[2-US] *Caldera, Inc.* v *Microsoft Corp.*, 72 F.Supp.2d. 1295 (D. Utah 1999)

Electronic annex to L. Rubini (ed.) *Microsoft on Trial: Legal and Economic Analysis of a Transtlantic Antitrust Case* (Edward Elgar: 2010)

United States District Court,

D. Utah,

Central Division.

CALDERA, INC., Plaintiff,

v.

MICROSOFT CORP., Defendant.

No. 2:96-CV-645 B.

Nov. 3, 1999.

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MEMORANDUM OPINION & ORDER

BENSON, District Judge.

I. INTRODUCTION

Presently before the Court are four motions for partial summary judgment brought by defendant, Microsoft Corporation. In its complaint, plaintiff, Caldera, Inc., alleges that Microsoft engaged in anticompetitive conduct in violation of §§ 1 and 2 of the Sherman Antitrust Act, 15 U.S.C. §§ 1, 2, as well as § 3 of the Clayton Act, 15 U.S.C. § 14. Microsoft has attempted to separate what it believes are Caldera's individual claims by filing the following nine motions for partial summary judgment on: (1) "Plaintiff's Preannouncement Claim," (2) "Plaintiff's Product Disparagement Claim," (3) "Plaintiff's Claim Regarding Microsoft's Licensing Practices," (4) "Plaintiff's Perceived Incompatibilities Claim," (5) "Plaintiff's Intentional Incompatibilities Claim," (6) "Plaintiff's 'Predisclosure' Claim," (7) "Plaintiff's Technological Tying Claim," (8) "Plaintiff's European & Japanese Claims," and (9) "Plaintiff's State Law Tortious Interference Claims." In addition to responding to each of Microsoft's motions for partial summary judgment, Caldera filed its own "Motion to Strike Microsoft's Partial Summary Judgment Briefs Relating to Substantive Antitrust Violations."

In its Memorandum Opinion and Order dated June 28, 1999, the Court denied three of Microsoft's motions for partial summary judgment. The motions denied were "Plaintiff's Product Preannouncement Claim," "Plaintiff's Product Disparagement Claim," and "Plaintiff's Claim Regarding Microsoft's Licensing Practices." Additionally, the Court denied from the bench defendant's motion for partial summary judgment on "Plaintiff's Japanese and European

Claims," as memorialized in its Order dated July 27, 1999. With respect to "Plaintiff's State Law Tortious Interference Claims," the Court continues to take the matter under advisement. This Opinion addresses defendant's motions for partial summary judgment on "Plaintiff's Claim of Intentional Incompatibilities," "Plaintiff's Claim of Predisclosure," "Plaintiff's Claim of Perceived Incompatibilities," and "Plaintiff's Claim of Technological Tying," as well as plaintiff's motion to strike.

The Court heard oral argument regarding defendant's present motions for partial summary judgment and plaintiff's motion to strike on June 8, 10, 29, and July 6, 8, 1999. Based on the motions presently before the Court, the memoranda, exhibits submitted by both parties, and the statements presented in oral argument, the Court makes the following findings and issues this Memorandum Opinion and Order.

II. BACKGROUND & DESCRIPTION OF PLAINTIFF'S CLAIMS

This case finds its genesis in the mid-1970s with the advent of the personal computer. Critical to the evolution of the personal computer was the development of the computer operating system. An operating system functions as the control center of the computer. It controls the computer's interaction with peripheral hardware such as keyboards, modems, and printers and also serves as the underlying support structure for software applications. An operating system functions as the interface between the computer and the software applications. Independent software venders (ISVs) write software application programs, such as games, spreadsheets, and wordprocessors, that rely for their operation on certain general functions written into the operating system.

As the computer age dawned, new and old companies alike scrambled to pioneer the emerging frontier. Founded in 1976 by Gary Kildall, Digital Research, Inc. (DRI) developed one of the first operating systems for personal computers, known as CP/M (Control Program for Microprocessors). According to plaintiff, CP/M was the dominant operating system for 8-bit personal computers in the late 1970s and early 1980s. CP/M operated much the same as a disc operating system (DOS) operates today. Both CP/M and DOS are character based, requiring the user to direct the computer to perform desired operations by using specific keystrokes.

At the same time DRI was making inroads into the operating systems market, a new start-up partnership called Microsoft was formed which focused on programming languages. In July 1980, IBM approached Microsoft about designing 16-bit versions of its most popular products to be used with IBMs forthcoming personal computer, which at the time was still undisclosed to the public. IBM was also looking for an operating system to install onto its personal computers. At that time, DRI had preliminary designs for a 16-bit version of CP/M. IBM contacted DRI about obtaining a license of this 16-bit version, known as CP/M-86, but the parties were unable to reach an agreement.

Microsoft also began exploring the possibility of developing or acquiring its own operating system. In 1981, Microsoft first licensed and later purchased for a reported $50,000 a 16-bit CP/M clone from Seattle Computer Products, a small original equipment manufacturer (OEM). This system, named QDOS (Quick and Dirty Operating System), mirrored the functionality of CP/M. Thereafter, IBM obtained a license from Microsoft for QDOS. When IBM launched its personal computer in August 1981, this operating system was installed on each computer, offered as PC-DOS 1.0 to IBM's direct customers, and offered by Microsoft as MS-DOS 1.0, to all other OEMs. IBM's personal computer incorporated the Intel x86 microprocessor. Other OEMs were able to use this same microprocessor to essentially clone the IBM personal computer, and MS-DOS was compatible with all of these clones. Accordingly, literally millions of Microsoft's operating systems were installed worldwide. By 1985, MS-DOS was the prevalent operating system in the world for personal computers using Intel x86 microprocessors. As a result, Microsoft enjoyed enormous financial success. By 1988 Microsoft had obtained a monopoly position in the DOS market. For purposes of the present motions, Microsoft does not dispute the contention that it has such a monopoly in the operating systems market.

By the mid-1980s, the computer industry began exploring alternatives to DOS, which were considered by many to be difficult to use because they required the user to type in commands in order to operate the computer. As a result, graphical user interfaces (GUIs) were developed, which replaced some of the character-based commands of DOS with graphical commands that users could execute through the use of point-and-click technology. In using a GUI, the user operates a "mouse" that controls an arrow on the screen and enables the user to control the computer by pointing at screen icons and clicking on them. GUIs were initially utilized by Apple Computer, Inc. In the early 1980s Apple

developed the Macintosh microprocessor, which, unlike the IBM personal computer, ran on the Motorola 68000 microprocessor chip. However, unlike Microsoft's GUI, called Windows, Apple's GUI was a complete operating system. Windows had the appearance of running the computer as its own operating system, but it was in essence merely operating on top of DOS, unable to function without the underlying DOS program. Notwithstanding, Microsoft's Windows gained widespread popularity due to the dominance of the Intel x86 microprocessor chip. Since its inception in 1985, Windows has maintained a monopoly position in the GUI market.

Despite the dominant market position of MS-DOS, DRI continued development of its operating system. In 1987, DRI developed DR DOS, an operating system that competed directly with MS-DOS and was compatible with software written for use with MS-DOS. In May of 1988, DRI launched DR DOS 3.31. Plaintiff claims DR DOS was a better product than MS-DOS, as it included features MS-DOS did not have, operated at a faster speed, and was less expensive. Plaintiff contends that DR DOS's superiority over MS-DOS was due in part to Microsoft's assumption that the new operating system it was developing with IBM, called OS/2, would replace DOS as the preferred operating system. Therefore, according to plaintiff, Microsoft spent little time in further developing or improving MS-DOS.

Contrary to Microsoft's and IBM's projections, computer users did not switch to OS/2 at the rate anticipated, and DOS continued to be the preferred operating system. In July 1990, DRI launched DR DOS 5.0, an updated and improved version of DR DOS 3.31. Nicknamed "the Leopard," DR DOS 5.0 received positive reviews from several trade magazines as well as computer industry awards. [1] In an internal Microsoft e-mail sent to Phil Barrett, a Microsoft executive, from one of his subordinates, DR DOS 5.0 received similar high praise when compared to MS-DOS:

> Last Thursday you asked me for a user's view of DR DOS 5.0.... I used DR DOS 5.0 with a HUGE number of apps. I found it INCREDIBLY superior to MS DOS 3.31 and IBM DOS 4.01.
>
> 1) DOS compatibility
>
> The most important reason to use ANY version of DOS is to run DOS apps. DR DOS 5.0 runs every DOS app I know. DR DOS 5.0 works successfully with Windows (2.11, Win 386 2.11 and Windows 3.0 and 3.0a).
>
> ....
>
> CONCLUSION:
>
> DR DOS is vastly superior to MS dos 5.0. Both have nearly identical features ... I don't see any real 'cutting edge' advantage of one over the other.

(Pl.'s Exhibit 123).

Caldera claims that Microsoft, alarmed at this positive reception of DR DOS 5.0 the computer industry and concerned about losing its DOS monopoly, began to engage in a series of practices to eliminate the threat DR DOS posed to Microsoft's market dominance. Initially, rather than competing with DRI, Microsoft attempted to bargain for DRI's exit out of the market. In essence, as plaintiff alleges, Microsoft offered DRI a certain amount of money for the use of DR DOS technology. Microsoft was proposing that DRI market MS-DOS instead of DR DOS and that each company license rights in the other's product. DRI, uninterested in a long-term relationship with Microsoft, offered DR DOS technology to Microsoft for $30 to $40 million. Microsoft refused.

Plaintiff alleges that beginning in approximately the latter half of 1990 with the introduction of DR DOS 5.0 into the marketplace, Microsoft began its improper campaign to eliminate DR DOS as a competitor and to illegally maintain its operating systems monopoly. By this time, DR DOS had captured approximately six percent of the operating systems worldwide market. Among the first of these allegedly improper actions was Microsoft's use of preemptive false and misleading announcements of forthcoming, competitive MS-DOS and Windows products. This practice of preannouncing upcoming products is known in the industry as "vaporware." Caldera claims that beginning in April 1990, Microsoft began making knowingly false and misleading preannouncements relating to the forthcoming MS-DOS 5.0, an allegedly comparable product to DR DOS 5.0. Plaintiff claims Microsoft knowingly mislead the public by stating MS-DOS 5.0 would be available to OEMs by September 1990, a full nine months before it was actually on the market.

Following DRI's April 26, 1990 announcement at an England trade show that DR DOS 5.0 would be available in eight weeks, Microsoft immediately announced to the trade press its development of MS-DOS 5.0. An e-mail sent by Mark Chestnut, then a product manager of MS-DOS 5.0, to a number of Microsoft executives on May 2, 1990, stated:

> On the PR side, we have begun an "aggressive leak" campaign for MS-DOS 5.0. The goal is to build an anticipation for MS-DOS 5.0 and diffuse potential excitement/momentum from the DR DOS 5.0 announcement. At this point, we are telling the press that a major new release from Microsoft is coming this year which will provide significant memory relief and other important features. This was picked up by the major weeklies in the U.S. and was the page 1 story in PC Week on 4/30.

Additionally, Chestnut himself flew to several countries, meeting with dozens of OEMs and telling them that they could expect MS-DOS 5.0 by September 1990. Plaintiff alleges that Chestnut's representations caused these OEMs to postpone any decision to switch to DR DOS.

Caldera argues that the purpose behind Microsoft's preannouncements was to prevent OEMs from entering into licensing agreements with DR DOS 5.0. and that Microsoft knew it could not possibly comply with the schedule it was announcing to the public. Caldera's expert states that such an aggressive schedule was objectively unattainable. For one thing, a release date of September 1990 would only allow for a three-month beta test cycle, which, according to Caldera, is an unacceptably short beta testing period.[2] Plaintiff argues that by the end of 1990, however, Microsoft was aware that its tactics were working. In a performance self-evaluation, Chestnut wrote "virtually all of our OEMs worldwide were informed about DOS 5, which diffused DRI's ability to capitalize on a window of opportunity with these OEMs." (Pl.'s Exhibit 62).

By mid-October 1990, the media became concerned about the veracity of Microsoft's preemptive remarks directed at DR DOS 5.0. Such media pressure was not taken lightly. Following an interview with *PC Week,* a trade magazine, regarding the release of MS-DOS 5.0, Chestnut wrote to other Microsoft employees on October 17, 1990:

> I'm afraid that this guy [Paul Sherer of *PC Week*] is going to write that we are being open about DOS 5 beta because we are trying to pre-empt DR DOS 5 sales. I tried real hard to present a different point of view, but I don't think he bought it. I'm concerned that this article may make us look bad. Can you guys follow up and see if we need to do some damage control?
>
> This was the toughest interview I've ever done, I felt like Richard Nixon giving his "I am not a crook" speech.

(Pl.'s Exhibit 87).

In addition to Microsoft's "vaporware" strategies, Caldera alleges that following the launch of DR DOS 5.0 Microsoft refined and dramatically expanded a campaign of "fear, uncertainty, and doubt" (FUD) against DRI and all of its forthcoming versions of DR DOS.[3] Plaintiff alleges that account managers were directed to share purported "serious problems" with OEMs considering a switch to DR DOS 5.0. Caldera asserts that Microsoft deliberately withheld from these same OEMs independent tests confirming DR DOS 5.0 compatibility with MS-DOS and Windows, while creating its own tests to give the appearance of "incompatibility."

In addition to its improper vaporware and FUD campaigns, Caldera alleges that Microsoft also forced OEMs away from DR DOS 5.0 by what plaintiff refers to as the "licensing triple-whammy," which refers to (1) per processor licenses, (2) minimum commitments subject to forfeiture, and (3) increased license duration. Per processor licensing agreements required an OEM to pay Microsoft a royalty on every machine the OEM shipped regardless whether the machine contained MS-DOS or a different operating system. This is in contrast to a per system licensing agreement, which required OEMs to pay a royalty on only those computers shipped with MS-DOS installed. The use of per processor agreements is argued by plaintiff to be Microsoft's most effective single weapon against DR DOS. Plaintiff alleges that DRI had no realistic chance to license DR DOS to OEMs under a per processor license with Microsoft. It would make no sense for an OEM to install DR DOS when it had already paid for MS-DOS on every machine. Microsoft contends that OEMs were free to depart from the per processor licensing scheme, and that price differentials between license types were "relatively minor." However, plaintiff points to the depositions of several OEM executives who testified that even slight price differentials between the per processor and per system licenses meant that only the per processor license was financially viable.

Plaintiff also asserts that Microsoft's use of minimum commitments with prepaid balances raised the costs to OEMs who may have wanted to switch to an alternative operating system. As alleged, during the life of a Microsoft contract, OEMs could find themselves over-committed with respect to units of Microsoft products. Plaintiff claims that given the nature of Microsoft's mandatory, nonrefundable minimum commitment payments, OEMs faced the prospect of either forfeiting their prepaid balance or signing a new agreement with Microsoft to partially recoup the prepaid balance. The rationale, plaintiff asserts, behind Microsoft's minimum commitments policy was not just to provide an OEM an opportunity to recoup the prepaid balance, but rather to sign a new license agreement so that the OEM would continue to distribute only MS-DOS.

Microsoft's final licensing tactic aimed at DR DOS, as plaintiff alleges, was increased license duration. Microsoft began increasing its licensing agreements from two-year to three-year terms and gave OEMs a small price break for agreeing to the longer term. Caldera claims that the increased licensing time was implemented only after DR DOS became a threat to MS-DOS's monopoly position, and that Microsoft deliberately increased the term length as part of its illegal scheme to drive DRI from the market. The strategy, plaintiff alleges, foreclosed DR DOS from effectively competing for existing OEM business.

On July 17, 1991, DRI announced its intent to merge with Novell. The result of this announcement intensified the threat DR DOS posed to Microsoft. The potential merger was a concern on more than one level. One Microsoft executive, Jim Allchin, expressed: "I thought about it all night. Since I came here I said there were two things that concerned me related to Novell: one Novell partnering with IBM and two Novell coming to us at the desktop. Both fears have now come true." (Pl.'s Exhibit 148). One of Microsoft's MS-DOS's product managers, Richard Freedman, expressed:

> The offensive scenario presumes Novell is actively developing products to compete with Win Peer and NT, and ultimately plans to enter the standalone OEM DOS business. It is this worst-case scenario we're focusing on.
>
> ....
>
> This scenario assumes Novell aims to own the desktop, both server and workstation, and assumes they'll attempt to do this first by integrating Netware and DR DOS, and then, having legitimized DR DOS, by going after OEM business. IBM licensing DR DOS is a major X factor in this scenario.

(Pl.'s Exhibit 153). Plaintiff alleges that these and other excerpts indicate that Microsoft was alarmed at not only the prospect of Novell competing in the MS-DOS arena, but also that an alliance between IBM and Novell would make DR DOS a much larger threat. On September 23, 1991, IBM officially endorsed DR DOS 6.0, which was scheduled to be released to the public in September or October of the same year. Plaintiff alleges that in response to IBM's endorsement and in anticipation of an IBM/Novell alliance, Bill Gates publicly threatened retaliation against IBM should it choose DR DOS. Caldera claims that as a result of the threatened retaliation and intense FUD concerning DR DOS incompatibility with Windows, IBM withdrew its consideration of DR DOS.[4]

In late September 1991, Novell released DR DOS 6.0. Plaintiff alleges with this release, Microsoft adhered to the same pattern of attack, vaporware, FUD, and per processor licensing agreements, but with more intensity. Microsoft executives were aware of the threat Novell/DRI and the new DR DOS 6.0 posed. Jim Allchin wrote on September 9, 1991:

> We must slow down Novell.... As you said Bill, it has to be dramatic .... We need to slaughter Novell before they get stronger.

(Pl.'s Exhibit 175). On March 26, 1993, Allchin also wrote:

> 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 bout 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.

(Pl.'s Exhibit 349). Plaintiff alleges that with this mind-set, Microsoft intensified its improper FUD campaign against DR DOS. Specifically, plaintiff asserts that Microsoft attempted to convince OEMs that DR DOS would to be incompatible with the upcoming Windows 3.1, when in fact Microsoft knew that DR DOS was, or with minor adjustments could be, compatible with Windows. On April 6, 1992, Windows 3.1 was launched worldwide. Following this release, plaintiff claims users immediately bombarded Microsoft with requests regarding problems setting up Windows 3.1 over DR DOS. Microsoft's standard response, according to plaintiff, was to tell the users that Windows was only tested with MS-DOS, not DR DOS, and that using a system other than MS-DOS puts the user at his own risk. When confronted with the issue of compatibility between Windows and DR DOS, Microsoft's marketing staff was instructed to respond, "we only test windows on Microsoft supported operating systems, so there's really no way to know in the future what will work and what will not." (Pl.'s Exhibit 176). Recognizing the damage that its FUD campaign could have on DR DOS, Microsoft stated: "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 fa[c]ts." (Pl.'s Exhibit 227).

To assure DR DOS's incompatibility with Windows, plaintiff alleges that Microsoft placed DRI on a "beta blacklist." According to plaintiff, Microsoft knew that if the DR DOS development team had access to a Windows 3.1 beta, it would allow them to make DR DOS compatible and consequently allay public fears of incompatibility. DRI submitted a formal request to become a beta site. The request was denied on August 2, 1991. Being placed on Microsoft's beta blacklist had an alleged direct effect on DR DOS sales.[5] One corporation notifying DRI of its decision to reject DR DOS 6.0, stated that

> the most important factor, however, is the rift developing between Digital Research and Microsoft. By this I mean Microsoft not allowing you to beta test Windows 3.1. Since the users who would be most inclined to switch to DR DOS are also using Windows, this one factor is of particular concern.

(Pl.'s Exhibit 266).

According to Caldera, Microsoft continued its attacks on DRI by intentionally making Windows 3.1 incompatible with DR DOS, not for any technologically significant reason, but for the sole purpose of eliminating DR DOS as a competitor. Caldera supports its claim with internal Microsoft statements, such as these written by David Cole and Phil Barrett on September 30, 1991, respectively: "It's pretty clear we need to make sure Windows 3.1 only runs on top of MS DOS or an OEM version of it," and "[t]he approach we will take is to detect dr 6 and refuse to load. The error message should be something like 'Invalid device driver interface.' " (Pl.'s Exhibits 205 and 206). Microsoft developers discussed reliable DR DOS detection mechanisms, and allegedly incorporated "Bambi," Microsoft's code name for its updated disc cache utility, which among other things detects DR DOS and refuses to load, in Windows 3.1.

In addition to Bambi, Microsoft added a version check known as the extended memory specifications (XMS) to the Windows 3.1 SETUP program. The XMS made it impossible for Windows to install on a DR DOS system. When it detected DR DOS the user was told:

> The XMS driver you have installed is not compatible with Windows. You must remove it before SETUP can successfully install Windows.

Caldera alleges that there was no valid competitive purpose for this version check, and that this message was not just misleading, but wrong, and that the DR DOS XMS driver was compatible with Windows 3.1. Caldera further alleges that Microsoft introduced a computer "bug," known as the nested task flag, that would cause a fatal error when users tried to run Windows 3.1 with DR DOS. Additionally, it is alleged that Microsoft installed "software locks" in the Korean version of Windows causing Windows to malfunction when it operated with DR DOS. Caldera claims that Microsoft knew about these problems, knew the cause of the problems, knew how to fix them, yet did nothing. Finally, Caldera complains of Microsoft's insertion of a line of code in a beta version of Windows 3.1. The code was designed to detect the presence of MS-DOS. In the event that MS-DOS was not detected, the following message was displayed:

> Non-fatal error detected: Error number [varied]. Please contact Windows 3.1 beta support. Press enter to exit or C to continue.

Through Microsoft's alleged use of vaporware, per processor licensing agreements, FUD, beta blacklisting, and the insertion of incompatibilities between Windows and DR DOS, Caldera claims that Microsoft was essentially forcing OEMs to purchase both MS-DOS and Windows. By this method Microsoft, Caldera asserts, was using its monopoly in the GUI (i.e. Windows) market, to illegally maintain its monopoly in the operating systems market. One OEM, an alleged leading proponent of DR DOS, stated: "[Microsoft] just said they had changed the way in which they market the product, instead of it being available as two separate packages it now came as an integrated package, which was DOS and Windows 3.11 or DOS and Windows for Workgroups 3.11, take it or leave it." (Harvey Depo. at 33).

According to plaintiff, Microsoft's desire to combine MS-DOS and Windows extended beyond simply forcing the sale of the two products. Since September 1991, and as reflected in an e-mail sent by Jim Allchin, Microsoft had been exploring the possibility of integrating Windows with DOS, creating a "common install," and "mak[ing] it so there is no reason to try DR DOS to get Windows." (Pl.'s Exhibit 175). Acting on this desire, Microsoft took steps to implement its combined product. By early 1992, Microsoft developed "Janus," which was designed to provide first-time Windows 3.1 purchasers who were using some older version of DOS, with an upgrade to MS-DOS 5.0. For the first time, Windows 3.1 and MS-DOS 5.0 were together in the same package. Each component, however, could still be purchased separately. Janus was not a success, and Microsoft estimated its failure to be the result of only providing an upgrade of one of the products. Therefore, Microsoft focused on the concept of releasing upgraded MS-DOS and Windows versions simultaneously. This project, labeled "Chicago," ultimately led to the creation of Windows 95. According to Caldera, one of Microsoft's stated objectives in developing Chicago was to block out Novell. In a June 16, 1992, strategy document Microsoft declared Novell as its biggest threat, and stated that Microsoft "must respond in a strong way by making Chicago a complete Windows operating system, from boot-up to shut-down." (Pl.'s Exhibit 309). Microsoft continued, "[t]here will be no place or need on a Chicago machine for DR-DOS (or any DOS)." (Id.).

While Microsoft was developing Chicago, Novell continued to develop DR DOS. In December 1993, Novell introduced its final upgrade to DR DOS, Novell DOS 7.0, which, according to plaintiff, offered innovative features and received industry praise. Plaintiff claims that Microsoft illegally attempted to eliminate Novell's momentum by continuing its FUD campaign, beta-blacklisting, and spreading vaporware. For example, in August 1993, Microsoft announced the forthcoming release of MS-DOS 7.0 to coincide with Novell DOS 7.0. However, MS-DOS 7.0 was never released. Additionally, Caldera alleges that further vaporware and FUD was being spread in relation to Chicago. Specifically, Microsoft leaked information that Chicago would be released in 1993 or 1994, and that Novell's DOS would not run on Chicago. Finally, Caldera claims that shrouded in the fog of such vaporware and as a result of years of Microsoft's illegal anticompetitive conduct, Novell announced in September 1994 that it would withdraw from active development and marketing of further versions of DOS. On the heels of Novell's exit from the market, Microsoft announced on December 20, 1994, that Chicago, now officially termed "Windows 95," may not be available until August 1995.

In August 1995, Microsoft released Windows 95. For ten years prior thereto, Microsoft had sold MS-DOS and Windows separately. However, Windows 95 combined the functions of Windows and DOS into one product. Microsoft touts Windows 95 as one of the most popular software products in history, selling within four months after its release nearly eleven million copies through OEM channels and nearly five million copies through retail channels. After its release, virtually all new personal computers came with Windows 95 preinstalled by OEMs. With the release of Windows 95, users of the Intel-based personal computer had a totally integrated (from boot-up to shutdown) graphical operating system for the first time. Microsoft claims that Windows 95 offered many new features of functionality over that provided by the combination of MS-DOS 6.0 and Windows 3.0 when those products were installed separately on a personal computer. Caldera, however, alleges that in reality Windows 95 is not an integrated software product, but rather two products-MS-DOS 7.0 and Windows 4.0, which Caldera asserts are merely updated versions of both MS-DOS 6.22 and Windows 3.1-packaged together using a common installation program with blue cloud graphics to make them appear to be a single product. Plaintiff claims that MS-DOS 7.0 and Windows 4.0 can be easily isolated and sold as separate products. Since the release of Windows 95, updated versions of Windows and MS-DOS were not sold separately. Plaintiff claims Novell would have been able to compete with Microsoft but for Microsoft's prior conduct

and ultimately this illegal tying arrangement of, Windows 95, which plaintiff argues was the *coup de grace* for DR DOS.

On July 23, 1996, Caldera acquired DRI from Novell. Included in the purchase was the right to bring this lawsuit against Microsoft. Based on the foregoing, Caldera filed its complaint against Microsoft, alleging the improper use and maintenance of monopoly power in violation of § 2 of the Sherman Act and for the illegal restraint of trade in violation of § 1 of the Sherman Act. Caldera supports its § 1 claim by arguing that Windows 95 constitutes an illegal tie of two separate products formerly sold as MS-DOS and Windows. Caldera supports its § 2 claim, as aforementioned, by alleging that Microsoft engaged in an anticompetitive scheme, the factual components of which consist of, improper licensing arrangements, improper preannouncements, improper intentional and perceived incompatibilities, beta blacklisting, the improper creation of fear, uncertainty, and doubt, and the illegal tying together of its products. Caldera acknowledges that each instance of alleged misconduct taken alone may not amount to a violation of § 2. However, when viewed in totality, Caldera asserts that Microsoft has engaged in an unlawful, anticompetitive scheme to illegally maintain its monopoly in the operating systems market.

III. DISCUSSION

In 1890, Congress passed the Sherman Antitrust Act in an effort to protect competition and prevent monopolies. Section 1 of the Sherman Act prohibits "[e]very contract, combination ..., or conspiracy, in restraint of trade or commerce." 15 U.S.C. § 1. Despite this broad language, almost from its inception the Sherman Act has been read to prohibit only those restraints of trade that are unreasonable. *Board of Trade v. United States,* 246 U.S. 231, 238, 38 S.Ct. 242, 62 L.Ed. 683 (1918) (recognizing that because every agreement involving trade is a restraint on trade in some form, the proper inquiry is whether the restraint suppresses or destroys competition). Courts have also developed a doctrine of per se violations to cover those business relationships that "because of their pernicious effect on competition and lack of any redeeming virtue are conclusively presumed to be unreasonable and therefore illegal without elaborate inquiry as to the precise harm they have caused or the business excuse for their use." *Northern Pac. Ry. Co. v. United States,* 356 U.S. 1, 5, 78 S.Ct. 514, 2 L.Ed.2d 545 (1958). Section 2 of the Sherman Act condemns "[e]very person who shall monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States or with foreign nations." 15 U.S.C. § 2. The Supreme Court has determined that "the offense of monopoly under § 2 of the Sherman Act has two elements: (1) the possession of monopoly power in the relevant market and (2) the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident." *United States v. Grinnell Corp.,* 384 U.S. 563, 570-71, 86 S.Ct. 1698, 16 L.Ed.2d 778 (1966).

Although by enacting the Sherman Act Congress expressed an inherent distrust of monopolies and their possible adverse effects on competition, it did not declare monopolies illegal per se. Antitrust laws are designed to protect and foster competition, even when the competitor is a monopolist. In general, a monopolist is free to market its products, engage in research and development to improve its products, and engage in any other business practice that is procompetitive. If smaller businesses find themselves unable to compete on the merits of their products against a procompetitive monopolist, there is nothing in the antitrust laws to protect them. Antitrust laws protect the competitive process; they do not protect individual competitors.

Notwithstanding, § 2 does proscribe a monopolist from engaging in business practices that are anticompetitive or exclusionary. Congress, recognizing that "it is difficult to define in legal language the precise line between lawful and unlawful combination[,]" left to the courts the responsibility of defining the parameters of anticompetitive conduct. 21 *Cong. Rec.* 2460 (1890). Anticompetitive conduct describes a wide variety of behavior including espionage, sabotage, predatory pricing, fraud, price discrimination, price-fixing, bid-rigging, illegal tying arrangements, product disparagement and a host of other activities that improperly stifle competition. Section 2 prohibits a monopolist from engaging in anticompetitive practices that are designed to deter potential rivals from entering the market or from preventing existing rivals from increasing their output, no matter how flagrant or subtle the violation. A monopoly may not improperly "wield [its] resulting power to tighten its hold on the market." *Berkey Photo, Inc. v. Eastman Kodak Co.,* 603 F.2d 263, 275 (2d Cir.1979). Perhaps the clearest way to explain what a monopolist may legally do is to say that the monopolist may engage in all of the same procompetitive activities that allowed it to become a legal monopolist in the

first place. These would include building a better or less expensive product, engaging in better public relations, employing effective (and honest) advertising campaigns, and developing aggressive and effective marketing techniques.

If these activities result in even more market share, and drive competitors out of the market, the monopolist is nevertheless fully entitled to such expansion, and its conduct is not a violation of the Sherman Act. Conversely, a monopolist may not engage in any activities other than those that are procompetitive, as generally described above.

A. Plaintiff's Motion to Strike

As mentioned at the outset of this Opinion, in response to Caldera's allegations that Microsoft violated § 2 by willfully maintaining its monopoly position through anticompetitive means, Microsoft filed nine separate motions for partial summary judgment. Seven of the nine motions relate to specific conduct Caldera claims against Microsoft. Caldera objected to these motions by filing a motion to strike the partial summary judgment motions as improper. Caldera argues that Microsoft has artificially created seven discreet claims out of Caldera's singular claim that Microsoft violated § 2 of the Sherman Antitrust Act. Caldera requests that the Court strike the seven partial summary judgment motions as improper and allow Caldera to present evidence of Microsoft's alleged anticompetitive behavior to a jury. The jury would in turn consider whether, based on the aggregate effect of the anticompetitive behavior presented, defendant unlawfully maintained a monopoly.

Microsoft objects to plaintiff's motion to strike for two reasons. First, Microsoft asserts that a motion to strike is a procedurally improper challenge to motions for summary judgment, and second, Microsoft contends that each allegation of anticompetitive conduct must be examined separately to determine if a § 2 violation has occurred. Defendant argues that if specific anticompetitive conduct fails by itself to support a § 2 claim then such conduct may not later be considered in determining whether a § 2 violation has occurred based on the totality of the circumstances.

Microsoft relies on *Southern Pacific Communications Corp. v. AT & T,* 556 F.Supp. 825 (D.D.C.1982), in support of its position. Microsoft claims that in *Southern Pacific* the court considered and rejected the idea that a plaintiff can assert one overarching § 2 claim. However, a careful reading of that case shows that the court there found it unnecessary to decide the issue and considered it only in dicta. The D.C. district court wrote:

> The Court is satisfied that nothing in *Continental Ore* requires a conclusion that a defendant that has not engaged in an unlawful conspiracy, and has committed no acts in themselves violative of the Sherman Act, could be found guilty of antitrust violations on some theory that the acts have "synergistic effects" that convert lawful conduct into violations of law. Such a doctrine, with its potential for converting entirely innocent conduct into violations of law, *would at the very least demand careful and sparing application* .... Fortunately, it is not necessary for the Court to decide whether plaintiffs' expansive reading of *Continental Ore* can be justified.

Id. at 888 (emphasis added).[6] Moreover, the court in *Southern Pacific* did not reject the idea, as defendant claims, that plaintiff should not be allowed to present its antitrust case based on the totality of defendant's conduct when none of the conduct alone could support a separate and independent antitrust claim. Rather, the court stated that such a theory would "at the very least demand careful and sparing application."

Defendant also asserts that the Supreme Court "tacitly rejected" plaintiff's theory in *Matsushita Electric Industrial Co. v. Zenith Radio Corp.,* 475 U.S. 574, 586-86, 106 S.Ct. 1348, 89 L.Ed.2d 538 (1986). In *Matsushita,* the Supreme Court addressed the issue of the appropriate standard for summary judgment in cases involving conspiracies to monopolize. However, defendant does not elaborate on how the Supreme Court tacitly rejected plaintiff's theory, nor can this Court, after its own reading of the case, find such a rejection. In fact, *Matsushita* seems to support plaintiff's synergy theory rather than reject it. On the same pages cited by defendant, the Supreme Court in *Matsushita* found that of the numerous conspiracies to monopolize alleged, only the conspiracy to monopolize the American market through predatory pricing could support respondent's claim of antitrust injury. However, the Court noted that evidence of the other conspiracies would be considered if "in context evidence of these 'other' conspiracies raises a genuine issue concerning the existence of a predatory pricing conspiracy." *Id.* at 586, 106 S.Ct. 1348. The Court found that although the "other" conspiracies could not alone support an antitrust claim, they could be used to bolster the remaining conspiracy claim

when viewed in context. This Court reads nothing in *Matsushita* that limits, either explicitly or tacitly, the aggregation of evidence to conspiracy to monopolize cases.

In support of its position, Caldera relies primarily on *Aspen Highlands Skiing Corp. v. Aspen Skiing Co.,* 738 F.2d 1509 (10th Cir.1984), which was affirmed on appeal to the Supreme Court in *Aspen Skiing Corp. v. Aspen Highlands Skiing Co.,* 472 U.S. 585, 105 S.Ct. 2847, 86 L.Ed.2d 467 (1985). That case involved two owners of ski resorts in Aspen, Colorado. The plaintiff owned one of four ski resorts located in Aspen. The defendant owned the remaining three. From the 1962 ski season through the 1971 ski season, the parties offered a joint multi-day lift ticket which could be used at any one of the four ski resorts. After a one-year reprieve, the multi-day lift ticket was reinstituted in 1973 through the end of the 1976 season. The revenues from the tickets were divided based on a percentage of the actual use of each facility. For the 1977-78 season, defendant offered to continue the multi-day lift ticket but only if plaintiff agreed to a fixed percentage of the revenues. Plaintiff requested that the parties continue to base the revenue sharing on actual usage but ultimately agreed to 15% of the revenues. In the 1978-79 ski season defendant offered to continue the joint ticket if plaintiff would agree to accept 12.5% of the revenues from ticket sales. Plaintiff again requested that the parties return to their previous arrangement. However, because the parties were unable to agree on a method of dividing the revenues, the multi-day lift ticket was discontinued.

Plaintiff brought suit under the Sherman Antitrust Act and the Clayton Act. After the close of evidence at trial, the defendant moved for a directed verdict. The district court granted the motion on all claims except the claims of unlawful monopolization and conspiracy to restrain trade. On both of the remaining claims, the jury found for the plaintiff. On appeal to the Tenth Circuit, defendant argued that "there was insufficient evidence to present a jury issue of monopolization because, as a matter of law, the conduct at issue was pro-competitive conduct that a monopolist could lawfully engage in." *Id.* at 1516-17 (citations omitted). Defendant further argued that each of the six things the plaintiff relied on to support its § 2 claim must support the claim independent of each other and may not be considered in the aggregate to determine if a violation of § 2 has occurred. [7] The Tenth Circuit rejected this argument, stating, "defendant's argument would require that we view each of the "six things" in isolation." To do this, however, would be contrary to the Supreme Court's admonition that an antitrust plaintiff "should be given the full benefit of [its] proof without tightly compartmentalizing the various factual components and wiping the slate clean after scrutiny of each." *Id.* at 1522 n. 18 (citing *Continental Ore Co. v. Union Carbide & Carbon Corp.,* 370 U.S. 690, 699, 82 S.Ct. 1404, 8 L.Ed.2d 777 (1962)). The Tenth Circuit continued by adding, "[p]laintiff's evidence should be viewed as a whole. Each of the 'six things' viewed in isolation need not be supported by sufficient evidence to amount to a § 2 violation. It is enough that taken together they are sufficient to prove the monopolization claim." *Id.*

Microsoft attempts to distinguish this case by highlighting the fact that the *Aspen Highlands* court allowed the plaintiff the benefit of the synergistic effect of its evidence to prove that the defendant monopolist had refused to deal with the plaintiff in violation of § 2. Whereas here, Microsoft argues, Caldera is requesting that all the evidence be considered in determining whether defendant violated § 2 without alleging any specific claim other than the defendant engaged in anticompetitive behavior. However, this distinction is immaterial. The Supreme Court's directive in *Continental Ore* that a plaintiff should not be denied the "full benefit of its proof" is equally applicable here. The Court finds nothing in the relevant law that prevents a plaintiff from asserting one overarching claim of a § 2 violation. Conversely, to allow defendant to carve plaintiff's complaint into seven discreet claims that plaintiff never intended to allege as independent claims not only appears to offend the purpose behind § 2, but also turns basic civil procedure principles on their head.

Caldera claims that Microsoft is a monopolist that engaged in anticompetitive conduct to preserve its monopoly. The alleged anticompetitive conduct is set forth in general terms in the foregoing background portion of this opinion. Plaintiff's entire case is based on the synergy of all of this conduct to demonstrate anticompetitive intent and effect. Plaintiff has not averred a separate claim of product disparagement, or a "refusal to deal" claim, or any other independent claim in support of its overall § 2 claim. Consequently, the Court sees no reason why plaintiff should now be required to submit to Microsoft's reclassification of its claim and to independently support each of the seven "claims" as classified by Microsoft as an independent legal claim upon which relief could be granted and liability could be independently based, in order to survive summary judgment. Such an exercise is not appropriate as a matter of summary judgment, though it may have some value in allowing the parties and the Court to focus on the plaintiff's proposed evidence in an effort to minimize evidentiary problems at trial.

In full agreement with *Aspen Highlands,* the Court finds no bar to allowing Caldera to present all of its evidence of Microsoft's alleged anticompetitive conduct to a fact finder in support of its § 2 claim. However, as a procedural matter, the Court agrees with the defendant that a motion to strike the partial summary judgment motions is improper. Therefore, the Court denies plaintiff's motion to strike, and entertains each of the remaining four motions in the following discussion. Consistent with the foregoing, however, what follows is generally more in the nature of evidentiary analysis.

B. Microsoft's Motions for Partial Summary Judgment

The Court now addresses Microsoft's motions for partial summary judgment regarding (1) "Plaintiff's Claim of Intentional Incompatibilities," (2) "Plaintiff's Claim of Predisclosure," (3) "Plaintiff's Claim of Perceived Incompatibilities," and (4) "Plaintiff's Claim of Technological Tying." Summary judgment is proper if the moving party can demonstrate that there is no genuine issue of material fact, and, therefore, is entitled to judgment as a matter of law. *See* FED. R. CIV. P. 56(c). The court is required to construe all facts and reasonable inferences in the light most favorable to the nonmoving party. *See Matsushita Elec. Indus. Co. v. Zenith Radio Corp.,* 475 U.S. 574, 587, 106 S.Ct. 1348, 89 L.Ed.2d 538 (1986); *Wright v. Southwestern Bell Tel. Co.,* 925 F.2d 1288, 1292 (10th Cir.1991). In considering whether there exist genuine issues of material fact, the court determines whether a reasonable jury could return a verdict for the nonmoving party in the face of all the evidence presented. *See Anderson v. Liberty Lobby, Inc.,* 477 U.S. 242, 249, 106 S.Ct. 2505, 91 L.Ed.2d 202 (1986); *Clifton v. Craig,* 924 F.2d 182, 183 (10th Cir.1991).

1. Intentional Incompatibilities

Caldera alleges that in an effort to eliminate competition in the operating systems market, Microsoft introduced intentional incompatibilities between Windows and DR DOS. Caldera maintains that these incompatibilities, in connection with other anticompetitive behavior such as Microsoft's exclusion of DRI from beta testing Windows 3.1 and Microsoft's campaign to spread fear, uncertainty, and doubt about Windows' compatibility with DR DOS, amounted to a violation of § 2 of the Sherman Act. In response to this allegation, Microsoft seeks summary judgment on Caldera's claims of intentional incompatibilities.

Caldera originally complained of seven technological incompatibilities existing between DR DOS and Microsoft Windows: (1) Nested Task Flag, (2) XMS Version Check, (3) AARD Code, (4) Korean Incompatibilities, (5) PROTMAN.DOS in Windows for Workgroups, (6) VSERVER.386 in Windows for Workgroups, and (7) Windows 95. At oral argument, plaintiff stated that it would no longer pursue any claims relating to PROTMAN.DOS or VSERVER.386. At the same hearing, Microsoft objected to Caldera's introduction of yet another technological incompatibility, known as "Bambi" which Caldera raised for the first time in its opposition brief to defendant's motion for partial summary judgment on plaintiff's intentional incompatibilities claim. Defendant objected to the introduction of any evidence relating to Bambi based on the fact that discovery had closed and defendant did not have an opportunity to depose plaintiff's expert witness on the subject. The Court held a separate hearing on this matter at which time it determined that the Bambi incompatibility issue and that the declaration of Caldera's expert witness, Dr. Hollaar, would be allowed. Therefore, the Court will address incompatibilities relating to Bambi, nested task flag, XMS version check, and Korean incompatibilities. The Court will address the AARD Code and Windows 95 in the "Perceived Incompatibilities" and "Technological Tying" portions of this Opinion. The Court will first briefly describe each technological incompatibility before turning to the applicable law.

Caldera asserts that Microsoft intentionally created a nested task flag incompatibility between DR DOS and Windows 3.1. A nested task flag allows a microprocessor to execute tasks that require several other tasks to be executed in order for a function to be performed. This layering of tasks is called "nesting." In order to determine if a specific task is nested or not, software is created to detect the numeric value assigned to the nested task flag. If the value assigned to the flag is incorrectly set, the computer may respond in unexpected or even detrimental ways. In the instant case DRI had set the nested task flag value in DR DOS to one. The Intel microprocessor used by Windows 3.1 was set at a default value of zero. Consequently, when Windows 3.1 operated in conjunction with DR DOS, a malfunction occurred. Shortly after Windows 3.1 was released publically in early April 1992, DRI corrected the problem with a small two-

byte modification to the IBMDOS.COM file in DR DOS. Plaintiff claims that Microsoft intentionally created this unnecessary incompatibility between DR DOS and Windows as part of its illegal anticompetitive scheme. Microsoft was aware of the nested task flag error that occurred when the Windows 3.1 beta version operated with DR DOS and even contemplated a remedy for the problem. Ultimately, however, Microsoft abandoned plans to fix the malfunction. Microsoft contends that the decision not to repair the malfunction was made because it required extensive testing to ensure that the remedy did not destabilize Windows.

Caldera next claims that Microsoft intentionally added code to the Windows 3.1 set-up program that operated as a check to determine if an appropriate version of extended memory specifications (XMS) was present. When the check found an unacceptable version of XMS, a message appeared on the monitor instructing the user "to remove the old XMS provider from a configuration file called CONFIG.SYS and to proceed with the installation of Windows 3.1." MS DOS passed the XMS version check. DR DOS did not. The Windows 3.1 set-up program runs in standard (or "protected") mode, which allows the program to be more user-friendly by adding graphics and other features. In order for the Windows 3.1 set-up program to run in standard mode, Microsoft asserts that a dependable version of the XMS had to be present. However, Caldera asserts that the Windows set-up program never actually used the XMS, which required an internal revision number of 2.6. However, Windows 3.1 required at most an internal revision number of 2.4 to run. Furthermore, Windows 3.1 consists of smaller modules, each containing its own XMS version check. With an internal reversion number of 2.5 DR DOS passed the individual modules checks but failed the Windows set-up XMS check. Caldera asserts that the only purpose for the XMS check was to prevent DR DOS from loading with Windows 3.1.

Next Caldera alleges that Microsoft intentionally placed a detection device known as Bambi to detect DR DOS and refuse to load Windows 3.1 if DR DOS was detected. Bambi was Microsoft's code name for SMARTDRV, a Windows 3.1 module. Caldera claims that Microsoft included code located within the Bambi module in at least one beta release of Windows 3.1 that checked for DR DOS. Once DR DOS was detected, an error message appeared on the computer monitor and Windows refused to run. Caldera claims that the incompatibility was intentionally inserted and that there was no technological reason or value to adding the error message. Caldera offers the declaration of its expert witness Dr. Hollaar, in support of its allegations.

Caldera finally asserts that somewhere between 1990 and 1991, Microsoft put "software locks" into three of its software programs produced for the Korean market. These software locks prevented users from operating Microsoft software with DR DOS. In support of its assertion, Caldera offers the testimony of Richard Dixon, DRI's vice-president for Far-Eastern OEM sales. Apparently, Mr. Dixon observed Korean versions of Microsoft Word, Works, and Excel being loaded onto DR DOS. When attempting to run these Microsoft software programs on DR DOS, an error message appeared which read, "application terminated." Mr. Dixon observed previous versions of these same Microsoft applications load onto DR DOS and function properly. Caldera also submits internal Microsoft e-mail which it argues shows that the software locks were intentionally inserted by Microsoft to prevent the software from operating with DR DOS. One e-mail concerns an inquiry by a member of the Korean Windows 2.10 project who wanted to know how the U.S. version of Windows handled MS-DOS clones and how the Korean version should handle clones. Along the chain of responsive e-mails, the discussion noted that Bill Gates, the CEO of Microsoft Corp., wanted all business units to detect all MS-DOS clones and show a warning message indicating that the MS-DOS clone was not tested and that the program might not work correctly.[8] The e-mail directed the Korean Windows 2.1 project member to individuals who could provide code for a checking routine that would display a warning message when an operating system other than MS-DOS was detected. Caldera also asserts that the Korean version of Windows, known as "Hangeul Windows," contained diagnostic checks to determine if Windows was operating on a system other than MS-DOS. The diagnostic check was contained in both the 3.0 and 3.1 version of Windows and was coupled with a message located in the WIN.CNF file. In the 3.0 version the message read: "Hangeul Windows 3.0 should be executed on Hangeul MS-DOS. For correct execution, please run Hangeul MS-DOS." In the Hangeul Windows 3.1 version the message read, "Warning: Your DOS is not compatible with MS-DOS. You may have some problems when you use Hangeul Windows 3.1."

Microsoft contends that in order for Caldera to succeed on its claim it must first show that each of the alleged incompatibilities between DR DOS and Windows "had no purpose other than to preclude competition from DRI."

(Def's Reply Mem. at 12). In support of this heavy burden, Microsoft relies on *Transamerica Computer Co., Inc. v. I.B.M. Corp., (In re IBM Peripheral EDP Devices Antitrust Litig.),* 481 F.Supp. 965 (N.D.Cal.1979). In *Transamerica,* the plaintiffs were manufacturers of peripheral computer equipment such as key boards and printers that were compatible with IBM personal computers. The plaintiffs brought suit for antitrust violations when IBM redesigned its central processing unit (CPU) to make it incompatible with any peripheral product not made by IBM. Defendant IBM maintained that the redesign had technological value and therefore the resulting incompatibilities could not support a § 2 claim.

Microsoft asserts in its reply brief that the court in *Transamerica* "held that a plaintiff must prove, in addition to intent, that the design decision was devoid of technical merit and had a significant effect on competition." (Def's Reply Mem. at 11) (citation omitted). Microsoft also adds that "the court [in *Transamerica*] expressly stated that design conduct violates § 2 of the Sherman Act only if the 'design changes had *no purpose and effect* other than the preclusion of ... competition.' " (*Id*. at 12) (citing *Transamerica,* 481 F.Supp. at 1002-03). Applying this standard to the instant case, Microsoft argues that Caldera cannot show that even one of the alleged incompatibilities had as its only purpose the preclusion of competition or that the incompatibilities were devoid of technological merit. Therefore, defendant argues, plaintiff's claims fail as a matter of law.

Applying this standard, the Court may agree that plaintiff has not met its burden. However, Microsoft has grossly misrepresented the holding of *Transamerica*. Particularly offensive to the Court is the assertion that "the court [in *Transamerica]* expressly stated that design conduct violates § 2 of the Sherman Act only if the 'design changes had *no purpose and effect* other than the preclusion of ... competition.' " (*Id*.) This is simply not true.

It appears that Microsoft scanned the *Transamerica* opinion for language favorable to its position and then quoted that language entirely out of context with the intent of leading this Court to believe that the court in *Transamerica* held something it did not. What the *Transamerica* court did say is

> [h]ad IBM responded to [the manufacturers of peripheral equipment's] inroads on its assumed monopoly by changing the System/360 interfaces with such frequency that [peripheral equipment manufacturers] would have been unable to attach and unable to economically adapt their peripherals to the ever-changing interface designs, and if those interface changes had *no purpose and effect other than the preclusion of [these manufacturers] from competition,* this Court would not hesitate to find that such conduct was predatory.

Transamerica, 481 F.Supp. at 1002-03 (emphasis added). The *Transamerica* court was attempting to provide a hypothetical illustration of what would undeniably be predatory conduct. The court did not maintain that IBM had engaged in such conduct let alone intend to announce a standard that a plaintiff must meet in order to succeed on a technological incompatibility claim. The *Transamerica* court went on to add, "[i]t is more difficult to formulate a legal standard for design conduct than it is to imagine clearly illegal situations." *Id*. at 1003.

Finally, the *Transamerica* court stated the standard by which it would evaluate the changes IBM made to the CPU design:

> A more generalized standard, one applicable to all types of otherwise legal conduct by a monopolist, and one recently adopted by the Ninth Circuit, must be applied to the technological design activity here. If the design choice is unreasonably restrictive of competition, the monopolist's conduct violates the Sherman Act. This standard will allow the fact finder to consider the effects of the design on competitors; the effects of the design on consumers; the degree to which the design was the product of desirable technological creativity; and the monopolist's intent, since a contemporaneous evaluation by the actor should be helpful to the fact finder in determining the effects of a technological change.

Id. (citations omitted). The standard actually applied by the *Transamerica* court contemplates the effect the design choice has on competition. It does not impose the much heavier burden on a plaintiff of demonstrating that a design choice is entirely devoid of technological merit.

In addition, in the instant case plaintiff has not alleged a separate intentional incompatibility claim upon which a finding of liability is sought. As previously discussed, Caldera's claim of unlawful predatory conduct is based on the aggregate effect of all of Microsoft's anticompetitive behavior. While each separate fact used to support Caldera's § 2 claim may not by itself legally support the claim, the overall effect may be prohibited anticompetitive conduct.

Accordingly, it would be inappropriate to view these alleged incompatibilities in isolation and out of the context in which they occurred. Contemporaneous with the appearance of these incompatibilities, several internal Microsoft memoranda were sent between Microsoft executives discussing possible plans to make Windows 3.1 incompatible with DR DOS. One such memorandum sent September 27, 1991 by Brad Silverberg, a top Microsoft executive, to Jim Allchin, another Microsoft executive, discussed the possible partnership between IBM and Novell involving DR DOS and how Microsoft would respond. The e-mail reads:

> after IBM announces support for dr-dos at comdex, it's a small step for them to also announce they will be selling netware lite, maybe sometime soon thereafter. but count on it.
>
> We don't know precisely what ibm is going to announce, my best hunch is that they will offer dr-dos as the preferred solution for 286, os 2 2.0 for 386. they will also probably continue to offer msdos at $165 (drdos for $99). drdos has problems running windows today, and I assume will have more problems in the future.

Allchin responded, “You should make sure it has problems in the future. :-)” (Pl.'s Exhibit 197).

The same day this exchange occurred, Silverberg sent another e-mail to Phil Barrett, who was in charge of the Windows 3.1 project, inquiring:

> can you tell me specifically what we're going to do to bind ourselves closer to ms dos? since you haven't been replying to my messages, I don't know how to interpret your silence. Let me emphasize the importance; ibm is going to announce the drdos deal at comdex (almost certain).
>
> OK?

Barrett responded:

> Sorry for the silence-don't interpret it as ignoring you. The approach that ralph and I have discussed is to use a vxd to ‘extend’ dos by patching it.... We would not patch unknown OSs [operating systems] and, most likely, would only patch MS DOS 5.x. The big advantage here is that it provides a legitimate performance improvement. However, it wont prevent us from running on foreign OSs (unless we explicitly decide to refuse to run)-they just wont run as fast. Is this the approach you want to take? Or would you prefer a simple check and refuse to run? Thats a lot easier but clearly quite defeatable. I'll come talk to you about it.

Silverberg responded, “let's talk.” (Pl.'s Exhibit 198).

Perhaps the most direct evidence offered by plaintiff that suggests the incompatibilities were intentionally placed by Microsoft for the purpose of eliminating DR DOS as a competitor, and not for procompetitive purposes, comes form a series of e-mails sent between Charles Stevens, Phil Barrett, and Brad Silverberg on September 29, and 30, 1991 relating to the Bambi incompatibility. Stevens writes:

> I tracked down a serious incompatibility with DR-DOS 6-They don't use the ‘normal’ devise driver interface for >32M partitions. Instead of setting the regular START SECTOR field to Offffh an then using a brand new 32-bit field the way MS-DOS has always done, they simply extended the start sector field by 16 bits.
>
> This seems like a foolish oversight on their part and will likely result in extensive incompatibilities when they try to run with 3rd part device drivers.
>
> I've patched a version of Bambi to work with DRD6, and it seems to run Win 3.1 without difficulty. This same problem may have caused other problems with Win 3.1 and swapfile under DRD6
>
> It is possible to make Bambi work, assuming we can come up with a reasonably safe method for detecting DRD6.

(Pl.'s Exhibit 208). The day after Barrett received this e-mail he responded: "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.' mike, tom, mack-do you have a reliable dr6 detection mechanism?" That same day Barrett also sent an e-mail to Brad Silverberg which read: "heh, heh, heh .... my proposal is to have bambi refuse to run on this alien os. comments?" (Pl.'s Exhibits 205 and 207).

Each of these incompatibilities arose at a time when Microsoft had excluded DRI from beta testing DR DOS with the new Windows version 3.1 before its public release. Consequently, any incompatibility which arose, intentionally placed there by Microsoft or not, could not be detected or remedied before Windows' public release. Moreover, it is alleged Microsoft was aware of both the Bambi and nested task flag incompatibilities and knew that DR DOS6 could be altered and made to work with Windows 3.1 with relatively minor modifications. However, Caldera asserts that Microsoft continued to create the illusion that DR DOS was incompatible with Windows by inserting error messages conveying to the user that either DR DOS was incompatible with Windows or that MS-DOS was the only environment in which Windows could properly function. While technically this may not be false, a fact finder could reasonably conclude that laid against this backdrop there existed an anticompetitive campaign to eliminate competition in the DOS market in violation of § 2.

Caldera has presented sufficient evidence that the incompatibilities alleged were part of an anticompetitive scheme by Microsoft. Accordingly, defendant's Motion for Partial Summary Judgment on Plaintiff's Alleged Intentional Incompatibilities is denied.

2. Predisclosure

Before the release of Windows 3.1, Microsoft had always included DR DOS in its beta testing. However, in July 1991, Microsoft elected to exclude all competitors in the operating system market, including DR DOS, from beta testing Windows 3.1. Plaintiff offers this fact as further evidence of Microsoft's anticompetitive conduct. Plaintiff asserts that by refusing to allow DR DOS to beta test Windows 3.1, which it had allowed previously, it created the impression that DR DOS would not be compatible with Windows 3.1. Caldera argues that because Windows has monopoly power in the GUI (Windows) market, any operating system perceived as incompatible with Windows would suffer a serious disadvantage. Caldera also argues that the use of per processor licensing agreements by Microsoft, used in connection with excluding DR DOS from beta testing, had both the effect and purpose of eliminating DR DOS from competition in the operating systems market. Plaintiff maintains that by creating the impression that DR DOS was incompatible with Windows, OEMs were likely to sign licensing agreements with Microsoft to minimize the risk of incompatibility. With the use of two and three year per processor licensing agreements, it was extremely difficult and highly unlikely that an OEM could or would switch to a different operating system after the release of Windows. Thus, the cure of any incompatibilities between Windows and DR DOS, no matter how quickly the incompatibilities were remedied after Windows market release, would be ineffective. Caldera maintains that this conduct along with Microsoft's alleged campaign to cause fear, uncertainty, and doubt in the computer industry about DR DOS' compatibility with Windows was anticompetitive conduct in violation of § 2.

In response to these allegations, Microsoft filed a motion for partial summary judgment which it styled, "Defendant's Motion for Partial Summary Judgment on Plaintiff's 'Predisclosure' Claim." In its memorandum in support of the motion, Microsoft argues that a corporate decision not to allow DRI access to beta versions of Windows 3.1, does not constitute predatory conduct as contemplated by the Sherman Act. Defendant asserts that "[a] claim of unlawful monopolization under § 2 has two elements: (1) the possession of monopoly power in the relevant market and (2) the willful acquisition or maintenance of that power through 'predatory conduct,' as distinguished from 'growth or development as a consequence of superior product, business acumen, or historic accident.' " (Def. Mem. Supp. at 1) (citing *United States v. Grinnell Corp.,* 384 U.S. 563, 570-71, 86 S.Ct. 1698, 16 L.Ed.2d 778 (1966)). Microsoft contends that because failure to disclose technological information to a competitor prior to the market release of a new product is not anticompetitive as a matter of law, plaintiff fails to satisfy the second prong of the *Grinnell* test.

The gravamen of defendant's position is that "antitrust laws impose no affirmative duty or obligation on a firm-even a firm with monopoly power-to assist its competitors by providing predisclosure of its technological innovations prior to

market release." (Def. Mem. Supp. at 2) (citations omitted). Defendant further adds that "[c]ourts considering this issue have consistently refused to impose such a duty." (*Id.*). Microsoft lists several cases which it maintains stand for the proposition that defendant had no duty to predisclose its technological innovations to DRI.[9] In particular, Microsoft relies heavily on *Berkey Photo Inc. v. Eastman Kodak Co.,* 603 F.2d 263 (2d Cir.1979). That case involved an antitrust action brought by Berkey Photo, Inc. (Berkey) against Eastman Kodak Company (Kodak). The two parties were competitors in camera, film and photofinishing markets in which Kodak possessed monopoly power. The dispute in question arose with the advent of 110 Instamatic cameras first designed and marketed by Kodak in the early 1970's. Because the cameras were significantly smaller and took comparable photographs to the larger cameras on the market, they were immediately popular among amateur photographers and a financial success for Kodak. However, because of the 110 system's diminished size, the film then on the market was unsuitable for use in connection with the new camera. Therefore, Kodak developed a film called Kodacolor II which was designed specifically for use with the 110 system.

Prior to the release of the 110 system, "Kodak followed a checkered pattern of predisclosing innovations to various segments of the industry." *Id.* at 279. Kodak initially elected not to predisclose information relating to the 110 system. However, in an apparent effort to stave off litigation, Kodak agreed to prerelease information on its 110 system to photographic equipment manufacturers for a fee. Plaintiff Berkey did obtain the prerelease information but less than two months before Kodak released the 110 system to the public and in too little time to develop film that would be compatible with the new 110 system. As a result of this and other conduct, Berkey brought suit under the Sherman Antitrust Act, claiming that Kodak's willful maintenance of monopoly power caused Berkey "to lose sales in the camera and photofinishing markets and to pay excessive prices to Kodak for film, color print paper, and photofinishing equipment." *Id.* at 267-68. After a six-month trial on the issue of liability, a jury returned a verdict favorable to Berkey on virtually every allegation and awarded more than $87 million in damages.

Kodak promptly appealed the decision on numerous grounds including the jury instruction concerning the plaintiff's claim that Kodak's refusal to predisclose information concerning the 110 system was an exclusionary practice in violation of the Sherman Antitrust Act. The challenged jury instruction read:

> Standing alone, the fact that Kodak did not give advance warning of its new products to competitors would not entitle you to find that this conduct was exclusionary. Ordinarily a manufacturer has no duty to predispose its new products in this fashion. It is an ordinary and acceptable business practice to keep one's new developments a secret. However, if you find that Kodak had monopoly power in cameras or in film, and if you find that this power was so great as to make it impossible for a competitor to compete with Kodak in the camera market unless it could offer products similar to Kodak's, you may decide whether in the light of other conduct you determine to be anticompetitive, Kodak's failure to predisclose was on balance an exclusionary course of conduct.

Id. at 281. The Second Circuit held that the "instruction was error and that, as a matter of law, Kodak did not have a duty to predisclose information about the 110 system to competing camera manufacturers." *Id.*

Microsoft relies heavily upon the Second Circuit's invalidation of this jury instruction. First, Microsoft asserts that *Berkey* clearly establishes that Microsoft was under no duty to predisclose Windows 3.1 to Caldera. Second, Microsoft argues that *Berkey* precludes Caldera from presenting evidence of predisclosure to a jury in support of its claim that Microsoft engaged in an exclusionary course of conduct when considered in light of other anticompetitive behavior. The Court agrees with Microsoft and the general proposition that a corporation is under no obligation to predisclose its innovations to a competitor. As the court in *Berkey* commented,

> a firm may normally keep its innovations secret from its rivals as long as it wishes, forcing them to catch up on the strength of their own efforts after the new product is introduced. It is the possibility of success in the marketplace, attributable to superior performance, that provides the incentive on which the proper functioning of our competitive economy rests. If a firm that has engaged in the risks and expenses of research and development were required in all circumstances to share with its rivals the benefits of those endeavors, this incentive would very likely be vitiated.

Id.

However, the question currently before the Court is not whether Microsoft was under a duty to include DRI in beta testing, but rather whether excluding DRI from beta testing, in which it had previously been included, was predatory conduct under the attenuating circumstances. Among the purposes of § 2 of the Sherman Act is to encourage competition in the marketplace by prohibiting monopolists from acting in anticompetitive ways. Although Microsoft was under no duty to predisclose information to DRI, it could not do so as part of an overall anticompetitive plan to eliminate DRI from the DOS market. It is a very different thing to impose an affirmative duty on a monopolist to prerelease sensitive corporate information or innovations to a competitor under all circumstances than it is to prohibit a corporation from acting in an anticompetitive manner. As previously discussed, generally a corporation may keep its innovations secret from competitors. This may foster competition. However, this is not always the case and when a monopolist acts in an anticompetitive manner it is proscribed by § 2. While this Court does not intend to announce a new rule that monopolists have a duty to predisclose innovations to a competitor, the Court does intend to uphold the basic antitrust principle that a monopolist may not eradicate its competitors through anticompetitive means.

In *Berkey,* the plaintiff urged the court to find that a duty to predisclose existed and that failure to predisclose was exclusionary. Berkey argued that because Kodak had monopoly power in both the camera and film markets, Kodak had a duty to disclose the new format in which it was manufacturing film because failure to do so unlawfully enhanced its power in the camera market. In rejecting this argument the Second Circuit stated:

> The first firm, even a monopolist, to design a new camera format has a right to the lead time that follows from its success. The mere fact that Kodak manufactured film in the new format as well, so that its customers would not be offered worthless cameras, could not deprive it of that reward. Nor is this conclusion altered because Kodak not only participated in but dominated the film market. Kodak's ability to pioneer formats does not depend on it possessing a film monopoly. Had the firm possessed a much smaller share of the film market, it would nevertheless have been able to manufacture sufficient quantities of 110-size film either Kodacolor X or Kodacolor II to bring the new camera to market.

Id. at 283.

This Court is of a similar opinion. Had Microsoft simply desired to keep Windows 3.1 a secret from DOS competitors to gain the natural advantage of releasing a comparable DOS version with the release of Windows, the Court would find nothing anticompetitive about such conduct and would simply require that competitors "play catch up on the strength of their own endeavors." However, this is not the case Caldera alleges. Caldera asserts a single § 2 claim and offers as evidence multiple anticompetitive activities engaged in by Microsoft. Caldera claims as part of its anticompetitive scheme that Microsoft excluded DRI from beta testing. Caldera does not claim that Microsoft had a duty to predisclose Windows 3.1 to DRI or even that failure to disclose was exclusionary conduct which by itself amounts to an antitrust violation. Rather, Caldera claims that Microsoft engaged in a clandestine campaign to eliminate DR DOS from the market by a variety of tactics, none of which alone supports a Sherman Act violation but the aggregation of which results in prohibited predatory conduct.

Caldera asserts that the beta blacklisting of Novell/DRI was essential to the success of the falsely represented incompatibilities created by Microsoft as discussed in the previous section of this Opinion and in the section immediately following. Although standing alone, failure to include DRI in beta testing does not give rise to a violation of § 2, (and an appropriate limiting instruction to that effect may be necessary to give to the jury to avoid any misunderstanding at trial) but when viewed in context with Caldera's other anticompetitive allegations the fact that DRI was blacklisted may be considered by the fact finder along with other alleged predatory conduct to determine if a § 2 violation has occurred. Therefore, defendant's partial summary judgment motion relating to plaintiff's predisclosure claims is denied.

3. Perceived Incompatibilities

Microsoft also seeks partial summary judgment on Caldera's allegations of anticompetitive conduct relating to a routine, known as the AARD code, contained in one of the beta versions of Windows 3.1. The AARD code was designed to

detect the presence of MS-DOS in the computer onto which the Windows beta was loaded. When the AARD code detected a foreign DOS system, a message was displayed which read:

> Non-fatal error detected: Error number [varied]. Please contact Windows 3.1 beta support. Press enter to exit or C to continue.

Caldera argues that this error message was false as no error had actually occurred. In fact, all that had occurred was that MS-DOS had not been detected and therefore, another operating system was present. Caldera further contends that the ARRD code was an intentional incompatibility created by Microsoft and was part of Microsoft's campaign to create doubts about the compatibility between DR DOS and Windows.

Microsoft counters Caldera's allegations by asserting that because the AARD code was not technically an incompatibility between DR DOS and Windows, it is inappropriate to evaluate it under the rubric of an intentional incompatibility claim as previously discussed. Rather, Microsoft argues that because Caldera claims that the error message resulted in economic harm by making it appear as though DR DOS was incompatible with Windows, Caldera's claim is really one of product disparagement.

Microsoft submits that in order to succeed on a product disparagement claim, Caldera must show as a preliminary matter that a "significant and more-than-temporary harmful effect[ ] on competition (and not merely upon a competitor or customer) before these practices can rise to the level of exclusionary conduct." (Def. Mem. Supp. at 2) (citing *American Prof. Testing Serv., Inc. v. Harcourt Brace Jovanovich Legal and Prof'l. Pub., Inc.,* 108 F.3d 1147, 1152 (9th Cir.1997)). In the event that Caldera can make this preliminary showing, Microsoft argues Caldera must then demonstrate that the error message: "(1) was clearly false, (2) was clearly material, (3) was clearly likely to induce reasonable reliance, (4) was made to consumers having little understanding of the subject matter, (5) continued for extended time periods, and (6) was not readily susceptible to counter statement, explanation, or other neutralizing effort or offset." (Def. Mem. Supp. at 2) (citing *David L. Aldridge Co. v. Microsoft Corp.,* 995 F.Supp. 728, 749 (S.D.Tex.1998)) (internal quotations omitted). As to the requisite preliminary showing, Microsoft claims that Caldera fails to demonstrate that there was a significant effect on competition. Microsoft further claims Caldera fails to establish any of the elements to succeed on a claim of product disparagement. Caldera objects to Microsoft's characterization of its claim as one of product disparagement but argues that even if the Court determines that the product disparagement standard is applicable, plaintiff has satisfied the test as outlined in *Aldridge*.

The Court does not agree that Caldera has satisfied the test under *Aldridge*. The bulk of plaintiff's evidence relates to efforts by DR DOS to dissuade consumers from using DR DOS and not to disparagement of the product. In fact, plaintiff's evidence of disparagement appears extremely limited. This is not surprising as plaintiff did not assert a separate claim of product disparagement. In its complaint, Caldera uses evidence of the AARD code only in support its broad § 2 claim. The beta version containing the AARD code was sent out to over 12,000 test sites and was considered to be a beta that would preview the final commercial release of Windows 3.1. Caldera claims this final beta version was as much a marketing tool to build demand for the product as it was an opportunity to further test Windows. While Microsoft claims that valid business reason existed for the code, Caldera presents evidence that casts doubt on the validity of the code. In an e-mail sent from Andy Hill, a Microsoft employee, to David Cole, the group manager of Windows 3.0, Mr. Hill writes:

> Janine has brought up some good questions on how we handle the error messages that the users will get if they aren't using MS-DOS.
>
> - The beta testers will ask questions. How should the techs respond: Ignorance, the truth, other?
>
> - This will no doubt raise a stir on Compuserve. We should either be proactive and post something up there now, or have a response already constructed so we can flash it up there as soon as the issue arises so we can nip it in the bud before we have a typical CIS snow-ball mutiny.

(Pl.'s Exhibit 262). Mr. Cole responded: "Let's plead ignorance for a while. We need to figure out our overall strategy for this. I'm surprised people aren't flaming yet, maybe they won't." (Id.). Furthermore, Mr. Cole sent an e-mail to Brad Silverberg regarding the AARD code and the suggestion that a less severe message be installed than the one currently under contemplation.

> 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. BillP made an excellent point, what is the guy supposed to do?
>
> With a TSR, the solution is to just remove it. With DR-DOS, or any others, I doubt the user is in a position of changing. He will no doubt continue to install. When he finds problems, he will call PSS. We will get a lot of calls from Dr DOS users. Perhaps a message in the phone system for Windows. It would say something like "if you are not using MS-DOS or an OEM version of MS-DOS, then press". Then give them the message.

(Pl.'s Exhibit 277). Mr. Silverberg replied: "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." (Pl.'s Exhibit 278).

While it may very well be that Microsoft had a legitimate business reason to include the AARD code in its final beta version, a reasonable fact finder could conclude that the code was inserted to make DR DOS appear incompatible with Windows. This may not give rise to a claim of product disparagement or, standing alone, a § 2 violation. However, inserting the code with such a purpose is certainly not competition on the merits and viewed in context with other alleged anticompetitive behavior may give rise to a § 2 violation. Plaintiff is entitled to present the AARD code as evidence of anticompetitive behavior in establishing its § 2 claim. Accordingly, defendant's motion for partial summary judgment on Plaintiff's Claim of Perceived Incompatibilities is denied.

4. Technological Tying

Caldera next alleges pursuant to §§ 1 and 2 of the Sherman Act and § 3 of the Clayton Act that Microsoft's development of Windows 95 as an integrated, graphical operating system constitutes an illegal tying arrangement of products formerly sold as MS-DOS and Windows. Microsoft contends, however, that Windows 95 is far from a tied together version of MS-DOS and Windows, but rather a new product with vast technological improvements over the prior products. Accordingly, Microsoft argues that the requirements for an unlawful "technological tying" arrangement have not been satisfied and should be dismissed as a matter of law.

"A tying arrangement is an agreement by a party to sell one product-the 'tying product'-only on condition that the buyer also purchase a second product-the 'tied product'-or at least agree not to buy that product from another supplier." *Multistate Legal Studies v. Harcourt Brace Jovanovich Legal & Professional Publications, Inc.,* 63 F.3d 1540, 1546 (10th Cir.1995) (citing *Eastman Kodak Co. v. Image Technical Services, Inc.,* 504 U.S. 451, 461-462, 112 S.Ct. 2072, 119 L.Ed.2d 265 (1992)). In the instant case, Caldera alleges that Microsoft is involved in an illegal tying arrangement by tying Windows 4.0, the tying product, and MS-DOS 7.0, the tied product, together and selling them as one product known as Windows 95. This allegation is based on the claim that Microsoft used its monopoly power in the Windows market to force consumers to use MS-DOS by tying these products together into one product. "A tie-in constitutes a per se section 1 violation if the seller has appreciable economic power in the tying product market and if the arrangement affects a substantial volume of commerce in the tied product." *Id.* For purposes of this motion, Microsoft concedes that it has monopoly power in the personal computer operating system market.

Several economic reasons exist for outlawing anticompetitive tying. Indeed, the law forbids a manufacturer who has market power in a certain area to gain advantage in another area by requiring consumers to buy another product. *See Jefferson Parish Hospital v. Hyde,* 466 U.S. 2, 104 S.Ct. 1551, 80 L.Ed.2d 2 (1984). If market "power is used to impair competition on the merits in another market, a potentially inferior product may be insulated from competitive pressures. This impairment could either harm existing competitors or create barriers to entry of new competitors in the market for the tied product." *Id.* at 14, 104 S.Ct. 1551. The Supreme Court captured Congress' concern about the anticompetitive character of tying arrangements when it recognized that tying arrangements have the power to "completely shut[ ] out competitors, not only from trade in which they are already engaged, but from the opportunities to build up trade in any community where these great and powerful combinations are operating under this system and practice." *Id.* at 10 n. 14, 104 S.Ct. 1551 (quoting H.R. Rep. No 63-627, 63d Cong.2d Sess., 12-13 (1914) and noting that congressional findings "concerning the competitive consequences of tying is illuminating, and must be respected").

The Supreme Court has recognized that "every refusal to sell two products separately cannot be said to restrain competition." *Id*. at 11-12, 104 S.Ct. 1551 (finding that "buyers often find package sales attractive; a seller's decision to offer such packages can merely be an attempt to compete effectively"). Nevertheless, the Supreme Court has established that upon meeting certain criteria, a tying arrangement may constitute a per se § 1 violation. "[T]he essential characteristic of an invalid tying arrangement lies in the seller's exploitation of its control over the tying product that the buyer either did not want at all, or might have preferred to purchase elsewhere on different terms." *Id*. at 12, 104 S.Ct. 1551. The Court continued: "When such 'forcing' is present, competition on the merits in the market for the tied item is restrained and the Sherman Act is violated." *Id*. at 12, 104 S.Ct. 1551. In sum, "[t]ying arrangements need only be condemned if they restrain competition on the merits by forcing purchases that would not otherwise be made." *Id*. at 27, 104 S.Ct. 1551.

a. Caldera's Standing to Bring a Tying Claim

As a preliminary manner, the Court first addresses Microsoft's argument that Caldera lacks standing to raise any tying claim concerning Windows 95 because neither Caldera nor its predecessors, DRI or Novell, ever produced a substitute for the allegedly tied product that would have enabled Caldera to compete with Microsoft. Specifically, Microsoft contends that Caldera was not an actual or potential participant in the business from which Caldera alleges they were foreclosed from competition.

While acknowledging that Novell stopped its development work on DR DOS in 1994 and never developed a Windows-like (GUI) program, Caldera argues that it cannot be precluded from bringing a claim on the basis of standing. Caldera claims that it could not participate because Microsoft foreclosed the competition in the DOS market by tying together in Windows 95 two functionally distinct products, Windows 4.0 and MS-DOS 7.0. Through this tie, Caldera argues, Microsoft used its monopoly power in the Windows market to effectively prevent further competition in the DOS market by completely closing that market to outside competition. Consequently, any further development of a DOS program would have been futile since Windows was no longer sold separately. Caldera's claim is based on the fact that after 1995 consumers could not buy Windows 4.0 alone. The fundamental premise of Caldera's tying claim is that it and its predecessors would have, and could have, made a version of DR DOS that would have been compatible with Windows 4.0 and fully competitive with MS-DOS 7.0.

Caldera alleges that Microsoft developed Windows 95 as an attempt to destroy its DOS competition. Such allegations are supported by internal Microsoft documents. For example, in a 1992 internal strategy document, Microsoft, referring to Windows 95 by its code name "Chicago," stated:

> Novell is after the desktop. As you know, they have acquired Digital Research and are now working hard to tightly integrate DR-DOS with Netware. We should also assume they are working on a Windows clone and/or that they are working on a virtualized DOS environment which will run standard mode Windows as a client. This is perhaps our biggest threat. We must respond in a strong way by making Chicago a complete Windows operating system, from boot-up to shutdown. There will be no place or need on a Chicago machine for DR-DOS (or any DOS).

(Pl.'s Exhibit 309). Caldera argues that Microsoft did exactly as it planned, and were it not for Microsoft's tying Windows to DOS, Caldera would still be a viable competitor in the DOS business. Indeed, as inferred from the following e-mail, Caldera asserts that but for Microsoft's deliberate anticompetitive conduct aimed at Novell, DR DOS would still be alive. In 1993, Microsoft executives further stated: "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.... We need to smile at Novell while we pull the trigger." (Pl.'s Exhibit 384).

Caldera has alleged facts sufficient to persuade the Court that Caldera has standing as an actual and potential competitor to bring its tying claim. Novell was an actual competitor to Microsoft in the DOS market in 1994. Novell ceased its active development and marketing of its DOS product based on the imminent release of Windows 95, which eliminated the need for a separate DOS program. Additionally, Caldera has alleged sufficient facts that it had the financial resources, the engineering talent, and the marketing capability to continue upgrading Novell DOS, as it had done in the past with DR DOS, so that it would continue to be a marketable component to Windows. *See Curtis v. Campbell-*

Taggart, Inc., 687 F.2d 336, 338 (10th Cir.1982) (holding that a potential competitor may have standing under the antitrust laws "if he has manifested an intention to enter the business and has demonstrated his preparedness to do so"). Certainly Caldera has demonstrated that it was foreclosed from a market in which it would otherwise have competed. It is hard to imagine that Caldera does not have standing to sue under these alleged facts. Accordingly, the Court finds that as an actual competitor to MS-DOS 6.22, and as a potential competitor to the allegedly tied product, MS-DOS 7.0, Caldera has the requisite standing to pursue its tying claim against Microsoft.

b. Technological Tying Arrangements

Microsoft contends that so long as the integrated design of Windows 95 offers any technological benefit, its design is immune to judicial review under the antitrust laws. Because the tying cases that are binding upon this Court involve nontechnical products such as bar review courses, *Multistate Legal Studies v. Harcourt Brace Jovanovich Legal & Professional Publications, Inc.*, 63 F.3d 1540 (10th Cir.1995), and medical services, *Jefferson Parish Hospital Dist. v. Hyde*, 466 U.S. 2, 104 S.Ct. 1551, 80 L.Ed.2d 2 (1984), Microsoft argues that the Court should apply the reasoning used by the United States Court of Appeals for the District of Columbia Circuit in *United States v. Microsoft, Corp.*, 147 F.3d 935 (D.C.Cir.1998). Microsoft relies heavily on this case in support of its present motion, premising its argument on the contention that technically integrated products are immune from per se § 1 liability. As with the case at bar, the case before the D.C. Circuit arose from Microsoft's practices in marketing Windows 95. In that case, the D.C. Circuit considered whether the district court erred in entering a preliminary injunction prohibiting Microsoft from requiring computer manufacturers who license its operating system software to license its internet browser, Internet Explorer, as well. *Id.* at 938. The preliminary injunction turned on the court's interpretation of a consent decree between the Department of Justice (DOJ) and Microsoft, which in relevant part reads:

> Microsoft shall not enter into any License Agreement in which the terms of that agreement are expressly or impliedly conditioned upon:
>
> (i) the licensing of any other Covered Product, Operating System Software product or other product (provided, however, that this provision in and of itself shall not be construed to prohibit Microsoft from developing integrated products).

Id. at 125 (quoting section IV(E) of the Consent Decree). Although both Microsoft and the DOJ characterize section IV(E) of the decree as an "anti-tying" provision, the court found that "the decree does not embody either the entirety of the Sherman Act or even all 'tying' law under the Act." *Id.* at 946. Nevertheless, the court stated that "the consent decree emerged from antitrust claims, unresolved as they were, so that we must keep procompetitive goals in mind in the interpretive task." *Id.* It is in this perspective that the court began its analysis in attempting to interpret the consent decree consistent with the antitrust laws. While the court stated that it would keep antitrust "goals in mind," in essence the court's task was "to discern the bargain that the parties struck" in the consent decree. *Id.* at 964. Not only is the D.C. Circuit's opinion nonbinding on the proceedings before this Court, but also it is even less persuasive due to the context in which it arose. Nevertheless, due to Microsoft's heavy reliance on this case, the Court will review the D.C. Circuit's analysis as it may apply to the instant case.

After debating whether Windows 95 and its Internet Explorer were an "integrated product" under the consent decree, the D.C. Circuit determined that it should ask the question "not whether the integration is a net plus but merely whether there is a plausible claim that it brings some advantage." *Id.* at 950. Microsoft now urges the Court to adopt this standard and reject Caldera's challenge to Microsoft's integrated product design of Windows 95 so long as Microsoft has a plausible claim of technological improvement that brings some advantage. Upon announcing this standard the D.C. Circuit acknowledged that "[w]hether or not this is the appropriate test for antitrust law generally, we believe it is the only sensible reading of § IV(E)(i)." *Id.* This Court finds that such a test is not the appropriate standard to determine whether an illegal tie has taken place under antitrust law. Simply determining whether a "facially plausible benefit" has been ascribed to justify an integrated product that is alleged to constitute an illegal tying arrangement falls short of satisfying the antitrust laws, as well as existing antitrust authority. This Court agrees with Judge Wald's dissenting opinion in *Microsoft,* that the majority's standard allows Microsoft "too safe a harbor with too easily navigable an entrance." *Id.* at 957. Just as the dissent recognized that Microsoft could require OEMs to install "integrated" software

without fear of running aground on the main prohibition of section IV(E)(i) so long as Microsoft has created a design to combine functionality in a way that offers the ultimate user some "plausible" advantage otherwise unavailable, this Court finds that if the same standard were applied in the case at bar, Microsoft could similarly avoid § 1 violations and tie whatever products it wanted by simply pointing to some "plausible advantage." Furthermore, as Judge Wald stated: "It is difficult to imagine how Microsoft could not conjure up some technological advantage for any currently separate software product it wished to 'integrate' into the operating system." *Id.* at 961. Were this Court to adopt in this case the standard the D.C. Circuit articulated in the narrow context of the D.C. case, the Court would be adopting a broad standard of allowing a showing of "plausible" product improvement functionality, whatever that means, as an absolute defense to a § 1 tying claim. The Court is not willing to do so and would find such a standard to be inconsistent with existing legal precedent. *See, e.g., Eastman Kodak Co. v. Image Technical Services, Inc.* 504 U.S. 451, 112 S.Ct. 2072, 119 L.Ed.2d 265 (1992); *Jefferson Parish Hospital Dist. v. Hyde,* 466 U.S. 2, 104 S.Ct. 1551, 80 L.Ed.2d 2 (1984); *Multistate Legal Studies v. Harcourt Brace Jovanovich Legal & Professional Publications, Inc.,* 63 F.3d 1540 (10th Cir.1995).

This is a case dealing with technology, and the Court recognizes the need to promote pro-competitive conduct in the technology world. Indeed, technological innovation is an important defense in defending antitrust allegations. As the D.C. Circuit noted, "[a]ntitrust scholars have long recognized the undesirability of having courts oversee product design, and any dampening of technological innovation would be at cross-purposes with antitrust law." *Microsoft* 147 F.3d at 948. Thus, acknowledging the importance of promoting technological innovation, the Court is cautious in completely relying on the analysis contained in cases such as *Jefferson Parish* and *Multistate Legal Studies,* which involved medical services and bar-review courses. However, the Court finds that the D.C. Circuit has given too much deference to the technology argument and not enough to current antitrust law. Certainly a company should be allowed to build a better mousetrap, and the courts should not deprive a company of the opportunity to do so by hindering technological innovation. Yet, antitrust law has developed for good reason, and just as courts have the potential to stifle technological advancements by second guessing product design, so too can product innovation be stifled if companies are allowed to dampen competition by unlawfully tying products together and escape antitrust liability by simply claiming a "plausible" technological advancement.

Microsoft requests the Court do as other courts have and apply a more deferential standard to technically integrated products. *See, e.g., Response of Carolina, Inc. v. Leasco Response, Inc.,* 537 F.2d 1307, 1330 (5th Cir.1976) (holding that an antitrust "violation must be limited to those instances where the technological factor tying the hardware to the software has been designed for the purpose of tying the products, rather than to achieve some technologically beneficial result"); *Innovation Data Processing, Inc. v. IBM,* 585 F.Supp. 1470, 1476 (D.N.J.1984) (finding that the integration of a "dump-restore" utility into mainframe operating system was a lawful package of technologically interrelated components); *ILC Peripherals Leasing Corp. v. IBM,* 448 F.Supp. 228 (N.D.Cal.1978) (finding that disk drives and head/disk assembly combination were lawful), *aff'd per curiam sub nom., Memorex Corp. v. IBM,* 636 F.2d 1188 (9th Cir.1980); *Telex Corp. v. IBM,* 367 F.Supp. 258 (N.D.Okla.1973) (denying a claim that IBM's integration of additional memory and control functions into its CPU constituted unlawful tying), *rev'd on other grounds,* 510 F.2d 894 (10th Cir.1975). These cases, upon which Microsoft relies, arose from an era when IBM was accused of tying its central processing unit to various peripheral devices such as disk drives. The courts addressing this issue generally concluded that IBM's integrations did not amount to illegal tying arrangements due to the fact that the computers were considered a single product, and the integration of related devices could not be regarded as predatory within the contemplation of antitrust policy. *See Telex,* 367 F.Supp. at 342. However, as noted by the D.C. District Court, on remand in the Internet Explorer case, Microsoft has taken an additional step beyond the defendants in the *IBM* cases by not only bundling two products together, but also by prohibiting the unbundling of the two. *See United States v. Microsoft Corp.,* No. Civ. A. 98-1232, 1998 WL 614485 at *8-*9 (D.D.C. Sept. 14 1998). In the instant case, unlike the *IBM* cases, Microsoft ceased selling Windows and DOS separately after the release of Windows 95. Furthermore, Caldera argues that the Court should not look to these cases because they were decided prior to the Supreme Court's decisions in *Jefferson Parish* and *Eastman Kodak* and have been preempted by the Court's "separate product analysis."

Although not "technology" cases, *Jefferson Parish* and *Eastman Kodak* both involved integrated products and services where the defendants claimed that a functionally integrated package of services existed. In order to determine whether an unlawful tying arrangement had taken place, the *Jefferson Parish* Court considered whether anesthesiological

services, which a hospital had required patients to take only from certain anesthesiologists, were in fact separate products from the other services provided by the hospital or, rather, were part of what the hospital claimed was a "functionally integrated package of services." *Id.* at 19, 104 S.Ct. 1551. In its analysis the Court asked the fundamental question: Are there two separate products? This was not a question of function, but rather one assessing whether there was a market for two separate products. *Id.* at 21, 104 S.Ct. 1551 (holding that "a tying arrangement cannot exist unless two separate product markets have been linked"). The Court found that no tying arrangement could exist unless there was sufficient demand for the purchase of anesthesiological services separate from hospital services to identify a distinct product market in which it is efficient to offer anesthesiological services separately from hospital services. *Id.* at 21-22, 104 S.Ct. 1551. The *Jefferson Parish* test is actually consistent with the *IBM* cases in that the market should determine whether an integration is desirable-not Microsoft. The market can only make that decision if the two integrated products are, as a practical matter, available individually, as they were in the *IBM* cases.

The Tenth Circuit has also applied the *Jefferson Parish* tying analysis in *Multistate Legal Studies v. Harcourt Brace Jovanovich Legal & Professional Publications, Inc.,* 63 F.3d 1540 (10th Cir.1995). The court was faced with the task of determining whether an unlawful tying arrangement was created when a bar review provider bundled its multistate bar review workshop with its full-service bar review course and required customers to purchase the workshop if they wanted the full-service course. In making such a determination, the Tenth Circuit articulated that the following elements were necessary in order to find a per se tying violation: "(1) two separate products, (2) a tie-or conditioning of the sale of one product on the purchase of another, (3) sufficient economic power in the tying product market, and (4) a substantial volume of commerce affected in the tied product market." *Id.* at 1546. In determining whether the first prong of its analysis was satisfied, the Tenth Circuit stated that "[t]he Supreme Court has made clear that the test for determining whether two components are separate products turns not on their function, but on the nature of any consumer demand for them." *Id.* at 1547. In essence the Tenth Circuit requires an inquiry as to whether the market wants two separate products. In its analysis the court held "there must be sufficient consumer demand so that it is efficient for a firm to provide [one] separate from [the other]." *Id.* (quoting *Eastman Kodak Co. v. Image Technical Services, Inc.* 504 U.S. 451, 462, 112 S.Ct. 2072, 119 L.Ed.2d 265 (1992)).

It is against this backdrop of precedent that the Court must determine what standard should govern whether an unlawful "technological tying" arrangement has taken place from the alleged integration of Windows and DOS into Windows 95. Therefore, the Court embarks on its own analysis in applying a standard that is consistent with established antitrust tying authority, yet appropriate for cases involving technological innovations. The Court finds that if the evidence shows that a valid, not insignificant, technological improvement has been achieved by the integration of two products, then in essence a new product has been created, and a defendant is insulated from § 1 tying liability. If Microsoft could meet such a standard with uncontested evidence, it's present motion would be granted. Thus, the Court must determine whether the present state of the record support the proposition that Windows 95 consists of Microsoft's prior products simply upgraded and packaged together as illustrated below in Figure 1, or rather whether legitimate technological improvements were achieved, thereby technologically integrating the prior products into an entirely new product as illustrated below in Figure 2.

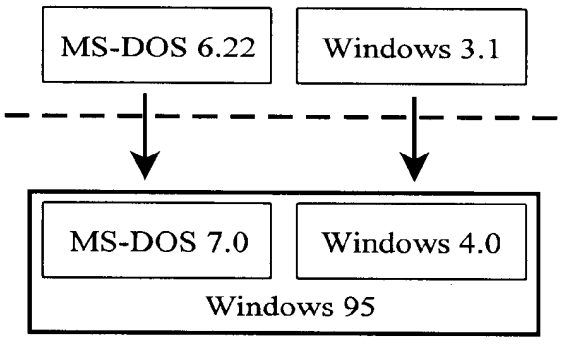

FIGURE 1

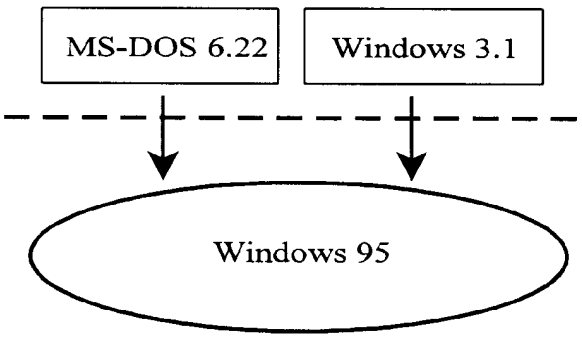

FIGURE 2

The Court's standard is consistent with what the Tenth Circuit said when it stated that "a product improvement motivation-at least without something more, such as demonstrated efficiencies-will not save an otherwise illegal tying arrangement under § 1." *Multistate,* 63 F.3d at 1551 n. 9 (citing *Jefferson Parish,* 466 U.S. at 25 n. 41, 104 S.Ct. 1551). Accordingly, the technological improvements must have demonstrated efficiencies. This is more than just a "plausible claim that brings some advantage." *Microsoft,* 147 F.3d at 950. Any other standard would have the potential to allow illegal tying arrangement to deter, or even eliminate, effective competition, which in turn could hurt consumers not just because of higher prices, but because of a lack of technologically improved products.

In determining whether a technological advance has essentially created a new product through integration, the two products that have been integrated must be joined for technological reasons. In other words, in the spirit of *Jefferson Parish,* this analysis requires the integration to be driven by technology rather than by marketing. *See Jefferson Parish,* 466 U.S. at 21, 104 S.Ct. 1551. Evidence that consumers prefer an integrated product may not be enough, especially where the two previous products have essentially ceased to exist as separate commodities, as is the case here. Caldera asserts that the Windows 95 package consists of two separate products to which the link is no stronger than it was between the prior products and can be easily separated. (Pl.'s Expert, Dr. Hollaar's Report at 20-26). When asked about the integration of Windows and DOS in Windows 95, one of Microsoft's software engineers acknowledged that DOS and Windows were basically "stuck together with baling wire and bubble gum." (Barrett Depo. at 60-61). Based on this contention, Caldera argues that Microsoft's decision to combine them into Windows 95 turned on marketing decisions (and anticompetitive ones) rather than technological reasons. For example, Caldera again cites to the 1992 internal strategy document, where Microsoft, referring to Windows 95 by its code name "Chicago," stated:

> While Chicago is being developed as a single integrated Windows operating system, it's being designed and built so that 3 specific retail products can be packaged up and sold separately. Which products actually ship other than full Chicago is a marketing issue.

(Pl.'s Exhibit 309). Microsoft never released separate updated versions of DOS or Windows subsequent to the release of Windows 95. Accordingly, this evidence supports Caldera's contention that Windows 95 consists of separate DOS and Windows products and was integrated not for technological reasons but rather for marketing reasons to gain market power. Such allegations, together with Dr. Hollaar's report, support Caldera's claim that genuine issues of material fact exist as to any alleged technological advantage of Windows 95.

Microsoft, however, responds with evidence that Windows 95 is more than two separate products tied together and that any integration was done for technological reasons and achieved legitimate technological advantages. Indeed, Microsoft argues that incorporating a real-mode DOS component into Windows 95 resulted in several significant benefits, including the benefit of integration itself, sparing users the uncertainties of combining two products from different companies and giving users more confidence in the product, as well as the benefit of a single installation program, requiring users to only install one software program rather than two. Additionally, Microsoft argues that the integration provided several technological benefits that were not present in MS-DOS 6.22 or Windows 3.1, including the ability to (1) use long file names; (2) protect against incompatible utilities; (3) support plug-and-play devices so that notebook computers using docking stations will function properly; (4) use a "safe mode" boot-up process to determine if the boot-up process was completed properly, and if not, shift the computer into safe mode when the computer is restarted; (5) detect incompatible device drivers; and (6) obscure boot noise with an blue cloud image so users do not see the series of confusing messages that appear on the screen during the DOS boot-up sequence.

There appears to be no question that Windows 95, as Microsoft argues, is greater than the sum of Windows 3.1 and MS-DOS 6.22 and contains features that the previous products did not contain. However, the question that must be addressed is whether the technological improvements were in reality improvements to the prior products, ultimately creating Windows 4.0 and MS-DOS 7.0, under the guise of a new technologically advanced product, Windows 95. Caldera claims that none of the improvements offered in Windows 95 required-or even resulted from-the MS-DOS/Windows integration. Caldera's expert, Dr. Hollaar, argues this position. (Hollaar Report at 21-26). Dr. Hollaar claims that no shared software code exists between the underlying products in Windows 95 and that the two products can be easily separated and work properly once separated. *See id*. Thus, Caldera contends that the relationship between MS-DOS 7.0 and Windows 4.0 in Windows 95 is the same relationship that existed between Windows 3.1 and MS-DOS 6.22. Furthermore, Caldera alleges that but for Microsoft's anticompetitive conduct, Caldera would have and could

have produced a DOS system that would support Windows 4.0, and thus would have all of the same technological benefits advanced by Windows 95.

The Supreme Court has instructed that "any inquiry into the validity of a tying arrangement must focus on the market or markets in which the two products are sold, for that is where the anticompetitive forcing has its impact." *Jefferson Parish,* 466 U.S. at 18, 104 S.Ct. 1551. Thus, the Court explained, "the answer to the question whether one or two products are involved turns not on the functional relation between them, but rather on the character of the demand for the two items." *Id.* at 19, 104 S.Ct. 1551. The alleged fact that Microsoft could have produced the products separately is not enough. "There must be sufficient consumer demand so that it is efficient for a firm to provide separately [its products]." *Eastman Kodak v. Image Tech. Services,* 504 U.S. 451, 462, 112 S.Ct. 2072, 119 L.Ed.2d 265 (1992). Caldera argues that there exists a demand for separate Windows and DOS products. Certainly a demand existed prior to the release of Windows 95, when for ten years DOS and Windows were marketed separately. Caldera claims that some OEMs would prefer Windows and DOS to still be offered separately. Indeed, in a 1991 *PC User* interview when asked about giving GUI users a single operating system, Microsoft executive Steve Ballmer stated:

> [w]e'll certainly be providing OEMs with an installation program that installs DOS and Windows as if they were one product. But not all hardware vendors want to sell Windows and not all end-users want to run Windows. And there is nothing we give up technically by offering Windows and DOS separately.

(Engel Declaration, Exhibit 3). Caldera's claim that there is a demand for separate products is further buttressed by the fact that Microsoft continued to sell old versions of MS-DOS and Windows separately. While these sales are relatively small and relate largely to obsolete products, they illustrate that some level of consumer demand exists even after the introduction of Windows 95.

Based on the fact that Caldera's expert has opined that Windows 95 is in reality nothing more than updated versions of Windows and MS-DOS, that these products could be separated, that any improvements in Windows 95 did not result from the integration of its underlying products, and that but for the tying of Windows 95 a market would exist for other DOS products, this Court finds that drawing all inferences in the light most favorable to the nonmoving party, genuine issues of material fact exist as to whether a valid, not insignificant, technological improvement have been advanced by integrating Windows and DOS into what would constitute one superior technological product. While in the end Microsoft may be able to satisfy a jury that Windows 95 constitutes a significant technological improvement over the prior products, at this point, based on Caldera's expert testimony and on Microsoft's own admissions, the Court will allow these factual disputes to be presented to a fact finder. Indeed, this is not the time to assess the strength of Caldera's case, but the time to determine whether there is enough evidence to allow a jury to make such an assessment. Even the D.C. District Court upon remand from the D.C. Circuit found that under the D.C. Circuit's rigid standard there were enough disputed facts that summary judgment should be denied in relation to the alleged tie of Microsoft's Internet Explorer to Windows 98, the latest update of Windows 95. *See United States v. Microsoft Corp.,* No. Civ. A. 98-1232, 1998 WL 614485 at *10 (D.D.C. Sept. 14 1998). Based on these findings the Court concludes that Microsoft's motion for partial summary judgment on its "technological tying" claim must fail. Accordingly, Caldera will be allowed to present its § 1 tying claim to a jury.

c. Caldera's § 2 Tying Claim

Furthermore, in addition to presenting its § 1 tying claim to the jury, Caldera will be allowed to present to the jury Microsoft's alleged unlawful tying arrangement of Windows 4.0 and MS-DOS 7.0 as part of Caldera's evidence in support of its § 2 claim for anticompetitive conduct. "Illegal tie-ins ... under section 1 may also qualify as anticompetitive conduct for section 2 purposes." *Multistate Legal Studies v. Harcourt Brace Jovanovich Legal & Professional Publications, Inc.,* 63 F.3d 1540, 1550 (10th Cir.1995).

IV. CONCLUSION

For the foregoing reasons, the Court finds that plaintiff's "Motion to Strike Microsoft's Partial Summary Judgment Briefs Relating to Substantive Antitrust Violations" is DENIED, and defendant's Motions for Partial Summary

Judgment on "Plaintiff's Claim of Predisclosure," "Plaintiff's Claim of Perceived Incompatibilities," "Plaintiff's Claim of Intentional Incompatibilities," and "Plaintiff's Claim of Technological Tying" are DENIED.

* * *

Footnotes

1. For example, in August 1990, *BYTE* magazine stated:

> The latest incarnation of DR DOS, Digital Research's MS-DOS clone, is an innovative and intriguing operating system that's thoughtfully designed. Version 5.0 is also packed with the extra features that Microsoft's own operating system should have (and might eventually have if the long-rumored MS-DOS 5.0 becomes a reality). As the people at DRI make very clear, its not pronounced Doctor DOS, although the analogy isn't far off the mark, since it indeed cures many (but not all) of MS-DOS's shortcomings.
>
> Stan Miastkowski, *A Cure for What Ails DOS,* BYTE, Aug.1990, at 107 (Pl.'s Exhibit 69). *PC Magazine* wrote on January 15, 1991:
>
> Digital Research is the microcomputer operating system company that predates Microsoft. As if to prove it hasn't lost its touch, DR DOS 5.0 does all the things you wish MS-DOS did. Its features include ... full compatibility with MS DOS.... Everybody's DOS should be this advanced.
>
> Bill Machrone, *7th Annual Awards for Technical Excellence,* PC Magazine, Jan. 15, 1991, at 100 (Pl.'s Exhibit 106).

2. A "beta" or "beta version" refers to unreleased software still under development. Beta testing is both a common and necessary practice in the computer software industry. It involves allowing software users and manufacturers of other software that is compatible with the beta product to test the new product. Beta testers provide the software manufacture with needed feedback on its product including potential problems with operating the software. It also allows the makers of compatible software the opportunity to work out any incompatibilities between their product and the beta version before its commercial release. Ordinarily, this is a mutually beneficial arrangement between the beta manufacturer and the maker of the compatible software. The arrangement allows the compatible software manufacturer to cure incompatibilities while making the beta product more marketable since upon its release it would be compatible with an assortment of software programs.

3. As alleged by plaintiff, a FUD campaign is meant to attack or alter perceptions regarding software compatibility. The purpose of a FUD campaign is to raise an artificial barrier to entry by a competitor. Caldera alleges that Microsoft knew of the effect an effective FUD campaign could have on a competitors and offers as evidence the following statement by a Microsoft official, Jeremy Butler, made in September 1989:

> It only takes a couple of reports about non-compatibility to give the kiss of death to a PC: we've seen that on the hardware side as well as in the operating system area.

(Pl.'s Exhibit 34).

4. During this same time period, and in response to the Novell/DRI merger plaintiff argues, Gates called Ray Noorda, Novell's CEO and Chairman, and proposed a merger between Novell and Microsoft. According to plaintiff, the only prerequisite for Gates was that "DRI's got to go." Plaintiff now asserts that Gates' proposal was "a ploy to hobble the development of DR DOS as a competitor." Microsoft asserts it was done in good faith.

5. Caldera further alleges that Microsoft's beta blacklist of Windows 3.1 extended to ISVs that expressed an interest in continuing to use DR DOS.

6. In *Continental Ore, Co. v. Union Carbide and Carbon, Corp. et al.,* 370 U.S. 690, 82 S.Ct. 1404, 8 L.Ed.2d 777 (1962) the plaintiff brought suit under §§ 1 and 2 of the Sherman Antitrust Act alleging that the defendants had violated the Sherman Act "by conspiring to restrain, by monopolizing, and by attempting and conspiring to monopolize, trade and commerce" in various metals that both parties mined. *Id.* at 693, 82 S.Ct. 1404. A jury trial was held in which a verdict was returned in favor of the defendants. The plaintiff appealed the verdict to the United States Court of Appeals for the Ninth Circuit.

"On appeal, instead of considering whether the defendant's had illegally attempted or conspired to monopolize the industry, the Ninth Circuit considered each defendants conduct separately and affirmed the determination made in the district court. The Supreme Court granted certiorari and vacated the judgment of the court of appeals, remanding the case to the district court. The Court held, [i]t is apparent ... that the Court of Appeals approached Continental's claims as if they were five completely separate and unrelated lawsuits. We think this was improper. In cases such as this, plaintiffs should be given the full benefit of their proof without tightly compartmentalizing the various factual components and wiping the slate clean after scrutiny of each." *Id*. at 698-99, 82 S.Ct. 1404.

7. The "six things" relied on by the plaintiff were:

> (1) forcing plaintiff out of the four-area ticket by requiring that revenues be divided below plaintiff's market share; (2) substituting defendant's three area ticket for a four area ticket; (3) marketing and advertising its three mountains in a manner designed to convince consumers that Aspen had only three mountains, not mentioning Aspen Highlands; (4) making an agreement with a tour operator to sell defendant's tickets to the exclusion of plaintiff's; (5) refusing to accept plaintiff's coupons during the 1978-79 season; and (6) raising ticket prices for a single-day lift ticket thus eliminating plaintiff's ability to offer a multi-area ticket.
>
> *Aspen Highlands Skiing Corp*., 738 F.2d at 1516-17.

8. The e-mail reads: "Bill Gates ordered to all application business units to include checking routines of operating environments and if it is Microsoft DOS, nothing will happen. But if it is non MS-DOS (such as DR-DOS), application will display messages saying that 'This application has been developed and tested for MICROSOFT MS-DOS. Since you use a different environment, this application may not work correctly.' " (Pl.'s Exhibit 30).

9. Defendants cite to the following cases: *Berkey Photo Inc. v. Eastman Kodak Co*., 603 F.2d 263 (2d Cir.1979); *ILC Peripherals Leasing Corp. v. IBM Corp*., 458 F.Supp. 423 (N.D.Cal.1978); *Memorex Corp. v. IBM* Corp., 636 F.2d 1188 (9th Cir.1980); *California Computer Products, Inc. v. IBM Corp*., 613 F.2d 727 (9th Cir.1979); *Telex Corp. v. IBM Corp*., 510 F.2d 894 (10th Cir.1975); *The David L. Aldridge Co. v. Microsoft Corp*., 995 F.Supp. 728 (S.D.Tex.1998); *GAF Corp. v. Eastman Kodak Co*., 519 F.Supp. 1203 (S.D.N.Y.1981).