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1 Q. One?

2 **A. Correct.**

3 Q. Okay. This argument applies to all the claims,

4 correct?

5 **A. That's correct.**

6 Q. Across all ordinary windows?

7 **A. That's correct.**

8 Q. Okay. Let me just quickly ask you a question.

9 You heard something about stacking of sticky windows.

10 Do you recall those questions?

11 **A. Yes.**

12 Q. And how some could be on top of others. I

13 believe you called it Z-ordering?

14 **A. I did refer to it as Z-ordering.**

15 Q. Can you explain a little bit about what you

16 mean by Z-ordering?

17 **A. Sure. It's a three-dimensional concept, so**

18 **that's kind of hard to think about, but Z-ordering, if**

19 **you look at a screen, it's going to have an X**

20 **coordinate, a Y coordinate, and then the third dimension**

21 **is the Z coordinate.**

22 **So Z-ordering is just the stack of the**

23 **windows along that Z axis. I don't know if that's**

24 **helpful or not, but you asked me, and that's the**

25 **explanation.**

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1 Q. So can you give sort of a real world example of

2 what's meant by stacking like that?

3 **A. For example, in -- some of the slides showed**

4 **windows overlapping each other, and so the overlapping**

5 **of the windows would be the Z-ordering. It's the**

6 **ordering along the logical Z axis.**

7 Q. Does that have any effect on whether we have

8 one display object or multiple display objects with

9 respect to sticky windows?

10 **A. No, it does not.**

11 Q. And why not?

12 **A. It's still just one display object -- excuse**

13 **me -- that wasn't very clear.**

14 **The sticky window, wherever it is in that**

15 **stack, is still just the single object. Think of it**

16 **like a deck of cards. I've got the ace of spades. If**

17 **the ace of spades is on top or on the bottom or in the**

18 **middle of the cards, it's still just one ace of spades,**

19 **unless someone's cheating.**

20 **But, I mean, there's only one ace of**

21 **spades, wherever it is, it's in the stack of the cards.**

22 MR. LYON: I have no further questions.

23 MR. GIBBONS: Briefly, Your Honor, if I

24 may.

25 THE COURT: You may, Mr. Gibbons.

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1 **REXCROSS-EXAMINATION**

2 **BY MR. GIBBONS:**

3 Q. Now, there's some questions that your lawyer

4 just asked you on redirect regarding the servers and the

5 burden.

6 And you understand that one -- or two of

7 the models that our damage expert is calculating numbers

8 are on the Fedora and openSUSE products, correct?

9 Were you here for his testimony?

10 **A. I was not here for his testimony, and I don't**

11 **believe I've read his latest iteration of the reports.**

12 Q. Well, that's one part of his opinion. Other

13 than your one experimental use of Fedora, no servers, in

14 your opinion or in your knowledge, use Fedora or

15 openSUSE, correct?

16 **A. I'm not aware of any sitting here today.**

17 Q. Now, you understand that patent claims are not

18 normal language? It's pretty obvious, correct?

19 **A. They're English but, yeah. A peculiar**

20 **structure to the language, yeah.**

21 Q. And so your words or even Dr. Henderson's words

22 can't alter the words of the claim, correct?

23 **A. I think that's correct.**

24 Q. Okay. And that's why we have the Judge to

25 construe what the words of the claim mean, correct?

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1 **A. I agree, the Court does that.**

2 MR. GIBBONS: Nothing further, Your Honor.

3 THE COURT: Thank you, Mr. Gibbons.

4 Mr. Lyon?

5 MR. LYON: Nothing further.

6 THE COURT: You may step down.

7 THE WITNESS: Thank you.

8 MR. LYON: At this point, the Defense

9 would like to call Dr. David Wilson.

10 THE CLERK: Please raise your right hand.

11 (Witness sworn.)

12 MR. LYON: Your Honor, I have a couple of

13 witness binders. May I give one to the witness and to

14 you as well just to speed things up?

15 THE COURT: Yes, please.

16 **DAVID WILSON, Ph.D., DEFENDANTS' WITNESS, SWORN**

17 **DIRECT EXAMINATION**

18 **BY MR. LYON:**

19 Q. Good afternoon.

20 **A. Good afternoon.**

21 Q. Would you please introduce yourself to the

22 jury.

23 **A. My name is David Wilson.**

24 Q. What do you currently do for a living?

25 **A. I have my own consulting and software company**

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1 **in San Jose, California.**
 2 Q. Dr. Wilson, could you speak up a little bit.
 3 It sounds like the jurors are having a hard time. Maybe
 4 if you speak more into the mic.
 5 **A. I'm self-employed in San Jose, California, and**
 6 **I really have three different jobs that my company does.**
 7 **One, I do consulting and sometimes expert**
 8 **witness work. Two, I teach training classes on advanced**
 9 **computer programming. And the fun part of my job is I**
 10 **build apps for the iPhone and for the new Apple iPad.**
 11 **So I spend as much time as I can writing apps.**
 12 Q. What types of apps?
 13 **A. The latest one is learning about how to be a**
 14 **better photographer. I've also written apps on a math**
 15 **program for kids, two real estate programs, and a**
 16 **deadline program to manage deadlines, because there**
 17 **are --**
 18 Q. Can I get a copy of that one?
 19 **A. -- too many deadlines these days.**
 20 Q. So what are you here to talk to the jury about?
 21 **A. Talk about my investigations on -- of the**
 22 **patents being asserted and investigations of prior art**
 23 **that might potentially have an impact on the patents.**
 24 Q. Now, we've all been staring at some things on a
 25 table out here. Can you tell us what we're actually

Page 23

1 looking at?
 2 **A. Well, I have two examples of prior art where I**
 3 **actually assembled old computer software and hardware**
 4 **and managed to find sets of things that represented**
 5 **prior art to the time the patent was filed.**
 6 **And I will show you those in operation,**
 7 **which is a lot more fun than just hearing me talk about**
 8 **them.**
 9 Q. Now, are you an employee of any of the parties
 10 in this case?
 11 **A. No, I'm not.**
 12 Q. But you were retained by the Defendants?
 13 **A. Yes.**
 14 Q. And how much are you being paid?
 15 **A. \$275 per hour.**
 16 Q. Is your pay in any way related to the outcome
 17 of the case?
 18 **A. No, it's not.**
 19 Q. Can you briefly summarize your educational
 20 background for the jury?
 21 **A. Well, I have a bachelor of science degree in**
 22 **engineering and physics from Cornell University, and**
 23 **then I discovered it didn't snow in California, so I**
 24 **moved to Palo Alto and went to Stanford University and**
 25 **got a master's and Ph.D. in applied physics at Stanford.**

Page 24

1 Q. And so what computer languages do you have
 2 experience programming in?
 3 **A. Well, I won't go through the whole list. My**
 4 **first job where I was paid to do computer programming**
 5 **was for IBM in 1966 using what they called for Fortran**
 6 **assembly language on a mainframe.**
 7 **And I've shrunk my programming down over**
 8 **the years from the room-filling mainframe down to iPhone**
 9 **that fits in your pocket. I programmed in Fortran,**
 10 **Pascal, C, C++, Smalltalk, Objective-C, various visual**
 11 **programming languages. And, in fact, my son and I**
 12 **invented a kind of dataflow visual programming language**
 13 **for one product we shipped.**
 14 Q. What does that mean, you invented a visual
 15 dataflow programming language?
 16 **A. Well, we invented a language -- a new kind of a**
 17 **spreadsheet where you actually -- it was all drag and**
 18 **drop and you wired components up together, and it**
 19 **represented a way to program the spreadsheet rather than**
 20 **typing in formulas like you do in Excel. It's very**
 21 **cool.**
 22 Q. You mentioned you teach classes. What kind of
 23 classes do you teach?
 24 **A. Well, starting in 1984, the year the Macintosh**
 25 **was introduced, I started -- I was contracted by Apple**

Page 25

1 **Computer to put together their first general purpose**
 2 **programming classes on how to program the Macintosh. So**
 3 **I spent over ten years teaching Apple developers how to**
 4 **write programs for the Mac.**
 5 **Since then, I've also taught database**
 6 **programming and applet programming at Boeing. I've**
 7 **taught -- I worked for Sun Microsystems, who invented**
 8 **Java, to teach advanced Java classes.**
 9 **But, of course, Sun Microsystems doesn't**
 10 **exist anymore. They were swallowed by Oracle. I worked**
 11 **at Portal Software in Cupertino, which made an**
 12 **internet-billing system, and now they've been swallowed**
 13 **by Oracle.**
 14 **In fact, I realized when thinking about**
 15 **this that my son, Steve, who worked at Sun has now been**
 16 **swallowed by Oracle, and he's an employee at Oracle now.**
 17 MR. LYON: At this point, Your Honor, I'd
 18 like to move Dr. Wilson in as an expert witness.
 19 MR. HILL: No objection, Your Honor.
 20 THE COURT: You may proceed.
 21 MR. LYON: Thank you.
 22 Q. (By Mr. Lyon) So now, Dr. Wilson, were you
 23 asked to -- I'm sorry.
 24 THE COURT: Let me explain to the jury.
 25 When you become an expert, you can offer

1 opinions testimony, not just factual testimony. That's
2 what we've done each time. There have been several
3 expert witnesses, and they can offer an expert opinion.

4 Please proceed.

5 MR. LYON: Thank you very much, Your
6 Honor.

7 Q. (By Mr. Lyon) Were you asked to perform any
8 work in connection with this case?

9 A. Yes, I was.

10 Q. What were you asked to do?

11 A. I was asked to look at the patents that are at
12 issue, analyze them, and then analyze a wide range of
13 prior art to see how they related to the patents.

14 Q. And if we could --

15 MR. LYON: Well, why don't we get Slide 1
16 up, please?

17 Q. (By Mr. Lyon) Can you explain a little bit
18 about what you did in order to perform this work?

19 A. Well, to analyze the patents, you really --
20 among other things, you look at the prosecution history
21 of the patents, which means the interaction that the
22 applicants had with the Patent Examiners themselves as
23 they went through the process of eventually getting the
24 patents issued.

25 When the patents finally issue, all three

1 patents at issue have a common specification, which is
2 kind of a bonus, if you're studying them, because you
3 don't have to read the specification three times. You
4 just read it once.

5 The difference in the three patents are in
6 the claims, so then, after you study the specification,
7 your job is to study the claims, analyze the claims, and
8 interpret them.

9 But as we've discussed this morning
10 already -- so you've heard this before -- I don't get to
11 make up what the terms mean. I can't say, just because
12 I'm an expert, a display object is a chicken. I have to
13 use the Court's definition of display object. I can't
14 make up what a workspace is. I have to use the Court's
15 definition of workspace.

16 And I can interpret the claims in the
17 context of the Court's definition. And that's my
18 understanding -- and I'm not an attorney, but that's my
19 understanding of how to interpret the claims. And I
20 understand that the Court will actually give you
21 instructions on how to interpret the claims as we go
22 along.

23 Q. So now as part of this case, did you have an
24 opportunity to do some research and investigation into
25 user interfaces that existed prior to the patents being

1 filed?

2 A. Yes, quite a lot of research.

3 Q. Okay.

4 MR. LYON: And if we take a look at
5 Slide 2.

6 Q. (By Mr. Lyon) Does this summarize the types of
7 research that you did?

8 A. Yes. First, because I've been around since the
9 beginning of the personal computer revolution, I had a
10 lot of personal experience with products, including some
11 of the products on the table.

12 I also reviewed lots of publications and
13 user manuals and publications in learned journals and
14 publications in popular magazines. And then I obtained
15 old software and hardware, picking and choosing the
16 parts that fit together that I knew were the correct
17 dates and the correct versions for what we're interested
18 in.

19 And then I started getting them actually
20 to work and testing them and taking screen shots and
21 figuring out how they worked.

22 Q. Now, as part of your work in this case, have
23 you formed any opinions?

24 A. Yes.

25 Q. And what opinions have you formed?

1 A. Well, I found a number of prior art systems
2 that anticipate each of the claim elements and render
3 the claims invalid.

4 Q. When you said anticipate, what do you mean by
5 that?

6 A. Well, the claim -- elements of a claim are
7 anticipated, if, in a prior art system, you find every
8 feature described in the elements of the claim based on
9 the Court's claim construction, how to interpret the
10 claims.

11 And those features may be explicitly
12 there. If the claim calls for a display object, you
13 look on the screen and say, okay, I have a display
14 object. If the claims call for some data structure
15 underneath the display object, that may be -- it's not
16 explicitly something you can see on the screen, but it's
17 inherently there. It has to be there for that thing
18 that you see on the screen to exist.

19 Q. Now, which prior art systems did you
20 investigate?

21 A. Well, I have a long list of them, so I put
22 together a timeline just to summarize them before we
23 dive into detail on three of them.

24 MR. LYON: Can we bring the timeline up?

25 A. Now, I have to make a comment here that struck

<p style="text-align: right;">Page 30</p> <p>1 me as funny this morning.</p> <p>2 These are really about graphical user</p> <p>3 interfaces for the most part, and you've heard them</p> <p>4 described as GUIs. And, in fact, this morning's</p> <p>5 discussion went into some detail about GUI trash cans</p> <p>6 and GUI sticky windows. And I thought if I told my wife</p> <p>7 that I spent the whole day working with GUI trash cans</p> <p>8 and GUI sticky windows, she'd first say, ooh, that's</p> <p>9 gross, and then she'd say be sure to wash your hands</p> <p>10 before you come in the house.</p> <p>11 But that's the way we talk about it. So</p> <p>12 I'm going to talk about GUIs, and I'm going to show you</p> <p>13 some trash cans and I'm going to show you some windows.</p> <p>14 Q. All right. Let's start over on the left-hand</p> <p>15 side. What period of time is this timeline</p> <p>16 representing?</p> <p>17 A. This covers basically the two decades leading</p> <p>18 up to the time that the patent was actually filed. And</p> <p>19 the reason I went back two decades is there were</p> <p>20 significant things that happened in the world of</p> <p>21 computing starting all the way back in 1968.</p> <p>22 Q. Let's start in the far left. Why don't you</p> <p>23 tell us what you're showing there.</p> <p>24 A. Well, fortunately, I think we -- I'm going to</p> <p>25 try to advance these slides so -- I guess it's taken</p>	<p style="text-align: right;">Page 32</p> <p>1 Now, these windows weren't as fancy as the</p> <p>2 windows that came later in the Macintosh or today's</p> <p>3 computers, but they still represented windows, and they</p> <p>4 represent -- in terms of the patent, these represented</p> <p>5 display objects.</p> <p>6 Q. All right. How about the next entry on the</p> <p>7 timeline, what's that?</p> <p>8 A. Well, now we're going to jump ahead to almost</p> <p>9 ten years to where people had been working on all these</p> <p>10 ideas and doing research, and lots of different</p> <p>11 universities and research labs were now doing</p> <p>12 developments that we're starting to try to bring some of</p> <p>13 this eventually to where we get it.</p> <p>14 So if you could -- I picked as an</p> <p>15 example -- there were many different research projects</p> <p>16 going on. One of them was Smalltalk -- called Smalltalk</p> <p>17 76, where 76 represented some year in the development,</p> <p>18 1976, and this was a Xerox PARC project. And, again,</p> <p>19 PARC stands Palo Alto Research Center.</p> <p>20 And since I lived in Palo Alto, I used to</p> <p>21 sometimes ride my bicycle past PARC. Later on, I</p> <p>22 started going to seminars there. And later on, I</p> <p>23 actually started to teach Smalltalk programming for a</p> <p>24 PARC spinoff called PARC Place.</p> <p>25 So PARC and Smalltalk had -- by 1977, they</p>
<p style="text-align: right;">Page 31</p> <p>1 care of for me.</p> <p>2 The first great demonstration of what's</p> <p>3 come to be personal computer capabilities was done by</p> <p>4 Doug Engelbart, a researcher at Stanford Research</p> <p>5 Institute. And at least in 1968, it was called Stanford</p> <p>6 Research Institute. It was part of Stanford. When I</p> <p>7 worked there in the '70s, it was called SRI</p> <p>8 International, but it was the same place.</p> <p>9 That is not Doug Engelbart's picture, but</p> <p>10 he was doing a demo showing the future of computing.</p> <p>11 And it's been called in publications the mother of all</p> <p>12 demos, the greatest single demo ever done, probably</p> <p>13 better than the one you're going to see today.</p> <p>14 Q. Why was it called the mother of all demos?</p> <p>15 A. What Doug Engelbart and his team did was invent</p> <p>16 the mouse and they showed the mouse in operation. They</p> <p>17 showed live video-conferencing, which is still a</p> <p>18 relatively new feature for many of us even today. They</p> <p>19 showed collaborative text.</p> <p>20 He basically came up with the first place</p> <p>21 where I've seen windows talked about. And what</p> <p>22 Engelbart said was a window back in 1968 was just a</p> <p>23 rectangular area of the screen that contains a certain</p> <p>24 kind of information. So he's showing a video window on</p> <p>25 top. He's showing a text window on the bottom.</p>	<p style="text-align: right;">Page 33</p> <p>1 already had multiple virtual workspaces. They had a</p> <p>2 graphical user interface with menus and buttons, and I</p> <p>3 talk about bit map graphics, which Engelbart's system</p> <p>4 had.</p> <p>5 What I mean by bit map graphics is every</p> <p>6 little pixel on the screen could be turned on or off</p> <p>7 independently, which means you can do things like show</p> <p>8 graphics. I'll show you some later systems that didn't</p> <p>9 have bit map graphics and you could only see text, but</p> <p>10 this was a system that had graphics and text.</p> <p>11 Q. How about the next entry?</p> <p>12 A. So the next entry is one of the very first</p> <p>13 personal computers ever sold.</p> <p>14 THE COURT: Can I ask, how many pixels was</p> <p>15 on that last screen?</p> <p>16 THE WITNESS: I'm going to guess -- I</p> <p>17 don't know. I'm going to guess about 800-by-600, but</p> <p>18 I'm only guessing. I never thought to look.</p> <p>19 THE COURT: Excuse me.</p> <p>20 A. When I worked with Smalltalk in later years, it</p> <p>21 could handle different pixel sizes depending on what</p> <p>22 your graphics card supported.</p> <p>23 Okay. So let me jump ahead to this</p> <p>24 system. This was one of the very first personal</p> <p>25 computers sold, the Commodore Pet, and I put in</p>

1 asterisks next to it because I bought the Commodore Pet
2 the first month it was on sale. And the good news is,
3 it was a personal computer.

4 THE WITNESS: Let me try the laser
5 pointer.

6 THE COURT: Top button.

7 THE WITNESS: I don't see red. There it
8 is. Okay.

9 A. That thing is a cassette tape deck. That's how
10 you loaded programs in. It was a nightmare. If you
11 loaded a game, it could take 15 minutes to load the game
12 in.

13 Now, on the other hand, you could do games
14 with character graphics. And my son, Steve, and I
15 thought this was way cool at the time, but it wasn't a
16 great leap forward in graphical user interfaces. It
17 didn't really have one. It didn't have a mouse.

18 Now, as we go into 1980, the Three Rivers
19 PERQ graphical workstation is an example of the great
20 leaps forward that started in the '80s. Now we had
21 things that started to look modern. We had
22 sophisticated graphical user interfaces with workspaces
23 with lots of display objects. We had calculators; we
24 had clocks.

25 Again, it doesn't contain everything that

1 we're talking about in the patent, but we're moving
2 rapidly toward that at this point. So starting in the
3 '80s, things really -- there was an explosion of
4 innovation, creativity, and new systems, including
5 systems as we'll see that were sold to ordinary people.

6 Q. (By Mr. Lyon) What comes next?

7 A. Well, we're going to move along to the most
8 important for many people, the personal computer ever
9 introduced, which is the IBM PC. So the IBM PC came out
10 on a certain date in August 1981. And the day it came
11 out, I went and picked mine up, put my Commodore Pet in
12 the closet and eventually sold it to a neighbor, and
13 said, all right, now I've got a computer with floppy
14 disk drives. That was a great leap forward.

15 But you notice I said it doesn't have a
16 GUI, didn't have a mouse. It used the DOS command line,
17 which means you had to type -- I don't really want to go
18 there yet.

19 You had to type commands on this line, and
20 you had to memorize them. And the funny thing about
21 command lines is real nerds still love command lines. A
22 lot of database administrators and a lot of server
23 administrators who run big server systems feel like they
24 can type commands faster than they can use a mouse. And
25 they think mice and GUIs are for sissies. Real men use

1 the command line.

2 And I know a lot of people that still feel
3 that way. I'm not one of them.

4 Q. And, again, just to remind everyone, so when
5 you say GUI, you're referring to a graphic interface,
6 right?

7 A. Yes.

8 Q. As opposed to this text interface?

9 A. Right. And so this text interface is not a
10 GUI. It didn't have a mouse. You just had to remember
11 what to type. To help people remember what to type, I
12 wrote a little book called the IBM PC Disk Guide and had
13 it published by McGraw-Hill, because it was the kind of
14 thing where you just couldn't quite remember all of what
15 the exotic commands were.

16 Now, the GUI systems brought things like
17 menus where you didn't have people to memorize so much,
18 and from now on, that's what we'll be talking about.
19 But I mention this because of the fact there's so many
20 systems today, particularly servers, where the
21 administrators feel like the macho way to do it is to
22 use the command line, and they think they can work
23 faster using a command line. And that's often what they
24 do.

25 Q. Let's go to the next entry in your timeline.

1 A. So now we're going to go to one of the pieces
2 of prior art I'm going to discuss in some detail. This
3 is called the Chan Room System, and Patrick Chan was a
4 grad student at the University of Waterloo. And I'm
5 going to go into some detail on this.

6 But one of the things that was interesting
7 about this, in prosecuting one of the patents at issue
8 in this case, the applicant said to the Patent Office,
9 the Chan System is especially relevant. And I really
10 think it is, and I'll show you why as we go along.

11 It has multiple virtual workspaces; it has
12 switching objects for switching from one workspace to
13 another; each workspace contains multiple display
14 objects. You can have the flexibility to move display
15 objects around between workspaces, and you can have the
16 continuity to start a task with a display object in one
17 workspace, and then go to a tool that's perceptible as
18 the same tool in the next workspace, which is a lot of
19 words.

20 I will show you -- I don't have the
21 running system, but I'll show you an animation of what
22 it did based on the documentation I have.

23 Q. All right. Now, how about the next entry?

24 A. The next entry is the thing that changed my
25 career. When the Macintosh came out in 1984, it really

1 had a graphical user interface with a mouse, so I took
2 my IBM PC, pushed it aside, and bought a Macintosh. And
3 I said to my son, Steve, wouldn't you like a computer?
4 Here's the IBM PC. And he said, no, I don't like that.
5 I want a Macintosh.

6 And eventually, we all had them.

7 A Macintosh brought a sophisticated
8 workspace with lots of display elements inside a bit map
9 GUI. And I'll go through this in some detail, but I'm
10 going to show you a later version of it, because that's
11 the most relevant. And I'm going to demonstrate live a
12 later modification of it.

13 Q. Okay. Let's go to the next entry then.

14 A. Now we get to the one that's going to be one of
15 our demos, this Switcher Construction Kit. And Andy
16 Hertzfeld, one of the Apple engineers who had designed
17 the original OS and knew how the operating system worked
18 in detail, wrote an add-on called Switcher that Apple
19 started selling in 1985.

20 And it allowed you to keep multiple
21 virtual workspaces in memory and switch back and forth
22 between them. And it's fun even today to play with
23 them, so I'll give you a live demo of that.

24 Q. And how about the next one?

25 A. Well, this is an example of trying to bring the

1 poor IBM PC people into the game. So Digital Research
2 introduced something called GEM, a graphical environment
3 manager, which brought a Macintosh-like display to the
4 IBM PC. So it would now have bit map graphics. You
5 could have windows and menus, but we're not going to be
6 discussing it in detail.

7 I do remember in, I think, late '85 going
8 to an IBM PC user group and showing them GEM, and most
9 of them thought it was quite amazing, because they
10 hadn't moved into this world yet.

11 But by this time, you can see that we've
12 gone from Doug Engelbart with just kind of here's some
13 text and here's some video to very fancy user interfaces
14 with lots of display objects. And as you'll see, we'll
15 have multiple workspaces and switching and lots of other
16 things going on.

17 Q. And the next one?

18 A. Another system -- the other system I will
19 demonstrate live is the Commodore Amiga Workbench, and
20 for some reason, I let down the economy. I didn't
21 actually get rid of my Mac and buy a Commodore, but it
22 was a very advanced system in terms of its sound and
23 speech synthesis and graphics.

24 And I'll demonstrate how that has multiple
25 workspaces and how you can easily switch between

1 workspaces and manipulate and share display objects.

2 Q. And then finally, what do we come to at the
3 end?

4 A. So by this time, these products have been on
5 the market and in use for quite some time in some cases,
6 and now we get to March '87 when the first of the patent
7 applications was filed.

8 So the things I've shown you before all
9 came prior to the patent application being filed and
10 some of them are just part of the development along the
11 way. Some of them represent what I believe to really be
12 anticipatory prior art.

13 Q. So can you just summarize, then, state of the
14 art at the time the patents were filed?

15 A. Well, there were systems out there, well-known
16 systems that had multiple virtual workstations --
17 workplaces (sic). They had -- workspaces -- they had
18 switching display objects that allowed you to switch
19 back and forth between them.

20 They had shared display objects where you
21 could have a display object that you could put in one
22 location in one workspace, and what appeared to be the
23 same tool in another workspace in a different location.
24 And you could start a task. They had the continuity to
25 allow you to start a task for the tool in one workspace

1 and then go to the other workspace and continue
2 operating on that tool.

3 So they had the flexibility of moving
4 things around. They had the continuity of continuing
5 your work.

6 Q. Now, in your opinion, what new development did
7 the patents that we're talking about here today bring to
8 the state of the technology?

9 A. By the time we got to March of '87, there was
10 nothing new in the patents. Those ideas had already
11 been in these existing systems.

12 Q. We've been talking a lot about some of the
13 terms here. Are there particular terms you think are
14 useful to explore, given the Court's claim construction
15 for purposes of validity here?

16 A. Yes. Originally -- and, again, I put this
17 slide up to mention that we have to interpret the claims
18 in terms of the Court's claim construction. I can't
19 just say I'm an expert, trust me, this is what the word
20 means. I have to work with what the Court said.

21 There are a lot of terms that are actually
22 important, and in Dr. Gray's testimony, he actually
23 covered a number of these. But I want to at least
24 mention two of them again, and I hate to repeat myself,
25 but I do want to do that.

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1 MR. LYON: Can you go to Slide 22, please?
 2 **A. Well, this one is an easy one. I'm not going**
 3 **to focus on it.**
 4 **The systems need a display, but, of**
 5 **course, there has been some controversy this morning**
 6 **about whether servers and server farms have a display or**
 7 **not. I'm just saying that a display is required to be**
 8 **one of the elements of the patent.**
 9 **Display object is a key term, and notice**
 10 **the definition of display object is quite broad. A**
 11 **visually distinguishable display feature is the first**
 12 **part.**
 13 **So, for example, I'll show you on the**
 14 **Apple Macintosh there's an Apple icon in the upper**
 15 **left-hand corner. That Apple icon is a display object.**
 16 **Now the other part of the definition is a set of**
 17 **features which is coherent in the sense of sticking**
 18 **together in the display.**
 19 **So if I go, for example, to the display**
 20 **object, the text editing window in the patent, it's a**
 21 **display object because it's a set of features, but it**
 22 **better stick together, because I'd be very disturbed if**
 23 **I dragged this window down here and the letters all fell**
 24 **out.**
 25 **And I, in fact, had this happen on**

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1 **Macintosh recently on one of these old Macs when I ran**
 2 **the wrong version of the software. I ended up, when I**
 3 **tried to move a window, pieces got left behind. And if**
 4 **the programs break, that happens, but that's not the**
 5 **kind of display object we want.**
 6 **So if I have a clock icon here and I move**
 7 **the clock, I want the hands to go with me. So that's a**
 8 **display object.**
 9 **Menus are a display object. Icons are a**
 10 **display object. Windows themselves are display objects.**
 11 MR. LYON: How about if we go to Slide 26,
 12 please.
 13 **A. So workspace is obviously the term we probably**
 14 **heard the most today. So what's workspace?**
 15 **It's a display system entity. Well, that**
 16 **means that we can see it on the screen. It's displayed**
 17 **in our display system. It includes a collection of**
 18 **display objects. That's, again, a very broad**
 19 **definition.**
 20 **That means that what I have shown in the**
 21 **patent, for example, Figure 1A, all of those three items**
 22 **inside are display objects, and the whole outer edge of**
 23 **the display represents the workspace. So that's one**
 24 **workspace and the patent says that.**
 25 **In the Amiga system, I'll show you how**

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1 **the -- one of the Amiga Workbench programs running,**
 2 **provides a workspace full of display objects. In the**
 3 **Chan system, I'll show you how one of the Rooms in the**
 4 **Chan system represents a workspace. And when you go to**
 5 **another Room, you'll be going to another workspace.**
 6 **And in the Macintosh, I'll show you a big**
 7 **enough space so you can actually see it, and do a live**
 8 **display, how all the different graphics, icons, menu**
 9 **bars, and menus, et cetera represent display objects,**
 10 **and one of those applications is a workspace.**
 11 Q. (By Mr. Lyon) Now, you mentioned that you
 12 believe that the patent claims are anticipated. Which
 13 prior art systems do you think anticipate the claims at
 14 issue?
 15 **A. In fact, the three shown here I'm going to**
 16 **discuss in more detail. The Amiga system, I'll give you**
 17 **a live demo of that and tell you why I think it**
 18 **anticipates the claims.**
 19 **Under the -- but the Amiga system is**
 20 **special. It anticipates the claims under the**
 21 **interpretation of the claims that Dr. Zimmerman has**
 22 **given.**
 23 **The Chan Room system anticipates the**
 24 **claims under my interpretation and Dr. Zimmerman's, and**
 25 **so does the Switcher system. So I'll show you an**

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1 **animation of the Chan Room system or a simulation of it.**
 2 **I'll show you the Amiga live and Switcher live, so you**
 3 **can make up your own minds.**
 4 Q. Let's start with Switcher. Can you describe
 5 what Switcher is?
 6 **A. Switcher, again, was an add-on product that was**
 7 **added on to the basic Macintosh system in 1985. And its**
 8 **purpose, as the name implies, was to allow you to switch**
 9 **from one workspace to another with a simple click of a**
 10 **mouse or typing a key on the keyboard.**
 11 **And it was really very sophisticated**
 12 **programming to do that, and it was probably only done**
 13 **because Andy Hertzfeld wrote a lot of the original**
 14 **Macintosh system, so he knew how it worked.**
 15 Q. How did you first become familiar with
 16 Switcher?
 17 **A. Well, I was working at Apple, basically**
 18 **full-time teaching Macintosh programming. I wasn't an**
 19 **employee; I was a contractor, but I was teaching**
 20 **Macintosh programming on the Apple campus, and I was out**
 21 **there constantly working with the engineers and**
 22 **engineering support people and trainers. So I saw**
 23 **Switcher as soon as it became public.**
 24 **Now, it had a long, varied history,**
 25 **because Andy kind of wrote it for himself first and then**

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1 eventually Apple adopted it, and it became part of the
 2 Apple official products.
 3 Q. When did you first begin using it?
 4 A. I suspect that I probably began using it in
 5 January '86 when I got the Mac Plus, but my original
 6 128K Mac didn't have enough memory to run Switcher, so I
 7 needed the next generation Mac so I had enough memory.
 8 And being a good consumer, as soon as I
 9 could buy one, I went out and bought one.
 10 MR. LYON: If we can have Defendants'
 11 Exhibit 577 up on the screen, please.
 12 Can we rotate that just so it's easy --
 13 there we go.
 14 Q. (By Mr. Lyon) Do you recognize this exhibit,
 15 Dr. Wilson?
 16 A. Now that we've rotated it, yes.
 17 This is the user manual that Apple shipped
 18 for the Switcher Construction Kit, as it was called.
 19 None of us ever called it a construction kit. We just
 20 called it Switcher.
 21 MR. LYON: And if we go to, I think, it's
 22 Page 2. Well, maybe not. Keep going. It's not that
 23 page.
 24 I think that's it. Can you turn this
 25 around?

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1 A. This is what's called anticipating a figure on
 2 the screen.
 3 MR. LYON: Back up a little bit to the
 4 page you had just before this. And then the bottom, can
 5 you flip it again and update that?
 6 Q. (By Mr. Lyon) Okay. And we see a copyright
 7 date down there. What is that date?
 8 A. Well, that says copyright 1986. The version of
 9 Switcher that I'm going to show you has a menu item you
 10 can bring up to find the version, and the version I'll
 11 show you is Version 4.4 shipped in 1985.
 12 Q. And if you --
 13 MR. LYON: Now if we go to -- I guess it
 14 will be Page 21761 of this -- of this exhibit.
 15 Two more pages. There we go. Can we blow
 16 that figure up, please, and rotate it?
 17 Q. (By Mr. Lyon) Okay. Can you use this figure to
 18 just explain briefly what Switcher did and how it
 19 worked?
 20 A. Right. What Switcher was doing was kind of
 21 allowing you to load up to four different programs. It
 22 represented four different workspaces and switch between
 23 them. And this was kind of like a square dance where
 24 you circled around and you go from the first one to the
 25 second to the third to the fourth and back to the first.

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1 But I don't want to pretend that I go to
 2 square dances, because I don't. I went to one when I
 3 was a kid and when I saw this yesterday, it made me
 4 think of it, but I haven't been to one since. And I was
 5 a kid a long time ago.
 6 MR. LYON: Do we have the floppy disks?
 7 THE WITNESS: Oh, they're back in the back
 8 of the room.
 9 MR. LYON: Can someone go --
 10 THE WITNESS: They're in my green -- I
 11 forgot to bring them up.
 12 MR. LYON: Your Honor, may I approach the
 13 witness?
 14 THE COURT: You may.
 15 Q. (By Mr. Lyon) Could you identify the Macintosh
 16 switcher disk that's in there?
 17 A. This is the disk I'm going to use for the live
 18 demonstration.
 19 MR. LYON: Just for the record, this will
 20 be substituted in for a DVD that we produced as software
 21 already as DX721. We'll substitute in the floppy. I
 22 think that was by agreement?
 23 MR. GASEY: We have no problem with that
 24 substitution, Your Honor.
 25 THE COURT: Thank you.

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1 Q. (By Mr. Lyon) What software is on that floppy
 2 disk?
 3 A. Well, it has, first, the Macintosh operating
 4 system that was appropriate for the 1985 because you
 5 need that to actually boot up the machine and do
 6 anything. And then it has a system file that's part of
 7 that boot-up process, and the system file contains
 8 things that are needed by the various applications, and
 9 the things that most of us cared about that were in
 10 there were all the little desk accessories I'm going to
 11 show you and the fonts.
 12 So the Macintosh was one of the first
 13 systems to have different fonts that you could use. So
 14 the fonts that were available are in the system file on
 15 this disk.
 16 Then I added switcher, and I wanted to
 17 make sure I got a 1985 version of switcher, so I
 18 contacted a former Apple vice-president, Dr. Patel, and
 19 said: Do you have a version such and such of switcher?
 20 I think it's 4.4. And he did have it, so he gave me a
 21 copy of it. And then I put on MacPaint and MacWrite
 22 from that same time period.
 23 Dr. Patel and I both have a large stack of
 24 floppy disks of various versions of Mac software, but I
 25 wanted to pick versions that were all truly from 1985,

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1 so I assembled the disks that had the right pieces.
 2 Q. And how do you know the software that's on that
 3 disk is switcher and from that time period?
 4 A. Well, there are a number of ways to determine
 5 what it is. First, of course, you start by just the
 6 software has this software dialogues you can bring up
 7 that will show copyright notices and version numbers and
 8 dates, and I can show you those.
 9 Number two, we've looked at the switcher
 10 user manual, for example, and you'll see that everything
 11 that I show on the screen looks exactly as was shown in
 12 the switcher user manual for the screen shots that they
 13 did show.
 14 The user manual didn't show you everything
 15 I'm going to show you, but what I -- what I do see in
 16 the manual, I see the same thing on the screen.
 17 Further, we have other documents about how
 18 MacPaint should look and how MacWrite should look, and,
 19 of course, I owned MacPaint and MacWrite and switcher,
 20 and I remember how they looked and how they work,
 21 and the other thing is a little more technical.
 22 If you think of open-source software at
 23 one end of the spectrum, Apple is at the other end of
 24 the spectrum. They're not open source, they don't ship
 25 their source code, and they hardwire their hardware and

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1 software together because they were not the slightest
 2 bit interested in having you run Macintosh stuff on a
 3 PC.
 4 So what happens when you boot a Macintosh
 5 is it starts by going to code that's burned into ROM on
 6 the motherboard, and that contains a lot of the library
 7 routines we call the tool box, and it contains hardware
 8 drivers for the mouse and the keyboard.
 9 And if you were to try to substitute, say,
 10 a different year's system software that this ROM didn't
 11 know about, it would just crash, and there are three
 12 kinds of crashes, and the worst kind of crash is when it
 13 can't boot, and it comes up with something called the
 14 Sad Mic -- Sad Mac icon, and it shows a very sad face
 15 and what looks like curse words underneath.
 16 Now, the modern version of that in Mac is
 17 you get something called a kernel panic, and it comes up
 18 with an error message in about 12 language. The modern
 19 version of that in windows is called the blue screen of
 20 death, BSOD.
 21 Q. All right. So, now, we have a computer -- a
 22 Macintosh computer in the courtroom, correct?
 23 A. Yes.
 24 Q. What type of computer is that?
 25 A. That's a Mac 512K. That was the second version

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1 of Mac released. The 128K Mac in 1984 only had 128,000
 2 bytes of RAM, which means it didn't have room to fit
 3 all -- multiple virtual -- multiple programs into memory
 4 at the same time.
 5 And, in fact, Bill Atkinson, who wrote
 6 MacPaint, told me that to fit MacPaint originally into
 7 the Macintosh memory, he had to do obscene nasty
 8 programming tricks, like writing self-modifying code to
 9 even make it fit at all.
 10 The Mac 512K had four times as much
 11 memory, so not only could you fit MacPaint in, you could
 12 put other programs in addition. They'd all fit into
 13 memory. You could swap back and forth.
 14 Q. And when did the Mac 512K come out?
 15 A. That came out in 1985.
 16 Q. How were you able to obtain the old computer?
 17 A. We -- I have a number of old Macintoshes at
 18 home, but I didn't have one from 1985. So I looked on
 19 eBay, found one that was currently being bid on, and,
 20 frankly, I asked these guys how much could I bid? And
 21 they said, \$1,000. So I bid 1,000, but it only cost 300
 22 to get it, so I only paid 300 to get it.
 23 Q. Thank you. How did you -- how did you know
 24 this is a Macintosh and the software for the time frame?
 25 I guess, is it just the interaction?

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1 A. Well, again, the interaction, what's on the
 2 screen, my memory, again, if you took a later version of
 3 my Macintosh, it didn't even have the same connector for
 4 the keyboard or the same connector for the mouse.
 5 So I -- I tried using a different mouse
 6 and keyboard at one point, and I couldn't connect them
 7 up. It was all very hardwired for the Mac 512K.
 8 Q. Now, let's turn to your opinion that these
 9 claims are invalidated by the Macintosh switcher
 10 program. What -- on what do you base that opinion?
 11 A. Well, again, as I'll show, the ability to have
 12 multiple virtual workspaces, each containing a set of
 13 display objects, having a switcher display object that
 14 allows you to switch from one workspace to another,
 15 being able to share display objects between workspaces,
 16 so, for example, I could open up a clock or a notepad in
 17 one workspace, then open a clock and notepad in another
 18 workspace but put them in different locations and even
 19 in some cases different window sizes and then switch
 20 back and forth and have the flexibility to have all
 21 these different tools in use and the continuity to be
 22 able to start using a tool in one workspace and continue
 23 and use it in another workspace. And all those elements
 24 of the claims were found in switcher.
 25 MR. LYON: At this time, Your Honor, would

1 it be all right if the witness were to step down and
2 demonstrate the computer?

3 MR. HILL: No objection, Your Honor.

4 THE COURT: Thank you. Dr. Wilson, would
5 you please --

6 THE WITNESS: If anything goes wrong with
7 the demo, I'll show --

8 THE COURT: You have to speak in a manner
9 that the record can pick up.

10 THE WITNESS: Oh, okay.

11 THE COURT: So you need to take that.
12 Repeat what you just said to the jury, please, so that
13 she can record it. Dr. Wilson, will you tell her right
14 now what you said to the jury a second ago when you were
15 walking across?

16 THE WITNESS: I said: If anything goes
17 wrong with the demo, I'll show you -- describe two other
18 ways the Macintosh can crash.

19 THE COURT: Now, we'll say nothing until
20 we get a mic. Doctor, would you see if this microphone
21 is working right here? And if you can...

22 THE WITNESS: All right. We'll do the
23 best we can here.

24 **A. At Carnegie Hall, Harry Belafonte said: Never**
25 **turn your back on the audience. And I'm kind of turning**

1 **my back on the audience. I apologize.**

2 **So the first step, does it light up? And**
3 **I'm told you can see the screen over there. Is that our**
4 **screen? It is, good. So it's waiting for a floppy**
5 **disk. These early Macs did not have a hard drive, so if**
6 **you didn't have a floppy disk, nothing ever happened and**
7 **you were done.**

8 **So now it says the famous, welcome to**
9 **Macintosh, and it now works for a while to load the**
10 **system and finder into software -- into the memory and**
11 **start up.**

12 Q. (By Mr. Lyon) Now, Dr. Wilson, before you
13 start with the demo, can you just give a quick moment to
14 describe what are the components that are there and what
15 are seen on the screen?

16 **A. So let's start with the hardware. We have a**
17 **built-in display. This was the appliance version of the**
18 **Macintosh. We have a floppy disk drive. We have a**
19 **keyboard. We have a mouse. If you had a torques --**
20 **weird screw driver, you could take the case off, and**
21 **there's a motherboard inside with a processor and**
22 **read-only memory which contains a lot of the boot code**
23 **and then regular memory that you can use to load your**
24 **programs.**

25 **The software, I have the MacPaint**

1 **application here. We'll get to that momentarily. I**
2 **have the MacWrite word processor here.**

3 **Thank you. All right. Yeah, I'll use**
4 **this stand here if we can, because I do need my hands**
5 **available.**

6 MR. LYON: Before you go on, Doctor, just
7 let me -- one thing, I'd like to apologize to the Court
8 and the jury for one thing, and that is, apparently, our
9 camera isn't particularly compatible with the system, so
10 you're seeing a little bit of flicker every once in a
11 while. I apologize in advance for that. Since these
12 things don't have video out, we're doing the best we
13 can.

14 **A. What we're having is just a problem. Macintosh**
15 **didn't refresh its screen too often, so you often get**
16 **bars when you try to photograph it or make a movie of**
17 **it.**

18 **So we have the MacPaint drawing program,**
19 **the MacWrite writing program, the switcher application**
20 **itself, which I'll show you shortly. We have the system**
21 **folder containing system software, and the system file**
22 **here is particularly important.**

23 **In that little file, it's actually**
24 **one-third of the floppy is just that file in terms of**
25 **bytes, and it contains the fonts which I've stripped**

1 **down to a minimum number so it all fits, and it contains**
2 **a few desk accessories which I've stripped down so it**
3 **all fits. It's very hard to fit all this onto a 400K**
4 **byte floppy, but it's all here.**

5 **Now, what I'm going to do is launch the**
6 **switcher program and have it launch MacPaint and**
7 **MacWrite, and then I'll show you multiple workspaces in**
8 **operation.**

9 **Now I need to talk while all of this**
10 **happens. So, first, it's going to load the application**
11 **switcher program. This is a Switcher Construction Kit.**
12 **And then I've already given it instructions on what to**
13 **do, which are described in that user manual we mentioned**
14 **earlier. And so now it's loading MacPaint by Bill**
15 **Atkinson, one of the best programmers I ever met.**

16 **But then it's going to continue on after**
17 **it loads the MacPaint document to go back to switcher**
18 **and then load MacWrite. So if you're used to your**
19 **computer being blazingly fast, you just haven't gone**
20 **back in time to 1985 lately.**

21 **And you'll notice a 128K over to the right**
22 **in switcher that we saw. What it's doing is allocating**
23 **128K bytes of memory for each of these two programs. So**
24 **I think it's almost done.**

25 **So I'm going to start by going -- I'm in**

1 **Workspace No. 1, which is MacPaint. So let me tell you**
 2 **what's here. All Macintosh programs had a menu bar at**
 3 **the top with various menu items, and they differ from**
 4 **one application to another, but one common element is**
 5 **the Apple menu. The Apple menu is supposed to be the**
 6 **first menu in your program.**

7 **Now, it's not -- it doesn't come**
 8 **automatically. It's up to the person who writes the**
 9 **application to put it there, and I had to teach people**
 10 **how to use the MacLibrary routines to put an Apple menu**
 11 **there and then how to load all the desk accessories into**
 12 **the Apple menu. If you wrote bad software this didn't**
 13 **appear.**

14 MR. LYON: Dr. Wilson, just for a minute.

15 Your Honor, would it be helpful for the
 16 Court and jury to come and actually see the computer
 17 rather than trying to see it on the screen?

18 THE COURT: I think they can see here.
 19 I've been watching.

20 MR. LYON: I just want to make sure that
 21 everybody can see it.

22 THE COURT: Are you comfortable that
 23 you're seeing everything that's going on? Just nod your
 24 head yes. I see everyone nodding their head, so they
 25 feel that they're seeing everything. Let's proceed.

1 MR. LYON: That sounds great. Sorry to
 2 interrupt.

3 **A. So, again, choosing the Apple menu, putting on**
 4 **the desk accessories was something that each application**
 5 **did, but all good Macintosh applications did it, so**
 6 **everybody always expects to see the Apple menu.**

7 **About MacPaint describes this particular**
 8 **program, and it says this was version MacPaint Version**
 9 **1.5, copyright 1985. To tell you how long ago that was,**
 10 **I spent an hour with Bill Atkinson two weeks ago. He**
 11 **does not have a bushy head of hair anymore.**

12 **So this Workspace No. 1, why is it a**
 13 **workspace? Well, all these menus are displayed objects,**
 14 **including the font menu with the fonts we get from the**
 15 **system file. The window itself is a display object with**
 16 **graphics inside. This is actually another window. This**
 17 **is called the tools window. And each of these were**
 18 **tools used to do drawing. So if you wanted to use the**
 19 **spray paint, then you chose that tool. This is a window**
 20 **to choose another window with icons and that controls a**
 21 **line. All these patterns are icons in another window.**

22 **So this actually is a program that's**
 23 **showing us four windows only one of which has the title**
 24 **of the document, Workspace 1.**

25 MR. LYON: We're have a little bit of

1 technical difficulties for some reason.

2 THE WITNESS: Oh, did I bump that? Okay.
 3 So we're okay for now. Thank you.

4 **A. So let me -- now you need multiple virtual**
 5 **workspaces for this patent. So I hope I have another**
 6 **workspace here. Up in the upper right-hand corner, I**
 7 **have the switcher icon with an arrow.**

8 Q. (By Mr. Lyon) Okay. Before you do that,
 9 though, can you explain a little bit about what the
 10 function of that switcher icon is?

11 **A. Well, again, normal Macintosh programs before**
 12 **switcher didn't have this icon, and the function of this**
 13 **icon is to let you switch. And you don't -- you can do**
 14 **it with the icon, or you can actually do it with a**
 15 **keyboard command. I'll show you both ways. But this is**
 16 **an example of a switching display object, because when I**
 17 **click on it, it's a very cool animated effect. Watch**
 18 **one workspace slide out of the way and the other one**
 19 **slide in. And we all in 1985 said, oh, cool.**

20 **And so now we're in a totally different**
 21 **workspace. This one has a -- MacWrite has a somewhat**
 22 **different design in that the window is resizable, and**
 23 **instead of the icons being in separate tool pallets,**
 24 **they're all up in this top part of the window much like**
 25 **Microsoft word might be today. But it still has clearly**

1 **a lot of different display objects and icons and rulers**
 2 **that are all part of this window.**

3 **And, again, the menus are part of this**
 4 **whole workspace. So this has a different set of menus,**
 5 **even though it shares common display items, like the**
 6 **font menu, for example, it has the Apple menu. I'll go**
 7 **and choose about MacWrite so we can see what version of**
 8 **this application we're using. And this was Version 4.5**
 9 **from April 4th, 1985. And MacWrite, MacPaint were two**
 10 **programs shipped for free with the original Macintosh.**

11 Q. Dr. Wilson, are there any menu items that are
 12 in common between the two workspaces?

13 **A. Yes. First, the Apple menu items of alarm**
 14 **clock, calculator, notepad, and scrapbook are common to**
 15 **both of those applications. And The font menus, this is**
 16 **the same notice, Chicago, Geneva, New York, Venice,**
 17 **Monaco.**

18 **Let's go to our other workspace, and we'll**
 19 **see, again, the same font menu. And, again, those are**
 20 **fonts found in the system file itself common to both**
 21 **workspaces, which is why it's the same set of fonts.**
 22 **There is only one set of fonts. All of the applications**
 23 **are using it.**

24 Q. Is it possible for you to create another
 25 display object in this workspace?

<p style="text-align: right;">Page 62</p> <p>1 A. Yes. The desk accessories are small programs 2 that can be open in any workspace. So, for example, I 3 can open the note pad, and I've typed some text into the 4 note pad. And if I -- and let's say I'll move it over 5 to the upper right, and I'll switch back to our other 6 workspace. I'll go to the Apple menu and open the 7 notepad and leave it in another location.</p> <p>8 So now I have a shared display object. I 9 can start working in one workspace, I can read it, I can 10 go over to another workspace.</p> <p>11 Now, let me give you another example. 12 This morning we saw discussion -- a somewhat complicated 13 discussion of a calendar program. So Mac didn't at this 14 point ship with a calendar, but it shipped with an alarm 15 clock, which served calendar-type functions.</p> <p>16 You can see the time, and so I'll put it 17 over here in Workspace 1. I'll switch to Workspace 2. 18 I'll open up the alarm clock. I'll put it at a 19 different location, and, in fact, I'll open it up so you 20 can see the date. And you noticed that you're back in 21 1953.</p> <p>22 And that's because to keep track of the 23 date, there's a little battery inside these systems, 24 which is probably since died, so it doesn't do a good 25 job of keeping track of the date anymore. But it says</p>	<p style="text-align: right;">Page 64</p> <p>1 A. The switcher screen.</p> <p>2 Q. Yeah, the switcher screen.</p> <p>3 A. If I click in the middle -- well, not good 4 enough. I'll go over to the switcher menu item. Now, 5 this is, again, showing two of my dancers in my dance, 6 and I can just cycle through them, but I'd like to add 7 another application. This is a risky business now. 8 We'll see if I get away with this.</p> <p>9 It says I should be able to launch another 10 application, and I only have one application left. And 11 it's the finder itself, which is our desktop app. So 12 I'm going to say open the finder, and if this behaves 13 itself, we will -- you never know with old computers. 14 So let me switch over. Here's Workspace 1. Here's 15 Workspace 2 with our shared display objects. Here's 16 Workspace 3 which is -- we're back at the finder.</p> <p>17 It still has an Apple menu, and if I open 18 the alarm clock here, I'm going to assume that in our 19 trip back to the future, it's 1954 here, also. So this 20 is another example of a workspace. It's a desktop 21 workspace. And we have three different kinds of 22 workspaces, but there's no question they all contain 23 display objects. These are all workspaces according to 24 the Court's definition.</p> <p>25 Q. Dr. Wilson, were you able to obtain any source</p>
<p style="text-align: right;">Page 63</p> <p>1 it's 6:27 p.m. somewhere in history, and if I switch 2 over here, it says it's 6:27 p.m.</p> <p>3 So, again, I have a display object that I 4 can use in one workspace, switch to another workspace, 5 and continue to use it in that workspace, even though it 6 has a different location, and in one case, I may be open 7 to show the date. I can open this one and show the 8 date, also. It will be the same date.</p> <p>9 So the note pad is one example. The clock 10 is another example where we have -- obviously, we have 11 switching between virtual workspaces. We have multiple 12 display objects. We have shared display objects.</p> <p>13 Q. What happens -- I'm sorry, Doctor. What 14 happens if you make a change to something on the clock?</p> <p>15 A. Well, let's say if I said it's really 1954, 16 let's go to our other workspace and see if it's -- 17 that's actually the switcher workspace. We'll come back 18 to that, and there -- it updated to 1954.</p> <p>19 So it does what you'd expect -- it shows 20 the continuity that we've talked about, the continuity 21 requiring that if I switch from one workspace to 22 another, my shared display object allows me to continue 23 my work.</p> <p>24 Q. Can you go back to that screen we just saw for 25 a second?</p>	<p style="text-align: right;">Page 65</p> <p>1 code for switcher?</p> <p>2 A. No. Again, I have never seen Apple ship source 3 code to their shipping products.</p> <p>4 Q. Then how do you know how switcher operates 5 underneath?</p> <p>6 A. Well, I had to teach people how to write 7 Macintosh applications, that was how I made my living 8 in -- in those years. And so I -- I know that there 9 are -- for example, I know that these desk accessories 10 are actually a special type of resource in the system 11 file of four capital letters, DRVR, and that's what we 12 would call a display system object, that's the -- that's 13 the code for each one of these device drivers that 14 controls that particular desk accessory.</p> <p>15 So desk accessories, for those of you who 16 care about such things, were treated as device drivers 17 in the Macintosh OS. But what happens is each 18 application, when it opens the desk accessory, accesses 19 a window data structure in the system file to find out 20 where to open -- initially open the window, and then the 21 application manages the window structures after that, 22 which is why I can put the clock in one location in 23 MacPaint, put it in a different location in MacWrite, 24 because each of those workspaces then manage that data 25 structure.</p>

1 **They originally start off assuming let's**
 2 **do what the window resource in the system file says, and**
 3 **they come up in some particular location. Then the apps**
 4 **manage it after that, maintain their own data**
 5 **structures.**

6 Q. Do you have anything else you want to show with
 7 respect to the switcher?

8 **A. I have the feeling I should quit while I'm**
 9 **ahead.**

10 Q. All right. Well, now that we've seen the
 11 operating switcher, why is it you believe that switcher
 12 invalidates the claims?

13 **A. As I said, the claims require that I have**
 14 **multiple virtual workspaces, switch display object to**
 15 **switch between them. That I have the flexibility to**
 16 **open multiple display objects and change their locations**
 17 **potentially and change their display characteristics.**

18 **And it's -- and the claims indicate that I**
 19 **should be able to perceive a tool in one workspace, be**
 20 **perceptible as the same tool in another workspace, and**
 21 **in my mind, there's -- as a user, even if I didn't know**
 22 **how the system worked, I'd look at the alarm clock at**
 23 **each workspace and say, yeah, that's the same display**
 24 **object. It's my alarm clock. And we saw that it**
 25 **updated and kept its information current or at least as**

1 **current as 1954 can be.**

2 Q. And was switcher something that was considered
 3 by the patent office when the patents were being
 4 examined?

5 **A. Yes, it was.**

6 Q. And what was -- what was considered by the
 7 patent office?

8 **A. They -- they saw the separate manuals for**
 9 **MacWrite and MacPaint as stand alone applications before**
 10 **switcher had been introduced, and then they saw the**
 11 **switcher manual that we showed you excerpts of earlier.**

12 Q. Well, why, in your opinion, doesn't it matter
 13 that the patent office looked at these manuals?

14 **A. Well, the manuals didn't show the things I**
 15 **showed here with regard to switcher. What the switcher**
 16 **manual did is say, here's how you launch switcher. Let**
 17 **me go back to switcher for a moment so we can talk about**
 18 **it.**

19 **It showed how to load applications into**
 20 **this collection of dancers that I can have MacPaint, I**
 21 **can have MacWrite, I can have the finder. And then it**
 22 **showed you how to use the switch icon to switch between**
 23 **them. It didn't talk about opening desk accessories**
 24 **having a common display object in Workspace 1 and**
 25 **another display object in another location in**

1 **Workspace 2.**

2 **You know, the purpose of the switcher**
 3 **manual was just to show you how to use switcher. It**
 4 **didn't address some of the issues that we have to**
 5 **address in regard to these patent claims.**

6 MR. LYON: Now -- so I guess at this
 7 point, unless there's anything else -- Your Honor, do
 8 you want to take a break at this point, or do you want
 9 him to continue on for a while? We can -- we can move
 10 to the next step. I just didn't know what you
 11 preferred.

12 THE COURT: Let's take a break. I took
 13 some nonverbal cues from my jury. Five or ten minutes.

14 (Recess.)

15 (Jury in.)

16 THE COURT: Please be seated.

17 Mr. Lyon, remind us where we are and where
 18 we're going.

19 MR. LYON: Thank you very much, Your
 20 Honor.

21 Q. (By Mr. Lyon) So we just finished, Doctor, with
 22 your demonstration of the Macintosh Switcher or the
 23 Apple Switcher System.

24 Now, do you recall hearing Dr. Zimmerman
 25 talk about the Switcher System when he testified earlier

1 this week?

2 **A. Yes, I do.**

3 Q. And did you agree with what he said about the
 4 Switcher System?

5 **A. No.**

6 Q. Why not?

7 **A. Well, the most important point is I disagree**
 8 **with Dr. Zimmerman regarding what is a menu -- or I**
 9 **mean, what is a window and what is a workspace.**

10 **And in particular, when he discussed**
 11 **workspaces, he said an application cannot be a**
 12 **workspace, but I've shown you the MacPaint application**
 13 **with multiple windows, with multiple display objects,**
 14 **with display objects in the menu, with desk accessories**
 15 **you can open as other sharable display objects.**

16 **According to the Court's construction,**
 17 **there's no restriction on workspace other than a**
 18 **collection of display objects. Those applications are**
 19 **workspaces.**

20 MR. LYON: Let's take a look at Slide 40,
 21 if we could, please.

22 I'm sorry. I gave you the wrong number.
 23 Hang on. Slide 40 -- no, it's 40, I think. The
 24 application, I believe it's Slide 40.

25 Yeah, there you go.

<p style="text-align: right;">Page 70</p> <p>1 Q. (By Mr. Lyon) Did you prepare this slide, 2 Dr. Wilson?</p> <p>3 A. Yes, I did.</p> <p>4 Q. So what were you trying to show with this?</p> <p>5 A. Again, showing that an application such as 6 MacPaint has a host of display objects inside. They're 7 visually distinguishable display features. Some of them 8 are a display feature like the Apple menu; it's just an 9 Apple icon. Some of them are sets of features, such as 10 the windows that contains a number of icons in the 11 bottom.</p> <p>12 And so all those are display objects. The 13 workspace is a display system entity. Well, this 14 application appears on the screen. It's a display 15 system entity, and it's a collection of display objects. 16 And it manages the spatial relations between them.</p> <p>17 In the MacPaint program, there's code to 18 manage where each of those windows goes, where each of 19 those icons goes (sic), where the desk accessory 20 currently is. In fact, I had to teach people how to 21 write code to build the menu bar. The menu bar is 22 actually a separate data structure. Each of those menus 23 is a separate data structure. It meets the definition 24 of workspace.</p> <p>25 MR. LYON: Now, if we could go to</p>	<p style="text-align: right;">Page 72</p> <p>1 Claim 21. Switcher, again, anticipates all the elements 2 of the claims.</p> <p>3 And also for the '521 and the '183 4 patents, all of those claim limitations are present, 5 interpreting the claims in the context of the Court's 6 claim construction. And I believe that those patents 7 are invalid on that basis.</p> <p>8 Q. When you say -- we're talking about the 9 asserted claims in particular, correct?</p> <p>10 A. The asserted claims. Pardon me.</p> <p>11 Q. That's fine.</p> <p>12 Now, let's switch over, euphemistically 13 speaking, to the Chan Room System, and let's talk 14 about --</p> <p>15 MR. LYON: Can I pull up Exhibit 5 -- 16 DX535, please?</p> <p>17 Q. (By Mr. Lyon) Do you recognize DX535?</p> <p>18 A. Yes. This was a paper, again, by Patrick Chan. 19 It was a republication of his master's thesis at the 20 University of Waterloo.</p> <p>21 Q. And was this part of the record of the 22 patents-in-suit?</p> <p>23 A. Yes. The Patent Examiner, in fact, was told by 24 the applicants that this was an especially relevant 25 reference, and it was called the Room Model. We call it</p>
<p style="text-align: right;">Page 71</p> <p>1 Slide 42.</p> <p>2 Q. (By Mr. Lyon) Could you give us a summary of 3 what we've seen here with Switcher?</p> <p>4 MR. LYON: 42, please. There we go.</p> <p>5 A. Okay. Well, again, we saw multiple virtual 6 workspaces. We saw the Switcher icon to switch 7 between -- there's also a keyboard command to switch 8 between.</p> <p>9 We have the flexibility to arrange the 10 notepad or the clock or other desk accessories in 11 different locations in each workspace. We can use a 12 tool like the clock in one workspace and continue using 13 it in another workspace.</p> <p>14 And you couldn't determine how these desk 15 accessories behaved under Switcher from reading the 16 manual. You actually have to use it and try it as I did 17 here. And that kind of demo was never presented to the 18 Patent Office. The Patent Examiner didn't have the 19 information that you have.</p> <p>20 Q. (By Mr. Lyon) All right. So in sum, what is 21 your opinion with respect to the Switcher and the 22 patents?</p> <p>23 A. Switcher invalidates all the claims of the '412 24 patent by anticipating them all. There's nothing new in 25 the '412, Claim 1 patent. There's nothing new in '412,</p>	<p style="text-align: right;">Page 73</p> <p>1 the Room System, and -- but it was referenced in the 2 patents.</p> <p>3 MR. LYON: And if we could look at 4 Slide 30.</p> <p>5 Okay. My numbering seems to be off. 6 Slide -- I have Slide 30; it's the prosecution history. 7 There we go.</p> <p>8 Q. (By Mr. Lyon) Is this what you're referring to 9 about what the applicant said about the --</p> <p>10 A. Yes. This is, again, from the prosecution 11 history in one of the patents. This was a comment to 12 the Patent Examiner from the applicants, that the Chan 13 report was especially relevant as a user interface 14 design.</p> <p>15 It had the Room Model and it talks in the 16 Chan report -- it's quite a technical paper, because 17 he's trying to get his master's thesis, so he describes 18 the data structures. And the only problem with it is 19 he -- it's not always the easiest paper to understand, 20 because he includes a lot of other information on other 21 topics, too.</p> <p>22 Q. So have you reviewed Defendants' Exhibit 535, 23 the Chan paper, in detail?</p> <p>24 A. Yes.</p> <p>25 Q. And what does it describe generally?</p>

<p style="text-align: right;">Page 74</p> <p>1 A. Well, it describes a system of virtual 2 workspaces, each one of which is called a room. He 3 talks about organizing your work so you go into a room, 4 and you do some work. And then he has door icons and 5 you click on them and you go to another room, which is 6 another workspace.</p> <p>7 You can see why this is relevant, because 8 the applicants already talked about their Rooms paper 9 where you have one room and you go into a door -- click 10 on a door to go into another room.</p> <p>11 Well, this one is called room instead of 12 rooms, but Chan describes multiple rooms.</p> <p>13 Q. Are you aware of any other descriptions of Chan 14 systems?</p> <p>15 A. Yes.</p> <p>16 Q. What other descriptions are you aware of?</p> <p>17 A. Well, Chan was a graduate student for Professor 18 Malcolm at the University of Waterloo. Malcolm and a 19 co-worker, Doug Dymont, I think it was, wrote a paper 20 published in the proceedings of the ACM, which is one of 21 the major technical journals for programmers, where he 22 described this system and provided considerable 23 additional detail beyond what Chan did.</p> <p>24 MR. LYON: Could we have Defendants' 25 Exhibit 601 up on the screen, please?</p>	<p style="text-align: right;">Page 76</p> <p>1 Again, they seem in every evidence that I can find to be 2 describing the same system.</p> <p>3 MR. LYON: Now if we could see what I 4 think is Slide 33.</p> <p>5 THE TECHNICIAN: 32 or 33?</p> <p>6 MR. LYON: Well, I think it's 33 on mine. 7 We'll see if my numbering is off.</p> <p>8 There you go. That is right.</p> <p>9 Q. (By Mr. Lyon) So what are we seeing here?</p> <p>10 A. Again, this is Chan's drawing on the left of 11 what a Room system looks like, and Malcolm's actual 12 screen shot on the right. I like the screen shot 13 because it shows a real system in operation. I like 14 Chan's diagram, because he has labels attached to the 15 various pieces so you're sure what they are.</p> <p>16 But to me, they're both describing a 17 system with multiple rooms and room icons that you can 18 click on to go from one room to another and lots of 19 display objects in each room.</p> <p>20 Q. Can you briefly just point out what we're 21 seeing as far as the types of things on the screen right 22 now?</p> <p>23 A. Well, I will as best I can from this little 24 picture.</p> <p>25 This is a tool called a file browser, and</p>
<p style="text-align: right;">Page 75</p> <p>1 Q. (By Mr. Lyon) Is this the Malcolm paper you 2 were talking about?</p> <p>3 A. Yes. Here -- because he's the professor, he 4 gets to change the name and call it the Waterloo Port 5 System, but he -- I have a lot of evidence that he's 6 describing the same system, and, of course, he gives 7 Chan credit for it later on.</p> <p>8 Q. How do you know it's describing the same 9 system?</p> <p>10 A. Well, there are -- in the Chan paper, he has 11 hand drawings of what the screen looks like done by an 12 artist, I guess, but they're not actual screen shots.</p> <p>13 In the Malcolm paper, he has actual screen 14 shots, and I've put them up side by side and compared 15 them, and it's clear they're describing the same 16 multiple room model with doors you can click on to go 17 from one room to another.</p> <p>18 And in addition, there are various 19 technical details. Chan talks about being part of the 20 Port operating system, and, in fact, they both talk 21 about the usage of the system. And what Chan says is 22 there were 100 fourth-year computer science students, 23 approximately, using the system.</p> <p>24 What Malcolm said was there were 120 25 fourth-year and graduate students using the system.</p>	<p style="text-align: right;">Page 77</p> <p>1 Chan and Malcolm both mention a tool called the file 2 browser. And what that is, it's like a file browser we 3 have today. You can open it up and look at the files 4 you have on your hard disk, for example. And so if you 5 want to open a file browser tool, you click on that 6 icon.</p> <p>7 Up in the upper right corner, we're right 8 now in the office room. And in Chan's drawing, the room 9 name is in the lower left. But it, again, shows the 10 room name in the border of the window.</p> <p>11 When you click on a door, and here's a 12 door icon and here's a door icon, you go from one room 13 to another. So you can go from the office room to the 14 work room, and, again, spread some of your work out in 15 each room. So you work for a while in one room, click 16 on a door, go to another room, continue your work, and 17 you can put these tools in more than one room.</p> <p>18 Q. So, Dr. Wilson, you mentioned you had a 19 simulation that you created.</p> <p>20 A. Yes.</p> <p>21 Q. How did you create that simulation?</p> <p>22 A. I -- basically, because I liked the real screen 23 shots, I used the information in both papers. I used 24 the screen shots from the Malcolm paper and I used a 25 screen shot of a workspace, and then he had a detailed</p>

<p style="text-align: right;">Page 78</p> <p>1 screen shot of the file browser window.</p> <p>2 Chan also has window diagrams. He didn't</p> <p>3 happen to diagram the file browser window. He diagramed</p> <p>4 a different tools window.</p> <p>5 MR. LYON: If we could go to the next</p> <p>6 slide.</p> <p>7 Q. (By Mr. Lyon) Are these the windows that you're</p> <p>8 talking about?</p> <p>9 A. So here's an example of the window from the</p> <p>10 Chan paper, which is an editing window of some sort.</p> <p>11 Then Malcolm is showing a file browser window down here,</p> <p>12 but, again, you can see that there are a bunch of</p> <p>13 commands here.</p> <p>14 And my understanding from reading the</p> <p>15 papers is these commands are dependent on what tool</p> <p>16 you're in. So this particular tool, the developer gave</p> <p>17 it a quick command, the save command, et cetera. Down</p> <p>18 here, there's an edit command, and quit is over on the</p> <p>19 far right, where in the other window it's over on the</p> <p>20 left.</p> <p>21 But these both are windows that will</p> <p>22 appear when you click on a particular tool icon in one</p> <p>23 of your workspaces.</p> <p>24 MR. LYON: Can we quickly pull up the</p> <p>25 simulation then, please?</p>	<p style="text-align: right;">Page 80</p> <p>1 this tool or Paschal with this tool or Fortran with this</p> <p>2 tool.</p> <p>3 And then this file browser up here is an</p> <p>4 icon we can click on to open a file browser.</p> <p>5 THE WITNESS: So if you'd click on the</p> <p>6 file browser icon.</p> <p>7 A. Now, again, this is the not running code. I'm</p> <p>8 not giving you a live demo, because I couldn't find this</p> <p>9 code. The problem with stuff done in 1983 like this is</p> <p>10 we didn't have the internet as we do today, so you can't</p> <p>11 find everything on the internet. And I couldn't find</p> <p>12 this. So this is a simulation based on what I've</p> <p>13 learned from looking at the papers.</p> <p>14 But this file browser allows you to edit</p> <p>15 documents and files in your system, and what the Malcolm</p> <p>16 paper shows that was never mentioned in the Chan paper</p> <p>17 is that it's a live view of the file system. And if</p> <p>18 someone changes the file system, this will update</p> <p>19 automatically, which means if I click on quit here to</p> <p>20 close this window, go to another room, which is work</p> <p>21 room, I think, now I'm in a room where we've rearranged</p> <p>22 some of the tools.</p> <p>23 The basic tool is not in the same location</p> <p>24 as it was before, even though it's a display object that</p> <p>25 exists in each workspace. But the file browser is still</p>
<p style="text-align: right;">Page 79</p> <p>1 Q. (By Mr. Lyon) All right. So tell us what</p> <p>2 you've done here with your simulation.</p> <p>3 A. Well, one thing I've done is intend to be able</p> <p>4 to operate it. How are we going to do that?</p> <p>5 Q. I think you could just tell Jason what you</p> <p>6 would like to do and he'll take care of it.</p> <p>7 A. Well, the first thing is, here's what I call</p> <p>8 Workspace No. 1. In the upper right-hand corner, it</p> <p>9 says it's the office.</p> <p>10 THE WITNESS: Jason, if you'd click on the</p> <p>11 power button down below for a moment.</p> <p>12 A. What we've added to the simulation that wasn't</p> <p>13 in this screen shots is interpreting what the various</p> <p>14 icons mean. And the green one -- if you can see the</p> <p>15 difference between yellow and green, the green objects</p> <p>16 are switching objects that let you switch to other</p> <p>17 rooms.</p> <p>18 The other icons are various other kinds of</p> <p>19 display objects that let you do work.</p> <p>20 THE WITNESS: And so I guess you can</p> <p>21 unclick the power button, please.</p> <p>22 A. So, for example, these languages down here are</p> <p>23 editors on various programming languages, and we</p> <p>24 discussed the number of different programming languages</p> <p>25 briefly before, but you can program here in Basic with</p>	<p style="text-align: right;">Page 81</p> <p>1 here. We have another file browser here. If we click</p> <p>2 on it here, we'll bring up a view of the file system.</p> <p>3 Now what we said -- what I said I was</p> <p>4 looking for is I was looking for continuity. I wanted</p> <p>5 to be able to start using a tool in one workspace,</p> <p>6 continue using it in the other. And what Malcolm's</p> <p>7 paper told me was that the file browser will have that</p> <p>8 continuity, because it will update automatically when</p> <p>9 the file system is changed.</p> <p>10 So if I look at my files in one workspace</p> <p>11 and then make a change -- if I go to the other</p> <p>12 workspace, the file browser will update. I don't have a</p> <p>13 live demo of it, but that's what Malcolm says will</p> <p>14 happen.</p> <p>15 MR. LYON: Can we pull up Slide 36,</p> <p>16 please?</p> <p>17 Q. (By Mr. Lyon) So, Dr. Wilson, what are the</p> <p>18 differences between the paper and the Chan paper that</p> <p>19 you think are important?</p> <p>20 A. Well, to me the first thing was the Malcolm</p> <p>21 paper was just easier to understand. Chan's paper had</p> <p>22 to impress the thesis committee, and I've had to do that</p> <p>23 myself. And that means you have to sound very erudite.</p> <p>24 And so he went into long discussions of</p> <p>25 the psychology of user interfaces and things, which</p>

<p style="text-align: right;">Page 82</p> <p>1 Malcolm didn't do. So it was easier to really get at 2 some of these issues in the Malcolm paper. Malcolm had 3 the live screen shots, which Chan didn't. 4 Malcolm had the technical details -- 5 whoops, wrong button -- that told me what the file 6 browser would update automatically. And that's 7 important, because I was looking to see if there was 8 continuity, where I start a task in one workspace, 9 switch to another workspace, and continue the task; do I 10 have that continuity. 11 Chan's paper, I didn't see it explained 12 that as clearly as explained in Malcolm's paper. 13 Malcolm's paper, of course, was in a major publication, 14 which many, many researchers would read. And Malcolm's 15 paper was not submitted to the Patent Office. And I'm 16 not at all saying that the applicants should have 17 submitted it, merely that it wasn't submitted. The 18 Examiner never saw this paper. 19 Q. And so because the Malcolm paper wasn't cited 20 to the Patent Examiner, how does that affect your 21 opinion? 22 A. I believe if the Examiner had seen both of 23 these papers together and seen the kind of thing that 24 I've talked about today, the Examiner would have 25 realized that the Chan system anticipates all the claims</p>	<p style="text-align: right;">Page 84</p> <p>1 The actual cover of Byte Magazine was in 2 color, and the reason that's interesting is because 3 unlike the Macintosh, the Amiga was a color computer. 4 So this picture was proud of the fact there was color 5 showing on the Amiga screen. 6 Q. And this was one of the articles that you 7 reviewed in your research? 8 A. Yes. 9 Q. Now, what, in general, does the Byte Magazine 10 article describe? 11 A. Well, first, it describes the hardware, which, 12 as you'll see in the picture right there, the actual 13 computer hardware looks just like what we have in the 14 courtroom. 15 It describes the architecture. It has a 16 photo of the motherboard showing all the back panel 17 connectors and the processor and memory and things. 18 Q. Let me stop you there, if I might, Doctor. 19 MR. LYON: Can we show Page 86 of the 20 article, please? 21 Q. (By Mr. Lyon) Is that the photo you referred 22 to? 23 A. There's the motherboard. For those of you who 24 don't tear computers apart, the motherboard has nothing 25 to do with your mother, but it's where the pieces live</p>
<p style="text-align: right;">Page 83</p> <p>1 of the asserted patents, and the Examiner would have 2 rendered the claims invalid. 3 Q. And you're basing that on the -- your 4 understanding of the Chan room system based on the 5 combination of the Malcolm paper and the Chan paper? 6 A. Yes. Each one provides different information. 7 Combined together, you get a much better picture of the 8 system. 9 Q. Now, let's turn, if we could, to your opinion 10 regarding the Amiga workbench. 11 How did you first become familiar with the 12 Amiga 1000? 13 A. Well, originally, there was an article 14 published in the August 1985 issue of Byte Magazine. 15 Back in those days, everyone I know, including me, read 16 every issue of Byte Magazine; everyone I know being a 17 geek. 18 And Byte Magazine was where you got your 19 updated information, so it had a cover story on the 20 Amiga computer. 21 MR. LYON: And if we could pull up 22 Defendants' Exhibit 679. 23 Q. (By Mr. Lyon) Is this the cover of the Byte 24 Magazine that you're referring to? 25 A. Yes, with one unfortunate problem.</p>	<p style="text-align: right;">Page 85</p> <p>1 that run the system. 2 Q. And the boxes along the top, are those the 3 connectors? 4 A. Those are the connectors, and if you look on 5 the back of the Amiga, later on you'll see all those 6 different connectors back there. 7 Q. Now, if you turn to Page 90 of the article, 8 what do we see here? 9 A. Well, again, we see a set of black-and-white 10 pictures that in the article are color pictures showing 11 the Amiga screen. The top is just a game running on the 12 Amiga. The bottom is what is called Amiga workbench, 13 which is the equivalent of the Macintosh finder. It's 14 where you manage your files and launch your programs, 15 launch your -- which they call tools. 16 MR. LYON: If we could, have introduced -- 17 if we could have up on the screen Defendants' Exhibit 18 455, please. 19 Q. (By Mr. Lyon) What is Defendants' Exhibit 455? 20 A. Well, this is an internet-based document, I 21 believe, that's describing the history of the Amiga. 22 And up on top, you'll notice it talks -- it says 23 released in December 1985 was Workbench Release 1.1, 24 Version 31.334, along with Kickstart Version 31.34, 25 which is what I want to demonstrate to you today.</p>

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1 MR. LYON: If we could have up on the
 2 screen Defendants' Exhibit 342.
 3 Q. (By Mr. Lyon) And what is Defendants'
 4 Exhibit 342?
 5 **A. This is a page of the Amiga user manual that**
 6 **was shipped with the Amiga.**
 7 MR. LYON: Would you turn to the second
 8 page of the document, please?
 9 Q. (By Mr. Lyon) And what do we see? The
 10 copyright date?
 11 **A. Up at the top, I think. Copyright 1985.**
 12 MR. LYON: And if we turn to Page -- it's
 13 the page -- I think it's 4-1 or the page Bates-numbered
 14 58, 0058.
 15 Q. (By Mr. Lyon) What is this section?
 16 **A. Again, the Workbench software is a software**
 17 **that you start the computer up with to get to your**
 18 **desktop. So that's their version of the desktop, and it**
 19 **represents a workspace with numerous display objects,**
 20 **icons that represent files, and tools with folders of**
 21 **various kinds.**
 22 MR. LYON: Turn to the next page of the
 23 document.
 24 Q. (By Mr. Lyon) What do we see there?
 25 **A. There's a screen shot of the desktop, for**

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1 **example.**
 2 Q. And does the rest of this chapter describe the
 3 workbench?
 4 **A. Yes, it does.**
 5 Q. And did you read through the Amiga manual as
 6 part of your research here?
 7 **A. Yes, I did.**
 8 MR. LYON: If we could have --
 9 Q. (By Mr. Lyon) Do you have the floppy disks for
 10 the Amiga handy?
 11 **A. Yes. The Amiga system early on required a disk**
 12 **called the Amiga Kickstart to kickstart it into action.**
 13 **So in the demo, I'm going to start by showing you the**
 14 **Kickstart floppy.**
 15 **And I have -- what I had to do was acquire**
 16 **as much Amiga software as I could, so I have all**
 17 **different kinds of Amiga floppy disks here, but I wanted**
 18 **to stay in 1985, because the patent was filed in 1987,**
 19 **and I couldn't find a disk with the Amiga labels from**
 20 **1985, even although I did find the right files for 1985.**
 21 **So I made my own floppy disks and made**
 22 **sure I had the right software with the right copyright**
 23 **dates and the right version numbers for this demo.**
 24 Q. What version of software do you have on those
 25 two floppy disks?

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1 **A. Again, I'm running Workbench Release 3.1, which**
 2 **is Version No. 31.334. And for some reason, they had**
 3 **both of those designations for it.**
 4 Q. Did you say 3.1? Workbench Version 3.1?
 5 **A. 1.1. Pardon me. It says 1.1 on the disk. I**
 6 **misspoke.**
 7 THE COURT: How do you know that what you
 8 have on those disks with the handwriting on them is from
 9 1985?
 10 THE WITNESS: Well, the reasons that --
 11 this was a concern of mine, how do I know this.
 12 First, of course, when I boot it up, it
 13 says copyright notice 1985. It says it's Workbench 1.1.
 14 It says it's Version 31.334, and the screens, as I'll
 15 show you, look exactly like the screens in this user
 16 manual and look like the screens shown in the Byte
 17 Magazine article.
 18 So since what I'm showing you is what
 19 appears on the screen, the most important thing to me
 20 was that what appears on the screen was exactly as
 21 documented back then. And I haven't found any
 22 deviations.
 23 Q. (By Mr. Lyon) Does -- the Workbench software
 24 that you have on those disks, does it behave as depicted
 25 in the Amiga manual?

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1 **A. Everything I've seen looks exactly as depicted.**
 2 THE COURT: The other disks you have are
 3 labeled as from 1985, right?
 4 THE WITNESS: Well, the Kickstart disk is
 5 also 1985. It's mentioned in that previous document,
 6 again, Version Release 1.1, and this has 1.1. Now,
 7 these are -- one of them is the Workbench 1.2, and it is
 8 a later version, so I didn't want to try to demonstrate
 9 that. I wanted to stick with 1985.
 10 THE COURT: And so your handwritten disks
 11 are compatible with the 1985 disks?
 12 THE WITNESS: Yes, these are the 1985
 13 versions, and it -- the later versions get prettier, but
 14 they're not relevant, because they're the wrong dates.
 15 MR. LYON: Anything further, Your Honor?
 16 THE COURT: No.
 17 Q. (By Mr. Lyon) Now, can you show the jury here
 18 what you have as far as the Amiga computer?
 19 THE WITNESS: May I?
 20 MR. LYON: If it's okay, may he step down,
 21 Judge?
 22 THE WITNESS: Whoops, I forgot one.
 23 Kickstart. You have to start with Kickstart.
 24 **A. Now, the Amiga didn't ship with a built-in**
 25 **monitor. You were supposed to provide your own monitor**

<p style="text-align: right;">Page 90</p> <p>1 or use your home television or something like that. So 2 we've got a monitor here just for display purposes. 3 I'm going to turn this on, and it's going 4 to start booting up from its internal read-only memory 5 just like the Mac, but it won't finish booting up. It's 6 going to then ask us for this Kickstart floppy, and it's 7 going to ask for it upside down. So if you look at it 8 and say, well, what's that, but what it is, is it's 9 that. When you look at it that way, it's upside down. 10 I always wanted to stand on my head when I 11 used the Amiga. 12 So now it's going to finish its boot 13 process with Kickstart, and then it's going to ask me to 14 insert a Workbench disk. So then I'll insert Workbench 15 1.1, which is the 1985 version. 16 It's much harder to find an old Amiga than 17 it is an old Macintosh, because I don't think they sold 18 as many. So upside down, that says that I want the 19 Amiga Workbench. So I just pop this out, and I'll put 20 in the Amiga Workbench disk. 21 Q. Doctor, while that's happening, can you tell us 22 where you got the Amiga? 23 A. The Amiga -- I asked the attorneys if someone 24 could find an Amiga somewhere out there in the world, 25 because I looked in all my local junk shops in Silicon</p>	<p style="text-align: right;">Page 92</p> <p>1 workspace, Workspace No. 2. 2 And what's interesting about the Amiga 3 user interface is it has what they call gadgets up in 4 the upper right, and it has a front gadget and a back 5 gadget. And I'm going to use those as switching display 6 objects, and I'm going to make both windows the same 7 size for this demonstration. 8 And so what I have here is what I've 9 called Workspace 1 with a bunch of display objects, and 10 I'll put the clock in the upper right and the trash can 11 in the lower left. I'm going to click on the back 12 gadget to bring up Workspace No. 2. And I'll put the 13 trash can in the upper right and the clock icon down 14 here. 15 And as I toggle back and forth, I'm going 16 from one workspace to another, and we have display 17 objects that are located in different places. And to a 18 degree, they're perceptible as the same object, because 19 this is called trash can; this is a clock icon; and this 20 is called trash can; this is the clock icon. 21 Q. Now, you said to a degree. What did you mean 22 by that? 23 A. Well, Dr. Zimmerman's interpretation of the 24 claims is that this would be sufficient -- or one of his 25 interpretations is this would be sufficient to meet the</p>
<p style="text-align: right;">Page 91</p> <p>1 Valley, and I couldn't find one. And they were able to 2 find an Amiga enthusiast who loaned us this computer. 3 Now, one of the things he loaned us also 4 was a second floppy drive, and I want to do a demo with 5 two floppies, but, unfortunately, when I got this last 6 September, the floppy drive wouldn't work. It was just 7 sick, which is not surprising. So it was only this 8 month that we were able to find a substitute floppy 9 drive so that I could show you this demonstration. 10 I think we got it ten days ago when it 11 finally came in. And, in fact, we didn't find this 12 release of Workbench until this month, also, when we 13 bought it from oldsoftware.com. So should you need old 14 software, go to oldsoftware.com. 15 Q. Can you quickly go through and walk through a 16 demo, please, Dr. Wilson? 17 A. Yes, and we will have to make this quick. 18 I'm opening up what I've called Workspace 19 No. 1, and it has various tools inside such as the trash 20 can. And so a trash can is a display object. I can 21 move it from one place to another. 22 Now, I'm going to put a second copy of 23 Workbench in the external floppy drive. And as the 24 Amiga manual shows, you'll end up with two icons on the 25 desktop, one for each floppy drive. So here's my other</p>	<p style="text-align: right;">Page 93</p> <p>1 elements of the patent claim. 2 But I believe you have to be able to 3 continue your work in each workspace. So is this trash 4 can really the same tool? 5 Well, if I open up the trash can in 6 Workspace No. 1 and see what's inside, it says I have a 7 file called March travel plans. If I switch workspaces, 8 open up the trash can here, it says I have a file called 9 tax info. And what happens is there's a trash can for 10 each floppy disk. 11 So although I see what looks like 12 identical icons on the desktop, one of them represents 13 the trash can for inside, and one of them represents the 14 trash can for outside. So I don't actually believe you 15 can continue using the trash can from one workspace to 16 another and continue to do your work, because it's 17 really a different trash can. 18 Q. Then why do you think this Amiga might be 19 relevant to the issue of the validity of the claims? 20 A. If you interpret the claims the way 21 Dr. Zimmerman has in one of his interpretations, then 22 you don't really need the continuity. You just need the 23 flexibility to be able to move the display object in one 24 workspace relative to the other. 25 So this shows flexibility, but it doesn't</p>

<p style="text-align: right;">Page 94</p> <p>1 show continuity. And I'm going to briefly show you 2 another demo that behaves differently. 3 So I'm going to open the utilities folder 4 and open the calculator and pick a random number to put 5 in the calculator. I'll put 456. So the calculator 6 says 456. 7 I'm now going to switch from Workspace 1 8 to Workspace 2. I have the same calculator setting 9 there. It's -- I have a display object that's shown in 10 both workspaces, and it does provide continuity. I can 11 begin my calculation in one workspace and continue it in 12 the other. 13 But what it does not provide is 14 flexibility, because I can't locate the calculator in 15 one place in Workspace 1 and a different place in 16 Workspace 2. This is what was talked about this morning 17 as a sticky window. This window sticks in one location. 18 It isn't two different display objects. It's one 19 display object just setting there when I switch 20 workspaces. 21 So this is a sticky window. The trash can 22 was not sticky. I had two trash cans, but here I have 23 one calculator. 24 Q. Doctor, could you go back up and take a seat 25 and we'll continue. Thank you.</p>	<p style="text-align: right;">Page 96</p> <p>1 MR. LYON: Next slide. 2 A. So now I need a display object means for 3 generating display objects, and I need data structures 4 that manage the display objects. The workspace data 5 structures are really inherent. 6 If I move a window around and I switch out 7 and come back to it and it's in that location, then I 8 know there was a data structure that managed the 9 placement of that window. The display object means -- 10 is really what's underneath something like the clock 11 desk accessory in two different workspaces and how does 12 it make it work. But it's all there. 13 MR. LYON: Next slide, please. 14 A. We need control means for switching from one 15 workspace to another, and I've shown you various 16 techniques for clicking on icons to switch from one 17 workspace to another. 18 MR. LYON: And the next slide. 19 A. And, again, this gets to the question of having 20 a first and second display object that are perceptible 21 as the same tool when you switch workspaces. I've shown 22 you the notepad in Switcher, for example, perceptible as 23 the same notepad in each workspace. 24 I've shown you a file browser in Chan, 25 perceptible as the same tool in each workspace. And</p>
<p style="text-align: right;">Page 95</p> <p>1 A. (Complies.) 2 MR. LYON: So can we jump -- can we jump 3 to -- I'm having a hard time reading the numbering -- I 4 believe it's Slide 40 -- 50? 5 Q. (By Mr. Lyon) Could you summarize your opinions 6 with respect to the validity of these claims? 7 A. Well, what I've done here, in the interest of 8 keeping the slide shorter, is reference all three prior 9 art systems plus the patent in regard to this claim. 10 And if -- I'm going to not read all the claims, because 11 you've had to suffer through that before, so I'm just 12 going to say to start with, all of these systems have a 13 display. 14 MR. LYON: Next slide. 15 A. The patent and each of these systems has first 16 and second workspaces that set on the display, and I've 17 outlined in yellow what the workspaces are for each of 18 these particular pieces of prior art. 19 MR. LYON: Next slide, please. 20 A. Each of the workspaces includes a set of 21 display objects. And I've outlined a number of 22 different display objects, so you've seen all of these 23 once, so I won't talk to you through them all again. 24 But three have multiple display objects in each 25 workspace.</p>	<p style="text-align: right;">Page 97</p> <p>1 I've shown you two possible interpretations of Amiga 2 where I can either switch from one workspace to another, 3 and the first and second display objects are the trash 4 can, perceptible as the same tool, or the calculator 5 window, perceptible as the same tool, depending on your 6 interpretation of the claims. 7 If you interpret that we only need objects 8 to be flexible, then moving the trash can from one 9 workspace to another would fit. If you interpret that 10 we only need continuity, then I can start working and 11 continue working. 12 THE COURT: Excuse me one second. 13 MR. HILL: Your Honor, it seems the 14 witness is talking about interpretation of the claims to 15 the jury, as if the jury is going to be engaged in the 16 function of interpreting the claims, which he knows is 17 the Court's function. 18 THE COURT: I have your point. And I 19 think the witness is stating it in a manner that makes 20 it clear to the jury that he is just giving alternatives 21 for alternative instructions. He can continue. 22 MR. LYON: Thank you, Your Honor. 23 THE COURT: You may need to pose a 24 question that puts him back into context. 25 MR. LYON: Certainly, Your Honor.</p>

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1 Q. (By Mr. Lyon) So let's move, shall we, to Claim
 2 21 of the '412 patent and go through that quickly as
 3 well?
 4 How does your analysis of all these prior
 5 art systems affect your analysis of the validity of
 6 Claim 21?
 7 **A. Well, again, it has a display, and input means**
 8 **meaning keyboards and mice and ways for the users to get**
 9 **signals into the system.**
 10 Q. Next -- I'm sorry.
 11 **A. It has a way to generate sets of display**
 12 **objects and a way to present the first set of display**
 13 **objects and then have a switching display object.**
 14 Q. Does it also have a tool display object?
 15 **A. And a first tool display object such as the**
 16 **notepad.**
 17 Q. All right.
 18 MR. LYON: Next slide, please.
 19 **A. Then when you get a switch signal request --**
 20 **and what I've shown you in Switcher is clicking the**
 21 **right upper icon. What I've shown you in the Chan model**
 22 **is click on a room door. In the patent, you click on a**
 23 **room door. In the Amiga, you click on the gadgets up in**
 24 **the upper right corner of the window, and you can switch**
 25 **from one workspace to another.**

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1 **And you'll, again, see objects perceptible**
 2 **as the same tool, even though they may be in different**
 3 **locations on the screen in each workspace.**
 4 Q. How about the '521, Claim 8?
 5 **A. Again, we have a display. I mentioned along**
 6 **the way occasionally, these systems have processors.**
 7 **They generate display objects that we can see on the**
 8 **screen, and I know there's memory in the systems, and**
 9 **the data that is operating these programs is stored in**
 10 **memory. So those are there in all the systems.**
 11 MR. LYON: Next slide, please.
 12 **A. Each of the workspaces has a set of display**
 13 **objects. Each of the display objects is perceptible as**
 14 **a -- with a coherent set of display features as we**
 15 **talked about in claim construction.**
 16 **And they have spatial positions relative**
 17 **to one another, so I can move the trash can around or**
 18 **the calculator around or the alarm clock around.**
 19 MR. LYON: Next slide, please.
 20 **A. And, again, you'll see that the first and**
 21 **second display objects are again perceptible as the same**
 22 **tool, again under the particular interpretation you make**
 23 **for the claims as to what perceptible as the same tool**
 24 **would mean.**
 25 Q. And then finally the last patent, '183,

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1 Claim 1?
 2 **A. Again, we have a display. We have an input**
 3 **device. We have a data processor for each of these**
 4 **systems. The display presents images that include**
 5 **display objects. And you've seen the display objects,**
 6 **and they're perceptible as coherent sets of display**
 7 **features, clocks and notepads and windows, et cetera.**
 8 **Again, you operate the data processor to**
 9 **present the first workspace with display objects, and**
 10 **there will be a subset that would be some first display**
 11 **object tool, such as the trash can in Amiga or the file**
 12 **browser in Chan or the notepad in Switcher that will**
 13 **then -- that are perceptible in the first workspace.**
 14 MR. LYON: Next slide, please.
 15 **A. Then when you get a switching display signal,**
 16 **again, the switch signal -- here they talk about a**
 17 **switch signal sequence. It doesn't have to be a**
 18 **signal -- single signal. It could be a set of them, but**
 19 **in the examples I've shown you, it really is a single**
 20 **signal.**
 21 **And so you click on an icon and you switch**
 22 **from one workspace to another. And then you get a**
 23 **second set of display objects, and the second display**
 24 **object is also perceptible as a tool that can augment**
 25 **users' capabilities. And those first and second display**

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1 **objects are perceptible as the same tools.**
 2 **I apologize for going so fast, but I am**
 3 **told there are time issues.**
 4 Q. So, Dr. Wilson, now is it your opinion that
 5 each of the Amiga Workbench, the Mac Apple Switcher, and
 6 the Chan room model anticipate all the asserted claims
 7 by themselves?
 8 **A. The Chan room model by itself anticipates all**
 9 **the asserted claims, all the claim elements of the**
 10 **asserted patents, and invalidates those claims.**
 11 **Switcher also by itself anticipates all**
 12 **the asserted claim elements -- the claim elements of the**
 13 **asserted claims and invalidates the patent.**
 14 **And the Amiga system, if you take**
 15 **Dr. Zimmerman's interpretation of how to interpret these**
 16 **claims, I believe it meets the elements of each of these**
 17 **claims and invalidates the patents.**
 18 MR. LYON: And I just have one more
 19 housekeeping thing. I think the Amiga disks that we're
 20 talking about we are going to substitute in for what has
 21 been marked as Defendants' Exhibit 714 and use those
 22 disks that were actually used here today, if counsel is
 23 okay with that.
 24 MR. GASEY: With a substitution, we're
 25 fine.

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1 MR. LYON: With the substitution, yes.
 2 Understood.
 3 With that, I'll pass the witness.
 4 THE COURT: All right. Do you want to
 5 start right in?
 6 MR. HILL: If we could take a moment so I
 7 can gather my notes.
 8 THE COURT: Why don't we take five
 9 minutes. It's towards the end of the week, so we're
 10 trying to give you a lot of time to move around. Five
 11 minutes and we'll be right back.
 12 (Jury out.)
 13 THE COURT: If I interpret right, you want
 14 to take a quick break.
 15 MR. HILL: Yes, Your Honor.
 16 THE COURT: Five minutes, though.
 17 (Recess.)
 18 (Jury out.)
 19 MR. HILL: We are ready for liftoff.
 20 THE COURT: I need my procedural
 21 masterminds for a couple of points.
 22 MR. KREVITT: On -- on this examination?
 23 THE COURT: No, on this -- on the case in
 24 general. The point is, as you know, the Court has
 25 obligations in Washington Monday morning, so I'll return

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1 to Washington. And first thing I'd like to know is that
 2 if the deliberations go a little longer, do you have any
 3 objection to Judge Everingham accepting the verdict?
 4 MR. GASEY: That's fine.
 5 MR. KREVITT: Fine.
 6 THE COURT: Can you note they both said
 7 fine?
 8 MR. KREVITT: The masterminds.
 9 THE COURT: Yeah. And then I expect to be
 10 present in the courtroom via the phone, and I may even
 11 say a word or two to the jury by phone after we've
 12 received their verdict, but it would be Judge Everingham
 13 sitting here in the chair.
 14 Now, it gets more complex. That will not
 15 be on Sunday -- on Monday -- next Monday. That may be
 16 this Saturday. The reason is that Judge Everingham has
 17 a judicial conference on Monday that he needs to attend.
 18 So now you can see what I'm going to tell the jury at
 19 the end of the day today is that if their deliberations
 20 carry on past a closing time on Friday, which I will let
 21 them set, I will have them back on Saturday to continue
 22 their deliberations. And Judge Everingham would be here
 23 to receive, if it's after my departure time. I have a
 24 departure time on Saturday.
 25 Does all of this sound like this can work?

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1 MR. HILL: Sounds like we ought to get a
 2 verdict on Friday doing it that way.
 3 THE COURT: Well, that's probably the
 4 effect, but that I won't say. I will simply say to them
 5 today -- at the end of today that there is a chance that
 6 they would need to plan to be here Saturday morning if
 7 their verdict goes beyond closing time Friday so they
 8 can adjust schedules, if at all necessary. I'll give
 9 them a day of notice on that.
 10 Is this all okay, Mr. Krevitt?
 11 MR. KREVITT: Yes, very much.
 12 THE COURT: Is this okay, Mr. Gasey?
 13 MR. GASEY: That's fine, Your Honor.
 14 THE COURT: Okay. Thank you. Let's bring
 15 our jury back and keep going.
 16 (Jury in.)
 17 THE COURT: If we could be seated.
 18 Mr. Hill, are you going to inquire?
 19 MR. HILL: Yes, Your Honor. Thank you.
 20 CROSS EXAMINATION.
 21 BY MR. HILL:
 22 Q. Dr. Wilson, how are you doing this afternoon?
 23 A. **I'm doing fine.**
 24 Q. Well, let me be consistent and welcome you to
 25 East Texas, as well?

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1 A. **Thank you.**
 2 Q. Now, you covered a fair amount of ground, so
 3 we've got some things we need to talk about, but I'm
 4 going to try to do it as expeditiously as we can.
 5 We're going to talk about all three of the
 6 systems that you talked about that you say are
 7 anticipatory references, okay?
 8 A. **Okay.**
 9 Q. But before we do that, let's go over a couple
 10 things. Let's first talk about what is involved with
 11 the issue of invalidity in a patent case, okay?
 12 A. **Okay.**
 13 Q. First off, you understand that the only basis
 14 of invalidity that the Defendants in this case are
 15 pursuing is what's called anticipation. You understand
 16 that?
 17 A. **Yes.**
 18 Q. They're not pursuing -- there's another kind --
 19 there are other types of invalidity out there, so
 20 they're chasing an invalidity defense with these
 21 references based off what's called anticipation?
 22 MR. KREVITT: Your Honor --
 23 THE COURT: Yes.
 24 MR. KREVITT: -- I know it's not
 25 deliberate. We -- we do have other invalidity theories,

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1 not -- not based on prior art.
 2 MR. HILL: Right, not based on these --
 3 THE COURT: That --
 4 MR. KREVITT: I want to make sure that's
 5 clear.
 6 Q. (By Mr. Hill) And I don't mean to imply as
 7 much, Dr. Wilson. You understand that the only reason
 8 people are looking at these prior art systems is
 9 anticipation?
 10 **A. Correct.**
 11 Q. Okay. And anticipation means that every
 12 element -- every element of the claimed invention -- so
 13 every element in the claims of this patent -- and these
 14 three patents has to be present -- literally present in
 15 a single prior art reference. You understand that?
 16 **A. My understanding -- and, again, I'm not an**
 17 **attorney -- was explicitly present or inherently**
 18 **present.**
 19 Q. And -- but it has to be in a single prior art
 20 reference, right?
 21 **A. Correct.**
 22 Q. No mixing and matching?
 23 **A. Correct.**
 24 Q. So we can't take a little bit of the Chan
 25 reference and a little bit of the Apple or the

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1 Macintosh, right?
 2 **A. I would never do that.**
 3 Q. We can't take a little bit of the Amiga and a
 4 little bit of the Macintosh?
 5 **A. Correct.**
 6 Q. You have to look at each one independently, and
 7 within that single piece of prior art you've got to find
 8 every claim element of the patent claims, correct?
 9 **A. Correct.**
 10 Q. You also understand that there's a different
 11 burden of proof that applies when you're dealing with
 12 the issue of anticipation; is that right?
 13 **A. Correct. That's my understanding.**
 14 Q. That's called the clear and convincing evidence
 15 burden of proof; isn't that right?
 16 **A. Correct.**
 17 Q. And were you here when we selected the jury in
 18 this case?
 19 **A. No, I was not.**
 20 Q. When we selected the jury, I had an opportunity
 21 to talk to them about the different burdens of proof in
 22 a patent case, so let me talk to you about that and see
 23 if -- since you weren't there, see if your understanding
 24 is the same as mine.
 25 To prove infringement, Plaintiff has to

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1 prove -- you have the scales of justice -- they have to
 2 prove infringement by a preponderance of the evidence.
 3 Do you understand that?
 4 **A. Yes.**
 5 Q. Which means more likely true than not true.
 6 You've got two situations, yes or no, you look at what's
 7 more likely true or not true?
 8 **A. Okay.**
 9 Q. That means just enough to tip the scales.
 10 **A. Okay.**
 11 Q. Some people use football analogies as crossing
 12 the 50?
 13 MR. HILL: Your Honor, I think we have a
 14 jury question.
 15 THE COURT: You can just continue,
 16 Mr. Hill. We'll work this in in due course.
 17 MR. HILL: Thank you, Your Honor.
 18 Q. (By Mr. Hill) Now -- so that's infringement.
 19 That's the plaintiff's burden of proof?
 20 **A. Okay.**
 21 Q. The defendant's burden of proof for
 22 invalidity --
 23 THE COURT: Mr. Hill, could you suspend
 24 for one second?
 25 MR. HILL: Yes, Your Honor.

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1 THE COURT: And we're going to take a
 2 brief recess right now, ladies and gentlemen, just maybe
 3 two or three minutes.
 4 (Jury out.)
 5 THE COURT: Gentlemen, Juror No. 8,
 6 Ms. Nash, is having a considerable health problem at the
 7 moment. You noticed that she had been wearing
 8 sunglasses, and -- and she just out of your presence to
 9 me detailed the difficulty she's experiencing and I'm
 10 making the judgment to excuse her from the rest of the
 11 service. Is there any objection to that?
 12 MR. HILL: No objection from the
 13 Plaintiff, Your Honor.
 14 THE COURT: Mr. --
 15 MR. KREVITT: No objection, Your Honor, if
 16 she can't serve.
 17 THE COURT: No, she cannot serve. She
 18 is -- we would have to stop now. She may go from here
 19 directly to a medical facility, and so we will proceed.
 20 We'll bring the jury back. We will now proceed with 11
 21 jurors. She will no longer participate, and I've
 22 explained to her that she is not to discuss this matter
 23 with anyone else. Thank you.
 24 (Jury in.)
 25 THE COURT: Ladies and gentlemen, I just

1 wanted to assure you it's well within all the federal
2 rules for you to continue to deliberate as a group of 11
3 now. And if we can just proceed, having lost one of our
4 jurors, we will do so. Please be seated.

5 Mr. Hill, sorry to interrupt you.

6 MR. HILL: Thank you, Your Honor.

7 Q. (By Mr. Hill) Now, Dr. Wilson, talking about
8 the clear and convincing evidence burden of proof.
9 Clear and convincing burden of proof is what applies to
10 the Defendants -- defense of anticipation. Do you
11 understand that?

12 **A. Yes.**

13 Q. So when you look at a prior art reference and
14 you want to decide whether it anticipates a claim and
15 invalidates it, you have to judge it by a much different
16 standard than what you judge infringement, a much higher
17 standard. You understand that?

18 **A. Yes.**

19 Q. Clear and convincing burden of proof, the Judge
20 will instruct the jury, means highly probable, an
21 abiding conviction. Are you aware of that?

22 **A. I wasn't aware of those particular phrases.**

23 Q. And if we use our scales of justice analogy
24 again, that means sufficient to significantly tip those
25 scales.

1 **A. Okay.**

2 Q. Go back to our football analogy. Some people
3 would say that means getting it deep into the red zone.

4 **A. You don't actually have to score though.**

5 Q. No, it's not a touchdown, but it's deep into
6 the red zone, okay?

7 **A. Okay.**

8 Q. Now, were you aware of those burdens of proof
9 when you were performing your work?

10 **A. Yes.**

11 Q. Let's talk a little bit about the three
12 references that you discussed. You're only discussing
13 three, correct?

14 **A. Correct.**

15 Q. It's only been three things put forward that
16 these Defendants claim invalidate these patents?

17 **A. Correct.**

18 Q. Two of those three, won't you agree with me,
19 were before the Patent Office?

20 **A. There was information about them before the
21 Patent Office.**

22 Q. Let's look at those things. I want to look
23 first at Plaintiffs' No. 1. This is our patent. We're
24 going to go -- this is the '412 patent.

25 And let me ask you something, too, as

1 well. We've been talking throughout this trial, this
2 patent was filed in 1987?

3 **A. Right.**

4 Q. But you understand that the filing date of a
5 patent doesn't necessarily mean that's the date you
6 consider when determining whether or not something is
7 prior art?

8 **A. Correct.**

9 Q. It may be earlier than that?

10 **A. Correct.**

11 Q. Are you aware of the priority date for these
12 patents?

13 **A. My understanding was it was March 25th, 1986.**

14 Q. March 25th, 1986?

15 **A. Right.**

16 Q. So it's a full year earlier than the date
17 that's marked on the front of the patent as the filing
18 date?

19 **A. Which is why I showed demos of 1985 systems.**

20 Q. Okay. But, again, it's an '86 issue, so if we
21 see copyrights on things that say '86, those may not be
22 before the -- before the priority date; isn't that
23 right?

24 **A. It depends on -- yes, you have to go for more
25 than just the copyright date.**

1 THE COURT: Excuse me.

2 MR. LYON: Your Honor, I'm not sure
3 Mr. Hill is being accurate with that. I'm a little
4 concerned about misleading things. I just want to make
5 sure he's being accurate what the actual priority date
6 really is as opposed to bar date.

7 THE COURT: I'll be handling that if
8 there's any issue.

9 MR. HILL: Your Honor --

10 THE COURT: I'll also be giving
11 instructions as to the burdens that they apply. I don't
12 think I'll use a football field.

13 MR. HILL: And, again, Your Honor, on the
14 date, if I'm inaccurate up here, it's -- it's not
15 intentional because I --

16 THE COURT: I just thought I'd remind the
17 jury that -- I probably said this a lot. What the
18 attorneys say doesn't matter as much. What you're
19 listening to is the evidence, and then you have to
20 listen to me, too, I'm afraid.

21 Please proceed.

22 MR. HILL: Thank you.

23 Q. (By Mr. Hill) And, Dr. Wilson, I want you to
24 know that, too. I'd never intentionally give you a date
25 trying to trick you up here. That's not what I'm after.

<p style="text-align: right;">Page 114</p> <p>1 I want us to talk about the substance of these things.</p> <p>2 A. Thank you.</p> <p>3 Q. Let's talk about the references that were</p> <p>4 before the Patent Office. First off, if we look at the</p> <p>5 second page of the patent, there is a list of the</p> <p>6 publications that were considered by the Patent Office,</p> <p>7 correct?</p> <p>8 A. Correct.</p> <p>9 Q. And if we look at the very first of those</p> <p>10 references, there's the Chan article; isn't that right?</p> <p>11 A. That is the art -- article authored by Patrick</p> <p>12 Chan, yes.</p> <p>13 Q. And that describes the room system that you</p> <p>14 discussed earlier and around which you built the</p> <p>15 simulation?</p> <p>16 A. It provides one of the descriptions.</p> <p>17 Q. But that's -- that's the man who came up with</p> <p>18 the room model, correct?</p> <p>19 A. He was a graduate student with Malcolm. I</p> <p>20 can't guarantee he came up with the whole room -- whole</p> <p>21 room model. He is the one that wrote this paper that</p> <p>22 you're referring to.</p> <p>23 Q. And you described that paper as being so</p> <p>24 thorough and dense that it was something you really had</p> <p>25 to read carefully?</p>	<p style="text-align: right;">Page 116</p> <p>1 Q. So the Patent Office had not just the benefit</p> <p>2 of one, but the benefit of all three?</p> <p>3 A. Correct.</p> <p>4 Q. And in fact if we look at the front of</p> <p>5 Plaintiffs No. No. 2 --</p> <p>6 MR. HILL: If we can go to that.</p> <p>7 Q. (By Mr. Hill) There on the right-hand side in</p> <p>8 the second -- in that second column, there's where we</p> <p>9 see reference to the Macintosh Switcher construction</p> <p>10 kit, don't we?</p> <p>11 A. Yes, I guess we do.</p> <p>12 Q. So those were all before the Patent Office when</p> <p>13 this patent issued?</p> <p>14 A. They were.</p> <p>15 Q. The patent was filed in 1987, correct?</p> <p>16 A. Correct.</p> <p>17 Q. And the patent issued then in 1991?</p> <p>18 A. Well, I don't remember that.</p> <p>19 Q. We'll look back at Exhibit 1. You'll see the</p> <p>20 date of the patent there at the very top, December 10,</p> <p>21 1991?</p> <p>22 A. Okay.</p> <p>23 Q. So patent's filed. Patent Office has the</p> <p>24 material in front of it from '87 to '91, and then the</p> <p>25 Patent Office issues the first patent, correct?</p>
<p style="text-align: right;">Page 115</p> <p>1 A. I did describe that you had to read it</p> <p>2 carefully. I didn't use the words thorough and dense.</p> <p>3 Q. I'm not trying to put those in your mouth.</p> <p>4 So that's the Chan paper. Now, if we look</p> <p>5 further down that page, we have reference to the</p> <p>6 MacWrite manual, correct?</p> <p>7 A. Yes, you do.</p> <p>8 Q. And the MacWrite manual is the manual that</p> <p>9 describes the switcher function?</p> <p>10 A. No, it does not.</p> <p>11 Q. You don't think the switcher function was</p> <p>12 discussed in front of the Patent Office?</p> <p>13 A. I said the statement you just made was wrong.</p> <p>14 Q. Okay. Was the switcher function description</p> <p>15 and manual that you showed earlier before the Patent</p> <p>16 Office in the prosecution of these patents?</p> <p>17 A. Yes, but it wasn't the MacWrite manual or the</p> <p>18 MacPaint manual.</p> <p>19 Q. Okay. So we had the MacWrite manual, we had</p> <p>20 the MacPaint manual, and we also had the Switcher</p> <p>21 manual?</p> <p>22 A. Correct.</p> <p>23 Q. And those things were all before the Patent</p> <p>24 Office?</p> <p>25 A. Correct.</p>	<p style="text-align: right;">Page 117</p> <p>1 A. Okay.</p> <p>2 Q. You don't disagree with that, do you?</p> <p>3 A. I have no reason to dispute that, no.</p> <p>4 Q. And that's the '412 patent. We then have the</p> <p>5 next, which is the '521 patent.</p> <p>6 A. Okay.</p> <p>7 Q. And the '521 patent, which you are aware that</p> <p>8 these patents issued from a common specification --</p> <p>9 A. Yes.</p> <p>10 Q. -- correct?</p> <p>11 And the Patent Office, again, from the</p> <p>12 same specification, issues a 1995, based on a 1993</p> <p>13 filing date. See that?</p> <p>14 A. Yes.</p> <p>15 Q. They issue the '521 patent?</p> <p>16 A. Yes.</p> <p>17 Q. In 1995?</p> <p>18 A. Yes.</p> <p>19 Q. And then based on that same specification and</p> <p>20 disclosure, we have the '183 patent which is Exhibit 3,</p> <p>21 which was issued in 1996?</p> <p>22 A. Okay.</p> <p>23 Q. So with regard to the two systems, the</p> <p>24 Macintosh and the Chan Rooms article system --</p> <p>25 A. Okay.</p>

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1 Q. -- it's your opinion that those invalidate the
 2 patents despite the fact that the Patent Office had that
 3 material in front of it from 1987 through 1996, and it's
 4 your testimony that the Patent Office during that time
 5 frame managed to get it wrong not once, not twice, but
 6 three times; is that right?
 7 **A. It is my testimony that had the Patent Office**
 8 **had the information from 1985 that I showed here today,**
 9 **the Patent Office would have made a different decision**
 10 **and invalidated those claims.**
 11 Q. So they got it wrong three times; that's your
 12 testimony?
 13 **A. I'm not saying the Patent Office made a**
 14 **mistake. I'm saying they didn't have the complete**
 15 **information.**
 16 Q. Let's talk about the information that they had.
 17 First off, let's talk about in regard to
 18 the information they had, you understand nobody even
 19 claims in this case that the Patent Office wasn't given
 20 everything that the inventors were supposed to give
 21 them, do they?
 22 **A. I've never heard a discussion of misconduct.**
 23 Q. Correct.
 24 **A. I shouldn't use that word. I'm not a lawyer.**
 25 Q. Because that word's not even an issue in this

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1 case, is it?
 2 **A. As far as I know, it's not.**
 3 Q. Well, let me ask you about one other thing.
 4 Well, we'll come back to that.
 5 Let's go ahead and get into these systems.
 6 Let's look first at the Chan reference.
 7 **A. Okay.**
 8 Q. Now, the Chan reference was -- no question,
 9 Mr. Chan's work was before the Patent Office?
 10 **A. Yes.**
 11 Q. Correct?
 12 **A. Correct.**
 13 Q. And you didn't have an actual device or copy or
 14 physical computer that contained the Chan system that
 15 you could review in this case, did you?
 16 **A. No. The Chan system, Malcolm says ran on an**
 17 **IBM PC which I could have gotten, but I couldn't find**
 18 **the software.**
 19 Q. So you don't have the Chan software?
 20 **A. No, I don't have the Chan software.**
 21 Q. I just want to make clear, what we saw earlier
 22 on the screen that you were flipping through to discuss
 23 the Chan system, that was something that you made --
 24 **A. Yes --**
 25 Q. -- correct?

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1 **A. -- that was an artist's simulation, I guess you**
 2 **would say.**
 3 Q. So that was simulation --
 4 **A. Right.**
 5 Q. -- your -- your interpretation of what you read
 6 from those articles?
 7 **A. From both articles, yes, correct.**
 8 Q. Okay. From two articles?
 9 **A. Two articles, right.**
 10 Q. And what you're telling the jury is you
 11 reviewed the Chan article just like the Patent Office
 12 did and though the Patent Office says, yes, it is
 13 patentable, it is new and novel, you say no?
 14 **A. Correct.**
 15 Q. So you just have a difference of opinion based
 16 on the same material from what -- from the conclusion
 17 the Patent Office reached, right?
 18 **A. No. We just discussed it wasn't -- they didn't**
 19 **have the Malcolm paper. It wasn't the same material.**
 20 Q. So you think the Malcolm paper describing the
 21 exact same system would have been so significant that
 22 the Patent Office would have had a complete different
 23 understanding of the description in Mr. Chan's article?
 24 **A. I believe the Malcolm paper added additional**
 25 **information which would have led the Patent Office to**

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1 **reach a different conclusion.**
 2 Q. And to reach that conclusion, you had to
 3 combine those two articles, didn't you?
 4 **A. Yes, I got information from both articles.**
 5 Q. Not just one?
 6 **A. Not just one.**
 7 Q. Are you saying that the Chan article would just
 8 be too hard for the PTO to get it?
 9 **A. The Chan article had a lot of information that**
 10 **was irrelevant to how the room system works, and so you**
 11 **kind of had to sift through it.**
 12 **But one of the problems is the Chan**
 13 **article did not have the description of the file browser**
 14 **that automatically updated when you made changes to the**
 15 **file system. So it didn't show the continuity of using**
 16 **the file browser in one workspace, clicking to go to**
 17 **another room, and continuing to use the file browser**
 18 **which had updated information. I didn't -- it didn't**
 19 **have -- the Chan article didn't have a picture of that**
 20 **file browser. It was in the Malcolm paper. I found**
 21 **that to be an important fact.**
 22 Q. So you don't think the folks at the Patent
 23 Office would have been bright enough over nine years and
 24 three attempts to figure out the operation of the Chan
 25 system based on the Chan article alone?

<p style="text-align: right;">Page 122</p> <p>1 A. No, I believe the Malcolm article contributed 2 important information. 3 Q. All right. Now then, let's move on to some of 4 the other systems that we've got here, okay? 5 A. But I -- I'm not agreeing with your conclusion 6 they weren't smart enough. I'm just saying they didn't 7 have enough information. 8 Q. Okay. That's a fair point. 9 Let's talk a little bit about the 10 Macintosh. And before I do that, I want to talk 11 generally about the claim language in something you said 12 when you got started here. I wrote it down. 13 You were talking about the Macintosh has 14 an application switcher, correct? 15 A. That's how it was described, I believe, in the 16 documentation. 17 Q. And you'll agree with me that an application 18 window -- in the phraseology of these patents, an 19 application window is a display object, correct? 20 A. Well, first, I would not characterize each 21 of -- either of these applications as just an 22 application window. In particular, MacPaint had I 23 believe five windows on the screen in the MacPaint 24 application. 25 Q. But the bigger -- there's an outer window at</p>	<p style="text-align: right;">Page 124</p> <p>1 desktop in your application like you do for the other 2 windows. 3 When other people talk -- 4 Q. And I don't mean to cut you off there, but I 5 want to get a question in there. 6 A. Okay. Go ahead. Excuse me. 7 Q. When you're taking about an application, 8 MacPaint is an application, is it not? 9 A. MacPaint is an application. 10 Q. And MacWrite is an application? 11 A. MacWrite is an application. 12 Q. And in fact, application switcher is an 13 application? 14 A. It is, a special kind. 15 Q. And if we look specifically at the exhibit that 16 you had up here when we were discussing -- 17 MR. HILL: DX577. 18 Q. (By Mr. Hill) This is the application Switcher 19 construction kit, right? 20 A. That's the user manual, yes. 21 Q. And if we go to the second page -- or I believe 22 it's the fifth page of it actually. That's the page you 23 were looking at earlier -- 24 A. That is -- 25 Q. -- with Mr. Lyon?</p>
<p style="text-align: right;">Page 123</p> <p>1 one point, and the window that it's contained in? 2 A. That's a desktop. 3 Q. That's a desktop? 4 A. Right. 5 Q. Well, let's talk about that. Let's look at -- 6 do you think there's a difference between a workspace 7 and a desktop? 8 A. A desktop -- for example, the Finder desktop is 9 a workspace. 10 Q. And so you've heard witnesses in this trial, 11 haven't you, who have used the words desktop and 12 workspace interchangeably, correct? 13 A. Yes, but the claim construction does not 14 restrict a workspace to being a desktop. And now we're 15 talking in fact about two different meanings of the word 16 desktop. When I talk about the desktop behind MacPaint, 17 I'm talking about a particular piece of the Apple system 18 software, and we can get into discussions of graph ports 19 versus windows, but the desktop I believe has a graph 20 port that -- that the -- you can draw into, but it 21 doesn't have the window frame that the other windows 22 have. The MacPaint program shows two different windows 23 types, one with title bar, one that just encloses icons 24 just with a box. There is no window outline around the 25 graph port, and you don't have a window resource for the</p>	<p style="text-align: right;">Page 125</p> <p>1 A. Right. 2 MR. HILL: Let's blow up it up so we can 3 see some of that. 4 Q. (By Mr. Hill) We can focus on the left side 5 where it says how switcher works? 6 A. Right. 7 Q. -- text below. 8 A. Which you can't read. 9 Q. We can blowout the -- the -- right below how 10 switcher works, that first paragraph. 11 A. Yes. By the way, I want to clarify. You 12 described Switcher as an application. It is not a 13 normal application. It's an application that basically 14 hacks into the operating system to intercept calls from 15 the applications and do things that a normal application 16 could never do. 17 The things I taught people to do could not 18 be -- you could not build Switcher with them. It was 19 not a normal application. 20 Q. Well, okay, then it's an abnormal application? 21 A. It's an abnormal application. 22 Q. All right. But it's an application nonetheless 23 and it's an application switcher and what it enables you 24 to do is switch between two different applications, 25 correct?</p>

1 **A. Up to four.**
 2 Q. Up to four?
 3 **A. Up to four.**
 4 Q. And so you can switch from one application
 5 window to the next application window, correct?
 6 **A. You can switch from one application to another.**
 7 **They aren't necessarily defined by a single window.**
 8 **MacPaint has five windows.**
 9 Q. Okay. But we have -- we can switch from one
 10 application to the next application, correct?
 11 **A. Correct.**
 12 Q. And those applications are displayed on top of
 13 a workspace, aren't they?
 14 **A. The applications represent a workspace. Each**
 15 **application represent -- represents a workspace.**
 16 Q. And let's look, while we're at it, at the
 17 discussion that went on at the Patent Office regarding
 18 the application switcher.
 19 **A. Okay.**
 20 Q. Because, again, one of the items that you I
 21 think agree with me about is that the manuals for the
 22 switcher -- for MacWrite and for MacPaint all before the
 23 Patent Office?
 24 **A. Yes.**
 25 Q. Let's look at the prosecution history. I

1 believe it's Plaintiffs Exhibit 6.
 2 MR. HILL: And I don't know how to give
 3 you a good order. It's the bottom of the page, Bates
 4 range is 3464. That's what I'm looking for.
 5 Q. (By Mr. Hill) We look at the second paragraph
 6 there?
 7 **A. Okay.**
 8 Q. And let me explain first. Do you understand
 9 the significance of -- of the prosecution history?
 10 **A. Yes, it's a history of the applicant and the**
 11 **Patent Office communicating back and forth about which**
 12 **claims should be allowed or should the claims be**
 13 **modified to be allowed.**
 14 Q. So this is part of the give and take that goes
 15 on with the Patent Office and the person seeking the
 16 patent?
 17 **A. Correct.**
 18 Q. And we can learn what the Patent Office knew
 19 and didn't know oftentimes from that history, can't we?
 20 **A. You can provide valuable information.**
 21 Q. And you see here the Patent Office discusses
 22 the switcher where they talk about with the switcher a
 23 user can move back and forth between Macintosh programs
 24 and exchange information between them. See that?
 25 **A. Yes.**

1 Q. That's what you demonstrated on the screen a
 2 little earlier with a Macintosh computer, wasn't it?
 3 **A. No. Actually --**
 4 Q. You didn't move back and forth between programs
 5 and exchange information between them?
 6 **A. No, I moved back and forth between programs. I**
 7 **opened up shared display objects in each space.**
 8 **Exchanging information is typically done through the**
 9 **clipboard where you do copy and paste. I didn't show**
 10 **copy and paste. I didn't discuss copy and paste.**
 11 Q. Well, the Patent Office was well aware of the
 12 capability to move back and forth between programs and
 13 to exchange information between programs offered by the
 14 MacSwitcher product, right?
 15 **A. I'm just saying the exchanging information is a**
 16 **different feature that I didn't show.**
 17 Q. Okay. But the Patent Office had a good idea of
 18 what's -- how the switcher functioned by reviewing the
 19 manual, didn't they?
 20 **A. No.**
 21 Q. They didn't? They couldn't read the manual
 22 that Apple used to describe the functionality of its own
 23 products and determine how it worked?
 24 **A. The -- Apple wrote this document to show people**
 25 **how to install Switcher, how to put applications in it,**

1 **and how to switch, then stopped. They weren't**
 2 **interested in explaining how these applications**
 3 **represent multiple workspaces with shared display**
 4 **objects. That wasn't their purpose.**
 5 Q. Now, Dr. Wilson, my question was a little
 6 different than that.
 7 **A. Okay, excuse me. Sorry.**
 8 Q. Let me see if I can get you focused on what I'm
 9 asking.
 10 **A. I'll try.**
 11 Q. What I'm asking you is the Patent Office had
 12 the MacSwitcher program manual before them?
 13 **A. Yes.**
 14 Q. And they were able to read it and understand
 15 from it the functionality of that program; isn't that
 16 right?
 17 **A. No, they were able to understand the particular**
 18 **functionality I just described, how to install it and**
 19 **how to switch.**
 20 Q. And so for nine years they were in the dark
 21 after reviewing all the product literature about how
 22 this program functioned. That's your belief?
 23 **A. Yes. They did not have the information I**
 24 **showed today.**
 25 Q. Well, I want to show the jury again what you

1 were doing with the program.
 2 **A. Okay.**
 3 Q. If we can come down and -- if I can get you to
 4 come down and help me as you were kind enough to help
 5 Mr. Lyon because I don't dare try to work this thing.
 6 Let's start with the -- let's start with
 7 the Mac.
 8 I'll try to stay out of the way over here.
 9 Now, we're looking there at the MacPaint
 10 application, correct?
 11 **A. Yes, correct.**
 12 Q. And if you click the switcher, you can switch
 13 to another application?
 14 **A. Would you like me to do that?**
 15 Q. Please.
 16 **A. There -- for example, I'm in the Finder**
 17 **workspace now.**
 18 Q. So this is the Switcher application, correct?
 19 **A. No. This is the Finder. This is the desktop**
 20 **that start -- I had added that as the third workspace,**
 21 **you remember, at the end of my demo.**
 22 Q. So you have -- we have our open workspace and
 23 we can go to our open application?
 24 **A. I'm not sure. What are you asking me to do?**
 25 Q. Will you switch to one of the open

1 applications?
 2 **A. Okay. Well, this is one of the applications,**
 3 **by the way. It's called a finder. It's another**
 4 **application.**
 5 Q. So we've got that application?
 6 **A. There's MacPaint.**
 7 Q. MacPaint is the second application?
 8 **A. If I continue in the circle, there's MacWrite.**
 9 Q. The third application?
 10 **A. Yes, there's three applications.**
 11 Q. Can you open now the MacPaint application in
 12 this workspace?
 13 **A. No.**
 14 Q. Can't do it, can you?
 15 **A. No.**
 16 Q. Okay. That's all I needed with regard to the
 17 Mac.
 18 **A. Should I go back to the witness stand?**
 19 Q. Yeah. We'll come back to the Amiga here in
 20 just a moment. I'm sorry for making you run laps.
 21 **A. I need the exercise.**
 22 Q. Were you here in this courtroom during the
 23 discussion of some of the license agreements in this
 24 case?
 25 **A. Probably -- well, I -- I heard Dr. Cooper I**

1 **think discuss licensing discussions with Apple, if**
 2 **that's what you mean.**
 3 Q. Licensing discussions with Apple?
 4 **A. Yeah.**
 5 Q. People who make Macintosh?
 6 **A. Right.**
 7 Q. Does it strike you as odd that Apple would
 8 enter into a license agreement for these patents if they
 9 were the manufacturer of the very prior art system
 10 that -- that invalidates these patents?
 11 **A. It doesn't strike me as odd at all.**
 12 Q. Doesn't strike you as odd at all. They
 13 wouldn't look at these patents, look at the claimed
 14 invention, and say we're not taking a license, that's
 15 our Macintosh switcher function?
 16 **A. Dr. Cooper described negotiations --**
 17 Q. I'm asking you a question. Would they -- does
 18 that strike you as odd?
 19 **A. No, it doesn't strike me as odd. I answered**
 20 **that question.**
 21 Q. All right. Let's talk about the disks that you
 22 used to boot these programs. They were handwritten
 23 disks, right?
 24 **A. The labels were handwritten, yes.**
 25 Q. The labels are handwritten. Those aren't the

1 original disks with -- that came from Apple, are they?
 2 **A. No.**
 3 Q. So those aren't the original applications?
 4 **A. They are the original files for each of those,**
 5 **but they're not the original floppy disks.**
 6 Q. Well, they're the files that you were sold as
 7 the original files, correct?
 8 **A. I have so many different disks. All I can say**
 9 **is I have these various pieces. They were on different**
 10 **floppies. I assembled them into this one. I can't even**
 11 **say -- in one case, as I mentioned, I wasn't sold this**
 12 **version of Switcher. I got it from a former Apple**
 13 **vice-president, Dr. Patel.**
 14 Q. And let's talk a little bit, too, about what we
 15 saw on the screen here.
 16 **A. Okay.**
 17 Q. The titles on these bars when you were flipping
 18 between the applications where it says Workspace 1 and
 19 Workspace 2.
 20 **A. Right.**
 21 Q. You added that, didn't you?
 22 **A. Yes, I -- I named the documents so as to be**
 23 **helpful. I hope you found them helpful.**
 24 Q. And you never had access to the code -- the
 25 source code that's behind these programs, did you?

1 **A. I had access to certain information about how**
2 **they're structured through programming tools. I did not**
3 **have the source code for any of these programs.**

4 Q. And that was my question. You did not have the
5 source code for these programs?

6 **A. Correct.**

7 Q. So when we were hearing analysis earlier today
8 from -- or throughout the week from Dr. Zimmerman and
9 then today from Dr. Gray where they're discussing source
10 code as a way to determine whether a program actually
11 contains the functionality described in the patents, you
12 didn't have that opportunity with respect to the Apple
13 system, did you?

14 **A. No, I did not have the source code.**

15 Q. Now, let's look at the Amiga system.

16 **A. Okay.**

17 Q. Now, the Amiga system, if I purchased that
18 originally back in 1984, was it?

19 **A. This one is a model from 1985, summer of '85, I**
20 **believe.**

21 Q. 1985. Okay. If I purchased it originally, it
22 wouldn't come with these secondary disk drives that you
23 have to the right of it, would it?

24 **A. Well, actually I moved the Amiga disk drive**
25 **that's -- there was an optional accessory. I had the**

1 **broken one as I remember.**

2 Q. But the broken one was an optional accessory?

3 **A. Yes, you didn't have to buy it.**

4 Q. If you bought an Amiga desktop, it came without
5 these items over here to my right?

6 **A. Correct.**

7 Q. It simply came with the disk drive that's on
8 the front of the machine here, right?

9 **A. Right.**

10 Q. But you have to have two disk drives running to
11 do what you're doing with that machine, don't you?

12 **A. Well, no. It just makes it more convenient.**

13 Q. So you've got one disk drive currently that's
14 running one workspace --

15 **A. Right.**

16 Q. -- and you've got a second disk drive that's
17 running a second workspace -- what you're calling a
18 workspace, correct?

19 **A. Yeah. Right now I have two floppies each**
20 **running Workbench 1.1. I did not actually have to have**
21 **two drives, but it prevents you having to swap a lot.**

22 Q. So you're saying that you can get on this
23 computer and you can load both those workspace
24 applications through one drive --

25 **A. I believe I can.**

1 Q. -- and switch between the two?

2 **A. I believe I can, but it would require a lot of**
3 **swapping of the floppies back and forth.**

4 Q. And these are -- each workspace that you're
5 running on a floppy is a separate application, correct?

6 **A. Yes, I probably -- each -- each is a copy of**
7 **Workbench 1.1.**

8 Q. And what you're saying is that each one of
9 those copies of workspace is not just a window, not just
10 a display object as defined in the claim construction,
11 but you're saying that it is a workspace?

12 **A. Right.**

13 Q. Okay. Let's talk about that.

14 **A. Okay.**

15 Q. Can a display object also be a workspace?

16 **A. By the definition of display object, yes, I**
17 **believe it could.**

18 Q. You believe it could?

19 **A. Yeah.**

20 Q. Have you looked at the Court's claim
21 construction?

22 **A. I have.**

23 Q. And you understand that a workspace is defined
24 as a display system entity that includes a collection of
25 display objects?

1 **A. Yes.**

2 Q. And so a display object, it's defined
3 differently than a workspace by the Court?

4 **A. Would you put up the definition of display**
5 **object?**

6 Q. We'll get to it.

7 **A. Okay.**

8 Q. Let's put it up there. I believe we've got
9 that as --

10 **A. There it is.**

11 Q. There it is. We've got a display object there
12 at the top, and then at the bottom we've got workspace.

13 **A. Right.**

14 Q. There's workspace, and we can look at that.
15 There's our definition of workspace.

16 **A. Right.**

17 Q. And then we've got a definition of display
18 object above it.

19 **A. I'd really like to see them both.**

20 Q. Let's see if we can get them both.

21 **A. Okay. Now, could you ask your question?**

22 Q. Those are defined differently, aren't they?

23 **A. They are defined differently.**

24 Q. Usually when you define two things differently,
25 it's because they mean different things, don't they?

1 **A. That sounds philosophical. I'm not sure where**
 2 **you're going with that.**
 3 Q. We'll just accept it as philosophical then.
 4 **A. Okay.**
 5 Q. The -- and as you said earlier, you've heard
 6 witnesses throughout the trial, including Dr. Zimmerman,
 7 state that frequently -- including Defendants --
 8 witnesses for the Defendants -- we heard from
 9 Mr. Tiemann, also Mr. Rex, say that a workspace and a
 10 desktop are often used interchangeably when you talk
 11 about what people understand in the industry, right?
 12 **A. Well, anybody discussing what people currently**
 13 **understand in the industry doesn't seem relevant to what**
 14 **the claim construction was relative to the technology in**
 15 **1987 -- or 1985 in this case.**
 16 Q. Well, will you at least agree with me then,
 17 Dr. Wilson, that the Court has defined a display object
 18 as something different than a workspace?
 19 **A. The definitions are definitely different. I**
 20 **agree with you wholeheartedly.**
 21 Q. Let's go ahead and look at this Amiga system.
 22 If I can get you to come down and help me with it, too.
 23 Okay. Have you got it up there?
 24 **A. I do.**
 25 Q. All right. I want you to do something for me.

1 **A. Okay.**
 2 Q. I want you to close Workspace No. 1?
 3 **A. Okay. I'll click in the close box in the upper**
 4 **left, and that will -- it's -- it's closing the window**
 5 **associated with Workspace No. 1.**
 6 Q. So the application window that contains
 7 Workspace No. 1 has closed; is that right?
 8 **A. Yes.**
 9 Q. Okay.
 10 **A. I think that's right.**
 11 Q. Now then, if you'll close the application
 12 window that contains workspace -- Workspace No. 2.
 13 **A. Yes. Now they're just represented as disk**
 14 **icons.**
 15 Q. And so now those two display objects in
 16 windows --
 17 **A. Right.**
 18 Q. -- are gone?
 19 **A. They are.**
 20 Q. What remains?
 21 **A. The desktop and a calculator at this point.**
 22 Q. The desktop and the calculator?
 23 **A. Right. And the menu bar.**
 24 Q. Would you go so far as to call that desktop the
 25 workspace?

1 **A. No, I'm calling it the desktop.**
 2 Q. It's not a workspace?
 3 **A. It does contain display objects, so you could**
 4 **call it a workspace.**
 5 Q. Okay. And that's my point, Dr. Wilson. All
 6 you had there were three windows open on a single
 7 desktop -- on a single workspace?
 8 **A. No.**
 9 Q. And you were switching between windows. You
 10 were switching from the window you had labeled -- you
 11 had labeled it. It didn't come this way? You had
 12 labeled it Workspace 1, right?
 13 **A. It didn't come that way. I labeled it.**
 14 Q. And then you switched to the next window which
 15 was Workspace 2; isn't that right?
 16 **A. Right. But they were workspaces.**
 17 Q. Did you switch between them?
 18 **A. I did.**
 19 Q. You had labeled them workspaces?
 20 **A. I did.**
 21 Q. They were application windows?
 22 **A. And also as in MacPaint and MacWrite, they were**
 23 **applications, but they were workspaces.**
 24 Q. So when we close the two windows that you
 25 mentioned earlier that were display objects, those

1 display objects went away and we're left with the last
 2 application that you have running which is the
 3 calculator?
 4 **A. Correct.**
 5 Q. So we had a single desktop -- a single
 6 workspace, excuse me, with two -- three windows open on
 7 top of it?
 8 **A. No.**
 9 Q. Two of them were workspace windows that you
 10 labeled Workspace 1 and 2, and then you had a
 11 calculator?
 12 **A. I'm not agreeing with you.**
 13 Q. Okay. You didn't just close two program
 14 windows to leave one remaining program window?
 15 **A. I did close the two windows, I agree to doing**
 16 **that part.**
 17 Q. Have you heard other witnesses in this case
 18 talk about --
 19 THE COURT: Excuse me, one second.
 20 MR. LYON: Are we done with the
 21 demonstration?
 22 MR. HILL: Oh, we are. I'm sorry. I
 23 didn't mean to keep you there in the chair standing over
 24 you.
 25 THE WITNESS: More exercise.

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1 MR. HILL: Thank you, Mr. Lyon.

2 Q. (By Mr. Hill) Have you heard some of the

3 other -- throughout this trial we've had people talk

4 about the difference between Microsoft Windows and these

5 other Linux-based desktop environments. Have you heard

6 some of that?

7 **A. I can't say I remember hearing that discussion.**

8 Q. You haven't heard that? You didn't hear

9 Mr. Tiemann, for instance, talk about how his programs

10 were different than Windows, Windows is a different

11 environment?

12 **A. No, I did -- I wasn't present for that.**

13 Q. Did you see any of documents that we put on the

14 screen that talked about one of the big advantages that

15 a Linux environment had over Windows was Windows lacked

16 the virtual desktop switching function?

17 **A. I don't remember seeing any of that discussion.**

18 Q. You don't remember that either?

19 **A. No.**

20 Q. Windows ever -- articles put on this screen

21 that discussed the top features that weren't in Windows,

22 but were in other programs?

23 **A. I'm telling you honestly, I don't remember**

24 **being here for that.**

25 Q. Listen, I'm -- just asking if you recall. I

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1 think the jury will recall.

2 Let's see if we can look at a few of

3 those.

4 MR. HILL: Let's look at PX 285. Here we

5 go.

6 Q. (By Mr. Hill) Perhaps one of the most

7 interesting and useful of the so-called Linux secrets is

8 the Linux virtual desktops. If there's no other reason

9 to switch from Microsoft Windows to DME Linux, it's the

10 virtual desktop.

11 THE COURT: Excuse me a second.

12 MR. LYON: I'm just wondering what the

13 relevance of this is to prior art and invalidity.

14 MR. HILL: I'm about to get there, Your

15 Honor.

16 Q. (By Mr. Hill) That was one -- we showed

17 several articles that made the point that Microsoft

18 Windows lacks a switching function.

19 **A. I haven't seen that before. I'm pretty sure I**

20 **wasn't here for that.**

21 Q. Okay. Well, that's one of -- that's

22 representative of several exhibits the jury saw.

23 **A. Okay.**

24 Q. Okay? And let me -- let me -- just so folks

25 understand, we, the Plaintiffs, had never seen your old

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1 computers until about two days ago, had we?

2 **A. These physical computers? I believe not.**

3 Q. That's right. We came over to the building

4 that you folks are using here in town and got the first

5 chance to look at these about two nights ago?

6 **A. No, no, that's not correct in terms of the**

7 **first chance. I put this stuff in my report last fall.**

8 Q. You put in your report that you had physical

9 computers you were going to run these things on?

10 **A. I provided a lot of screen shots from a**

11 **Macintosh computer. It happened to be -- not be this**

12 **physical one, but I did describe in my report the Amiga**

13 **computer and I included screen shots from that, too.**

14 Q. You included screen shots that you had gathered

15 from a magazine article that had those screen shots;

16 isn't that right?

17 **A. I remember last fall connecting up a video**

18 **display capture system to my Macintosh from the Amiga**

19 **hardware.**

20 Q. And I don't want to -- it's -- it's a side

21 point, so I'm not going to waste a lot of the jury's

22 time to prove it. But if I hand you your report, are

23 you going to be able to point to me a spot in that

24 report where you disclose that you had physical

25 computers you planned to use in this courtroom?

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1 **A. I obviously did not say what I was planning to**

2 **do in the courtroom.**

3 Q. And in fact, you just -- you testified a little

4 earlier that you just got the programming to even be

5 able to run one of these things ten days ago; isn't that

6 right?

7 **A. I just got the version that I was satisfied was**

8 **the correct 1985 version.**

9 Q. Well, I bring all that up just to make the

10 point that we just got to see these in the flesh a

11 couple days ago; isn't that right?

12 **A. Yes, but I think that was your decision.**

13 Q. Okay. Well, we -- we'll let the jury decide

14 that.

15 I want to show you something --

16 **A. Okay.**

17 Q. -- now that we've discussed. We've seen that

18 Windows lacks the switching functionality.

19 **A. Yes.**

20 Q. The jury has seen evidence of that.

21 **A. That's what that article says, yes.**

22 Q. And you're telling me that you're not just

23 toggling between application windows on one screen with

24 this Amiga. You say you're doing something different,

25 right?

1 **A. I'm saying that according to the Court's**
2 **definition of workspace, those windows have display**
3 **objects inside and I can adjust the position and**
4 **location of them. It meets the definition of a**
5 **workspace.**

6 MR. HILL: Are you running Windows on that
7 system that we're hooking these things up to?

8 THE TECHNICIAN: Yes, sir.

9 MR. HILL: Will you put just your desktop
10 on the screen?

11 Q. (By Mr. Hill) Now, this is -- this is a
12 Windows desktop, isn't it?

13 **A. It looks like it is.**

14 Q. And that is a -- that is a web browser. It
15 looks like it's open?

16 **A. Is that internet -- no, that's Firefox. Yes,**
17 **that's the Firefox web browser.**

18 Q. Web browser open?

19 **A. Yes.**

20 MR. HILL: Christi, if you will now open a
21 word processor or -- just another application, another
22 program.

23 Q. (By Mr. Hill) So there we've got Microsoft
24 Word, right?

25 **A. Right.**

1 Q. And if I maximize both of those application
2 windows -- those are application windows, aren't they?

3 **A. Well, they're more than that according -- now,**
4 **first, of course, this is not technology from 1985.**

5 Q. I'm not claiming it is.

6 **A. But according to the Court's claim**
7 **construction, each of those has display objects inside**
8 **each of those as a workspace.**

9 Q. So are you telling this jury that Microsoft
10 Windows -- this looks like Vista, also would be covered
11 by these patents?

12 **A. I'm telling you that those are workspaces with**
13 **display objects. Now, the patents cover more than that.**
14 **They cover shared display objects that you can**
15 **manipulate each workspace -- start your work in one**
16 **workspace, continue on to another. And, of course, my**
17 **job was not to analyze any technology from 2010. My job**
18 **was to analyze technology before 1985. This Windows**
19 **Vista did not exist then.**

20 Q. Well, let me -- let me -- I'm not sure you're
21 getting my point. My point is this: If all the
22 witnesses in this courtroom have agreed that Microsoft
23 Windows does not practice this invention, okay --

24 **A. Okay.**

25 Q. -- and the programs you have are doing nothing

1 more than Microsoft Windows, they -- reverse of the coin
2 is they don't invalidate the patents?

3 **A. Wait a minute. I didn't study Microsoft**
4 **Windows. I made no claims for Microsoft Windows. It**
5 **was not my task to study Microsoft Windows. Microsoft**
6 **Windows did not exist in 1985.**

7 Q. And I'm not claiming it does. Here's the whole
8 reason I brought it up.

9 MR. HILL: Will you switch back and forth
10 between these application windows using the task bar?

11 Q. (By Mr. Hill) See that?

12 **A. Yes.**

13 Q. What she's doing? She's switching between
14 application windows, isn't she?

15 **A. She's switching between workspaces by the**
16 **Court's definition.**

17 Q. Okay. So by the Court's definition, you think
18 those are both workspaces?

19 **A. Yes.**

20 Q. So we have a workspace switcher in Microsoft
21 Windows contrary to what every witness that has come in
22 this courtroom has said?

23 **A. First, I don't know what the witnesses said,**
24 **but I'm talking about -- I'm not saying that those meet**
25 **all the elements of the patent claims. I'm saying those**

1 **are two workspaces, and we're switching between them.**

2 Q. And that's my point. You have read the claims
3 in this patent in such a manner that they cover things
4 that every other witness that came in here agreed they
5 don't, haven't you?

6 **A. No, that's -- you have given me no evidence**
7 **that the other witnesses contradicted my opinion.**

8 Q. You've read display object and workspace, as
9 you said earlier, as potentially being the same thing?

10 **A. No, that's not what I said.**

11 Q. Did you not say they could in some
12 circumstances be the same?

13 **A. I said in some circumstances -- let's see, let**
14 **me get this right. In some circumstances, a display**
15 **object can be a workspace.**

16 Q. And now then we're going to close these windows
17 one at a time?

18 **A. Okay.**

19 Q. I tell you what, before we do, let's open a
20 third. Let's keep it fair. Let's open a third
21 application window.

22 MR. HILL: Whatever you want. A
23 calculator, that's great.

24 Q. (By Mr. Hill) All right. There's our third
25 application window.

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1 **A. Okay.**
 2 Q. And now then I'm going to shut the web browser.
 3 I'm going to shut the word processor. And what am I
 4 left with?
 5 **A. You're left with a calculator.**
 6 Q. I'm left with a calculator on a workspace, just
 7 like is shown on the screen of this Amiga right now;
 8 isn't that right?
 9 **A. That's right.**
 10 Q. Now, Dr. Wilson, the prior art that you
 11 testified about in this courtroom, these three
 12 references, those weren't the only three pieces of prior
 13 art that you identified in your report that you claimed
 14 originally invalidated -- anticipated our patents?
 15 **A. Correct.**
 16 Q. I want to show you a complete copy of your
 17 report with the exhibits.
 18 MR. HILL: Your Honor, may I approach?
 19 THE COURT: You may.
 20 Q. (By Mr. Hill) I just want you to identify this
 21 for me.
 22 **A. Okay.**
 23 Q. Is this your report and the exhibits?
 24 **A. Well, let's see, there's 101 pages of the**
 25 **overview report, and then there are appendices.**

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1 THE COURT: Mr. Hill, would you step down
 2 here?
 3 MR. HILL: Oh, I'm sorry, Your Honor, I
 4 sure will.
 5 THE COURT: Just right there.
 6 **A. Appendices for the patents, and then there are**
 7 **appendices for the patent claims, as you say, a number**
 8 **of the prior art technologies. It looks likes my**
 9 **report. I haven't read every page.**
 10 Q. (By Mr. Hill) I sure wouldn't ask you to take
 11 that on.
 12 Now, one of the references in your
 13 report -- and let me -- let me ask first. This is --
 14 that's -- that's a chunk of paper right there.
 15 What are you getting paid by the hour in
 16 this case?
 17 **A. As we discussed, \$275 per hour.**
 18 Q. \$275 per hour?
 19 **A. Yes.**
 20 Q. I've got in your report you're being paid \$420
 21 an hour?
 22 **A. No --**
 23 Q. No?
 24 **A. -- that's not what the report says.**
 25 Q. Okay. Well, let's --

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1 **A. Read it very carefully.**
 2 Q. All right. I'll make sure -- I may be -- I
 3 wouldn't want to misread it. I'm going to put it on the
 4 document camera, if I can.
 5 **A. Sounds good.**
 6 **What it says is Silicon Valley Expert**
 7 **Witness Group, not my employer, but just an agency that**
 8 **I work with, gets paid \$420 per hour, but they only give**
 9 **me 275. They keep the rest for their services.**
 10 Q. So what is Red Hat and Novell paying per hour
 11 for your time?
 12 **A. They are presumably paying \$420 an hour.**
 13 **Unfortunately, I don't get it all.**
 14 Q. Can you tell me what Silicon Valley Expert
 15 Witness Group is?
 16 **A. It's an organization that works with attorneys**
 17 **to provide expert witness references. As I say, I'm not**
 18 **an employee of it. It acts like an agent for you.**
 19 Q. It's an expert witness marketing service?
 20 **A. Maybe you call it that, sure.**
 21 Q. If a lawyer for a lawsuit wants to find
 22 somebody to testify to something, they call them up and
 23 they send them an expert?
 24 **A. They -- they would call them up and propose an**
 25 **expert's CV, and then they interview experts to decide**

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1 **whether they're the right people.**
 2 Q. And is that the same expert witness service
 3 that Mr. Gray also got retained through in this case?
 4 **A. I don't know. It may be, but I haven't talked**
 5 **to him about how he got in this case.**
 6 Q. Well, let's take a look at his report. When we
 7 look at his report -- when we look at the -- his
 8 curriculum vitae -- it's there on the very top.
 9 **A. Okay.**
 10 Q. Is that the same expert witness service?
 11 **A. It looks like it is, yes.**
 12 Q. So Silicon Valley Expert Witness Service was
 13 getting -- what does it say, 360, 365 an hour for
 14 several hundred hours for his time and they're getting
 15 420 an hour for however much time we're fixing to talk
 16 about that you've spent on this report?
 17 **A. I don't actually know what they get in**
 18 **Mr. Gray's service. I only know what they get in mine.**
 19 Q. You didn't hear his testimony earlier?
 20 **A. I heard him say what he got paid. I didn't**
 21 **hear him discuss Silicon Valley Expert Witness Group.**
 22 Q. He said he got paid 360 -- I think it was 65?
 23 **A. Yeah, okay.**
 24 Q. So they would have gotten paid something more
 25 than that?

1 **A. I guess. I wasn't part of that contract.**
 2 Q. Presumably because you get to keep 275 of your
 3 420, right?
 4 **A. Right.**
 5 Q. How many hours have you recorded working on
 6 this case to date?
 7 **A. I have no idea. I send in a monthly invoice,**
 8 **and I've been working on this case on and off I know**
 9 **since last summer at least, but I -- I haven't kept**
 10 **track of the hours other than hours per month.**
 11 Q. Well, you're billing by the hour, aren't you?
 12 **A. Yeah, I keep track. Every month I send in an**
 13 **invoice. I've never totaled it.**
 14 Q. And -- well, let's talk about it then.
 15 Let's -- let's -- what are the estimates? What are some
 16 of the busy months, what was the hour total?
 17 **A. I don't remember. I remember some months when**
 18 **I essentially did no work on it which is when I got some**
 19 **of my iPhone apps written, but I don't remember the**
 20 **busiest month, other than I'm pretty sure this month**
 21 **will be the busiest month I've had.**
 22 Q. Well, how many hours do you think you'll bill
 23 this month?
 24 **A. Well, I've been working 14 hours a day on**
 25 **common days lately, but I, again, haven't looked at the**

1 **total hours. I just know that I'm tired at the end of**
 2 **the day.**
 3 Q. Okay. Well, let's -- let's think about that.
 4 14 hours a day. How many days have you been in town?
 5 **A. I left last -- we came here Friday, I think.**
 6 **So it's been about -- this must be the seventh day I**
 7 **guess.**
 8 Q. Gosh, that's a hundred hours at least right
 9 there?
 10 **A. A good guess, yes.**
 11 Q. All right. And then before that -- that's just
 12 this week?
 13 **A. That's this week.**
 14 Q. You've been working on this case for how long?
 15 **A. Well, I remember talking to one of the -- one**
 16 **of the attorneys last June about the case, so I know I**
 17 **was on it then. I don't remember when I started.**
 18 Q. And you have no -- you can't give me any help,
 19 any ballpark estimate of how many hours you think you've
 20 billed in this case?
 21 **A. I don't have any idea whatsoever.**
 22 Q. Is it 500?
 23 **A. I don't know. I just -- I didn't add that up.**
 24 THE COURT: Let's move on, Mr. Hill.
 25 Q. (By Mr. Hill) Can you tell me what percentage

1 of your total income for this year you'll make off this
 2 lawsuit?
 3 **A. Well, obviously I can make a wild estimate.**
 4 **For this year off this lawsuit?**
 5 Q. Uh-huh.
 6 **A. I'm guessing \$70,000 say. I don't know. A**
 7 **wild guess. I shouldn't speculate when I don't have the**
 8 **numbers, but if I had to guess, I'll guess that.**
 9 Q. Well, let's get on to one of these other prior
 10 art systems that you originally said, based on your
 11 reading of this claim language, invalidated our patents?
 12 **A. Okay.**
 13 Q. I want to talk to you about the flight
 14 simulator.
 15 **A. The flight simulator, okay.**
 16 Q. Do you remember that?
 17 **A. Microsoft flight simulator?**
 18 Q. Yes, sir.
 19 **A. A very popular program.**
 20 Q. Let me find it in your expert report here.
 21 Okay. These flight simulator programs -- let's put it
 22 on the document camera.
 23 All right. Do you see that screen shot at
 24 the bottom?
 25 **A. Yes, I do.**

1 Q. That's a page out of your report?
 2 **A. Yes, it is.**
 3 Q. And if we look at the appendix to your
 4 report -- I believe it's Appendix E, if you'll bear with
 5 me. It's a big report. I apologize for having to
 6 shuffle through this paper.
 7 This one will show it well enough. That's
 8 a screen shot from the flight simulator, correct?
 9 **A. Yeah, that's -- I'm sorry. I swallowed wrong.**
 10 **That's from the early -- one of the early PC versions,**
 11 **yes.**
 12 Q. And you said in your expert report that you
 13 signed and submitted in this case that that flight
 14 simulator invalidated our patents, didn't you?
 15 **A. Yes, I did.**
 16 Q. You said that that single piece of prior art
 17 met each and every claim limitation; isn't that right?
 18 **A. Yes, I did.**
 19 Q. And you said it because you can change the
 20 view, you can look out from the plane or you can switch
 21 to a view where you're looking out the back of the plane
 22 or another view where it's a tower view; isn't that
 23 right?
 24 **A. Well, specifically -- I'm sorry.**
 25 Q. Take your time.

1 **A. Specifically I said that it has a work --**
 2 **workspaces and multiple display objects. There are**
 3 **tools on the screen you can use to switch workspaces,**
 4 **and in some cases you'll see the same display objects in**
 5 **different workspaces even though there will be a**
 6 **different view of them from a different perspective.**

7 **You can see, for example, the airplane**
 8 **that you're simulating flying from different views. You**
 9 **can see the control tower from different views. I'm not**
 10 **saying that it --**

11 Q. You said that --

12 **A. I'm saying that it -- it -- according to the**
 13 **broad elements of the claim that the Plaintiffs are**
 14 **asserting, it meets the elements of the claim.**

15 Q. So you have read these claims broadly enough
 16 that a flight simulator of this sort you say would
 17 invalidate the claims; is that right?

18 **A. Yes, the claims were written that broadly.**

19 Q. You didn't come into court today and testify to
 20 that though, did you?

21 **A. No, I didn't.**

22 Q. One last thing. You understand the
 23 significance of the Court's claim construction opinion,
 24 don't you?

25 **A. Yes.**

1 Q. It's the Court's job to decide the
 2 interpretation of the claims in the patent, right?

3 **A. It's the Court's job to define those terms.**

4 Q. Define the terms?

5 **A. It's the experts' job partially to decide what**
 6 **the -- what to infer from the claims themselves and how**
 7 **to interpret them.**

8 Q. But when we talk of claim construction, just
 9 for clarity so the jury knows what we're talking about,
 10 we're talking about the definitions that the Court has
 11 given that we all have to follow?

12 **A. Correct.**

13 Q. Same definitions that you heard Dr. Zimmerman
 14 talk about he applied as the Court had construed,
 15 correct?

16 **A. Well, I actually believe Dr. Zimmerman --**

17 Q. Did you hear my question? My question was the
 18 same definitions --

19 **A. The answer is no.**

20 Q. -- that he sat on that witness stand and said
 21 he had read and applied?

22 **A. He did not use them in some cases.**

23 MR. HILL: Thank you, Your Honor.

24 THE COURT: Thank you, Mr. Hill.

25 Let's take just a five-minute break here.

1 Give everyone a chance to stretch their legs before we
 2 finish up today.

3 (Recess.)

4 (Jury in.)

5 THE COURT: Be seated.

6 Mr. Lyon?

7 MR. LYON: Thank you, Your Honor.

8 Q. (By Mr. Lyon) Dr. Wilson, I just have a few
 9 questions, and I'll be done.

10 Now, would you agree with me that the
 11 definitions of box and item aren't the same, correct?

12 **A. Box and item?**

13 Q. Yeah, the word box and the word item, they have
 14 different definitions?

15 **A. They do.**

16 Q. And -- but a box is an item, isn't it?

17 **A. It can be, yes.**

18 Q. And a box could contain an item, couldn't it?

19 **A. It can, yes.**

20 MR. LYON: Now, let's look a little bit at
 21 the words again. Can we get the claim -- Court's claim
 22 construction up? Just highlight the same words that Mr.
 23 Hill was highlighting about display object and
 24 workspace, if possible.

25 THE COURT: Take it and show it to

1 Mr. Hill, too.

2 Q. (By Mr. Lyon) If you'll just answer the
 3 question.

4 **A. Sure. Okay. I think there was a question.**
 5 **The answer is, is there a definition of application from**
 6 **the Court? And the answer is no, there is not.**

7 Q. So, now, looking at those two terms, we all
 8 agree, I think, that a window is a display object,
 9 correct?

10 **A. Yes.**

11 Q. Now, windows and an icon is a display object,
 12 correct?

13 **A. Yes.**

14 Q. So you can have a window that's full of a bunch
 15 of different icons; is that right?

16 **A. You can.**

17 Q. And that would be a window that's containing a
 18 whole bunch of display objects?

19 **A. It is.**

20 Q. And if we look at the definition of work
 21 supplies, display system entity that includes a
 22 collection of display objects together with spatial
 23 display -- display relations between them, that would
 24 fit a window, wouldn't it?

25 **A. It certainly could.**

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1 Q. A window full of icons?

2 **A. If you had a window full of icons, it would fit**

3 **it.**

4 Q. And a window with a display object could also

5 be a workspace, right?

6 **A. Yes.**

7 MR. LYON: If we could look at your slide,

8 and I think -- I'm sorry, Jason, I'll try to read this,

9 but I think it's 40, Slide 40, the application slide.

10 Q. (By Mr. Lyon) So how is it -- again, just to

11 emphasize, why is it that you believe that this is a

12 workspace?

13 **A. Well, I've outlined or circled simple display**

14 **objects, which one display feature such as the Apple**

15 **symbol on the Apple menu, or a set of features, such as**

16 **the window on the lower left that contains a number of**

17 **different icons describing line widths for when you're**

18 **drawing lines, those are display features. Some of them**

19 **are single display features, some of them are sets of**

20 **display features that are coherent in the sense they**

21 **stick together.**

22 **The window is a collection of display**

23 **objects. Well, there is a large collection, and I've**

24 **only circled a few of them that are display objects.**

25 **The switcher symbol on the right-hand end of the menu**

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1 **bar is another display object, for example. It's all**

2 **part of that same workspace.**

3 Q. But as Mr. Hill has said, we have to follow the

4 Court's definitions of these terms, right?

5 **A. We do.**

6 Q. And so if we find those definitions and you

7 find that each of the claim terms are met based on those

8 definitions, that results in anticipation, correct?

9 **A. Yes.**

10 MR. LYON: No further questions.

11 THE COURT: Thank you.

12 Mr. Hill?

13 MR. HILL: Thank you, Your Honor.

14 RE-CROSS-EXAMINATION

15 BY MR. HILL:

16 Q. Dr. Wilson, I just want to make sure I have one

17 thing straight. You say -- or let me -- let me -- let

18 me back up.

19 Dr. Gray says that the current products

20 made by these defendants can't, and we heard in opening

21 statements, can't do what's described in these patent

22 claims. But you say these computers from 25 years ago

23 can?

24 **A. I don't know anything about the current**

25 **products. That wasn't part of what I analyzed. All I**

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1 **can tell you is what I told you about these products**

2 **from 25 years ago.**

3 Q. But were you --

4 **A. Yes, they do meet the patent claims.**

5 Q. Were you here for opening statements?

6 **A. I was.**

7 Q. And did you hear Mr. Krevitt tell the jury not

8 only did the products not infringe the patents because

9 they didn't perform the functionality, they were

10 incapable? So the position of the defendants in this

11 case is that their modern, new product cannot perform

12 the functions described in our patents, but these

13 25-year-old dinosaurs can?

14 **A. I'm not speaking for the position of the**

15 **defendant. I'm speaking for my opinions regarding these**

16 **25-year-old products that would have hurt feelings if**

17 **you called them dinosaurs.**

18 Q. Well, you understand that that conundrum is the

19 position that the Defendants in this lawsuit have taken,

20 don't you?

21 **A. I understand what my opinions are regarding**

22 **prior art. That was my only task.**

23 MR. HILL: Thank you.

24 MR. LYON: No further questions.

25 THE COURT: You may step down.

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1 THE WITNESS: Thank you.

2 MR. REITER: Your Honor, Defendants will

3 call its damages expert next, Dr. Putnam.

4 THE COURT: All right, good.

5 THE CLERK: Good afternoon. Please raise

6 your right hand.

7 (Witness sworn)

8 MR. REITER: Thank you, Your Honor.

9 JONATHAN D. PUTMAN, DEFENDANTS' WITNESS, SWORN

10 DIRECT EXAMINATION

11 BY MR. REITER:

12 Q. State your name?

13 **A. Yes, my name is Jonathan, middle initial D,**

14 **Putnam.**

15 Q. And why are you here, Dr. Putnam?

16 **A. I'm here to speak about the estimation of**

17 **damages in the event that the jury finds the Plaintiffs'**

18 **patents valid and infringed.**

19 Q. Okay. I want to make something clear right

20 from the get-go. Do you believe that the patents are

21 infringed? Do you know if the patents are infringed?

22 **A. No, I have no opinion about that.**

23 Q. And by you testifying today, are you indicating

24 in any way that the Defendants think that the patents

25 are infringed?

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1 **A. No, I understand that they contend that the**
 2 **patents are not infringed, but for my purposes, I have**
 3 **to assume the patents are infringed so I can compute the**
 4 **damages.**
 5 Q. And that has something to do with I think
 6 something we're going to talk about later, hypothetical
 7 negotiation; is that right?
 8 **A. Yes, that's right.**
 9 Q. Okay. Well, before we get into all of that, I
 10 want to talk about your qualifications, who you are and
 11 where you come from. So tell us a little bit about your
 12 -- yourself and your experience in this area.
 13 **A. Well, I was -- went to Yale University. I**
 14 **received a bachelor's degree in economics. I worked for**
 15 **the Yale faculty for several years and then enrolled in**
 16 **graduate school. I received a master's degree in**
 17 **economics in 1985 and then came to Yale Law School and**
 18 **Columbia Law School, and finally finished my Ph.D. in**
 19 **economics in 1986.**
 20 Q. A lot of school.
 21 **A. My parents thought so, too.**
 22 Q. What did you do after you got your Ph.D.?
 23 **A. I joined Charles River Associates, and I also**
 24 **received a grant from the National Science Foundation to**
 25 **use some of my graduate research to value the patent**

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1 **portfolios of firms.**
 2 Q. What is Charles River Associates?
 3 **A. Charles River Associates is a management and**
 4 **litigation consulting firm. They're headquartered in**
 5 **Boston, Massachusetts.**
 6 THE COURT: Mr. Reiter, let me speak to
 7 two people here.
 8 (Bench conference.)
 9 THE COURT: As you know, I have real
 10 concerns of the damages area.
 11 MR. REITER: Yes, sir.
 12 THE COURT: And I want this to go as long
 13 as we can here given we've got our jury. Before we hit
 14 any numbers, I need you to kind of give a sign to say
 15 we're going to hit some numbers here, and I may want to
 16 excuse the jury at that time --
 17 MR. REITER: Okay.
 18 THE COURT: -- and spend a little time
 19 with -- with Dr. Putnam.
 20 MR. REITER: Okay.
 21 THE COURT: But let's go as long as we can
 22 before we hit that, all right?
 23 MR. REITER: Okay.
 24 THE COURT: The preliminaries and
 25 then -- okay. Thank you.

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1 (Bench conference concluded.)
 2 Q. (By Mr. Reiter) We were, what is Charles
 3 Rivers & Associates, I think.
 4 **A. Yes. That's the firm that I work for. I'm**
 5 **vice-president there. We do management consulting,**
 6 **litigation support, and they're headquartered in Boston.**
 7 Q. Okay. What do you mean by litigation support?
 8 **A. Well, for example, cases like this, when you**
 9 **need to estimate the value of a piece of intellectual**
 10 **property, that's my particular specialty. We provide**
 11 **help to -- we're economists, and we provide help to**
 12 **lawyers whenever they need to value something,**
 13 **intellectual property or some other claim that a**
 14 **plaintiff has against a defendant.**
 15 Q. And have you valued intellectual property in
 16 the past?
 17 **A. Yes, many times.**
 18 Q. How many times?
 19 **A. Over 50 times, actually, in court.**
 20 Q. In court?
 21 **A. Well, I'm sorry. In litigation and in court**
 22 **about -- between 12 and 15 times.**
 23 Q. And what is that process -- or how did you get
 24 into -- I'm sorry, how did you get into doing this
 25 litigation support and damages analysis?

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1 **A. I was once asked by a lawyer when I was in**
 2 **graduate school at a party if I could work on his case.**
 3 **He knew I was working on patent research. I wrote my**
 4 **dissertation on the valuation of patent rights,**
 5 **actually, and he said, oh, I've got a case you might be**
 6 **interested in. Could you help me? And so he hired me**
 7 **that way, and the rest is history. I've done it about**
 8 **50 times since then.**
 9 Q. Okay. Have you ever done any cases here in
 10 East Texas?
 11 **A. Yes, I actually testified in Tyler before Judge**
 12 **Davis, and I had, I think, around five other cases that**
 13 **have been in either Marshall or Tyler that didn't**
 14 **actually make it into the courtroom.**
 15 Q. Have you ever testified on computer-related
 16 technology?
 17 **A. Yes, several times, several times.**
 18 Q. Anything related to software or open-source
 19 software?
 20 **A. Yes. Actually, there's a large case about the**
 21 **control of the copyrights related to the Linux operating**
 22 **system. It was entitled SCO versus IBM, and I**
 23 **represented IBM in that case.**
 24 Q. Who are some of your other clients you've --
 25 you worked for?

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1 **A. I've worked for Apple. You've heard about**
 2 **them. I've worked for Hewlett-Packard. They were also**
 3 **mentioned in this case. In non-computer cases, I've**
 4 **worked for Gore. They make Gore-Tex, like jackets and**
 5 **boots and things like that. Eli Lilly, it's a big**
 6 **pharmaceutical company, companies like that.**
 7 Q. And this is all in valuating intellectual
 8 property; is that right?
 9 **A. Yes, that's correct.**
 10 Q. Judges always agree with your opinion?
 11 **A. Not always, no.**
 12 Q. Any specific instances?
 13 **A. Well, a couple times. I worked on a copyright**
 14 **case once where the lawyers actually wanted to offer a**
 15 **particular theory of defense for why they hadn't done**
 16 **what they said they did. And I authored a report for**
 17 **them. And then the judge said that the lawyers couldn't**
 18 **offer that theory. And so, therefore, they didn't need**
 19 **my report. So the judge said I wasn't needed.**
 20 And I guess there's one other case where
 21 the judge disagreed with some of my findings and said
 22 so, and then the defendants appealed the case, and she
 23 was reversed by the Court of Appeals, and her findings
 24 were vacated. So, you know, it happens.
 25 Q. Yeah. So have you taught -- I think I might

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1 have asked you that before. Have you taught in this
 2 area?
 3 **A. I have taught, actually, yes.**
 4 Q. And where have you taught?
 5 **A. I taught at Yale while I was a graduate**
 6 **student. I taught the economics of technology while I**
 7 **was that. I taught at Columbia University in the School**
 8 **of Law. And I taught at Vassar College in Poughkeepsie,**
 9 **New York. I taught industrial organization and finance**
 10 **at Boston University Graduate School of Management. I**
 11 **taught the management of intellectual property. And I**
 12 **hold a chair at the University of Toronto and taught**
 13 **intellectual property law and property law there.**
 14 Q. Have you published any papers or books?
 15 **A. Yes.**
 16 Q. What were those about?
 17 **A. I entered a book recently called intellectual**
 18 **property rights and innovation in a knowledge-based**
 19 **economy. I recently authored a chapter in a book on**
 20 **globalization called International Intellectual Property**
 21 **Rights, Primer. And if you look, there's something**
 22 **called the New Palgrave Dictionary of Economics. If you**
 23 **look up -- it's like an encyclopedia for all fields of**
 24 **economics. If you look up patent valuation and how to**
 25 **do that, then I authored the entry on patent valuation.**

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1 Q. For your work here, is your firm being
 2 compensated?
 3 **A. Yes.**
 4 Q. How much is that?
 5 **A. At the rate of \$675 an hour.**
 6 Q. And about how much time have you put into this
 7 case?
 8 **A. About 250 hours.**
 9 MR. REITER: Your Honor, I'd like to offer
 10 Dr. Putnam as an expert.
 11 MR. VICKREY: No objection, Your Honor.
 12 Q. (By Mr. Reiter) I'm going to ask you a
 13 question about intellectual property generally. What
 14 exactly is intellectual property, at least as far as an
 15 economist and what you do? What does that cover?
 16 **A. Intellectual property is a series of rights,**
 17 **patents, copyrights, trademarks by which a person seeks**
 18 **to prevent other people from using something that**
 19 **belongs to them, but it's not a tangible thing like a**
 20 **cup or laser pointer. It's a -- it's an invention, or**
 21 **in the case of copyright, it's a novel. So you can't**
 22 **copy my invention if I have a patent on it. You can't**
 23 **copy my novel if I've got a copyright on it. You can't**
 24 **copy my brand if I've got a trademark on my brand name.**
 25 **So it's things like that that you can't touch but you**

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1 **still have legal rights on.**
 2 Q. So patents are a type of intellectual property?
 3 **A. That's right.**
 4 Q. Okay. Now, let's talk about your work in this
 5 case. What were you asked to do?
 6 **A. I was asked to do two things. I was asked to**
 7 **value the Plaintiffs' patents, and I was asked to**
 8 **respond to the expert report and opinions that were**
 9 **expressed by Mr. Gemini that the jury heard earlier this**
 10 **week in court.**
 11 Q. Okay. Did you review any materials in forming
 12 your opinion?
 13 **A. Sure.**
 14 MR. REITER: Can we put up DX801, please?
 15 Q. (By Mr. Reiter) What is this?
 16 **A. Well, these are -- it doesn't look very**
 17 **informative, but in litigation, all the documents in the**
 18 **case have their own special number on them, and so this**
 19 **is a list of some of the documents according to their**
 20 **number that I reviewed.**
 21 It's things like financial reports and
 22 marketing documents and descriptions of the products and
 23 their features and the feature at issue in this case, in
 24 particular. And so you have to list everything that you
 25 studied, and that's, I guess, the first page of a long

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1 list.

2 Q. And then I think you -- you said you made some

3 assumptions in doing your opinion. What were those

4 assumptions again?

5 A. Yeah, there's -- there's basically two types of

6 assumptions. The first assumption is I have to assume

7 that you folks, the jury find that the patents are valid

8 and infringed. So that's the first assumption. You've

9 got to find the patent valid, and you've got to find it

10 infringed. If you do that, if you do that, then -- then

11 my opinion becomes relevant because we need to decide

12 how much damages are to be paid.

13 And then the second set of assumption is

14 that the parties, had they sat down at the time that

15 infringement began, would have been willing to negotiate

16 a deal with each other, and the question then is what is

17 the deal they would have reached?

18 Q. Okay. But, again, you're not saying today that

19 the patents are, in fact, infringed or, in fact, valid,

20 are you?

21 A. No. It's sort of like appraising a car. I can

22 tell you what your car is worth even if you're not

23 selling it to me. In the same way, I can tell you what

24 a patent is worth even if it's not valid and infringed.

25 Q. Do you have any understanding about what the

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1 patents are about?

2 A. Generally speaking as an economist would, sure.

3 Q. Okay. And what's your understanding?

4 A. They -- they cover a user interface the way you

5 look at a -- you deal with a computer, a graphical user

6 interface, that has common display objects in multiple

7 workspaces. Those are the features as I understand

8 them.

9 Q. Now --

10 A. I'm sorry, I just want to say, and I -- I'll

11 refer to that as an enhanced workspace switching

12 feature. Okay. They didn't invent workspace switching,

13 but it's an enhancement of workspace switching. So I'll

14 call it an enhanced workspace switching feature.

15 Q. Now, for those of us that who don't have a

16 Ph.D. in economics, how does one compute royalty or

17 damages?

18 A. Well, I think the jury has heard the basics of

19 this. There's a case from about -- it's now, like, 40

20 years ago called Georgia-Pacific. In that case, the

21 judge said, here are the types of things you should look

22 at if you're going to value a patent if you want to do a

23 reasonable royalty, compute a reasonable royalty.

24 And so ever since then, going forward,

25 experts have had to go back and say, well, how does the

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1 evidence stack up against the Georgia-Pacific factors?

2 And so I've listed them here. I've grouped them a

3 little bit because it's hard to keep track of all 15.

4 And it's really mostly common sense.

5 If you were asking yourself what's a

6 patent worth, you'd say, what did people pay for it in

7 licenses. That makes sense. How much money does the

8 company make from selling their product or its profits,

9 in other words? That's the second category.

10 The third category is what does the

11 invention do for you? What are its advantages, and how

12 often is it used? And then the fourth category is

13 what's the relationship between the parties? How do

14 they bargain with each other. And what's the deal they

15 would arrive at if they were sitting across the

16 bargaining table from each other?

17 Q. And how does your analysis compare with

18 Mr. Gemini's analysis?

19 A. Well, I certainly disagree with Mr. Gemini. We

20 -- we agree that the measure of damages, the way you

21 ought to compute this is there ought to be a reasonable

22 royalty. Nobody lost any profits in this case. There

23 ought to be a reasonable royalty. But we disagree about

24 three fundamental conclusions regarding how to calculate

25 that royalty.

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1 Q. And what are those conclusions?

2 A. Well, the first is Mr. Gemini says that the

3 structure of the license the parties would have agreed

4 to is a running royalty. That's a pay-as-you-go

5 royalty. That's -- I've never been to the State Fair

6 either, but I understand that's how they compute rides

7 at the State Fair. You pay for each ride as you go.

8 And I just think that's the wrong royalty

9 structure based on all the evidence. It doesn't support

10 a running royalty. The evidence doesn't support that.

11 It supports a lump sum. You should pay for this all-in,

12 upfront, one at a time. The --

13 Q. What about -- what about rate or base? I

14 talked -- did you hear me talk to -- were you here when

15 I -- I talked to Mr. Gemini?

16 A. I certainly was, yes.

17 Q. Okay. And when Mr. Vickrey spoke with

18 Mr. Gemini, as well?

19 A. That's right, yes.

20 Q. And we talked about royalty rate and base; do

21 you recall that?

22 A. Yes.

23 Q. Do you agree with the way he did that?

24 A. No. I think that -- that both Mr. Gemini's

25 royalty base, which is the number of units that the

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1 **Plaintiffs have accused of infringement, and the royalty**
 2 **rate, which is the amount that should be paid per unit,**
 3 **are both highly inflated, and so, therefore, the number**
 4 **that he comes up with is way too big.**
 5 **I don't think there ought to be a royalty**
 6 **rate or a royalty base because I don't think it ought to**
 7 **be pay-as-you-go. But if you were going to structure**
 8 **that agreement as pay-as-you-go, then you shouldn't**
 9 **count that many units and you shouldn't have that high a**
 10 **royalty rate.**
 11 Q. Okay. Now, I think we were going to talk about
 12 each of those this afternoon with the jury, the
 13 structure of the license, rates, the bases, and then
 14 also Mr. Gemini; is that right?
 15 **A. Yes, that's right.**
 16 Q. Okay. So let's start with the license
 17 structure. You said there were two types, lump sum and
 18 running royalty; is that right?
 19 **A. Yes, that's right.**
 20 Q. Okay. And did you prepare a slide for
 21 determining whether a running royalty would be
 22 applicable?
 23 **A. Yes. The first thing that -- if you had a**
 24 **mother or you ever were a mother, you probably heard**
 25 **your mother say, it's not just what you say, it's how**

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1 **you say it, okay?**
 2 **And so in this case, we're talking about**
 3 **money. You can sort of adapt that expression to the**
 4 **structure of the contract, whether it should be a lump**
 5 **sum or a running royalty. In this case, the question**
 6 **is, it's not just what you pay, it's how you pay it.**
 7 **And so the first thing you need to decide is how would**
 8 **the parties have agreed to pay the money that the**
 9 **Defendants owe the Plaintiffs if the Plaintiffs are**
 10 **right?**
 11 **And so I've put together a nine-part test**
 12 **here to see if there -- if you would structure the**
 13 **agreement as a running royalty or if you would structure**
 14 **it as a lump sum.**
 15 Q. Okay. Well, let's take each step as we go.
 16 **A. Sure.**
 17 Q. And try and quickly go through them.
 18 If you have liability, does each unit
 19 infringe, what -- what does that mean?
 20 MR. VICKREY: Your Honor, I -- I object to
 21 this. How could he be opining on whether certain units
 22 infringe or don't infringe?
 23 THE COURT: Let's see what Mr. Putnam
 24 says, and then I'll keep in mind your objection.
 25 Go ahead.

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1 MR. VICKREY: Thank you, Your Honor.
 2 Q. (By Mr. Reiter) All right. How does this part
 3 of the analysis in determining whether a running royalty
 4 should apply, the -- the issue of infringement, how does
 5 that come up?
 6 **A. Well, the -- the question is -- and maybe it**
 7 **could be worded more artfully. Obviously, I'm assuming**
 8 **that the products infringe, but the question is, does**
 9 **each of those particular units infringe? And so one of**
 10 **the things -- my understanding is that an infringing**
 11 **unit must have is a display, for example. If there**
 12 **isn't a display, then there can't be infringement. I**
 13 **don't think anybody can test that.**
 14 **And so the question is, if you were**
 15 **counting the units, would you be able to verify that**
 16 **each of those units have all of the elements that are**
 17 **necessary in order to infringe? And the answer to that**
 18 **question is, no. We've already heard the technical**
 19 **experts, who actually do know something about this,**
 20 **discuss those instances where a computer running the**
 21 **accused operating systems doesn't have a display and so,**
 22 **therefore, can't be infringing, like in those server**
 23 **farms.**
 24 Q. So here, can the Defendants determine their
 25 percentage of what has or doesn't have, for example, a

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1 display?
 2 **A. Well, again, that's part of the problem is that**
 3 **they sell operating systems, they don't sell entire**
 4 **units. And so when somebody downloads their software**
 5 **from the internet, the Defendants don't know whether**
 6 **that software is being used on a computer that has a**
 7 **display or doesn't have a display, so they can't**
 8 **determine this.**
 9 Q. Okay. Does that go to observability?
 10 **A. Yes. In other words, you can't -- you**
 11 **can't -- if you can't -- if the Defendants can't tell**
 12 **whether a unit is infringing or not, then they can't**
 13 **count it. So -- and that obviously means you can't**
 14 **count it, then you can't tell the Plaintiffs how many of**
 15 **those units they should get a royalty on.**
 16 Q. What about administrative burden, what does
 17 that mean?
 18 **A. Well, this just means -- we've heard a lot**
 19 **about this in the -- in court, talking about whether Red**
 20 **Hat and Novell actually count the units for their**
 21 **businesses, okay?**
 22 **When you sell cars, you count the number**
 23 **of cars you sell. General Motors knows how many cars it**
 24 **sells, but Red Hat and Novell don't know how many copies**
 25 **of the software they've sold. So, again, it's**

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1 impossible to determine the royalty that ought to be
 2 paid under those circumstances.
 3 Q. And how is that different from contract
 4 administration?
 5 A. Well, for the first three reasons, you ask
 6 yourself if the parties are sitting down across the
 7 table and they know that they can't count the number of
 8 units that are actually infringing, then it's going to
 9 be impossible to agree on a contract between them that
 10 actually allows the number of units to get paid for
 11 because they're going to disagree about the -- about
 12 what actually constitutes the -- in effect, the number
 13 of rides that people are going on.
 14 Q. And the next thing, I think, is revenue. Does
 15 each unit generate revenue?
 16 A. Well, as we've heard, the -- the Defendants
 17 give away their software, and so the answer to that
 18 question is no. Again, unlike a car where if you sell
 19 another car, you make more dollars, if you give away
 20 another piece of software, you don't make any more
 21 money.
 22 Q. So --
 23 A. If you don't make any more money, then you
 24 wouldn't pay a royalty because you're not making any
 25 more money.

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1 Q. So are you saying that because the software is
 2 free, the Defendants shouldn't pay any money?
 3 A. No, no, absolutely not. The Defendants should
 4 pay the fair market value for the intellectual property
 5 for these patents. There's no question the Defendants
 6 should pay the fair market value if they infringe and
 7 the patents are valid.
 8 But the question -- but -- but they
 9 wouldn't pay that fair market value on a pay-as-you-go
 10 basis. They would pay for it all upfront.
 11 Q. What about the cost or the profit of the units,
 12 how does that part of the analysis affect --
 13 A. Well, if you can imagine that sometimes you
 14 have an invention that lowers the cost of production.
 15 Maybe you use less gasoline in your tractor or something
 16 like that, and so it's -- it's cheaper to produce -- to
 17 produce, and so, therefore, the patentee wants a part of
 18 that savings that he's provided.
 19 In this case, the accused feature doesn't
 20 lower the cost of production because software doesn't
 21 cost anything to produce, and so you aren't making any
 22 more money; you aren't saving any costs, and so,
 23 therefore, you aren't making any more profit every time
 24 somebody down -- downloads this.
 25 Q. You've got upstream market, downstream market.

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1 What does that mean?
 2 A. Well, the -- now, the other thing you can look
 3 at is the competition, what happens in the -- in the
 4 marketplace. And so the answer is -- the -- the thing
 5 to ask yourself is does anybody actually pay for this
 6 technology on a per-unit basis right now?
 7 The answer is no. None of the Defendants'
 8 competitors pay for this technology per unit, and so --
 9 and, in turn, downstream, when they sell their operating
 10 systems, they don't charge their customers per unit, and
 11 so since there's not money changing hands on a per-unit
 12 basis, you wouldn't structure a royalty on a per-unit
 13 basis to try to compensate for each time the invention
 14 gets used.
 15 Q. Is Microsoft a competitor of the Defendants?
 16 A. Yes.
 17 Q. Do they have this feature?
 18 A. Not in Windows itself, no.
 19 Q. Do they make it available?
 20 A. They make it available for free, yes, that's
 21 right. You can download it as an option. But, again,
 22 you don't pay for it.
 23 Q. Have you tried to download it?
 24 A. I actually did it myself. Yes, it took
 25 about -- I went to the Microsoft website. It's in a

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1 section called Power Toys. So if you want workspace
 2 switching, you go to Power Toys, and you get your Power
 3 Toy. It takes about two minutes, and you can install it
 4 on your computer, and so now I have a -- I still don't
 5 use it, but I -- I did it. I've got my own Power Toy.
 6 Q. So does any operating system seller that
 7 competes with the Defendants pay for these patents on a
 8 per-unit basis?
 9 A. Not that I'm aware of, no.
 10 Q. What about any operating system seller that
 11 does not compete with the Defendants, do they pay on a
 12 per-unit basis?
 13 A. Well, for example, Apple, we -- we see that
 14 Apple is not a major competitor of the Defendants, but
 15 we also have seen that they license this technology, but
 16 they pay for it upfront. They don't pay for it on a
 17 pay-as-you-go basis. They just got all their obligation
 18 out of the way upfront, pay fair market value when they
 19 were done.
 20 Q. So what does all of this tell you about
 21 per-unit royalty or running royalty in your analysis?
 22 A. Well, you see the conclusion right there, you
 23 get nine nos, and the answer then is should the
 24 agreement be structured as a per-unit royalty, and the
 25 answer is no, it shouldn't.

1 Q. Okay. Now, do you look at the actual patents,
2 and does that come into play on whether it should be a
3 running royalty or lump sum?

4 **A. Sure.**

5 Q. Okay. And how does that affect your -- your
6 analysis? Prior licenses affect it?

7 **A. Yes. Well, obviously, one of the things you're**
8 **concerned about is how the -- what people do in the real**
9 **world, and I can be an economist and hypothesize, but**
10 **what I really care about is what people do in the real**
11 **world.**

12 **And so in the real world, people have**
13 **actually sat down and negotiated these agreements**
14 **already, and I want to see how they've done that.**

15 Q. Okay. And there are four licenses --

16 **A. That's right.**

17 Q. -- associated with these specific patents; is
18 that right?

19 **A. Yes, that's right.**

20 Q. And if I get them right, there was
21 Hewlett-Packard; is that right?

22 **A. Yes, yes.**

23 Q. And Central Point?

24 **A. Yes.**

25 Q. And Silicon Graphics, SGI?

1 **A. That's right.**

2 Q. And Apple?

3 **A. That's right.**

4 Q. So let's start with the SGI license. How was
5 that structured?

6 **A. That's a lump-sum payment. You pay once, and**
7 **for \$95,000, Silicon Graphics obtained the right to sell**
8 **as many copies of an operating system that contained the**
9 **enhanced workspace feature as they wanted to.**

10 Q. Do you recall Mr. Geminis' testimony where he
11 said that Silicon Graphics was willing to take the
12 product out?

13 **A. Yes.**

14 Q. Does that affect your analysis at all of what
15 he talked about?

16 **A. Well, yes, they were willing to take it out,**
17 **but what that means is that they were willing -- they**
18 **were willing to pay \$95,000 to put it back in.**

19 **So in the grand scheme of things, this**
20 **feature couldn't make that much difference one way or**
21 **the other because they only got \$95,000 worth of benefit**
22 **by adding it back into their system. So that's, you**
23 **know, an indication of the fair market value of the**
24 **technology, at least with Silicon Graphics.**

25 Q. And how about Apple, how does that come into

1 play?

2 **A. Well, it's the same thing. They -- they**
3 **structured as a lump-sum payment, in this case for \$1.25**
4 **million, covering a period of about seven years in**
5 **total, and granting worldwide rights, again, to sell as**
6 **many units as they wanted that incorporated the enhanced**
7 **workspace feature.**

8 Q. Did you recall hearing Mr. Gemini say that he
9 wasn't aware of a way that the Apple license could go
10 back in time --

11 **A. Yes.**

12 Q. -- and last for seven years?

13 **A. Yes.**

14 Q. Do you agree with that?

15 **A. No, I think that's incorrect.**

16 Q. Why is that?

17 **A. Well, when -- when the Plaintiffs, IPI, sued**
18 **Apple -- you can actually go back and look at the**
19 **complaint. They complained about the infringement of**
20 **one particular claim of one of their patents. That**
21 **claim is called a method claim. It's a way of doing the**
22 **enhanced workspace switching feature.**

23 **With a method claim, my understanding of**
24 **the law is -- and certainly the Judge will instruct you**
25 **on that -- but my understanding of the law is that you**

1 **are able to go back six years prior to the date you**
2 **filed the lawsuit for the purposes of obtaining damages.**

3 **And under those circumstances, the -- the**
4 **scope of the license, the time period covered would be**
5 **six years prior to the filing of the license. And then**
6 **the license went through the end of the patents, which**
7 **was another year and a half. You put it together, it's**
8 **about a seven-and-a-half-year period that Apple was**
9 **covered for selling any operating system that had the**
10 **enhanced feature.**

11 Q. Now, you also mentioned the Central Point and
12 the HP agreements. How did those come into play?

13 **A. Well, these are -- these are different**
14 **licenses. It's also important to look at them, but they**
15 **are not two operating systems.**

16 **So the first thing to notice is that the**
17 **first two licenses we discussed, SGI and Apple, are for**
18 **operating systems. That's like what the Defendants**
19 **sell. The Central Point and the HP agreements are for**
20 **add-ons to the operating systems. They're options. So**
21 **we know when a person wants this particular set of**
22 **features, like if they want to rearrange their desktop**
23 **or become more efficient, then they buy an add-on to the**
24 **operating system.**

25 **That's not what the Defendants sell. So**

1 **it's important to look at those licenses. I put a**
 2 **little bit less weight on them, but -- but we have them**
 3 **as data points.**

4 Q. Okay. Now there was something about HP selling
 5 its license or its business to another company. Do you
 6 recall that?

7 A. Yes.

8 Q. What happened there?

9 A. **So HP decided to get out of the software**
 10 **business, and as part of sort of the cleaning house,**
 11 **there was this question of whether these patents should**
 12 **be licensed or not. HP was selling their whole**
 13 **business. This is the whole business.**

14 Let's just play. I'm selling it to you,
 15 and as part of selling it to you, I need to transfer to
 16 you everything, and they will give you clean title so
 17 that you can go on -- so that the new company, Borland,
 18 can begin selling the products that HP was previously
 19 selling. Okay. It's called Dashboard.

20 So on the day that they licensed -- the
 21 day they sold Dashboard off to Borland, they also
 22 entered into this license agreement, and that would mean
 23 that Borland could also -- could also sell Dashboard and
 24 not have to worry about any claims of infringement.

25 So the license covered all of HP's sales

1 **backwards in time, and then going forward into the**
 2 **future, the next \$10 million of sales that Borland**
 3 **made, and if Borland made more than \$10 million of**
 4 **sales, then there was a different provision.**

5 Q. Okay. Did you do anything to determine how
 6 much HP sold prior to giving the license to Borland?

7 A. **Yes. Based on what I could find out -- of**
 8 **course, this is now going back to 1995, and it's a**
 9 **little hard to keep track of this, but based on what I**
 10 **can find out, Borland said that HP has sold about**
 11 **125,000 units of Dashboard before the sale of the**
 12 **business that Borland was buying, and at -- at HP's list**
 13 **price, which is about \$99, that works out to about \$12.4**
 14 **million in sales in the past that this license took care**
 15 **of that became licensed as a result.**

16 Q. And it had some kind of future component?

17 A. **Yes. And so as I said, not only were the past**
 18 **\$12 million licensed, but the next \$10 million going**
 19 **forward were licensed. So a total -- the total license**
 20 **covered about \$22.4 million worth of sales.**

21 Q. For \$110,000?

22 A. **Yes. And what HP paid for that was 110,000,**
 23 **that's right.**

24 Q. Okay. Now, do you have any evidence or did you
 25 see any evidence as to whether or not that \$10 million

1 amount was ever reached?

2 A. **No, I'm not aware of anything.**

3 Q. Did Mr. Gemini identify any evidence as to
 4 whether or not that \$10 million sum had been reached?

5 A. **No, Mr. Gemini said the same thing, he wasn't**
 6 **aware of any reason to believe that they ever actually**
 7 **exhausted that 10 million dollar cap.**

8 Q. Okay. Now, can you substitute or -- or convert
 9 a lump-sum license into a running royalty license? Is
 10 that possible?

11 A. **No. That's one of the things you shouldn't do.**
 12 **In my expert report that I prepared in this case, I**
 13 **cited a text by a fellow named Jean Tirole who is a**
 14 **professor at MIT, an economist. And he explained that**
 15 **as a matter of theory, running royalty licenses and lump**
 16 **sum licenses are not economically equivalent. And the**
 17 **reason is, you know, it doesn't take a Ph.D. in**
 18 **economics to understand this.**

19 **If it turns out that you're raising the**
 20 **cost of producing every unit, then that means that**
 21 **people are going to charge a higher price. When you**
 22 **raise their costs, they raise their prices in general.**
 23 **If you don't raise the cost of every single unit with a**
 24 **lump-sum license, then people don't have to raise their**
 25 **prices.**

1 **And so getting back to what your mother**
 2 **would have told you, it's not just what you pay, it's**
 3 **how you pay it. The structure of the license is**
 4 **actually really important.**

5 THE COURT: Mr. Reiter, this is a good
 6 time for us to -- because I need a little time to talk
 7 to my jury.

8 MR. REITER: Okay.

9 THE COURT: Can I speak to Counsel here
 10 for a second?

11 (Bench conference.)

12 THE COURT: Now, I'm going to tell the
 13 jury what we discussed earlier, which is that I may need
 14 them on Saturday. I'm not going to tell them that Judge
 15 Everingham will be substituting for me in that event,
 16 but I'm going to go through the schedule.

17 What I'm going to tell them is that we
 18 expect to finish with the last witness, Mr. Putnam,
 19 early tomorrow morning.

20 MR. REITER: Yes.

21 THE COURT: That we expect to start very
 22 quickly thereafter the closing arguments, and that if
 23 they don't get the case for --

24 MR. REITER: Sur-rebuttal case.

25 THE COURT: Oh, that's an interesting

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1 question.

2 MR. HILL: We're not going to --

3 MR. REITER: You're not putting rebuttal

4 on.

5 MR. HILL: No.

6 THE COURT: Okay. So then I would say I

7 expect they will be deliberating soon, maybe before

8 lunch but probably after lunch, and -- and these things

9 aren't hard and fast, but that's what I'm going to give

10 them an estimate on.

11 MR. HILL: If it helps with the

12 scheduling, if we push into the lunch hour to finish

13 closing, I'm sure the parties would be willing to split

14 the cost to have lunch brought in for them if they

15 wanted to start work.

16 THE COURT: Doesn't the Court take that

17 anyway?

18 MR. HILL: I don't...

19 MR. REITER: We'll split it.

20 THE COURT: They'll be happy to hear that.

21 All right. Let's -- let me talk to them.

22 MR. REITER: Okay.

23 MR. HILL: Thank you.

24 (Bench conference concluded.)

25 MR. REITER: May Dr. Putnam step down?

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1 THE COURT: Step down -- step down for a

2 minute, but don't go anywhere, please.

3 Ladies and Gentlemen, you need some

4 guidance for your scheduling. So I thought after

5 discussions with the parties, I would tell you what the

6 rest of the trial looks like and our potential schedule.

7 We expect Dr. Putnam is the last witness

8 in the Plaintiffs' case, and thus we expect him to be

9 the last witness in the trial. Shortly after that, the

10 Court would offer you its instructions on the law that

11 you will apply in the case, and shortly after that, the

12 parties would each have a period of time where they will

13 give you their argument on how the case should be

14 decided.

15 We expect that entire procedure will

16 finish sometime perhaps in the morning but more likely

17 in the early afternoon tomorrow. At that point, you

18 will be released to deliberate the case.

19 I will give you instructions on that

20 deliberation when you begin it, but you will have time

21 to decide each of the issues the parties will present to

22 you. You can deliberate as long as you wish, keeping

23 the Court in mind as to how your schedule is proceeding.

24 You could deliberate even into the evening

25 Friday, but assuming you do not finish Friday, the Court

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1 would inform you that you are to return Saturday morning

2 at 9:00 and continue your deliberation. And you would

3 deliberate until you finish. You could finish --

4 whenever you finish is when you finish.

5 This Court will not tell you when you

6 finish; you will tell the Court when you finish. And so

7 there is a potential that you would need to return on

8 Saturday, and I want you to be aware of that so you can

9 clear your schedule to do that.

10 The parties have made a generous offer,

11 both of them, and they've said that in the event that

12 you wish to deliberate over the lunch hour, they will

13 bring lunch in for you, and, therefore, you could gain a

14 little bit more time on Friday for your deliberations.

15 We would go potentially until the trial

16 phase is over, breaking for lunch probably a little

17 later than we usually do, but you'd have lunch then

18 waiting for you that the parties have jointly brought to

19 you, and you could begin your deliberations over lunch.

20 That's the way the schedule sounds. You

21 deliberate until you finish. If you don't finish Friday

22 night, you would come back Saturday and you would

23 deliberate until you finish. Okay.

24 JUROR: Then what happens after that?

25 When we come back in, is there anything else?

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1 THE COURT: No. Once you have reached

2 your verdict, the Court will accept your verdict. The

3 parties will receive your verdict with you present, and

4 then you will be released, and that will be the end of

5 your service, and we will all thank you very sincerely

6 and vociferously.

7 I think that gives you the instructions

8 you need to plan for the rest -- for the rest of this

9 trial.

10 And with that, we've reached our closing

11 time for today. So we'll see you tomorrow morning at

12 8:30.

13 (Jury out.)

14 THE COURT: All right. The Plaintiffs

15 have used 9 hours, 54 minutes -- essentially 10 hours.

16 The Defendants have used 11 hours, 37 minutes -- 11 and

17 a half.

18 We have several things -- sit down.

19 Several things this evening. I propose we take a

20 five-minute break, and then I'd like to spend a little

21 time with Dr. Putnam. He ought to hang around. It will

22 be interesting. We're going to talk about a horse and

23 the House of Lords. And now he's starting to worry.

24 He's taught at Columbia, but he doesn't know about a

25 horse and the House of Lords.

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1 But -- then we're going to deal with jury
2 instructions. My clerks have looked over your efforts
3 for which I'm very grateful. You have tried lots of
4 cases. You got guys closer than anybody I've had to
5 work with, and I'm saying that as a pretty sincere
6 compliment because I've worked with some pretty fine
7 attorneys.

8 And we'll deal with the Inventorship issue
9 and the damages on which there's still a split in the
10 parties. I've taken a look at that already myself, and
11 I think I'll have some language that we will all be
12 happy to embrace.

13 And then we also have our admission of
14 documents to deal with. Give me five minutes, and we'll
15 start with the documents. Then we'll do Dr. Putnam, and
16 then we'll do jury instructions.

17 Anything else?

18 MR. REITER: Your Honor, just one question
19 on the jury instructions. Is this going to be the
20 formal charge conference where we make our objections?

21 THE COURT: Yes -- well, no. No, this
22 will be where we come up with the -- with the document
23 I'm going to read. And then I think you should make
24 those objections -- I'm going to send our reporter home,
25 and we'll make those reject -- those objections when

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1 she's present and make sure that they're all handled for
2 the record.

3 MR. REITER: Thank you, Your Honor.

4 THE COURT: Any questions of what we're
5 doing for this evening?

6 MR. VICKREY: No. Your Honor, although
7 the parties have yet to come up with a structure for
8 closings --

9 THE COURT: By the way, I'm a little
10 offended. You didn't offer to bring me any lunch.

11 MR. GASEY: It was implied, Your Honor.

12 THE COURT: Actually it's not. I don't
13 think you can, but I can be offended anyway.

14 Excuse me, Mr. Vickrey.

15 MR. VICKREY: Yeah, in light of the time
16 pressures, we were just going to suggest an hour for
17 each side and we -- we go 45 minutes with 15 in
18 rebuttal.

19 THE COURT: How does that sound to you?

20 MR. KREVITT: Give me two minutes. That's
21 the first I'm hearing of the proposal, Your Honor. If I
22 can have a few minutes to talk to my colleagues, and
23 then we'll -- by the time you get back from your
24 break --

25 THE COURT: By the way, that's --

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1 Mr. Vickrey, that's sounding very much like what I would
2 propose.

3 MR. KREVITT: That gives me some sense of
4 our position, Your Honor.

5 THE COURT: But you can -- you can discuss
6 it with your colleagues if you'd like. I'll be back in
7 five minutes.

8 (Recess.)

9 THE COURT: I think we're ready to put the
10 documents for today in the record.

11 Ms. Dickman, are you first? We always
12 start with you first.

13 MR. KREVITT: Your Honor, I'm sorry to
14 interrupt. Just following up on the closing, I would
15 accept Your Honor's suggestion with one request which is
16 possibly some cushion on my time so if I can --
17 definitely not more than an hour and 15. I'll do my
18 best efforts to complete it by an hour, I assure you of
19 that. But there's so much to cover. If I could have
20 just an hour and 15 to be sure, I can -- I can assure
21 the Court I will not go over that.

22 MR. GASEY: As long as we get a little bit
23 of bump up in our time.

24 THE COURT: Yeah, sure.

25 MR. KREVITT: I'll do my best.

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1 THE COURT: I like the hour target.

2 MR. KREVITT: Yeah, I will use that as a
3 target.

4 THE COURT: And I just won't get too
5 excited if you go a few minutes over.

6 MR. KREVITT: Yeah, it certainly won't be
7 more than 15 minutes, Your Honor.

8 THE COURT: 15 is more than a few. Work
9 on it.

10 MR. KREVITT: Okay. I've got to go start.
11 I'll see you later.

12 THE COURT: That will be fine.

13 Ms. Dickman.

14 MS. DICKMAN: The Plaintiffs would like to
15 offer the following exhibits to be admitted: PX1, PX2,
16 PX3, PX6, PX91, PX05, PX285, PX290, PX308, PX309, PX310,
17 PX314, PX315.

18 MR. STEWART: We have an objection with
19 that one.

20 THE COURT: 315?

21 MS. DICKMAN: PX326 and DX819.

22 THE COURT: Okay, Mr. Stewart. Let's take
23 care of the 315, and then we'll get your entries.

24 MR. KREVITT: We would object, Your Honor.
25 They didn't -- there's no foundation.

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<p>1 THE COURT: What's the 315? 2 MR. KREVITT: That was the video of the -- 3 MR. GASEY: The video off the better 4 desktop. 5 MS. DICKMAN: The woman -- 6 MR. GASEY: -- woman dragging the -- the 7 window from one workspace. 8 THE COURT: Oh, yes, yes, yes. 9 MR. KREVITT: There was just no foundation 10 at all as to this witness's knowledge about it. 11 THE COURT: I'm trying to recall. 12 MR. GASEY: Your Honor, Mr. Rex admitted 13 there's 1500 hours of video made by Novell. That's -- 14 that's the video compilation. 15 MR. KREVITT: There wasn't evidence of the 16 second part. There was certainly evidence that there 17 had been many, many hours of video. There was no 18 evidence at all as to where that video came from or what 19 it was. They just recrossed, went up and showed a 20 video. 21 MS. DICKMAN: It was downloaded directly 22 from the website. 23 MR. KREVITT: I take your word for it, but 24 that's just the point. No one said what we just heard. 25 THE COURT: Thank you, Mr. Krevitt. I'm</p>	<p>1 THE COURT: 455, uh-huh. 2 MR. STEWART: DX535. 3 MS. DICKMAN: We're objecting to that. 4 MR. STEWART: DX577. 5 MS. DICKMAN: We're objecting to that. 6 THE COURT: 577? 7 MR. GASEY: Yes, Your Honor. 8 MR. STEWART: DX601. 9 MS. DICKMAN: We're objecting to that. 10 THE COURT: Okay. 11 MR. STEWART: DX679. 12 MS. DICKMAN: We're objecting to that. 13 MR. STEWART: DX714. 14 MS. DICKMAN: We're objecting to that. 15 MR. STEWART: DX721. 16 MS. DICKMAN: We're objecting to that. 17 MR. STEWART: DX727, DX817, DX818. 18 MS. DICKMAN: We're objecting to that. 19 MR. STEWART: I'm sorry. I missed DX801. 20 THE COURT: Yeah, that's okay. 21 MS. DICKMAN: Fine with us. 22 MR. STEWART: Okay. And you objected to 23 818 -- 24 MS. DICKMAN: Yes. 25 MR. STEWART: -- is that right? But 817</p>
Page 203	Page 205
<p>1 going to overrule the objection and allow it in on the 2 basis that there was testimony that there was available 3 this information about studies that were done. There 4 was some discussion of the studies, and this was 5 presented as an example of the studies. 6 MR. GASEY: Thank you, Your Honor. 7 THE COURT: So I'm going to allow that in. 8 This is one of those instances where my -- my own 9 peculiar style of doing this later could cause them 10 prejudice is all -- is also -- they would have certainly 11 supplied all of that on the spot if I hadn't delayed the 12 presentation of documents until the end of trial, which 13 Ms. Dickman and Mr. Stewart have caught the idea of it 14 very quickly. I think it generally works quite well to 15 do it this way and moves things along. 16 Mr. Stewart, you were going to offer 17 some -- 18 MR. STEWART: The Defendants offer DX98, 19 DX342. 20 MS. DICKMAN: We're objecting to that. 21 THE COURT: DX -- what is it? 22 MR. GASEY: 342, Your Honor. 23 THE COURT: We'll come back. Go ahead. 24 MR. STEWART: DX455. 25 MS. DICKMAN: We're objecting to that.</p>	<p>1 was fine? 2 MS. DICKMAN: Correct. 3 MR. STEWART: We have PX091, that's 4 Plaintiff's Exhibit. Then we have Plaintiff's Exhibit 5 290, Plaintiff's Exhibit 308, Plaintiff's Exhibit 309, 6 Plaintiff's Exhibit 310, Plaintiff's Exhibit 314, and 7 that's it. 8 THE COURT: Okay. So we have one, two, 9 three, four, five, six, seven, eight, nine to deal with. 10 Three or two? 11 MR. GASEY: This -- I mean, frankly, Your 12 Honor, these can largely be dealt with as a group. The 13 is largely the condition of the authenticity question, 14 things such as the diskettes that we talked with Your 15 Honor tonight -- last night as part of the demonstration 16 we had. 17 THE COURT: So this is the disks -- is 18 there anything other than what we saw with the prior art 19 demonstrations? 20 MS. DICKMAN: There is Mr. Gray's 21 documents considered, were not offered. 22 MR. GASEY: That's 818. That's the only 23 other one that -- 24 THE COURT: Let's deal with these all 25 first.</p>

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1 MR. GASEY: Right.
 2 THE COURT: Then if you want to clarify
 3 your objection for the record.
 4 MR. GASEY: Our objection for the record,
 5 Your Honor, is there's a lack of indicia of reliability
 6 as to these exhibits. Dr. Wilson testified at least as
 7 to one of the pieces of software, I believe it was the
 8 Apple software, that it was assembled from components
 9 and was -- there is no chain of custody to go ahead and
 10 verify the reliability of the underlying information.
 11 Obviously, we're not -- we're not disputing that, you
 12 know, when a screen shot shows 1985, it shows 1985, but
 13 we have no way of verifying that it is, in fact, the
 14 original item was in commerce as of that date.
 15 THE COURT: Dr. Wilson, I questioned him a
 16 few times on this. And he -- one of the ways that he
 17 made it clear that there was some reliability was the
 18 copyrights and the dates that he saw. He also said
 19 another reason was that they were all compatible and
 20 they were runnable on the same system -- the same machine
 21 at the same time --
 22 MR. LYON: And also just that he also
 23 testified extensively about the various characteristics
 24 of the program relative in the manuals and things you
 25 can do to verify that they operate in the way you would

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1 expect.
 2 THE COURT: And then of course, there's
 3 Dr. Wilson himself who -- I don't want to defend him,
 4 but I think he was around.
 5 MR. LYON: And the Plaintiffs had the
 6 opportunity to cross-examine.
 7 THE COURT: He struck me as someone who
 8 recognized a fraud pretty quickly himself.
 9 MR. GASEY: Yeah, the other -- the other
 10 one that deviates from this group somewhat and I think
 11 Your Honor heard from that was the --
 12 THE COURT: Let's finish this ruling.
 13 MR. GASEY: I'm sorry.
 14 THE COURT: I'm going to allow those. We
 15 did do a pretty careful inquiry as to authenticity. We
 16 looked at them last night, as well as during the Court
 17 proceeding here, and I'm confident that they were
 18 reliable.
 19 MR. LYON: Thank you.
 20 MR. GASEY: I understand the floppy disk,
 21 Your Honor.
 22 The one that I guess I want to make sure I
 23 point out a different -- a related but different
 24 objection to is DX601, the experience designing the
 25 Waterloo port user interface. That's one that he

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1 constructed. It's not -- it isn't an actual software
 2 source. It was like his interpretation was of what the
 3 Waterloo-Chan article told him. It's a combination of
 4 other references.
 5 THE COURT: Yes, I think he made that
 6 clear. I think he made it clear that he had constructed
 7 it based on his reading of the article and he said
 8 that -- remember he had Chan's handwritten or graphic
 9 presentations and then he had his senior professors --
 10 Malcolm, wasn't it?
 11 MR. LYON: Yes, sir.
 12 THE COURT: -- Malcolm's screen shots.
 13 And I think he put them up and compared them side by
 14 side. And --
 15 MR. GASEY: If it's admitted as a
 16 demonstrative, Your Honor, as long as it's clear that
 17 it's that, it's not admitted for the substance of the
 18 matter that it intends to prove, that's fine. We
 19 just -- there's a difference between creating a
 20 demonstrative in 2009 weaving together two articles
 21 versus, you know, trying to -- trying to imply to the
 22 jury that it's an actual prior art reference unto
 23 itself.
 24 MR. LYON: That was not the intention.
 25 The intention was to demonstrate what the Chan system

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1 had.
 2 THE COURT: It was a demonstrative.
 3 That's what I perceived, as well, and for that purpose,
 4 it's admitted. And I think that gets us to 818; am I
 5 correct?
 6 MS. DICKMAN: Yes, Your Honor.
 7 MR. GASEY: That was not offered.
 8 MS. DICKMAN: I reviewed the transcript.
 9 MR. LYON: If you've got it --
 10 THE COURT: What is 818?
 11 MS. DICKMAN: It's like the beginning of
 12 the end.
 13 THE COURT: What's 818?
 14 MS. DICKMAN: It is Mr. Gray's documents
 15 reviewed. The documents he considered for his report.
 16 MR. GASEY: His CV was published, but
 17 not -- not the exhibits considered.
 18 THE COURT: I'm not recalling this. Can
 19 some -- can you help me, Mr. Lyon?
 20 MR. LYON: Maybe.
 21 MR. KREVITT: Our technical expert on
 22 infringement --
 23 THE COURT: I remember --
 24 MR. KREVITT: -- and the question
 25 evidently is whether from his report the list of

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1 materials he considered in connection with preparing his
 2 report should be admitted into evidence.
 3 MR. LYON: I don't actually have a big
 4 concern about it, Your Honor. I thought I brought it
 5 in, but apparently I don't see it in the transcript so I
 6 can't say I did.
 7 THE COURT: Okay. Then 818 is not
 8 admitted for the record, but everything else is?
 9 MR. LYON: Your Honor, what would you like
 10 me to do with these disks we're going to substitute in
 11 for the DVD?
 12 MR. GASEY: We agreed we had no problem.
 13 We maintained our authenticity objection, but we had no
 14 problem swapping them in for DVDs that were originally
 15 submitted.
 16 THE COURT: Okay. Fine.
 17 MR. LYON: So should we just put those in
 18 envelopes?
 19 THE COURT: Yes, I think that's the best
 20 way to do it, some way that --
 21 MR. HILL: Do we want to wait to do that
 22 until after we have a verdict? That way if the jury
 23 wants to see something, they'll get that.
 24 MR. LYON: That's fine. We can leave them
 25 here with the --

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1 MR. GIBBONS: Put them in your --
 2 MS. DICKMAN: And we would need to pull
 3 all our materials out anyway, so...
 4 MR. KREVITT: We can put all those in the
 5 jury room, can't we? So they can play with them and
 6 break them.
 7 THE COURT: They've got to be somewhere
 8 with the case.
 9 Thank you.
 10 Have we finished with documents?
 11 MR. GASEY: I think we have.
 12 THE COURT: Thank you, Ms. Dickman and
 13 Mr. Stewart. Once again my compliments; you grasped
 14 very quickly how I envisioned it happening. Thank you.
 15 Now, we're -- I think I want to speak to
 16 Dr. Putnam.
 17 Please be seated.
 18 MR. REITER: Your Honor, where do you want
 19 me?
 20 THE COURT: Just sit down and let me talk
 21 to Dr. Putnam for a minute.
 22 MR. REITER: Okay.
 23 THE COURT: We'll do it the way we did it
 24 with Mr. Gemini, which was -- I think it's pretty open.
 25 If you feel you can assist me or Dr. Putnam at any time,

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1 you can -- either party can stand up and just help me
 2 and help Dr. Putnam.
 3 MR. REITER: Thank you, Your Honor.
 4 THE COURT: Just for starters, at the end,
 5 you said no running royalty and lump-sum payment can be
 6 rendered equivalent. And you told me -- you told my
 7 jury that was an economic principle.
 8 I haven't studied economics as long as you
 9 have, but I'm under the impression you can do time value
 10 of money and vice versa, and you can almost equate
 11 anything, if you use the right principles and formulas.
 12 So why can't you do this?
 13 THE WITNESS: It's an excellent question,
 14 Your Honor.
 15 THE COURT: You were careful in how you
 16 said it. You said, in theory, you cannot render one in
 17 the terms of the other. But I'm not sure I agree with
 18 that theory. Tell me why.
 19 THE WITNESS: Well, it's an excellent
 20 question. I mean it in a very precise sense. I wasn't
 21 trying to be careful or cagey. I was trying to be
 22 precise.
 23 And what I mean is this: A license has,
 24 in general, one of two effects: Either it increases the
 25 licensee's cost of production or it doesn't. And by

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1 cost of production, I mean marginal cost of production.
 2 So in other words, either a license
 3 increases the cost of producing an additional unit or it
 4 doesn't. And so if it does, then it raises marginal
 5 costs, and basically every Econ 101 textbook will tell
 6 you that when marginal price goes up, then prices adjust
 7 accordingly.
 8 So the fact that two licenses yield the
 9 same revenue in expectation doesn't mean that the
 10 licensee would behave the same way under each of those
 11 two license structures. So, for example --
 12 THE COURT: But -- I mean, you're making
 13 kind of my point, that whether it's a per-unit basis or
 14 a lump sum, it's going to be part of the cost. And I
 15 could figure that into my margin and somehow render a
 16 lump sum in terms of the marginal per-unit cost, or vice
 17 versa, I could tell you the lump-sum value of a per-unit
 18 application, couldn't I?
 19 THE WITNESS: There are two issues I don't
 20 want to confuse, okay? So, first of all, if you're
 21 thinking about --
 22 THE COURT: This is a matter of
 23 mathematics.
 24 THE WITNESS: Yes, I understand.
 25 First of all, let me agree with you and

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1 distinguish two cases.
 2 THE COURT: All right, fine.
 3 THE WITNESS: It's perfectly possible to
 4 take a cash flow that occurs over time to discount that
 5 back to present value and figure out the equivalent
 6 lump-sum payment, okay? So --
 7 THE COURT: There you go. That's what I'm
 8 talking about.
 9 THE WITNESS: And there's no question you
 10 can do that. And those two things are equivalent. So
 11 if I give you the right to a dollar a year forever,
 12 okay, at 10-percent interest, then the question is what
 13 would you pay for that right, and the answer is you
 14 would pay \$10. And so that asset, that lump, that \$10
 15 is the same as a dollar a year forever, if the interest
 16 rate is 10 percent. We don't disagree about that.
 17 THE COURT: So why did you tell the jury,
 18 in theory, you can't do that?
 19 THE WITNESS: Well, because -- because the
 20 right to an asset stream or the right to a cash flow and
 21 the ability to convert a cash flow into a fixed asset is
 22 not the same thing as the operation of a running
 23 royalty, which actually changes the cost structure of a
 24 firm.
 25 So, for example, just to take an everyday

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1 example --
 2 THE COURT: So you're saying that the firm
 3 is going to treat it differently even if the economist
 4 can equate it?
 5 THE WITNESS: Yes, that's right. An
 6 economist can compute -- if you had to report what you
 7 expect on the cost of your royalty to be -- suppose you
 8 sign an agreement and the patent's got ten years of life
 9 left, and for financial purposes, you need to report
 10 that on your balance sheet. I've got this obligation
 11 and here's what I think it's going to cost today.
 12 And so it's going to cost me -- the
 13 present value is a billion dollars over the next ten
 14 years. You can compute that, but it makes a difference
 15 in your behavior whether it's a billion dollars that
 16 you've paid today or whether it's a running royalty that
 17 you're going to pay over time.
 18 If you pay it over time, then you will
 19 build it into your pricing structure. If you pay it as
 20 a lump sum, then you're -- as circumstances change and
 21 as facts change, you can adjust your price differently
 22 when you're burdened by that -- you would adjust your
 23 price differently when you're burdened by that running
 24 royalty.
 25 THE COURT: Why would it be different? As

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1 you say, it's the same amount whether it's the \$10 or \$1
 2 over 10 years, I'm going to adjust my prices on my
 3 products to account for that cost, right?
 4 THE WITNESS: Well, let me give you an
 5 intuitive example. Maybe we can move the ball down the
 6 field a little bit.
 7 THE COURT: Sure.
 8 THE WITNESS: Suppose that you're taking a
 9 cab to the airport, okay, and you can imagine two
 10 license structures, two taxi fare structures, okay? In
 11 one taxi fare structure, you pay a certain amount per
 12 mile, and the other taxi fare structure, you pay a
 13 certain amount upfront, and that's the cost of going to
 14 the airport, okay?
 15 And so depending on which of those
 16 contracts you're operating under, that might affect the
 17 way you approached the trip to the airport.
 18 THE COURT: It might affect the taxicab's
 19 driver's route.
 20 THE WITNESS: And that's --
 21 THE COURT: How often has that happened to
 22 you in New York City?
 23 THE WITNESS: Well, as a matter of fact,
 24 we were discussing a slide trying to explain exactly
 25 that problem. In fact, truthfully, I Googled the

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1 distance from La Guardia to Grand Central Station for
 2 the purposes of trying to illustrate to the jury that
 3 this is a problem that you face in New York.
 4 I don't want to be taken for a ride by a
 5 New York cab driver who decides the best way to get from
 6 La Guardia to Grand Central is via New Jersey, if I
 7 don't know the area.
 8 But if we agree upfront that I'm going to
 9 pay you 50 bucks to take me to Grand Central Station, I
 10 don't care how you get me there, then that's not going
 11 to happen. In that case, the guy has got an incentive
 12 to drive you there directly because he wants to get on
 13 to his next fare.
 14 And that is simply my point, is that the
 15 structure of the agreement influences behavior, both the
 16 buyer's behavior and the seller's behavior. And you
 17 can't say -- since in one case the driver has an
 18 incentive to deceive you, in the other case, he doesn't,
 19 you can't regard those as equivalent contracts.
 20 THE COURT: Why do you think the buyer in
 21 this case -- that's our Defendants -- would want a lump
 22 sum?
 23 THE WITNESS: Well --
 24 THE COURT: If they know their way to
 25 Grand Central Station, they might do better under 50

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1 bucks. It isn't 50 bucks to Grand Central; it's about
 2 30, and so why would they take a 50-buck guarantee that
 3 you don't go via New Jersey, if they know that on the
 4 meter it's going to be about -- about 27, 28?
 5 THE WITNESS: Right. So I think as the
 6 Court actually pointed out in Lucent, if I'm not
 7 mistaken, one of the -- and just to bring it to this
 8 case, but also illustrating with taxis, you're
 9 allocating risks differently under those two contracts.
 10 So, for example, one party or the other
 11 might have private information about traffic conditions,
 12 and so -- and in more complex contracts, you're not
 13 simply looking at the distance to Grand Central, but
 14 you're also looking at time, waiting time.
 15 THE COURT: You are.
 16 THE WITNESS: And so, for example, let's
 17 suppose that I am the buyer and I can get on my iPhone
 18 and see that there's a traffic jam, and so I'm either
 19 going to have to take -- I'm either going to have to go
 20 via the Triborough Bridge or I'm going to spend a long
 21 time sitting in traffic in the Midtown Tunnel.
 22 And so I say to the cab driver, you know,
 23 let's just call it 30 bucks, okay? And so I've got
 24 private information, and so, therefore, we've shared our
 25 risks differently about travel and time than we would if

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1 we were doing it on the meter.
 2 And so -- and the real point, the
 3 fundamentally common point is that those two contracts
 4 will result in different actual payments and different
 5 behavior. And even though in advance you might say, on
 6 average, whether you pay by the meter or whether you pay
 7 upfront, it's about 30 bucks. That's true on average.
 8 In this particular case, it's going to be
 9 either better than average or worse than average, and
 10 depending on the parties' preferences, they may --
 11 THE COURT: So tell me now why --
 12 THE WITNESS: -- enter into a different
 13 contract.
 14 THE COURT: -- they are going to do \$30
 15 when they think they can get there --
 16 THE WITNESS: They're not going to use it
 17 that much.
 18 THE COURT: Their whole case all the way
 19 along is we don't use this thing at all.
 20 THE WITNESS: Yes.
 21 THE COURT: And so why are they going to
 22 pay 30 bucks? Why wouldn't they say let's go per unit?
 23 This is the hypothetical negotiation in advance now.
 24 Why wouldn't they say we don't think this is used much;
 25 let's go per unit, because it's not going to be

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1 downloaded much?
 2 THE WITNESS: Right. Well, the --
 3 THE COURT: Mr. Reiter wants to help us
 4 out.
 5 MR. REITER: I thought I might just try.
 6 Dr. Putnam had a slide with nine factors.
 7 THE COURT: Yeah, I remember those. Those
 8 were good, and I've got them in mind.
 9 MR. REITER: Okay.
 10 THE COURT: So I don't need to see that
 11 again. Do you need to see it?
 12 THE WITNESS: No, no. I wrote it, so I'm
 13 good with it.
 14 But so now we're speaking about this case.
 15 THE COURT: Yes, we are a little bit.
 16 THE WITNESS: So the -- my
 17 understanding -- so, first of all, the answer to, I
 18 think, the question, Your Honor, is that they could do
 19 that. But, in general, it's -- going back to the taxi
 20 example, would you want to get into a taxi if the guy
 21 said, you know, my odometer is broken, and so it's \$2 a
 22 mile. I live in New York. You know, I drive to Grand
 23 Central all the time. I know about how far it is. When
 24 we get there, I'll tell you how far it was.
 25 You would say, no, if we're doing this on

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1 the meter, you'd better have a meter that actually keeps
 2 track of mileage.
 3 And the problem that we face in this case
 4 is that there's no meter, so you don't know how many
 5 units are out there. They don't track that, and you
 6 don't know of the units that are out there how many are
 7 installed on a machine that actually can be configured
 8 to infringe.
 9 So, in effect, you're getting into a taxi
 10 where you can't keep track of mileage and time, and it
 11 doesn't -- the expression has now become, it doesn't
 12 take a Ph.D. in economics to realize that the driver and
 13 the passenger are going to get into a lot of arguments
 14 about how long it took and how far they traveled, if
 15 there's nothing to measure those two contractual terms
 16 with. And that's really the situation that we're facing
 17 here.
 18 MR. REITER: Your Honor?
 19 THE COURT: Go ahead and help me out.
 20 MR. REITER: Well, I don't know if I'm
 21 helping or hurting. This is way above my education
 22 level.
 23 But Dr. Putnam has explained to me about
 24 demand curves as the price goes to zero and that sort of
 25 affects the analysis here, and I thought that I might

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1 invite him to talk about that, because I always blanked
 2 when he talked about it.
 3 THE WITNESS: Should I accept Mr. Reiter's
 4 invitation?
 5 THE COURT: Please. But I'm not smarter
 6 than Mr. Reiter.
 7 MR. KREVITT: Then we're all in trouble.
 8 THE COURT: So you're going to have to --
 9 but I do understand demand.
 10 THE WITNESS: Yeah, okay. So -- and I
 11 heard you actually begging for one.
 12 THE COURT: I do, because I really think
 13 it would bring some discipline to the process.
 14 THE WITNESS: I couldn't agree more. I
 15 prepared two of them for you, and, unfortunately, they
 16 didn't make the director's cut.
 17 THE COURT: I want to see it, because it
 18 will help me with my horse in the House of Lords here in
 19 a minute.
 20 THE WITNESS: All right. So --
 21 THE COURT: Okay. That I understand.
 22 That's elemental.
 23 THE WITNESS: So the reason for putting
 24 this up is just to get to the next slide, actually. So
 25 as the price goes down, the quantity and demand

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1 increase.
 2 THE COURT: I got that.
 3 THE WITNESS: So the next slide is the
 4 important one.
 5 In this particular case, the price of the
 6 product is essentially zero. They give away software
 7 for free. The whole goal of the business model is to
 8 get the software into the hands of as many people as
 9 possible. They call it ubiquity, I guess, is the
 10 marketing term.
 11 And there's lots of reason that don't have
 12 much to do with pricing for this. For example, you want
 13 to create as large a community of developers as
 14 possible, because they're the ones who actually improve
 15 the product. So there's some synergy with your
 16 consumers.
 17 So the point of it is, you want to have a
 18 price of zero. And the question is, what happens if you
 19 increase that zero price to something greater than zero
 20 when the demand curve has a shallow slope, which it
 21 does.
 22 And so if you take the price up from zero
 23 to something above zero, for example, Mr. Gemini's
 24 royalty, even like at 62 cents which he says, you're
 25 going to drastically reduce the number of units from

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1 Point A to Point B. And that violates the whole concept
 2 of the business model, reduces the size of the
 3 community, and imposes all kinds of inefficiencies on
 4 the Defendants' production process, even if it weren't
 5 the case that -- even if it were the case that they can
 6 track the number of units.
 7 So we're assuming we actually know what A
 8 is or B is. We don't know that. But even if we did, it
 9 would mean such a big change in the number of units, it
 10 would be inefficient.
 11 THE COURT: But I have a feeling that
 12 somebody from -- probably Mr. Vickrey is going to jump
 13 up in a minute and say but the price isn't really zero,
 14 because we are --
 15 MR. VICKREY: Your Honor made an excellent
 16 point, but I think ultimately --
 17 THE COURT: You can stay there where
 18 you're comfortable.
 19 MR. VICKREY: We are going to be arguing
 20 about the -- his -- what he believes to be the
 21 appropriate measure, but I don't -- I can't tell you
 22 that this should just be completely excluded.
 23 We have a difference of opinion as to
 24 whether it works, whether he's right, whether Mr. Gemini
 25 is right. I understand what he's saying, but...

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1 THE COURT: I need you to tell me why he
 2 isn't right here.
 3 MR. VICKREY: Well, I've never
 4 seen this before, so I don't understand where
 5 he's coming from with the price.
 6 THE COURT: Well, he is saying that the
 7 price of your -- the price that you are asking for the
 8 claimed invention is zero, because you give it away for
 9 free. That's true, but you generate income by giving it
 10 away for free, and so you will have to come back and
 11 tell me that the price actually isn't zero, because the
 12 price to you is the income you generate from giving it
 13 away for zero.
 14 MR. VICKREY: That's the missing
 15 component. They said that their business model is
 16 making profits by --
 17 THE COURT: How do you deal with the
 18 missing component, what I just said. I'm making
 19 Mr. Vickrey's argument, but they're making money,
 20 because they give it away for free.
 21 Where does that factor into your demand
 22 curve?
 23 THE WITNESS: Well, Your Honor, the -- if
 24 you recall from basic economics, a demand curve reflects
 25 the -- a particular good, one good.

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1 THE COURT: Yes.

2 THE WITNESS: And the problem that we have

3 here is that there are multiple goods.

4 THE COURT: We're trying to find the

5 marginal cost.

6 THE WITNESS: So the marginal cost is zero

7 in this case, and, in general, a marginal cost and price

8 are equal equilibrium.

9 Now, it turns out that -- I mean, the

10 point has to be acknowledged. The absolute price is not

11 zero. It does take time to actually download the

12 software onto your computer. There are -- you incur

13 costs when you download the software, but for practical

14 purpose, we can keep the price at zero.

15 THE COURT: I think this is the time for

16 my horse, because I think it's going to help us.

17 THE WITNESS: Sure.

18 THE COURT: I'm trying to remember who it

19 is. I think it's Lord Diplock handling a patent case,

20 talks about damage theories and says, of course, one

21 theory is restoration. He put them back in the place

22 they would have been.

23 Your argument is if they're giving it away

24 for free, they'll be in the same position anyway. But

25 then he says, no, there's another principle. It's the

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1 principle of the horse. And he explains that if I own a

2 horse and I keep it in the stable, it's a mangy old --

3 I'm embellishing a bit, but it helps. It's a mangy, old

4 horse kept in the stable.

5 Along comes a delivery boy. He takes the

6 horse and uses it, rides the horse around making

7 deliveries. Interestingly, he feeds the horse; he

8 brushes the horse; and he brings the horse back in

9 better condition than it was just sitting in the stable.

10 Now, in fact, I've since profited, because

11 my horse is now in better condition, but Lord Diplock

12 says, no, I'm going to charge you for the rent of that

13 horse. There's going to be a rental value on that

14 horse.

15 I think we're talking reasonable royalty

16 in our American legal terms.

17 THE WITNESS: Yes.

18 THE COURT: So I'm going to charge you a

19 rental on that horse. Now, what I need you to explain

20 to me, because I think it's very relevant to this, is

21 the delivery boy takes the horse for one day or he takes

22 the horse for ten days, how do I calculate the

23 difference in rental value?

24 Remember, I wasn't using the horse anyway,

25 and I'm getting back a better horse than I had. In a

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1 sense, you could say there's no damages. That's pretty

2 close to what Mr. Reiter is saying. It's pretty close

3 to no damages, but we have to charge, assuming the kid

4 took the horse without permission, infringement. We've

5 got to charge him for the horse.

6 How am I going to make that charge?

7 THE WITNESS: I think we have competing

8 people who want to speak. I certainly have an opinion,

9 but I want to make sure that --

10 MR. VICKREY: Well, I want to hear yours

11 first. Then we can hear from them. They're lawyers.

12 THE WITNESS: All right. The first thing

13 I want to make clear, Your Honor, is that the fact the

14 Defendants give software away for free, in my opinion,

15 has absolutely nothing to do with the compensation

16 amount that should be due to the Defendants, okay?

17 The Defendants should receive the fair

18 market value of the use of their horse, regardless of

19 whether the person who took it is an open-source

20 provider or a proprietary software provider.

21 THE COURT: That's a good -- you answered

22 that one, I think, right. Go on.

23 THE WITNESS: And so I don't want that to

24 be an issue.

25 THE COURT: Good.

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1 THE WITNESS: The second question, then,

2 becomes, what's the rental value of the horse?

3 THE COURT: Exactly.

4 THE WITNESS: And the horse in this case

5 is being played by the part of the Plaintiffs' patents.

6 As the Court knows, obviously from Property Law 101, the

7 difference between the horse example and the example in

8 the case of patents is that in the case of intangible

9 property or information, the plaintiff is not

10 necessarily deprived of something when a defendant uses

11 it.

12 And so one of the examples of using

13 real -- one of the problems of using real property

14 examples is that they don't, from an economic

15 perspective, apply to intangible property, because both

16 parties can actually possess the same thing at the same

17 time.

18 THE COURT: But I like the horse because I

19 wasn't using it either, so it's got that component built

20 into it.

21 THE WITNESS: Yes. And so then the

22 question becomes --

23 THE COURT: So you're not depriving me of

24 use; I wasn't using it.

25 THE WITNESS: Yes. And so when you --

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1 then the question -- leaving aside sort of the criminal
 2 issues and the trespass issues and everything like that,
 3 what you come down to is saying, what would the owner of
 4 the horse and the boy bargain for --
 5 THE COURT: There you go.
 6 THE WITNESS: -- in order to -- for the
 7 use of the horse? And one might very well think that
 8 they would bargain for the use of the horse based on the
 9 time period involved. That would be a natural way to
 10 think of the amount of compensation that was due.
 11 And for many pieces of tangible property,
 12 particularly when the variable in question is the amount
 13 of time that it's being used for, you pay for per unit
 14 of time.
 15 In this case obviously, we can all measure
 16 a time and so you pay per unit of something that you can
 17 measure. If for some reason -- let's just suppose, to
 18 alter the example, time were not measurable in this
 19 example, so it was going to be a subject of contract
 20 dispute.
 21 The boy says I took it for a day, and the
 22 man says, no, you took it for ten days, and the boy says
 23 I took it for one day. And you couldn't establish that
 24 fact, and the parties couldn't agree to a contract that
 25 was enforceable because one of the terms is inherently

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1 vague.
 2 And so in this case, all I'm really saying
 3 is -- there's lots of economic reasons for this, but as
 4 a matter of law, my understanding of law, the -- you
 5 wouldn't agree to a contract where you can't agree upon
 6 and define an essential term of the contract, which is
 7 the units that are actually being -- that actually use
 8 the accused feature.
 9 That's an inherently vague term, and so,
 10 therefore, for that reason alone you wouldn't agree to
 11 that.
 12 THE COURT: But when there's an argument
 13 between one day or ten, why wouldn't they compromise at
 14 five or three even or two?
 15 THE WITNESS: Well, that's -- and, Your
 16 Honor, that's actually -- just to bring it back to this
 17 case, I think that's exactly right. There's got to be
 18 some way of saying let's find a reference point that we
 19 can agree to. We don't know -- you say ten, I say one;
 20 we don't know what it is, but let's look at -- and so
 21 Billy --
 22 THE COURT: Rode the horse and didn't pay
 23 for it.
 24 THE WITNESS: You rode the horse, you
 25 know, but now when Tommy rode the horse last week, I

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1 couldn't tell how long he rode either. And, in fact, I
 2 said to him, you know, you can ride as much as you want,
 3 but you've got to pay me \$50. And when Susie rode it
 4 two weeks ago, the circumstances were different. She
 5 had to feed it, blah, blah, blah. I charged her 60, and
 6 she could ride it as long as she wanted.
 7 In fact, every time I've rented out my
 8 horse to people, I haven't charged them by the day. I
 9 haven't charged them by how far they rode the horse or
 10 anything like that. I've charged them a lump sum.
 11 And so now in the instant negotiation,
 12 when we say what should Billy get charged for his use of
 13 the horse when we can't measure how much time he's taken
 14 it, an important set of reference points is all the
 15 other prices that have been charged when the horse has
 16 been rented, and not only the prices that have charged,
 17 but the form of those contracts.
 18 And if we don't observe per-day charges in
 19 those contracts, it's unlikely that Billy and the horse
 20 owner would have agreed to a per-day contract between
 21 them, because nobody can measure days in this example.
 22 THE COURT: How am I to be sure that
 23 you're not going to undervalue -- I haven't heard your
 24 number yet. What's your number going to be, by the way?
 25 We don't have a jury. Just tell me close.

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1 THE WITNESS: The final number is \$172,000
 2 for Red Hat, Your Honor.
 3 THE COURT: One-time shot?
 4 THE WITNESS: Yes.
 5 THE COURT: How do I know that you aren't
 6 undercharging for the horse that your guys rode?
 7 THE WITNESS: Well, it's an excellent
 8 question, and I'm happy to be examined on it thoroughly
 9 both by Mr. Vickrey and by you.
 10 So what I've done is look -- just take
 11 this example -- is to look at what other people have
 12 paid in similar circumstances for the use of the horse
 13 when they couldn't measure the instances of use.
 14 And so we have the Silicon Graphics
 15 license, okay, a lump-sum payment of about \$100,000,
 16 95,000. And they could sell as many copies of the
 17 operating system as they wanted. They struck a deal.
 18 We have the Apple agreement, which is also
 19 an operating system agreement. It's about a million and
 20 a quarter.
 21 You might think -- and we obviously
 22 investigated this and intend to present it to the
 23 jury -- that that's a pretty big range at 95,000 to a
 24 million and a quarter, but it turns out that if you look
 25 at the scale of Apple's operations relative to the scale

<p style="text-align: right;">Page 234</p> <p>1 of the Defendants' operations as measured by the number 2 of units, because in Apple's case, they do count units. 3 You actually can count units. 4 And so if we pretend that you can count 5 units, which you can't, but if we pretend that, the 6 Apple contract on a per-unit basis implies a payment by 7 the Defendants of somewhere between 75,000 and \$200,000. 8 I actually think it's closer to 75,000. 9 And then we have the HP license finally, 10 which is not an operating system license, where you can 11 actually count the number of times the software is 12 consumed, and that was a lump-sum payment, it looked 13 like, for the life of the product of \$110,000 with this 14 kicker that you examined Mr. Gemini on, which apparently 15 never actually went into effect, the 1 percent. 16 And so we have 95; we have 110; we have a 17 million and a quarter that when adjusted for the 18 relative sizes of the organization looks like something 19 like a hundred. And so I've tried to do the best that I 20 could without being artificially precise and say I think 21 it's about a hundred, the only adjustment being, unlike 22 those deals -- I don't know if there's a good analogy to 23 the horse case. 24 But unlike those deals, which were 25 bargained -- where the patent hadn't been litigated, in</p>	<p style="text-align: right;">Page 236</p> <p>1 Dr. Putnam -- and this is not my area, and that's why 2 I've enjoyed working with him. 3 What he is talking about is looking at how 4 can a business like Red Hat, like Novell, who are not 5 concerned with the number of units that are out there, 6 how can they conduct their business in a way that 7 respects intellectual property, because -- and I did ask 8 this already. 9 Are you saying because the products are 10 free, they shouldn't have to pay, and he said absolutely 11 not. 12 THE COURT: You've got to rent the horse. 13 MR. REITER: Right, exactly. 14 So how would a company like Red Hat or 15 Novell respect that intellectual property, taking into 16 account their business model where they don't count 17 units? 18 They're not going to create an 19 infrastructure that suddenly allows them or causes them 20 to count units that increases their costs such that 21 they're going to agree on a lump-sum payment that allows 22 them to have that technology based on what the market 23 has paid for it. And the market in this case has been, 24 as Dr. Putnam said, those licenses. 25 THE COURT: Okay. The parties, I think,</p>
<p style="text-align: right;">Page 235</p> <p>1 this case by assumption, the jury has found it valid and 2 infringed, and so we should increase the value, because, 3 in effect, the property that the Defendants have used is 4 a more valuable piece of property, because it's not 5 encumbered by a cloud regarding its validity and 6 infringement. 7 The Defendants have used a valid and 8 infringed patent. They should, therefore, pay more, and 9 there's an adjustment that occurs at the end to reflect 10 that. 11 THE COURT: Misters Reiter and Vickrey, do 12 you want to participate here before I give my final 13 statement? 14 MR. VICKREY: Your Honor, obviously we 15 disagree on units, on some of the factors. 16 THE COURT: No, we know the disagreements. 17 MR. VICKREY: But, conceptually, I think 18 it's a matter of argument, as opposed to whether he 19 should be excluded. 20 MR. REITER: I don't think he should be 21 excluded, so -- 22 MR. VICKREY: I'm not saying he should be. 23 MR. REITER: I understand that. I don't 24 mean to be flip. 25 I think if I understand correctly</p>	<p style="text-align: right;">Page 237</p> <p>1 have made an excellent effort to tie this to the kinds 2 of reliable sources that the federal circuit is credited 3 in both Lucent and ResQNet, maybe even more ResQNet 4 where the Court really did focus in on what types of 5 licenses were relevant. 6 And, of course, the parties differ and are 7 going to argue a little bit on which licenses and how 8 those licenses should be interpreted, and that decision 9 will ultimately be made by the jury. 10 But I think that we are looking at the 11 right things. Mr. Putnam will be allowed to proceed and 12 give his numbers and give his reasons, and I'm happy to 13 allow that to proceed tomorrow. 14 MR. KREVITT: I just wanted to note for 15 the record, now seems like a good time, given the 16 evidence that the court has heard and that the jury has 17 heard from the witnesses most knowledgeable about units 18 and whether the companies track units or not, it is our 19 view that Mr. Gemini -- for the jury to accept 20 Mr. Gemini's analysis based on IP addresses for which 21 there's unequivocal testimony that those do not track 22 units, will render, should the jury rely on that 23 information, a jury verdict for which there is not 24 sufficient basis. 25 We want to -- given the evidence on</p>

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1 units --

2 THE COURT: That sounds to me like that's

3 a JMOL.

4 MR. KREVITT: I just want to bring it to

5 the Court's attention that it's an objection we have,

6 and the Court is in a position to deal with it now in

7 terms of instructions or on an evidentiary ruling.

8 It's our view that the jury should not be

9 considering unit information when the evidence has been

10 unequivocal from the people that know, as opposed to

11 Mr. Gemini, that the companies do not track IP

12 addresses, and so we have an expert and a party that's

13 suggesting that a jury base a damages award on

14 information we know to be inaccurate.

15 THE COURT: So are you making some kind of

16 motion at this point?

17 MR. KREVITT: Well, we would ask Your

18 Honor that they not be permitted to submit that to the

19 jury, because of the -- I mean, we plan to establish

20 with Mr. Putnam the extent to which that information

21 would be irrelevant and inappropriate to be considered,

22 given the extent to which the information is not

23 reliable.

24 We also heard, Your Honor, that if you do

25 base it on IP addresses, we know to a 99.8-percent

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1 certainty what percent of those are in the United

2 States. That ranges from 13.8 to 15 and change.

3 Mr. Gemini, using revenue -- as Your Honor

4 knows, revenue for a different product is trying to say,

5 even though we know for certain what percent is in the

6 United States and it's in the teens, is going to ask the

7 jury -- the Plaintiffs are going to ask the jury to

8 apportion 55 percent of the IP addresses to the United

9 States.

10 That will result -- if the jury were to

11 accept that, that will result as a matter of certainty

12 in the jury basing a damages award on IP addresses from

13 outside the United States. A lot of them -- let me

14 finish, please, Mr. Vickrey.

15 That will result in the jury -- even if

16 you were to accept some correlation, and all the

17 evidence is to the contrary, between IP addresses and

18 users, we know that, because they're only taking large

19 IP address numbers and ignoring the information we know

20 with certainty how many are in the United States.

21 As a matter of certainty, that will result

22 in a damages award being based on a substantial number

23 of units outside the united states. And Your Honor

24 addressed this very question the Monday before trial,

25 when we discussed 271(f).

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1 As Your Honor may recall in that video

2 teleconference that we had, there is no 271(f) in this

3 case. It would be improper as a matter of law to base a

4 damages award on units outside the United States. And

5 based on the arguments that will be presented by

6 Plaintiffs, if they're accepted, we know with certainty

7 that's what would happen.

8 MR. VICKREY: Your Honor, two points.

9 First of all, we believe the record shows

10 that what Mr. Gemini used was a conservative estimate of

11 the -- of something that's not even the highest base.

12 In other words, let's say it's 10 million units.

13 We looked at Defendants' own explanation

14 as to what the 10 million means. They say two things.

15 First, the location of the IP addresses is going to be

16 skewed, because there are dynamic IP addresses. Just as

17 you heard the testimony, if you go from place to place,

18 it's going to double-count you, triple-count you,

19 quadruple-count you.

20 But Red Hat also said something else.

21 They said when -- it doesn't -- when you look at the

22 whole scheme of things, that 10 million number is low

23 because something else is going on. When something hits

24 a single IP address, it's going to fan out to the rest

25 of the people in my law firm at various corporations,

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1 and we're not going to capture those IP addresses.

2 So they quarrel with the methodology, but

3 it was a reasonable methodology, because, first of all,

4 they're admitting that the actual distributions are much

5 higher because the second category is significantly

6 higher according to Red Hat's own words.

7 The second point is, all of the licenses

8 in these -- in this case, all the licenses of these very

9 patents are worldwide licenses. Dr. Putnam admitted

10 that people do that because in cases such as this where

11 there's mixed-up issues of foreign use, something's

12 going overseas, maybe is created here, something --

13 maybe there's a mix-and-match-type thing going on, we

14 don't want to mess with it. We're not going to mess

15 with it.

16 We don't want to be burdened with the task

17 of figuring out what's an infringing sale under the U.S.

18 patent laws. We're going to make it worldwide. That's

19 another issue.

20 But Mr. Gemini, nonetheless, tried to

21 account for -- under methodology that he had available,

22 he came up with a conservative base. He came up with a

23 conservative user estimate. They quarrel with the

24 methodology, but there's evidence supporting it, Red

25 Hat's own statements.

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1 And not only that, Your Honor, there's
 2 been evidence that you may have heard yesterday. Novell
 3 has two per-unit licenses. Why don't we get -- they
 4 never gave us any per-unit enterprise numbers.
 5 So -- anyway, the record supports
 6 Mr. Gemini's methodology. They don't like it. They're
 7 going to argue with it. Dr. Putnam is not going to like
 8 it. We're going to argue about that as well. But it's
 9 not a basis for exclusion.
 10 MR. KREVITT: Your Honor, may I respond
 11 briefly? May I use the flip chart?
 12 THE COURT: Sure.
 13 MR. KREVITT: Okay. And I'm terrible at
 14 this, but let me just take a shot.
 15 There's actually two different issues that
 16 in my view will affect this jury verdict. And I just
 17 want Your Honor to be aware and Your Honor will make
 18 whatever ruling Your Honor makes. But everything is
 19 being a little concluded, if you will.
 20 So the first is, we have a glued-on cap.
 21 That's the first thing we have.
 22 [Laughter.]
 23 MR. KREVITT: We have IP addresses. The
 24 first thing we have, Your Honor, is IP addresses, okay?
 25 And those are estimated at, give or take, 9 million,

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1 okay?
 2 So the first error, we believe -- and,
 3 again, we can talk about it. I want Your Honor to
 4 understand there are two fundamental errors here.
 5 The first error is they say that because
 6 there are 9 million IP addresses, there are 9 million
 7 users. That's their estimate. They're going to
 8 estimate 9 million. It might be more, it might be less;
 9 it's reasonable to start and say 9 million.
 10 Mr. Tiemann and Mr. Rex testified
 11 unequivocally on this subject. This is as speculative
 12 as it comes. We might as well say 2 million or 15
 13 million, 30 million. We might as well count the cars in
 14 the parking lot.
 15 They have said this bears no relationship
 16 at all to the number of users. So that's the first
 17 error. I want to come back to that. So that's the
 18 first thing we're sending to the jury. A number of
 19 units, and Your Honor's jury verdict will say units. So
 20 the jury will be asked to write a number in a box for
 21 units.
 22 There is no evidence. The evidence is
 23 unequivocal there is no evidence of that. That's the
 24 first error.
 25 But it gets worse, much worse, because

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1 what do they do?
 2 They say, well, the 9 million we're going
 3 to start with, we want the jury to hear the 9 million,
 4 because that's a big number. So the 9 million we're
 5 going to start with, but we know -- even though we took
 6 our 271(f) shot at the last minute, we know the Court
 7 didn't let us do that, so we've got to find a way to
 8 only use U.S. numbers. We can only rely on U.S.
 9 numbers. So how do we do that?
 10 This is what they do. We now know, if you
 11 start with this number, as a certainty -- the testimony
 12 is unequivocal, unchallenged on this question -- with
 13 99.8 certainty, fraud protection software, we know
 14 exactly how many of these, whatever this represents --
 15 users might be higher, users might be lower, but let's
 16 just call it 9 million.
 17 Whatever this number is, we know with
 18 certainty that 15 percent are in the United States. On
 19 this question, this question, there is no -- there is no
 20 ambiguity. Mr. Tiemann and Mr. Rex testified to that
 21 fact, that 15 percent are in the United States.
 22 So think about the compounding error that
 23 the Plaintiffs will want to send to the jury. First,
 24 there's 9 million users. False. We don't know that.
 25 That's a guess. There is no evidence. Mr. Vickrey

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1 won't tell you there is.
 2 Second, they don't want to use the 15
 3 percent, because if you use 15 percent, you wind up at
 4 1-1/2, and at 16 cents a unit, you get something not
 5 good. You get a million bucks or something. Whatever
 6 you get -- you get not good. You get not happy.
 7 So what do you do? We've got to come up
 8 with a way to get more of the 9 million, because that's
 9 not good. Why are we here in Marshall for that amount
 10 of money? So we've got to come up with a way to get
 11 more.
 12 So here's what they do. They say, well,
 13 why don't we look at the revenue for a totally different
 14 product. Keep in mind, Your Honor, this is Fedora.
 15 Again, everything I am saying to you is not gray.
 16 There's no dispute on this. These numbers are Fedora.
 17 So that's the open-source project. Okay,
 18 so these numbers are Fedora. What do they do, because
 19 that doesn't work?
 20 They say, well, why don't we look at the
 21 revenue numbers from the products, the RHEL products you
 22 heard about. Those are the ones they charge
 23 subscription on. And what do we find?
 24 Well, because most of the affluent
 25 businesses or given the affluence of this country,

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1 there's such a greater proportion of companies that are
 2 willing to pay money for subscriptions in the United
 3 States, not surprisingly, we find a different number.
 4 Remember the 14 percent worldwide internet usage. This
 5 number makes sense. It's exactly the same as Novell's.
 6 They make perfect sense.
 7 But what do we find when we look at people
 8 that have actually got to shell out cash? We find that
 9 they're predominantly in the United States, 55 percent
 10 of them.
 11 So think about this apples and oranges.
 12 We'll take the 9 million from Fedora, which is
 13 speculative by definition. We then will take the 55
 14 percent from RHEL, totally irrelevant, and we'll
 15 multiply these two and we'll wind up with an estimate of
 16 U.S. usage.
 17 Even if you accept this as an
 18 approximation of U.S. usage, even if you're willing to
 19 do that, to suspend all disbelief and accept that, we
 20 know as a matter of certainty, 99.8 certainty that this
 21 is wrong. This will capture the difference between 55
 22 and 15 percent of IP addresses that are outside the
 23 United States.
 24 And as a matter of law, under 271(a) -- I
 25 need not tell Your Honor -- and under 271(b), they are

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1 not entitled to capture any damages based on usage
 2 outside the United States. That's 271(f). They took
 3 their last-minute shot and weren't able to put that in
 4 the case.
 5 This is why, Your Honor -- and I know how
 6 much Your Honor craves economic justification.
 7 Dr. Putnam may be the first person ever that actually
 8 looked forward to a voir dire. He was looking forward
 9 to this discussion with you. It was actually scary to
 10 us.
 11 Mr. Reiter passed me a note, Judge Rader
 12 doesn't know what he got into. He'll stay with you as
 13 long as you want.
 14 But the most important thing is this: We
 15 could argue about whether it should be lump sum. We
 16 could argue about whether it should be a reasonable
 17 royalty. We could argue about the relevance of SGI
 18 versus HP versus Apple versus Central Point. That's
 19 what litigation is about.
 20 We have a strong view. The Plaintiffs
 21 will make their case. This can't go to the jury,
 22 because there is no evidence in the record that could
 23 possibly support it. And what's more, the evidence in
 24 the record demonstrates as a matter of indisputable fact
 25 that this would be capturing usage outside the United

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1 States.
 2 So that's why, Your Honor, this can't be
 3 sent to the jury. Your Honor craves economic
 4 justification. Your Honor craves economic principles.
 5 We understand that. This is as basic as it comes. To
 6 send 9 million, which we've been told does not relate to
 7 usage, does not accomplish it, to then -- not even to
 8 take this, but ignore what we know with certainty the
 9 percent in the United States is, and instead use an
 10 arbitrary number is, as a matter of law and fact, in our
 11 view, objectionable.
 12 MR. VICKREY: Your Honor, a couple of
 13 points.
 14 THE COURT: You get equal time,
 15 Mr. Vickrey.
 16 MR. VICKREY: Regardless of 271(f), we
 17 believe that the evidence will show and the evidence in
 18 the record does show that this license would be a
 19 worldwide license, even though they're U.S. patents.
 20 All the others were worldwide licenses. And, in fact,
 21 Mr. Gemini had a calculation for all --
 22 THE COURT: You don't want to push me back
 23 into the 271(f) category, do you?
 24 MR. KREVITT: That's wrong as a matter of
 25 law.

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1 THE COURT: It's Mr. Vickrey's time.
 2 MR. KREVITT: I'm sorry.
 3 MR. VICKREY: In fact, in Mr. Gemini's
 4 supplemental report, which survived a motion to strike,
 5 he had a damage estimate based on total use. He's come
 6 back to try -- within a good-faith basis to try to
 7 estimate this.
 8 And what do we know about the IP --
 9 getting to the IP addresses at 9 million? This is what
 10 Red Hat says: There are two flaws in the methodology.
 11 One of the flaws not only cancels out the other flaw,
 12 but actually suggests that the 9 million is much higher.
 13 The two flaws are, when you have dynamic IP addresses,
 14 as many people do, it's going to double, triple,
 15 quadruple count the number of users.
 16 So IP addresses as such, the location is
 17 not going to signify the proper usage of the software.
 18 We know something else, though. We know
 19 that many times for a corporate or an NAT account, it's
 20 going to hit one single IP address and fan out from
 21 there. And we don't know the IP addresses, the
 22 locations, whatever.
 23 THE COURT: You've made that point.
 24 MR. VICKREY: And so we believe that
 25 there's a foundation in the record to support what

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1 Mr. Gemini tried to do. It's a fact issue. He's not
 2 trying to overreach. And we've explained why the mere
 3 IP addresses don't tell the whole story.
 4 They disagree with it, and I've heard it
 5 loud and clear, and they're throwing statistics around
 6 and everything else.
 7 MR. KREVITT: What would be the record
 8 evidence for the 55 percent?
 9 MR. VICKREY: The 55 percent is based on
 10 their own financial performance, as announced during the
 11 damage period, which was 55 percent of the revenue was
 12 U.S. revenue. And it also doesn't account for the fact
 13 that Mr. --
 14 THE COURT: But their revenue is not
 15 generated by the claimed invention. Their revenue is
 16 generated by their service contracts and the other
 17 things that they provide to their clients. And we only
 18 get to compensate here for the claimed invention.
 19 MR. VICKREY: That is true, Your Honor,
 20 but the --
 21 THE COURT: The rental of the horse.
 22 MR. VICKREY: But the evidence also shows
 23 that even on those enterprise products where you have
 24 all this U.S. activity, U.S. big corporate activity --
 25 we saw all the big U.S. corporate logos there. We heard

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1 Mr. Riveros say today -- or yesterday -- that one of
 2 their business models is to sell the proxy model.
 3 So it's going to hit a single IP address
 4 and fan out such as my law firm. So there is a basis in
 5 the record for looking at activity that generates
 6 revenue and trying to correlate that.
 7 So -- and we also have evidence from
 8 Mr. Frields' statements to the press, this is our user
 9 base. Mr. Tiemann didn't agree with it. He said it's
 10 wrong, he's overstating, et cetera, but there's
 11 nonetheless information in the record as to --
 12 MR. KREVITT: Your Honor, may I respond
 13 very briefly?
 14 THE COURT: Just a second. I want to make
 15 sure. Mr. Vickrey, did you get everything you wanted to
 16 say said?
 17 MR. VICKREY: I did, Your Honor.
 18 THE COURT: Just a second.
 19 Mr. Gasey might want to add something.
 20 Okay. You can have a quick response.
 21 MR. KREVITT: Very briefly, Your Honor, a
 22 few things.
 23 First, Mr. Vickrey just explained the
 24 problem. He said that Mr. Gemini assumed that this
 25 would be a worldwide license. Again, I always am a

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1 little reluctant to mention what the law is to Your
 2 Honor, but the law is clear that in a patent case --
 3 THE COURT: That's your job.
 4 MR. KREVITT: -- damages are set based on
 5 the infringement. That's it. We don't assume that
 6 there will be another horse thrown in or a stable or a
 7 weekend away. We are only looking at what the
 8 infringement was.
 9 In this case, the infringement is the
 10 United States. So for Mr. Vickrey to say that what
 11 Mr. Gemini did is assume a worldwide license, that's
 12 precisely the problem. That's number one.
 13 Number two -- and this is -- I just want
 14 this point to be very clear. If you're going to accept
 15 this number -- and Mr. Vickrey said that's a question of
 16 fact. You know my view; I don't think it is. I don't
 17 think there's any evidence to support it.
 18 But here's the point: If you're going to
 19 start with this number, you cannot not use this number.
 20 You can't take the big number and ignore the one thing
 21 that we know with certainty how many of this, whatever
 22 these constitute, are in the United States.
 23 You can't take this number and ignore the
 24 fact -- we can have a dispute about this -- that we know
 25 what this is, and instead choose a much bigger number.

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1 THE COURT: I've got the point.
 2 Mr. Vickrey, you get the last word here.
 3 MR. VICKREY: Well, Your Honor, Mr. Gemini
 4 explained, and I think Red Hat's own literature
 5 explains, that looking at the location of an IP address
 6 is not going to signify the degree of use, because those
 7 IP addresses are very much overstated.
 8 And instead -- but they're more than
 9 canceled out and the number goes significantly higher
 10 when you look at these corporate NAT address-type issues
 11 where it hits a single corporate address and fans out.
 12 They disagree with it. I mean, it's a
 13 fact dispute, but he attempted to account for that to
 14 come down to the number where he was, and he explained
 15 at every level why his number was conservative.
 16 THE COURT: Okay. Thank you, Mr. Vickrey.
 17 MR. KREVITT: I would just note that again
 18 he's only at this number.
 19 THE COURT: I gave Mr. Vickrey the final
 20 word.
 21 MR. KREVITT: I understand.
 22 THE COURT: We can shorten the amount of
 23 time we need to argue JMOL, because I think that's what
 24 we've been doing here. And so we'll see if the jury
 25 gives us a -- see what the jury gives us in damages, and

1 then we will review the record to see if the record
2 supports that. That's the way courts work, and that's
3 the way courts ought to work.

4 And I think I should facetiously ask
5 Mr. Putnam to send me his resume in a month. I want to
6 see if it has a little tag line, I survived Judge Rader.

7 THE WITNESS: That's right. That's right.
8 Well, have I survived you?

9 THE COURT: Not yet, but we'll see.

10 I think we're about ready to go to jury
11 instructions now. Did you want to say something,
12 Mr. Reiter?

13 MR. REITER: No, Your Honor.

14 THE COURT: Give me five minutes again.
15 I'm going to take off my robe and come back and talk
16 about the instructions.

17 (Court adjourned.)
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1 CERTIFICATION
2

3
4 I HEREBY CERTIFY that the foregoing is a
5 true and correct transcript from the stenographic notes
6 of the proceedings in the above-entitled matter to the
7 best of my ability.
8
9
10

11 _____ Date _____
12 DONNA COLLINS, CSR
13 Deputy Official Court Reporter
14 State of Texas No. 1086
15 Expiration Date: 12/31/10

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