

1 (Recess)

2 THE COURT: I forgot to ask you about Apple, but
3 we will take that up later.

4 MR. SCHMIDTLEIN: About?

5 THE COURT: About Apple. That is the last thing
6 on the --

7 (WHEREUPON, the jury enters the proceedings.)

8 THE COURT: Sorry for the long lunch. I was
9 confused about something and counsel helped me out. Thank
10 you very much.

11 MR. JOHNSON: Thank you, Your Honor.

12 I think I need a witness.

13 THE COURT: You can't do much without Dr. Noll.

14 BY MR. JOHNSON

15 Q. Professor Noll, we were discussing the conduct with
16 respect to the namespace extension APIs, and you testified
17 with respect to the anticompetitive conduct and the impact
18 of that conduct in the operating system market. Were there
19 any offsetting pro-competitive benefits with respect to your
20 analysis of this conduct?

21 A. No, I do not believe so.

22 Q. Is that on?

23 A. Yes. Okay.

24 Q. I'm sorry. Could you give us that answer again?

25 A. No, I do not believe so.

1 Q. For purposes of analyzing harm to competition in the
2 operating systems market, what you are doing here today,
3 does it matter if Novell or Corel owned the product at the
4 time of its release?

5 MR. TULCHIN: Objection, Your Honor. That calls
6 for a legal conclusion.

7 THE COURT: Sustained.

8 BY MR. JOHNSON

9 Q. Have you provided a slide to describe generally the
10 justifications that Microsoft had offered?

11 A. Yes.

12 MR. JOHNSON: Let's go to that slide.

13 BY MR. JOHNSON

14 Q. What are you referring to when you talk about
15 Microsoft's intellectual property?

16 A. It first refers to the fact that software in general
17 can be copyrighted, which means you can't replicate exactly
18 the code. And, secondly, algorithms that are included in
19 software programs in some cases can be patented. And so
20 intellectual property here refers to both of those, that it
21 consists of legal protections against somebody duplicating
22 that product.

23 Q. And from an antitrust economic perspective what view,
24 if any, do you have of Microsoft's claim that it has the
25 right to do what it wants with its intellectual property?

1 MR. TULCHIN: This also calls for a legal
2 conclusion, Your Honor.

3 MR. JOHNSON: Your Honor, this goes directly to
4 the pro-competitive justifications.

5 THE COURT: The question as phrased does not call
6 for a legal conclusion. There is absolutely a legal aspect
7 to this as well.

8 MR. JOHNSON: Thank you, Your Honor.

9 THE WITNESS: Yes. From the point of view of
10 antitrust economics the issue has to do with what the use of
11 the intellectual property is. Remember that the
12 justification that we have in economics, notwithstanding
13 what the law says, for intellectual property rights is to
14 encourage innovation, which means they do have certain kinds
15 of control over property that is theirs for the purpose of
16 allowing them to profit from their innovation. But it is
17 property and how you use the property is what matters in
18 terms of determining its economic impact. If it is
19 something that is simply advancing consumer welfare then,
20 indeed, it is correct to say that you control its use for
21 the purposes of consumer welfare.

22 It is not true that you can use property for
23 things that destroy competition unrelated to intellectual
24 property, and that is the distinction in economics between
25 anticompetitive and pro-competitive use of intellectual

1 property.

2 Q. Was it your role to evaluate Microsoft's claimed
3 technical justifications?

4 A. No, I did not. That was Mr. Alepin's job.

5 Q. What understanding, if any, do you have regarding Mr.
6 Alepin's conclusions regarding Microsoft's claimed technical
7 justifications?

8 A. Mr. Alepin's conclusions are that the technical
9 justifications were not valid.

10 Q. Let's go back to the hardboard and move to the next
11 item on your list of anticompetitive acts, specifically RNA
12 API.

13 MR. JOHNSON: If we can turn to the next slide,
14 please.

15 BY MR. JOHNSON

16 Q. What does this slide summarize?

17 A. This basically summarizes the basic facts about the RNA
18 API, my conclusion basically about them.

19 Q. In terms of antitrust economics, what was the
20 anticompetitive harm caused by Microsoft's conduct regarding
21 the remote network access API in the operating systems
22 market?

23 THE COURT: Mr. Tulchin, of course, you have a
24 continuing objection to this whole line of questioning, and
25 anything else --

1 MR. TULCHIN: Yes.

2 THE COURT: Go ahead.

3 THE WITNESS: Well, the value of the RNA API had
4 to do with the ability to access the Internet directly over
5 telephone lines, and to the extent Netscape couldn't make
6 use of that API the value of its browser was undermined.

7 If Internet Explorer could do that but Netscape
8 Navigator could not, that is a liability in terms of
9 performance and functionality for Netscape Navigator. And
10 so not revealing that API to Netscape not only had the
11 affect of reducing Netspace's penetration as a browser, but
12 because Netscape exposes APIs in its middleware, it also
13 protects the operating system monopoly by reducing
14 Netscape's ability to reduce the applications barrier to
15 entry.

16 Q. Remind us again why does antitrust economics care about
17 these non-Novell products?

18 A. The reason we care about it is because we are
19 interested in the overall condition in the market. The harm
20 to competition means harm to people who buy the products.
21 It does not mean harm to a particular firm, unless you have
22 already gotten past the first thing, which is in order for
23 conduct to have anticompetitive harm it must harm consumers,
24 and that is what I am focusing on. That depends on
25 everything that is going on in the market. It does not

1 depend on just one particular act.

2 Q. Were there, in your view, any offsetting
3 pro-competitive benefits to Microsoft's actions with respect
4 to the RNA API?

5 A. I am not aware of any.

6 Q. Has Microsoft provided any alleged justification for
7 its conduct --

8 MR. TULCHIN: Objection, Your Honor.

9 THE COURT: Sustained.

10 MR. TULCHIN: This subject has never been raised
11 in this case before right now.

12 THE COURT: Sustained.

13 BY MR. JOHNSON

14 Q. Upon what do you rely for your testimony regarding this
15 conduct?

16 A. I rely upon the information that was submitted in prior
17 cases.

18 THE COURT: I will strike all of this. It is all
19 struck. It has nothing to do with antitrust theories, and
20 it is what the evidence is in this case and it is struck.

21 MR. JOHNSON: Your Honor, may we be heard outside
22 of the presence of the jury?

23 THE COURT: No. I understand you say that it is
24 opinion, but I am striking it. I understand what the issue
25 is. I am striking it. I have to keep this case within

1 reasonable bounds and not rely upon evidence in other cases.

2 Go ahead.

3 MR. JOHNSON: Your Honor, I am going to continue
4 through this list of anti --

5 THE COURT: And if an objection is made, I might
6 sustain it.

7 Go ahead.

8 MR. JOHNSON: All right.

9 THE COURT: I will hear you out, but just based on
10 that answer we're going too far afield. I'm sorry. I
11 understand that the --

12 MR. JOHNSON: Your Honor --

13 THE COURT: -- the jury has a sense of what
14 happened in the market that is relevant, and that is the
15 opinion and is a good opinion, but I am not going to allow
16 this to go far afield of the evidence in our case.

17 MR. JOHNSON: I would ask to be heard outside of
18 the presence of the jury.

19 THE COURT: Okay. Approach the bench.

20 (WHEREUPON, a bench conference was begun.)

21 THE COURT: I am not going to allow you to bring
22 in new opinions based upon evidence in other cases. If this
23 has been --

24 MR. JOHNSON: Your Honor, this is not being raised
25 for the first time. Your Honor, please. Dr. Noll submitted

1 an expert report in this case.

2 MR. TULCHIN: We are at a trial, Your Honor.

3 MR. JOHNSON: So did Mr. Alepin and they both
4 discuss these matters. In fact, Mr. Alepin testified about
5 the RNA API. So for Mr. Tulchin to stand up and object that
6 this has never been raised in this case --

7 THE COURT: For him to say, as you just asked his
8 opinion, and based upon evidence in other cases is just --
9 that is just going too far afield.

10 MR. TULCHIN: We are at trial. They have put on
11 whatever evidence they have, and apparently they have no
12 more fact witnesses except by video, and I have looked at
13 the videotape, and this is just the Christmas tree that we
14 talked about in Baltimore.

15 MR. JOHNSON: This is not the Christmas tree, this
16 is evidence of anticompetitive harm in the relevant market.

17 THE COURT: I am not going to allow opinions based
18 upon evidence from reviewing other cases.

19 MR. JOHNSON: Your Honor, if I may, Professor Noll
20 is an expert and he is entitled to rely upon other things,
21 and one of the things that he is relying on here with
22 respect to these opinions are the findings of fact in the
23 government case against Microsoft.

24 THE COURT: He is an expert and I am a judge and
25 I'm telling you that in terms of the trial I am simply not

1 going to allow an expert to give opinions based upon
2 evidence from other proceedings. It is not for this jury.
3 That is my ruling.

4 Let's go.

5 MR. JOHNSON: Your Honor, many of these facts are
6 before the jury.

7 THE COURT: He just said based on his opinion and
8 evidence in other cases, and I'm not -- there comes a point
9 where -- in your opening statement you said this case was
10 about APIs and withdrawing them and that is what this case
11 is about, and I am perfectly willing to allow you some
12 leeway in terms of the -- I don't think it is fair for him
13 to all of a sudden be giving specific opinions based upon
14 evidence which is not before this Court.

15 MR. TULCHIN: This has nothing to do with this
16 case.

17 MR. JOHNSON: Your Honor --

18 THE COURT: I am not sure I agree with you on
19 that.

20 MR. JOHNSON: You may recall there was a motion
21 about collateral estoppel, and there is a substantial amount
22 of evidence before this jury which relates to these matters,
23 and --

24 MR. TULCHIN: And it is binding on both sides and
25 you cannot go beyond it.

1 MR. JOHNSON: For you to say that there is no
2 evidence before --

3 THE COURT: He just said he based his opinions
4 from other proceedings, and I am basing my rulings on what
5 the witness said and that is just what he said.

6 (WHEREUPON, the bench conference was concluded.)

7 THE COURT: I am allowing the testimony about the
8 market and you should hear the professor's opinion about
9 that, but to the extent that his opinion is specifically
10 relying upon evidence that is not before you from other
11 cases, I just think it goes a little far afield and that is
12 why I am sustaining the objection.

13 Mr. Johnson is free to ask another question.

14 MR. JOHNSON: Thank you, Your Honor.

15 BY MR. JOHNSON

16 Q. Let's turn to the next anticompetitive act by Microsoft
17 with respect to MAPI.

18 MR. JOHNSON: If we can turn to the next slide,
19 please.

20 BY MR. JOHNSON

21 Q. Professor Noll, what does this slide summarize?

22 A. This summarizes the information that I have seen, and
23 then my conclusions that I have drawn from it on the nature
24 of the MAPI episode.

25 Q. And in terms of antitrust economics, what was the

1 anticompetitive harm caused by Microsoft's conduct regarding
2 the messaging application programming interface known as
3 MAPI with respect to the operating systems market?

4 A. The anticompetitive harm was that it created a barrier
5 to the use of messaging software produced by other vendors,
6 because if you had Windows 95 you automatically had the
7 Microsoft messaging software installed on your computer and
8 as an icon on your screen.

9 Q. And what product does this relate to?

10 A. This relates to basically messaging software, which the
11 most common is e-mail type systems.

12 Q. Were there in your view any offsetting pro-competitive
13 benefits?

14 A. Not that I'm aware of.

15 Q. Microsoft offered a technical justification for this
16 conduct that was addressed by Mr. Alepin.

17 Do you rely upon Mr. Alepin's testimony with respect to
18 whether that technical justification was supported by the
19 evidence?

20 A. Yes.

21 Q. When Mr. Holley cross-examined Mr. Alepin last week he
22 emphasized the fact that MAPI consists of only 14 APIs. Mr.
23 Holley asked Mr. Alepin several questions regarding whether
24 MAPI could be, quote, even a vague substitute for PC
25 operating systems in terms of providing support for

1 applications, close quote.

2 Professor Noll, who owned MAPI?

3 A. Microsoft.

4 Q. To your knowledge has Novell ever asserted that MAPI as
5 a Microsoft owned product was a threat to Microsoft's
6 monopoly in the PC operating systems market?

7 A. No. I can't imagine anyone ever contending that a
8 company's product A is a competitive threat to product B.

9 Q. Upon what do you rely to form the basis of your opinion
10 that Microsoft's conduct with respect to MAPI caused
11 anticompetitive harm in the operating systems market?

12 A. It is the fact that it created a barrier to entry
13 against other messaging software programs that could have
14 been programs that produce the applications barrier to
15 entry. In other words, it increased the market share of the
16 Microsoft controlled messaging software, and thereby
17 prevented other software from coming along that would
18 cross-platform or that could expose APIs, either one, that
19 would have undermined the applications barrier to entry.

20 MR. JOHNSON: Your Honor, if we may approach we
21 are going to hand Professor Noll a copy of the findings of
22 fact in the case against Microsoft in Washington, D.C.

23 Do you have a copy?

24 THE COURT: That have been admitted here?

25 MR. JOHNSON: I'm only going to refer to the ones

1 that have been admitted here.

2 Thank you, Your Honor.

3 BY MR. JOHNSON

4 Q. Professor Noll, that is a complete set of the findings
5 in the case against Microsoft in Washington, D.C. I would
6 like to refer you specifically to finding number 159, which
7 is binding in this case, if you could get to that.

8 A. Okay.

9 Q. I would ask you, sir, what if any significance this
10 finding has on your opinions with respect to MAPI?

11 A. Well, this is a finding of fact pertaining to the
12 installation of another icon, and why the insistence that
13 the Microsoft product icon be installed constituted a
14 barrier to entry and anticompetitive conduct. That is what
15 this is about. It is with respect to another icon.

16 Q. What was that other icon, just so we have some context
17 here?

18 A. This one is typically referring to Internet Explorer
19 that required that Internet Explorer actually be loaded and
20 displayed on the desktop for anybody who had Windows 95.

21 Q. And the icon with respect to MAPI, what was that?

22 A. That was the messaging program of Microsoft.

23 THE COURT: Again, in case you're all confused,
24 which I wouldn't blame you for being, I think that you all
25 understand that this case is obviously brought by Novell and

1 certain allegations are made about conduct directed by
2 Microsoft against Novell, and that ruling is what you have
3 to decide.

4 I think in fairness the plaintiff should be able
5 to present evidence through the witness, to the extent that
6 it is supported by evidence in this case or is not relied
7 upon by evidence in entirely different proceedings, just to
8 know what, under the plaintiffs view, what was happening in
9 the market at the time and the way Microsoft was interacting
10 with the market. Obviously Novell's case rises and falls
11 with conduct directed by Microsoft against Novell, and that
12 is what you will finally have to decide, but I do think in
13 fairness, the plaintiff through other evidence and through
14 this witness, is entitled to let you know its view of what
15 was happening in the marketplace generally.

16 MR. JOHNSON: Thank you, Your Honor.

17 Your Honor, in light of your prior ruling we're
18 going to skip the next one, but I want to note for the
19 record an objection --

20 THE COURT: Fine.

21 MR. JOHNSON: -- with respect to our inability to
22 talk about the IBM foreclosure.

23 THE COURT: Fine.

24 MR. JOHNSON: Thank you, Your Honor.

25 BY MR. JOHNSON

1 Q. Let's go to the Netscape foreclosure under distribution
2 foreclosure, Professor Noll.

3 A. Okay.

4 Q. Can you tell us what this slide does and what this
5 slide talks about?

6 A. Well, what is being displayed are three findings of
7 fact that pertain to the foreclosure in the OEM channel of
8 Netscape by Microsoft. In other words, by that is meant
9 that Microsoft conditioned the ability to license Windows 95
10 and sell it on the requirement that Internet Explorer also
11 be the only browser directly installed by that OEM and
12 displayed on the desktop.

13 MR. JOHNSON: And just for the record, Your Honor,
14 these findings of fact are all binding in this case.

15 THE COURT: Fine. That is fine. I think we
16 understand.

17 MR. JOHNSON: Thank you.

18 BY MR. JOHNSON

19 Q. In terms of antitrust economics, what was the
20 anticompetitive harm caused by Microsoft's conduct regarding
21 Netscape in the OEM channel with respect to harm to
22 competition in the operating systems market?

23 A. Well, the harm in competition is the same one, which is
24 it eliminates the ability of Netscape to use the OEM channel
25 and thereby reduces the number of computers that have

1 Windows 95 on it that Netscape runs on. And because
2 Netscape is middleware it means that the degree to which it
3 undermines the applications barrier to entry is reduced.

4 This also had an affect on Novell as well, because they
5 were distributing Netscape as well, so anything that
6 eliminates the ability to install Netscape affects them as
7 well. It reduces the demand for their product as well as
8 the demand for Netscape.

9 Q. Did Microsoft advance any alleged justifications for
10 its conduct with respect to this foreclosure of Netscape in
11 this case?

12 A. Not to my knowledge.

13 Q. Did Microsoft advance any alleged justifications for
14 its conduct in the case against Microsoft in Washington,
15 D.C.?

16 MR. TULCHIN: Your Honor, objection. If there are
17 going to be binding findings, we can't relitigate that case.

18 MR. JOHNSON: Your Honor, I am not relitigating
19 the case. I'm pointing out as a fact that Microsoft's
20 expert offered no justification for this conduct.

21 MR. TULCHIN: Microsoft's expert has not testified
22 yet, Your Honor.

23 MR. JOHNSON: With respect to the report of Dr.
24 Noll, which discussed this issue --

25 THE COURT: Sustained.

1 BY MR. JOHNSON

2 Q. Were Microsoft's alleged justifications accepted or
3 rejected by the court in the case against Microsoft in
4 Washington, D.C.?

5 MR. TULCHIN: Same objection, Your Honor.

6 THE COURT: Sustained.

7 Now, remember, we are at the frontier of the
8 field, and let's just stay inside the perimeter.

9 BY MR. JOHNSON

10 Q. And you rely upon these binding findings of fact with
11 respect to your testimony on this anticompetitive act?

12 A. Among other things, yes. I actually performed my own
13 analysis of this, because these were done after I wrote my
14 expert report. Yes, for purposes of this testimony there is
15 no point in rehashing all of that.

16 Q. Turning to the next item on the anticompetitive acts,
17 commingling IE, which is Internet Explorer, with Windows 95.

18 Could we turn to the next page, please.

19 Again, this finding of fact is also binding in this
20 case.

21 Can you tell us what this was about, Professor Noll?

22 A. Yes. The commingling issue is that not only is
23 Internet Explorer bundled with Windows 95, but after
24 commingling some of the code is interlinked so that it makes
25 it impossible to remove Internet Explorer without destroying

1 some of the functionality of Windows 95. That was what this
2 finding of fact is about.

3 MR. TULCHIN: Objection to all of that, Your
4 Honor, and move to strike. The finding is the finding, and
5 for this witness to tell the jury what it is about I think
6 violates Your Honor's prior rulings about collateral
7 estoppel.

8 MR. JOHNSON: Your Honor, the jury deserves an
9 explanation of the anticompetitive act that has been
10 collaterally estopped in this case, as to what it was about.

11 THE COURT: I'll overrule the objection, but my
12 general view is that you should view the findings as
13 speaking for themselves.

14 BY MR. JOHNSON

15 Q. In terms of antitrust economics, Professor Noll, what
16 was the anticompetitive harm caused by Microsoft's binding
17 Internet Explorer into Windows 95 with respect to the
18 operating systems market?

19 A. Well, it made it more difficult to not use Internet
20 Explorer and thereby increase the direct barrier to entry of
21 Netscape as a competitor against Internet Explorer. And
22 then that in turn, because Internet Explorer is not
23 cross-platformed but Netscape is, it eliminates this source
24 of APIs that Netscape would have exposed to other software
25 vendors.

1 Q. Did Microsoft advance any alleged justifications for
2 its conduct in the case against Microsoft in Washington,
3 D.C.?

4 MR. TULCHIN: Same objection, Your Honor.

5 THE COURT: Same ruling. Sustained.

6 MR. JOHNSON: Your Honor, may I have a continuing
7 objection to not allowing him to address the justifications?

8 THE COURT: Of course you can.

9 MR. JOHNSON: Thank you, Your Honor.

10 BY MR. JOHNSON

11 Q. Upon what do you rely, Professor Noll, with respect to
12 your testimony regarding this conduct?

13 A. In the first instance the analysis that I have done of
14 this particular act. I am relying on the experts, the
15 technical experts for what this actually did and how it
16 affected the functionality of Windows 95 and Internet
17 Explorer and other products, and then my own economic
18 analysis of the implications of that technical analysis.

19 Q. Let's turn to the next anticompetitive act which is
20 entitled IAP foreclosure.

21 MR. JOHNSON: These findings are also binding in
22 this case, Your Honor.

23 BY MR. JOHNSON

24 Q. Can you tell the jury what IAP stands for?

25 A. Internet access provider. It is a person who is in the

1 business of being the portal by which you go to the
2 internet. At the time the events in this case were taking
3 place the main one was AOL, and you would access it
4 basically over telephone lines.

5 Q. Can you tell us what, if anything, Microsoft did in
6 order to exclude Netscape Navigator from the IAP channel?

7 A. Well, that is, again, described in these findings of
8 fact. That is to say that --

9 THE COURT: That is enough. They are described in
10 the findings of fact.

11 BY MR. JOHNSON

12 Q. Can you tell us in terms of antitrust economics what
13 was the anticompetitive harm caused by Microsoft's
14 exclusionary agreements with internet access providers with
15 respect to the operating systems market?

16 A. It basically means that Internet access providers
17 cannot be a vehicle for distributing a competing browser
18 against Internet Explorer. It prevents them from getting
19 on -- it prevents Netscape Navigator and other browsers from
20 getting on to personal computers that run Windows 95 by
21 having the Internet access provider load the browser onto
22 their computers.

23 Q. And upon what do you rely for your testimony regarding
24 this conduct?

25 A. Again --

1 MR. TULCHIN: Same objection.

2 THE COURT: Sustained.

3 I really think that the limited purpose for which
4 I'm allowing this area of evidence really has been addressed
5 by my admitting the findings of fact. I really think that
6 there is no need to have any opinions, to simply say that
7 this is what the findings of fact say, Mr. Johnson. As far
8 as I'm concerned, to the extent these are findings of facts
9 relating to the things on the chart, just stick to the
10 findings of fact and move on to something else.

11 BY MR. JOHNSON

12 Q. Let's turn to the next anticompetitive act which is the
13 foreclosure with respect to the first wave ISV agreements.

14 MR. JOHNSON: These findings of fact are also
15 binding in this case, Your Honor.

16 THE COURT: Exactly. Exactly, and I admitted
17 them, and I think any opinion is redundant, so move on to
18 something else.

19 MR. JOHNSON: Well, Your Honor, I have to ask what
20 its impact was with respect to the market, if I may.

21 THE COURT: Doesn't the finding of fact tell you
22 that?

23 MR. JOHNSON: No, it does not, Your Honor.

24 THE COURT: Okay. I will leave that to the
25 doctor.

1 BY MR. JOHNSON

2 Q. In terms of antitrust economics, what was the
3 anticompetitive harm caused by Microsoft's conduct with
4 respect to the ISV first wave participants with respect to
5 harm to competition in the operating systems market?

6 MR. TULCHIN: Same objection.

7 THE COURT: Overruled.

8 THE WITNESS: Again, it is the same sorry, that
9 Internet service vendors are people who are providing
10 functionality over the Internet to consumers, and it means
11 that you can't use those as a mechanism for distributing a
12 anticompetitive browser, thereby reducing the number of
13 copies of Netscape Navigator that are on PCs, and thereby
14 reducing the ability of Netscape to lower the applications
15 barrier to entry.

16 BY MR. JOHNSON

17 Q. Thank you, Professor Noll. That was with respect to
18 ISV foreclosure. Let's go to the next anticompetitive act,
19 reduce Novell as a distribution channel.

20 Can you tell us what this slide summarizes?

21 A. Yes. This refers to the fact, the event that I
22 referred to earlier, which is that there was a collaboration
23 agreement between Novell and Netscape with regard to the use
24 of Novell's WordPerfect products as a vehicle for
25 distributing Netscape Navigator.

1 Q. Professor Noll, can you explain how, if at all,
2 Microsoft's actions taken against Novell reduced the
3 distribution of Netscape Navigator?

4 A. Well, the issue here is to go back to the original
5 point, which is most people like to buy computer software
6 when they buy the PC. It is buy all at one stop shopping.
7 You get the PC, the operating system, and a bunch of
8 applications. If the competitive applications and vendors
9 don't have access to the OEM channel, that is the single
10 most important potential distribution channel they have,
11 just to buy it with the PC.

12 So if Novell is excluded from distributing through the
13 OEMs, that means they are not distributing Netscape
14 Navigator. Likewise, if Netscape Navigator is excluded from
15 the OEM channel, that means WordPerfect can't distribute
16 Netscape along with its product. Because these two products
17 are linked by collaboration agreements, anything that harms
18 one harms the other.

19 MR. JOHNSON: Can we take a look at the next
20 slide, please.

21 BY MR. JOHNSON

22 Q. Can you explain this chart to the jury?

23 A. Yes. This is from data about the sale of Microsoft
24 Office to people who are switching their office productivity
25 suite. That is to say that this is sales to people who

1 already have installed on their personal computer a product
2 that competes with Microsoft Office.

3 As you can see, at the point at which Windows 95 was
4 introduced there is this huge spike in conversions from
5 competing products to Microsoft Office.

6 Q. Have you prepared any slides summarizing your findings
7 as to the affect Microsoft's conduct aimed at Novell had on
8 the actual foreclosure of Netscape Navigator?

9 A. Yes. Yes, I have.

10 Q. And can you explain what you did to create this slide?

11 A. Okay. The issue here is what were the sales of
12 WordPerfect as a fraction of office productivity, or
13 WordPerfect's share of word processing in this case. In
14 1994 26 percent of word processors were WordPerfect. In
15 1996 it was six percent. So there was a 20 percent
16 reduction in the share of WordPerfect's sales, which had
17 their sales retained what they were doing in 1994, then the
18 actual shipments in 1996 would have been almost 7 million
19 more than it was.

20 So what that shows you is how the number of Netscape
21 products was lower in 1996 than it would have been had
22 WordPerfect maintained its share.

23 Q. Is it possible that Novell's decline in market share
24 was not due to Microsoft's actions but was instead due to
25 the quality of Novell's products?

1 A. Well, in principle that's possible, but if you think
2 about what is going to determine the ability of Novell to
3 sell WordPerfect, or WordPerfect to be sold at all, there
4 are two potential issues. One is has it been damaged by the
5 various foreclosures of distribution that have happened to
6 it and by the delay in the release of Windows 95?

7 Then the second potential explanation -- the delay of
8 the product, when you make use of Windows 95.

9 And then the second potential explanation is if in fact
10 it was producing bad products, and no one who was a
11 WordPerfect user wanted to continue using it, so one has to
12 examine both of these issues to conclude whether the result
13 that we observed, the substantial decline in market share,
14 was due to superior efficiency of Word, or was it in fact
15 due to the events that took place that undermined
16 WordPerfect's ability to sell its product for use on the
17 Windows 95 product, and to make use of all of the extra
18 features in Windows 95.

19 Q. Did you do any research regarding the industry's
20 reviews of Novell's products at the time?

21 A. Yes, I did.

22 Q. What were your findings?

23 A. If one focuses on the period of the previous Windows
24 products, and the contemporaneous operating systems that
25 were available just prior to the release of Windows 95, if

1 you focus on the period of '93, '94 and how were they doing,
2 and the interesting fact is that the cumulative effect of
3 all of these reviews are that the two products are roughly
4 equal in quality.

5 Sometimes writers who are reviewing these in the trade
6 press, and magazines like PC World and things like that
7 contain product reviews, and so the reviews of the product
8 are that some people prefer Word and some people prefer
9 WordPerfect, but both are highly regarded as products and
10 the number of first place finishes is about the same for
11 both.

12 Q. In terms of antitrust economics what significance, if
13 any, do you attribute to the loss of 6.9 million copies of
14 WordPerfect, assuming their share had stayed the same, with
15 respect to harm to competition in the operating systems
16 market?

17 A. Well, the significance of that loss of 7 million is
18 that 7 million PCs do not have the WordPerfect middleware,
19 and that do not have Netscape Navigator that would have been
20 loaded with the WordPerfect middleware. So that
21 substantially reduces the degree to which the applications
22 barrier to entry is being undermined by WordPerfect and
23 Novell.

24 MR. JOHNSON: Your Honor, we're about to reach the
25 comparison with the Apple foreclosure.

1 Do you want to discuss that?

2 THE COURT: Why don't you approach the bench.

3 Thank you.

4 MR. JOHNSON: Thank you, Your Honor.

5 (WHEREUPON, a bench conference was begun.)

6 THE COURT: What is your proffer?

7 MR. JOHNSON: The proffer, Your Honor, is that we
8 are offering this simply --

9 THE COURT: What is the evidence?

10 MR. JOHNSON: The evidence is with respect to the
11 fact that the foreclosure of Apple -- you may remember that
12 Microsoft forced Apple to only use Internet Explorer to the
13 exclusion of Netscape Navigator. So this evidence simply
14 goes to the comparison of the fact that the foreclosure of
15 Netscape Navigator through Apple was in fact smaller than
16 the foreclosure of Netspace Navigator through the exclusion
17 of WordPerfect from the market at the same time.

18 MR. TULCHIN: This took place in 1997 and 1998 as
19 the slide indicates. It seems to be just a way of damaging
20 Microsoft. It is improper and it is in a different market,
21 not the PC operating system market, and at a different time,
22 and it really has nothing to do with this case.

23 MR. JOHNSON: Again, Your Honor, this is a direct
24 comparison of the foreclosure of Novell, and it really is
25 the result to what the market was --

1 MR. TULCHIN: Your Honor --

2 MR. JOHNSON: The relevant part is the fact that
3 there was a foreclosure of a distribution channel for
4 Netscape that was in fact less than what occurred with
5 respect to WordPerfect and which, as Your Honor may well
6 remember, the court in the Microsoft case found to be
7 anticompetitive with respect to the foreclosure of Netscape
8 through --

9 MR. TULCHIN: Your Honor, Netscape brought that
10 claim for foreclosure and it was in fact pending for a short
11 time before Your Honor, and it was part of the Microsoft MDL
12 case, and Microsoft paid a lot of money for that conduct,
13 but the idea that the Netscape foreclosure here should be
14 compared to the Netscape foreclosure through Apple is
15 getting us way, way far afield. It really has nothing to do
16 with Novell.

17 THE COURT: I will sustain it. 403. I think we
18 are fair afield.

19 (WHEREUPON, the bench conference was concluded.)

20 MR. JOHNSON: If we could turn that off for
21 awhile.

22 Thank you very much.

23 BY MR. JOHNSON

24 Q. Professor Noll, let's turn back to your summary of
25 conclusions.

1 MR. JOHNSON: Erin, could you take down the top
2 board to get back to the summary of conclusions, please.

3 Thank you.

4 BY MR. JOHNSON

5 Q. With respect to your summary of conclusions, Professor
6 Noll, the last bullet point states Microsoft's conduct
7 against WordPerfect and Novell were a significant
8 contributor to anticompetitive harm in the PC operating
9 systems market in light of the weakened state of other
10 applications and ISVs.

11 Can you please tell us what you mean when you say in
12 light of the weakened state of other applications and ISVs?

13 A. Well, the entire array of important applications and
14 middleware products has been weakened in terms of their
15 ability to be cross-platformed products that undermine the
16 applications barrier to entry. The benefits to a particular
17 company in this set of being able to be cross-platformed and
18 to weaken the application barriers to entry derive from the
19 efforts of everyone. It is the cumulative affect of all of
20 these products on the application barrier to entry that
21 determines the degree to which they collectively have made
22 competition more intense in operating systems.

23 If they have made it more intense then the price has
24 gone down, and because these are complimentary products, the
25 demand for this entire set of alternatives to Microsoft

1 applications goes up. So by weakened state of the other
2 applications and ISVs, the point that is being made here is
3 foreclosure attempts against Novell, Netscape, Java and
4 other products are all collectively undermining the ability
5 of this entire collection of products to create operating
6 systems competition.

7 Now, if I say in light of the weakened state of other
8 applications, the activities that have already happened and
9 that are happening ongoing against Netscape have already
10 weakened WordPerfect because of the agreement with Novell
11 that it would distribute WordPerfect, but in addition to
12 that the weakening of WordPerfect itself has caused a
13 reduction in the number of PCs that have a cross-platform
14 office suite on it.

15 In particular, in WordPerfect's case, a cross-platform
16 word processor. So that of itself is of a magnitude that is
17 large, millions of PCs, and it is not my job here, as I said
18 earlier, to quantify that for you. That is the job of the
19 other economic expert. But to the extent that this decline
20 in the sales of Novell products, because of the acts of
21 Microsoft that caused that decline in Novell's sales, then
22 that is a significant decline in the ability of these other
23 middleware and applications products to induce more
24 competition in operating systems by lowering the application
25 barrier to entry.

1 Q. Would it be appropriate for purposes of analyzing harm
2 to competition in the operating systems market to only look
3 at Microsoft's conduct directed at Novell, and to assume
4 that none of Microsoft's other conduct that you have
5 described occurred?

6 A. No. That would completely be inappropriate, because if
7 this had just been a grudge between CEOs, and they had had
8 one of the major players in the software market that had
9 been wiped out, others would have filled the gap. If there
10 was going to be no barriers or difficulty created for
11 anybody else like, for example, Netscape Java, then, indeed,
12 if Java and Netscape were ubiquitous on all the PCs, and
13 Microsoft had done nothing about it, the applications
14 vendors would have written to the Netscape Java combination
15 and somebody would have replaced Novell.

16 The issue here is is there a barrier to entry by
17 anybody who is trying to do what Novell is trying to do? If
18 so, is it being created by Microsoft's conduct? That is why
19 I have analyzed all of these products together, because what
20 it tells me is that the cumulative message from all of these
21 was that it was not possible to enter at this time in
22 history as somebody who was going to make a significant run
23 at the applications barrier to entry as an applications
24 program or as newware.

25 Q. Thank you, Professor Noll.

1 THE COURT: Thank you, Mr. Johnson.

2 Mr. Tulchin.

3 MR. TULCHIN: Thank you, Your Honor.

4 CROSS-EXAMINATION

5 BY MR. TULCHIN

6 Q. Professor Noll, good afternoon.

7 A. Good afternoon, Mr. Tulchin.

8 Q. How are you?

9 A. Fine. Thank you.

10 Q. You said earlier in one of the answers that you gave on
11 direct examination that you had reviewed the testimony given
12 in this case by Adam Harral, Greg Richardson, Gary Gibb and
13 Bob Frankenberg.

14 Did I get that right?

15 A. Yes.

16 Q. And you have read all of their trial testimony?

17 A. I have not read it all. I have skimmed the testimony
18 and focused on parts that I thought were relevant.

19 Q. And in all these dozens and dozens --

20 THE COURT: I hope it has all been relevant or I
21 wasn't doing my job.

22 THE WITNESS: Well, relevant to economics.

23 Relevant to economics.

24 BY MR. TULCHIN

25 Q. With counsel you showed the jury many, many slides in

1 your testimony here today, correct?

2 A. That is correct.

3 Q. Some of them contain particular documents or excerpts
4 from documents?

5 A. Yes.

6 Q. Right. And, of course, you reviewed a more fulsome
7 record, and you picked those documents to show the jury from
8 among the universe of documents; is that fair?

9 A. Correct.

10 Q. And you're familiar with the evidence as it pertains to
11 each of the matters on which you have given testimony; is
12 that right?

13 A. Yes.

14 Q. You're certainly not here, are you, professor, to
15 disagree with or change the testimony of the Novell
16 employees or former employees who testified in person in
17 this courtroom?

18 A. I am not here to argue with their testimony, no, at
19 all. You know, whatever it is, it is.

20 Q. Well, you certainly don't disagree with the testimony
21 of Bob Frankenberg, the guy who was the boss, the C.E.O. of
22 the company in 1994 to '96, do you?

23 A. Well, I don't know until you cite me something and you
24 can ask me whether I agree or disagree. I don't recall it
25 word for word, so I can't tell you that I agree with every

1 sentence. I don't know that I do, but I have not attempted
2 to rebut anything or analyze -- I have not had the time, of
3 course, to analyze the testimony of all of these people. I
4 have found the testimony related to the issues I was
5 testifying about.

6 Q. I think I understand you. But didn't you just say on
7 direct and in response to my question, that you had an
8 opportunity to review their trial testimony?

9 A. I said I had reviewed -- that is exactly right. I have
10 skimmed all of it and I have read intensively some of it.

11 Q. All right. Mr. Frankenberg in particular, did you read
12 that carefully?

13 A. Well, some parts yes, and some parts no. I don't know
14 if what you're about to quote to me is something I read, I
15 skimmed or read intensively.

16 Q. We'll have some time tomorrow, too. Our time today is
17 a little short. Was there anything in what Mr. Frankenberg
18 said either on direct examination or on cross that you
19 disagreed with at the time that you were reading it?

20 A. I don't recall ever disagreeing with him, but I didn't
21 read carefully all of the testimony, so there may be
22 something in there that I wouldn't agree with. I can't
23 sitting here say I read anything that I disagreed with at
24 the time I was reading it.

25 Q. Am I right, sir, that a couple of minutes ago you said

1 that it was not your role or function as an expert to
2 disagree with the fact testimony of the former chief
3 executive officer of Novell?

4 A. Well, yes, that is true. Obviously if somebody had
5 said the world is flat I would have disagreed with it, but I
6 didn't see any world is flat type statements in what I read.

7 Q. Would you agree with me, Professor Noll, that before an
8 economist can find that there was harm to competition, and
9 here we're talking about harm to competition in the market
10 for PC operating systems, correct?

11 A. Yes. We are talking about harm to competition in the
12 market for PC operating systems.

13 Q. So before an economist could find harm to competition,
14 you would have to determine a number of things. First, that
15 the conduct at issue was anticompetitive, right?

16 A. That is correct.

17 Q. And the conduct that we're talking about is Microsoft's
18 decision in October of 1994 to withdraw support for the
19 namespace extension APIs, right?

20 A. Among other things, yes.

21 Q. Well, is there any other conduct directed at Novell
22 that you have contemplated in giving your testimony about
23 harm to competition?

24 A. What I testified to also was that harm to Netscape
25 harmed Novell as well.

1 Q. Well, let me then go back. Maybe we're missing one
2 another.

3 Am I right, sir, that in Novell's opening statement in
4 this case -- you have read that, right?

5 A. I have read part of it. I have not read all of it.

6 Q. I see. The only conduct that Microsoft engaged in that
7 Novell's lawyer said caused harm to Novell was the
8 withdrawal of support for the namespace extension APIs,
9 correct?

10 A. I don't know if that is true. It wouldn't matter to my
11 opinion anyway. What I did was an analysis of the conduct
12 that took place, not what some lawyer told me to do.

13 Q. All right. Professor Noll, I think we agree that
14 before you can find harm to competition you would have to
15 find that the act in question was anticompetitive. That
16 would be at least one thing. A second thing would be that
17 you would have to determine in this case that the act,
18 Microsoft's act caused delay in the release of WordPerfect
19 or PerfectOffice or QuatroPro, correct?

20 A. Well, if you're referring specifically to the namespace
21 extensions, that is the claim with respect to namespace
22 extensions, yes.

23 Q. Right. If Novell was late in getting PerfectOffice or
24 WordPerfect out into the market as a result of factors other
25 than Microsoft's decision on the namespace extensions, then

1 the conduct at issue would not have caused any harm in the
2 market, correct?

3 A. Well, not quite correct. I mean, it would depend on
4 the magnitude of the delay for other reasons versus the
5 magnitude of the delay for namespace extensions. I am
6 actually not testifying about the degree to which the delay
7 was caused. I am relying on others for that.

8 Q. Let me see if I can understand that. First, am I
9 right, as a matter of economics, that if the delay was
10 caused, let's say entirely by other factors, if Novell was
11 unable to get its product out onto the market for reasons
12 having nothing to do with a withdrawal of support for the
13 namespace extension APIs, then there would be no harm to
14 competition in the market, agreed?

15 A. If the namespace extensions had been there and used in
16 WordPerfect, but they were still not released until May of
17 1996 then, indeed, the delay would have been for another
18 purpose. If that would have been true, if that is the
19 but-for world, then the namespace extensions themselves
20 didn't cause the delay. That is right.

21 Q. Okay. So I think we have agreed on two things. Before
22 you can have harm to competition in the PC operating system
23 market, you have to have at least a conclusion that the
24 conduct was anticompetitive.

25 Secondly, a conclusion that the conduct caused the

1 delay. Agreed?

2 A. That is correct. And it would also be the case that it
3 got restored later after they were introduced.

4 Q. You also, Professor Noll, have to have a third thing,
5 which is a determination, a conclusion that if the products
6 had come out in a timely fashion, let's say in the late
7 summer or fall of 1995, not long after the release of
8 Windows 95, that those products would have been
9 cross-platform products, correct?

10 A. They don't have to be cross-platformed the moment they
11 are introduced, but they have to be cross-platformed by the
12 time the person who buys them is contemplating changing
13 their PC.

14 Q. That certainly wouldn't be years later, right? The
15 products would have to be cross-platformed during the
16 relevant period, otherwise your theory that the presence of
17 PerfectOffice or WordPerfect could effect the competitive
18 landscape wouldn't work at least until such time as those
19 products were cross-platformed?

20 A. That question is based on an incorrect understanding of
21 what the analysis is about the applications barrier to
22 entry. Yes, it has to be cross-platformed at the time
23 people decide to buy the next PC. If someone buys a PC in
24 1995, say the last six months of 1995, that has Windows 95
25 on it, and they decide to use Netscape Navigator as their

1 browser, and they buy PerfectOffice as their office suite
2 and, you know, buy a bunch of other applications that are
3 not sold by Microsoft, for that act to reduce the
4 applications barrier to entry, then it must be the case that
5 later when they replace that PC that those applications are
6 cross-platformed.

7 They don't have to be cross-platformed at the moment
8 they were released. They have to be cross-platformed by the
9 time that person is considering replacing that PC.

10 THE COURT: I'm sorry. Again, there is no
11 significance to this question. Don't they have to be
12 cross-platformed at the time that the consumer purchases the
13 application?

14 THE WITNESS: No. What is relevant at the time
15 they purchase the application is how many of them are
16 sitting on that particular operating systems, but if they
17 are cross-platformed -- if you buy a PC today and there is
18 Schlotnick word processor on it, it does not have to be
19 cross-platformed today. But in three years from now when
20 you replace that personal computer for the applications
21 barrier to entry to have disappeared it has to be
22 cross-platformed, so that you don't care which operating
23 system is on the replacement.

24 THE COURT: But I would have thought that you
25 would have at least had to anticipate or expect that what

1 you're purchasing is going to be cross-platformed at the
2 time that you purchase your next computer?

3 THE WITNESS: That would be beneficial especially
4 to enterprise purchasers, because they are basically buying
5 all the time. An enterprise software purchasers are large
6 companies who are buying lots of PCs, and they are very much
7 interested in what the long-term plans of the vendor are.

8 An individual consumer they probably really don't
9 pay much attention to that. They would pay attention to it
10 only when they bought a PC. Is this PC -- if I buy my next
11 PC, will I be able to open the files I have already done and
12 be able to use the applications that are on my old PC, or
13 will I have to do something expensive?

14 THE COURT: Excuse me, Mr. Tulchin.

15 MR. TULCHIN: Thank you, Your Honor.

16 BY MR. TULCHIN

17 Q. Professor Noll, and maybe I can ask for the help of Mr.
18 Goldberg here and Novell's technical people, but I wanted to
19 put up slide 24, your slide 24. Professor Noll, this was a
20 slide that you looked at earlier.

21 There we go. Thank you. I appreciate that.

22 Now, this is your slide, Professor Noll, right, and you
23 prepared this?

24 A. Yes, except I have this video thing, blocking thing. I
25 can't read it because there is some sort of image in front

1 of it. I can probably find it.

2 There, it went away. Now I can read it.

3 Q. This is your slide, something that you prepared?

4 A. Yes.

5 Q. And the title says WordPerfect: Cross-platform
6 application. Right?

7 A. Yes.

8 Q. And you did this based on your review of the evidence?

9 A. That is correct.

10 Q. The question that was put to Mr. Harral at page 216 of
11 the trial transcript was this: When you first started
12 working in WordPerfect, can you tell us how many different
13 operating systems that WordPerfect was written for? Answer,
14 I can't tell you how many, but I know there were over a
15 dozen.

16 Now, of course, the key thing here, Professor, is to
17 know when and what year Mr. Harral is talking about,
18 correct?

19 A. Yes.

20 Q. Tell me what year he first started working at
21 WordPerfect.

22 A. It was earlier. I mean, WordPerfect had a long history
23 of being cross-platformed.

24 Q. Could you just tell me the year? That was my question.

25 A. Not from memory.

1 Q. But you had enough memory of his testimony to put this
2 slide up?

3 MR. JOHNSON: Objection.

4 THE COURT: Sustained.

5 Don't argue with the witness.

6 BY MR. TULCHIN

7 Q. Professor, we agree that the key thing here in looking
8 at the question was WordPerfect a cross-platformed
9 application, during the period that is relevant to our case,
10 is to know when, what year it was that Mr. Harral's
11 testimony pertains to?

12 A. I disagree with you. I don't think that is the
13 relevant question. The relevant question is does this
14 product have a history of being cross-platformed and does it
15 have plans to be cross-platformed in the future? That goes
16 to the enterprise decision which I was just discussing, that
17 at any given moment in time, and it may not work on a
18 particular platform, but if it has a history of working on
19 that class of platforms, the class of, say, windows MS DOS
20 operating systems, and it is planning to do it again, then,
21 indeed, people who buy it have the expectation that it will
22 continue to be cross-platformed.

23 This is what that was about. WordPerfect does have a
24 history of being cross-platformed, and it did have plans to
25 be cross-platformed and that is what matters. It does not

1 matter which is true at any given instant in time.

2 Q. Well, let's look into the question of whether or not
3 when Novell was developing PerfectOffice, a version of
4 PerfectOffice for Windows 95, was Novell planning to have
5 that version cross-platformed?

6 A. They were devoting virtually all of their energy to
7 being on Windows 95 at that time, with a plan that they
8 would later then, because of this way that they do things --

9 Q. Professor, I wonder if you would answer my question.

10 A. -- to produce software that was being cross-platformed
11 in the future.

12 Q. I wonder if you could answer my question. Let me go
13 back.

14 In response to your questions on direct examination
15 about lots and lots of Microsoft conduct, some pertaining to
16 Novell and some pertaining to other companies, I can't
17 remember a single instance where you provided even a year
18 let alone a date when this conduct occurred.

19 Can you?

20 A. There were lots of slides that had dates on them
21 between '94 and '95.

22 Q. I asked you about your testimony, sir.

23 A. Yes. No, I did testify about lots of things that
24 happened between '94 and '95, and the slides had dates on
25 them, and in my explanations I had dates on them, so I

1 disagree that I didn't use any dates in my testimony. That
2 is just false.

3 Q. Okay. Are you aware of whether or not Novell in 1994
4 to 1995 was developing PerfectOffice, a version of
5 PerfectOffice to run on Windows 95?

6 A. The first sentence of my last answer, and I will just
7 repeat it, they were devoting their resources to Windows 95,
8 and they had plans to develop it for other platforms later.

9 Q. Well, I hear you say plans to do it later. The plans
10 were to do it years and years later, correct?

11 A. I don't know that that is true. I think years and
12 years is overstating it. They had a plan that when they got
13 done with Windows 95 to move on to other things.

14 Q. Am I right that the plan to do it for other platforms
15 was a plan to do it years out into the future?

16 A. I don't think that is accurate. I think it ended up
17 being that, but it was not -- if they had been on time with
18 Windows 95, it wouldn't have been years later.

19 Q. You looked at the testimony of Mr. Gibb. I know you
20 said that. Do you remember the testimony on this subject?

21 A. Not from memory, of course not, but I do remember
22 having read the testimony.

23 Q. Well, you say not from memory, but you looked at this
24 very recently, correct?

25 A. Yeah, but I didn't memorize it. What I said was, yes,

1 I read it and, yes, I did cite some things from Mr. Gibb,
2 yes.

3 Q. Now, this is page 787 of the trial transcript. This is
4 Mr. Gibb's testimony just a week or two ago.

5 Do you recall this, sir?

6 A. Yes. That is what I said, that they were developing at
7 this time just for Windows 95.

8 Q. No, that is not what your said.

9 A. Yes, I said they were devoting all of their resources
10 to --

11 Q. Listen to my question, sir. Professor --

12 A. Okay.

13 THE COURT: Don't argue. Just ask a question.

14 MR. TULCHIN: You're right, Your Honor. I am
15 sorry. I apologize.

16 BY MR. TULCHIN

17 Q. This was the question asked of Mr. Gibb in this
18 courtroom, and he was sitting in the same seat that you're
19 in now. Do you recall what operating systems Novell was
20 developing the PerfectOffice suite for? Answer, so the
21 suite, the entire suite? Question, uh-huh. Answer, I think
22 we only did it for, you know, Microsoft platform. We did
23 for -- well, I guess we had -- we had a DOS offering. But
24 suite, the entire thing we were doing was really based on
25 Windows 3.1 and Windows 95.

1 Now, I'm showing you the next question and answer about
2 a long term plan, but you don't disagree that at the time in
3 1995 the only platform that Novell was developing the suite
4 for was Windows?

5 A. That is what I said. That is exactly what I said.
6 Their developing resources were devoted entirely to Windows
7 95, but they succeeded in making it work on the Windows 95
8 platform.

9 Q. No, you didn't say entirely, you said mostly. That is
10 different.

11 A. Well, they had plans. Some plans were there but, yes,
12 they were devoting their resources to Windows 95.

13 Q. So --

14 A. I think that is what I said.

15 Q. When you testified on direct that PerfectOffice was
16 going to be cross-platformed, that was years and years out
17 into the future, correct?

18 A. Your years and years. I don't know that that is true.

19 MR. JOHNSON: Can I have a page reference for this
20 testimony?

21 MR. TULCHIN: I gave it to you. 787.

22 MR. JOHNSON: Thank you.

23 BY MR. TULCHIN

24 Q. Here is Mr. Frankenberg at page 1169. Mr. Frankenberg
25 says that Novell never released a version of PerfectOffice

1 that was written for any other platform except Windows.

2 Do you see that, sir?

3 A. That is true, because they didn't acquire it in this
4 time period.

5 Q. And then Mr. Frankenberg was asked, same page, a little
6 bit further, line 18, is it true, Mr. Frankenberg, that as
7 far as you know Corel never released any version of
8 PerfectOffice for any other platform except Windows? His
9 answer was, I don't know what they did, sir, beyond
10 releasing it for Windows.

11 Do you see that, sir?

12 A. Yes.

13 Q. And that was correct testimony, was it not, as far as
14 you know?

15 A. I have no reason to doubt that he didn't know.

16 Q. Well, tell me then, Professor, and you're here as an
17 expert in this case, when was it that Corel released
18 PerfectOffice to run on any other platform other than
19 Windows?

20 A. I don't know because Corel basically didn't devote much
21 effort to the development of WordPerfect beyond that so I
22 don't know. It is sometime in the future and I don't know
23 when.

24 Q. I think you testified on direct that you had a version
25 of WordPerfect on one of your computers, correct?

1 A. You're talking about PerfectOffice and what I had was
2 WordPerfect.

3 Q. I just asked you a question, sir.

4 A. I had WordPerfect on three different computers.

5 Q. Right. Was that WordPerfect as released by Corel or by
6 Novell or by WordPerfect Corporation?

7 A. I think one was from WordPerfect, one was from Novell,
8 and I am not certain about the third. I think that it was
9 two Novell and one WordPerfect Corporation.

10 Q. To your knowledge did Corel ever release a version of
11 WordPerfect for any platform other than Windows?

12 A. No, they released it for Linux, I believe, in --

13 Q. Do you know --

14 A. -- in '96, the spring of '96, something like that. I
15 mean, I am trying to remember facts and that is not -- so I
16 am not going to swear -- I don't swear to God for sure it
17 was that date, but my recollection is that in the spring of
18 '96 that WordPerfect could run on Linux.

19 Q. Could we look briefly at your slide 54, if I could ask
20 Novell's help in putting that up.

21 Do you remember this one, sir?

22 A. I do.

23 Q. Now, your first bullet point says Microsoft promised
24 something.

25 Do you see that?

1 A. Yes.

2 Q. And this is your slide and you put it together?

3 A. Yes.

4 Q. When was that promise made?

5 A. It was made prior to the acquisition of WordPerfect by
6 Novell to my recollection. Again, I don't want to testify
7 about remembering dates exactly, but I believe it was made
8 earlier than the acquisition, but I am not absolutely
9 certain. Maybe I am wrong.

10 Q. Was the promise ever made to Novell?

11 A. I am not aware of a withdrawal of the promise. I think
12 people were operating under the presumption that MAPI would
13 be part of windows 95 during this entire period.

14 Q. Your third bullet point, Professor, says Microsoft's
15 business justification is unsupported by evidence and
16 irrelevant.

17 Do you see that, sir?

18 A. I do.

19 Q. But when you were asked about this by Mr. Johnson, you
20 said that you were relying on Mr. Alepin for this
21 proposition, correct?

22 A. No. He only asked the unsupported by evidence part,
23 and then he was not permitted to ask the irrelevant part.

24 Q. Well, your memory and mine is different on this, and I
25 am sure the jury's will control, but let me just take this

1 one piece at a time.

2 Am I correct that you said on direct examination, that
3 for the proposition that Microsoft's business justification
4 is unsupported by evidence, you relied on Mr. Alepin,
5 correct?

6 A. The unsupported by the evidence that is exactly right,
7 I relied on Mr. Alepin.

8 Q. You have not formed your own opinion about that?

9 A. No, I have not, and it is not my task to second guess
10 the technical experts.

11 Q. Am I right then, Professor, that you didn't mean in
12 this slide, slide 54, the third bullet point, to communicate
13 to the jury that this was your opinion?

14 A. My opinion actually is the antitrust economic
15 implications of it, which is the word irrelevant.

16 Q. I'm asking you whether -- let's try it again.

17 You said you relied on Mr. Alepin for the proposition
18 that the justification is unsupported by the evidence,
19 correct?

20 A. That is correct. That part of it I am relying on Mr.
21 Alepin.

22 Q. And you didn't mean to communicate through this slide
23 to the jury that you were offering your own opinion about
24 that?

25 A. No, I was offering my opinion about the entire

1 sentence, not that component of it.

2 Q. Now, Mr. Alepin --

3 THE COURT: No, Dr. Noll.

4 MR. TULCHIN: Dr. Noll.

5 I am thinking about Mr. Alepin I'm afraid, Your
6 Honor.

7 BY MR. TULCHIN

8 Q. My apologies, Professor.

9 A. That is not an insult.

10 Q. Of course. You have testified elsewhere, have you not,
11 that if some set -- I'm sorry. You have stated elsewhere
12 that if some set of APIs can do harm to an operating system,
13 where if they are just inefficient in the functions they
14 perform, not documenting them is perfectly acceptable.

15 A. Yes. Yes, there are circumstance in which the
16 withdrawal of APIs is acceptable, namely if they do more
17 harm than good.

18 Q. So from the perspective of an antitrust economist,
19 withdrawing support for a particular set of APIs would be
20 perfectly acceptable and the conduct would not be
21 anticompetitive if those APIs could do some harm to the
22 operating system?

23 A. No, that is not true. You have to balance the harm
24 against the benefits. The harm has to be sufficient to
25 offset the benefits of using them.

1 Q. All right. So your testimony is there are
2 circumstances where it would be perfectly acceptable to
3 withdraw support for a set of APIs, correct?

4 A. Yes. That is when they are more likely to do damage
5 than to add to functionality.

6 Q. All right. And in connection with the opinions that
7 you have offered here today, you have relied entirely on Mr.
8 Alepin, am I right, in any conclusions about that balancing
9 of harm versus benefit?

10 A. No, because he didn't do a balancing. What he did was
11 say that there were no such harms. That means that there is
12 not any need for a balancing. I have relied on him for the
13 conclusion that there were no such harms.

14 Q. You agree with me, do you not, Professor, that in
15 connection with the issue, did withdrawal of support of the
16 namespace extension APIs cause harm, you have relied
17 entirely on Ronald Alepin?

18 A. I have relied upon him with respect to did they cause
19 any harm, yes.

20 Q. That is my question.

21 A. Yes. That is exactly right. We know that withdrawing
22 the APIs eliminated a benefit, which was the functionality
23 of WordPerfect, and the issue is is there an offsetting
24 harm, and I have relied on him for the testimony that there
25 was no offsetting harm.

1 Q. You didn't do any analysis of that technical issue
2 yourself?

3 A. No, I did not.

4 Q. All right.

5 THE COURT: Let's break for the day. I will stay
6 here. I have one follow-up question for Dr. Noll, sort of
7 an after class question. It is not for family. I am still
8 confused, and then I will talk to counsel about things.

9 See you all at 8:00 in the morning.

10 (WHEREUPON, the jury leaves the proceedings.)

11 THE COURT: This really is in the nature of coming
12 up after class to ask your professor a question. This is
13 what we were talking about before, but I didn't want to keep
14 questioning you, but it does not make really much difference
15 except to my understanding, and I understand what you said
16 that the critical time becomes when you buy your second
17 computer. But to get my head on straight, we're talking
18 here about the anticompetitive effect of the delay of a
19 version of WordPerfect coming out which utilized all of the
20 functionality of Windows 95, correct?

21 THE WITNESS: That is correct.

22 THE COURT: I would still think that the critical
23 time to focus on -- and I understand what you're saying
24 about in one sense that the critical time is when you buy
25 your second computer, but it would seem to me that we're

1 talking about here the decision whether to purchase
2 WordPerfect, say as opposed to Word or the Lotus product,
3 and that the critical time for the consumer's thinking would
4 be when you are buying the application. And what you're
5 thinking is, well, someday I'm might buy a second computer,
6 and I don't want to necessarily have that computer tied into
7 Windows.

8 So I now have a choice, say, between WordPerfect
9 and Word, and I am going to purchase WordPerfect because I
10 don't know what I eventually will buy, but I don't want to
11 be tied in to buying windows, which I would be if I
12 purchased Word. So, therefore, it would seem to me that the
13 critical time, and I am not sure for analysis, but certainly
14 in terms of the critical point to ask the question is when
15 the consumer or the enterprise purchases the application and
16 it wants to have the flexibility of the cross-platform when
17 it buys a computer later.

18 THE WITNESS: Well, I understand it and I think we
19 can parse this in two different parts. All right. Let's
20 start with the typical enterprise that is buying a PC. They
21 are buying them for ten years and it is going to be buying
22 them forever into the future. They already know that once
23 every three or four years they replace all the PCs. All
24 right. A value that they would like to have is that their
25 word processor that they have already got ten year's worth

1 of documents in is going to work in subsequent operating
2 systems.

3 Cross-platform is one such feature, but also
4 running on Windows 95 is one such feature. That is to say,
5 if they see that there has been a huge technological advance
6 in computers, per se, hardware, and that Windows 95 is
7 necessary to access and get used to it, then the very first
8 issue is can it run on Windows 95? Then the second issue is
9 will I be able to deal with this and use this same
10 application and read those same files on into the future?

11 Now, what happens in 95 is people who are sitting
12 on an installed base of WordPerfect, as that diagram shows,
13 just sort of decide, okay, I'm going to invest and I am
14 going to switch, all right, because I don't have -- in the
15 first instance it does not look like WordPerfect is reliable
16 as a company to be able to run on Windows 95 or any
17 subsequent operating systems that comes out at the moment
18 that the computer technology advances.

19 Now, so that explains enterprises. I agree, they
20 are going to balance two things. Is it going to run on the
21 current advanced technology and is it going to be durable?
22 I think that is a perfectly relevant thing for a company
23 that is buying PCs almost all the time, because they have an
24 enormous workload.

25 There is a second part, which is the ordinary

1 consumer, and the PCs in the home existed prior to the 32
2 bit processor and the rise of the Internet, but they were
3 nowhere near as important as they were after the rise of the
4 Internet and the 32 bit processor. So there it is more like
5 a first order. I'm buying it the first time.

6 A lot of these people who were buying it for the
7 first time are probably not very savvy on computer
8 technology. They are not going to know a lot about
9 application barriers to entry and network affects and
10 switching costs and all that. Their principal interest is
11 going to be can I have a word processor that works on this
12 system and uses all these features? That is going to be the
13 principal driver for them. Then later on when the next
14 increment to computer technology comes along, at that point
15 it will be important to them whether what they have bought
16 was cross-platformed. But it seems to me -- I can't sit
17 here and say that for the ordinary consumer future
18 cross-platformedness is a big factor in what they bought the
19 first time they bought. I don't have any evidence.

20 THE COURT: My next series of questions do get a
21 little closer to the issues in the case and, of course,
22 counsel is free to follow up now or later. I want to make
23 sure I understand.

24 For the people who are -- I mean, I actually was
25 very enlightened to hear you say that around this time it is

1 important, because people are buying PCs for the first time
2 because of the access to the Internet. I would think that
3 those people buying, you know, for access to the internet
4 and for home use word processing, probably just are
5 interested in having a word processor that works on Windows
6 95, and are less interested than, say, a major enterprise,
7 whether it is a company or a school or a charitable
8 organization, and using all of the functionality of
9 WordPerfect. So, therefore, if WordPerfect worked with
10 Windows 95, even if you couldn't get all of the
11 functionality which then existed with WordPerfect, for
12 example, accessing different databases and things of that
13 nature, that wouldn't be a major concern to them. They
14 would be mainly concerned about does WordPerfect work with
15 Windows 95 as a word processing application.

16 As I understand it one of the reasons that WordPerfect
17 or Novell wrote its own code is it felt that unless it wrote
18 its own code they would have to take a step back from what
19 had already been established through preferred partnerships
20 or something with these enterprise customers, and they
21 wanted to make sure that those customers had the same
22 functionality, you know, in the future as they had in the
23 past. That is exactly why they wrote their own code.

24 Whereas I would think an individual consumer wouldn't care
25 about that that much. Mainly, they wanted a word processor

1 that worked with Windows 95.

2 THE WITNESS: Well, I think that is true, except
3 that you can't extract from these new functions. I mean,
4 the ability, for example, to put hyperlinks in a document.
5 That is something that was entirely possible after you
6 introduce Windows 95, and so there are features to these --
7 you know, if it were true that all they cared about was
8 would it work in the same way it had worked in the past, and
9 you could have bought WordPerfect for Windows 3.1 and put it
10 on the Windows platform, and we know people didn't do that.
11 We know on the one hand that WordPerfect for Windows 3.1 was
12 a well accepted product and a well reviewed product. On the
13 other hand, we know people didn't buy it to put it on
14 Windows 95.

15 THE COURT: As I understand the issue in this
16 case, and I frankly forget -- Windows open file dialogue or
17 something.

18 What is that?

19 MR. TULCHIN: Common file open dialogue.

20 THE COURT: Common file open dialogue. That the
21 reason that the programmers and the project managers didn't
22 want to use that was because they thought that, although it
23 would come up on an icon and on the start button, they
24 wanted to be in the shell and they wanted to be able to --
25 there were lots of reasons, I guess, but the main one, as I

1 understand it, is it accesses different databases.

2 THE WITNESS: They wanted to compete. That is
3 exactly right.

4 THE COURT: But they could compete, but my point
5 is, and I am just really trying to understand, that
6 individuals who were buying WordPerfect, you know, for home
7 use, they could be content with Windows 3.1 or they would
8 have been content with a product that had been developed
9 using the common --

10 MR. TULCHIN: File open dialogue.

11 THE COURT: -- file open dialogue, which Corel
12 eventually produced, as I understand it.

13 THE WITNESS: The goal of all three of these major
14 players, Microsoft and I.B.M. and Novell was exactly the
15 same. They wanted to be in control of the entire screen and
16 they wanted people to write their software to their APIs.
17 It was not just competing in the word processor front. They
18 were competing on the desktop environment. That was their
19 perception of where the future was.

20 THE COURT: I am not talking about the desktop,
21 because I understand the desktop is where the icons were.

22 THE WITNESS: The desktop is where the icons are,
23 but it is the control of those icons and the control of what
24 programs are called when you want to use some function.

25 That is what control of the desktop environment really

1 means, and they had all perceived that that was the domain
2 of competition that was going to be introduced in the
3 future, and that is what they were competing for. It was
4 not just competing for word processors or just competing for
5 spread sheets, they were competing for control of the
6 desktop environment.

7 THE COURT: But the desktop environment was not
8 being affected.

9 THE WITNESS: Yes, it was, because that was what
10 the game was really all about. These other acts have to be
11 interpreted in terms of what the strategic objectives of the
12 companies were, and the strategic objectives were to control
13 the desktop environment. And the advantage that Microsoft
14 had, regardless of what you call anticompetitive or
15 pro-competitive, the advantage that Microsoft had is that it
16 dominated the operating system and that gave it an edge up
17 in controlling the desktop environment. These other guys
18 were trying to take that away, and for a host of reasons,
19 but one of which was to make the operating system market
20 more competitive.

21 THE COURT: Now -- it is not fair, but you all
22 help me, because I have understood, and I could, again, and
23 I am sometimes a sloppy listener, my understanding is that
24 this was not about a fight over control of the desktop
25 environment, because WordPerfect had come up on the start

1 button, and it could come up on the desktop --

2 MR. TULCHIN: That is correct, Your Honor.

3 THE COURT: -- regardless of what was done about
4 these APIs, the APIs affected only the ability to come up in
5 that screen that I keep seeing. What is it called?

6 MR. TULCHIN: The Explorer, the preview of the
7 Explorer.

8 THE COURT: In the preview, and that it could come
9 up on the desktop regardless of what was done with these
10 APIs.

11 THE WITNESS: The icon could, but the control of
12 it, the control of what goes on and what programs get used,
13 that was not there. That was what they were aiming for.
14 You're right, if you did eventually buy PerfectOffice you
15 could do that, but by that time it was long after Windows 95
16 had been introduced.

17 THE COURT: The other question is completely
18 unrelated and it is a minor thing, but you had the slides of
19 the loss of the number of WordPerfect units that were sold.

20 THE WITNESS: Yes.

21 THE COURT: If you had stayed with the same
22 percentages.

23 THE WITNESS: Right.

24 THE COURT: I assume there was no way to estimate
25 what number of Word -- what the share, the percentage share

1 would have been with the number of WordPerfect items that
2 would have been purchased if Novell had made the decision to
3 use Microsoft's common --

4 MR. JOHNSON: Common file open dialogue.

5 THE COURT: -- common file open dialogue.

6 THE WITNESS: Yes. That question should be asked
7 of -- I think, yes, you probably --

8 THE COURT: The question should be asked of the
9 damages expert.

10 THE WITNESS: -- should be asked that question.

11 THE COURT: Nobody has to, but if you want to you
12 can ask things now or later. As I say, I'm really just
13 trying to clarify --

14 MR. TULCHIN: I think I will wait until tomorrow.

15 MR. SCHMIDTLEIN: I think we are done further
16 cross-examining the witness outside the presence of the
17 jury. I don't think Mr. Tulchin needs any more practice
18 for --

19 THE COURT: No, it was not practice, I am really
20 just trying to understand. I am sorry. This is hard for
21 me. It may be easy for you all. It is very hard for me.

22 Thank you.

23 MR. JOHNSON: Thank you, Your Honor.

24 THE COURT: Okay.

25 MR. TULCHIN: There is one subject, Your Honor,

1 that we were going to address, and I don't think we need Dr.
2 Noll for it, which was the motion we made last week to
3 strike a portion of Mr. Alepin's testimony.

4 THE COURT: I am not sure I am going to decide it
5 now.

6 MR. TULCHIN: Do you want to hear it now, Your
7 Honor?

8 THE COURT: Let me understand, what is the big
9 deal about this? I mean, I understand that there is a
10 difference between bundling Netscape and PerfectOffice and I
11 think I have ruled on that. I think I understand that
12 PerfectOffice is all over this case, whether you want it or
13 not. You have put it in about whether to develop the suite
14 or not, and I think everybody understands what PerfectOffice
15 is. I am not sure that I understand, and it could have
16 something to do with Mr. Alepin's testimony, why the
17 importance that I strike or not strike this testimony about
18 PerfectOffice being potential middleware.

19 MR. TULCHIN: Well, Your Honor --

20 MR. JOHNSON: Your Honor, we just got a reply this
21 morning.

22 THE COURT: Let's talk about it in the tomorrow.

23 MR. SCHMIDTLEIN: Thank you, your Honor.

24 MR. TULCHIN: I'm sorry, Your Honor, but every
25 time this happen. When Novell wants something it has to be

1 immediate. In fact, they often insist upon --

2 THE COURT: I think Novell would have as much
3 complaint about me as you do, Mr. Tulchin.

4 MR. TULCHIN: No. Your Honor, we got their brief
5 after I was in bed last night. We put a reply in this
6 morning. I am happy do this at the Court's convenience.

7 THE COURT: I understand. If I really thought we
8 had to do it today I would, but it is striking testimony so
9 let's just wait.

10 MR. SCHMIDTLEIN: There is no reason to do it at
11 this point.

12 MR. JOHNSON: Thank you, Your Honor.

13 MR. TULCHIN: Thank you, Your Honor.

14 (Proceedings adjourned.)
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