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UNITED STATES DISTRICT COURT
for the District of Utah
Central Division

Novell, Inc.,	*	NOVELL'S OPPOSITION TO
Plaintiff,	*	JUDGMENT AS A MATTER OF LAW
	*	
v.	*	
	*	
Microsoft Corporation,	*	Case No. 2:04-cv-01045-JFM
Defendant.	*	Hon. J. Frederick Motz

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I.   INTRODUCTION

After seven years of pre-trial activities and two appeals to the United States Court of

Appeals for the Fourth Circuit, this Court empanelled a jury of 12 Utah citizens to hear the evidence

in this case and resolve the disputed issues of fact. For the past month, the jurors have listened to

over 62 hours of deposition and live testimony from 18 witnesses and been presented with 555

exhibits to consider and evaluate. The issue now before the Court is whether to send the jury home

without completing the record for the inevitable appeals, thereby risking that the entire effort will

have to be duplicated in the future. Given the state of the record, and the inferences that must be

drawn in plaintiff's favor at this juncture of the case, such a retreat would be improper as a matter of

law.

The testimony and documents presented to the jury demonstrate, at the least, the

following: (1) Microsoft possessed monopoly power in the market for Intel-compatible personal

computer ("PC") operating systems at all times relevant to the issues in this case; and (2) Plaintiff

Novell, Inc. ("Novell") has presented evidence from which the jury can conclude that Microsoft

engaged in anticompetitive conduct, including conduct to thwart development of Novell's office

productivity applications. Further, with regard to the second element, Novell has presented

abundant evidence that Microsoft's actions toward Novell were a "significant contributor" to

anticompetitive harm in the PC operating systems market. Thus, Novell has met its burden of proof

as set forth in the Court's preliminary jury instruction and has presented the exact evidence that led

this Court and the Fourth Circuit to conclude that this case was appropriate for a jury to determine.

Because this Court and the Fourth Circuit rejected Microsoft's arguments on summary

judgment that it is entitled to judgment as a matter of law on the ground that Novell cannot establish

the elements of its claim, and held instead that the case presented triable issues for the jury, that determination is binding on remand under the law of the case doctrine. Novell presented not only the same evidence that was before the Court on summary judgment, but far more evidence, in support of its claim. Although Microsoft has attempted to dispute and impeach much of this evidence at trial, that is irrelevant for purposes of a motion for judgment as a matter of law under Rule 50, or a motion for summary judgment under Rule 56 – the Court must view the evidence in the light most favorable to Novell, resolve all evidentiary conflicts in Novell's favor, and give Novell the benefit of all reasonable inferences. The Court must, therefore, deny Microsoft's motion for judgment as a matter of law.

The legal analysis that lead to this Court's and the Fourth Circuit's convening the trial has not changed. Microsoft's repeated attempts to characterize this case as a pure unilateral, refusal-to-deal subject to analysis under *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585 (1985), and *Verizon Communications Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398 (2004) ("*Trinko*") is still improper. The evidence presented at trial, like that at summary judgment, demonstrates that Microsoft's anticompetitive conduct involved affirmative representations and deception, regardless of whether it owed a duty to cooperate under *Aspen Skiing*. The jury could find that Microsoft's conduct caused the delay in Novell's release of WordPerfect and PerfectOffice for Windows 95. Indeed, this Court previously rejected Microsoft's attempt to position this case as exclusively a refusal-to-deal. "As an initial matter, Novell has presented evidence that Microsoft affirmatively misled Novell about Windows 95 and entered into anticompetitive agreements with OEMs," thus taking the case out of the "refusal-to-deal" paradigm. *Novell, Inc. v. Microsoft Corp.*, 699 F. Supp. 2d 730, 746 (D. Md. 2010), *aff'd in*

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relevant part, rev'd in part on other grounds, 429 F. App'x 254 (4th Cir. 2011). If Microsoft had

refused to cooperate from the beginning, Novell's developers, without any help from Microsoft,

could have built the open dialogues they needed in about one year and finished the PerfectOffice

suite for Windows 95 with the functionality its historic, installed-base customers had come to

expect in time to go to market with Windows 95 in or around August 1995. But this is not what

happened. Microsoft affirmatively induced Novell's reliance, causing the delay. That is not

competition on the merits nor is it merely refusing to deal with a competitor. This in no way

depends on the question raised by the Court with regard to Microsoft's right to refuse to share its

intellectual property with Novell.

 If Microsoft had told Novell (or at that time WordPerfect), when the two met in

November 1993, that the namespace functionality would not be provided, Novell's developers

would have had ample time to do all the work themselves without any assistance from Microsoft –

there would have been no delay. Consequently, Novell's antitrust claims are not dependent on

establishing Microsoft's failure to continue to cooperate under the *Aspen Skiing* line of cases, which

require a wholly distinct analysis. *See Christy Sports, LLC v. Deer Valley Resort Co., Ltd.*, 555

F.3d 1188, 1196 (10th Cir. 2009) (*Aspen Skiing* is inapplicable when the monopolist invites

investment then disallows use of the investment.)

 After recognizing that Novell's misrepresentation theory is not dependent on showing

that Microsoft had a duty to cooperate, this Court commenced the separate analysis: "Even

assuming Microsoft's conduct should be characterized as a refusal to cooperate, there is a question

of fact about whether it was anticompetitive under *Aspen* and *Trinko*." *Novell*, 699 F. Supp. 2d

at 746. The evidence shows a long history of a pre-existing profitable cooperation. It is established

that it was in Microsoft's interest as an operating systems vendor to provide consumers with the widest and best collection of applications possible. Specifically, Microsoft worked with WordPerfect to ensure that it could provide Windows-specific applications. Microsoft abruptly changed course after Novell acquired WordPerfect and Gates saw Novell's plans. It seems obvious that a monopolist who "evangelizes" the technology to third parties has sought out and established a pre-existing profitable relationship. At the very least, it presents a question of fact for the jury.

Because it is impossible to deny that it voluntarily cooperated, Microsoft has moved the debate to focus on the extent of the cooperation it was obligated to provide. Microsoft has claimed that even if it had an obligation to share intellectual property that would help Novell get ahead, it provided a common open dialog which was sufficient for Novell. Contrary to Microsoft's assertions, however, it did not cooperate to the extent it was obligated. Mr. Richardson testified that without the namespace extensions PerfectOffice "wouldn't be functional enough to be considered a reasonable product in Windows 95." Tr. at 629. He further explained that "the common dialog wouldn't even give us the level of functionality we had in our last release in Windows or that we had on our DOS card. It was a huge step backwards for us. And we felt it simply wasn't an option. If we were to go with that option we didn't really have a product." *Id.* at 630.

Whether the jury finds anticompetitive conduct through standard Section 2 principles as set forth in the preliminary instructions, as discussed above, or through the *Aspen Skiing* analysis, the record is equally clear that the conduct harmed competition and significantly contributed to Microsoft's monopoly maintenance. There is abundant evidence that Microsoft knowingly harmed consumers by degrading Windows 95 and excluding one of the premier "key franchises" for an anticompetitive purpose. There is also substantial evidence that Microsoft perceived the

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Novell/WordPerfect combination as a threat to its PC operating systems monopoly – rightly so –

and that Gates withdrew the extensions not to improve Windows 95, but to harm Novell and

eliminate a threat to the applications barrier to entry protecting its monopoly. In fact, the evidence

is more than sufficient to support a jury finding that Gates knowingly harmed Windows 95 in the

short term (foregoing revenue from sales of Windows 95 to WordPerfect's installed-based

customers who might have jumped at the opportunity to upgrade their operating system if, at the

same time, they could upgrade the office productivity applications they had been using for years) in

exchange for the long-term benefit of excluding Novell and maintaining its operating systems

monopoly, and that Gates' conduct was part of a broader attack by Microsoft on "nascent" platform

threats. The record further confirms that Novell intended to make WordPerfect and PerfectOffice

available on other platforms, including Linux and Apple, but that in order to survive as a viable

business in the long-run, it needed to be successful on Windows 95.

The middleware threat is the exact same threat that the D.C. Circuit found was sufficient

to establish harm to competition and unlawful monopoly maintenance, and that the Fourth Circuit

found was sufficient to create a jury question. In addition, the Fourth Circuit has recognized that

WordPerfect posed an additional threat as a "key franchise." Novell has, in fact, proffered concrete

proof that Microsoft abused its ownership of the word-processing and suite markets to control

potential rivals in the operating systems market. *See* Docket# 296.

Finally, Microsoft's position that the D.C. Circuit case can be distinguished because it

was an equitable action is contrary to the law in other Circuits. More than a dozen cases, including

binding 10th Circuit precedent and this Court's summary judgment ruling, apply the "reasonably

capable" test. Any other rule would encourage monopolists to take more and earlier action to

exclude potential threats, which cannot be reconciled with the purposes of the Sherman or Clayton acts. Indeed, by Microsoft's incorrect view of the law, even Netscape and Sun would be foreclosed from seeking damages despite the many findings made by the DC Circuit. That simply cannot be the law.

This Court has on several occasions expressed its confidence in the jury system. Novell respectfully submits that this Court should adhere to its previous ruling, affirmed by the Fourth Circuit, that allows the jury to perform its fact-finding functions.

II.   LEGAL PRINCIPLES

A.   <u>Motion For Judgment Of Law Is Permissible Only When The Evidence So Overwhelmingly Favors The Moving Party As To Permit No Other Rational Conclusion</u>

Under Rule 50 of the Federal Rules of Civil Procedure, a district court may grant judgment as a matter of law only if "a party has been fully heard on an issue during a jury trial and the court finds that a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue." Fed. R. Civ. P. 50. "'[J]udgment as a matter of law is appropriate only if the evidence points but one way and is susceptible to no reasonable inferences which may support the nonmoving party's position.' This is a difficult and high standard for the movant to satisfy." *Smith v. United States*, 555 F.3d 1158, 1162 (10th Cir. 2009) (citation omitted); *see also Shaw v. AAA Eng'g & Drafting, Inc.*, 213 F.3d 519, 529 (10th Cir. 2000) ("Judgment as a matter of law is improper unless the evidence so overwhelmingly favors the moving party as to permit no other rational conclusion."); *Weese v. Schukman*, 98 F.3d 542, 547 (10th Cir. 1996) (citation omitted) ("A motion for a judgment as a matter of law is cautiously and sparingly granted and then only when the

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court is certain the evidence 'conclusively favors one party such that reasonable men could not arrive at a contrary verdict.'").

In ruling on a motion for judgment as a matter of law, the court "review[s] all the evidence in the record, construing it and all inferences drawn therefrom most favorably to the nonmoving party, and refrain[s] from making credibility determinations or weighing the evidence." *Guides, Ltd. v. Yarmouth Grp. Prop. Mgmt., Inc.*, 295 F.3d 1065, 1073 (10th Cir. 2002). "'Credibility determinations, the weighing of the evidence, and the drawing of legitimate inferences from the facts are jury functions, not those of a judge.'" *Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 150 (2000) (citation omitted). In reviewing the record, therefore, the court "must disregard all evidence favorable to the moving party that the jury is not required to believe." *Id.* at 151. The Court may "give credence" to evidence favoring Defendant only when it "is uncontradicted and unimpeached" and comes from "disinterested witnesses." *Id.* at 150-51.

B. **Novell Must Only Establish A *Prima Facie* Case That Microsoft Unlawfully Maintained Its Monopoly Power In The PC Operating Systems Market In Violation Of Section 2 And That The Anticompetitive Conduct Caused Antitrust Injury To Novell**

The offense of monopolization under Section 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. *United States v. Grinnell Corp.*, 384 U.S. 563, 570-71 (1966). To maintain a private action under Section 2, the plaintiff must also prove "'the fact of injury and damages suffered by reason of a violation of the antitrust laws.'" *Reazin v. Blue Cross & Blue Shield of Kan., Inc.*, 899 F.2d 951, 973 (10th Cir. 1990) (citation omitted). While Microsoft has attempted to make this analysis complex, it is straightforward and simple. First, the jury should

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determine whether Microsoft violated Section 2. Second, if the jury finds that Microsoft violated

Section 2, then it will determine whether it was a material cause of Novell's antitrust injury. The

Court's preliminary instruction largely adopted this framework.[1] Letter from the Court, October 11,

2011, at 2. The line between legitimate business conduct and anticompetitive conduct can be very

hard to draw. *Copperweld Corp. v. Independence Tube Corp.*, 467 U.S. 752, 767-68 (1984);

United States v. Microsoft Corp. ("*Microsoft II*"), 253 F.3d 34, 58 (D.C. Cir. 2001). Juries are

typically instructed to consider whether the conduct was consistent with competition on the merits,

whether it provided benefits to consumers, and whether the conduct made business sense apart from

any effect it had on excluding competition or harming potential competitors. *See* ABA Section of

Antitrust Law, Model Jury Instructions in Civil Antitrust Cases, 2005 Edition, at C-26 to C-30

(2005). If Novell has established its prima facie case, then Microsoft bears the burden of providing

a "procompetitive justification" for its conduct, namely a "nonpretextual claim that its conduct is

indeed a form of competition on the merits because it involves, for example, greater efficiency or

enhanced consumer appeal." *Microsoft II*, 253 F.3d at 59. If Microsoft makes that showing, then

the burden shifts back to Novell to rebut the claim or show that the anticompetitive harm of the

conduct outweighs the procompetitive benefit." *Id.*

In evaluating the evidence, the jury should consider it as a whole without "tightly

compartmentalizing the various factual components." *Cont'l Ore Co. v. Union Carbide & Carbon*

Corp., 370 U.S. 690, 699 (1962), *quoted in Aspen Highlands Skiing Corp. v. Aspen Skiing Co.*, 738

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[1] As the Court knows, Novell does not agree that the "directed at" language is appropriate and the
Court has acknowledged Novell's objection to that language.

F.2d 1509, 1522 n.18 (10th Cir. 1984), *and Caldera, Inc. v. Microsoft Corp.*, 72 F. Supp. 2d 1295,

1307 n.6 (D. Utah 1999);[2] *Novell*, 699 F. Supp. 2d at 745, 750.

III.   FACTUAL BACKGROUND

A.   Relevant Technologies And Terminology

An "operating system" is a software program that controls the allocation and use of

computer resources (such as central processing unit time, main memory space, disk space, and

input/output channels). Finding of Fact ¶ 2. The operating system also supports the functions of

software programs, called "applications," that perform specific user-oriented tasks. *Id*. The

operating system supports the functions of applications by exposing interfaces, called "application

programming interfaces," or "APIs." *Id*. These are synapses at which the developer of an

application can connect to invoke pre-fabricated blocks of code in the operating system. *Id*. These

blocks of code in turn perform crucial tasks, such as displaying text on the computer screen. *Id*.

Because it supports applications while interacting more closely with the PC system's hardware, the

operating system is said to serve as a "platform." *Id*.

An application that relies on APIs specific to one operating system will not, generally

speaking, function on another operating system unless it is first adapted, or "ported," to the APIs of

the other operating system. *Id.* ¶ 4.

In 1981, Microsoft released the first version of its Microsoft Disk Operating System,

commonly known as "MS-DOS." Finding of Fact ¶ 6. The system had a character-based user

interface that required the user to type specific instructions at a command prompt in order to

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[2] *See also* Antitrust Law Developments (Sixth) at 244 ("Effect may be assessed on an *aggregate* basis, as distinguished from examining the impact of its discrete component parts.").

perform tasks such as launching applications and copying files. *Id*. When IBM selected MS-DOS for pre-installation on its first generation of PCs, Microsoft's product became the predominant operating system sold for Intel-compatible PCs. *Id*.

In 1985, Microsoft began shipping a software package called Windows. Finding of Fact ¶ 7. The product included a graphical user interface, which enabled users to perform tasks by selecting icons and words on the screen using a mouse. *Id*. Although originally just a user-interface, or "shell," sitting on top of MS-DOS, Windows took on more operating-system functionality over time. *Id*.

In 1995, Microsoft introduced Windows 95, which was announced as the first operating system for Intel-compatible PCs that exhibited the same sort of integrated features as the Mac OS running PCs manufactured by Apple Computer, Inc. *Id.* ¶ 8.

Microsoft is the leading supplier of operating systems for PCs. *Id.* ¶ 9. Microsoft licenses copies of its software programs directly to consumers. *Id.* ¶ 10. The largest part of its MS-DOS and Windows sales, however, consisted of licensing the products to manufacturers of PCs (known as "original equipment manufacturers" or "OEMs"), such as the IBM PC Company and the Compaq Computer Corporation. *Id*. An OEM typically installs a copy of Windows onto one of its PCs before selling the package to a consumer under a single price. *Id*.

B.   The Relevant Market And Microsoft's Monopoly Power

During the relevant time period, there is no dispute that the relevant market is Intel-compatible PC operating systems and that Microsoft had monopoly power in that market. Microsoft does not dispute that it had "monopoly power," nor can it given the findings in the Government Case. Microsoft enjoyed so much power in the market for Intel-compatible PC

operating systems that if it wished to exercise this power solely in terms of price, it could charge a

price for Windows substantially above that which could be charged in a competitive market.

Finding of Fact ¶ 33. Moreover, it could do so for a significant period of time without losing an

unacceptable amount of business to competitors. *Id.*

C.   The Applications Barrier To Entry

Although Microsoft overwhelmingly dominated the PC operating systems market, other

PC operating systems existed. *Novell, Inc. v. Microsoft Corp.*, 505 F.3d 302, 305 & n.8 (4th Cir.

2007). Because these PC operating systems work differently from each other, software developers

must create separate versions of their applications for each PC operating system in order for the

applications to function properly on it. *Id.* Modifying an application written for one PC operating

system so that it can run on another, i.e., porting, is time-consuming and costly. *Id.* Because of

this, a new or less popular PC operating system faces significant obstacles to gaining market share.

Id. As the D.C. Circuit has explained:

> the 'applications barrier to entry' – stems from two characteristics of the
> software market: (1) most consumers prefer operating systems for which a
> large number of applications have already been written; and (2) most
> developers prefer to write for operating systems that already have a
> substantial consumer base. This 'chicken-and-egg' situation ensures that
> applications will continue to be written for the already dominant Windows,
> which in turn ensures that consumers will continue to prefer it over other
> operating systems.

Microsoft II, 253 F.3d at 55; *see also* Findings of Fact ¶¶ 30, 31, 36.

IV.   UNDER THE LAW-OF-THE-CASE DOCTRINE, THIS COURT MUST DENY MICROSOFT'S MOTION

As we demonstrate below, there is abundant evidence in the record to establish all of the

facts necessary for Novell to meet its burden of proof. This Court, however, need not look any

further than the Fourth Circuit's opinion affirming its denial of Microsoft's prior summary judgment motion.

"The law of the case 'doctrine posits that when a court decides upon a rule of law, that decision should continue to govern the same issues in subsequent stages in the same case.'" *Huffman v. Saul Holdings Ltd. P'ship*, 262 F.3d 1128, 1132 (10th Cir. 2001) (citation omitted). "The doctrine has particular relevance following a remand order issued by an appellate court." *Id.* After remand, the Court of Appeals' ruling "is not subject to further adjudication" in the district court because "'[w]hen a case is appealed and remanded, the decision of the appellate court establishes the law of the case, which *must* be followed by the trial court on remand.'" *Orient Mineral Co. v. Bank of China*, No. 2:98-CV-238BSJ, 2010 WL 624868, at *14 (D. Utah Feb. 19, 2010) (emphasis in original) (quoting 1B James Wm. Moore et al., *Moore's Federal Practice* ¶ 0.404[1], at II-2–II-3 (2d ed. rev. 1996)), *aff'd*, 416 F. App'x 721 (10th Cir. 2011), *cert. denied*, --- U.S. ----, 2011 WL 4533788 (Oct. 3, 2011). The rule that the Court of Appeals' decision is not subject to further adjudication "applies to all 'issues previously decided, either explicitly or by necessary implication.'" *Rohrbaugh v. Celotex Corp.*, 53 F.3d 1181, 1183 (10th Cir. 1995) (citations omitted). "An argument is rejected by necessary implication when the holding stated or result reached is inconsistent with the argument." *United States v. Jordan*, 429 F.3d 1032, 1035 (11th Cir. 2005) ("We did not address that argument in so many words, or in any words for that matter, but we did reject it 'by necessary implication,' which is enough under our decisions to bring the law of the case doctrine to bear in this appeal.").

"The legal standard for granting judgment as a matter of law is identical to the standard for granting summary judgment under Fed. R. Civ. P. 56." *Brown v. Presbyterian Healthcare*

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Servs., 101 F.3d 1324, 1329 (10th Cir. 1996); *see also Reeves*, 530 U.S. at 150. Because the standards under Rule 50 and Rule 56 are identical, the law of the case doctrine dictates that "when the court of appeals has remanded a case for trial after ruling that summary judgment in favor of a given party was inappropriate because the evidence indicated the existence of genuine issues of material fact to be resolved by the jury, the district court cannot properly, on remand, grant judgment as a matter of law to that party on the basis of trial evidence that is not substantially different." *Kiernan v. City of New York*, 374 F.3d 93, 110 (2d Cir. 2004). Thus, in the present case, because this court denied summary judgment to Microsoft, and the Fourth Circuit affirmed this Court's ruling, under the law of the case doctrine this Court is precluded from granting a judgment as a matter of law in Microsoft's favor, given that the facts adduced at trial were not substantially different than the facts taken as true for purposes of summary judgment.

This result is supported by a plethora of decisions in the Tenth Circuit holding that, on remand, a district court cannot disturb a ruling of the Court of Appeals. "According to the Tenth Circuit, an 'important corollary' to the law of the case doctrine 'known as the "mandate rule," provides that a district court "must comply strictly with the mandate rendered by the reviewing court."'" *Orient Mineral Co.*, 2010 WL 624868, at *14 (citations omitted). "The mandate consists of [the Tenth Circuit's] instructions to the district court at the conclusion of the opinion, and the entire opinion that preceded those instructions." *Proctor & Gamble Co. v. Haugen*, 317 F.3d 1121, 1126 (10th Cir. 2003). The mandate rule seeks "to preserve the finality of judgments, to prevent 'continued re-argument of issues already decided, . . . and to preserve scarce court resources.'" *Id.* at 1132 (alteration in original) (citation omitted).

A district court may depart from the "mandate rule" only "'under exceptional circumstances,'" none of which are present here: "'(1) a dramatic change in controlling legal authority; (2) significant new evidence that was not earlier obtainable through due diligence but has since come to light; or (3) if blatant error from the prior . . . decision would result in serious injustice if uncorrected.'" *Huffman*, 262 F.3d at 1133 (alteration in original) (citation omitted). These three "'exceptional circumstances'" that permit departure from the "mandate rule" essentially mirror the three "'exceptionally narrow'" grounds that permit departure from the law of the case doctrine – substantially new evidence, a change in controlling authority, or a prior decision that was clearly erroneous and would cause a manifest injustice if followed.[3] *Id.* (citation omitted).

Moreover, "'a legal decision made at one stage of litigation, unchallenged in a subsequent appeal when the opportunity to do so existed, becomes the law of the case for future stages of the same litigation, and the parties are deemed to have waived the right to challenge that decision at a later time.'" *Capps v. Sullivan*, 13 F.3d 350, 353 (10th Cir. 1993) (citation omitted). The reason for this rule is that "'[i]t would be absurd that a party who has chosen not to argue a point on a first appeal should stand better as regards the law of the case than one who had argued and lost.'" *Cnty. of Suffolk v. Stone & Webster Eng'g Corp.*, 106 F.3d 1112, 1117 (2d Cir. 1997) (citation omitted). In *Rohrbaugh*, the Tenth Circuit held that plaintiffs "waived their right to challenge the correctness of the holdings in [the prior Court of Appeals' decision] by failing to seek review of that decision when they had the opportunity to do so." 53 F.3d at 1184; *see also Klay v.*

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[3] The exception that permits a departure from the law of the case doctrine when the decision is "clearly erroneous" and would work a "manifest injustice" is "rarely, if ever, invoke[d]." *United States v. Alvarez*, 142 F.3d 1243, 1247 (10th Cir. 1998). "In fact, in the only case we found in which a panel used this exception, the en banc court subsequently reversed the panel." *Id.* (citation omitted).

All Defendants, 389 F.3d 1191, 1199 (11th Cir. 2004) ("[Defendants'] failure to seek *en banc*

review or *certiorari* with respect to these issues caused our previous ruling to become law of the

case."). Similarly, in the present case, Microsoft did not seek review of the Fourth Circuit's

decision in the Supreme Court, and thus waived any right to challenge the correctness of the Fourth

Circuit's decision.

A. **Because This Court Has Already Held That Novell's Evidence Presents A Triable Issue For The Jury, And The Court Of Appeals Has Affirmed That Ruling, That Decision Is Binding Under The Law Of The Case Doctrine**

Microsoft's motion for summary judgment argued that Novell's evidence was insufficient

to prove anticompetitive conduct or harm to competition as a matter of law. Microsoft's

Memorandum in Support of its Motion for Summary Judgment at 22-35. For example, Microsoft

argued that it had no affirmative duty to assist – or to continue assisting – a competitor, and that

therefore Novell's claim was barred under cases such as *Trinko*. *Id.* at 29-35. In response, Novell

cited much of the evidence it has now presented at trial, including expert opinion testimony and

Microsoft documents, to demonstrate that it had established a *prima facie* case for trial. *See*

Novell's Opposition to Microsoft's Motion for Summary Judgment at 1-32. This Court held that

"Novell has raised an issue of triable fact as to whether Microsoft's Novell-injuring conduct was

anticompetitive and whether that conduct caused anticompetitive harm in the PC operating system

market," and therefore rejected Microsoft's argument that Novell could not establish the elements

of a Section 2 claim as a matter of law. *Novell*, 699 F. Supp. 2d at 743. As to Microsoft's argument

that Novell's claim was a refusal to cooperate claim barred by *Trinko*, the Court held that this was

not so: "Novell has presented evidence that Microsoft affirmatively misled Novell about Windows

95 and entered into anticompetitive agreements with OEMs," thus taking the case out of the "refusal

to cooperate" paradigm. But, even if analyzed as a pure refusal to cooperate case, the Court held, Novell had presented sufficient evidence to create a triable jury question as to whether Microsoft had violated the antitrust laws – including evidence of Microsoft's "predatory motives." *Id.* at 746. "A fair inference arises that inhibiting WordPerfect's and Quattro Pro's ability to achieve functionality on Windows 95 was an effort to 'sacrifice short-run benefits and consumer goodwill in exchange for a perceived long-run [anticompetitive impact].'" *Id.* (quoting *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 610-11 (1985)).

Microsoft argued on appeal "[a]s a separate and distinct ground for affirming the district court's grant of summary judgment, Count I fails on the merits." Brief of Appellee Microsoft at 28. For example, Microsoft argued that "Novell cannot show that WordPerfect and Quattro Pro posed any threat to the applications barrier to entry." *Id.* According to Microsoft, "[t]he district court was incorrect when it found that 'Novell has raised an issue of triable fact as to whether Microsoft's Novell-injuring conduct was anticompetitive and whether that conduct caused anticompetitive harm in the PC operating system market.'" *Id.* at 29 (quoting *Novell*, 699 F. Supp. 2d at 743).

The Fourth Circuit reversed this Court's order granting summary judgment. In doing so, it expressly rejected "Microsoft's claim that there are no remaining disputed issues of material fact." *Novell*, 429 F. App'x at 262. The Court of Appeals made a particular point of rejecting Microsoft's argument that "Novell cannot make the required showing that Microsoft's conduct toward its office productivity applications helped maintain Microsoft's monopoly power." *Id.* The Court of Appeals further noted that Dr. Noll's testimony "leaves ample room for 'a finding that Microsoft's actions toward Novell were a significant contributor to anticompetitive harm in the PC operating system

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market *in light of the weakened state of other applications and [independent software vendors]*.' That issue is appropriate for trial." *Id.* at 262-63 (citation omitted).

Thus, the Court of Appeals rejected, either expressly or by necessary implication, all of Microsoft's arguments that "there are no remaining disputed issues of material fact" and that Microsoft was entitled to judgment as a matter of law on the ground that Novell presented insufficient evidence for a finder of fact to conclude that Novell had established a *prima facie* case under Section 2. Under the law of the case doctrine, that ruling is binding on this Court. Because the Rule 56 standard for summary judgment and the Rule 50 standard for judgment as a matter of law are the same, this Court cannot grant judgment as a matter of law in favor or Microsoft in the face of the Court of Appeals' decision that summary judgment in favor of Microsoft was inappropriate. The record on the prior summary judgment motion included the opinions of experts and other key evidence that Novell has now presented at trial. Indeed, Novell has presented the evidence that this Court and the Court of Appeals previously found to be sufficient to present a triable case and much more. In sum, the law of the case dictates the denial of Microsoft's motion.

V.   MICROSOFT VIOLATED SECTION 2 BY WILLFULLY MAINTAINING ITS OPERATING SYSTEM MONOPOLY THROUGH ANTICOMPETITIVE CONDUCT, INCLUDING CONDUCT DIRECTED AT NOVELL

Even if this Court were to revisit the issues previously resolved by the prior rulings of this Court and the Court of Appeals, Novell has introduced more than sufficient evidence to establish that Microsoft violated Section 2, even applying the Court's preliminary instruction that Novell must prove that "Microsoft willfully maintained its monopoly in the PC operating system market by engaging in anticompetitive conduct, including conduct to thwart development of

Novell's WordPerfect word processing application and its other office productivity applications, during the period relevant to this case."

A. The Sherman Act Precludes Monopolists From Excluding Potential Competitors That Threaten To Commoditize The Relevant Market

As an initial matter, this Court has questioned whether it is unlawful for a monopolist to eliminate companies that pose a threat to a monopoly because they could commoditize the monopolist's product, even if the competition comes from outside the relevant market. This Court seems concerned that the threats to Microsoft came from outside the PC operating systems market and that they threatened to create new forms of competition, but not necessarily from within the relevant market.[4] In markets characterized by network effects, where competition is *for* the market instead of within it, monopolists actually are more likely to seek to exclude "threats from outside the field instead of from within." *Novell, Inc. v. Microsoft Corp.*, 505 F.3d 302, 319 (4th Cir. 2007).[5] In the Government Case, the D.C. Circuit found that Microsoft violated Section 2 by excluding Java and Navigator even though "they were not competitors or potential competitors" but rather "they could enable an alternative operating system to compete with Windows." As a matter of logic, that has to be correct. A monopolist cannot be allowed to eliminate potential threats to its

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[4] This concern appears to relate to Novell's middleware theory of harm to competition. As discussed below, middleware is not the only theory on which Novell proceeds to establish harm to competition. The "moat" theory arises from the proposition accepted by Microsoft business executives that Microsoft maintained its monopoly power by, in part, owning the "key franchises." Microsoft understood that a potential operating system rival needed key franchises written for its operating system to even attempt to challenge Microsoft's operating system monopoly. In this case, the threat was not only that Novell's OPAs could promote the development of an alternative platform, but that it could promote the development of competition within the relevant market.

[5] *See id.* at 308 ("[F]irms compete to dominate the market, and once dominance is achieved, threats come largely from outside the dominated market, because the degree of dominance of such a market tends to become so extreme.").

monopoly from outside the market that enable or enhance the competitiveness of existing or

potential entrants within the relevant market. Any other rule would ignore the importance to

consumers of competition and innovation.

Moreover, the Tenth Circuit held in *Reazin v. Blue Cross & Blue Shield of Kansas, Inc.*,

899 F.2d 951 (10th Cir. 1990), that a monopolist who excluded a "perceived competitor" violated

Section 2 by engaging in anticompetitive conduct to eliminate that competitor, even though the

potential competitor did not compete, nor seek to compete, in the relevant market. In that case,

Blue Cross was a traditional third-party medical insurer that, through special enabling legislation,

monopolized the market for private health care financing in the area. It perceived a threat to its

monopoly when a local health maintenance organization ("HMO") purchased the largest hospital in

the area and sought through that combination to offer a different type of health care financing by

combining the HMO concept with hospital ownership. *Id.* at 954-55. The monopolist's concern

was that the HMO/hospital concept was part of a "health care revolution" that threatened to render

irrelevant Blue Cross' monopolization of traditional third-party private health care financing by

offering consumers a variety of alternatives. *Reazin v. Blue Cross & Blue Shield, Inc.,* 663 F. Supp.

1360, 1383 (D. Kan.1987). The jury found that Blue Cross's conduct restricted the ability of buyers

to purchase hospital services through alternative delivery systems, "thereby restraining competition

in the health care financing market." *Id.* at 1413.

In its JNOV motion, Blue Cross argued that it could not have monopolized the market

for private health care financing because many new and existing conventional insurance companies

could easily enter the market. In rejecting that argument, the trial court found that Blue Cross

missed the thrust of plaintiffs' evidence: "conventional insurance coverage provides only limited

competition to defendant and poses little, if any, threat to its entrenched and dominant market

position. The *only effective challenge to that position comes from alternative delivery systems*."

Id. at 1417 (emphasis added). As the trial court noted, "The Sherman and Clayton Acts ensure

consumers the benefits of free, open and unrestrained competition. The only competition

conceivably benefiting consumers at the consumption level is that between different products,

prices, terms, services, etc., i.e., market competition through which consumers are offered a choice

among competing products." *Id.* at 1436.

B. **Microsoft Engaged In Conduct Other Than Competition On The Merits That Had The Effect Of Preventing Or Excluding Competition Or Frustrating The Efforts Of Other Companies To Compete For Customers Within The Relevant Market.**

The evidence Novell has presented at trial discloses that Microsoft engaged in a pattern

of conduct directed at Novell and other products that it perceived to be threats to its operating

systems monopoly. This Court has properly ruled that the jury should look at "Microsoft's

behavior, taken as a whole," *Novell*, 699 F. Supp. 2d at 745, and may consider conduct "directed at"

those other threats. We first discuss the conduct that thwarted Novell's office productivity

applications and then discuss the other conduct.

1. **The Office Shell Plan**

In early June of 1993 a retreat was held at Bill Gates' home compound on Hood Canal to

focus on how Microsoft's "Systems" and "Apps/Tools" could leverage each other. PX0047 at MS

5025271.[6] Microsoft felt that this was a "crucial issue" if Microsoft was to avoid "commodization"

of its Windows operating system. *Id*. at MS7085723. In a memo for the retreat, Bill Gates outlined

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[6] Trial exhibits referenced herein will be provided to the Court in separate binders organized in numerical order by plaintiff's exhibits and defendant's exhibits.

that "Chicago offers an opportunity to redefine what it means for applications to integrate together, and we must fully exploit our advantage to do so." PX0050 at FL AG 0103212. Gates also noted that "[i]ntegration and synergy will be the paradigm shift that will drive the Chicago wave of applications and the Chicago Office." *Id.*

At a presentation given at the retreat by several senior Microsoft executives, a radical idea was proposed that Microsoft would create a shell specifically designed for Microsoft's office productivity applications, called "The Office Shell." PX0051 at MS-PCA 2535292. The basic approach of the plan was to hold all extensible shell technology for Microsoft's Office product and to make the shell that would ship with Microsoft's Window 95 product "non-extensible." *Id.* The idea was that by shipping an extensible shell with Office, this would differentiate Office and give Microsoft's office productivity applications an advantage over competitors when it came to shell integration. *Id.* The Microsoft slide indicates that Microsoft would offer an excuse to ISVs as to why the Chicago shell would be non-extensible, and that the excuse would be that Microsoft "couldn't get it done in time." *Id.*

Notes from the retreat indicate that Bill Gates was thinking about ways to "win market share" from Lotus and Novell. PX0052 at MS7089439. Gates noted that Chicago provided a huge opportunity for Microsoft's applications to gain synergy with the operating system, and that all Microsoft apps should "bet on Chicago." *Id.* at MS7089440. Notes from the retreat also indicate that Gates supported the Office Shell scheme, as he was recorded as stating emphatically to "Ship extensible shell in Office!!!" – "Billg sez do it!" *Id.* at MS7089441.

Based on the discussion at the retreat, Christopher Graham developed an "Office Shell Plan." *See e.g.*, PX0057. The paper Graham wrote investigated and summarized a proposal that the

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next major version of Office consist of a Windows shell and applications optimized to work together. PX0061 at MS 0097121. Graham noted that the proposal originated at the senior technical retreat at Hood Canal and recommended that Microsoft follow the "aggressive" version of the plan. *Id*. The proposed plan was that Office would ship an enhanced Windows shell and that it would be a functional superset of the Chicago shell, designed for maximum synergy with Office. *Id*. Chicago would ship limited extensibility and Office would ship with the optimized shell six months after Chicago. *Id*. Office would include many features that would exploit the new shell. *Id*. The goal of the plan was to give Office a "big jump on competitors in creating apps optimized for the new shell." *Id*. at MS 0097122. Graham however recognized that there were some downsides to the plan, in particular, that the plan would result in "Risk of ISV retaliation" and could result in a "Negative impact on [Microsoft's] corporate image." *Id*. The aggressive version of the plan, recommended by Graham, would undertake greater user interfaces changes, and according to Graham, could "pull off the 'UI Paradigm Shift' to document centricity" two years sooner that if they didn't follow the aggressive approach. *Id*. Graham noted that the aggressive plan would give Microsoft "a very significant lead over our competitors, and make our competitors' products look 'old'." *Id*.

Tom Evslin also described the plan outlined at the system/apps retreat in an e-mail on June 16, 1993, stating that "[a] very interesting plan was developed and tentatively adopted to bundle the extensibility of Chicago shell and some of the shell sizzle with Office rather than release with Chicago itself. This makes these features a compelling reason to buy Office rather than icing on the cake of an OS we can't make as much profit on." PX0055 at MS 5048640.

In sum, the office shell plan was aimed at leveraging Microsoft's control of platform technology. PX0074 at MS 0150226. Microsoft would be able to anticipate the changes in platform technology, or the "left turn" of the platform before everyone else and as a result, Microsoft could "[r]epeat [the] advantage [Microsoft] gained from the bet on Windows." *Id*. The end result would be an advantage for Microsoft against Lotus, Borland and WordPerfect, that would "lock in users" and "lock out competition," enabling Microsoft to "[k]eep prices up and increase market share." *Id*. at MS 0150227.

The office shell plan was widely discussed within Microsoft. Bob Muglia wrote in an e-mail to Paul Maritz on July 1, 1993 that Microsoft should not continue along their current path of exposing shell extensibility. PX0062 at MX 1389851. Muglia stated that while "this is the current plan, it seems like a bad option no matter how you view it" because "Word and Excel are forced to battle again their competitors on even turf." *Id*. Muglia continues: "Given that Lotus and Wordperfect have largely caught up, [Word and Excel] almost certainly lose ground – if not in market share, than in margins." *Id*. However, not everyone within Microsoft liked the Office Shell plan or was enthusiastic about limiting Chicago's shell extensibility in order to benefit Office. *See, e.g.*, PX0056 at MS7080520. For example, Tandy Trower wrote to Bill Gates, Brad Silverberg, Paul Maritz and others on June 23, 1993, that he was highly critical of the plan, stating:

> This strategy signals a sign of weakness. This stinks of 'proprietary-ness,' something that we have been critical of others for embracing….We are better focused on making this transition, like we did from character to GUI, than trying to leverage some weak extensions. If we really wanted to leverage a technological advantage we should have kept OLE 2 as a proprietary set of APIs. It just doesn't appear to me to be a smart strategy. It seems contrived and the possible repercussions not worth the risk. In the twelve years, I have been here, I've always taken pride in the fact that we excelled by doing things better than our competition, not by withholding some functionality that we

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might uniquely leverage. That doesn't mean that I think we should just give away all our technology. I just don't think this particular proposal is a good one and doesn't fit our character.

PX0056 at MS7080520.

Others on the Chicago team, such as David Cole, Brad Silverberg and John Ludwig feared that shipping a shell in office would lead to "Shell Wars" and that Microsoft's competitors would be forced to ship their own shell in their office productivity applications to remain competitive and that this could have a detrimental effect on the consistency of the Windows user interface, and could result in fragmentation of Windows as competitors layer their own shells and APIs on top of Windows. PX0054 at MS 0185884-85; PX0499 at MS7093049. If such a fragmentation occurred, Microsoft could theoretically "lose control" of Windows and the future evolution of the operating system, if developers started to make use of other vendor's shells. *Id*. at MS 0185885. In fact, John Ludwig indicates in the same e-mail thread that Microsoft's worst nightmare would be "novell/lotus being successful at establishing their 'middleware' as a standard." *Id*. at MS 0185884.

On July 8th and 9th of 1993, Microsoft held a Chicago User Interface Design Preview for third party ISVs including WordPerfect. *See, e.g.*, PX0063. During the presentation, Microsoft's Joe Belfiore showed off the Chicago Shell and its new user interface. *Id.* at NOV-B06507480-81. Brad Silverberg wrote in an e-mail on July 13, 1993, that ISVs were clamoring for shell extensibility and that they "continued to press for this in every way, whether cabinet extensibility so they could put in their own right pane handler; add properties to prop sheets; hook find file; etc." PX0064 at MS7093163. Silverberg noted that the ISVs "were afraid and angry that

Microsoft would use the hooks for its own purposes (apps, mail, etc) but not provide to ISV's" and that "This was a very hot button." *Id.*

On September 9th and 10th, 1993, Microsoft held a "Win32 Developers Workshop Featuring Chicago." *See*, *e.g.*, PX0078. During the Workshop, Microsoft's Joe Belfiore showed the Chicago shell and the new MS Mail client (Capone) that would tie into the shell just as another folder using the namespace extension APIs. *Id.* at NOV00721981. During the workshop, Belfiore stated that there were no plans to allow ISVs to extend the explorer in the same way, and WordPerfect developers complained that "this was an unacceptable situation." *Id*.

As a result of ISVs' complaints, a debate erupted within Microsoft in September of 1993 regarding whether Microsoft had to publish the namespace extension APIs since Capone would make use of them. *See, e.g.*, PX0483. Some within Microsoft, such as Doug Henrich, felt that not providing the same namespace extension APIs Microsoft was using for Capone was "problematic from a PR and ISV issue" and that several "big and small email vendors will be upset, and this will play out as an unfair advantage issue with the press." PX0083 at MS 0186379. Henrich felt that by not publishing the "interfaces/APIs that Capone uses" that "Lotus will make a big deal of this" because Lotus CEO Jim Manzi had "already mentioned it" to Bill Gates. PX0084 at MS 5043511. Others, such as Ken Ong, believed that the APIs being utilized by Capone to tie into the shell were "fit for public consumption" and that it was just a "question of whether Chicago choose[s] to publish those calls." PX0084 at MS 5043511-12. Brad Silverberg felt that Microsoft clearly had to "publish whatever api's capone uses." *Id.* at MS 5043513; PX0085 at MS 5042229. Jonathan Lazarus was more blunt, stating that Microsoft's failure to publish the namespace extensions APIs that Capone would be using would be "D U M B!!!". PX0082 at MS 5042220. Finally on

September 27, 1993, Brad Silverberg indicated in an e-mail that he and David Cole met with Bob

Muglia and Jim Allchin to discuss the namespace extension APIs Capone was using, and that the

group decided that the APIs would be published (on the A-list). PX0473 at MS 0186458.

Silverberg states that "we decided that we would document the shell extensibility . . . ." *Id.* While

the extensibility mechanisms would not be full OLE2 compatible, the Chicago team would use a

"lighter weight OLE implementation" and Chicago UI exploitive applications would work decently

on Cairo, Microsoft's next version of NT, and there would be "no need for ISVs to do different

work to run on Cairo." PX0094 at MS7048981.

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2. Microsoft Evangelizes The Namespace Extensions To WordPerfect

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Shortly after the decision to document the namespace extension APIs, Jeff Thiel, Brad

Struss, and David Cole visited WordPerfect on November 11th, 1993, to evangelize Chicago and

"what [Microsoft] thought a good Chicago app was and what barriers they would have to doing one

close to the time Chicago shipped." PX0105 at MS7086583. David Cole described the visit as

follows:

> Overall, the visit was good. There were around 10 WP guys, (VP dev lead
> types) sitting around a table so it was much more intimate than the Borland
> visit. They weren't nasty at all, in fact had good feedback and decent
> questions. These guys will bet on Chicago, they've never had any doubts
> about that….It was interesting to see how enthusiastic WP was about
> Chicago, much in contrast with the ho-hum attitude of our own apps
> group…They were very happy about us deciding to document the shell
> extensions. I explained conceptually how the extensibility would work and
> what controls they'd have. Since they just acquired a document management
> system (I forget from who) I assume they will want to plug that in, plus WP
> mail and other part of WP office too. . . I anticipate that WP will have a very
> exploitive Chicago app ready close to when Chicago ships.

PX0105 at MS7086583.

Adam Harral, a WordPerfect developer, testified that at this meeting Microsoft told WordPerfect that it had decided to document the shell extensions and that this was one of the primary reasons for the meeting. Tr. at 289:14-22. WordPerfect was "very enthusiastic" about Microsoft's decision to document the shell extensions. *Id*. at 289:10-13; 290:1-4 (Harral). At the meeting, David Cole explained to WordPerfect how the extensibility would work and what controls they would have, and that Microsoft would provide information at a later time related to the details. *Id*. at 290:25-291:9 (Harral).

A month later at the December 1993 Professional Developers Conference ("PDC '93") Joe Belfiore presented a slideshow entitled "New Windows 'Chicago' UI: What It Means For Your Application." *See e.g.*, PX0113. The presentation indicated that ISVs would be provided with "Explorer UI integration" and that "[i]f you have an application that displays a collection of file-like objects, you can create your own 'custom container' displayed in the folder/explorer hierarchy." *Id*. at NOV 00734389. Belfiore outlined that the technology, while not for most applications, was perfect for certain types of applications such as "electronic mail, document management, etc." *Id*. at NOV 00734390. This slideshow was distributed amongst developers and evangelists and managers at WordPerfect. Tr. at 294:8-17 (Harral). Mr. Harral also indicated that the Shell Extensibility portion of the document, dealing with Explorer UI integration dealt directly with the namespace extension functionality. *Id*. at 296:21-298:13 (Harral).

The sections of the presentation dealing with pseudo folders also were specifically about the namespace extension APIs. *Id*. at 298:14-299:8. He also testified that both of the topics outlined in the Belfiore slideshow were among the topics that were discussed with Mr. Cole a month earlier in November of 1993. *Id*. at 299:9-299:12.

Gregory Richardson testified that he reviewed the Belfiore slideshow, stating that it was a "presentation describing functionality that was being provided in Windows 95 to promote those features" and that the presentation related to how to provide custom namespaces into the shell, including pseudo-folders for electronic mail, document management, and then make them accessible via the File Open dialogue. Tr. at 589:17-589:25, 590:22-591:21, 592:9-593:19 (Richardson).

Prior to receiving the M6 beta from Microsoft, WordPerfect's shared code team had started work on moving shared code to Windows 95, including the file open dialog component. Tr. at 318:23-319:25. In June 1994, Microsoft shipped and rolled out to approximately 20,000 sites world-wide the Chicago beta 1 (M6) release. *See* PX0179 at MX 2217526. The M6 beta of Chicago contained partial documentation for the namespace extension API functionality. Tr. at 303:16-305:6; *see also* PX0181. This partial documentation included a header file called shlobj.h which contained general definitions for the extensions and some general comments on how they could be invoked and utilized by WordPerfect. *Id*; PX0181.

This did not provide WordPerfect with full and complete documentation regarding the namespace extension functionality, which was not expected until the next milestone beta release, entitled M7. Tr. at 317:6-317:12. In order to fully invoke and utilize the namespace extension interfaces, a developer would need additional documentation that would describe in greater detail how these computer definitions were meant to be used. *Id*. at 317:13-318:6.

Relying on the M6 partial documentation, the shared code team began working on namespace extension related aspects. *Id*. at 320:1-321:4. The shared code team also started working with other groups, such as the mail team, the document management team, and others

regarding what extensions they thought they could provide. *Id*. The documentation and M6 beta

gave the shared code team for the first time the ability to hook the WordPerfect code to the

namespace extension APIs to see how they behaved. *Id*. at 321:5-321:25. WordPerfect developers,

including Adam Harral, spoke with Microsoft's Premier Support regarding the namespace extension

interfaces at least three times. *Id.* at 331:7-331:12. Other liaisons in the company, such as Lynn

Monson were also having conversations with Premier Support about the interfaces. *Id.* at 331:13-

331:19. By October of 1994, "significant work" had already been done on the shell extensions, and

the shared code was about 80 percent of the way through hooking up the shared code pieces into the

Windows 95 system. *Id*. at 322:1-322:8; 326:9-326:25. The only thing the shared code team

needed from Microsoft was additional information on the namespace extension interfaces, which

was promised in M7. *Id*. at 322:9-323:5. WordPerfect developer Adam Harral predicted that if

WordPerfect would have received the final documentation from Microsoft with respect to the

namespace extension APIs in M7, the process of hooking shared code up to Windows 95 would

have been completely finished by December of 1994. *Id*. at 323:6-323:14.

On September 20, 1994, Novell CEO Bob Frankenberg gave a presentation at the

Agenda '95 conference in Scottsdale, Arizona. *See* PX0213 at NOV-B01939861. Bill Gates

described the speech given by Frankenberg in an e-mail to senior Microsoft leadership, indicating

that Frankenberg demonstrated a new shell technology called Corsair that exposed cross-platform

APIs on the Macintosh, Unix and Windows. *Id*. Gates also noted that Frankenberg demonstrated a

new web browser called Ferret and that he "launched WP 6.1 and showed how its Hypertext

capability lets you navigate around the world using URLs!!!" *Id*. Gates indicated that this work by

Novell "emphasizes the importance of our shell integration" and that "Novell is a lot more aware of how the world is changing than I thought they were." *Id.*

3. Microsoft Withdraws Support For The Namespace Extension APIs

On October 3, 1994, only two weeks after seeing Mr. Frankenberg demonstrate Novell's latest innovations in WordPerfect 6.1, Bill Gates decided to withdraw support for the namespace extension APIs, contrary to Microsoft's previous representations and course of conduct. *See* PX0001 at MX 9030733. In a memorandum regarding his decision, Mr. Gates admitted that the "shell group" had done a "good job defining extensibility interfaces," and that the extensions were "a very nice piece of work." He also admitted that it was "very late in the day to [be] making changes to Chicago." *Id.* Mr. Gates stated that he decided Microsoft "should not publish these extensions" until the company had "a way to do a high level of integration that will be harder for [the] likes of Notes, Wordperfect to achieve, and which will give Office a real advantage." *Id.* Mr. Gates added that Microsoft could not "compete with Lotus and WordPerfect/Novell without this" and that Microsoft's goal was "to have Office '96 sell better" because of "shell integration work." *Id.*

After the decision was made, Tom Evslin asked in an e-mail to Gates and other top executives whether Marvel, Microsoft's MSN client, and Capone, Microsoft's e-mail client, had to stop using the interfaces. *See* PX0219 at MX 5117033. In response, Brad Silverberg wrote that Microsoft should "take them out of marvel and capone" because "[t]here is no one in the world outside of Microsoft who will buy the argument that they are 'part of Chicago' so [Microsoft] get[s] the interfaces while others don't" and that such a position was "an impossible sale." *Id.* An

investigation was then conducted by Russell Siegelman, researching the impact of the namespace

extension decision on Marvel. *See* PX0220 at MX 5103184. Siegelman had Sean Nolan, a Marvel

developer, look into the implications of losing the Chicago namespace extension mechanism

implementation. *See* PX0221 at MX 5103234. In a memorandum to Siegelman, Nolan wrote that

the decision amounted to a "bombshell" and that having to redesign the Marvel "shell from the

group up is not a realistic solution due to time constraints." *Id*. Nolan then recommended that

Marvel be allowed to continue to use the Chicago Implementation. *Id*.

On October 5, 1994, Siegelman then passed along Nolan's recommendation to Gates,

Silverberg and Maritz among others, stating that his team had fully researched the impact of the

decision on Marvel, and that the "bottom line is that there is only 1 solution that doesn't cause huge

risk to the Marvel project: using the Chicago implementation of IShellBrowser." *See* PX0220 at

MX 5103184. According to Siegelman, other options would require the Marvel team to write

"significant code" and perform testing, and could jeopardize Marvel making the Chicago launch

date. *Id*. Siegelman felt that there were only two reasonable options for Marvel, either (1) overturn

the decision not to publish the namespace extensions and allow Marvel to continue to use the

interfaces or (2) don't publish the namespace extension interfaces, but continue to allow Marvel to

use them. *Id*. The third option, having Marvel "[c]reate a private version of [the namespace

extension interfaces]" was described by Siegelman as "lunacy." *Id*. at MX 5103184-85.

In response to Siegelman's e-mail, Brad Silverberg argued that Microsoft should do the

first option and "make the extensions public." *Id*. at MX 5103184. Silverberg states:

> I am afraid that when we tell ISV's, there will be a firestorm of protest. I
> heard today that the Outside-In people (SCC), from whom we've licensed our
> viewers, are building their business based on shell extensions…Other ISV's

> using the extensions are *WordPerfect*, Lotus, Symantec and Oracle. These
> companies will not be bashful about expressing their displeasure. *It will play
> out, I predict, on page one of the weeklies, lead to calls for the DOJ to
> investigate, etc.* We have not yet figured out how to really take them out, as
> the shell needs them itself. We can't just not document, because (a) the doc
> is already out, and (b) they will just get reverse engineered.

PX0220 at MX 5103184 (emphasis added).

However, Microsoft did not reverse the decision and Marvel was permitted to continue to use the interfaces. Paul Maritz informed Gates that "there is no way they can move off the current interfaces and still have a chance of shipping with Win'95," and that as a result, Microsoft would not disable the interfaces, but would not document the interfaces. *See* PX0530 at MX 6025435. Applications such as Marvel that continued to use the interfaces would open into a separate window, to "appear to be separate apps" not using the interfaces, but Marvel and Capone would still be executing in process. *See* PX0543 at MX 5067022; PX0530 at MX 6025435.

On October 10, 1994, Satoshi Nakajima, an inventor of the namespace extension interfaces, sent an e-mail indicating changes being made to the shlobj.h header-file in the Windows 95 Software Development Kit. PX0224 at MS98 0103243. Nakajima wrote, "[b]ased on the recent decision, we are hiding one of [the] shell extension mechanisms…I marked all those interfaces and definitions ';Internal' so that we don't put them in the SDK header files any more. [Outside development] partners will receive these new headers (shlobj.h and shlguid.h) before M7 release." *Id*. Nakajima noted that because of the decision, the following changes were made to Windows 95 interfaces: "IShellFolder" and "IEnumIDList" became "read-only" and could not be implemented in a customized way, and the "name space extension mechanism," which consisted of "IShellBrowser," "IShellView," "IPersistFolder," "ICommDlgBrowser" became private. *Id*. In

Microsoft's next M7 beta release, the shlobj.h SDK header file contained no documentation on the namespace extension mechanism, and the interfaces were no longer supported by Microsoft. *See generally* PX0227.

By October 12, 1994, Microsoft's Developer Relations Group had worked up a plan of action for "going to our ISVs and telling them about BillG's recent decision to return the namespace extension API's to their original system-level status." PX0225 at MX 6055840. The plan warned people to not "use the word *undocumented* or private API's" and "[t]his has a negative connotation to most ISVs." *Id*. The document instructed people to contact ISV's by the end of the day to inform them of Gates' decision, stating that Microsoft had "changed the status of the API's which allow objects to be represented in the explorer as if they were part of the Windows 95 namespace." *Id*. The document indicated that this kind of functionality could be seen in InfoCenter (Capone) and with Marvel, but warned people to "NOT MENTION MARVEL IN ANY OF YOUR CONVERSATIONS." *Id*.

The instructions also contained a call script, that was to be used when communicating the decision to the ISV community. The script stated the following:

> There is a set of APIs which allows you to extend the explorer visually in a manner that makes an application look as though it were a system-level hierarchical component…We have taken a hard look at these APIs and because it makes it very difficult for us to support our long-term objectives with the Windows shell we have decided to return these interfaces back to their system-only status. *This means that if you are using these API's you should stop.* The API's affected are: IShellBrowser, IShellView, ICommDlgBrowser, and IPersistFolder. These allowed for the CREATING (rather than browsing) of the shell's namespace (file system, net, control panel(…) and for extending the namespace in general.

PX0225 at MX 6055841.

The Developer Relations Group plan of action also included a Question & Answer ("Q&A") document that was to be used as a reference and guide regarding how to answer questions from the ISVs related to Gates' decision to take out the namespace extension APIs. If an ISV asked what the "penalty" would be if they continued to use the interfaces and documentation that was provided in M6, the sample answer instructed Microsoft staff to tell ISV's that Microsoft would:

> not arbitrarily change [the] interfaces, but because of how tightly [the] interfaces are tied to internals of the shell, [Microsoft] cannot guarantee ISVs that try to call into them will work in future releases of Windows 95 (*or even between interim beta builds*). There will be no support for ISVs who use this. It will be completely at their own risk.

PX0225 at MX 6055844 (emphasis added).

Adam Harral discovered that Microsoft had withdrawn the namespace extensions after a call to Microsoft's Premier support sometime in the October time frame. Tr. at 331:24-332:10. After inquiring on a couple of issues that he needed clarification on related to the WordPerfect file open dialog and some of the namespace, he was told by Premier Support that the namespace extensions were no longer something that they could discuss. *Id*.

The shlobj.h header file that eventually shipped with the M7 beta did not contain the full documentation of the namespace extension interfaces. Instead, all references to the namespace extension mechanism had been removed. *Compare* PX 181 to PX 227; Tr. at 332:11-333:2. The ability of WordPerfect to present its namespaces in the Windows 95 shell, to negotiate where it was going to place its namespace items, and to enhance the Microsoft common file open dialogs, was missing. Tr. at 333:3-333:9 (Harral).

4. Microsoft's Deceptive Scheme To Eliminate WordPerfect Was Deliberate and Premeditated

The evidence shows that Microsoft's conduct regarding the namespace extension APIs was a premeditated deception that Microsoft executed for the purpose of harming Lotus and Novell. Microsoft's deceptive scheme had an anticompetitive effect on the market and "dramatically widen[ed] the moat that protects [Microsoft's] operating system business." *See Novell, Inc. v. Microsoft Corp.*, 505 F.3d 302, 310 n.15 (4th Cir. 2007).

The evidence shows that Microsoft planned from the start to deceive Novell regarding the namespace extension APIs. As mentioned earlier, Microsoft held an Executive Retreat at Mr. Gates' home at Hood Canal in June of 1993. *See* PX0047. At that retreat, Mr. Gates was shown a presentation by Mike Maples, Jon Lazarus, Tandy Trower, Steve Madigan, David Cole, Chris Graham, Ed Fries and Nathan Myhrvold. *See* PX0051. In an apparent attempt to hide the presentation from outside scrutiny, the slide show was labeled: "Note: *Client-Attorney* Privileged Material." *Id.* at MS-PCA 2535283. However, none of the members on the team who gave the presentation was an attorney, and most were executives from either Microsoft's applications division or systems division.

One of the slides presented a proposal entitled "**The Radical Extreme: The Office Shell.**" *Id.* at MS-PCA 2535292. The "Basic Approach" presented was to "[h]old extensible shell for Office," Microsoft's suite of office productivity applications. *Id.* In order to preserve this differentiation feature for Office, the Chicago shell (Windows 95) would be "non-extensible." *Id.* The prepared excuse to be offered ISV's for Chicago being non-extensible was that "we couldn't get it done in time." *Id.* (emphasis added).

On June 14, 1993, Dennis Adler, a Chicago Program Manager, sent notes from the Hood Canal Executive Retreat to Brad Silverberg, the Microsoft Vice-President responsible for Chicago, and David Cole, the Group Program Manager for Chicago. *See* PX0052. The notes confirm that Mr. Gates himself approved the Office Shell scheme: "Ship extensible shell in Office!!!" – "Billg sez do it!" *Id.*

This evidence is confirmed by a document entitled "Office Shell Ideas and Issues," dated July 3, 1993, and authored by Chris Graham, one of the team members who had developed the "Radical Extreme" plan. *See* PX0061. Mr. Graham states that the plan "originated at a senior technical retreat at Hood Canal in June/93." *Id.* at MS 0097121. The plan calls for an enhanced Windows shell to be bundled with the next major version of Office to ship after Chicago. "The Office shell would be functionally a superset of the Chicago shell." *Id.* It would be only after the Office shell ships that the enhanced shell would become the next standard Windows shell for both Chicago and Cairo (Windows NT). *Id.* The new shell would not be "initially available with Windows itself." Mr. Graham expressly states the motivation for this plan:

> ➢ "Office gets a big jump on competition in creating apps optimized for the new shell." *See* PX0061 at MS 0097122.

> ➢ "We could gain a much bigger advantage from the Office shell. We could pull off the 'UI Paradigm shift' to document centricity possibly two years sooner than if we did not follow this plan . . . . This would give us a very significant lead over our competitors, and make our competitors' products look 'old.'" *Id.* at MS 0097123.

With Mr. Gates' approval of the Office Shell Plan in place, Microsoft's Systems Group, together with the Developer Relations Group (DRG) at Microsoft, began to evangelize the benefits

of Chicago and the namespace shell extensibility APIs that Mr. Gates had already decided he was going to deny all ISVs.

Bill Gates' intent to attack and destroy Novell/WP is further demonstrated by PX0482, an internal Microsoft e-mail dated April 1994 from Mike Murray to Bill Gates, with the subject "Novell/WP." In the e-mail, Murray states to Gates: "At yesterday's Exec Staff meeting you asked what else could be done to *attack Novell/WP*….I suggested that we should lock up the LDS Church (and BYU)…we would inflict an incredible amount of FUD…" *See* PX0482 at MS98 0185989.

Then, on October 3, 1994, "very late" into the development process of Windows 95, and after Novell had relied to its significant detriment on Microsoft's previous misrepresentations, Mr. Gates announced the decision to de-document the namespace extension APIs. *See* PX0001. In Mr. Gates' view, this would give Microsoft Office '96 a real advantage, and help "Office '96 sell better because of the shell integration work…" *Id.*

Moreover, evidence appears in the record that Microsoft was working on an Office Shell for Office 96 called the Office Explorer, and that this shell was using the same namespace extension APIs that Gates de-documented after the de-documentation. *See* PX0231 at MX 1189913; *see also* PX0379 at MS-PCA 1566800-01.

The only reasonable conclusion that can be drawn from this evidence is that Bill Gates executed the Chris Graham Office Shell Plan to withhold functionality from ISVs for Microsoft's own competitive advantage, and then took that scheme a step further into the realm of deliberate deception when he and his top executives told ISVs, including WordPerfect, that Microsoft would publish and document the namespace extension interfaces (*see* PX0105) – when Gates knew all along that he had planned to keep the interfaces for Microsoft's exclusive use.

This conclusion is bolstered by an examination of the similarities between the "Radical Extreme" plan outlined at Hood Canal in June 1993 and approved by Mr. Gates and Mr. Gates' announcement of the decision to de-document the namespace extensions in October of 1994:

The "Radical Extreme" Plan, June 1993	Gates Announcement, Oct. 1994
"Chicago Ships. Shell has limited extensibility" "Chicago + 6 Months – Office ships with optimized shell . . . Pros: Office gets a big jump on competitors in creating apps optimized for the new shell" "Sometime after Office ships – Cairo ships with a shell that is a superset of the Office shell . . . When Cairo ships – Enhanced Shell added to Chicago"	"I have decided that we should not publish these extensions." "Our goal is to have Office '96 sell better because of the shell integration work." "Our goal is to . . . have the Ren/Office effort yield technology that can be an integral part of the shell in Windows '97." "We should wait until we have a way to do a high level of integration that will be harder for the likes of Notes, WordPerfect to achieve, and which will give Office a real advantage . . . We can't compete with Lotus and WordPerfect/Novell without this."
See PX0061.	*See* PX0001.

A reasonable jury could easily conclude, based upon the evidence, that this was not competition on the merits, but a deliberate deception by Microsoft designed to lure WordPerfect down a path, and then spring a preexisting plan. Thus, a reasonable jury could conclude from these facts that Microsoft engaged in anticompetitive conduct.

5. Microsoft's Conduct Against Novell Was Part Of A Scheme To Eliminate Potential Threats

The Government Case established that Microsoft engaged in a broad pattern of unlawful conduct during the 1990s with the purpose and effect of thwarting emerging threats to its powerful

and well-entrenched operating system monopoly. *See generally United States v. Microsoft Corp.*,

253 F.3d 34 (D.C. Cir. 2001). Most prominent among the threats discussed in the Government Case

was the threat posed by Netscape Navigator and Java, two types of middleware products that were

determined to have the potential to weaken the applications barrier to entry protecting Microsoft's

monopoly power. Findings of Fact ¶¶ 70, 74, 75, 77.

However, *all* middleware, including Novell's AppWare and PerfectFit shared code

technologies, had the potential to form the center of an emerging middleware platform that could

have helped erode the high applications barrier to entry that protects Microsoft's monopoly.

Finding of Fact ¶ 68 (noting that "Microsoft was concerned with middleware as a category of

software; each type of middleware contributed to the threat posed by the entire category.").

Microsoft acted quickly during the 1990s to destroy this evolving middleware threat to its "desktop

paradise," by embarking on a predatory campaign against *any* actual or potential middleware threats

to its operating system monopoly, including Intel's Native Signal Processing, Apple's QuickTime,

and Novell's WordPerfect word processor and PerfectOffice suite (which included AppWare).

Mr. Gates took aim at WordPerfect by de-documenting the namespace extension

interfaces, because Microsoft could not "compete with Lotus and WordPerfect/Novell" without an

uneven playing field. *See, e.g.*, PX0001. In fact, Microsoft could only win against Lotus Notes and

Novell/WordPerfect if it took away functionality it had promised in order to gain a strategic

advantage in the area of shell integration, which Gates felt would help future versions of Office '96

sell better. *Id*.

Microsoft's predatory campaign against middleware threats during the 1990s was a

success from Microsoft's standpoint. Microsoft's actions destroyed WordPerfect, thwarted the

distribution of Netscape, and prevented the successful development of alternative platforms that

could have eroded its Windows monopoly and given consumers greater choice. In other words,

Microsoft prevented consumers from getting what they wanted so that Microsoft could keep what it

had, a monopoly in operating systems.

Because of Microsoft's anticompetitive conduct in this case, personal computer

consumers are locked into a Microsoft-only world. By gaining control of the "key franchise" of

word processing, Microsoft widened the moat protecting its operating system monopoly.

C.   The Court Should Not Limit The Temporal Scope Of Evidence Of Harm To Competition

Microsoft's conduct against Novell harmed competition because WordPerfect and

Quattro Pro were nascent cross-platform threats to Microsoft's operating system monopoly, and

Microsoft's elimination of a large number of such nascent threats enabled it to enhance the

applications barrier to entry and maintain its operating system monopoly. Competition was thus

harmed by Microsoft's entire course of conduct against nascent middleware and cross-platform

threats—a course of conduct that lasted well beyond Novell's sale of the PerfectOffice suite in

March 1996.

Professor Noll's testimony at trial, like his reports that were before this Court on

summary judgment, demonstrated harm to competition in part by examining Microsoft's course of

conduct in destroying the multiple cross-platform threats that could otherwise have eroded its

operating system monopoly. Tr. at 1763:14-1828:23; *see Novell,* 699 F. Supp. 2d. at 749. That

methodology has been expressly endorsed by the Fourth Circuit as a valid basis for "a finding that

Microsoft's actions toward Novell were a significant contributor to anticompetitive harm in the PC

operating system market *in light of the weakened state of other applications and [independent software vendors].*" *Novell*, 429 F. App'x at 262-63 (emphasis in original). And this Court has ruled that Professor Noll's conclusion that "there was anticompetitive harm caused by the combination of the conduct directed at Novell's software applications and the anticompetitive conduct directed at Netscape, Java, and other third party applications," is sufficient to demonstrate injury to Novell cognizable under the antitrust laws notwithstanding the impossibility of separating out the specific harm to competition caused by Microsoft's actions against Novell alone. *Novell*, 699 F. Supp. 2d at 749-50.

There is no valid reason to restrict the jury's consideration of evidence postdating Novell's sale of WordPerfect and Quattro Pro. Such evidence is relevant not only to show Microsoft's motive, intent, preparation, plan, and knowledge, as the Court's previous rulings have expressly recognized, *see* Oct. 4, 2011 Mem. to Counsel (Dkt. #163), but also to demonstrate the anticompetitive effect of Microsoft's scheme to eliminate the competitive threats posed by Novell, Netscape, Sun, and other producers of cross-platform applications and middleware.

As this Court has recognized, "[i]t would be contrary to the purpose of § 2 to immunize a monopolist for anticompetitive conduct, which in fact significantly contributed to anticompetitive harm, simply because that harm was caused by conduct directed at multiple small threats, none of which could prove that the conduct directed at any single firm would have by itself significantly contributed to the defendant's monopoly if none of the other small firms had been similarly weakened." *Novell*, 699 F. Supp. at 749; *see also Microsoft II*, 253 F.3d at 79 ("[I]t would be inimical to the purpose of the Sherman Act to allow monopolists free reign to squash nascent, albeit unproven, competitors at will—particularly in industries marked by rapid technological advance

and frequent paradigm shifts."). As the Third Circuit stated in *LePage's*, "[t]he relevant inquiry is the anticompetitive effect of [the defendant's] exclusionary practices considered together. . . . [T]he courts must look to the monopolist's conduct taken as a whole rather than considering each aspect in isolation." *LePage's v. 3M (Minn. Mining & Mfg. Co.)*, 324 F.3d 141, 162 (3d Cir. 2003) (*en banc*); *see, e.g.*, *City of Anaheim v. S. Cal. Edison Co.*, 955 F.2d 1373, 1376 (9th Cir. 1992) ("It would not be proper to focus on specific individual acts of an accused monopolist while refusing to consider their overall combined effect. . . We are dealing with what has been called the 'synergistic effect' of the mixture of the elements."); *Mishawaka v. Am. Elec. Power Co.*, 616 F.2d 976, 986 (7th Cir. 1980) ("[The defendant] would have us consider each separate aspect of its conduct separately and in a vacuum. If we did, we might agree with [the defendant] that no one aspect standing alone is illegal. It is the mix of the various ingredients of utility behavior in a monopoly broth that produces the unsavory flavor." (internal quotation, alteration, and citation omitted)); *Caldera, Inc. v. Microsoft Corp.*, 72 F. Supp. 2d 1295, 1313 (D. Utah 1999) ("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.").

Because Novell was an early victim of Microsoft's anticompetitive scheme, by the time Microsoft had destroyed the threats posed by WordPerfect and Quattro Pro, Microsoft had not yet fully extended its conduct to any number of other middleware and cross-platform threats. Thus, Microsoft's conduct against Novell had not yet caused its full anticompetitive effect because that

course of conduct had only begun to damage other nascent threats such as Navigator and Java. For

that reason, Microsoft has argued on the one hand that Novell cannot demonstrate that Microsoft's

conduct against Novell itself caused contemporaneous anticompetitive harm, Microsoft Mot.

Summ. J. 26, Dkt. No. 101-2 (Case 1:05-cv-01087-JFM D. Md.), and on the other that the jury

should not be permitted to consider Microsoft's conduct as to Netscape and Sun because it

supposedly is irrelevant to demonstrating the contemporaneous effect of its conduct toward Novell,

Microsoft Mot. in Limine To Preclude Evid. re Netscape & Java 7-8 (Dkt. #101).

Microsoft's argument urges the Court to adopt an erroneous requirement that the

anticompetitive effect of its actions must be contemporaneous with those actions in order to be

actionable. Microsoft's argument ignores this Court's holding that under the "contributed

significantly" standard, Novell need not present direct proof that Microsoft's "'continued monopoly

power is precisely attributable to its anticompetitive conduct'" against Novell, for to require such

proof would require that Section 2 liability "'turn on a plaintiff's ability or inability to reconstruct

the hypothetical marketplace absent a defendant's anticompetitive conduct.'" *Novell*, 699 F. Supp.

2d at 748 (quoting *Microsoft II*, 253 F.3d at 79). Assessing a monopoly maintenance claim under §

2 of the Sherman Act—particularly in the technology sector—is often forward-looking and

predictive, because the central concern of the antitrust laws in such cases is whether the

exclusionary conduct at issue will enable the monopolist to maintain its dominant position in the

future, which often cannot be ascertained at the moment the conduct occurs. *See, e.g.*, *Microsoft II*,

253 F.3d at 79.

Where a plaintiff seeks to show that a defendant's anticompetitive scheme was in fact

successful, it is commonplace for the finder of fact to consider evidence of the defendant's conduct

that postdates the conduct directed toward the plaintiff. For example, plaintiffs alleging monopoly

maintenance via predatory pricing often use evidence of the defendant's subsequent conduct to

demonstrate actual recoupment after the pricing scheme succeeded in driving the plaintiff from the

marketplace. *See, e.g.*, *Spirit Airlines v. Northwest Airlines*, 431 F.3d 917, 931, 935-36 (6th Cir.

2005) (assessing defendant's conduct during the period after the predatory scheme had forced

plaintiff from the market to ascertain whether the scheme had an anticompetitive effect); *Zapata*

Gulf Marine Corp. v. Puerto Rico Maritime Shipping Auth., No. 86-2911, 1989 U.S. Dist. LEXIS

13650, at *5-9 (E.D. La. Nov. 15, 1989) (evidence, postdating plaintiff's withdrawal from market,

of (1) demise of subsequent would-be competitors, and (2) subsequent increase in defendants'

prices, was relevant to whether earlier conduct directed at plaintiff was anticompetitive); *see also*

e.g., *Westwood Lumber Co. v. Weyerhaeuser Co.*, No. CV 03-551-PA, 2003 U.S. Dist. LEXIS

27213, at *13 (D. Or. Dec. 29, 2003) ("The Westwood Plaintiffs could offer evidence of

Defendant's earlier conduct bearing upon the period at issue in this case, for instance, to show

Defendant's intent to monopolize, its possession of monopoly power and ability to influence prices,

the manner in which Defendant obtained and maintained its monopoly, and the harm to

competition."), *aff'd*, 411 F.3d 1030 (9th Cir. 2005), *vacated and remanded on other grounds*, 549

U.S. 312 (2007); *cf. Morgan v. Ponder*, 892 F.2d 1355, 1358 (8th Cir. 1989) (considering

defendant's post-conduct pricing behaviors and profits in assessing anticompetitive effect, but

rejecting them as independent bases to conclude competition had been harmed, as plaintiff lacked

evidence that defendant had priced below an appropriate measure of cost).[7]

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[7] As we already have made clear, Novell will not use this evidence in support of its damages claim, which is limited to the period from June 24, 1994 through March 1, 1996. But whether the evidence is admissible to show damages is a different question from whether it is relevant—and necessary—

The need for the jury to consider evidence of conduct postdating the conduct directed toward the plaintiff is even stronger in this case. Without such evidence, the jury would be unable to appreciate fully the state of the market after Microsoft had eliminated the threat posed by Novell's software, because the fact that Microsoft was in a position to destroy the threats posed by Navigator and Java is itself reflective of the strengthening of Microsoft's operating system monopoly that was achieved in significant part by its elimination of the earlier threat posed by Novell.

D. The Reasonably Capable Standard Is Appropriate

On the question of harm to competition and unlawful maintenance, this Court engaged in a thorough analysis of Dr. Noll's testimony and concluded that "[a] reasonable person may disagree with Dr. Noll, but the decision whether or not to do so is within the province of a jury." *Novell*, 699 F. Supp. 2d at 749-50. In so ruling, this Court held that Novell must introduce evidence to show that the conduct "contributed significantly" to Microsoft's monopoly maintenance. *Id.* at 748. But the Court applied the quoted phrase consistent with the D.C. Circuit in the Government Case such that Novell meets its burden of proof if it shows that the conduct was "'reasonably capable of contributing significantly'" to Microsoft's "'continued'" monopoly power. *Id.* (quoting *Microsoft II*, 253 F.3d at 80, and citing *Data Gen. Corp. v. Grumman Sys. Support Corp.*, 36 F.3d 1147, 1182 (1st Cir. 1994), *abrogated on other grounds by Reed Elsevier, Inc. v. Muchnick*,

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to show the anticompetitive effects of the defendant's anticompetitive scheme. *See, e.g.*, *Westwood Lumber Co.*, 2003 U.S. Dist. LEXIS 27213, at *13-14 ("[The fact that] Plaintiffs may be unable to recover damages for injuries inflicted prior to 1999 does not automatically render defendant's pre-1999 conduct inadmissible, nor impair the preclusive effect of the [prior] verdict on the question of whether Defendant possessed a monopoly in the alder sawlog market through 2001. Plaintiffs still must prove that Defendant continued to possess monopoly power in 2002, as that question is beyond the scope of the [prior] verdict.").

130 S. Ct. 1237 (2010)); *Morgan v. Ponder*, 892 F.2d 1355, 1361-63 (8th Cir. 1989). Thus, this

Court, and presumably the Fourth Circuit, actually applied the "reasonably appears capable"

standard used in *United States v. Microsoft Corp.*, that the evidence must show that the conduct was

"'reasonably capable of contributing significantly'" to maintenance of a monopoly. *Novell*, 699 F.

Supp. 2d at 748 (quoting *Microsoft II*, 253 F.3d at 80); *compare with Microsoft II*, 253 F.3d at 79

("'reasonably appears capable of making a significant contribution to . . . maintaining monopoly

power'" (alteration in original) (citations omitted)). Microsoft has argued that this standard should

be limited only to equitable enforcement actions, but there are more than a dozen private action

cases that use the "reasonably capable" standard,[8] and Novell is not aware of any that apply a

stricter test. Most importantly, the Tenth Circuit endorses the "reasonably capable" formulation.

Multistate Legal Studies, Inc. v. Harcourt Brace Jovanovich Legal & Prof'l Publ'ns, Inc., 63 F.3d

1540, 1550 (10th Cir. 1995).

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[8] *See, e.g.*, *Taylor Publ'g Co. v. Jostens, Inc.*, 216 F.3d 465, 475 (5th Cir. 2000); *PSI Repair Servs., Inc. v. Honeywell, Inc.*, 104 F.3d 811, 822 (6th Cir. 1997); *Town of Concord, Mass. v. Boston Edison Co.*, 915 F.2d 17, 21 (1st Cir. 1990); *Morgan v. Ponder*, 892 F.2d 1355, 1363 (8th Cir. 1989) (cited in the Government Case); *S. Pac. Commc'ns Co. v. Am. Tel. & Tel. Co.*, 740 F.2d 980, 999 n.19 (D.C. Cir. 1984); *Barry Wright Corp. v. ITT Grinnell Corp.*, 724 F.2d 227, 230 (1st Cir. 1983) (Breyer, J.) (cited in the Government Case); *Data Gen. Corp. v. Grumman Sys. Support Corp.*, 36 F.3d 1147, 1182 (1st Cir. 1994) (cited by this Court in its summary judgment decision); *Instructional Sys. Dev. Corp. v. Aetna Cas. & Sur. Co.*, 817 F.2d 639, 649 (10th Cir. 1987); *Hertz Corp. v. Enter. Rent-A-Car Co.*, 557 F. Supp. 2d 185, 193 (D. Mass. 2008); *Cytologix Corp. v. Ventana Med. Sys., Inc.*, Nos. 00-12231-RWZ, 01-10178-RWZ, 2006 WL 2042331, at *4 (D. Mass. July 20, 2006); *Z-Tel Commc'ns, Inc. v. SBC Commc'ns, Inc.*, 331 F. Supp. 2d 513, 522 (E.D. Tex. 2004); *Nobody in Particular Presents, Inc. v. Clear Channel Commc'ns, Inc.*, 311 F. Supp. 2d 1048, 1105 (D. Colo. 2004); *Lantec, Inc. v. Novell, Inc.*, 146 F. Supp. 2d 1140, 1145 (D. Utah 2001); *Hewlett-Packard Co. v. Boston Scientific Corp.*, 77 F. Supp. 2d 189, 197 (D. Mass. 1999); *CTC Commc'ns Corp. v. Bell Atl. Corp.*, 77 F. Supp. 2d 124, 144 (D. Me. 1999); *Wichita Clinic, P.A. v. Columbia/HCA Healthcare Corp.*, No. 96-1336-JTM, 1997 WL 225966, at *7 (D. Kan. Apr. 8, 1997). Novell could supply the Court with additional decisions upon request.

In *Multistate*, a provider of Bar review courses challenged conduct of the dominant

supplier and its licensee of engaging in various acts to exclude it from the market. *Id.* at 1543. The

Tenth Circuit stated that it defines anticompetitive conduct as "'conduct constituting an abnormal

response to market opportunities. Predatory practices are illegal if they impair opportunities of

rivals and are not competition on the merits or are more restrictive than reasonably necessary for

such competition,' if the conduct appears 'reasonably capable of contributing significantly to

creating or maintaining monopoly power.'" *Id*. at 1550 (citation omitted). The Tenth Circuit

applied this test to the various acts, including the dominant supplier's decision to schedule its

classes at times that made it difficult for students to also attend classes provided by the rival. *Id.* at

1550-56. The rival scheduled its workshop from 9 a.m. to 4 p.m., and the monopolist held its

classes from 6 p.m. to 9 p.m. *Id.* at 1552-53. The monopolist argued that, to be actionable, the

schedule had to make it "impossible" for students to take both sets of classes. *Id.* at 1553. The

Tenth Circuit disagreed, ruling that "[w]hat matters is not so much whether the classes actually

overlapped as whether the scheduling pattern was ***reasonably capable of contributing significantly***

to a monopolization attempt . . . ." *Id.* (emphasis added). Thus, the analysis of harm to competition

is inherently forward looking – unlike the separate question of harm to the plaintiff – and may be

based on events that occur after the plaintiff goes out of business or sells its business.

In *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 608 (1985), for

example, the United States Supreme Court upheld jury instructions that allowed the jury to consider

whether the monopolist sacrificed short-run benefits to reduce competition "over the long run."[9] If

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[9] Similarly, in predatory pricing cases, the monopolist lowers prices in the short term to eliminate
competition and later recoups its short-term losses through price increases. In exclusive dealing
cases, the harm to competition is the foreclosure of *potential* competition. *United States v. Dentsply*

a monopolist successfully eliminates a competitor or forces the competitor to sell, the law must

allow the victim to show that the conduct, including the victim's exclusion, would have affected

competition in the relevant market.

This Court correctly held that under its "contributed significantly standard," Novell need

not present direct proof that Microsoft's "'continued monopoly power is precisely attributable to its

anticompetitive conduct'" and explained that to "require such proof would 'require that § 2 liability

turn on a plaintiff's ability or inability to reconstruct the hypothetical marketplace absent a

defendant's anticompetitive conduct[,]' which 'would only encourage monopolists to take more and

earlier anticompetitive action'" to eliminate potential threats. *Id.* (alteration in original) (quoting

Microsoft II, 253 F.3d at 79). When a monopolist engages in anticompetitive conduct, courts

"should be reluctant to demand too much certainty in proving that such conduct caused

anticompetitive harm because '[t]o some degree, "the defendant is made to suffer the uncertain

consequences of its own undesirable conduct."'" *Id.* (alteration in original) (quoting *Microsoft II*,

253 F.3d at 79).

Finally, the Court accepted Dr. Noll's 1,000 firm hypothetical and wrote that "[i]t would

be contrary to the purpose of § 2 to immunize a monopolist for anticompetitive conduct, which in

fact significantly contributed to anticompetitive harm, simply because that harm was caused by

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Int'l, Inc., 399 F.3d 181, 191 (3d Cir. 2005). Tying and bundling arrangements are condemned because a monopolist exerts power in one market to erect barriers to entry in another market that may exclude *potential* competition. *See, e.g.*, *Fox Motors, Inc. v. Mazda Distributors (Gulf), Inc.*, 806 F.2d 953, 957 (10th Cir. 1986); *LePage's Inc. v. 3M*, 324 F.3d 141, 155 (3d Cir. 2003). In the Government Case, the fact that AOL acquired Netscape in late 1998 did not factor at all into the analysis of the future harm to competition caused by Microsoft's anticompetitive conduct. Indeed, the U.S. Supreme Court observed in *Blue Shield of Virginia v. McCready*, 457 U.S. 465 (1982), that a § 4 plaintiff "need not 'prove an actual lessening of competition in order to recover. [C]ompetitors may be able to prove antitrust injury before they actually are driven from the market and competition is thereby lessened.'" *Id.* at 482 (alteration in original) (citation omitted).

conduct directed at multiple small threats, none of which could prove that the conduct directed at

any single firm would have by itself significantly contributed to the defendant's monopoly if none of

the other small firms had been similarly weakened." *Id.* at 749. The Court's view is consistent with

the Sherman Act's purpose to prevent monopolists from unlawfully wielding their market power to

eliminate potential threats to competition. *See Microsoft II*, 253 F.3d at 79 ("[I]t would be inimical

to the purpose of the Sherman Act to allow monopolists free reign to squash nascent, albeit

unproven, competitors at will – particularly in industries marked by rapid technological advance

and frequent paradigm shifts.").

   As shown, Microsoft cannot support its assertion that the "reasonably appears capable"

standard is limited to equitable actions. Indeed, although the D.C. Circuit noted that the

Government Case was an equitable enforcement action, it cited two damages cases for its

"reasonably appears capable" standard and emphasized that it was only considering "§ 2 *liability*"

(emphasis in original). The D.C. Circuit explained that in order to obtain the equitable remedy of

divestiture, the Government may have to prove a more significant connection between the conduct

and the maintenance of market power, but "these queries go to questions of remedy, ***not liability***. In

short, causation affords Microsoft no defense to liability for its unlawful actions undertaken to

maintain its monopoly in the operating systems market." *Id.* at 80 (emphasis added).[10]

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[10] Even the lone authority on which Microsoft has relied, *Areeda*, fails to support its position.
Microsoft has quoted a single sentence out of context: "[I]t [is] critical that treble damage remedies
be strictly limited to those aspects of a plaintiff's injury that were in fact caused by an unlawful
exploitation of market power or an unlawful quest for such power in attempt cases." 3 Phillip E.
Areeda & Herbert Hovenkamp ¶ 657a (3d ed. 2011). The quote is taken from a larger academic
discussion of the potential that a monopolist might be held liable for damages for a "reasonable but
mistaken judgment that it was doing nothing unlawful." In the same paragraph from which
Microsoft takes its quote, Areeda continues: "[I]t is well established that the damage plaintiff must
demonstrate not only that the defendant has violated the antitrust laws, but also that the plaintiff's

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Notably, the Fourth Circuit indicated that it would have granted standing to Netscape

and Sun to pursue damage claims. Microsoft admits that, for its position to be correct, neither

Netscape or Sun would have been able to pursue a private damages claim, which would completely

undermine the purpose of Clayton Action Section 4.[11] The Supreme Court has recognized that "in

enacting § 4[,] Congress sought to create a private enforcement mechanism that would deter

violators and deprive them of the fruits of their illegal actions, and would provide ample

compensation to the victims of antitrust violations." *Novell v Microsoft* 505 F.3d at 317 (quoting

McCready, 457 U.S. at 472). The broad language of the statute, "and the avowed breadth of the

congressional purpose, caution[ ] us not to cabin § 4 in ways that will defeat its broad remedial

objective." *Id*. at 477, 102 Sect. 2540.

In fact, where a plaintiff seeks to show that a defendant's anticompetitive scheme was in

fact successful, it is commonplace for the finder of fact to consider evidence of the defendant's

conduct that postdates the conduct directed toward the plaintiff. *See, e.g.*, *Spirit Airlines*, 431 F.3d

at 931, 935-36; *Zapata Gulf Marine Corp. v. Puerto Rico Maritime Shipping Auth.*, 1989 U.S. Dist.

LEXIS 13650, at *5-*9; *see, e.g.*, *Westwood Lumber Co. v. Weyerhaeuser Co.*, 2003 U.S. Dist.

LEXIS 27213, at *13.

1.   Microsoft's Conduct Effected Lotus (and later IBM)

Another middleware product that Microsoft targeted was Lotus Notes. Notes is

groupware, which is a popular category of software that provides the kind of collaboration tools that

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business or property in fact suffered compensable injury as the result of that violation . . . . ***Proper
adherence to that principle would moderate the treble damage consequences of finding
'exclusionary' conduct*." *Id.* (emphasis added).

[11] *Novell*, 505 F.3d at 314 n.22.

enterprises use. Tr. at 1402:23-1403:8 (R. Alepin). Groupware products like Lotus Notes included

functionality such as e-mail/messaging, calendaring, scheduling, contact management, and

document libraries. Tr. at 1402:23-1403:8 (R. Alepin). Lotus Notes and groupware products were

development platform to which other development applications could write. Tr. at 1404:1-14 (R.

Alepin). In particular, Lotus Notes acted as a middleware development platform throughout the

1990s and up through the present, as it provided a "complete set of tools to develop applications for

independent software vendors." Tr. at 1404:15-18 (R. Alepin).

Microsoft perceived Lotus Notes as a threat to its operating systems monopoly. For

example, one Microsoft executive stated in April 1992 that "Lotus is effectively using Notes . . . to

challenge both our desktop applications and systems businesses." PX 17, at MS 0076890. The

same document notes that "Notes is being sold not just as an application, but as an operating system

itself, establishing competitive APIs to the native Windows APIs." PX 17, at MS 0076890.

Similarly, a March 1993 Microsoft memorandum stated that Lotus Notes "attacks [Microsoft's]

systems business by relegating Windows to the OS level and taking over the middleware and shell

functionality – Notes is the portable platform, not Windows." PX 31, at FL AG 0034585. Finally,

in April 1993, another Microsoft executive recognized Notes as a "Danger," describing it as "the

combination of an app (Notes) that leverages a platform (Notes)." PX 33, at MS 5011635.

To combat the threat of Lotus Notes, Microsoft used its Messaging Application

Programming Interface ("MAPI") as a fulcrum. MAPI is a set of APIs "that allow independent

software vendors and Microsoft to access and use the services of messaging software in an

operating system." Tr. at 1444:13-21 (R. Alepin). Depending on the context, MAPI may refer to

the "APIs themselves or it may be the software that actually does the work that the APIs as the software to do." Tr. 1444:13-21 (R. Alepin).

The fundamental concept of MAPI is to connect desktop applications with mail servers, regardless of the vendor that developed each product. Using a desktop application to invoke an e-mail or messaging command – like "send" – MAPI relays the information the user wants sent through the MAPI middleware in the operating system, which then routes the information to the appropriate server product needed, and more specifically, to the particular function of the server being invoked (i.e., transporting the message or identifying the recipient). *See* Tr. at 1445:17-1447:4 (R. Alepin).

The computer industry relies on standards because standards define the way that two products from potentially different companies can work together. Tr. at 1448:11-17 (R. Alepin).[12] MAPI is a set of specifications that make up a standard, and Microsoft is the author of those specifications. Tr. at 1447:5-9 (R. Alepin). Groupware products other than Microsoft's products make use of the MAPI specification. Tr. at 1447:12-16 (R. Alepin). MAPI was initially developed in 1991 and became available for use some time in the early 1990s. Tr. at 1447:25-1448:4 (R. Alepin).

At the time that MAPI was introduced, Lotus Notes was the leading groupware product in the market. Tr. at 1448:5-7 (R. Alepin). Lotus Notes was a development platform that competed

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[12] When standards are "publicly owned by a standards organization" that independently accepts suggestions for additions and considers those suggestions as a group for acceptance, and when "no one company owns the standard," it is called an open standard. Nov. 9, 2011 Tr., at 1449:1-6 (R. Alepin). "Open standards are rules where the process for amending them is not under control of a single company, but rather part of a standards body which adopts the decision according to the rules of the standards organization." Nov. 9, 2011 Tr., at 1449:6-10 (R. Alepin).

with Microsoft both at both an applications and systems level. It was also a cross-platform

application developed to run on multiple operating systems. Tr. at 1450:16-1451:1 (R. Alepin).

During the time that MAPI was being developed and promoted by Microsoft, another standard

existed, called Vendor Independent Messaging ("VIM"). VIM was primarily promoted by Lotus

and certain other ISVs, including Novell. Tr. at 1450:2-15 (R. Alepin).

   To compete with VIM, and to recruit ISVs to build their products with MAPI, Microsoft

told ISVs that MAPI would be "open and would not . . . favor Microsoft in its design or in its

specifications." Tr. at 1451:2-11 (R. Alepin). In light of Microsoft's representations that MAPI

would be an open standard, eventually, Lotus and other ISVs adopted MAPI. Tr. at 1451:12-14 (R.

Alepin).

   In 1994 and 1995, not everyone who bought a Windows PC was connected to the

Internet or a network. Therefore, some portions of Windows were not installed on every computer

until the user undertook to explicitly install that portion. Tr. at 1451:25-1452:17 (R. Alepin).

MAPI was one particular portion of Windows 95 that was not automatically installed if a user did

not actively make the choice. From this perspective, it is important to understand that MAPI is not

only APIs, but also software that is called to implement those APIs. Tr. at 1452:7-12 (R. Alepin).

These functions, which implement the MAPI APIs, are called "when an applications would send

mail inside [a] Windows PC." Tr. at 1452:7-12 (R. Alepin).

   Therefore, if users decided they wanted to use e-mail, they would have to manually

install the MAPI software from the Windows 95 installation disk. Tr. at 1452:17-20 (R. Alepin).

In doing so, not only the MAPI software would be implemented, but it would also "stick an icon on

your desktop that said [Inbox]. And it would do that regardless of whether you were planning on

installing Lotus or cc.Mail or Microsoft Exchange or MS Mail or anything." Tr. at 1452:17-25 (R. Alepin). If you were to click on the Inbox icon, you would be asked to complete setting up Microsoft's mail product, which would "come as a surprise to you, especially if you thought you were preparing to set up Lotus or some other product." Tr. at 1453:3-7 (R. Alepin).

The Inbox icon was not like other icons, in that it created a problem by being "really stuck on the screen. So if you tried to delete it, you couldn't delete it." Tr. at 1453:8-11 (R. Alepin). The icon could not be removed via right-mouse click, by highlighting the icon and hitting the delete key, or by moving the icon to the Recycle Bin. Tr. at 1453:11-15 (R. Alepin). A number of customers complained and queried how to remove the icon, and ultimately, the required remedy was to edit the Windows 95 Registry. Tr. at 1453:16-20 (R. Alepin). Only sophisticated users would be able to open the Registry because any incorrect modification could "crash your system" – yet, that was the only means for removing the Inbox icon. Tr. at 1453:20-23 (R. Alepin). The takeaway for ISVs was increased support costs and unhappy customers. Tr. at 1453:24-1454:7 (R. Alepin).

Microsoft has not offered, nor does it have, any technical justification for forcing users to install its messaging applications to obtain access to MAPI functionality. *See* Tr. at 1443:25-1454:7 (R. Alepin.). Moreover, Microsoft's conduct with respect to MAPI "created a barrier to the use of messaging software produced by other vendors, because if you had Windows 95 you automatically had the Microsoft messaging software installed on your computer as an icon on your screen." Tr. at 1812:25-1813:8 (R. Noll). This barrier to entry for competing messaging products caused anticompetitive harm in the PC operating systems market. Tr. at 1814:9-19 (R. Noll). Microsoft's conduct had no offsetting pro-competitive benefit. Tr. at 1813:12-14 (R. Noll).

E.   Even If This Jury Only Views The Effects On Competition Before The Sale, Novell Has Met Its Burden Of Proof

As shown below, even if this Court only allows the jury to consider the effects of Microsoft's conduct on competition before Novell sold its office productivity applications (which Novell contends would be error), the evidence still is more than sufficient to support a jury finding that Microsoft violated Section 2 of the Sherman Act.

1.   Microsoft Feared the Threat Posed by Novell's Office Productivity Applications

While Novell need not show that Microsoft engaged in conduct with the intention of maintaining its PC operating systems monopoly, the intentions underlying a defendant's conduct has long played an important role in Section 2 cases. *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 602 (1985); Antitrust Law Developments (Sixth) at 242. A jury may consider the monopolist's intent to understand the likely effect of the conduct.[13] *Microsoft II*, 253 F.3d at 59; *see also Telecor Commc'n, Inc. v. Sw. Bell Tel. Co.*, 305 F.3d 1124, 1138 (10th Cir. 2002) (jury may properly consider the purpose or intent of an allegedly anticompetitive act in assessing its legality).

Novell's office productivity applications could perform well on a variety of operating systems, and though Novell's applications were not themselves competitors to Microsoft's Windows, Novell's applications offered operating systems that competed with Windows the prospect of surmounting the applications barrier to entry. Tr. at 996:4-13 (Frankenberg); PX0033; Finding of Fact ¶ 68. Specifically, if Novell's office productivity applications had remained viable, consumers and corporate customers would have felt more comfortable purchasing Intel-compatible

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[13] In *Reazin*, for example, the 10th Circuit found it significant that the monopolist "perceived" the defendant to be a competitor, even though the defendant was not an actual competitor. *Reazin*, 899 F.2d at 954, 962, 965.

operating systems other than Windows 95 with which these office productivity applications were

compatible, and third-party ISVs would have begun to write software to competing Intel-compatible

operating systems supported by a viable key franchise application. Moreover, WordPerfect and its

shared code "PerfectFit," combined with AppWare[14] in the PerfectOffice suite, constituted

"middleware," because it relied on interfaces provided by the underlying Windows operating

system while simultaneously exposing its own APIs to developers. Finding of Fact ¶ 28. As a

result, these technologies served as a platform for software development, lessening dependence on

functionality provided by Windows itself. Finding of Fact ¶ 68. Thus, these middleware

technologies also had the potential to weaken the applications barrier to entry. *Id.*

> **2.   WordPerfect's Shared Code Technologies ("PerfectFit") And AppWare Constituted Middleware With The Potential To Weaken The Applications Barrier To Entry Or "Moat" Protecting Microsoft's Monopoly Power In The PC Operating Systems Market**

> > a.   Middleware Was a Categorical Threat to the Applications Barrier to Entry

Middleware technologies have the potential to weaken the applications barrier to entry.

Finding of Fact ¶ 68. Microsoft was apprehensive that the APIs exposed by middleware

technologies would attract so much developer interest, and would become so numerous and varied,

that there would arise a substantial and growing number of full-featured applications that relied

largely, or even wholly, on middleware APIs. *Id.* The applications relying largely on middleware

APIs would potentially be relatively easy to port from one operating system to another. *Id.* The

applications relying exclusively on middleware APIs would run, as written, on any operating system

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[14] AppWare was also integrating support for OpenDoc.

hosting the requisite middleware. *Id*. So the more popular the middleware, and the more APIs it

exposed, the more the positive feedback loop that sustains the applications barrier to entry would

dissipate. *Id*. ***Microsoft was concerned with middleware as a category of software; each type of***

middleware contributed to the threat posed by the entire category. *Id* (emphasis added).

<div align="center">b. <u>Microsoft Feared Novell as Middleware Vendor</u></div>

There is substantial evidence in the record that Microsoft viewed Novell as a vendor of

middleware, and that Novell's middleware technologies and APIs were viewed as a potential threat

to the Windows operating system. For example:

- PX0032 is an e-mail from Jim Allchin to Bill Gates, Paul Maritz, and Brad Silverberg dated March 26, 1993. In the e-mail, Allchin writes, "I feel we are much too smug in dealing with Novell…This isn't IBM. These guys are really good; they have an installed base; they have an channel; they have marketing power, they have good products. AND they want our position. They want to control the APIs, middleware, and as many desktops as they can in addition to the server market they already own. We need to start thinking about Novell as THE competitor to fight against – not in one area of our business, but all of them….If you want to get serious about stopping Novell, we need to start understanding this is war – nothing less….As an aside, I feel almost this strongly about Lotus and Notes as well. We need to make sure that we are being consistent across the board in attacking Notes. It ain't no app anymore. It's a platform. As far as I'm concerned, Lotus has turned into an mini MS – complete with evangelism units and the like. That means we should treat them completely as the enemy." *See* PX0032 at MS7079459.

- PX0033 is a memorandum by senior Microsoft executive Paul Maritz, dated April 4, 1993. In the document, Maritz stresses the growing threat to Microsoft's business posed by companies such as Lotus and Novell who were developing applications with platform capabilities. *Id*. at MS 5011634. Maritz writes that while Microsoft had been able to achieve much success in the operating systems market, this success could be "broken" by standards that were being driven by "[a]pplications that are really platforms." *Id*. Mr. Maritz explains his worry that "'non-MS' APIs will get established on the desktop" and that this threatened Microsoft because the "next generation of NON-COMMODITY applications" were going to be differentiated by their "information access, information categorization, information publishing, information tracking" and "transaction

<div align="center">57</div>

processing capabilities," and that Novell and Lotus were precisely the "non-MS" forces that were doing a successful job of defining these sort of APIs and capabilities. *Id*. In outlining the dangers posed by Novell and Lotus, Mr. Maritz states that Novell was "dangerous not only because of [its NetWare product] but because they are intent on becoming a 'CROSS-PLATFORM' PLATFORM company." *Id*. at MS 5011635. Maritz cites as an example the threat from Lotus Notes, which he described as the combination of an application that leveraged a platform. *Id*. Maritz states that Microsoft faced numerous problems competing against Lotus and Novell applications, particularly, Microsoft had a "[d]eclining ability to differentiate its applications from the competition and was facing severe price pressure" and Microsoft did not "have credible products to counter Notes and Novell." *Id*. at MS 5011640. Maritz finishes up by noting that "Novell" was "getting more insidious all the time" as they were making a "strong cross-platform API push…" *Id*. at MS 5011648.

- PX0044 is an e-mail dated May 4, 1993 from Brad Silverberg to Paul Maritz, Bill Gates, and Steve Ballmer. Brad Silverberg writes, "What I see is that our competitors will try to turn windows into the new unix – in a bad way. The unix that frankenberg called the 'bosnia herzegovina of operating systems.' That is, they will 'adopt' windows and then split the windows standard. They will take the win 3.1 level of api as the standard and then build their own middleware layers on top – for networking, for object-oriented frameworks and system object models, for distributed computing, for compound documents, for messaging, for directory services, for administration, for database access, for document management, etc etc etc. They hope to create mass confusion about exactly what the windows api's are, and take them out of microsoft's ownership. Every time we announce some intention for a new wosa api or other extension to windows api's, our competitors will propose some alternative. We are starting to see this from IBM, Novell, Lotus, Borland, and I'm sure soon Sun. If they can freeze 'windows' at 3.1 (or nt) level api, then they can be the provider of value added services. It gives them more freedom to clone windows – the definition of 'windows' is static. For Novell, it makes it easier for them to slip DR DOS underneath. It lets them position themselves as the supplier of connectivity services for windows to servers – the 'middleware' which builds on windows and thus takes ownership away from us. This effort to balkanize windows is a clear threat…" PX0044 at MS7080466-67. In response to Silverberg's e-mail regard the "threat" posed by third-party middleware, Bill Gates responds, "I totally agree with this – it describes the situation very well," however, he implies that in order to prevent the balkanization Microsoft needs to "make sure [its applications] are very popular." *Id*. at MS7080466.

- PX 54 is an internal Microsoft e-mail thread dated June 15, 1993. Senior Microsoft executives are debating the wisdom of shipping a shell in Microsoft

Office. Senior Microsoft executive Brad Silverberg writes, "our competitors are going to do everything they can to fragment windows, they will build their own middleware to claim API ownership." PX0054 at MS 0185884. In response, John Ludwig writes to Brad Silverberg, David Cole, Paul Maritz and others: "our worst nightmare is Novell/Lotus being successful at establishing their 'middleware' as a standard. Ours ought to be ubiquitously available to forestall this. Our huge advantage vis-à-vis Novell is our end-user franchise, we shouldn't cast aside this advantage." *Id.*

- PX0088 is an e-mail by Brad Silverberg to Andrew Schulman dated September 30, 1993. Silverberg writes, "I didn't mean to convey that Taligent, NeXT, Go were my only competitors. Hardly. I also have IBM, Novell, Apple, Sun, HP (Unix), Novell Unix, SCO, … These are very determined companies that each have strengths, both technically and marketing wise….Novell is coming at us from every direction possible and has a very concerted, multilayer attack strategy….I would include other companies who are intent on building 'middleware,' which is just system software by another name. In fact, Jim Manzi just said today that by 1995 Windows will just be a graphical C: prompt; users will instead live in Notes. I think many people – yourself included – vastly underestimate the competitive situation for operating systems….Each competitor can exploit a weakness, and they are getting better everyday." PX0088 at MSC 090001843-44.

- PX0091 is an internal Microsoft e-mail to Brad Silverberg, John Ludwig and others from LuisT, dated Oct. 9, 1993. In the e-mail LuisT writes "rob mentioned that a few of lotus' technical big shots will be in town soon to talk about chicago. After [Jim Manzi's] big public push to make notes the c-prompt for network users, it worries me that we open our kimono and show them what chicago will bring, its UI and net features. It seems to me that notes can be as dangerous middleware as a well thought out appware strategy…" *See* PX0091 (emphasis added).

- PX0093 is an e-mail dated October 12, 1993 from Paul Maritz to Brad Silverberg, Jim Allchin and Jonathan Lazarus attaching a memorandum in which Maritz writes, "The document does not articulate our middleware strategy. We are getting our butts kicked here by Novell and Lotus….We must have a strong story here otherwise people will continue to be seduced by os-independent cross-platform middleware….The morale issue for the NT team is a direct consequence of their continued laboring under a mission that we know they cannot and will not achieve…Let's give them focused achievable objections. Like push Novell off the server. Like knock off AppWare." PX0093 at MS7088909-10.

- PX0115 is an internal Microsoft document, a "Systems Release Plan," dated December 2, 1993. The document notes that Novell's strategic goal was to "get

control of client API's" and was one of several "Middleware providers" that was supporting "OpenDoc" and "Appware." *Id*. at 5011462. The internal Microsoft document notes that it was important to work to "ensure that customers do not turn to middleware for needed new functionality, eg. Notes, DSOM, OpenDoc, Talligent, Appware, etc." *Id*. at MS 5011463.

- PX0127 is an internal Microsoft e-mail from Brad Silverberg to Paul Maritz dated January 19, 1994. Silverberg writes in the e-mail, "The middleware threat is once again another example of companies 'embracing' Windows as the 'transport' and then layering new services on top – services with api's so that customers are now wedded to the middleware vendor. Each one of the middleware vendors – Lotus, Novell, IBM with SOM, OpenDoc/CIL, etc – used to be on the rampage against Windows. They are more clever today. The rhetoric is now in 'support' of Windows. They all say they want to have 'great support for Windows (or Chicago). But also they reduce Windows to a 'BIOS' or 'transport' level, and position themselves as the new supplier of value-added services." *Id.* at 5064010. Under the heading "Novell," Silverberg mentions that Novell is a supporting of Wabi, a "plan" to "embrace Windows as a 'standard' and then wrest control away from msft via a committee" with the goal to "level the playing field." *Id*. Silverberg also notes that Novell fits under the middleware category, and that their "strategy with AppWare will be an incremental, insidious one. Get developers using Appware step by baby step, at each turn of the crank, requiring the ISV to use a bit more of Appware framework to access the new service." *Id*. As a result, Novell's strategy appeared "non-threatening" while getting in a "position to assert control step by step." *Id*.

- PX0471 is an e-mail from Tom Evslin to Brad Silverberg, Russ Siegelman, Jim Allchin, Paul Maritz and others, attaching a slideshow. Page 6 of the slideshow states: "Keep middleware such as Notes, Novell, OpenDOc, and DSOM and OS competitors such as OS/2 and Personal Netware at bay." PX0471 at M 1012687.

- PX0154 is an e-mail sent by Bill Gates to his Executive Staff and Direct Reports related to Novell's merger with WordPerfect. Gates outlines his thoughts on "Novell's new strategy and its impact on us." PX0154 at MX 9037682. Gates writes in the attached memorandum, "The merger of Novell-Wordperfect and acquisition of Quattro Pro by Novell changes our competitive framework substantially. The already intensely competitive software business has become even more competitive." *Id*. at MX 9037683. Gates states that as a result of the merger, "initiatives to promote anti-Microsoft platforms/API's/object models become easier to coordinate because fewer companies are involved. Novell itself will be able to set more standards for workgroup, document management, image systems and all of the 'services' they have been moving towards." *Id*.

- PX0156 is an e-mail by Bill Henningsgaard of Microsoft, to Pete Higgins in response to Bill Gates' e-mail regarding the Novell/WordPerfect merger. Henningsgaard states: "Some thoughts. For Novell, the key goal will be to maximize penetration of their suite to help them control o/s and workgroup standards. They want to quit letting us dictate the pc technical agenda….if they're successful at getting penetration, they'll be in a position to introduce alternative standards (ie opendoc) that will give us a much harder time to drive the O/S and apps agenda." PX0156 at MS-PCA 1253952.

i. Novell's WordPerfect Shared Code Technologies (PerfectFit)

Since as early as 1991 WordPerfect had been working on shared code. Tr. at 210:24-211:3 (Harral). Shared code was a component of the WordPerfect word processor[15] that was shared between the word processor and other WordPerfect Corp. products for efficiency purposes. Tr. at 206:3-207:5 (Harral). Each WordPerfect Corp. product had an application "engine" that was built on top of the shared code layer, which could then move between any operating system platform where shared code resided.[16] Tr. at 206:3-207:5 (Harral). Because multiple product engines shared a common layer of code, their behaviors would be the same and they would all operate in a similar integrated way. Tr. at 206:3-207:5 (Harral). Shared code eventually started to take on file handling

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[15] Shared code amounted to around one third of the WordPerfect word processing product. Tr. at 217:24-218:3 (Harral).

[16] WordPerfect made efforts to isolate its engine, or program core from the underlying operating system, and to instead, make it dependent on a shared code layer sitting above the underlying operating system. Tr. at 216:22-217:16 (Harral). As a result, in order to port applications dependent on shared code such as WordPerfect to another operating system, only the shared code layer would have to be retooled and ported to the new platform. Tr. at 216:22-217:16 (Harral). The WordPerfect program engine itself, would not have to be rewritten. Tr. at 216:22-217:16 (Harral). While in some instances the program engine would talk to the underlying operating system, such instances were rare, and most of the features that dealt with the operating system were part of shared code. Tr. at 218:4-218:20 (Harral). This resulted in a very efficient way to move WordPerfect products across operating systems. Tr. at 216:22-217:16 (Harral).

and file management functionality, such as providing dialogs for opening and saving files. Tr. at 209:15-210:22 (Harral).

WordPerfect had traditionally published or provided to third parties portions of the shared code. Tr. at 218:23-219:16 (Harral). Over time, WordPerfect began to publish all of the shared code, and promoted it explicitly to ISVs as a resource that could be written to, that would enable them to utilize the same code base across different operating systems. Tr. at 218:23-219:16 (Harral). When Novell acquired WordPerfect, the company productized the shared code and then branded it PerfectFit. Tr. at 218:21-219:16 (Harral); Tr. at 786:16-787:2 (Gibb). PerfectFit became a part of the PerfectOffice suite and shipped with PerfectOffice. Tr. at 212:16-212:19; 390:24-391:2 (Harral).

All the functionality that shared code provided to WordPerfect was available to third-party developers as well, including WordPerfect interface elements, file viewers, file converters, button bars, status bars, menus, and a macro system. Tr. at 220:9-220:13; 226:8-226:19 (Harral). In fact, PerfectFit offered to applications in the suite and to third-party developers[17] a (1) common look and feel (menus, icons, toolbars), (2) common dialogues (File Open, Save, Save As), (3) common tools (Speller, Thesaurus, Grammar Checker, File Manager), (4) common automation (QuickCorrect, QuickHelp, QuickMenus), (5) common scripting language (Record and play back across applications) and (6) common code (shared between applications). *See* PX0395 at NWP00008289.

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[17] WordPerfect offered "a PerfectFit Software Developers Kit (SDK) to third parties that included a broad range of developer tools including PerfectScript, shared programming code, and APIs." *See* PX0207 at NOV 00498183.

The common scripting language in shared code was called PerfectScript, which provided to third-party developers the ability to call scriptable components and to capture and replay tasks performed in WordPerfect. Tr. at 227:23-229:10; 228:21-229:10 (Harral). WordPerfect also contained a layer of APIs called the WordPerfect Open Applications Programming Interface ("WOAPI"), which allowed developers to intercept certain commands and insert new code to customize WordPerfect functionality. Tr. at 229:12-230:23 (Harral); *see also* PX0410 at NOV-B00656859. The Open Interface APIs were supported on Windows, DOS, and UNIX versions of WordPerfect and other applications. *See* PX0192 at MX 9037665. WordPerfect also exposed Writing Tools APIs that were supported on Windows and UNIX versions of WordPerfect. PX0192 at MX 9037665. PerfectFit, PerfectScript, and the Open Interface API were all technologies that were included in WordPerfect the word processor. Tr. at 230:24-231:3 (Harral). These technologies were also included within the PerfectOffice suite.[18] Tr. at 231:4-231:6 (Harral).

In using these features, third-party developers would write their own applications with shared code using the shared code libraries, which contained the shared code APIs that could be called. Tr. at 226:20-227:13 (Harral). Third parties would simply write their applications against the shared code layer and associated APIs, and then compile their programs using the shared code libraries for use in their products. Tr. at 226:20-227:13 (Harral).

WordPerfect and its shared code foundation was indisputably middleware. Tr. at 233:13-234:19 (Harral); *see also* Tr. at 783:5-783:18 (Gibb). The software sat "in the middle"

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[18] Novell had a plan to make the PerfectOffice suite available on multiple operating systems and wanted to eventually make everything cross-platform across the different available operating systems such as DOS, OS/2, Macintosh, UNIX and Linux. Tr. at 787:11-787:15 (Gibb); Tr. at 371:13-372:7 (Harral).

between the application core and the operating system, and provided features that would help

programs work through problems and achieve needed functionality. Tr. at 233:15-234:19.

Developers would purchase or license the shared code as middleware so they could use certain

features in their products, such as internationalization features, instead of having to hire the

expertise to do these features themselves, which could in some cases take years. Tr. at 233:15-

234:19 (Harral). Even Microsoft thought of PerfectOffice as an emerging development platform.

For example, Cameron Myhrvold wrote in 1994 in a slideshow presentation entitled "Recruiting

Developers for Office," that "MS is in a platform war with Office just as we are with Windows"

because "Lotus and Novell/WP are building competing application 'platforms'" *See* PX0201 at

MS-PCA 1432262. Microsoft was particularly concerned about "PerfectFit Technology and WP

'SDKs' and WP 'Windows Open API,'" and Novell including "Visual App Builder [AppWare] in

PerfectOffice." *See* PX0201 at MX 6046634.

      Novell started a program called PerfectFit Partners to market shared code to developers

outside the company who wished to license it. Tr. at 225:6-225:17 (Harral); Tr. at 784:9-784:24

(Gibb); PX0192 at MX 9037665. Membership of PerfectFit Partners was at least 1,000 companies.

Id; PX0333 at MS-PCA 1985716 (noting 1,500 members). The shared code team at Novell

understood that they were providing the shared code abstraction layer not only to people inside of

WordPerfect and Novell, but to other entities outside the company, and as a result, a documentation

team worked with the shared code team to create documentation so third parties could use the

shared code. Tr. at 225:18-226:8 (Harral); Tr. at 784:9-784:24 (Gibb). Novell also provided

support, similar to Microsoft's Premier Support, that developers utilizing shared code could use to

get help with PerfectFit. Tr. at 225:18-226:8 (Harral).

Because shared code was the foundation for each of Novell/WordPerfect's individual applications, the shared code team would usually be scheduled out six months to a year in advance of the regular applications when developing to a new platform. Tr. at 221:25-222:18 (Harral). Because shared code typically starts development before the applications that depend on it, it was unusual for shared code to be the "critical path" in releasing a product. Tr. at 225:1-225:5 (Harral).

Microsoft's anticompetitive conduct in this case destroyed WordPerfect and its ability to ship with the shared code it relied on. It also substantially delayed and interfered with PerfectOffice, which also contained the shared code middleware layer. In sum, Microsoft's de-documentation of the namespace extension mechanism harmed the distribution of PerfectFit middleware, a component of WordPerfect with the potential to weaken the applications barrier to entry.

ii. Novell's AppWare And OpenDoc

Harm to WordPerfect and its shared code caused by Microsoft's de-documentation of the namespace extension mechanism harmed the distribution of PerfectOffice and the included AppWare environment, which had an anticompetitive effect on competition in the operating systems market. AppWare was middleware (because it provided libraries) and an interface as well, which allowed the use of middleware, which was part of the PerfectOffice suite. Tr. at 236:2-236:8 (Harral). It was a graphical and object-oriented application development tool (formerly known as Visual AppBuilder) that allowed developers to build stand-alone programs.[19]   PX0410 at NOV-B00656854. Developers could quickly build fully portable software by linking components called

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[19] Developers could use AppWare in PerfectOffice to build applications that both integrated with PerfectOffice or which were completely stand-alone programs independent of PerfectOffice. PX0410 at NOV-B00656854.

AppWare Loadable Modules (ALMs).[20] AppWare also took WordPerfect's shared code and other

technologies and presented them in a conceptual way that allowed common non-programmers to

write programs. Tr. at 234:22-236:1 (Harral). In fact, using AppWare in PerfectOffice, users could

build applications using a simple interface by combining and connecting different ALM icons.

PX0412 at NOV 00498203.

Senior Microsoft Executive Paul Maritz thought of AppWare as an explicit attempt by

Novell to develop a layer that would provide all of the services required by applications.

Deposition of P. Maritz (May 24, 1994) at 108:1-108:5. He claimed that Novell's stated goal with

AppWare was for third-party software developers to know only about AppWare and obtain all the

services that their applications needed from AppWare. *Id.* at 108:6-108:11. As a result, Microsoft

viewed AppWare as one of its most serious long-term threats because, if Novell continued to add

functionality to the AppWare layer, Novell could incrementally obtain what would amount to an

operating system over time. *Id.* at 108:12-108:21. In fact, Microsoft executive Brad Silverberg

believed that AppWare had already become the equivalent of an operating system by 1994:

> Q.   What is your understanding of AppWare?
> A.   AppWare is an operating system. AppWare contains all of the functions of an
>   operating system and is a wonderful attempt by Novell to again reduce Windows or
>   anything underneath it to a commodity so it could then get applications completely
>   dependent on AppWare, have no dependence on Microsoft or other pieces
>   underneath it, so they can then supply their own pieces underneath it and thus
>   eliminate – as Mr. Noorda has stated, his goal is a Windows-free world.

Tr. at 932:18-933:1 (B. Silverberg).

Similarly, Brad Silverberg wrote in PX0127 that Novell's strategy with AppWare "will

be an incremental, insidious one." *See* PX0127 at MS 5064010.

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[20] PerfectOffice Professional came with a library of PerfectOffice ALMs. *See* PX0412 at
NOV00498203.

Bob Frankenberg, Novell's CEO, was also asked about AppWare:

Q. And just below paradox the document references visual app builder? What is that?
A. Visual app builder is a middleware product that allowed developers to develop applications and connect to – get its connections to the operating systems through AppWare. That meant that they didn't have to note as much or be as dependent on individual operating systems. <u>It was a key tool in our effort to create cross-platform applications and competition in the operating system environment.</u>

Q. Now you mentioned in your answer AppWare, was visual app builder another name for AppWare?
A. Yes, it was.

* * *

Q. Why was Novell interested in having third-party developers obtain all of the services for applications needed from AppWare?
A. Because we saw it as important to have third-party developers not have to be dependent on individual operating systems. If you want to have applications that span multiple operating environments as ours did, we needed to have it so that others could do that as well. And furthermore, it made the underlying operating system far less significant to the developer, perhaps not even at all important, and for us that matters because it gave real competition to the operating system market.

Q. Now the jury has heard quite a bit of testimony on the concept of middleware. And in your view, was AppWare middleware?
A. Yes, it was.

Tr. at 1013:19-1014:11 (B. Frankenberg).

Other evidence in the record indicates Microsoft's fear of AppWare and proves that

AppWare was a competitive threat to Microsoft's operating system monopoly:

- PX0090 is an internal Microsoft summary of Novell's AppWare product strategy dated October 7, 1993. In the document, Microsoft states: "AppWare is a Novell product strategy that includes, for now, a cross platform development foundation (AppWare Foundation), a visual Appbuilder, an object model (Appware Bus) and a distributed system services strategy…" *See* PX0090 at MS-PCA 2410389. "Why is Appware dangerous?" – "1. – quality: might be first viable platform for commercial cross-platform development" – "could in the long run blur the o/s API line and squeeze us into the camp of BIOS builders." *See* PX0090 at MS-PCA 2410390.

- PX0102 is an e-mail from Steven Sinofsky to Bill Gates, Brad Silverberg and others dated November 5, 1993, with the subject "FW: Novell AppWare – first

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impressions." Sinofsky states in reference to AppWare, "it is scary since it is just another windowing API, and a fairly complete one. *This is direct competition to Windows…*" PX0102 at MS7096165.

- PX0137 is an internal memorandum entitled "Mission Plan – Draft" dated February 4, 1994. Referring to Novell, the document states, "Their overall goal is to provide network services via NetWare, applications services via UnixWare and networked development tools via AppWare to create a 'virtual mainframe.'" "They will minimize our key benefits SMP and portability introduced into NetWare and SMP into UnixWare. And, try to reduce our advantage with developers thought AppWare." *See* PX0137 at MS7059681.

- PX0144 is an internal Microsoft e-mail from Bob Kruger dated February 22, 1994, that is forwarded by Microsoft executive Steven Sinofsky to Bill Gates. Bob Kruger writes, "AppWare's cross-platform nature makes it total goodness in the eyes of the customer. We need to take it seriously, make sure we understand it, create a cohesive competitive statement, and distribute appropriate info to combat the threat. The AppWare task force needs to accelerate efforts." *See* PX0144 at MS 5036490.

- PX0491 is an e-mail from Bob Kruger dated March 29, 1994. Kruger writes, "I believe that Novell's objective is to hit the desktop from both an OS and apps platform perspective. I feel they will soon bundle AppWare into NetWare thereby providing a cross-platform environment. This bundle would offer networking and dev tools; couple with Novell's commitment to OpenDoc, there would be support for compound docs and the SOM/DSOM object model….The message of AppWare is total goodness." PX0491 at MS 5035963.

- PX0531 is a draft Microsoft memorandum by John Ludwig with the subject entitled "Novell's AppWare." Ludwig writes, "The AppWare Foundation provides a 'common, cross-platform set of APIs…(which) allows developers to maintain a single-source base for all development platforms.' Basically, this layer virtualizes all services of the underlying OSes on which it is hosted, insulating the developer from differences in these platforms….The AppWare Foundation *is an entirely new OS API* It offers virtually all the services of the OSes it is hosted upon, but with a brand new and different API set." *See* PX0531 at MS 0115590-91.

In the spring of 1995, Novell outlined a comprehensive plan to provide OpenDoc

software development through the AppWare visual programming environment. *See* PX0391 at

NOV-B01192363. OpenDoc was an industry-standard architecture for component software that

was backed by numerous industry-leading software and systems vendors. *Id*. It enabled developers

to use interchangeable components to construct applications that could be shared across hardware

and operating system platforms, including Macintosh, OS/2, Windows, and UNIX. Microsoft

executive Brad Silverberg had this to say about OpenDoc in his 1994 disposition, which was read to

the jury:

> Q. What about OpenDoc, do you regard that as an operating system?
> A. I regard OpenDoc as an essential operating system component. At the recent Apple worldwide developer conference Apple got up on stage in front of thousands of developers and indicated that OpenDoc was its essential operating system strategy for competing with Microsoft and ridding the world of Windows.

Tr. at 933:2-933:9 (B. Silverberg).

Similarly, Paul Maritz stated the following in this case regarding OpenDoc:

> Q. And what is OpenDoc?
> A. OpenDoc is a set of conventions developed by Apple to allow application software and system – and software in general to cooperate with each other. And there is an effort under way by Novell and Apple and IBM to in some way link those standards together into a broader set of standards as to how software should be constructed.
> Q. Now both of those items were mentioned under Novell with – the reference there is "DSOM/Open Doc Supporter." Why did you mention Novell's support of those technologies here?
> A. Because we regard Novell as one of our principal systems software competitors and they, we believe, have a goal of competing with us at every level and in providing system software services. And the fact that they are allied with Apple and IBM in that endeavor is a significant fact.
> Q. Do you regard DSOM and Open Doc as products or technologies that are competitive to yours?
> A. Yes.
> Q. And in what sense are they competitive?
> A. Because they represent specifications on how software should be constructed and how services from the system software should be provided to applications software, and they provide – in that sense it's a way to – To go back to the earlier definition of an operating system as something that provides services to applications and end users, they are building software that does that, and they expect to make that software progressively more functional over time. And we have every belief that over time they'll make it so functional that no other software is required.

> Q. Are these products or technologies substitutes for products or complementary to what your company offers?
>
> A. They are substitutes in the sense that they are alternative ways of doing things that we are offering to application vendors as ways of structuring their applications.

Deposition of Paul Maritz, May 24, 1994 (played Oct. 25, 2011) at 104:10-106:6.

Documentary evidence in the record also shows that Microsoft feared Novell's work with OpenDoc and perceived it as a threat to its operating systems. For example, PX0488 is a Brad Silverberg e-mail dated Dec. 29, 1993 to Bob Kruger and Paul Maritz. In the e-mail, Silverberg writes that "[Component Integration Laboratories] is a group consisting of IBM, Novell, Apple, Oracle, WordPerfect, XSoft and Taligent intent on building a competitive OS's to ours. OpenDoc, for example, is part of their effort." *See* PX0488 at MS-PCA 2608514. In fact, Microsoft was so concerned about OpenDoc that it considered it competitive OS activity and Microsoft desired to restrict via non-disclosure agreement, so internal OpenDoc developers within WordPerfect and other companies would not receive Microsoft operating system technology. *See, e.g.*, PX0489. For example, in PX0490, Brad Silverberg writes to Dennis Adler, "what I want to do is exclude those people who are working on competitive os efforts, such as opendoc and os/2, from access to chicago." *See* PX0490 at MS-PCA 2618244.

Ultimately, Microsoft's anticompetitive conduct which thwarted WordPerfect's office productivity applications and PerfectOffice suite also disrupted Novell's plans to integrate AppWare and OpenDoc, two middleware components that had the potential to weaken the applications barrier to entry and thus threaten Microsoft's monopoly in the operating systems market.

3. **Novell's Office Productivity Applications Were "Key Franchises" That Microsoft Sought to Own to Widen the Moat Protecting its PC Operating Systems Monopoly**

Microsoft understood that a "strong applications business" was "extremely helpful to [its] systems strength." *See* PX0003 at X 159503. Senior Microsoft executive Jeff Raikes, in his e-mail to Warren Buffett, stated that if Microsoft "own[ed] the key 'franchises' built on top of the operating system, [Microsoft would] dramatically widen the 'moat' that protect[ed] the operating system business." *See* PX0361 at MS-PCA 1301180. As senior Microsoft executive Jim Allchin outlined in a memorandum to Bill Gates and Steve Ballmer: "Applications drive the world. Applications are the reason that the VAX [operating system] was so successful. Applications make people switch computer systems and vendors." PX0524 at MS 0119615. Thus, Microsoft intended to destroy Novell's "key franchise" application, WordPerfect – even though its destruction would have a short-term negative impact on Windows 95 – because WordPerfect's destruction would help solidify Microsoft's monopoly in the operating system market in the long term. *See* Tr. at 314:20-24 (Harral) (testifying that Microsoft's decision to withdraw the namespace extension APIs was "confusing" to him because in the short run the decision hurt Microsoft's own product).

WordPerfect was a cross-platform application in the "key franchise"[21] category of word processing. Tr. at 994:12-18; 995:15-996:13 (Frankenberg). It was an extremely popular application in the mid-1990s, and Microsoft considered WordPerfect to be a Tier "A" ISV. PX0517 at MS7045839. In fact, Microsoft considered WordPerfect's support of Windows to be "critical to the general perceptions of its success." PX0517 at MS7045839.

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[21] Word processing and spreadsheets applications amounted to 80 to 90 percent of everything people did on personal computers during the mid-1990s. Tr. at 782:3-782:12 (Gibb).

During Robert Frankenberg's tenure at WordPerfect in the mid-1990s, WordPerfect

focused a substantial amount of its attention on Windows, but it also continued to develop versions

of the WordPerfect word processor for multiple operating systems. Tr. at 996:14-1996:20

(Frankenberg). Novell also had a plan to make the PerfectOffice suite available on multiple

operating systems after its Windows release. Tr. at 787:11–787:15 (Gibb). In Microsoft's view,

Novell represented a threat because it was "intent on becoming a 'CROSS PLATFORM'

PLATFORM company." PX0033 at MS 5011635. Microsoft perceived Novell as even more of a

threat – in fact a "nightmare" – after its merger with WordPerfect. *See, e.g.*, PX0072.

The importance of WordPerfect to an operating system was so great, in Microsoft's

estimation, that when WordPerfect decided to stop developing for OS/2 in November of 1993,

Microsoft celebrated the victory as the death of OS/2, writing: "I think this is a great example of

how we kill OS/2 by sucking up ISV bandwidth. If we do it right the PDC can be the nail in OS/2's

coffin." PX0106 at MS 5044763.

Similarly, the death of WordPerfect widened the "moat" protecting Windows dominance

in the PC operating system market. With its dominance of the word processing franchise in place,

Microsoft felt free to use Microsoft Office as a "club" to keep a tight grip on competition in the PC

operating system market. *See* Finding of Fact ¶ 354 (not collaterally estopped).

4.   WordPerfect Was A Cross-Platform Application

An overwhelming amount of evidence in the record establishes that WordPerfect was a

cross-platform application during the relevant time-period:

- DX 370 indicates that as of August 13, 1993, WordPerfect was running on DOS, Windows, Macintosh, OS/2 and UNIX. *See* DX 370 at NOV 00062681-82; NOV 00062689-90. The document notes that WordPerfect's goal was to be #1 in market share in DOS, Windows,

UNIX and OS/2 markets and number 2 in market share in Mac and VMS markets for shipments during 1994. *Id*. at NOV00062687.

- A WordPerfect Quarterly Product Review dated March 31, 1994 indicates there was a WP DOS, WP WIN, Macintosh, UNIX/VAX product. *See* DX 303 at NOV 00069951.

- PX0174 is an April 22, 1994 S-4 registration statement filed with the Securities and Exchange Commission in Washington D.C. *See* PX0174. On page 3 of the statement, the document states that "WordPerfect is now available in 23 languages and on *all of the most widely used computing platforms and operating systems*, including DOS, MS Windows, UNIX, Apple/Macintosh and DEC's VAX/VMS." *Id*. at NOV00364208. On page 66 of the document, under "Product Development" states that "WordPerfect's product development objective is to create software applications that appeal to a broad range of users, run on a wide range of operating systems and hardware platforms and are focused on helping user communicate more effectively." *Id*. at NOV00364271.

- Similarly, the S-4 Amendment No. 3 dated June 23, 1994 repeats again on page 3 that "WordPerfect is now available in 23 languages and on all of the most widely used computing platforms and operating systems, including DOS, MS Windows, UNIX, Apple/Macintosh and DEC's VAX/VMS." *See* DX 379 at p. 3.

- DX 323 is Novell/WordPerfect's Merger Questions and Answers dated on or around June 30, 1994. In the document, a question is asked whether WordPerfect will continue to support non-Novell environments, including Windows, Macintosh, UNIX, DOS, NLM, OS/2, NT, NetWare, LAN Server, and Banyan. DX 323 at NOV-B00642696.

- PX0200 is a WordPerfect Business Review Exercise Summary dated July 19, 1994. It indicates that WordPerfect was still developing versions of WordPerfect, Quattro Pro and Presentations for DOS, a WordPerfect version for the Macintosh, a WordPerfect version for UNIX, and WordPerfect version for OpenVMS. PX0200 at NOV-25-006587-90.

- DX 4 is a Novell/WP/QP Integration plan dated August 3, 1994. Under Business Applications the document states that "Development includes PerfectOffice, WordPerfect for Windows, DOS, Macintosh and UNIX, Presentations, Electronic Publishing tools, the PerfectOffice engine group and Tapestry." DX0004 at NOV-25-006572. The document continues: "Product marketing consists of teams focused on Tapestry, Windows Product Management (include PerfectOffice, WordPerfect for Windows and Presentations), Windows Marketing Development, WordPerfect for Macintosh, and WordPerfect for UNIX and Electronic Publishing tools." DX0004 at NOV-25-006572.

- DX 205 is an October 1994 status report. It indicates that WordPerfect shipped WordPerfect Windows 5.2+ and WordPerfect UNIX 6.0 (SCO). It also indicates that WordPerfect was

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moving ahead with other WordPerfect for UNIX, DOS and VMS products as well. *See* DX 205 at NOV-B15912823-24.

- DX 231 is a document entitled Development Project Status. It indicates that WordPerfect had shipped on multiple operating system platforms during the relevant time-period. For example, it states that WordPerfect Unix (SunOS, Solaris), was released to manufacturing on June 7, 1994, that WordPerfect 6.0 Unix (SCO, Intel) was released to manufacturing on October 6, 1994, and that WordPerfect 6.1 DOS was released to manufacturing on August 10, 1995. *See* DX 231 at NOV00161055.

- PX0192 is a June 30, 1994 e-mail by Scott Raedeke regarding Novell/WordPerfect's PerfectFit Program. It notes that the PerfectFit Technologies were available on Windows, DOS and UNIX; specifically it states that the Open Interface APIs are supported on Windows, DOS, and UNIX versions of WordPerfect and other applications. *See* PX0192 at MX 9037665. It also outlines that these APIs "provide access for 3rd party DLLs and macros to communicate with, enhance or modify the functionality of WordPerfect applications. They give you control of over 2,000 WordPerfect commands." *Id.* On the next page it states: "Writing Tools APIs – supported on Windows and UNIX versions of WordPerfect, these new APIs allow you to directly manipulate text in WordPerfect." *Id.*

- PX0554 is an internal Microsoft document entitled Year of the Office Marketing Plan – DRAFT v0.9. It states that "WordPerfect Strengths" are "Cross-platform compatibility" and notes that "A consistent use of the cross-platform position could neutralize Word's Windows leadership." PX0554 at MS-PCA 1330664.

- PX0312 shows WordPerfect revenue by product line for the years 1993, 1994, and 1995. On each chart Novell is selling "WP DOS," "QP DOS," "WP MAC," and "WP UNIX." *See generally* PX0312.

Gary Gibb also testified that WordPerfect was developed to be cross-platform and that the WordPerfect engine could go across DOS, OS/2, Windows and UNIX. Tr. at 781:14-782:2. In addition, Robert Frankenberg, the former CEO of Novell from April of 1994 to July of 1996,[22] testified to the following regarding WordPerfect's cross-platform presence:

> Q. To your knowledge, did WordPerfect have experience in working with 32-bit systems prior to Microsoft's development of Chicago?

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[22] *See* Tr. at 983:16-984:2 (Robert Frankenberg).

A. Yes. WordPerfect ran on a number of other 32-bit systems including digital equipment corporations, VAX operating systems and several UNIX systems. So they were well acquainted with the 32-bit development.

* * *

Q. [Referencing DX 4] And I'm looking at the first two bullet points. Um, again, I would like to focus you in on, Mr. Frankenberg, the fact that development included WordPerfect for Windows, DOS, Macintosh and UNIX. Can you explain to the jury what that means?
A. Well, what that means is that WordPerfect was designed to run across a range of operating systems. So not only in Windows, but DOS which was the earlier version of Microsoft's operating system, Macintosh works [sic] from Apple, and Unix which there were a number of implementations from quite a few different companies. And it was one of the things that was very attractive about WordPerfect that it could run across all of those. And if a company had those systems, people learned one word processor and would be able to use it on all of the systems.

Q. And during your tenure with Novell, did WordPerfect continue to develop versions of WordPerfect for multiple operating systems?
A. Yes, we did.

Q. And during your tenure, did Novell also develop a version of WordPerfect for the Linux operating system?
A. Yes, we did.

Q. Given that Microsoft had a monopoly in PC operating systems using Intel Processors at this time, why did Novell continue to develop cross-platform versions of WordPerfect?
A. Well, there were two main reasons. One reason was that our customers, as I mentioned a moment ago, wanted to have one word processor that could work across their work station or their PCs or their larger systems. **The other reason was to provide some real competition in the operating system environment.**

* * *

Q. This bullet point states that "all resources need to be applied to Chicago," and then in parenthesis "or Tapestry." Can you tell us what Tapestry was?
A. Tapestry was the next generation of our – of our suite, and it included a number of various IT capabilities that were under initial development at that point in time.

Q. Was Tapestry planned to be cross-platformed?
A. Yes, it was.

Q. So do I understand correctly that back in 1994 Novell WordPerfect was already working on its next generation of cross-platform business application products?

A.   Yes, we were.

Tr. at 994:12-998:10 (Frankenberg).

    On re-direct Bob Frankenberg continued:

Q.   Today Mr. Tulchin asked you a series of questions about PerfectOffice and whether PerfectOffice, during your tenure with Novell, had come out in a cross-platform version. I think you previously testified that WordPerfect historically had been cross-platform and that during your tenure WordPerfect continued to be brought out under multiple platforms; is that right?

A.   That's correct.

Q.   Now in order to run cross-platform, it would be necessary for the shared code running underneath WordPerfect to be able to run on those different operating systems?

A.   Yes, it would be essential for that to happen.

Tr. at 1266:15-1267:11 (Frankenberg).

        Adam Harral testified that Novell intended to make the entire PerfectOffice suite cross-

platform as well after the initial release of PerfectOffice 95, claiming that Novell was looking at

moving PerfectOffice and its features to DOS, OS/2, the Macintosh, UNIX and Linux. *See* Tr. at

371:13-372:7 (Harral). Similarly, Gary Gibb and Bob Frankenberg also testified that Novell

planned to make PerfectOffice available on multiple operating systems. Tr. at 787:11-787:15

(Gibb); Tr. at 1169:2-1169:6.

            **5.   Novell's Distribution Of Netscape Navigator Constituted A
                    Threat With The Potential to Weaken the Applications Barrier
                    To Entry Or "Moat" Protecting Microsoft's Monopoly Power In
                    The PC Operating Systems Market**

        In December 1994, Netscape Communications Corporation ("Netscape") brought to

market the first widely popular graphical browser distributed for profit. Finding of Fact ¶ 17.

Upon its release on December 15, 1994, Navigator "began to enjoy dramatic acceptance by the

public; shortly after its release, consumers were already using Navigator far more than any other

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browser product." *Id.* ¶ 72. In particular, Navigator possesses "three key middleware attributes that endow it with the potential to diminish the applications barrier to entry": (1) Navigator is a complementary product to Windows, and can therefore gain widespread use on Windows operating systems; (2) Navigator exposes a limited set of APIs and "can serve as a platform for other software used by consumers," such as "network-centric applications that run in association with web pages"; and (3) Navigator has been ported to more than fifteen different operating systems, meaning that applications written to Navigator will run on any of those operating systems without porting.[23]

Id. ¶ 69.

By the spring of 1995, Navigator also included various Java Technologies, a form of middleware developed by Sun Microsystems. *See id.* ¶ 76. By combining its own APIs with Sun's Java Technologies, Navigator offered "an increasingly broad platform for the development of applications where you would not leave the browser and you would not see the operating system." Tr. at 1400:20-1402:3 (R. Alepin). Specifically, Navigator included its own APIs for developers to write to, Java Script (which allowed people who were sending web pages to include little programs inside), and "programming for Java Virtual Machine, which allowed programmers to develop full-on business applications and transport them from a server over the Internet to the browser and have them execute in the browser."[24] *Id.*; *see also* Findings of Fact ¶¶ 28, 76.

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[23] As the Government case found, adding to "Navigator's potential to weaken the applications barrier to entry is the fact that the Internet has become both a major inducement for consumers to buy PCs for the first time and a major occupier of the time and attention of current PC users." Finding of Fact ¶ 70.

[24] It is undisputed that in the Government case against Microsoft, it was determined that middleware technologies, like Netscape's Navigator, have the potential to weaken the applications barrier to entry protecting Microsoft's PC operating systems monopoly. Finding of Fact ¶ 68. Nor can it be

Netscape's quick rise to popularity "alarmed Microsoft, which feared that Navigator's enthusiastic reception could embolden Netscape to develop Navigator into an alternative platform for applications development. Finding of Fact ¶ 72. Microsoft's "dread" only increased moving into 1995, when Netscape added Sun's Java Technologies to Navigator. *Id.* ¶ 77. Microsoft's concern was well-founded, as the combination of Netscape's Navigator and Sun's Java Technologies, "threatened to hasten the demise of the applications barrier to entry, opening the way for non-Microsoft operating systems to emerge as acceptable substitutes for Windows." *Id.* Consequently, Microsoft set out to (and did) foreclose Navigator from various distribution channels, including Original Equipment Manufacturers ("OEMs") and Internet Access Providers ("IAPs"). *See generally id.* ¶¶ 143-148, 158-161, 164. The record also shows that Novell's office productivity applications, including WordPerfect and PerfectOffice, would have been another distribution channel for Navigator, and thus, another threat to Microsoft's PC operating systems monopoly. Conduct that prevents effective distribution and use of products that might threaten Microsoft's PC operating systems monopoly is anticompetitive conduct. *Microsoft II*, 253 F.3d at 58.

In the same time frame that Netscape brought Navigator to market, Novell pursued its own strategy of "pervasive computing" geared towards providing all users with easy access to information. Tr. at 1005:8-17 (B. Frankenberg). A component of pervasive computing involved making the internet accessible to users, and to that end, in February 1995 Novell entered into a licensing agreement with Netscape (the "Netscape Agreement"). Tr. at 1006:6-19 (B. Frankenberg); PX 268 at NOV 00052206. Novell entered this agreement because Navigator

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disputed that "Microsoft was concerned with middleware as a *category* of software; each type of middleware contributed to the threat posed by the entire category." *Id.* (emphasis added).

was "the foremost browser available at the time" and because Novell wanted to connect and integrate its office productivity applications with Navigator to better enable Novell's customers to access information throughout the internet. Tr. at 1007:6-13 (B. Frankenberg). The Netscape Agreement gave Novell the right to distribute Navigator with Novell's own products, including its office productivity applications. Tr. at 1006:20-1007:25 (B. Frankenberg); PX 268 at NOV 00052197. In fact, Novell did distribute Netscape Navigator with PerfectOffice. Tr. at 1007:22-25 (B. Frankenberg).

Moreover, Novell planned to create an Internet namespace for Navigator using the namespace extension APIs, thereby allowing users to browse the Internet through WordPerfect's file open dialog. Tr. at 593:20-594:18 (G. Richardson). Novell planned to include Internet support in its applications because users wanted WordPerfect to be a place that they could access and edit the voluminous content on the web. Tr. at 595:23-596:7 (G. Richardson). In addition, Novell sought to leverage its QuickFinder technology to browse Internet content in Navigator. *See* Tr. at 801:16-802:23 (Gibb); PX 374. Ultimately, Novell's office productivity applications would not only have *shipped* with Navigator, but they would also have had a level of technical integration, making the combination even more potent. *See, e.g.*, Tr. at 593:20-594:18 (G. Richardson); Tr. at 801:16-802:23 (Gibb).

F. **There Is Abundant Evidence In The Record To Show That Microsoft Sacrificed Windows 95 Quality And Profits In The Short Run To Exclude Potential Competition And Maintain Its PC Operating System Monopoly**

Microsoft continually releases "new and improved" versions of its PC operating system. Findings of Fact ¶ 44. Each time it does, Microsoft must convince ISVs to write applications that take advantage of new APIs, so that existing Windows users will have incentive to buy an upgrade.

Id. Since ISVs are usually still earning substantial revenue from applications written for the last

version of Windows, Microsoft must convince them to write for the new version. *Id.* As a result,

Microsoft works closely with ISVs to help them adapt their applications to the newest version of the

operating system. *Id.* In turn, a large body of applications on Windows reinforces demand for

Windows, augmenting Microsoft's dominant position and thereby perpetuating ISV incentives to

write applications principally for Windows. Findings of Fact ¶ 39.

An operating system's success is largely determined by the applications that are written

to run on it. Tr. at 290:5-290:19 (Harral). As a result, Microsoft had a long history of evangelizing

and cooperating with WordPerfect in order to get its popular word processing application running

on Microsoft's operating systems. Tr. at 253:3-253:17 (Harral); *see* PX0506. Indeed, Microsoft

had a continuous course of evangelizing and cooperating with WordPerfect to create applications

for Microsoft's operating systems dating all the way back to MS-DOS. Tr. at 253:3-253:17

(Harral). Microsoft representatives met with Novell repeatedly throughout this course of dealing to

promote different Microsoft operating systems, and the features and advantages these new operating

systems would bring. Tr. at 253:3-253:21. WordPerfect developers, such as Adam Harral, were

also routinely invited to attend events where Microsoft promoted its operating systems. Tr. at

253:18-253:21 (Harral); *see also* PX0063 (Trip Report – Chicago User Interface Design Preview);

PX0078 (Trip Report – Win32 Developers Workshop Featuring Chicago).

In keeping with this course of conduct, when Microsoft began its development of

Windows 95, it continued its vigorous evangelization efforts, specifically targeting WordPerfect as

a "key" ISV critical to the success of Windows. PX0131 at MS-PCA 1673787. WordPerfect also

attended numerous meetings and events related to the Chicago platform and Microsoft's Win32 system strategy. *See* PX0515; PX0063; PX0078.

Novell/WordPerfect also joined, at Microsoft's request, a "First Wave" program for Windows 95 – a program that was designed by Microsoft's Developer Relations Group ("DRG") to get a critical mass of (1) *key* Chicago applications (2) to ship within 90 days of Chicago's shipment, (3) supporting the key features necessary to make <u>*Chicago*</u> successful. *See* PX0148 at MS-PCA 2150196. The goal of the program was to get firm commitments from the most important ISVs in a signed Letter of Intent that they would pursue best efforts to ship their application within 90 days of the shipment of Chicago. PX0148 at MS-PCA 2150197; PX0248 at MX 7155007-09; Tr. at 282:24-283:13 (Harral). In return, the limited group of First Wave ISVs would get special technical, informational and marketing assistance from Microsoft to improve their applications for Windows 95 and maximize their chances of success. PX0148 at MS-PCA 2150196; MS-PCA 2150198-201; Tr. at 301:13-301:15 (Harral). By June 1994, WordPerfect was a member of the First Wave and was receiving Chicago Status Updates from Microsoft. *See e.g.*, PX0184; PX0248 at MX 7155006. Microsoft also provided WordPerfect with betas of Chicago that it could use to build software for the platform. Tr. at 301:13-301:15, 303:23-304:18; *see also* PX0181 (partial documentation provided by Microsoft in June 1994 on namespace extensions).

One of Microsoft's top executives, David Cole, who was directly responsible for the marketing and product management of Windows 95, even went to WordPerfect personally in November of 1993 to evangelize the namespace extension functionality. Tr. at 282:14-282:16; 284:3-284:4 (Harral); *see also* PX 509. Microsoft's purpose in visiting WordPerfect, according to Adam Harral (who attended), was to encourage WordPerfect to be a great Windows 95 application

and to adopt the look and feel of the new operating system, so that WordPerfect's shared code technologies were congruent with the way that Windows 95 was trying to approach its users. Tr. at 284:12-287:8 (Harral).

According to Mr. Harral's testimony, Microsoft discussed and evangelized the namespace extension APIs, and promised to provide WordPerfect with information to enable WordPerfect to plug its own technologies into the Windows 95 platform – so that any user who was "living" in the shell could find and utilize WordPerfect features and functionality. Tr. at 287:1-287:8; 290:25-291:9; 293:15-294:7 (Harral). In fact, WordPerfect talked at length with Microsoft representatives about WordPerfect's document management system, its clip art libraries, and hooking its Quickfinder technologies into the operating system. Tr. at 284:12-287:8; 292:18-292:21 (Harral).

If WordPerfect had had the ability to utilize the namespace extension interfaces as promised, it would have made Windows a better product and driven more customers to Windows in the short term. In fact, WordPerfect's customers were telling the company that they wanted to move to Windows 95 and "live" in the shell of the operating system. Tr. at 268:1-18. As a result, WordPerfect believed that it needed to bring forward its features, including those in shared code, and evolve its technologies to work in the same place as where its customers lived. Tr. at 268:1-268:18. Customers expected when they purchased a Windows 95 product that they would get the Windows 95 experience, and the ability to use and work with namespaces. Tr. at 275:13-276:19 (Harral).

Despite this, Bill Gates decided on October 3, 1994, to de-document the namespace extensions, intentionally degrading the functionality of Windows and putting a roadblock in the way

of the development of Novell's applications and suite for Windows 95. This decision was not

motivated by any legitimate technical problem – indeed, Bill Gates called them "a very nice piece

of work" and thought the shell group who worked on the extensions "did a good job defining the

extensibility interfaces." Thus, Bill Gates destroyed an advanced, valuable[25] functionality in his

own operating system that would have made the operating system better, allowing for better

applications products and a better user experience for customers, for the purpose of making it harder

for two pieces of middleware, Notes and WordPerfect, to achieve a "high level of integration" with

the operating system, because he thought Microsoft having an advantage in shell integration would

help "Office '96 sell better." *See, e.g.*, PX0001. And the reason, from Microsoft's standpoint, that

Office '96 had to sell better than WordPerfect and Lotus was because Microsoft feared Novell's

middleware (along with other middleware products such as Netscape) and felt that it had to control

key "franchises" built on top of the operating system, such as word processing and browsing, in

order to achieve the long-term benefit of widening the "moat" that protects its operating system

monopoly. *See* PX0361 at MS-PCA 1301180.

Microsoft's "worst nightmare" would be allowing "novell/lotus" to be successful at

establishing their "middleware" as a standard on Windows. PX0054 at MS 0185884; *see also*

PX0127; PX0156; PX0499. Microsoft executives feared Novell and Lotus would build their own

middleware on top of Windows to claim API ownership. *See* PX0499. And in the end, after seeing

that Bob Frankenberg and Novell were further ahead than Microsoft in building cross-platform

technologies and middleware, and in integrating WordPerfect with the Internet (*See* PX0222), Bill

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[25] Microsoft patented as intellectual property the namespace extension API functionality. *See*
PX0364.

Gates decided to take a short term hit to Windows and its functionality that would result from de-documenting the namespace extensions, for the long term gain of entrenching Office as a "key franchise," which would widen the barriers protecting the operating system monopoly and preserve dominance in the PC operating systems market.

VI. ABUNDANT EVIDENCE EXISTS IN THE RECORD TO SHOW THAT THE ANTICOMPETITIVE CONDUCT CAUSED ANTITRUST INJURY TO NOVELL

As this Court's preliminary jury instruction reflects, if the jury concludes that Microsoft violated Section 2, then the jury will next consider whether the anticompetitive conduct injured Novell. There is abundant evidence in the record to support this aspect of an unlawful monopolization claim, which is supported by the Fourth Circuit's 2007 decision confirming that Novell has antitrust standing to pursue its treble damages claim. Notably, establishing causation and injury is *not* an element of a Section 2 violation. *See, e.g.*, *World of Sleep, Inc. v. La-Z-Boy Chair Co.*, 756 F.2d 1467, 1477-78 (10th Cir. 1985) ("[U]nder Section 4 of the Clayton Act, . . . a plaintiff must show 'a causal connection between the defendant's actions violative of the Sherman Act and the actual injury to the plaintiff's business.'" (citation omitted)). In fact, commingling the separate issues of anticompetitive effect and antitrust injury is reversible error. *Angelico, M.D. v. Lehigh Valley Hosp., Inc.,* 184 F.3d 268, 273-76 (3d Cir. 1998).[26]

There can be no legitimate dispute that Novell has adduced facts that show (1) Novell was in fact injured as a result of Microsoft's anticompetitive conduct; (2) Microsoft's

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[26] The appellate court observed that, unlike a Rule of Reason case brought under Section 1, injury to competition is *not* a separate element of a Section 2 claim. *Angelico*, 184 F.3d at 276 n.5. That is because injury to competition is presumed to follow from the conduct proscribed by Section 2. *See, e.g.*, *Doctor's Hosp. of Jefferson, Inc. v. Se. Med. Alliance, Inc.*, 123 F.3d 301, 305 (5th Cir. 1997); *Walker v. U-Haul Co. of Miss.*, 747 F.2d 1011, 1016 (5th Cir.1984).

anticompetitive conduct was a "material cause" of Novell's injury; and (3) Novell's injury is an

injury of the type that the antitrust laws were intended to prevent. The Fourth Circuit has already

decided that a question of fact exists on the antitrust injury component, ruling that if Novell proved

its Section 2 claim then "the injury that Novell alleges here is plainly an injury to competition that

the anti-trust laws were intended to forestall. Microsoft's activities . . . were intended to and did

restrain competition in the PC operating-system market by keeping the barriers to entry into that

market high. *Novell*, 505 F.3d at 316.

The impact and effect on WordPerfect caused by Bill Gates' decision to de-document

and withdraw support for the namespace extensions was dramatic. Due to the de-documentation of

the namespace extension APIs, WordPerfect was unable to integrate its own namespace into the

operating system in such a way that users who "lived" in the shell could use or access them. Tr. at

333:3-333:9 (Harral). WordPerfect was also no longer able to extend the Windows 95 common

dialogs as promised. Tr. at 333:14-334:22. The decision also put at risk WordPerfect's ability to

talk to the regular default Windows 95 shell extensions, such as Network Neighborhood and

Recycle Bin. *Id*.

Ultimately, the decision created a twofold problem: (1) WordPerfect couldn't expose its

own namespaces to users of the shell, and (2) WordPerfect was having problems getting all the

Windows 95 namespaces integrated into its own products. *Id*. While the number of the APIs

withdrawn was small, the impact was enormous. As Adam Harral testified when questioned about

the impact of the decision:

> "We're not talking about changing the color that's the background of a
> picture, you know, of a little image on a desktop here. The [IShellBrowser
> API] stopped anybody from finding a place to put things on the shell. The

[ICommDlgBrowser API] stopped them from getting at those things in the common dialog and adding things for people beyond what the shell provided. And the [IPersistFolder API] just made sure they couldn't – even if they could do that, they wouldn't be able to save it so that the user would have the same consistent view from one time to the next. Those were – the four removed APIs, that's the impact that we saw in removing those four little APIs. *You can do something to my house, but if the thing you decide to do is remove the door and close it up, that's a pretty significant thing to do to your house.*"

Tr. at 335:5-336:3.

Faced with Gates' decision to de-document the namespace extension functionality, Novell had three theoretical options. *Id.* at 342:6-344:7. Option one was to continue to use the now unsupported APIs and attempt to invoke them using the partial documentation provided in the M6 beta documentation. *Id.* The second option was to see if they could somehow fit within the common framework provided by Microsoft, even though it would result in significantly reduced functionality – which could have a dire impact on WordPerfect's customers and Novell's relationship with them. *Id.* The third option was to try to recreate what was lost as a result of Microsoft's decision to de-document the namespace extension APIs *Id.*

Novell decided to try to explore the first option – continuing to use the now unsupported namespace extension APIs. *Id.* at 344:8-345:7. However, when it went down that road, Novell was shut down by Microsoft, and Microsoft's Premier Support refused to provide any help on the shell at all, let alone help on invoking the partially documented shell namespace extensions that were now unsupported. *Id.* at 345:8-346:11. Novell concluded that it was useless to continue trying to explore the namespace extensions, and that option one was not a viable option. *Id.*

Novell then decided to explore the second option, which was to try to use the basic common file open dialog and evaluate whether the lost features and functionality would seriously

impact customers. *Id.* at 346:12-347:4. In talking with customers, Novell concluded that losing

features that had been in use for 10 years was not an acceptable option. *Id.* Novell concluded that

customers bought WordPerfect because of enhanced file management capabilities, and that the

concept of living in WordPerfect was a big deal to Novell's customers – all of which would be lost

if option 2 were pursued. *Id.* Novell then abandoned Option 2, and began to evaluate what it would

take to implement Option 3, in which Novell would imitate the namespace extension APIs inside

what WordPerfect was doing so it could give the same view of namespaces inside WordPerfect's

own file open dialog. *Id.*

      After the de-documentation of the shell namespace extensions, efforts were made by

Novell management to continue to seek the assistance of Microsoft's Premier Support to resolve the

issue. *Id.* at 349:19-350:7. However, by January of 1995, Novell had moved to trying to reproduce

the lost functionality. *Id.* at 350:8-352:3. In order to solve the problem, Novell efficiently escalated

resources so the team could split the problem up and work as efficiently as possible. *Id.* The team

was working around the clock, and 80 hour weeks were common. *Id.* at 354:1-354:5. Mr. Harral

personally complained about the de-documentation of the namespace extensions to Premier

Support, as that was the primary avenue of communication open to him. *Id.* at 354:9-354:14.

      Novell's top priority was to release a great suite that ran well on Windows 95 close in

time to the Windows 95 release. Tr. at 796:10-796:18; 797:5-797:8 (Gibb). The evidence at trial

showed that Novell was prevented from achieving this goal by Microsoft's de-documenting of the

namespace extension APIs, without which PerfectOffice "wouldn't be functional enough to be

considered a reasonable product in Windows 95." *Id.* at 629 (Richardson). Mr. Richardson testified

that "the common dialog wouldn't even give us the level of functionality we had in our last release

in Windows or that we had on our DOS card. It was a huge step backwards for us. And we felt it simply wasn't an option. If we were to go with that option we didn't really have a product." *Id.* at 630.

Once it became clear that Option 3 was the only viable route, the PerfectFit shared code team quickly became critical path.[27] It then took the shared code team almost a year to complete the new file open dialog that could mimic the interfaces and functionality that had been promised and then taken away by Microsoft. *Id.* at 347:13-347:18. As a result, Novell was unable to release PerfectOffice suite (and WordPerfect) within 60 to 90 days after the release of Windows 95. Tr. at 804:20-805:7 (Gibb). PerfectOffice finally shipped a suite for Windows 95 in 1996, after Novell sold WordPerfect to Corel. Tr. at 804:13-804:19 (Gibb).

Microsoft's misrepresentations regarding the namespace extension APIs delayed Novell's introduction of its office productivity applications and suites past the critical period represented by Microsoft's introduction of Windows 95; by contrast, Microsoft's suite "was there at the day of announcement." Tr. at 1033:15-17 (Frankenberg). As a result, the value of Novell's products (besides GroupWise) "declined significantly." *Id.* at 1033:11-17. Mr. Frankenberg testified that Novell was forced to sell these applications at a loss because "[i]t became clear that we were not competing on a level playing field . . . our key competitor, Microsoft, could control our ability to put product out the door and did so. And that meant it was impossible for us to fulfill our

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[27] Critical path means the portion of the overall software project that is currently going to take the longest to complete on the schedule. Tr. at 794:3-794:11; 804:20-805:22 (Gibb). Gary Gibb testified that Quattro Pro was not critical path – it did not cause the delay in shipment of PerfectOffice 95. Tr. at 806:15-806:25 (Gibb). Early on, Gary Gibb thought Quattro Pro might be critical path. Tr. at 806:15-806:25. However, the Quattro Pro team was very conservative in their estimates and over delivered. Tr. at 806:15-806:25 (Gibb).

promises to customers, it was impossible for us to derive significant value, and it made much more sense for us to sell [the office productivity applications] product and pursue other opportunities." *Id.* at 1033:22-1034:3.

Microsoft's de-documentation of the namespace extension API's not only delayed completion of WordPerfect's shared code, but also had a significant impact on the overall functionality that Novell and Corel wished to deliver in the product. *Id*. at 355:7-355:14. During the development process, Novell cut back the functionality of the file open dialog in an attempt to ship as soon as possible, cutting features they were once going to add to the file open dialog. Tr. at 815:16-817:1. In fact, from an architectural perspective, Adam Harral and his team did not achieve until Windows 98, the next version of Windows, the suite that they planned to release for Windows 95. *Id*.

VII.   THERE IS ABUNDANT EVIDENCE IN THE RECORD TO SHOW MICROSOFT VIOLATED SECTION 2

As the Third Circuit explained in *Broadcom Corp. v. Qualcomm Inc.*, 501 F.3d 297, 316 (3d Cir. 2007), the *Trinko* plaintiff failed to state a claim because it "did not allege that the defendant engaged in a voluntary course of dealing with its rivals," nor would the defendant have "publicly marketed the allegedly withheld services absent a statutory duty to do so." Here, Microsoft voluntarily undertook a 15-year course of conduct that spanned every platform from DOS to Windows 95, and included the publication of tens of thousands of APIs.

As the record shows, operating system vendors and ISVs have a symbiotic relationship that, in many respects, is required so that both groups of developers can best serve their customers. In particular, operating systems vendors need ISVs for two reasons: first, the operating system

vendor needs ISVs to develop their software products to run on the operating system. Tr. at 1387:9-10 (R. Alepin). Novell's technical expert Ronald Alepin explained that "people buy computers to run applications not to run operating systems." *Id.* at 1387:9-10 (R. Alepin). Therefore, operating system vendors "encourage" ISVs to develop their applications to the new operating system. *Id.* at 1387:12-16 (R. Alepin). Second, operating system vendors need ISVs "because ISVs are close to users and they understand what users want and need." Tr. at 1387:17-24 (R. Alepin). In the same vein, ISVs require the assistance of the operating system vendor to learn about the future of the operating system, including the functionality planned, the timing of the operating system's release, and how the changes in the operating system will enable the ISV to better sell applications to their customers. *Id.* at 1388:2-8 (R. Alepin).

As Mr. Harral testified – and as noted earlier – an operating system's success is largely determined by the applications that are written to run on it. Tr. at 290:5-290:19 (Harral). This led Microsoft to work closely with WordPerfect; the two entities had a long history of cooperation, in which Microsoft evangelized its operating systems to Novell/WordPerfect so that WordPerfect would develop its popular word processing application running on Microsoft's operating systems. *See* Tr. at 253:3-253:17 (Harral); *see* PX 506. As previously detailed, that course of conduct involved Microsoft's visits to WordPerfect (PX 105), WordPerfect's attendance at multiple Microsoft evangelism events and developers conferences (PX 63, PX 78, PX 113), and a general course of conduct stretching as far back as development for Microsoft's MS-DOS operating system, Tr. at 253:3-253:17 (Harral). WordPerfect also joined Microsoft's "First Wave" program for critical ISVs. *See* PX 148, at MS-PCA 2150196.

This course of dealing continued through the development of Microsoft's Windows 95 operating system, including with respect to the namespace extension APIs. Generally speaking, Microsoft identified WordPerfect as a "key" to the success of its new platform and WordPerfect developers continued to attend events dedicated to Windows 95 and Microsoft's 32-bit strategy. *See, e.g.*, PX 131, at MS-PCA 1673787; PX 515. At a visit in November 1993, discussed above, Microsoft told WordPerfect that the namespace extension APIs would be documented (Tr. at 282:14-282:16; 284:3-284:4 (Harral)), it continued to evangelize the APIs through late 1993 and early 1994 (*see, e.g.*, PX 113), and finally, documented the APIs in the June 1994 M6 beta release of Chicago, (*see, e.g.*, PX 181).

While all of this is discussed in greater depth above, even this summary view illustrates the depth of the prior course of dealing between Microsoft and Novell/WordPerfect. Microsoft reversed course on this prior relationship when it realized that Novell was using certain Chicago APIs more effectively than Microsoft's own applications developers, and that withdrawing key pieces of promised technology would crush Novell's business. As in *Aspen Skiing*, Microsoft unilaterally terminated this "voluntary *(and thus presumably profitable)* course of dealing," which shows "a willingness to forsake short-term profits to achieve an anticompetitive end." *Trinko*, 540 U.S. at 409 (emphasis in original) (citing *Aspen Skiing*, 472 U.S. at 608, 610-11).[28] This is the hallmark of a monopolist.

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[28]The essential facilities cases on which Microsoft has previously relied are not remotely analogous. The opinion in *Olympia Equipment Leasing Co. v. Western Union Telegraph Co.*, 797 F.2d 370, 377 (7th Cir. 1986), is distinguishable for the same reason as *Trinko* – the defendant was not in the business of providing the service that the plaintiff demanded, nor did it historically provide the withheld service to competitors. In *David L. Aldridge Co. v. Microsoft Corp.*, 995 F. Supp. 728, 748-56 (S.D. Tex. 1998), the complaint was that Windows 95 solved a shortcoming of Windows 3.1, depriving the plaintiff of a market for its third-party solution. The court found, in effect, that

A. This Case Is Nowhere Near The Limits Of *Aspen Skiing*

While this Court has already acknowledged that the facts of this case go well beyond a pure "unilateral-refusal-to-deal" violation,[29] it recently posited a hypothetical attempting to compare this case to *Aspen Skiing*. In the Court's hypothetical, the monopolist that owned three of the four mountains decided to build a tram line to connect all of its slopes and the plaintiff owner of the fourth mountain asked for a perpetual easement to tie the monopolist's tram line to the plaintiff's tram line and to connect to the monopolist's power source.

The hypothetical is inconsistent with the record in this case. To more accurately capture the facts of this case, Novell would modify it as follows: The monopolist planned to build a tram line connecting all of its mountains and voluntarily offered to the plaintiff to route the tram line to the plaintiff's mountain so that the plaintiff could connect its own tramline and offer consumers a better way to experience all four mountains. In reliance on that offer, the plaintiff chose not to pursue alternative plans to purchase easements and build its own transportation network to give skiers a way to move easily from the monopolist's mountains to the plaintiff's mountain, and *vice versa*. The plaintiff obtained a second mortgage and invested heavily to build its own transportation network to build a restaurant, a recreational center, and otherwise improve its mountain to a state-of-the art mountain. The monopolist became concerned that the plaintiff would divert all of the most valuable customers to its mountain and decided not to make the tram available to plaintiff.

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the prior defect was not an essential facility. The plaintiff in *Twin Laboratories, Inc. v. Weider Health & Fitness*, 900 F.2d 566, 569 (2d Cir. 1990), experienced growth in profits and market share after the defendant withdrew its facility, which therefore could not be considered "essential."

[29] *Novell, Inc. v. Microsoft Corp. (In re Microsoft Antitrust Litig.)*, 699 F. Supp. 2d 730, 746 (D. Md. 2010) ("As an initial matter, it is not entirely clear that Microsoft's conduct was merely a refusal to cooperate: Novell has presented evidence that Microsoft affirmatively misled Novell about Windows 95 and entered into anticompetitive agreements with OEMs.").

The plaintiff did not have enough time or money to build its own transportation network in time to avoid foreclosure.

As in this case, the monopolist's misconduct was not necessarily in withholding access but in offering access, inducing reliance, and then retracting access which eliminated the competitor and harmed the competitive process. The case upon which Microsoft has placed substantial reliance, *Christy Sports, LLC v. Deer Valley Resort Company, Ltd.*, 555 F.3d 1188 (10th Cir. 2009), is in accord with Novell's theory of antitrust liability. In that case, a covenantee ski rental company alleged that a covenantor ski resort owner attempted to monopolize the market for ski rentals at the resort by enforcing a restrictive covenant granting the resort owner a right of approval over conduct of ancillary businesses at the resort. The court found that the covenantee could not complain that the covenantor chose to exercise its contractual rights but noted that an antitrust claim might have arisen if "by first inviting an investment and then disallowing the use of the investment the resort imposed costs on a competitor that had the effect of injuring competition in a relevant market." *Id.* at 1196. That is exactly what happened here. Having invited Novell to utilize its APIs and sending Novell down a path of reliance, Microsoft's decision to disallow Novell access to those APIs imposed substantial costs on Novell and prevented Novell from producing a product for Windows95 within the critical window of opportunity for markets characterized by network effects, and exclusion of Novell's OPAs harmed competition in the market for PC operating systems, as set forth more fully below. All of Microsoft's arguments to the contrary rest on disputed questions of fact.

B. Microsoft's Conduct Is Not Immune From Antitrust Scrutiny As A Technological Innovation

"Intellectual property rights do not confer a privilege to violate the antitrust laws." *Microsoft II*, 253 F.3d at 63. Microsoft, as a matter of law, does not have an unfettered right to its intellectual property to harm competition. In the government case, Microsoft argued "if intellectual property rights have been lawfully acquired, [then] their subsequent exercise cannot give rise to antitrust liability." *Id.* The D.C. Circuit rejected Microsoft's argument, which it characterized as "border[ing] on frivolous," and noted that "it is no more correct than the proposition that use of one's personal property, such as a baseball bat, cannot give rise to tort liability." *Id.* The antitrust laws will tolerate any success that a monopolist may achieve "*solely* through 'the process of invention and innovation.'" *Foremost Pro Color, Inc. v. Eastman Kodak Co.*, 703 F.2d 534, 544-45 (9th Cir. 1983) (emphasis added) (quoting *Berkey Photo, Inc. v. Eastman Kodak Co.*, 603 F.2d 263, 281 (2d Cir. 1979)). There is no blanket immunity for design changes and product introductions; it is the monopolist's "'associated conduct,'" and not the innovation itself, that determines liability under Section 2. *Id.* at 545 (quoting *Berkey Photo*, 603 F.2d at 286 n.30). A wide variety of conduct can be considered anticompetitive, including fraudulent inducement, and "a host of other activities that improperly stifle competition." *Caldera*, 72 F. Supp. 2d at 1306. The "associated conduct" here is actionable. Because Microsoft's success was at least "'partial[ly] root[ed]'" in the use of its monopoly power, Microsoft's actions may be condemned under Section 2. *GAF Corp. v. Eastman Kodak Co.*, 519 F. Supp. 1203, 1227 (S.D.N.Y. 1981) (quoting *Berkey Photo*, 603 F.2d at 292).[30]

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[30] This Court's decisions in *In re Microsoft Corp. Antitrust Litigation*, 274 F. Supp. 2d 743 (D. Md. 2003), and *Daisy Mountain Fire District v. Microsoft Corp.*, 547 F. Supp. 2d 475 (D. Md. 2008), do

Further, there is no question here of a legitimate first-mover advantage. Microsoft

claims that it never used the technologies at issue. It cannot simultaneously claim that it

was seeking to gain temporary benefits from using the technologies. *See In re Microsoft*,

274 F. Supp. 2d at 746. While Microsoft "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," *Berkey Photo*, 603 F.2d at 281, that is not what Microsoft was doing here.

In fact, Microsoft's effective destruction of the namespace APIs was more like vandalism than

"us[ing] its superior knowledge," as this Court used the term in *In re Microsoft*, 274 F. Supp. 2d

at 746.

C.   **Microsoft's Conduct Did Not Make Business Sense Apart From Any Effect
        It Has On Excluding Competition Or Harming Competitors**

Microsoft has put forth what it claims are legitimate technical justifications for its

decision to withdraw support for the namespace extension interfaces. Specifically, Microsoft

claims that (1) a program written to use the Namespace Extension APIs could potentially crash the

Windows 95 shell, (2) the namespace extension APIs were not compatible with future versions of

Windows that were then being developed and (3) the namespace extension APIs did not achieve the

functionality that Bill Gates hoped for. Because the alleged existence of technical justifications is

an issue on which Microsoft has the burden of proof, and Microsoft has not yet presented any

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not support Microsoft's defense. Both cases concerned essential facilities and monopoly leveraging
claims, which are not at issue; nor does Novell complain that Microsoft's own developers were
given preferential access to the withdrawn technology, nor seek an injunction that would involve the
Court in micro-managing Microsoft's disclosures of technology. *See In re Microsoft*, 274 F. Supp.
2d at 745. As the *Caldera* court observed upon rejecting the same defense, the relief here would not
"impose an affirmative duty on a monopolist to prerelease sensitive corporate information or
innovations to a competitor under all circumstances." *See Caldera*, 72 F. Supp. 2d at 1317.
Microsoft generally can decide what APIs to disclose, but it cannot refuse to disclose or selectively
disclose information as part of an anticompetitive scheme to destroy a rival. *See, e.g.*, *id.*

testimony on this issue, it is impossible for Microsoft to prevail on this issue on its Rule 50 motion. Nevertheless, there is already substantial evidence in the record that none of these purported technical justifications hold water.

As an initial matter, Microsoft's purported technical justifications for de-documenting the namespace extension APIs are shown to be pretextual by the very fact that Microsoft's own products continued to use the interfaces after they were withdrawn. For example, Microsoft allowed its Marvel client to continue to use the namespace extension interfaces even after Bill Gates de-documented the namespace extension APIs. *See* PX0530. Similarly, Microsoft's Office '96 team also utilized a de-documented namespace extension interface in the development of an "Office Explorer" – an interface similar to Outlook that users would use to find documents, appointments, tasks and mail in a single place in a consistent manner. *See* PX0231 at MX 1189911-13. An internal Microsoft document entitled "Chicago Explorer Superset and Replacement," indicates that the "Office Explorer will superset and replace the Chicago Explorer to become the single place where users can find and manipulate all their information irrespective of its type, including all documents and files, in addition to personal information such as appointments, task lists and mail" and that such functionality "undercuts Lotus Notes, giving away a large part of the Notes functionality for free." PX0379 at MS-PCA 1566798. The document, updated on November and December of 1994, well after Bill Gates' decision to withdraw support for the namespace extension interfaces, also states that the Office Explorer implementation strategy was "to leverage the Chicago shell team's work" and that one of the "crucial interfaces" to be utilized was "IShellView," an important namespace extension interface. *Id*. at MS-PCA 1566800-01.

In addition to Marvel and Office '96, the evidence also shows that Microsoft continued to utilize the namespace extension interfaces in 1995 in the development of Internet Explorer. *See, e.g.*, PX 344. A document entitled "Web-like Shell: Architecture," dated November 8, 1995 outlines that Internet Explorer, Athena, and MSN Marvel were all using the shell namespace extension mechanism. *See* PX0344 at MS98 0116190. The document outlines that Microsoft intended to integrate the shell explorer and the Internet Explorer so that users could navigate documents on local volumes, local area networks and the world wide web. *Id.* at MS98 0116189. The document notes that while Microsoft hadn't yet clearly defined how it would present documents on the World Wide Web to the end user on the Explorer left pane (i.e., the hierarchy), that it was "quite natural to use the Namespace Extension mechanism to plug the URL namespace into the explorer's name space." *Id.* at MS98 0116190. Despite Microsoft's claims that the namespace extension mechanism was somehow incompatible with future versions of Windows, unstable or poorly designed, and that they didn't achieve the functionality Gates hoped for, the evidence in fact shows that Microsoft was basing one of its important products, Internet Explorer, on these same interfaces.

Similarly, an internal Microsoft e-mail by Scott Henson entitled "Shell extensibility and ISVs" from August 1995 also indicates that Microsoft continued to utilize the namespace extension interfaces in the development of their own products even after Microsoft had withdrawn support for them. Henson writes in the e-mail to top Microsoft executives that he is voicing a "STRONG concern" for the ISVs because "approximately a year ago we told ISVs that a set of interfaces (known as namespace extensions) were no longer going to be a part of the standard Win32 API set"

and were instead moving to an unsupported status. *See* PX0324 at MS98 0120901. Henson

continues,

> Given this, we went and told the ISVs that there was a lot that they could do
> in the system with respect to extensibility BUT they COULD not integrate
> into the explorer (like the control panel and briefcase) as we had previously
> mentioned was possible. HOWEVER, this is not the limit of what is going
> on internally. As I mentioned there is a lot of internal development going on
> where various groups are implementing these interfaces to varying degrees. .
> . . I have just installed Athena (the lightweight PIM from the PSD group)
> onto my system and to my dismay they are not only using the namespace
> extensions but they are also displaying themselves in the scope (left) pane
> and view (right) pane. This is the EXACT thing we told ISVs they could
> (and should) not do! In short we have a product that will be sold in the very
> near future that will implement interfaces that we told ISVs they should not
> use because we would not be able to support them moving forward. In the
> meantime we were developing a product that did exactly that. I can't even
> express how BAD this is! We loose everything when we do this!
> Credibility, trust, leverage, the works! Assuming that we are going to
> support these APIs as a part of the standard Win32 API set we should
> document them – *QUICK! Our ISVs are already months behind.*

PX0324 at MS98 0120901 (emphasis added).

The evidence clearly shows that Microsoft continued to use the namespace extension

mechanism for strategic advantage after it had told ISVs such as WordPerfect not to use those

interfaces. For this reason alone, Microsoft's purported technical justifications can be seen as a

sham.

1. Microsoft's Claim That A Program Written To Use The Namespace Extension APIs Could Potentially Crash The Windows 95 Shell

Microsoft's claim that robustness issues were a legitimate technical justification for Mr.

Gates' decision to de-document the namespace extension APIs is clearly an after-the-fact pretext.

First, Mr. Gates did not cite robustness or quality concerns regarding the Namespace Extension

APIs in his October 3, 1994 decision to withdraw support for those APIs. *See* PX0001. In fact, Mr.

Gates states in his e-mail that there was nothing "wrong with the extensions – on the contrary they are a very nice piece of work." *Id*.

Second, when Microsoft re-documented the namespace extension mechanism in 1996, it did not change the interfaces at all, and they continue to run in-process. For example, the David Campbell article in July 1996, entitled "Extending the Windows Explorer with Name Space Extensions," which re-documented the interfaces, notes that name space extensions still must be implemented in process, as "OLE in-proc" servers. *See* PX0355. As a result, namespace extensions, even after the re-publication in 1996, still ran in the shell's process. If there was a serious problem with running shell namespace extensions in process, Microsoft would never have re-documented the interfaces.

Third, Microsoft's own applications continued to run in-process in 1994 and 1995. For example, Capone and Marvel in 1994 continued to execute "in process" after the decision was made to de-document the interfaces. *See* PX0543. Microsoft's Athena PIM also continued to run "in process" on Windows 95 in 1995. *See* PX 324.

Fourth, robustness issues relating to namespace extensions on Windows NT had been fixed by at least March of 1995. *See* PX0279. If similar problems existed and were considered serious on Windows 95, a similar fix could have been implemented on Windows 95. Instead, Microsoft chose to republish the documentation, and Windows 95 namespace extensions, to this very day, run in the shell's process.

2.   **Microsoft's Claim That The Namespace Extension APIs Were
Not Compatible With Future Versions Of Windows That Were
Then Being Developed**

Microsoft also claims that supposed incompatibility with future versions of Windows is

a legitimate technical justification for the decision to de-document the namespace extension

mechanism. However, this purported justification is also a sham. The extensions were

implemented in Windows 95 in a manner that made them completely compatible with all future

versions of the Windows operating system. For example, when Microsoft made the original

decision to publish the namespace extension interfaces, Paul Maritz stated to Bill Gates that the

APIs exposed by Chicago, including the shell extension APIs, would use a "lighter weight OLE

implementation" that would be compatible with future versions of Windows NT called Cairo. *See*

PX0094 at MS7048981. Maritz states that "any Chicago UI exploitive apps would work decently

on Cairo – i.e. No need for ISVs to do different work to run on Cairo." *Id.*

In fact, Satoshi Nakajima, the investor of the namespace extensions, spent weeks

working on new lightweight shell extensibility mechanisms that Cairo would support. *See* PX0114

at MS7083975. When Nakajima finished re-writing the interfaces to be Cairo compatible, Brad

Silverberg wrote that he was "very proud of the way the team has architected the extension

mechanism to use OLE interfaces but have a lightweight implementation underneath." *See* PX0129

at MS 5064050. In fact, by May of 1994, Nakajima bragged that his new implementation ran well

on 4MB systems and was completely OLE2-compatible "in future versions of windows." PX0176

at MX3171070. Nakajima outlined that "[t]his compatibility is the key of this technology, and we

should emphasize it." *Id.* He explained in answering a question regarding compatibility with

OLE2, that: "To achieve our size goal, we decided to put a sub-set implementation of OLE 2 (light-

weight binder) in the shell (so that we can run the shell and old Windows apps without loading

OLE2), but it uses the same algorithm when loading In-Proc server DLLs. *When we switch to the*

real OLE2, nobody will notice the difference.” *Id*. at MX3171071. Nakajima explained that they

took all compatibility issues into account, and that ISVs would switch to the real OLE 2

implementation without having to “re-write their extensions.” *Id*. at MX3171072.

In addition, any compatibility issues between Windows 95 and future versions of the

Windows operating systems such as Cairo disappeared in September 1994 (*before* Gates’ decision

to de-document the namespace extensions), when the Chicago shell codebase was chosen for future

Windows operating systems. *See e.g.*, PX0212; PX0216. For example, PX0212 outlines that a

decision was made by September 19, 1994 to ship Windows NT Cairo with a Chicago-compatible

user interface and that Microsoft had went from multiple centers of shell-like efforts to just two: one

in systems and one in applications. PX0212 at MSC 00524455-57. The document also indicates

that systems would ship a Chicago-derivative shell on Nashville (Windows ’96) and Cairo. *Id*. at

MSC 00524458. In fact, in an e-mail to Windows NT employees, senior Microsoft executive Jim

Allchin outlines on September 27, 1994 that:

> Bill recently made a decision to move the Cairo shell effort to Office…Given
> the above decision, we have decided to use the Chicago shell codebase for
> the NT Workstation. A positive benefit from this is that the NT workstations
> shell will be the same as Chicago. This gives ISVs one set of APIs to target
> and minimizes the user training issues.

When the decision was made to use the Chicago shell codebase on Cairo and Windows ’96, all

potential compatibility problems with future versions of Windows were eliminated. In fact, Brad

Silverberg stated that the win95 team kept NT in mind from the beginning for the shell, which is

why it ported so easily, and that “the win95 shell will be on winnt and the shell extensions will run

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fine there – there is no issue about supporting on nt." PX0324 at MS98 0120900. Getting the

namespace extension APIs to run robustly on Windows NT also posed no issues. *See* PX0279 at

MS-PCA 1405389 ("there shouldn't be any issues with shell extensions being run robustly on NT.

The big ones (namespace extensions) end up in a separate process").

3. Microsoft's Claim That The Namespace Extension APIs Did Not Achieve The Functionality That Bill Gates Hoped For

Microsoft has long asserted that the namespace extensions were "trivial and

unimportant," and had a much more limited functionality than originally envisioned by Mr. Gates –

and that this purported fact somehow excuses Mr. Gates' anticompetitive conduct. However, the

evidence refutes Microsoft's assertion.

In fact, Bill Gates himself calls the namespace extension interfaces in 1994 a key component

that was "central to [Microsoft's] whole strategy – email, [document library], applications, file

system…" *See* PX0134 at MSC 00795586. Further, on October 3, 1994, when Mr. Gates made the

decision to withdraw the namespace extensions, he stated that the "shell group did a good job

defining extensibility interfaces," that there was nothing "wrong with the extensions" and that "on

the contrary, they are a very nice piece of work." PX0001 at MX 9030733. Similarly, the Office

'96 team, while working with the namespace extension interfaces *after* Bill Gates made his decision

to de-document them, stated in a specification document that IShellFolder and IShellView, (two of

the namespace extensions) were "crucial interfaces" for their development of an Office Explorer.

See PX0400 at MS-PCA 1566793.

In addition, other evidence in the record shows that the namespace extensions were widely

called by ISVs during the short period of time they were partially documented after the release of

the M6 beta. For example, in addition to WordPerfect, a report from Scott Henson indicates that

Oracle, Symantec, Stac Electronics and DCA had already started work on the interfaces. *See*

PX0215 at MX 6109491-92. If the interfaces were "trivial and unimportant," as Microsoft now

claims, it makes no sense that so many third-party developers and ISV's were clamoring for the

access to the interfaces and using them. *See e.g.*, PX0064 at MS7093163 (noting that ISV's

"*really* want extensibility" and were "afraid and angry that Microsoft would use the hooks for its

own purposes (apps, mail, etc) but not provide to isv's. This was a very hot button.")

Furthermore, Microsoft itself extensively utilized the namespace extension APIs in a variety

of its own products. Scott Henson's report details that various divisions, groups, and products

within Microsoft were actively using namespace extensions in September of 1994, including

Microsoft Marvel, Access and Ren. *See* PX0215 at MX 6109491. Capone, an e-mail client in

Windows 95, was also clearly using the interfaces as well. *See* PX0219 at MX 5117033. In

addition, Mr. Henson's e-mail of August 8, 1995 reveals that "there is a lot of internal development

going on where various groups are implementing these interfaces to varying degrees," including the

development of Athena, a lightweight personal information manager. *See* PX0324 at MS98

0120901. Athena used the name space extensions in the exact manner Bill Gates envisioned and

claimed never happened (i.e., in the right hand pane). In fact, Mr. Henson stated in his e-mail

blowing the whistle on Microsoft's malfeasance, that he installed Athena and found to his dismay

that "they are not only using the namespace extensions but they are also displaying themselves in

the scope (left) pane and view (right) pane. This is the EXACT thing we told ISVs they could (and

should) not do!" *Id*. at MS98 0120901.

Microsoft also architected one of the most important products it ever developed, Internet Explorer, around the Windows 95 shell namespace extensions in 1995, using them as the chief method for integrating Internet Explorer into the Windows shell. *See* PX0344 at MS-PCA 1085016. Microsoft also re-documented the exact same extensions it now claims were "trivial and unimportant" in July of 1996 with the publication of a lengthy MSDN article. *See* PX0355. If, as Microsoft now claims, the extensions were flawed or had little benefit to applications developers, it makes no sense that Microsoft would go to such efforts to re-publish and promote the functionality.

Finally, Microsoft also sought and eventually received a patent for the namespace extension interfaces. *See* PX0364. If they were of little value, then it makes no sense for Microsoft to have gone to such trouble to protect this intellectual property. The only logical conclusion is that the extensions, far from being "trivial," were an important and valued piece of property Microsoft wanted to protect.

In sum, Microsoft's claim that the namespace extensions were trivial and never achieved some supposedly hoped for functionality is unsupported by the evidence, and cannot validly justify Microsoft's anticompetitive conduct.

VIII. CONCLUSION

For the foregoing reasons, Microsoft's Motion for Judgment as a Matter of Law should

be denied.

Dated: November 18, 2011   SNOW, CHRISTENSEN & MARTINEAU
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CERTIFICATE OF SERVICE

I hereby certify that on the 18th day of November 2011, I electronically filed the foregoing document with the Clerk of the Court using the CM/ECF system which will send notification of such filing to all counsel of record.

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