measures that go beyond the requirements of an ordinary company to do respectable and competitive business in its chosen industry. As it stands now, the proposed settlement may actually be used as a tool to extend and sustain the sheath of deception Microsoft has sewn, to further its own interests, and to continue the basic falsehood that the state of the computing industry now is as it should be.

ENTER THE DUNGEON

Once it became a monopoly as early as 1988, Microsoft's executives almost immediately adopted a Watergate-style cloak-and-dagger approach to its internal corporate and even personal conduct, to the extent that some executives were privately relishing in the opportunity for them to emulate Nixon's "plumbers," or characters from "The Godfather," or anti-heroes from comic books, or even leaders of the Third Reich. The company's chief executives not only tolerated but helped foster this new approach, like "dungeon masters" in a role-playing game encouraging nastier self-characterizations by players who deemed themselves "evil." Before the company had actually violated the law, Microsoft's executives were adopting other-worldly roles, imagining themselves as saviors of the world but rebels against the establishment, immunized from the laws that apply to mere mortals. It was this immersion in this surrealistic fantasy vision that empowered Microsoft not only to commit its undisputed violations of antitrust law, but also to defend its conduct to this very day as somehow fair, honest, innovative, and pro-competitive.

In 1994, *Newsweek* correspondent Michael Meyer sat in on a meeting of Microsoft's key executives, including then-CEO Bill Gates, and product managers who were discussing–while fully aware of Meyer's presence–the lackluster performance of their personal accounting software, called Microsoft Money, against a competitor, Intuit's Quicken. (Later, Microsoft and Intuit announced a merger, which even later fell apart.) In his 11 July 1994 article entitled, "Culture Club," Meyer recounted his experiences in the boardroom:

> Then comes a strange moment, the sort of thing that happens often at Microsoft, which seemingly within moments turns disaster into salvation. Talk has turned to broader trends in banking. Where's it going, what's in it for us. Banks are dinosaurs, says Gates. We can "bypass" them. [The Money product manager] is unhappy with an alliance involving a big bank-card company. "Too slow." Instead he proposes a deal with a small–and more easily controllable–check-clearing

> outfit. "Why don't we buy them?" Gates asks, thinking bigger. It occurs to him that people banking from home will cut checks using Microsoft's software. Microsoft can then push all those transactions through its new affiliate, taking a fee on every one. Abruptly, Gates sheds his disappointment with Money. He's caught up in a vision of "the transformation of the world financial system." It's a "pot of gold," he declares, pounding the conference table with his fists, triumphant and hungry and wired. "Get me into that and goddam, we'll make so much money!"
>
> Here is Microsoft in action. In just three hours, it laid plans to buy at least two companies, ditched an alliance with a major financial institution, opted for another and made major moves into "two incredible new worlds," as Gates put it—home banking and sports entertainment. Another company might take months to accomplish as much.

It is important to note here that, seven years later, none of this "pot of gold" thinking actually led anywhere—not for Microsoft Money, not for Microsoft Corp., and not for the world financial system. Nothing took place that day, or any day since, on this particular subject that offended anyone's rights or broke any laws. Nor was Microsoft Money as a software product the least bit improved. Meyer was astonished by Microsoft's "accomplishment," but today, little evidence of it remains outside of this article.

What did happen that day in 1994 is an example of how Microsoft approaches its everyday business: not by applying itself to the truths and principles and operating parameters of its chosen industry, and not by solving the arguably solvable problems put before it, but instead by concocting a fantasy world where Microsoft is the world's great benefactor, the great multitude is the recipient of its mercy and grace, and all other entities in the computing industry are either—to borrow a recently reborn phrase—"with us or against us." This is a world where media entities such as *Newsweek*, and professional observers such as myself, should stand in awe of that company's "accomplishments," as if its role-playing conquests held tangible value in any currency in which common people trade.

How Microsoft Lost the Moral High Ground

In another civil matter separate from the suit brought forth by the Justice Dept., the Canadian software producer Caldera took action against Microsoft in U.S. District Court in Utah, on behalf of a product it had acquired from Novell Corp.—a competitive operating system called DR-DOS. (This civil action was later settled, and the specific terms of that settlement were undisclosed.) As revealed by evidence subpoenaed by Caldera and presented in its Consolidated Statement of Facts, Microsoft's executives openly conspired to develop MS-DOS in such a way that compliance with its principles would mean, by definition, incompatibility with DR-

DOS. Later, these same executives came up with the idea of tying MS-DOS together with Windows–the first instance of "tying" in the company's history–in such a way that DR-DOS users would be artificially prohibited from running Windows 3.1. In fact, as the evidence in *Caldera v. Microsoft* indicates, Microsoft's idea of tying MS-DOS to Windows derived from its efforts to thwart the development of DR-DOS, and may have been created for that specific purpose alone and no other.

The Consolidated Statement in the *Caldera* case uses subpoenaed internal documents and e-mails from Microsoft executives to draw a picture of a company whose central, overriding, and only interest from 1990 to 1995 was not to produce a viable operating system for consumers, but to prevent Digital Research, and then Novell, and then Caldera from doing so. (Granted, IBM's OS/2 was also a Windows competitor during this time, although the *Caldera* Statement makes little mention of that system.) According to the Statement, in the summer of 1990, Microsoft's OEM sales force was directed to only use *per-processor* terms in licensing agreements with both small and large PC manufacturers, in order to prevent, as one account manager put it, "losing them to DR." Per-processor licensing practices was the subject of one of the Justice Dept.'s first civil actions against Microsoft, and was a matter of contention throughout the current civil case. Such exclusionary licenses made it cost-prohibitive for manufacturers to offer DR-DOS, or any other alternative operating system, to their customers while at the same time maintaining their critical link to Microsoft. As Microsoft's company memoranda–excerpted in the *Caldera* Statement–indicate, the company was fully aware of that fact. For instance, there is this note of congratulations:

> Congratulations are in order for John "DRI Killer" McLaughlan (No, he isn't having another baby) who signed a $2.5M agreement with Acbel (Sun Moon Star). The agreement licenses DOS 5 per processor on a worldwide basis for 3 years (they will be replacing DRI DOS which they currently ship outside the US).

In July 1991, Novell announced its merger with DR-DOS producer Digital Research, in order to build a stronger, more complete operating system product line that could compete on the same level as Microsoft, and that could be licensed to IBM, which had already identified itself as an interested party.

In a memorandum to fellow executives dated March 1992, Microsoft Vice President (now Senior Vice President) Jim Allchin spelled out his perception of the threat imposed by Novell:

> I still don't think we take them as serious as is required of us to win. This isn't IBM. These guys are really good; they have an installed base; they have a channel; they have marketing power; they have good products. AND they want our position. They

> want to control the APIs, middleware, and as many desktops as they can in addition to the server market they already own.
>
> We need to start thinking about Novell as THE competitor to fight against – not in one area of our business, but all of them.
>
> If you want to get serious about stopping Novell, we need to start understanding this is war – nothing less. That's how Novell views it. We better wake up and get serious about them or they will eventually find a way to hurt us badly.

Allchin's concept of "war" sparked then-Windows Product Manager Brad Silverberg to advocate developing Windows 3.1 intentionally so that it gave DR-DOS users the *impression* that it could not run on that platform. The *Caldera* Statement provides this e-mail exchange between Silverberg and his deputy (now Senior Vice President), David Cole:

> *Cole:* A kind-gentle message in setup would probably not offend anyone and probably won't get the press up in arms, but I don't think it serves much of a warning [...] What is the guy supposed to do?
>
> *Silverberg:* what the guy is supposed to do is feel uncomfortable, and when he has bugs, suspect that the problem is dr-dos and then go out to buy ms-dos. or decide to not take the risk for the other machines he has to buy for in the office.

With company policy having been determined that the Windows user should be made to feel uncomfortable with the notion of using a non-Microsoft product, work began on how to intentionally develop the beta code of Windows 3.1 so that parts of it fail to execute on a DR-DOS platform. In an e-mail discussion excerpted in the *Caldera* statement, a developer of Windows 3.1 told his development manager, Phil Barrett, of an incompatibility he discovered between a disk cache utility for 3.1, code-named "Bambi," and DR-DOS. The developer reports that he has created a build of the utility that solves this problem. Nevertheless, Barrett suggests in his response that this fix never see the light of day:

> heh, heh, heh . . .
>
> my proposal is to have bambi refuse to run on this alien OS. comments?
>
> The approach we will take is to detect dr 6 and refuse to load. The error message should be something like 'Invalid device driver interface.'

The actual error message in Windows 3.1 Setup would read, "The XMS driver you have installed is not compatible with Windows. You must remove it before SETUP can successfully install Windows."

Whether on direct instruction to do so or working on his own initiative, a Microsoft programmer made contact with Andrew Dyson, a technical support analyst at DRI, and in so doing identified himself as "Roger Sour, Director of Windows Development, Microsoft." Explaining that he was trying to solve an incompatibility problem with the "memory control blocks," this Microsoft developer requested information from Dyson on whether DRI has written Windows code to detect whether a program is running under a DR-DOS or MS-DOS platform. In the interest of fair play, Dyson submitted this information; but later, a DRI official wrote "Roger Sour" (whether or not he knew Sour existed is beside the point) to tell him that DRI was aware of Microsoft's plan to make Windows 3.1 fail on DR-DOS. The letter stated, "Usually, when a software manufacturer feels that something in our operating system is preventing their application from running well, that company works with us to resolve the actual, perceived, or potential conflicts."

In a letter dated 1 November 1991, Phil Barrett responded to the DRI official that there no "Roger Sour" at Microsoft, and added, "Perhaps you may have been the victim of a prank." This "prank" was reported to the Federal Trade Commission, which contacted Microsoft later that week. News of the FTC contact prompted David Cole to write the following in an executive memo:

> The bothersome part is where the hell is DRI getting their information. Are they just speculating? Seems like a pretty risky thing to do with the FTC? Did they interpret "Roger Sour" thing broadly and conclude we are doing it for Windows?

What bothered Microsoft more than the possible appearance of impropriety was the possibility of a mole within the company. For the next year and a half, Microsoft would deal with DRI, Novell (which acquired DRI), and the FTC as a single monkey on its back—the collective entity preventing Microsoft from smoothly integrating itself into the corporate computer network. Beginning in 1992, Microsoft would develop the entire Windows platform into "Chicago"—a confusing amalgamation of possible development scenarios which only Microsoft would be able to decipher, leaving confused independent developers and consumers to sort them out for themselves. In a 16 June 1992 strategy document circulated by Microsoft's then-Vice President Brad Silverberg, the company outlined its concept of Chicago as a product that could be packaged three ways—as Windows for Workgroups, as plain Windows, and as MS-DOS. Thus, the answer to the question, "Are you merging MS-DOS with Windows?" could be "Yes," and the answer to the question, "Are you maintaining the two product lines separately?" could also be "Yes." This obfuscation, according to documents, was crafted deliberately for the sole reason of throwing off the competition and keeping consumers guessing, thus fulfilling the following directive Brad Silverberg had made in late 1991:

> This is a very important point. We need to create the reputation for problems and incompatibilities to undermine confidence to drdos6; so people will make judgments against it without knowing details or fats *[sic]*.

In 1993, following its acquisition of DRI, Novell re-engineered DR-DOS to become Novell DOS 7—a product which it promised would not only serve as a cohesive network and desktop platform, but which would also run Windows 3.1 without problems. At long last, the monkey on Microsoft's back became too much for Chairman Bill Gates, who on 21 July wrote the following memo to his subordinates:

> Who at Microsoft gets up every morning thinking about how to compete with these guys in the short term – *specifically cut their revenue.* Perhaps we need more focus on this...After their behavior in this FTC investigation, I am very keen on this.

Once again, Gates infuses his fellow executives and product managers with a lofty vision of Microsoft as having *carte blanche*, on account of its size, to set the rules for the industry, even if it means teetering on the edge of implying that it's above the law. With Gates, there is never a smoking gun. The job of providing the smoke is left to others, such as Jim Allchin who, in an 18 September 1993 memo, advised the following:

> Sentiment is against us. We can and MUST turn this around. As we become more aggressive against Novell product and marketing-wise, we must get our mouth in order. The press, etc. is very sketical of us so one slip up and we get set back quite a ways.
>
> This really isn't that hard. If you're going to kill someone there isn't much reason to get all worked up about it and angry – you just pull the trigger. Any discussions beforehand are a waste of time. We need to smile at Novell while we pull the trigger.

The strategy that Microsoft concocted is for the company to represent Chicago as the successor to MS-DOS 6.3, and as perhaps Windows bundled with DOS and perhaps Windows merged with DOS. Consumers and businesses considering their upgrade options would have to consider the extent to which they considered Windows an asset. Not knowing whether the two products would bundle or merge, consumers were forced to evaluate MS-DOS as though it were Windows, and not for its own merits—which, against Novell DOS, were admittedly lacking. As long as Windows continued to support Novell NetWare—and it did, quite completely—consumers would conclude they had nothing to lose from their current NetWare investment, if they were to choose an all-Microsoft upgrade path for the future, which included DOS as well. The decision to actually merge DOS with Windows was withheld until the last possible minute—in 1994, well after what was supposed to

have been Chicago's initial release date. This decision was the *coup de grace* to Novell DOS, indicating to buyers that there would be no need for a DOS once Windows 95 was installed.

Consumer confusion about Microsoft's course of action led to the desired result: Buyers turned away from Novell, believing what Microsoft itself calls its own "FUD messages" (fear, uncertainty, and doubt) about the future reliability of Novell DOS in tandem with Windows. The term "FUD" is said to derive from a similar term used by Pres. Nixon's famous "plumbers"—the people hired to spread rumors and false information about possible presidential opponents. It is a term which shows up in Microsoft internal memos and documents as though it were its own brand name.

MIRACLE INGREDIENTS

The DR-DOS story is important because the behavior of Microsoft during the early 1990s established a prototype for its behavior during the "browser wars"—one of the current antitrust action's two key periods of interest. It is in some ways humorous to note that Microsoft held little or no regard for the Internet as a global information resource, until such time as it perceived that resource as a threat to its business. Bill Gates actually wrote an entire book, "The Road Ahead," that was a national bestseller, and that afterwards was amended as a "Special Edition" after its author had received too many inquiries about its omission of the Internet as a topic. Microsoft is not a company that believes in creating opportunities, or even in finding fair and open opportunities outside of its own corporate walls. This is a company whose key success during the 1990s was stifling the opportunities of others in order to protect its own products and intellectual assets.

After Novell had been thoroughly decimated by Microsoft FUD, the company turned its attention in late 1994 to Netscape, as the threat-on-the-horizon it needed to continue to function the way it had trained itself to do. Microsoft, as we all know now, perceived Netscape Navigator as a platform that could potentially be leveraged to distribute a future form of Sun Microsystems' Java as a substitute operating system. The cross-platform capabilities of Java awakened developers to the potential of crafting applications that did not need to rely on the resources of any one operating system exclusively—especially Windows.

As Judge Jackson's Findings of Fact show, Microsoft's internal policy was to develop its own Java programming language and applications resources—called J++—to appear to be compliant with Sun's Java, while actually presenting Java developers using Windows with non-portable libraries. Jackson writes:

> In a further effort intended to increase the incompatibility between Java applications written for its Windows JVM and other Windows JVMs, and to

> increase the difficulty of porting Java applications from the Windows environment to other platforms, Microsoft designed its Java developer tools to encourage developers to write their Java applications using certain "keywords" and "compiler directives" that could only be executed properly by Microsoft's version of the Java runtime environment for Windows. Microsoft encouraged developers to use these extensions by shipping its developer tools with the extensions enabled by default and by failing to warn developers that their use would result in applications that might not run properly with any runtime environment other than Microsoft's and that would be difficult, and perhaps impossible, to port to JVMs running on other platforms. This action comported with the suggestion that Microsoft's Thomas Reardon made to his colleagues in November 1996: "[W]e should just quietly grow j++ [Microsoft's developer tools] share and assume that people will take more advantage of our classes without ever realizing they are building win32-only java apps." Microsoft refused to alter its developer tools until November 1998, when a court ordered it to disable its keywords and compiler directives by default and to warn developers that using Microsoft's Java extensions would likely cause incompatibilities with non-Microsoft runtime environments.

The part of this story that Judge Jackson didn't touch on, and that was not introduced as evidence, concerns Microsoft's efforts during 1996-1999 to promote a cloudy but potentially promising future system called ActiveX as an alternative to Java for developers, and an alternative to Netscape for Windows users. Just exactly what ActiveX was, is, or was supposed to be, isn't entirely clear. I understand this fact better than most people alive. In 1996 and '97, I wrote a book on ActiveX technology for developers, with the full cooperation of a major worldwide publisher. For the better part of two years, I wrote seven complete drafts of this book, overhauling the content each time in order to keep up with Microsoft's mind-boggling changes in its definition of the product/concept/marketing scheme.

In an early document for developers such as myself, dated 18 June 1996, Microsoft defined ActiveX in this way:

> ActiveX is a set of open technologies that bring the power of the personal computer to the ubiquitous connectivity of the Internet. ActiveX takes the Internet beyond static text and picture documents to provide users with a new generation of more active, exciting, and useful experiences. For intranet developers (intranets are private Web sites published on internal, corporate networks), ActiveX provides core functionality for building robust enterprise-wide applications that offer enhanced functionality and productivity beyond basic HTML document sharing.

So in June, at least, ActiveX was a multimedia standard for Web sites. The very next month, Microsoft announced it was turning over stewardship of ActiveX to an independent body. In its press release, Microsoft quoted an independent industry analyst as stating the following:

> COM and DCOM - the foundation for ActiveX - constitute the most widely used object framework, but as technologies owned and controlled exclusively by Microsoft, they were not vendor-independent solutions. In the hands of a neutral standards body, ActiveX can become a vendor-independent solution, enabling interoperability while allowing both developers and customers to take full advantage of their existing investments in OLE and DCOM technologies.

"COM and DCOM" are, respectively, the Component Object Model and the Distributed Component Object Model. These are legitimate architectures which, in my view, represent some of the best ideas Microsoft has ever put forward. COM enabled source code from diverse and varied applications and program components to address one another dynamically, using a common framework and an amendable object language. This way, old programs could conceivably determine the capabilities of newer programs when they shared the same system, under a multitasking framework such as Windows 95. DCOM extended these principles to program components over a network, so server-based components could communicate with client-based components and provide them with requested resources. These were delicately intricate systems, but they were constructed with the best of intentions, and their creators deserve respect.

But it was apparently never the intention of Microsoft's executives to exploit the full potential of COM and DCOM. Instead, they deployed ActiveX as a marketing tool to befuddle the market as to Microsoft's intentions, and to repeat the company's successful strategy against DRI and Novell, this time to kick Netscape and Sun Microsystems into the death spiral.

Developers such as myself were given a myriad of mixed and often self-contradictory messages. In the summer of 1996, we were told that ActiveX was a system that would be deployed on Microsoft's Internet Explorer Web browser, to enable online applications from Windows servers to utilize *controls*–buttons, menus, lists, and common "user interface" elements–whose programs were deployed on the client side, thus freeing bandwidth and relieving much of the burden on the server. This was–and still is–a good idea. We were told that ActiveX controls would make use of a Windows feature called Object Linking and Embedding (OLE, pronounced "olay") to enable their code to be called up on the server side by *container* programs on the client side–again, a good idea. This utilization of resources would free the controls programs from the constraints of the client-side architecture called Microsoft Foundation Classes (MFC)–the architecture upon which Microsoft's Office applications are based. (Microsoft's developers are indeed capable of creating good ideas, and executing good plans based on them.)

In the fall of 1996, the FUD began. Microsoft offered developers a free, limited edition of its Visual Basic development environment, geared exclusively

toward the creation of ActiveX controls. These controls, we were told, leveraged the power of MFC to make them more fully integrated with Windows. This went against the company's original design strategy, for reasons we couldn't yet fathom.

While the newly-formed "ActiveX Working Group," assigned stewardship of the ActiveX standard, did establish a Web site for a brief period, the group only held a few token meetings, and even then with a subset of its membership. Many members listed on the Web site were surprised to find they were members at all. As soon as January of 1997, the Working Group had become a non-entity.

Later that same month, Microsoft announced its intention to deploy a network communications system then called Microsoft Transaction Server (MTS), and to market that system under the ActiveX collective umbrella. MTS would be the hub of a system that processed DCOM transactions over networks and over the Internet, between Microsoft servers and client systems that were running ActiveX controls. What confused us at first was the fact that DCOM was not OLE, so the ActiveX controls we had now appeared not to be the ActiveX controls we were supposed to build for later. Furthermore, the new controls–to be created using that free edition of Visual Basic–could only operate within the confines of a single, designated container program–which, not coincidentally, was part of Internet Explorer 3.0. So it appeared that the capability of Netscape Navigator to be adaptable, through a third-party product, to display and use ActiveX controls, was due for extinction.

By the spring of 1997, Microsoft had announced the replacement of its core database transaction protocol with something called ActiveX Data Objects (ADO). This protocol would be used by Microsoft Office applications, and would be licensed for free to developers making their own programs for data transactions. For ADO to be deployed in a network environment, it appeared, the server would need to run MTS. So if everyday applications wanted to take advantage of Web deployment capabilities, Netscape was appearing to be less and less of an option. ADO objects were not controls–what's more, they weren't COM objects or DCOM objects either. So the umbrella seemed to be reaching further. Almost every Windows protocol had something to do with ActiveX–and thus, by association, something to do with future deployment over the Internet.

In the summer of 1997, Microsoft sprung the trap. MTS as a product was integrated with Internet Information Server, and very soon thereafter, IIS was incorporated as a native part of Windows NT 4.0. If your server had NT4, it had IIS, so it had MTS. On the client side, Internet Explorer would be "sewn" onto the front end of Windows 98, not as an integral part or even an inseparable one from Windows 98, but a part which the common user could not easily detach from it. Suddenly, the whole world of Windows closed in on itself, excluding Netscape and

Sun technologies and immediately rendering them obsolete. Users abandoned Netscape in droves, and within only a matter of months. Sun's efforts to develop Java further, gradually slowed to a trickle. The death spiral still worked.

The code of conduct which the Appeals Court upheld as illegal use of Microsoft's monopoly power, stems directly from the code of conduct Microsoft taught itself in fending off the DR-DOS threat. It is not the behavior of an established, experienced company whose leadership position is bestowed upon it by its customers and partners. It is the behavior of an adolescent, catapulted quickly to prominence in a young industry, without ever having found the time or the inclination to learn how success may be achieved fairly and with honor. It is a spoiled brat kid that never listened to its elders, and has never come to appreciate the world outside of itself. It has erected its own psychological "barrier to entry" that prohibits it from absorbing anything of positive benefit--any new ideas, any good alliances, any substantive partnerships--from the outside world, out there, where the enemy lives. Paranoid, over-sensitive, and withdrawn, it hides out in its room, nails a "Keep Out" sign to its door, locks the door shut, loses itself in a video game, and drowns itself out with loud music laced with messages of pessimism and disdain. It is the unloved child. It is built in the image of its maker. It will not listen to reason.

Within the locked, sacrosanct confines of corporate headquarters or boardrooms, no fantasy world is illegal. Corporate fiefdom or chivalry may assume any degree of distortion, and black may very easily be declared white without objection. It is when these bizarre practices lead directly to tactics of deception, sabotage, and bad faith against not only a company's competitors but also its purported partners, and to a calculated campaign of consumer choice control, that they impede upon the rights of individuals, of companies and corporations, and of an entire industry. Microsoft's private fantasy world has evolved into a dangerous corporate subculture whose principles and motives threaten the very way business is done in America, in Canada, in Asia, in Europe, and anywhere there is a microprocessor.

When faced with a situation where the only rational option is for Microsoft to solve its own problems, Microsoft chooses instead to go on the attack against some outside enemy that could potentially expose or spotlight those problems. As a result, those problems may never be solved, but the enemy *du jour* becomes so damaged that the continued existence of those problems in the context of the industry as a whole, becomes inconsequential. To this day, serious bugs and deficiencies in Microsoft's operating systems and applications, discovered by myself and others and duly reported to Microsoft, remain uncorrected, quite possibly for fear of the political cost of exposing the problem by making the world aware of its solution.

Microsoft's distorted perception of the computing industry, and of the world as a whole, is important because of a fact which Judge Jackson came to realize but, all too soon, commented on: **Any conduct remedy which relies solely upon Microsoft's own ability to scrutinize, admonish, and improve itself through its own means, will be treated by Microsoft's executives with disrespect and contempt.** It's like a parent ordering his wayward son to shape up. The executives of Microsoft are as unwilling to consider such an order as an adolescent boy, bottled up in his room, is willing to remove his headphones and listen to his dad for five seconds. They are likely to ignore such an order altogether. I say this with the utmost respect: They don't give a damn what you think.

First Novell, Then Netscape, Now the Justice System

Microsoft is a company which views all events and actions relevant to the computing industry, taken outside of its corporate headquarters, as attacks against it. These include not only new product announcements from Oracle or marketing agreements from Sony, but legal maneuvers, motions, and actions from the Justice Dept., and judgments and decisions from the courts. Microsoft's executives are charged with the mission to manipulate circumstances to its own advantage, so that the enemy's actions end up reinforcing the company's prominence. Bill Gates calls this mission "kicking them into the death spiral." Here's how the death spiral works, paraphrased from Microsoft's own internal documents:

1. Make agreements with the enemy that build an interdependence between the enemy and us.

2. Generate uncertainty about our future course of action, to throw the enemy off-track.

3. Propose a clear solution to the uncertainty that depends upon a certain set of rules, and make it impossible for the enemy to turn you down.

4. Change the rules so that the enemy is forced to live with its own decisions, while we move to an entirely new world where the rules are different and we own the territory.

The proposed final judgment before you now, presented by Microsoft and the Justice Dept., is yet another clear example of the death spiral methodology, this time applied to the American justice system. Just as Novell was compelled to commit itself to a category of products that appeared to have been rendered obsolete, and Netscape was compelled to commit itself to offering for free a product that once generated revenue and that had been rendered in most consumers' minds unnecessary, the Justice Dept. and the District Court are being compelled to accept a

vision of Microsoft's conduct for the future that is incompatible with Microsoft's own vision of the future. Microsoft plans to change the rules, to pull the rug out from under you, and move on to a new territory where it gets to make new rules.

Last 12 December, Microsoft counsel Charles F. Rule presented a statement to the Senate Judiciary Committee, defending its Proposed Final Judgment (PFJ) as taking corrective measures that are far broader than may even be necessary, given that "four-fifths" of Judge Jackson's findings were invalidated, by his estimate, by the Appeals Court. As with most prepared statements before a Senate committee, the latter part that no one has time to read aloud, is "read into the record" without objection. The body of this statement explains the three-part provisions of the PFJ. The following excerpt explains the Judgment's provisions with regard to the category of software called *middleware*:

> The case that the plaintiffs tried and the narrowed liability that survived appellate review all hinged on claims that Microsoft took certain actions to exclude Netscape's Navigator browser and Sun's Java technology from the market in order to protect the Windows operating system monopoly. The plaintiffs successfully argued that Microsoft feared that Navigator and Java, either alone or together, might eventually include and expose a broad set of general purpose APIs to which software developers could write as an alternative to the Windows APIs. Since Navigator and Java can run on multiple operating systems, if they developed into general purpose platforms, Navigator and Java would provide a means of overcoming the "applications barrier" to entry and threaten the position of the Windows operating system as platform software.
>
> A person might expect that a decree designed to address such a monopoly maintenance claim would provide relief with respect to Web-browsing software and Java or, at most, to other general purpose platform software that exposes a broad set of APIs and is ported to run on multiple operating systems. The PFJ goes much further. The Department insisted that obligations imposed on Microsoft by the decree extend to a range of software that has little in common with Navigator and Java. The decree applies to "middleware" broadly defined to include, in addition to Web-browsing software and Java, instant messaging software, media players, and even email clients -- software that, Microsoft believes, has virtually no chance of developing into broad, general purpose platforms that might threaten to displace the Windows platform. In addition, there is a broad catch-all definition of middleware that in the future is likely to sweep other similar software into the decree.

To summarize: It is conceded that Microsoft acted unlawfully to thwart any action that Netscape and Sun may have taken to use Navigator and Java as leverage for the distribution of an operating platform that substitutes for Windows. Microsoft is to be praised, says Rule, for its broad definition of *middleware* as more than just Web browsers, but many categories of software with functionality that currently

isn't part of an operating system--software that could not displace Windows in and of itself, because it isn't really an operating platform like Java anyway. "A broad catch-all definition of middleware," Rule calls it--essentially, any software that isn't Windows.

Defined so broadly, anything that isn't on the Windows Setup CD-ROM could potentially be defined as middleware. The settlement's provisions would, conceivably, apply to Microsoft's treatment of the producers and manufacturers of any non-Microsoft package on a store shelf or Internet download site. Which sounds perfectly wonderful if we allow ourselves to forget recent history: Microsoft has a reputation for incorporating features from non-Microsoft software packages--or features which at least appear to incorporate their functionality--in new versions of Windows. The new digital photo management features of Windows XP are a clear and present example. What is to prevent Microsoft from adopting any new feature into Windows, thus narrowing the feature set of "middleware" at will? Certainly not the proposed judgment, which includes specific provisions enabling Microsoft to share resources with a third party for the development of products that compete with that party. From the top of page 5:

> Nothing in this section shall prohibit Microsoft from entering into (a) any bona fide joint venture or (b) any joint development or joint services arrangement with any ISV, IHV, IAP, ICP, or OEM for a new product, technology or service, or any material value-add to an existing product, technology or service, in which both Microsoft and the ISV, IHV, IAP, ICP, or OEM contribute significant developer or other resources, that prohibits such entity from competing with the object of the joint venture or other arrangement for a reasonable period of time.

So conceivably, if we accept Mr. Rule's explanation, a category of software that was middleware in the past, could at Microsoft's discretion no longer be middleware today or tomorrow. But if you read the Definitions section of the PFJ, you discover Mr. Rule's explanation isn't entirely accurate. In this section, there are two main categories: Microsoft Middleware, and non-Microsoft middleware. The definition of middleware as "Internet browsers, email client software, networked audio/video client software, instant messaging software" **applies only to the Microsoft category**. In other words, the broad definition applies only if Microsoft is the producer of the broadly defined products. Non-Microsoft middleware is defined later in the same section in this way:

> "Non-Microsoft Middleware" means a non-Microsoft software product running on a Windows Operating System Product that exposes a range of functionality to ISVs through published APIs, and that could, if ported to or made interoperable with, a non-Microsoft Operating System, thereby make it easier for applications that rely

> in whole or in part on the functionality supplied by that software product to be ported to or run on that non-Microsoft Operating System.

In other words, any product that exposes its own functionality to outside developers in the same way for Windows as for other operating systems, enabling them to conceivably write code that supports that functionality, for instance, for Macintosh, Linux, and Windows simultaneously. This isn't exactly Rule's "broad catch-all definition" that applies to instant messaging. Essentially, what this truly refers to is **any software that establishes dependencies with other software, apart from the native dependence that all Windows software has with the Windows operating system.**

Speaking as a developer, I can speak with experience: This definition may sound quite broad, but it isn't. Excluded from this definition are the *drivers* that software requires to be able to, for instance, print an image on the printer or display something on-screen—drivers are always considered part of Windows, even though Microsoft may not have written them. Excluded from this definition are the kinds of products whose mutual benefit, from the perspective of the user, is derived from their being bundled together rather than from their communication with one another—for example, Netscape Instant Messenger's bundling with Netscape Navigator. Excluded from this definition are programs that establish dependencies on categories of *data* (as opposed to programs or source code) that rely on the native operating system independence of the system that uses them—as, for example, MP3 music files are non-specific to Windows or Macintosh or Linux.

It is not broadness that distinguishes Microsoft's legal definition of middleware, but fuzziness. Depending on how you look at it, and where you look for it, it can be anything at any time. The conduct restrictions in the PFJ prohibit Microsoft from entering into agreements with manufacturers that, in turn, would prohibit them from choosing their own middleware for their own systems. Such restrictions would be important if we could be certain what it is that Microsoft is prohibited from prohibiting.

This fuzziness extends to the present moment. As I write, the entire ActiveX marketing scenario is in the final stages of being disbanded, in favor of a program architecture that replaces it entirely: the .NET (pronounced "dot-net") architecture. The basic principle of .NET is that Windows may be enhanced to include a *just-in-time compiler* (JIT) whose job is to execute programs in the Windows environment. The role of the JIT is analogous to that of the Java Virtual Machine (JVM), although Microsoft's implementation will have no cross-platform capabilities. Conceivably, as developers are compelled to switch their program architectures from the now-obsolete COM to the new .NET, the architectural model of the Windows application

may be redrawn in such a way that "apps" become satellites of a sort—small, shared components designed to interoperate and, in so doing, produce a collective, *de facto* application on behalf of the user. **In such an architectural model, middleware by one definition would not exist.** The reason is because the functionality of a collective .NET application would not have to be "exposed" like the opening of a telephone directory—and as the PFJ expects—but is instead *derived* as a result of an independent assessment by Windows of the collective capabilities of the .NET component programs. Imagine telephones that could publicize their own phone numbers, and you get a glimpse of the idea.

The architectural concepts underlying Microsoft's .NET architecture are among the best ideas the company's developers have ever conceived. Nonetheless, the mechanism is being put in place today for Microsoft to change the rules yet again. Microsoft itself has stated in press conferences throughout the antitrust proceedings, that the rules of the computing industry change so fast that, by the time a judgment or settlement is finally reached, its terms will have been rendered obsolete by the very evolution of the industry. Microsoft is actively working to demonstrate this principle, and we must see .NET not only as a good idea, but a warning. As long as we consider Microsoft the *de facto* keeper of the computing dictionary, we will render that company of changing its terms—and to some extent, our lives as a result—on a whim.

Microsoft has a history of making its enemies follow a set of rules, which it then changes. Provisions in the PFJ would prohibit Microsoft from excluding from any party the right to include icons and menu selections on its systems that point to any software it chooses. As both a developer and an editor, I have heard news—whether it be controlled leaks or the usual FUD—that Microsoft is considering eliminating the "Desktop" as a feature of Windows, replacing it with a more resplendent, multimedia-oriented, Web-based system that's possibly tied into its MSN network. The Windows Desktop is where all the icons and menu selections are. If Microsoft changes the rules, these provisions would immediately be rendered archaic.

The provisions of the Proposed Final Judgment as they stand today would restrict Microsoft to behaving as we would expect any large, successful company to behave with regard to its partners, competitors, supporters, and customers, had that company attained its position of prominence by legitimate means. What the PFJ would have us forget is that Microsoft has a duty, at this point in its history, to make reparations to those parties whom it knowingly and willfully deceived. It must behave not as an ordinary large company, but as one with unordinary obligations to the market in which it does business: **to provide its partners, competitors, supporters, and customers with more than is expected of the company that has**

operated in good faith, competed on the quality of its products and services, and has not broken federal and state laws.

MICROSOFT'S WORLD, AND OTHERS

Unlike any single corporation in any other industry in the world, Microsoft has attained the freedom to dictate not only the terms of the course of action for others in that industry, but also the very terminology, principles, and rules of existence by which that industry operates. In 1984, an operating system was a "bootstrap" program whose basic function was to engage the computer, take keyboard commands from the user, and give the user some rudimentary access to stored files. In 2001, the operating system has become something which removes red-eye from photographs, bounces instant messages to digital cell phones, and handles copyright infringement management on behalf of music publishers—and all of these things, not particularly very well. This transfiguration of the concept of the operating system is referred to by Microsoft as "innovation." No similar concept of innovation can be applied to any other industry in the world. In our own fantasy world, we can imagine an automobile industry whose leader endows its products with microwave ovens, paper shredders, and Spanish teachers. We can imagine the manufacturer calling these developments "innovation." And we can argue that such developments would not be illegal in and of themselves. But even in that fantasy world, we cannot concoct a situation where the inclusion of these features in automobiles would in any way impede, hinder, or prohibit a consumer's means of nuking a hot dog, shredding a letter, or counting to *diez* by any other method.

Microsoft's incorporation of often arbitrarily-chosen new features in its operating system, by design, impedes the channel of delivery for any company whose business is specifically to provide those features. Knowing that, Microsoft has created its own little market where partners and potential partners bargain for prominence. The price of a partner striking this bargain is often the termination of its own native distribution channel for its product—without Microsoft's backing, neither the product nor the company can exist. And yet Microsoft itself has shown it had no intention for its partnerships to continue for any longer than it could conjure its own, self-branded alternative. Microsoft used its partnerships to develop new markets in voice recognition, storage security, file backup and restoration, messaging, imaging, multimedia, database organization and translation—markets whose main channel of distribution were controlled by Microsoft. Once that market exists, Microsoft rescinds its partnership and offers its own "innovation" as a substitute.

The Definitions section of documents in the current antitrust case, including the overturned District Court's Final Judgment, paints an outline for a newcomer to

planet Earth of an industry constructed in general accordance with Microsoft's current vision. What an operating system is, what a "browser" is, what an application is, what a database is, are definitions that could have been supplied by a Microsoft manual. That a company should have such a defining vision should never be made illegal–any American company should be free to dream of redefining its industry. But the very definitions of these things as we have come to understand them, derive from Microsoft actions taken to defend its own prominence and thwart enemy attacks. Had these actions never been taken, our very understanding of the parts of a personal computer may be almost unrecognizable to the inhabitants of this world. Taking that into account, **any remedial measure which accepts the present state of computing at face value, without taking into account not only what computing is becoming, but also what it might have been today had Microsoft never acted with such aggression and deception, is of no benefit to the companies outside of Microsoft who each should have the right to challenge Microsoft's prominence in a fair and competitive manner.**

We use personal computers today whose processing power and data address capability supersede that which the Dept. of Defense categorized as "supercomputing" only eight years ago. Knowledge of their technology falling into the hands of enemies of the U.S., was considered a threat to national security. The processors on our desktops are capable of calculations which, as late as 1989, were deemed impossible given the laws of physics.

Yet what can we truly do with these computers? Can we calculate the trajectories of celestial bodies? Can we give them voice commands and ask them to perform sophisticated analyses of financial transactions, bodily functions, or legal maneuvers? Can a computer tell me what I'm eating that jeopardizes my cholesterol rate? Can we make heads or tails of Enron's bookkeeping strategy?

These are jobs, the basic functions of which supercomputers of the 1980s could perform with ease. Yet the modern, everyday personal computer, whose processing ability supersedes that of those machines by orders of magnitude, just barely delivers enough power for you to type a letter, or keep a list of your colleagues' phone numbers, or even play a decent game of chess with you. Crashing has become one of the fundamental functions of a computer. Entire careers are spent by system administrators whose principal jobs are helping their users recover from system crashes. We speak often of how the computers on-board Apollo 11 had one-fourth the processing power of a T.I. pocket calculator. Today, an everyday personal computer, capable of literally millions of times the processing power of Apollo 11, has difficulty running a real-time simulation of the Apollo 11 on-board computer, without being bogged down by the colossal overhead incurred by the

operating system. Most of us computer users and developers are just barely eking out our everyday jobs.

Had there been a true state of competition between Microsoft and other producers of operating systems over the last 15 years, this pitiful state of existence would never have come about. Microsoft yesterday and today has employed brilliant programmers, with the capability to endow computers with extraordinary functionality and richness of experience. These programmers—not just those outside the company—have been handicapped by the crippling weight of the monstrosity that has become Microsoft Windows, a platform that transforms the definition of "moving target" into an unfathomable, four-dimensional puzzle from which rational minds can barely escape.

It is bewilderment in the apparently minuscule importance of the law within Microsoft's own little world, that Judge Jackson attempted to express—and which, sadly, he did at the wrong time and with improper motivation. Judge Jackson's judgment was indeed clouded, as was Joel Klein's, and those of the other parties in this case who have attempted to craft an appropriate remedy for Microsoft's offenses. To date, no solution on the table—including the breakup of the company—has taken into account this obvious fact: **Any remedy that fails to render the future executive conduct of Microsoft or its successor companies innocuous to those whom its prior conduct knowingly deceived, is no remedy at all.**

NEW CONSIDERATIONS FOR THE FINAL JUDGMENT

Tough love, for a misbehaving adolescent child, often mandates that the parent be willing to cut that child off—not to kick him into the death spiral, but to make him live with his own choices.

Microsoft would have itself continue to live in a world defined by the agreements it makes with others—how free and open they are, how restricted and narrow they may be, but in any event, how many agreements there are! It is my suggestion to you that, in the interest of tough love, **Microsoft should be cut off.** We must take steps to force Microsoft to live with the decisions that it has already made for itself. We must allow Microsoft to live in the world it has constructed for itself. But we must not allow circumstances to continue which force, or compel, or rely upon any other company doing business in the computing industry—software, hardware, services, networking, or elsewhere—to have to make any agreements with Microsoft whatsoever just to stay alive.

What if we're sick of Microsoft? Why must developers, manufacturers, vendors, and retailers be forced to endure even the fairest and most legally

honorable of relationships with a corporation that has proven its inherent incapability to see value in the ideas, works, and products of others outside its own doors? Why must the rest of the computing industry be bunched together under the category of "third party" by legal definition?

In the early 1980s, the computing industry at large made a collective decision to support a single, pre-eminent operating system, and to trust Microsoft with the stewardship of that system. This decision was not reached by having been kicked into the death spiral. This was a rational decision made by honest, persevering corporations whose mutual interest was to build an industry together so that each could prosper.

Microsoft Windows did not, as Microsoft's self-authored history proclaims, compete head-to-head with other operating systems on equal turf, and achieve a position of prominence through overwhelming customer acclamation. MS-DOS—and by succession, Windows—were handed this position of prominence on a silver plate, under the auspices of a bond of trust between Microsoft and the rest of the computing industry. This trust was the collective property of the computing industry. Microsoft violated, ruined, and destroyed that trust. Entire corporations were destroyed as a result, and others today struggle simply to break even.

To presume that Microsoft can make reparations for this violation by way of an agreement stating that it promises this will never, ever happen again, is to ignore the extent of the damage that was done. For Netscape, Sun, and Novell, the death spiral was indeed devastating, but their survival is foreseeable. They may each yet rise from the ashes, with or without Microsoft's aid—and they may be better off without it anyway. These are companies that may never benefit from any settlement on the content of future agreements with Microsoft. These companies don't want future agreements with Microsoft.

The offended parties in the Microsoft antitrust matter are Microsoft's many software development partners, the computer manufacturers who depend on Windows, the retailers who have the right to sell the products they want to sell, and most importantly, the consumers and businesses who rely on Windows every day. The state of Windows today—and as a result, the state of the way their businesses work every day—was designed, planned, built, and executed in bad faith.

In the interest of crafting a proper redress, I make the following suggested replacements for the terms of the District Court's Final Judgment:

1. **Microsoft should cede stewardship of all components of its operating system directly related to the function of maintaining the**

readiness and usability of the computer, to an independent Licensing Bureau. This Bureau may be comprised of representatives of software manufacturers (including Microsoft); hardware manufacturers; leaders in services, support, and education. Any element of Windows whose basic function does not directly relate to the operability of the computer and its peripherals, may be retained exclusively by Microsoft. This definition may include Media Player, Outlook Express, and such elements that Microsoft has called "Microsoft Middleware." This central element of Windows is referred to here as the *Windows core.*

2. Representatives of lawmaking entities worldwide will be appointed as special liaison to the Licensing Bureau, for the purpose of overseeing all development, licensing, and educational operations. This includes representatives of the US Justice Dept., but may also include representatives from the various plaintiff states, from Canada, from the EU, and elsewhere.

3. The Licensing Bureau will make public all relevant information required by any independent developer to be able to create an application or program for any purpose that developer may conceive, in a timely manner such that a program constructed using this information may be guaranteed to run on the most premium version of Windows commercially available for a period of time 24 months following the developer's receipt of the information. Costs incurred for this publication will be assumed by the Bureau, and the Bureau will be free to make certain premium versions of its publications–such as "courseware"–commercially available.

4. The Licensing Bureau will serve as the central authority for licensing of shared Windows components to independent developers, for inclusion in independent programs. This way, developers who use a compiler package will be able to incorporate elements of shared code necessary for the software to perform common functions, such as display buttons and present menus.

5. Members of the Bureau will grant themselves licenses to produce, develop, distribute, and sell operating systems with any package, design, or name they may choose, but which has guaranteed compatibility with the Windows core, and whose principles comply completely with the level of interoperability and communication

required by the Windows core. Costs incurred for licenses will be paid to Microsoft Corp., and for the first two years, Microsoft will be credited in any non-Microsoft version of Windows as the creator of Windows. For example, "IBM Windows" may include this message: "Based on Microsoft technology." (Use the "Intel Inside" logo for a prototype.)

6. Each member of the Bureau will retain the right to develop (or "innovate") its own exclusive packaging arrangement for its own version of Windows. Hypothetically, "HP Windows" could include HP's own choice of media player, e-mail client, or instant messenger; and HP may even choose to make a "plain" version of Windows available without these items. Meanwhile, Microsoft may continue to offer Windows Media Player, Outlook Express, and MSN Messenger. Fair market competition will determine which package is superior.

7. It will be the sole and exclusive responsibility of the Bureau to determine for the benefit of its own members, as well as the computing industry at large, the developmental strategy for the Windows core, to assign the tasks of development to Microsoft teams or to teams from other companies, to manage the development process, and to ensure compliance with the interoperability principles of the Windows core. Microsoft has a seat at the table, but it's a seat among equals. It can elect to play along, or go home and sulk.

At this time in the history of the computing industry, and of the country as a whole, it is incumbent upon us all to get smarter very quickly. We now live and work in a society dependent upon the free and expedient flow of information. The computing industry has helped the concept of information to evolve to include not just news and mail, but *functionality*–the type of work that can be performed by software and yet represented digitally.

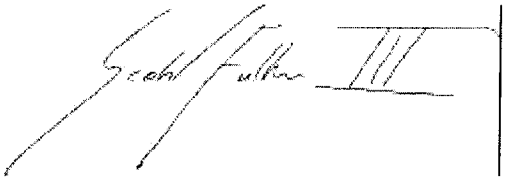
Microsoft's most ardent supporters have argued that it should not be the business of the federal government to interfere with, place controls on, or make restrictions to the free flow of information, or to any company that facilitates this flow of information. They are right. Acceptance of the Proposed Final Judgment as it presently stands, is a tacit surrender and assignment of all rights to restrict the free flow of information, by the federal government, to a single company. The Proposed Final Judgment defines the future as a magnification of the present–in a state of

existence that does not appear to have evolved much from where we stand now. And yet we know that the company to which the government would, in effect, render this authority is capable of using its own monopoly power in deceptive ways to manipulate the information industry in such a way that every single transaction comes closer and closer to flowing, at some point, through Microsoft.

"Get me into that," Bill Gates is quoted as saying, "and goddam, we'll make so much money!" The free flow of transportation was engineered by geniuses–Henry Ford, John A. Roebling, Norman Bel Geddes–and championed by presidents–Abraham Lincoln, Theodore Roosevelt, Dwight Eisenhower. The free flow of ideas is one of the basic principles upheld by the United States Constitution. Up to now, all successful freedom has been constructed and established on solid principles. Are we truly prepared to draw up a statement that speaks for all of us as a people and a nation, that serves as a catalyst for the surrender of the free flow of information not to an institution defined by principles, but a corporation defined by deception?

We are a smarter people than that. We know, for a fact, that all information, all knowledge, all wisdom is truly free, and that all people are entitled to fair and equal access. This principle will be demonstrated, clearly and unequivocally, either in the relative peace of today or in the turmoil of the future. You may spare the people a great ordeal now, against a powerful yet unprincipled force, by putting a stop to the death spiral. The way you do this is the way you deal with a wayward adolescent: Stop making deals. Take away its power. Spell out the law. And don't get kicked in yourself.

Yours sincerely,



Scott M. Fulton, III
Senior Partner, Ingenus