

UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE PATENT TRIAL AND APPEAL BOARD

Patent No. 6,724,403

\_\_\_\_\_  
MICROSOFT CORPORATION, )  
Petitioner )  
v. )  
SURFCAST, INC., )  
Patent Owner )  
\_\_\_\_\_ )

DEPOSITION OF DAVID R. KARGER

Washington, D.C.

January 14, 2014

Reported by: Mary Ann Payonk

Job No. 69647

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January 14, 2014  
10:08 a.m.

Deposition of DAVID R. KARGER, held at  
the law offices of Sidley Austin, 1501 K  
Street, N.W., Washington, D.C., pursuant to  
Notice before Mary Ann Payonk, Nationally  
Certified Realtime Reporter and notary public  
of the District of Columbia.

1 APPEARANCES:

2 ON BEHALF OF SURFCAST:

3 JAMES HEINTZ, ESQUIRE

4 DLA Piper

5 500 Eighth Street, NW

6 Washington, DC 20004

7  
8  
9 RICHARD BONE, Ph.D., Partner

10 VLP LAW GROUP

11 2225 East Bayshore Road

12 Palo Alto, CA 94303

13  
14 ON BEHALF OF MICROSOFT:

15 JOSEPH MICALLEF, ESQUIRE

16 WONJOO SUH, ESQUIRE

17 SIDLEY AUSTIN

18 1501 K Street, N.W.

19 Washington, D.C. 20005

20  
21 ALSO PRESENT:

22 Jasmin Rice, videographer

23 Stacy Quan, Assistant General Counsel

24 Microsoft Corporation

1 D. Karger

2 THE VIDEOGRAPHER: This is the  
3 start of videotape labeled number 1 in  
4 the videotaped deposition of Dr. David  
5 Karger taken in the matter of Microsoft  
6 Corporation versus SurfCast, in the  
7 United States Patent and Trade Office  
8 before the Patent Trial and Appeal  
9 Board, Patent Numbers 6724 and 403  
10 [sic].

11 Today's date is January 14, 2014  
12 and the time is approximately 9 --  
13 10:08 a.m. My name is Jasmin Rice from  
14 TSG Reporting, Inc. I'm the legal  
15 videographer.

16 The court reporter is Mary Ann  
17 Payonk, in association with TSG.

18 Will counsel please introduce  
19 themselves for the record.

20 (Whereupon, counsel placed their  
21 appearances on the video record.)

22 THE VIDEOGRAPHER: Will the court  
23 reporter please swear in the witness?

24

25

1 D. Karger

2 DAVID R. KARGER,

3 called as a witness, having been

4 affirmed, was examined and testified

5 as follows:

6 EXAMINATION

7 BY MR. HEINTZ:

8 Q. Good morning, Dr. Karger.

9 A. Good morning.

10 Q. Sir, have you been deposed before?

11 A. Not in federal court.

12 Q. Okay. Where were you deposed?

13 A. There was a state case in Florida  
14 many, many years ago.

15 Q. Okay. So I'm going to go over a  
16 couple of ground rules for the deposition just  
17 to help us out. So probably the most important  
18 rule is that we -- you answer your questions as  
19 asked of you in -- with English words such as  
20 "yes" and "no" rather than "uh-huh" or  
21 "huh-uh," as the court reporter has to take  
22 that down. Will you remember to do that?

23 A. Yes.

24 Q. The second most important rule is  
25 that we not speak over each other. So I'll

1 D. Karger  
2 finish my question, I'll ask you to wait until  
3 my question's over, then you'll begin your  
4 answer, and I'll wait until your answer is  
5 finished before asking the next question. Is  
6 that all right?

7 A. Yes.

8 Q. Okay. Also, if I ask you a question  
9 and you answer it, I'll assume you understand  
10 it. If you don't understand it, will you  
11 please ask me to rephrase it or clarify it?

12 A. Okay.

13 Q. All right. Sir, are you taking any  
14 medications that would prevent you from giving  
15 truthful testimony here today?

16 A. No.

17 Q. Are you suffering from any physical  
18 ailments that might prevent you from finishing  
19 the deposition here today?

20 A. No.

21 Q. Sir, you're here pursuant to a notice  
22 of deposition that was served on counsel; is  
23 that correct?

24 A. Correct.

25 Q. All right. You have submitted a

1 D. Karger  
2 declaration in the IPR involving the  
3 U.S. Patent Number 6,724,403; correct?

4 A. Correct.

5 Q. All right. I'll refer to the patent  
6 6,724,403 as the '403 patent for short. Is  
7 that all right?

8 A. That's fine.

9 MR. HEINTZ: I've had premarked and  
10 I'll hand to the witness Exhibit 1003,  
11 which is the declaration of David Karger  
12 regarding U.S. Patent Number 6,724,403,  
13 and we will maintain the exhibit numbers  
14 from the inter partes review proceeding  
15 unless otherwise mentioned. And I'll  
16 hand you this folder to keep it  
17 together. Counsel?

18 MR. MICALLEF: Thank you.

19 BY MR. HEINTZ:

20 Q. Sir, I'll ask you if you recognize  
21 Exhibit 1003.

22 A. Yes, I do.

23 Q. And is that the declaration you  
24 submitted in the IPR proceeding involving the  
25 '403 patent?

1 D. Karger

2 A. Yes, it is.

3 Q. All right. I'll ask you to turn to  
4 page 6 of Exhibit 1003.

5 A. All right.

6 Q. Sir, I'll direct your attention to  
7 paragraph 24, and in particular, the third  
8 sentence in that paragraph, which reads, "If a  
9 person of ordinary skill can implement a  
10 predictable variation, that variation would  
11 have been considered obvious."

12 Do you see that?

13 A. Yes, I do.

14 Q. Okay. Now, if you need time to  
15 review that paragraph, please do so in order to  
16 answer this next question.

17 Does this statement mean that as long  
18 as a person of ordinary skill can implement a  
19 predictable variation, that predictable  
20 variation is obvious --

21 MR. MICALLEF: Object to --

22 Q. -- in the absence of any further  
23 factors?

24 MR. MICALLEF: Object to form,  
25 foundation.



1 D. Karger

2 A. Can you restate the question?

3 Q. Sure. Paragraph 24 is a -- one of  
4 the paragraphs from your declaration; correct?

5 A. Yes.

6 Q. I'm going to direct your attention to  
7 the third sentence, which reads, "If a person  
8 of ordinary skill can implement a predictable  
9 variation, that variation would have been  
10 considered obvious."

11 Do you see that?

12 A. Yes, I do.

13 Q. Okay. Does that mean that so long as  
14 a person of ordinary skill has the ability to  
15 implement a predictable variation, that such a  
16 variation is obvious without regard to any  
17 other factors?

18 MR. MICALLEF: Same objections.

19 A. So it sounds like you're asking  
20 whether the word "can" means "has the ability  
21 to." That's the only change in the wording  
22 that you've made in the sentence.

23 Q. Okay. With that understanding, would  
24 you please answer the question?

25 MR. MICALLEF: Same objections.

1 D. Karger

2 A. If you're asking if the word "can"  
3 means "has the ability to," then I would have  
4 to say the answer is yes.

5 Q. All right. Sir, I'll direct your  
6 attention to paragraph 27 of your declaration,  
7 which is page 7 of Exhibit 1003. You see on  
8 the third line you're referring to the case of  
9 KSR International Company v. Teleflex, Inc.?

10 A. Yes, I do.

11 Q. Have you read that case, sir?

12 A. Yes, I have.

13 Q. Okay. There's a part in that case  
14 that discusses the notion that the teaching  
15 suggestion or motivation to combine tests,  
16 which is mentioned on the fourth and fifth  
17 lines of that paragraph, captures a helpful  
18 insight. I notice you didn't include that  
19 statement in paragraph 27. Why was that?

20 MR. MICALLEF: Object to form.

21 A. Do you have a copy of the KSR --

22 Q. I don't.

23 A. -- patent?

24 Q. The patent?

25 A. Sorry. The KSR case.

1 D. Karger

2 Q. Yeah, I don't have it with me now.

3 A. You don't have it with you? So I  
4 can't say that I remember all the details of  
5 that document, so I don't -- if you want to  
6 restate your question, I can take a stab at it,  
7 but without actually looking at the document,  
8 my ability to answer will be limited.

9 Q. Did you decide which portions of the  
10 case would be discussed in this declaration?

11 MR. MICALLEG: Object to form. And  
12 I'm going to caution you not to disclose  
13 communications with your -- with the  
14 attorneys in your answer.

15 A. Okay. Sorry. Restate the question.

16 Q. Sure. Did you decide which portions  
17 of the KSR case would be discussed in this  
18 paragraph 27?

19 A. I did not choose the exact wording of  
20 this paragraph. This reflects an interaction  
21 with counsel to decide what should be said  
22 about this KSR case at this point in the  
23 document. However, I did read and it's  
24 consistent with my own desire to articulate  
25 what I know about the KSR case.

1 D. Karger

2 Q. When you say you didn't choose the  
3 exact wording, does that mean you had some  
4 other input into the contents in paragraph 27?

5 A. Oh, well, I certainly -- I had  
6 authorial control over the contents of the  
7 paragraph.

8 Q. Do you recall the notion discussed in  
9 the KSR case that most if not all inventions  
10 are combinations of existing elements?

11 MR. MICALLEF: Object to form, lack  
12 of foundation.

13 A. Yes, I do.

14 Q. Okay. Feel free to look, but I  
15 didn't see a discussion of that principle in  
16 your discussion of KSR in your declaration.  
17 And my question is, why is that?

18 MR. MICALLEF: Object to form, lack  
19 of foundation, irrelevant.

20 A. All right. Now that I've refreshed  
21 my memory, can you restate the question?

22 Q. Yes. I'll represent to you that  
23 there's a discussion in KSR along the lines  
24 that most, if not all, inventions are  
25 combinations of known elements. And my

1 D. Karger

2 question to you is, why is that not discussed  
3 in your report?

4 MR. MICALLEF: Object to form, lack  
5 of foundation.

6 A. It's an interesting question. KSR is  
7 many pages long and there are many things that  
8 are not brought into this report simply for  
9 reasons of space. This report certainly does  
10 discuss the issues of combination, of  
11 motivation to combine, of the fact that there  
12 can be many reasons to combine even if the  
13 elements are not being targeted to solve the  
14 same problem.

15 I believe that we've covered the --  
16 sort of most important and relevant bits of the  
17 case here in the expert report, and at a  
18 certain point, had to stop.

19 Q. Okay. So I'll ask you to turn your  
20 attention to page 16 of your report, and in  
21 particular, paragraph 54.

22 A. All right.

23 Q. All right. So in paragraph 54, your  
24 report states that a person of ordinary skill  
25 in the subject matter of the '403 patent would

1 D. Karger  
2 have had at least a master's degree in software  
3 engineering or computer science or equivalent  
4 experience working in industry, and several  
5 years of experience designing, writing, or  
6 implementing software products either at the  
7 application or operating system level. Is that  
8 correct?

9 A. That's correct.

10 Q. Okay. Do you stand by that testimony  
11 here today?

12 A. Yes, I do.

13 Q. Sir, to the best of your  
14 understanding, is a person of ordinary skill in  
15 the art a person of average skill in the art?

16 A. Average has a mathematical meaning.  
17 Is that what you're asking?

18 Q. Yes, a mathematical average.

19 MR. MICALLEF: Object to form,  
20 then.

21 A. I'm not sure how to assign a number  
22 to a skill level. So in my understanding,  
23 ordinary skill is actually something of a  
24 technical term describing a certain level of  
25 skill that is to be expected of people when we

1 D. Karger

2 are trying to understand what is -- what should  
3 be taken as obvious in patents. And I'm not  
4 sure whether that ordinary skill is required to  
5 correspond to average or is determined by some  
6 other mechanism.

7 The reason -- what this paragraph  
8 reflects is my understanding of what a person  
9 of ordinary skill in the art is taken to be in  
10 this context of computer science and software  
11 engineering. I can't really tell you the --  
12 more broadly whether "ordinary" corresponds to  
13 "average" as a legal concept.

14 Q. The art you're talking about then is  
15 software engineering or computer science; is  
16 that correct?

17 A. Correct.

18 Q. Okay. That's the subject matter of  
19 the '403 patent?

20 A. Correct.

21 Q. Would you say in that field that more  
22 than half or less than half of the people had  
23 master's degrees? And by "the people," I mean  
24 people working in that field.

25 A. This would be pure speculation. I

1 D. Karger

2 don't have any hard data, but I would suspect  
3 that less than half had master's degrees.

4 Q. So then your definition -- okay, let  
5 me retract that for a second.

6 Now, as an alternative to a master's  
7 degree in your definition, you also talk about  
8 "or equivalent experience working in industry."

9 Correct?

10 A. Correct.

11 Q. And that would be an equivalent to a  
12 master's degree in your definition in paragraph  
13 54. And then you say "and several years of  
14 experience."

15 So if I understand this construction  
16 correctly, if someone didn't have a master's  
17 degree, in order to be one of ordinary skill in  
18 the art, that person would need several years  
19 of experience to be equivalent to a master's  
20 degree, and then several more years of  
21 experience in designing, writing, or  
22 implementing software products. Is that  
23 correct?

24 MR. MICALLEF: Object to form.

25 A. So are you asking whether a person



1 D. Karger  
2 who does not have a master's degree would have  
3 had to work more years in order to qualify as a  
4 person of ordinary skill in the art?

5 Q. In your opinion, as represented in  
6 paragraph 54, correct.

7 MR. MICALLEF: Object to form.

8 A. Given that we're using -- given that  
9 we haven't quantified the number of years that  
10 "several" is, I would say that, yes, somebody  
11 who has not earned a master's degree, I would  
12 want to see more experience on their resume  
13 before I considered them to be as skilled as  
14 somebody who came in with a master's degree and  
15 then worked for several years.

16 Q. Okay. If one has a master's degree  
17 in computer science or software engineering,  
18 then in your opinion, how many more years of  
19 experience designing, writing, or implementing  
20 software products is necessary before that  
21 person qualifies as one of ordinary skill in  
22 the art?

23 MR. MICALLEF: Object to form.

24 A. I would suspect that three or four is  
25 about right.

1 D. Karger

2 Q. Okay. So someone with a master's  
3 degree in software engineering or computer  
4 science plus three or four years of experience  
5 designing, writing, or implementing software  
6 products is what one of ordinary skill in the  
7 art means with respect to a person who has a  
8 master's degree; correct?

9 MR. MICALLEF: Object to form.

10 A. Well, recall that a -- that some of  
11 these years of experience may have happened  
12 during the writing of the master's degree. I'm  
13 not saying that they must be appended  
14 afterwards, but yes, I would think that three  
15 or four years is necessary to season -- to  
16 season someone.

17 Q. How about someone with a bachelor's  
18 degree, sir, in computer science or software  
19 engineering? How many years of experience in  
20 addition to the bachelor's degree does that  
21 person need to become one of ordinary skill in  
22 the art, in your opinion?

23 MR. MICALLEF: Object to form.

24 A. Well, with the understanding that  
25 this is highly variable by person, I would

1 D. Karger

2 venture that probably five or six years would  
3 suffice to give somebody a general sense of --  
4 of the field.

5 Q. Is it possible for somebody without a  
6 bachelor's degree to be of ordinary skill in  
7 the art in the field?

8 A. Certainly.

9 Q. And how many total years of  
10 experience in your opinion would it take for  
11 that person to qualify as one of ordinary skill  
12 in the art?

13 MR. MICALLEF: Object to form.

14 A. I think that's a relatively unusual  
15 person. It's hard for me to judge. That would  
16 probably be on a case-by-case basis.

17 Q. There are quite a few people in the  
18 field who don't have bachelor's degrees,  
19 though, are there not?

20 MR. MICALLEF: Object to form, lack  
21 of foundation.

22 A. I would venture that most of them  
23 have bachelor's degrees in something. It may  
24 not be in computer science.

25 Q. Do you know if Mr. Gates, Mr. Bill

1 D. Karger

2 Gates, the --

3 A. Absolutely, same -- same institution,  
4 the same teachers, yes.

5 Q. Does he have a bachelor's degree?

6 A. No, he does not.

7 Q. Are you familiar with the name Mark  
8 Zuckerberg?

9 A. Yes.

10 Q. Same institution, I believe.

11 A. Yes.

12 Q. Does he have a bachelor's degree?

13 A. Huh-uh.

14 Q. Okay. Who did you consult in order  
15 to form your opinion as to what one of ordinary  
16 skill in the art is?

17 A. My understanding of ordinary skill in  
18 the art drew from -- from previous counsel.

19 Q. Let the record indicate that you're  
20 indicating Mr. Micallef there. Is that  
21 correct?

22 A. That's correct.

23 Q. So Mr. Micallef told you what one of  
24 ordinary skill in the art is?

25 A. That's --

1 D. Karger

2 MR. MICALLEF: Object to form,  
3 object to the extent it calls for  
4 attorney-client communications. That's  
5 privileged. You're not entitled to get  
6 discovery of communications with  
7 counsel.

8 MR. HEINTZ: It's not  
9 attorney-client, but I understand your  
10 objection.

11 MR. MICALLEF: Instruct him not to  
12 answer that one.

13 MR. HEINTZ: All right.

14 BY MR. HEINTZ:

15 Q. Other than what you may or may not  
16 have discussed with Mr. Micallef, did you do  
17 any further research into what one of ordinary  
18 skill in the art is in order to form your  
19 opinion as expressed in paragraph 54?

20 A. I believe that some of my  
21 understanding drew from the KSR document,  
22 although I can't say without reviewing it in  
23 order to verify. But aside from the KSR  
24 document and my communications with counsel,  
25 no, there were no other sources of information.

1 D. Karger

2 Q. Do you have any understanding of what  
3 the average experience level is of the  
4 employees at Microsoft who work on Windows 8?

5 MR. MICALLEF: Object to form,  
6 foundation.

7 A. What do you mean by "understanding"?  
8 I certainly have no data.

9 Q. Okay. Do you have any other basis --

10 MR. MICALLEF: Object.

11 Q. -- for an understanding of what that  
12 average experience level may be?

13 MR. MICALLEF: Object to form, lack  
14 of foundation.

15 A. I have anecdotal evidence from people  
16 I know who work at Microsoft, from students I  
17 know who have gone to work for other people at  
18 Microsoft, but it is purely anecdotal.

19 Q. And you didn't rely on that in  
20 forming your opinion in paragraph 54, did you?

21 A. No.

22 Q. Sir, I'll direct your attention to  
23 paragraph 56 on page 16. The first sentence  
24 reads, "Based on my experiences, a person of  
25 ordinary skill in the art would have been

1 D. Karger  
2 familiar with a wide variety" -- sorry, "with a  
3 variety of user interface concepts and how to  
4 implement" those concepts -- sorry, "these  
5 concepts within user interfaces."

6 Do you see that?

7 A. Yes, I do.

8 Q. How would someone of ordinary skill  
9 in the art in your opinion become familiar with  
10 the variety of user interface concepts?

11 MR. MICALLEG: Object to form, lack  
12 of foundation, irrelevant.

13 A. So I believe there are several ways  
14 that such a person would have become familiar  
15 with user interface concepts.

16 There are, or were at the time, a  
17 literature and a type of -- of experience and  
18 learning on the topic of user interfaces. You  
19 could find user interfaces classes being  
20 offered at various universities.

21 There were seminars of various arts  
22 that would touch on user interface principles.  
23 There's direct experience. Anybody who is  
24 working in the computer science domain is  
25 probably going to be making heavy use of a

1 D. Karger

2 computer and experiencing the user interfaces  
3 on that computer on a daily basis.

4 And, of course, there's a pretty  
5 natural connection. User interfaces are a  
6 computer thing. If you're doing work in  
7 computers, then you think about those user  
8 interfaces, how to improve them, what's wrong  
9 with them and so forth.

10 Finally, even for those for whom user  
11 interface is not the primary focus of their  
12 work, a really large fraction of what is done  
13 in computer science requires some kind of user  
14 interface, right? Whatever kind of application  
15 you're building, if there's no user interface,  
16 then it's of very limited -- limited use if  
17 nobody can connect to it. There are certain  
18 kinds of computer science that can be almost  
19 entirely user interface free, but everybody, or  
20 almost everybody encounters them and has to  
21 work with them at some point.

22 Q. Someone just surfing the web -- by  
23 "someone," I'm not referring to anybody in  
24 particular, just an average web surfer, would  
25 come into contact with a variety of user



1 D. Karger

2 interface concepts, would he not?

3 MR. MICALLEF: Object to form.

4 A. What do you mean by coming in contact  
5 with a user interface concept?

6 Q. Fair enough. Let me rephrase the  
7 question.

8 Would someone who surfs the web on a  
9 daily basis be familiar with a variety of user  
10 interface concepts?

11 MR. MICALLEF: Object to form,  
12 irrelevance.

13 A. They would be familiar with certain  
14 user interface concepts, basic principles like  
15 windowing, opening, closing windows, switching  
16 between applications and such. Obviously, they  
17 wouldn't have familiarity with the same variety  
18 of concepts and would be less familiar with  
19 some of the deeper concepts than somebody who's  
20 actually working on creating user interfaces.

21 Q. A person surfing the web would become  
22 familiar with a variety of controls for user  
23 interfaces; correct?

24 MR. MICALLEF: Object to form,  
25 relevance, lack of foundation.

1 D. Karger

2 A. Yes, they would become familiar with  
3 a variety of controls.

4 Q. And the same would be true for a  
5 typical undergraduate student in a computer  
6 science or software engineering program; that  
7 person would become familiar with a variety of  
8 user interface concepts, would he not?

9 MR. MICALLEF: Same objections.

10 A. An undergraduate would become  
11 familiar with more user interface concepts,  
12 yes. Again, important to distinguish between  
13 controls and concepts.

14 Q. Okay. What's the difference between  
15 controls and concepts?

16 A. Well, a control is something like a  
17 close button, right? A concept is the concept  
18 of closing a window and the benefits that that  
19 can provide to somebody making use of the  
20 interface.

21 Q. Would a typical third-year  
22 undergraduate in software engineering or  
23 computer science become familiar with those  
24 concepts?

25 MR. MICALLEF: Object to form,

1 D. Karger

2 relevance, lack of foundation.

3 A. They would have begun to become  
4 familiar with some of those concepts. Some of  
5 those concepts are broad enough that they  
6 would -- they would have encountered them in  
7 other domains and realized that they could be  
8 applicable to user interfaces as well.  
9 Concepts like modularity, for example.

10 Q. Would the typical third-year  
11 undergraduate in computer science or software  
12 engineering know how to implement those  
13 concepts within user interfaces?

14 MR. MICALLEF: Object to form, lack  
15 of foundation, relevance.

16 A. Can you clarify what you mean by  
17 "know how to implement"?

18 Q. Well, I'd direct your attention to  
19 paragraph --

20 A. I'm aware it's in my declaration. I  
21 just want to understand what you're  
22 specifically asking.

23 Q. I'd like to know how you understand  
24 those words --

25 A. Okay.

1 D. Karger

2 Q. -- in your declaration, how you use  
3 them there.

4 A. Okay.

5 MR. MICALLEF: Object to form. Did  
6 you withdraw the other question?

7 MR. HEINTZ: I don't recall. So  
8 let's just say I did and we will ask  
9 this question.

10 Q. What did you mean when you wrote the  
11 words "how to implement these concepts within  
12 user interfaces"?

13 A. Good. So there are two  
14 understandings of how to implement. One is how  
15 to assemble the concepts themselves, which  
16 concepts to make use of, which ones are  
17 relevant to a given problem, and so forth. And  
18 the other notion of implementation is when one  
19 implements a piece of software to actually  
20 write code and make it happen and sort of to  
21 reduce it to practice, I guess would be the  
22 proper term.

23 And I would say that implementation  
24 would cover both of those aspects, knowing  
25 which concepts to apply, what to draw from, and

1 D. Karger  
2 also how to actually -- how to actually create  
3 the software that reflected those concepts.

4 Q. All right. Would a third-year  
5 undergraduate in software engineering or  
6 computer science know how to implement these  
7 concepts within user interfaces as you just  
8 defined what implement means?

9 MR. MICALLEF: Object to form,  
10 ambiguous, lack of foundation, and  
11 irrelevant.

12 A. So I would venture that a typical  
13 third-year probably would not.

14 Q. Okay.

15 A. But, of course, that's not a person  
16 of ordinary skill in the art.

17 Q. All right. Now, out of the two  
18 meanings you attach to the word "implement,"  
19 which of those two would a third-year  
20 undergraduate student in software engineering  
21 or computer science not be able to achieve?

22 MR. MICALLEF: Object to form, lack  
23 of foundation, relevance.

24 A. I suspect that a typical third-year  
25 student would not know enough about, say, the

1 D. Karger

2 user interface libraries that were available  
3 that they might want to make use of in order to  
4 do the implementation.

5 I guess if you gave them -- let me  
6 think for a minute. I would venture that a  
7 typical third-year, or at least many  
8 third-years would know how to find out how to  
9 implement in the coding sense that -- what  
10 languages they would have to learn, what  
11 libraries they would have to learn, so on and  
12 so forth. They could if necessary figure out  
13 how to actually do the implementation.

14 Based on my own experience of  
15 third-year students, I'm guessing that fewer of  
16 them would know where to go looking for  
17 concepts that were applicable to the problem  
18 they wanted to solve.

19 Q. And what did you mean in your answer  
20 when you referred to "know where to go  
21 looking"?

22 A. There's a lot of literature on user  
23 interfaces and human/computer interaction.  
24 Somebody who is familiar with that literature,  
25 which a person of ordinary skill in the art

1 D. Karger  
2 would be, would know what to draw on, the  
3 concepts are documented in that literature.  
4 But a typical third-year doesn't know how to do  
5 a literature search.

6 Q. Okay. So in a broad sense, and  
7 correct me if my understanding is incorrect,  
8 generally speaking, your opinion is the  
9 third-year undergraduate in computer sciences,  
10 software engineering, would know how to write  
11 the code if told what to do but wouldn't know  
12 what to do?

13 MR. MICALLEF: Object to form,  
14 foundation, relevance.

15 A. Yes, that's correct.

16 Q. Thanks. Sir, I'll direct your  
17 attention to the bottom of page 14 and the top  
18 of page 15 of your report. And in particular,  
19 paragraph 49. And if you would take a moment  
20 and read that to yourself before I ask the next  
21 question, I'd appreciate it. Just please let  
22 me know when you're ready.

23 A. Yes.

24 Q. All right. The last sentence states  
25 that "It was also known that Windows could be

1 D. Karger  
2 displayed in a number of widely used operating  
3 systems without active areas such as a title  
4 bar, a menu bar, or scroll bars."

5 Do you see that?

6 A. Yes, I do.

7 Q. Which widely used operating system  
8 are you referring to in that paragraph?

9 MR. MICALLEF: Object to form.

10 Q. Let me restate the question. To  
11 which widely used operating systems are you  
12 referring to in that paragraph?

13 MR. MICALLEF: Same objection.

14 A. So most substantively, I was  
15 referring to the various flavors of UNIX. And  
16 actually, I was also referring to Windows,  
17 Microsoft Windows in a particular way because  
18 all of those platforms could run X, which is a  
19 windowing system that did not require -- that  
20 was able to display windows without title bars,  
21 menu bars, or scroll bars.

22 Q. All right. I believe in one part of  
23 your answer, you referred to or at least meant  
24 to refer to Microsoft Windows.

25 A. Correct.



1 D. Karger

2 Q. Is that correct? That was one of the  
3 widely used operating systems you were  
4 referring to in that paragraph, Microsoft  
5 Windows?

6 A. Yes, it was.

7 Q. And is your testimony that Microsoft  
8 Windows could display windows without active  
9 areas such as a title bar, a menu bar, or  
10 scroll bars?

11 A. To be clear, what I was saying was  
12 that Microsoft Windows was able to run a  
13 display -- it's important to distinguish  
14 between the operating system and the windowing  
15 system. Microsoft Windows is both.

16 But when I'm talking -- and Microsoft  
17 Windows, the windowing system, as far as I  
18 know, always presented that kind of chrome on  
19 their windows. However, Microsoft Windows was  
20 also able to run an X display server, and  
21 within that X display server, operate the X  
22 windowing system. And the X windowing system  
23 running on Microsoft Windows could indeed  
24 present windows without title bars, menu bars,  
25 or scroll bars.

1 D. Karger

2 Q. To the best of your knowledge, in the  
3 time frame of the '403 patent in 1998 and 1999,  
4 was the X window -- I'm sorry, the X windowing  
5 system on the Microsoft Windows operating  
6 system widely used?

7 MR. MICALLEF: Object to form.

8 A. Not in proportion to the number of  
9 users of the Microsoft operating system, no.  
10 On the other hand, it was the default on the  
11 UNIX operating system.

12 Q. Does that mean that every UNIX  
13 computer defaulted to running X Windows? I'm  
14 sorry, let me retract that. Is X Windows the  
15 correct term to refer to the X windowing  
16 system?

17 A. That's how I refer to it, yes.

18 Q. So let me repeat the question,  
19 then --

20 Does that mean that every system that  
21 ran the UNIX operating system also defaulted to  
22 running the X Windows system?

23 A. Probably not. UNIX was used for many  
24 things. There were probably older  
25 installations of UNIX that had not gotten X,

1 D. Karger

2 but certainly, every environment I ever  
3 encountered where there was a UNIX system  
4 running, it was running X.

5 Q. Where were these environments that  
6 you encountered that you referred to in your  
7 answer?

8 A. Various academic institutions, for  
9 the most part.

10 Q. Okay.

11 A. Occasional industry.

12 Q. Again, I'll direct your attention to  
13 the last sentence in paragraph 49. And you  
14 refer to active areas such as a title bar, a  
15 menu bar, or scroll bars.

16 Do you see that?

17 A. Yes.

18 Q. Now I'll direct your attention to  
19 paragraph 93 of your declaration. That appears  
20 on page 30.

21 Do you see that?

22 A. Yes, I do.

23 Q. Okay. And in particular, on the  
24 second line of paragraph 93, you refer to  
25 decoration, in quotes, such as scroll bars,

1 D. Karger

2 title bars or menus.

3 Do you see that?

4 A. Yes, I do.

5 Q. Sir, why the change in wording from  
6 "active areas" to "decoration"?

7 MR. MICALLEF: Object to form,  
8 relevance, lack of foundation.

9 A. I would say that both terms are  
10 accurate descriptions of what -- accurate ways  
11 of referring to these things. The first refers  
12 to the fact that these are elements that you  
13 can interact with. They will respond if you  
14 put the mouse there and click, for example.  
15 Decoration refers -- it's sort of in the  
16 context of this paragraph. Decoration refers  
17 to the fact that they're not fundamental to the  
18 window. That is, the window can exist and be  
19 useful and have a role even without these  
20 elements.

21 Q. If I had a window with a large word  
22 processing document in it running a word  
23 processing application, would the scroll bars  
24 be functional or decorative?

25 MR. MICALLEF: Object to form,

1 D. Karger

2 relevance, lack of foundation.

3 A. So just to be clear, we're not  
4 talking about decorative in the jewelry sense,  
5 that they make it pretty. We're talking about  
6 decorative in the less essential, less  
7 fundamental sense. Okay? A control bar  
8 provides one mechanism for navigating through a  
9 document, but, for example, the word processor  
10 that I used to use didn't have them. You used  
11 keys to navigate through the document instead.

12 So I think that is sort of a  
13 demonstration of the way in which the scroll  
14 bar can be, you know, an addition, a useful  
15 addition to the window, but is not fundamental  
16 to the window.

17 Q. What was that word processor you were  
18 referring to in your answer that used keys?

19 A. Oh, I've used several. Vi long ago;  
20 Emacs more recently. A few years ago, Emacs  
21 finally got scroll bars, but I still don't use  
22 them.

23 Q. Would you consider vi to be a word  
24 processing program?

25 A. Sure.

1 D. Karger

2 Q. Do you think most people of ordinary  
3 skill in the art would classify vi as a word  
4 processing program?

5 MR. MICALLEF: Object to form,  
6 relevance.

7 A. Sorry, ask the question again.

8 Q. Do you think most people of ordinary  
9 skill in the art would refer to vi as a word  
10 processing program?

11 MR. MICALLEF: Same objection.

12 A. They would most likely refer to it as  
13 an editor. That's the commonly used term in  
14 software engineering and such, where it's still  
15 heavily used.

16 And people might want to -- people  
17 might dislike referring to it as a word  
18 processing program due to its relative lack of  
19 WYSIWYG features. Some people may assume that  
20 a word processor must be WYSIWYG, but I don't  
21 think so. I think that vi and Emacs can be  
22 fine word processing programs.

23 Q. Can you describe how to delete a line  
24 using the vi editor?

25 A. You hit the letter K. Sorry.

1 D. Karger

2 Control-K? It's been a long time since I've  
3 used vi. I can tell you a lot more about  
4 Emacs.

5 Q. How about YY? Does that sound  
6 familiar?

7 A. Yeah, yeah, yeah.

8 Q. Why don't you use vi anymore?

9 A. Because I found Emacs to be more  
10 powerful.

11 Q. Is that the Emacs with the scroll bar  
12 or without the scroll bar?

13 A. I started using Emacs long before the  
14 scroll bar.

15 Q. How do you delete a line in Emacs?

16 A. Control-K.

17 Q. Do you think most people of ordinary  
18 skill in the art today know how to use vi?

19 MR. MICALLEF: Object to form,  
20 relevance.

21 A. So again, my understanding of  
22 somebody of ordinary skill in the art is that  
23 this is a technical term describing somebody  
24 who is familiar with the technology of the  
25 field and thus by definition, they would

1 D. Karger

2 understand how to use Emacs and vi.

3 Q. When you say understand how to use  
4 it, does that mean they'd be able to edit a  
5 document using vi?

6 MR. MICALLEF: Objection,  
7 relevance.

8 A. Again, if we're talking about this  
9 hypothetical person of ordinary skill, yes.

10 Q. Okay. When was the last time you  
11 edited a large document in a window without  
12 scroll bars?

13 MR. MICALLEF: Objection, lack of  
14 foundation.

15 A. So that was probably the last time I  
16 used Emacs when it didn't have scroll bars. I  
17 can't say exactly how many years ago that was.  
18 I can tell you that I still don't use the  
19 scroll bars in Emacs.

20 Q. Can you make a guess as to how many  
21 years ago it was?

22 A. Maybe seven, rough guess.

23 Q. So let me direct your attention to  
24 paragraph 131 of your report. It's on page 43.

25 A. Uh-huh. No, wait, paragraph 131. My



1 D. Karger

2 apologies.

3 Q. Yes. So again, just to be clear for  
4 the record, we're at paragraph 131 on page 43  
5 of Exhibit 1003. Sir, do you see that  
6 paragraph?

7 A. Yes, I do.

8 Q. Will you take a moment and read it to  
9 yourself?

10 A. Yes, I do.

11 Q. Okay. So what is your understanding  
12 of the meaning of the second sentence?

13 A. My understanding of that sentence is  
14 that when you're reading the patent and you see  
15 a dependent claim, there should be a reason for  
16 that dependent claim to be stated. And  
17 therefore, in order for it to not be redundant,  
18 there has to be something in the independent  
19 claim that the dependent claim is not covering.

20 Q. Okay. I'll ask the reporter to --  
21 and hand the witness what's been marked  
22 Exhibit 1001, which is a copy of U.S. Patent  
23 6,724,403.

24 Mr. Karger -- I'm sorry, Dr. Karger,  
25 do you recognize that document?

1 D. Karger

2 A. Yes, I do.

3 Q. Have you studied this document prior  
4 to this deposition?

5 A. Yes, I have.

6 Q. Sir, I'll ask you to turn to column  
7 24 of the document. Those are the numbered  
8 paragraphs in the back just a few pages from  
9 the back.

10 A. You mean Claim 54.

11 Q. No, I mean column 24, actually.

12 A. Oh, column 24? Sorry.

13 Yes.

14 Q. And in column 24 at about line 14,  
15 you'll see the start of Claim 1.

16 Do you see that?

17 A. Yes, I do.

18 Q. And now I'd like to direct your  
19 attention to line 37 of column 24 where Claim 3  
20 is started.

21 Do you see that?

22 A. Yes, I do.

23 Q. So Claim 3 reads, "The method of  
24 Claim 1 wherein said partitioning includes  
25 partitioning said array of tiles in a

1 D. Karger  
2 non-overlapping configuration wherein each tile  
3 of said array of tiles is a uniform size and  
4 shape."

5 Do you see that?

6 A. Yes, I do.

7 Q. Okay. You understand that the first  
8 part of Claim 3 that reads "the method of  
9 Claim 1" means that Claim 3 depends from  
10 Claim 1; correct?

11 A. Correct.

12 Q. And is that your understanding of  
13 what the words "independent" and "dependent  
14 claims" in paragraph 131 of your report mean?

15 A. Yes, it is.

16 MR. MICALLEF: Object to form.

17 A. Yes, it is.

18 Q. Okay. So Claim 3 requires that each  
19 array -- sorry, let me restate that. Claim 3  
20 requires that each tile of said array of tiles  
21 is a uniform size and shape; correct?

22 A. Yes.

23 Q. Okay. Does Claim 1 require that each  
24 tile of said array of tiles be a uniform size  
25 and shape?

1 D. Karger

2 MR. MICALLEF: Objection,  
3 foundation, relevance.

4 A. Claim 1 says nothing about  
5 requirements on the size and shape of the tile.

6 Q. Does that mean that Claim 1 is not  
7 limited to tiles of a uniform size and shape in  
8 your understanding?

9 MR. MICALLEF: Objection,  
10 foundation, relevance.

11 A. Yes, that is my understanding.

12 Q. And it's also your understanding that  
13 Claim 3 does require that the tiles be uniform  
14 size and shape; correct?

15 MR. MICALLEF: Same objections.

16 A. Yes, it is.

17 Q. Does that mean Claim 3 is narrower  
18 than Claim 1?

19 MR. MICALLEF: Object to form,  
20 foundation, relevance.

21 A. Yes.

22 Q. And that also means Claim 3 further  
23 limits Claim 1, does it not?

24 MR. MICALLEF: Same objections.

25 A. Yes.

1 D. Karger

2 Q. We have been going just about an  
3 hour. It might be a good time to take a break  
4 if you'd like before we go on to the next  
5 subject. So we can go off the record if you  
6 agree?

7 MR. MICALLEF: Yeah.

8 THE VIDEOGRAPHER: Off the record  
9 at 10:59 a.m.

10 (Recess taken.)

11 THE VIDEOGRAPHER: Back on the  
12 record at 11:21 a.m.

13 BY MR. HEINTZ:

14 Q. Sir, I'd like to direct your  
15 attention back to Exhibit 1003, in particular,  
16 paragraph 133 on the same page. I'm sorry,  
17 1003 is your declaration, not the patent.

18 A. Thank you.

19 Q. Do you see paragraph 133 there on  
20 Exhibit 1003?

21 A. Yes, I do.

22 Q. So you say in paragraph 133 that "The  
23 specification does not explicitly or implicitly  
24 define the term 'tile.' It also does not  
25 indicate that there are inherent on the

1 D. Karger

2 number" -- I'm sorry, "on the form, number or  
3 manner of presentation of tiles on the  
4 display."

5 Do you see that?

6 A. Yes, I do.

7 Q. Is there a word missing between  
8 "inherent" and "on"?

9 A. Yeah, I think it's probably  
10 "dependencies" or "requirements."

11 Q. So "requirements" or "dependencies";  
12 correct?

13 A. Yes.

14 Q. Now direct your attention to the  
15 previous page of Exhibit 1003, to paragraph  
16 129. In that paragraph, you say that a tile  
17 must be displayed as part of an array, but  
18 you're relying on other words in Claims 1, 22  
19 and 46 other than the word "tiles" to make that  
20 statement; is that correct?

21 A. Did you ask me about paragraph 129?

22 Q. I did.

23 MR. MICALLEF: Object to form.

24 A. Sorry, I think you may have meant  
25 paragraph 130, but can you restate the

1 D. Karger

2 question?

3 Q. Yeah, so in paragraph 129, you say  
4 that Claims 1, 22 and 46 contain no explicit  
5 language that dictates the form, number, or  
6 manner of presentation of tiles on the display  
7 other than a tile be displayed as part of an  
8 array; right?

9 Now, you recall just a moment ago we  
10 looked at paragraph 133 that says there's no  
11 explicit or implicit definition of the word  
12 "tiles." Correct?

13 A. Yes.

14 Q. So my question to you was, in  
15 paragraph 129, the requirement that a tile be  
16 displayed as part of an array under your  
17 interpretation, that requirement comes from  
18 words in those claims other than the word  
19 "tile"; is that correct?

20 MR. MICALLEF: Object to form,  
21 foundation, relevance.

22 A. Let me take a quick look at the  
23 claims.

24 Q. Sure.

25 A. Okay. Now could you restate the

1 D. Karger

2 question?

3 Q. Sure. Does the requirement for a  
4 tile to be displayed as part of an array, as  
5 you state in paragraph 129, come from the word  
6 "tile" or from some other word in Claims 1, 22,  
7 and 46?

8 MR. MICALLEF: Same objections.

9 A. So what Claims 1, 22 and 46 contain  
10 is the phrase "array of tiles." And just  
11 having that phrase, "array of tiles," it's not  
12 completely clear to me what you're asking in  
13 the sense that these two words do co-occur, and  
14 so the claims do focus on an array of tiles.

15 Q. Does that mean that there's nothing  
16 in the word "tiles" that requires them to be  
17 displayed in an array?

18 MR. MICALLEF: Objection,  
19 foundation, relevance.

20 A. So these three claims only refer to  
21 an array of tiles and are making no  
22 requirements on -- and therefore are therefore  
23 imposing a requirement only on -- only on the  
24 case of an array of tiles. I'm not sure if  
25 that answered your question but --



1 D. Karger

2 Q. Yeah, I don't think so.

3 A. Okay.

4 Q. So I'm starting from the proposition  
5 in paragraph 133 that in your opinion, the  
6 specification does not explicitly or implicitly  
7 define the term "tile." That's your opinion in  
8 paragraph 133; correct?

9 A. Correct. Now, of course I'm  
10 referring here to the specification and not to  
11 those claims.

12 Q. Okay. Is there a definition of  
13 "tile" in the claims?

14 MR. MICALLEF: Objection.

15 Q. Let's start with Claim 1. Is there a  
16 definition of "tile" in Claim 1? And that  
17 could be explicit or implicit.

18 MR. MICALLEF: Objection,  
19 foundation, relevance.

20 A. No, there is no description. There  
21 is no definition of "tile" in Claim 1.

22 Q. Is there a definition of "tile" in  
23 any other claim of the '403 patent?

24 MR. MICALLEF: Objection,  
25 foundation, relevance.

1 D. Karger

2 A. There is no definition of "tile" in  
3 the claims.

4 Q. Okay. So in paragraph 129, when you  
5 say that a tile must be displayed as part of an  
6 array, that has -- that requirement comes from  
7 some word in Claims 1, 22 and 46 other than the  
8 word "tile"; is that correct?

9 MR. MICALLEF: Same objections.

10 A. That requirement comes from the  
11 phrase -- from the use of the phrase "array of  
12 tiles."

13 Q. Okay. And if the word "array" did  
14 not appear in Claim 1, there would be no  
15 requirement in Claim 1 that tiles be displayed  
16 in an array; correct?

17 A. If the word "array" did not appear,  
18 then there would be no requirement involving an  
19 array, correct.

20 Q. Does the specification of the '403  
21 impose any requirement on a tile?

22 MR. MICALLEF: Object to form, lack  
23 of foundation, and relevance.

24 A. Specification attempts to describe  
25 what tiles are not, and also talks about what

1 D. Karger  
2 they typically or preferably might be. Are  
3 you -- do you consider any of those to be  
4 requirements that you're asking about?

5 Q. Well, let me ask you. Do you  
6 consider them in your opinion to be  
7 requirements of a tile?

8 MR. MICALLEF: Object to form,  
9 foundation, relevance.

10 A. No, I do not.

11 Q. Okay. So in paragraph 133 of your  
12 report, where you say that the specification  
13 does not explicitly or implicitly define the  
14 term "tile," you mean that there are no  
15 requirements of a tile that are found in the  
16 specification either explicitly or implicitly;  
17 is that correct?

18 MR. MICALLEF: Object to form,  
19 foundation, relevance.

20 A. When you say "requirements of a  
21 tile," do you mean requirements for something  
22 to fulfill the definition of being a tile?

23 Q. Correct.

24 MR. MICALLEF: Same objections.

25 A. So at this point, my understanding is

1 D. Karger  
2 that the definition of "tile" has been  
3 determined by the board in their review and  
4 that's the definition that we should be working  
5 with.

6 Q. Is that the definition you used in  
7 your report?

8 A. Is that the definition I use in my  
9 report? The report was written before the  
10 review response by the board. However, I  
11 believe my report is consistent with that  
12 definition.

13 Q. Does the definition -- I'm sorry, or  
14 the construction reached by the board include a  
15 requirement for a tile to be selectable?

16 MR. MICALLEF: Object to form.

17 A. Do you have a copy of the board  
18 report? I'd rather refer to it to answer.

19 Q. Yeah, yeah, let me. I did want to --  
20 we will get to that, but I want to stay with  
21 the subject of your report here.

22 A. Okay.

23 Q. So is it correct to say for your  
24 report that you did not rely on the board's  
25 construction because you said the board's

1 D. Karger  
2 construction was not available? I'm not trying  
3 to trick you.

4 A. I understand, but it's consistent  
5 with my own interpretation, which I did rely on  
6 in the report.

7 Q. Okay. And under your interpretation  
8 as discussed in this report, there is no  
9 requirement imposed by the specification on a  
10 tile.

11 MR. MICALLEF: Object to form,  
12 relevance, foundation.

13 A. I'm going to check something.

14 Q. Yes.

15 A. Now can you restate the question?

16 MR. HEINTZ: I'll ask the reporter  
17 to read back the last question, please.

18 (The reporter read from the record.)

19 A. So I just want to pick apart the  
20 "imposed by the specification" bit of this in  
21 the sense that this is not a tile. This cup  
22 that I'm holding is not a tile. So it's not  
23 that a tile can be anything in the world.  
24 However, I do not believe that the  
25 specification imposes any additional

1 D. Karger  
2 requirements on a tile beyond what we're  
3 expected to interpret from the plain meaning of  
4 the term.

5 BY MR. HEINTZ:

6 Q. So does that mean if I took Claim 1  
7 of the '403 patent, Exhibit 1001, and  
8 substituted the word "doohickey," that's  
9 D-O-O-H-I-C-K-E-Y, for the word "tile," it  
10 would not change the meaning of Claim 1 --

11 MR. MICALLEF: Object to form,  
12 relevance.

13 Q. -- in your opinion? Sorry.

14 MR. MICALLEF: Object to form,  
15 relevance, foundation.

16 A. So I believe it would change the  
17 meaning, because "tile" does have a plain  
18 meaning that implies something about its  
19 intended usage.

20 Q. Did you state the plain meaning in  
21 your report somewhere?

22 MR. MICALLEF: Objection,  
23 relevance.

24 A. So what I described in my report, for  
25 example, is the ways "tile" has been used in

1 D. Karger

2 user interface work in the past.

3 In systems like SAPHIRE and other  
4 research systems, there is a use of the word  
5 "tiling" which refers to -- in general to  
6 laying out a group of windows or elements of  
7 the user interface in a sort of nonoverlapping  
8 fashion.

9 Q. So is nonoverlapping -- oh, I'm  
10 sorry. Are you done?

11 A. However -- and this was what I had in  
12 mind as I started reading the patent. However,  
13 the specification itself says that the tiles  
14 may overlap. So it sort of starts with the  
15 notion of -- it uses this word, "tiles," which  
16 is sort of mostly consistent with how it has  
17 been used in the past in user interface work,  
18 but then it adds these -- what's the word?  
19 These soft, it may do this, it may not do this.  
20 It's almost removing requirements from what  
21 would -- one would interpret from the word  
22 itself until it's hard to nail down anything  
23 special about the tile.

24 Q. Do I understand your answer to mean  
25 that in the plain and ordinary meaning of the

1 D. Karger

2 word "tile," they are nonoverlapping?

3 MR. MICALLEF: Object to form,  
4 relevance.

5 A. So I'll again state that the board  
6 has made the determination of what "tile" means  
7 here.

8 Q. I understand, Doctor. I'm asking for  
9 your opinion of what the plain and ordinary  
10 meaning of the word "tile" is.

11 MR. MICALLEF: Same objections.

12 Let's let him answer the question.

13 A. So are you referring to the plain and  
14 ordinary meaning before one reads this  
15 specification? Or the meaning that is implied  
16 by this specification?

17 Q. Before one reads the specification,  
18 without reference to it.

19 A. Without reference to this  
20 specification --

21 MR. MICALLEF: Objection, relevance  
22 lack of foundation.

23 A. I would venture that a tile -- that  
24 one would parse "tiles" to mean nonoverlapping,  
25 yes.



1 D. Karger

2 Q. And I think you said in your -- one  
3 of your previous responses that the  
4 specification says the tiles can be  
5 overlapping, and I'd like you to point to me  
6 where in the specification it says that.

7 A. All right. Let me hunt.

8 Yeah, I'm afraid I misspoke. I  
9 believe that the discussion of tiles being  
10 overlapping is something that came out in  
11 the -- in the board review when there was a  
12 discussion of what would the actual definition  
13 of a tile be. There was some discussion of  
14 whether claims that they had to be  
15 nonoverlapping would be applicable. Again, if  
16 you want to give me a copy of the board review,  
17 I can find that segment, but that's what I was  
18 thinking of.

19 Q. All right. So there's nothing -- to  
20 be clear for record, there is nothing in the  
21 '403 patent that says tiles can be overlapping  
22 to the best of your knowledge, is there?

23 MR. MICALLEF: Objection,  
24 relevance.

25 A. Correct.

1 D. Karger

2 Q. All right. Let me direct your  
3 attention -- again, this is with respect to  
4 Exhibit 1001, the '403 patent, to column 4, and  
5 I'll ask you to read -- I'll ask you to direct  
6 your attention to line 55 in column 4. And  
7 I'll read it: "The present invention comprises  
8 a method executed by a computer under the  
9 control of a program stored in computer memory,  
10 said method comprising the steps of:  
11 Partitioning a visual display of a computer  
12 into an array of tiles in a nonoverlapping  
13 configuration."

14 Do you see that?

15 A. Yes, I do.

16 Q. Do you have an understanding of what  
17 the words "present invention" mean in the  
18 context of that sentence?

19 MR. MICALLEF: Objection,  
20 foundation, relevance.

21 A. Yes, I do.

22 Q. What's your understanding of what the  
23 words "present invention" mean in that passage?

24 A. It's the invention being discussed in  
25 this patent.

1 D. Karger

2 Q. And when you say "the invention,"  
3 what do you mean by that?

4 A. What I mean by --

5 MR. MICALLEF: Objection,  
6 relevance.

7 A. It is -- what do I mean by "present  
8 invention? It is the thing which this patent  
9 is proposing as a novel thing, which should be  
10 patented.

11 Q. Okay. Now, sir, I understand that  
12 you've gained some understanding of legal  
13 principles from counsel. Is that correct?

14 A. Yes.

15 Q. Do you have any understanding of  
16 legal principles applicable to patents from any  
17 other sources?

18 A. No.

19 Q. Okay. Regardless of where any  
20 understanding may have come from, do you have  
21 any knowledge of the existence of case law that  
22 says the words "present invention" can indicate  
23 that every claim should be limited by what's  
24 defined by the present invention in the  
25 specification?

1 D. Karger

2 MR. MICALLEF: Objection,  
3 relevance, foundation.

4 A. Can you restate that question,  
5 please?

6 Q. Sure. I will represent to you that  
7 there is in existence some case law applicable  
8 to patent cases that says that when the words  
9 "present invention" are used in the  
10 specification, and in particular in a summary  
11 of the invention section of a specification,  
12 that that which follows the word "present  
13 invention" should be held to limit the claims.  
14 And I'm just asking if you have ever heard of a  
15 principle like the one I just articulated?

16 MR. MICALLEF: Objection, form,  
17 relevance, foundation.

18 A. No, I have not.

19 Q. Sir, I'm going to direct your  
20 attention to paragraph 157 of your report.  
21 Sorry. Before I ask you to do that I'm going  
22 to ask you to direct your attention back to  
23 Exhibit 1001, the '403 patent. I apologize for  
24 the back-and-forth. I'll ask you to turn to  
25 column 9 of Exhibit 1001. And direct your

1 D. Karger

2 attention to lines 26 through 32, which read --

3 I'm sorry, I believe that's 24 through 32, but

4 let me just read it starting at line 24: "When

5 a tile is selected, whether by mouse click or

6 otherwise, the tile instantly provides the user

7 with access to the underlying information,

8 whether that data be a hierarchical menuing

9 system leading the user to a different level or

10 tiles, a word processing file stored on a local

11 area network, a spreadsheet stored locally on a

12 user's computer, HTML file on the Internet, or

13 a television signal."

14 Do you see that passage, sir?

15 A. Yes, I do.

16 Q. Okay. My question is, is there

17 anything in that passage that leads you to

18 believe that a tile cannot be selectable to

19 provide access to the underlying information

20 source?

21 MR. MICALLEF: Object to form,

22 relevance, lack of foundation.

23 A. The text asserts the tiles are

24 selectable. And it also says that when they

25 are selected, it provides access to the

1 D. Karger

2 underlying information. So those are both  
3 assertions of the specification.

4 Q. Okay. And is there anything in that  
5 passage that leads you to believe that you can  
6 have a tile as discussed in this specification  
7 that is not selectable to provide access to the  
8 underlying information?

9 MR. MICALLEF: Objection,  
10 foundation, relevance.

11 A. This again comes back to the question  
12 of the board's definition -- I'm sorry, are you  
13 asking -- the board has made a definition of  
14 "tile."

15 Q. It has, and I'm not asking about  
16 that.

17 A. You're not asking about that? Okay.  
18 So restate your question.

19 Q. Yes. Is there anything about that  
20 passage that leads you to believe that it is  
21 possible to have a tile as used in this  
22 document that is not selectable to provide  
23 access to underlying information?

24 MR. MICALLEF: Same objections.

25 A. So according to this document, tiles

1 D. Karger

2 are selectable and provide access to the  
3 underlying information.

4 Q. Okay. Thank you. Now I'll ask you  
5 to go back to Exhibit 1003, which is your  
6 report, and take a look at paragraph 157.

7 A. Yes.

8 Q. In paragraph 157 you say the '403  
9 specification explains that web browsers may  
10 present multiple overlapping windows that  
11 occupy a portion of the display.

12 Do you see that?

13 A. Yes, I do.

14 Q. Okay. And you cite to the '403  
15 patent, which is Exhibit 1001, at column 1,  
16 line 66, to column 2, line 1, and also to  
17 column 8, line 15 through 28, for that  
18 proposition. Is that what I understand those  
19 numbers to mean?

20 A. Yes.

21 Q. Okay. So where in those passages  
22 does it say that web browsers may present  
23 multiple overlapping windows that occupy a  
24 portion of a display?

25 A. Okay. Now can you restate the

1 D. Karger

2 question?

3 Q. Yes. Where in those two passages  
4 does it say, does the '403 specification  
5 explain that web browsers may present multiple  
6 overlapping windows that occupy a portion of a  
7 display?

8 A. Good. So if you look at the second  
9 citation, column 8, it asserts that the window  
10 may occupy a substantial percentage of the  
11 available screen space, usually 90 to  
12 100 percent.

13 So if a window is occupying 90 to  
14 100 percent of the screen space, then by the  
15 pigeonhole principle, any pair of them is going  
16 to have to overlap; right? If each of them is  
17 that large, there's no way to put them both up  
18 without having them overlap.

19 Meanwhile, the first quotation talks  
20 about having two of these running at the same  
21 time. So you put those two together, you are  
22 running two of these -- you have two of these  
23 windows, each of them is larger than 50 percent  
24 of the screen, there's necessarily going to be  
25 an overlap.



1 D. Karger

2 Q. Right.

3 A. And for the last bit, portion of a  
4 display, well, 90 percent is a portion of a  
5 display.

6 Q. Precisely. So the '403 patent is  
7 talking about prior art browsers.

8 A. Uh-huh.

9 Q. And it's saying these prior art  
10 browsers often occupy 90 percent or more of a  
11 display. The patent also teaches that there  
12 can be two of them running at the same time,  
13 and so those two passages together indicate  
14 that these things overlap. They necessarily  
15 overlap.

16 MR. MICALLEF: Object to form.

17 A. They do not necessarily overlap  
18 because --

19 Q. I'm sorry.

20 A. They don't have to be 90 to  
21 100 percent of the screen space.

22 Q. Correct.

23 A. Usually, but people have -- people  
24 choose many different layouts for their screens  
25 and they can choose a layout where they do not

1 D. Karger

2 overlap.

3 Q. Right. But for the usual case, the  
4 patent is teaching that these windows with  
5 browser -- with browsers running in them will  
6 overlap, and the usual case being defined here  
7 at column 8, line 16, as 90 to 100 percent of  
8 the display area; correct?

9 MR. MICALLEF: Object to form,  
10 foundation, lack of relevance.

11 A. The specification is asserting that  
12 usually browsers will occupy 90 to 100 percent  
13 of the space. I wouldn't make that assertion  
14 myself. I don't think that's necessarily true.

15 Q. You disagree with that assertion?

16 A. Yes.

17 Q. But nonetheless, if one were to take  
18 the assertion as true in the patent, then one  
19 would say -- would reach the exact conclusion  
20 you reached here at paragraph 157 then: In a  
21 usual case you're going to have overlapping  
22 windows with browsers running in them; right?

23 MR. MICALLEF: Object to form,  
24 foundation, relevance.

25 A. Again, usual case? Yes. Necessary?

1 D. Karger

2 No.

3 Q. As defined in the patent. The usual  
4 case as defined in the patent here at column 8,  
5 line 16, where the usual case is 90 to  
6 100 percent.

7 A. Yes.

8 MR. MICALLEF: Objection,  
9 foundation, relevance.

10 Q. And isn't it true that here in column  
11 8, a tile is differentiated from what's been  
12 described as the usual case of windows that  
13 overlap?

14 A. Yes, it is.

15 Q. Okay. And wouldn't that lead one to  
16 conclude that as the term "tile" is used in the  
17 patents, it's intended not to be overlapping?

18 MR. MICALLEF: Objection,  
19 relevance, foundation.

20 Q. And again, just to clarify my  
21 question, we're assuming here for the sake of  
22 argument that the assumption -- that the  
23 statement about what the usual case is, 90 to  
24 100 percent of a -- of the available display  
25 space being occupied, that was correct. We're

1 D. Karger  
2 going to take the patent at its word. And in  
3 so doing, isn't it correct that when you read  
4 the description in column 8 about why a tile is  
5 different from the these windows, you would  
6 conclude that tiles are overlapping?

7 MR. MICALLEF: Object to form,  
8 foundation, relevance.

9 A. Did you mean I would conclude that  
10 tiles are nonoverlapping?

11 Q. I did mean that. Thank you.

12 MR. MICALLEF: Same objections.

13 A. So again, the language of this  
14 specification is vague. It asserts that a tile  
15 will typically be smaller in size, suggesting  
16 that it can be as large. Right? So we're in  
17 this sort of "usually," "typically," right,  
18 where both cases are clearly possible. Right?  
19 You can have a -- right? The specification  
20 asserts that usually, a window is 90 percent of  
21 the size. But it's clear that there's another  
22 case where it's not. Specification asserts  
23 that a tile will typically be smaller, but that  
24 makes clear the possibility that it might not.

25 Q. Right. And when the patent talks

1 D. Karger

2 about the two windowed displays of browsers  
3 that occupy 90 to 100 percent of the screen,  
4 it's clear to the reader, is it not, that a  
5 user cannot view those simultaneously?

6 MR. MICALLEF: Object to form,  
7 relevance, foundation.

8 A. Well, clearly, a user who wanted to  
9 view those simultaneously would resize them so  
10 that they could be seen simultaneously.

11 Q. But when they occupy 90 to  
12 100 percent of the available display space, as  
13 the patent discusses is the usual case, it's  
14 clear to the reader that the user will not be  
15 able to view them simultaneously; isn't that  
16 correct?

17 MR. MICALLEF: Same objections.

18 A. Not quite. For example, the MSIE  
19 Kits, or the Brown patent, talk about  
20 mechanisms for active desktop, and what -- part  
21 of their mechanism is actually a transparent  
22 browser window. And as a result, if you put  
23 the transparent browser window on top, it may  
24 occupy 100 percent; that's how it's designed,  
25 to occupy 100 percent of the space. But if

1 D. Karger

2 there's another browser window behind the  
3 transparent window, you'll still see both of  
4 them simultaneously.

5 Q. And the usual case being discussed  
6 here in the '403 patent, are they talking about  
7 transparent browser windows?

8 A. Oh, no, certainly not.

9 Q. So again, going on the discussion of  
10 the '403 patent, isn't it a logical conclusion  
11 that if you're in the usual case where 90 to  
12 100 percent of the display area is occupied by  
13 a window with a browser in it, that a user  
14 cannot view the two browser windows  
15 simultaneously?

16 MR. MICALLEF: Objection,  
17 foundation, form, and relevance.

18 A. So I should -- I want to make clear  
19 that sort of one of the problems with the  
20 specification is that it asserts various things  
21 which I don't take to be correct. So in a  
22 sense, we are being asked to read a  
23 counterfactual specification.

24 If we accept the things that they  
25 assert to be true, well, that takes us to some

1 D. Karger

2 strange places. Okay?

3 But if you want me to do that, if you  
4 want me to accept the assertion that usually a  
5 window is 90 percent of the size -- certainly,  
6 if windows are 90 percent of the size, then you  
7 can -- and if you are taking "simultaneously"  
8 to mean literally at the same time, which is  
9 another sort of vocabulary thing that we need  
10 to run by with the board, but if you mean  
11 literally at the same time see the entirety of  
12 both of the windows, then that's physically  
13 impossible.

14 Q. Okay. And then you see the statement  
15 here that says a tile -- I'm sorry, here being  
16 column 8, line -- I assume this is line 37.  
17 There's a little bit of ambiguity in the  
18 spacing on the numbers there, but the statement  
19 reads, "A tile is different from a window  
20 because a tile will typically be smaller in  
21 size, allowing the user to view multiple tiles  
22 simultaneously if desired."

23 A. Right.

24 Q. So I understand your distinction  
25 about typically, but was it not the case that

1 D. Karger  
2 here, there's a distinction being drawn between  
3 the previous case of windows with occupations  
4 of 90 percent of the display area not being --  
5 allowing the user to view things  
6 simultaneously, whereas here the tiles do allow  
7 the user to view things simultaneously?

8 MR. MICALLEF: Objection,  
9 foundation, relevance.

10 A. So again, this is a case of sort of  
11 requiring counterfactual reading. The  
12 assertion that a tile is different from a  
13 window because a tile will typically be smaller  
14 in size, it doesn't make sense to me, right?  
15 Because windows can be smaller, tiles can be  
16 bigger, so on and so forth.

17 Sorry. Now I've lost your question.

18 Q. Okay. So, you know, the  
19 specification does say, as you pointed out,  
20 that the window typically or usually occupies  
21 90 to 100 percent; right? And the -- I'm  
22 sorry. That's correct; right?

23 A. The specification certainly says  
24 that.

25 Q. Right. That means that the



1 D. Karger

2 specification allows that a window may be  
3 smaller than 90 to 100 percent; correct?

4 A. Correct.

5 Q. And, in fact, the window can be  
6 pretty small, smaller than a tile; correct?

7 A. Correct.

8 Q. Okay. So what it says here, that a  
9 tile is different from a window because a tile  
10 will typically be smaller in size, that may be  
11 commenting on the fact that a tile of a size  
12 let's say 100 by 100 pixels may be bigger or  
13 smaller than a window because the window is  
14 variable in size; correct?

15 MR. MICALLEF: Objection,  
16 relevance.

17 A. I need to hear that question again.

18 Q. All right. You know what? I'm going  
19 to withdraw that question.

20 A. All right.

21 Q. It's true, is it not, that one  
22 reading lines 37 through 41 we will call it of  
23 column 8 of the Exhibit 1001, the '403 patent,  
24 would understand that typical tiles are going  
25 to allow the user to view multiple tiles

1 D. Karger  
2 simultaneously if he desires it?

3 MR. MICALLEF: Object to form,  
4 relevance.

5 A. That is the assertion of this  
6 specification, right, that it is -- this  
7 specification does assert that a tile will be  
8 smaller in size -- typically be smaller in  
9 size, allowing the user to view multiple tiles  
10 simultaneously.

11 Q. Okay.

12 A. Again, this is where we're sort of in  
13 this counterfactual world.

14 Q. I understand.

15 A. Thank you.

16 Q. And I think we've established already  
17 that the '403 doesn't disclose any examples of  
18 overlapping tiles. Correct?

19 MR. MICALLEF: Objection,  
20 relevance.

21 Q. Do you know what? I'll withdraw the  
22 question. Let's go to paragraph 159 of your  
23 declaration. That's the next page, page 50 of  
24 Exhibit 1003. Now, here you say in paragraph  
25 159 that you understand that in concurrent

1 D. Karger

2 litigation, the patent owner -- that's  
3 SurfCast, correct?

4 A. Correct.

5 Q. -- has asserted that this claim  
6 language means simply dividing, or divide some  
7 or all of a display into an array of tiles.  
8 Correct? That's what that sentence says?

9 A. Yes.

10 Q. And the claim language we're talking  
11 about here is the partitioning step of Claim 1  
12 of the '403 patent; is that correct?

13 A. As well as Claims 22 and 46, yes.

14 Q. Okay. So what's your understanding  
15 of the meaning of the word "dividing"?

16 MR. MICALLEF: Objection,  
17 relevance, foundation.

18 Q. Let me lay a foundation.

19 Do you have an understanding of the  
20 meaning of the word "dividing"?

21 MR. MICALLEF: Same objections.

22 A. I have a plain language understanding  
23 of the meaning of the word "dividing," yes.

24 Q. What's your understanding?

25 A. This is one of these games where you

1 D. Karger  
2 have to define a term without using it.  
3 Dividing means separating. We have many  
4 synonyms. Separating, partitioning, splitting.  
5 Formally, it would sort of refer to assigning  
6 each infinitesimal element of the display to  
7 one or perhaps more of the tiles that you are  
8 said to be dividing the display among.

9 Q. Yeah. And so we're talking now,  
10 Dr. Karger, or at least I'm asking for your  
11 understanding of the plain and ordinary  
12 meaning.

13 A. Yes.

14 Q. Not in the context of the '403 patent  
15 at the moment.

16 A. Uh-huh.

17 Q. Okay. So you said splitting is one  
18 of the synonyms you gave for dividing.

19 A. Splitting up, partitioning,  
20 separating, yes.

21 Q. So partitioning is the word in the  
22 claim.

23 A. That's right.

24 Q. So I'm going to ask that we don't  
25 refer to that word now because we're trying to

1 D. Karger  
2 get -- what I'm trying to ask you, sir, is your  
3 understanding of the construction here that  
4 partitioning means dividing or divide some or  
5 all of the display --

6 A. Yes.

7 MR. MICALLEF: Object.

8 Q. -- into an array of tiles?

9 MR. MICALLEF: Objection,  
10 relevance.

11 Q. So you've said your understanding of  
12 dividing there means splitting.

13 A. Sort of tautologically. They're  
14 synonyms, right?

15 Q. Okay.

16 A. I don't know that I've helped any  
17 because I didn't define splitting either.

18 Q. Fair enough. Can you think of  
19 something -- of examples where something is  
20 split and -- but still overlapping?

21 MR. MICALLEF: Object to form,  
22 relevance.

23 A. In some of the work that I do we  
24 often talk about fuzzy partitioning, fuzzy  
25 clustering. These are -- most basic meaning of

1 D. Karger

2 clustering might imply you are taking a group  
3 of items and separating them into -- each goes  
4 to one cluster. But there are many cases where  
5 you want to allow for there to be more than --  
6 for an item to be associated with more than one  
7 of the clusters.

8 Q. And you used the word "fuzzy  
9 partitioning"; is that correct --

10 A. Yeah.

11 Q. -- to describe that concept?

12 Does the word "fuzzy" appear in  
13 Claim 1 of the --

14 A. Certainly not.

15 Q. Would you understand the '403 patent  
16 to be referring to fuzzy partitioning in  
17 Claim 1 --

18 MR. MICALLEF: Objection.

19 Q. -- when it recites partitioning?

20 MR. MICALLEF: Are you done?

21 MR. HEINTZ: Yeah.

22 MR. MICALLEF: I'm sorry.

23 Objection, relevance.

24 A. Claim 1 takes no position on whether  
25 the partition -- actually, let me read Claim 1

1 D. Karger

2 first.

3 Claim 1 takes no position on whether  
4 the division/partition is fuzzy or not or  
5 whether it has overlaps or not.

6 Q. Is that your understanding of  
7 Claim 1?

8 MR. MICALLEF: Object to --  
9 objection, relevance.

10 Q. Let me withdraw that question. Let  
11 me ask you a simpler one. If I say to you I'm  
12 going to divide a room, does that mean that  
13 the -- any portion of the room is going to be  
14 overlapping if I've divided it?

15 MR. MICALLEF: Objection,  
16 foundation, relevance.

17 A. So I venture that "division" taken  
18 colloquially often means that you have -- that  
19 there is some sense in which things are not  
20 overlapping, some sense in which they are  
21 separate. But there can be situations where  
22 they overlap or are nonseparated in other ways.

23 For example, if I take a pair of --  
24 if I think about a pair of windows, visually,  
25 they're overlapping. Semantically, they are

1 D. Karger

2 separate.

3 Q. In that answer when you're referring  
4 to windows are you talking about physical  
5 windows in a room or --

6 A. Computer windows, computer windows.  
7 So computer windows can be thought of as a  
8 division of a display even when those windows  
9 are overlapping.

10 Q. So getting back to my question about  
11 dividing a room, if I say I'm going to divide  
12 the room into two rooms, doesn't that mean to  
13 you colloquially that the rooms are not  
14 overlapping?

15 A. Yes --

16 MR. MICALLEF: Objection,  
17 relevance.

18 A. -- colloquially.

19 Q. Sir, are you familiar with the term  
20 "currency exchange rate"?

21 MR. MICALLEF: Objection,  
22 relevance.

23 A. I believe I've seen it used in the  
24 news.

25 Q. What's your understanding of the



1 D. Karger

2 meaning of the term, if any?

3 A. This would be the rate at which one  
4 can exchange one currency for another currency.

5 Q. As an example, it would be the rate  
6 at which a dollar could be -- or dollars could  
7 be exchanged for pounds; correct?

8 A. Correct.

9 Q. You're at MIT; correct?

10 A. That's right.

11 Q. Have you ever heard the term  
12 "acceptance rate" used with respect to  
13 admissions at MIT?

14 A. Yes.

15 Q. What's your understanding of what  
16 that term means with respect to admissions at  
17 MIT?

18 A. That refers to the portion of  
19 applying students who are ultimately accepted,  
20 although at other times it can mean the portion  
21 of students who we accepted to the program who  
22 then decided to come.

23 Q. I see. Sir, are you familiar with  
24 the term "bit error rate"?

25 A. Yes, I am.

1 D. Karger

2 Q. In what context are you familiar with  
3 that term?

4 A. That's in various kinds of coding and  
5 communication settings, and it refers to the  
6 rate at which bits that are being transmitted  
7 get flipped or lost.

8 Q. Is it something like a number of bits  
9 flipped or lost as a total of -- as a function  
10 of the total number of bits in the  
11 transmission?

12 MR. MICALLEF: Objection,  
13 relevance.

14 A. At times it can be stated as a  
15 probability for each bit to be flipped, but  
16 yes, there is sort of an association with the  
17 portion of bits that are being flipped from  
18 among those that are being transmitted.

19 Q. So if I said my bit error rate is  
20 1 percent, that would mean I would expect that  
21 out of every hundred bits, one of them would be  
22 lost in transmission or transmitted  
23 erroneously; is that right?

24 MR. MICALLEF: Objection,  
25 relevance.

1 D. Karger

2 A. Right.

3 Q. Sir, none of those terms involving  
4 "rate," "currency exchange rate," "bit error  
5 rate," or "acceptance rate," measured any  
6 quantity with respect to time; is that right?

7 MR. MICALLEF: Objection,  
8 relevance, ambiguous.

9 A. So taking those one at a time, it  
10 seems to me that "bit error rate" is being used  
11 in a context when we are thinking about  
12 transmissions, right? And in those  
13 transmissions we're often talking about rates  
14 of transmission, bits per second being  
15 delivered to a receiver. And so it's sort of  
16 natural to associate "rate" with that because  
17 it's sort of anchored in a time rate.

18 Similarly, when I hear the words  
19 "currency exchange rate," it does make me  
20 think, right, of currency flowing back and  
21 forth, currency being exchanged, right? As my  
22 dollars go out, I get back my pounds at a -- at  
23 a certain -- at a certain rate.

24 So I will agree with you that, for  
25 example, "acceptance rate" does not talk

1 D. Karger

2 about -- does not have a time component to it  
3 but it has sort of a connotation of time even  
4 when it's not actually there.

5 Q. Was there anything else you wanted to  
6 say?

7 A. No.

8 Q. So for "bit error rate," you said  
9 that has a -- the idea that bits are  
10 transmitted at a rate; correct? But the bit  
11 error rate has nothing to do with transmission  
12 rate; correct? If I transmit 100 bits at one  
13 baud rate and a 100 bits at another baud rate,  
14 assuming they have the same error rate, I'm  
15 going to expect to get the same number of  
16 errors regardless of the transmission speed;  
17 isn't that correct?

18 MR. MICALLEF: Object to form,  
19 relevance.

20 A. You will get the same number of  
21 errors but you will get them at a different  
22 rate, right? If the transmission is faster,  
23 the errors will happen faster as well. This  
24 actually can matter a lot.

25 Q. But the bit error rate will be the

1 D. Karger

2 same --

3 A. As defined, will be --

4 Q. -- regardless of what the  
5 transmission rate is; correct?

6 A. Correct.

7 MR. MICALLEF: Objection,  
8 relevance.

9 Q. So it's correct, then, that the bit  
10 error rate is not measured with respect to  
11 time; isn't that correct?

12 MR. MICALLEF: Objection.

13 Q. Isn't that true?

14 MR. MICALLEF: Objection,  
15 relevance.

16 A. That is correct.

17 Q. You mentioned that the admission rate  
18 at MIT had some connotation of time; correct?

19 A. Connotation? I mentioned that rate  
20 has a connotation of time, yes.

21 Q. How does the admission rate at MIT  
22 correlate to time?

23 MR. MICALLEF: Objection,  
24 relevance.

25 A. This is why I said connotation.

1 D. Karger

2 Right? Rate does not automatically -- in the  
3 absence of anything else, rate has a  
4 connotation of time. When we talk about the  
5 admission rate -- although frankly, we usually  
6 talk about the admission ratio or the admission  
7 percentage. I don't know that I've heard  
8 "admission rate."

9 But it can become clear from context  
10 that rate is not being used in a temporal  
11 sense.

12 Q. In fact there are many rates that are  
13 not used in a temporal sense; isn't that  
14 correct?

15 MR. MICALLEF: Objection,  
16 relevance, foundation.

17 A. I would say I can't count -- I can't  
18 count quantities, but I would say that it's the  
19 minority of usages.

20 Q. Nonetheless there are many; correct?

21 MR. MICALLEF: Same objection.

22 A. Since there are many speakers, there  
23 probably are many usages, yeah.

24 Q. Okay. Have you ever heard of a fuel  
25 consumption rate as expressed in terms of miles

1 D. Karger

2 per gallon?

3 A. Yes.

4 Q. Does that rate have anything to do

5 with time in any sense?

6 MR. MICALLEF: Objection,

7 relevance.

8 A. It absolutely does, because you're

9 going to be driving somewhere and that's going

10 to be taking you some time, right? There is a

11 temporal aspect to this consumption. The units

12 of measurement in this case do not involve time

13 but there is a temporal aspect to what's going

14 on.

15 Q. Are you telling me that the fuel

16 consumption rate varies as a function of time?

17 MR. MICALLEF: Object to form,

18 relevance.

19 A. So I don't mean to be tendentious,

20 but yes, I do -- but fuel consumption rates can

21 vary as a function of time. I don't think

22 that's the actual question you were asking, so

23 do you want to restate the question?

24 Q. What do you think the question I was

25 asking was?

1 D. Karger

2 MR. MICALLEF: Object to form,  
3 relevance, lack of foundation. And you  
4 should slow down or she's going to get  
5 very mad at you.

6 A. I think you were asking whether time  
7 appears in the units of measure of miles per  
8 gallon.

9 Q. Okay.

10 A. And it does not.

11 Q. Your previous answer sort of alludes  
12 to the fact that a car's fuel consumption rate  
13 may change over time because, for instance,  
14 engine components could become worn; correct?

15 A. Correct.

16 Q. Okay. But again, it's not necessary  
17 in the fuel consumption rate -- I'm sorry,  
18 the -- withdrawn.

19 It's correct to say that there are  
20 many rates that are not measured as a unit or  
21 as a function of time; correct?

22 MR. MICALLEF: Object to form,  
23 relevance.

24 A. Correct.

25 Q. I'd like you to go back to



1 D. Karger

2 Exhibit 1001 and look at the passage at column  
3 12, lines 50 to 55. Sir, do you have that  
4 passage?

5 A. Yes, I do.

6 Q. Did you read that before forming your  
7 opinions in your expert report?

8 A. Yes, I did.

9 Q. Okay. So starting at line 50, column  
10 12, the '403 patent reads: "In a preferred  
11 embodiment, according to priorities that may be  
12 applied to individual tiles on a tile by tile  
13 basis if desired, the grid manages the refresh  
14 rate of each tile in the grid."

15 Do you see that?

16 A. Yes, I do.

17 Q. Okay. Now, the next sentence begins,  
18 "For example, for locally stored" -- sorry,  
19 "stored word processing or spreadsheet files,  
20 the user may configure the tiles to refresh  
21 only when the underlying data is written to the  
22 local hard drive."

23 Do you see that?

24 A. Yes, I do.

25 Q. What's your understanding, if any, of

1 D. Karger

2 the words "for example" in that sentence?

3 MR. MICALLEF: Objection,

4 relevance, foundation.

5 A. My understanding is that there are to  
6 follow examples of the concept that has just  
7 been articulated.

8 Q. Is that the concept of refresh rate?

9 MR. MICALLEF: Objection,

10 relevance, form.

11 A. I don't know if you can narrow it  
12 that finely, right? There's a large sentence  
13 about priorities that may be applied to  
14 individual tiles on a tile-by-tile basis. So  
15 refresh rate is part of the concept being  
16 discussed, but there's a bunch of other  
17 material in there as well.

18 Q. Okay. You read the sentence and this  
19 passage that we are discussing when you formed  
20 your opinion --

21 A. Yes.

22 Q. -- as expressed in your expert  
23 report; correct?

24 A. Correct.

25 Q. Can you tell me now what your

1 D. Karger  
2 understanding is of exactly what the examples  
3 that are going to follow as indicated by the  
4 "for example" phrase in that sentence means?

5 MR. MICALLEF: Objection,  
6 relevance, form.

7 A. Can you restate? I didn't understand  
8 that question.

9 Q. I'm sorry, let's try again. So  
10 again, we're looking at column 12, line 53. It  
11 says "for example."

12 A. Uh-huh.

13 Q. I believe you told me that you'd  
14 expect that examples are going to follow.

15 A. Yes.

16 Q. And I'm asking for your understanding  
17 of exactly what the following examples are, or  
18 are examples of.

19 MR. MICALLEF: Objection, form,  
20 relevance.

21 A. They -- I would expect them to be  
22 examples of how, according to priorities that  
23 may be applied to individual tiles on a  
24 tile-by-tile basis, the grid manages the  
25 refresh rate of each tile in the grid.

1 D. Karger

2 Q. All right. Now, the first example is  
3 "For locally stored word processing or  
4 spreadsheet files, the user might configure the  
5 tiles to refresh only when the underlying data  
6 is written to the local hard drive."

7 Do you see that?

8 MR. MICALLEF: Objection, form,  
9 foundation.

10 A. Yes, I do.

11 Q. So is it your understanding that that  
12 is an example of how, according to priorities  
13 that may be applied to tile, individual tiles  
14 on a tile-by-tile basis if desired, the grid  
15 manages the refresh rate of each tile in the  
16 grid?

17 MR. MICALLEF: Objection,  
18 relevance.

19 A. It's my understanding that that is  
20 presented as an example, yes.

21 Q. Okay. And so doesn't that mean  
22 according to your understanding that refreshing  
23 a tile only when underlying data is written to  
24 the local hard drive is an example of a refresh  
25 rate?

1 D. Karger

2 MR. MICALLEF: Object to form,  
3 relevance, foundation.

4 A. So as you can see in my report --

5 Q. Would you be so kind as to indicate  
6 where you're referring?

7 A. Yes. So just as one example, if you  
8 look on page 53, paragraph 171, the second line  
9 of page 53, I reported on exactly this example  
10 which you've brought up. And again, the  
11 opening sentence is broad. It talks not  
12 only -- it doesn't say examples of refresh  
13 rates are the following. It talks about this  
14 whole process of managing refreshes based on  
15 priorities.

16 So this first example was  
17 problematic. It sort of fought against this  
18 notion of rate being temporal, right?

19 But there are several sort of  
20 reasonable interpretations of what it's talking  
21 about. One is that the refresh rate on this  
22 particular example is actually zero. Right?  
23 There's no requirement that one only refresh  
24 according to the rate. One can refresh for  
25 other reasons as well.

1 D. Karger

2 There's also the possibility that it  
3 may be referring to the need to poll the  
4 information in order to see whether it has been  
5 changed, right? This is how one would  
6 generally implement this sort of update on  
7 change is that the system would with some  
8 periodicity actually query the file system to  
9 see if there was a change to the document under  
10 consideration, and if so, it would do a  
11 refresh.

12 Q. Is that your answer?

13 A. Yes.

14 MR. HEINTZ: Okay. We have to  
15 stop. We're out of tape over here.

16 THE VIDEOGRAPHER: This is the end  
17 of videotape number 1. Off the record  
18 at 12:26 p.m.

19 (Discussion held off the record.)

20 THE VIDEOGRAPHER: This is the  
21 beginning of tape number 2. Back on the  
22 record at 12:30 p.m.

23 BY MR. HEINTZ:

24 Q. Okay. So Dr. Karger, again with  
25 reference to Exhibit 1003, this time paragraph

1 D. Karger

2 168, you state that the broadest reasonable  
3 construction of a retrieval rate would  
4 encompass any recurring time interval at which  
5 information is retrieved; correct?

6 A. Yes.

7 Q. Okay. And then in paragraph 170, you  
8 state that retrieval rates referred to in  
9 independent Claim 22 may be either the same or  
10 different; correct?

11 A. Correct.

12 Q. Okay. And you mention that that  
13 conclusion flows from dependent Claim 39, which  
14 specifies that the first and second retrieval  
15 rates are different; correct?

16 A. Correct.

17 Q. So the point you're making here in  
18 paragraph 170 is that retrieval rates for  
19 different tiles may be different; is that  
20 correct?

21 MR. MICALLEF: Object to form.

22 Q. I'm sorry, let me restate that  
23 question because I did make a mistake.

24 You're making the point in paragraph  
25 170 that the retrieval rates of different tiles

1 D. Karger  
2 may be the same or may be different; correct?

3 A. Can you restate that question once  
4 more?

5 Q. Sure. In paragraph 170, you're  
6 making the point that the retrieval rates of  
7 two different tiles may either be the same or  
8 they may be different; correct?

9 A. So if you look at Claim 22, it  
10 doesn't talk about the retrieval rate of a  
11 tile, it talks about the rate of retrieval from  
12 an information source.

13 Q. Okay.

14 A. So I want to be sure that I  
15 understand what you're asking.

16 Q. Sure. The point of paragraph 170 is  
17 that the retrieval rates associated with two  
18 different information sources may either be the  
19 same or they may be different; correct?

20 A. Correct.

21 Q. All right. So in paragraph 171,  
22 where you pointed out, you cite to the passage  
23 of the '403 specification where we just read,  
24 you're citing to that passage to illustrate how  
25 the '403 specification discloses different



1 D. Karger

2 retrieval rates; isn't that correct?

3 MR. MICALLEF: Objection,

4 relevance. Form. Object to form too.

5 A. Okay. Now can you restate the  
6 question?

7 Q. Yes. The passage in the '403 patent  
8 at lines 12, 50 to 65, are being cited by you  
9 in this paragraph of your report as support for  
10 the proposition that retrieval rates referred  
11 to in Claim 22 may be the same or may be  
12 different; isn't that correct?

13 MR. MICALLEF: Same objections.

14 A. So what I'm actually asserting in 171  
15 is that the different tiles can be retrieved in  
16 different ways, okay? But this certainly does  
17 cover the possibility that they may be  
18 retrieved according to a rate and at different  
19 rates.

20 Q. Okay. Doesn't it follow, then, that  
21 the passage that you cite here in paragraph 171  
22 of your report: "For example, for locally  
23 stored word processing or spreadsheet files,  
24 the user might configure the tiles to refresh  
25 only when the underlying data is written to the

1 D. Karger

2 hard drive," doesn't it follow then that that's  
3 an example of a refresh rate?

4 MR. MICALLEF: Object to form,  
5 relevance, foundation.

6 A. It does not. In fact, I think we  
7 were quite clear in the expert report to sort  
8 of differentiate these issues. For example,  
9 in -- what was that paragraph we were just  
10 looking at?

11 Q. Do you mean 170?

12 A. 171 actually. "For example,  
13 refreshes may occur when information is written  
14 to a hard drive or according to a defined  
15 refresh rate." Okay? So I do not believe that  
16 every means of refreshing means a refresh rate.

17 Q. Let's start at paragraph 170. You  
18 say retrieval rates referred to in independent  
19 Claim 22 may be either the same or may be  
20 different.

21 A. Yes.

22 Q. This conclusion, which means the  
23 conclusion that retrieval rates referred to in  
24 independent Claim 22 may be either the same or  
25 may be different, flows from dependent

1 D. Karger

2 Claim 29 -- 39, which specifies that the first  
3 and second retrieval rates are different;  
4 right?

5 A. Yes.

6 Q. Then you say the '403 specification  
7 also supports this reading of the claims.

8 A. Yes.

9 Q. "This reading" meaning that the  
10 retrieval rates referred to in independent  
11 Claim 22 may be either the same or may be  
12 different.

13 A. Yes.

14 Q. Okay.

15 A. But again --

16 MR. MICALLEF: Wait for the  
17 question. Wait for the question.

18 THE WITNESS: Oh.

19 Q. Then you go on to say that, "For  
20 example, the '403 specification explains that  
21 all of the tiles on a display may be configured  
22 to refresh in the same manner or may be  
23 individually configured to refresh in different  
24 ways"; correct?

25 A. Yes.

1 D. Karger

2 Q. Is it your understanding that  
3 Claim 22 allows for refreshing to occur other  
4 than in accordance with a refresh rate?

5 MR. MICALLEF: Objection, form,  
6 relevance, foundation.

7 A. Claim 22 specifically talks about  
8 retrieving in accordance with a retrieval rate.

9 Q. It requires the retrieving to occur  
10 in accordance with a retrieval rate; correct?

11 A. Correct.

12 Q. Okay. Now, I notice on the second  
13 line on page 53 of your report, Exhibit 1003,  
14 you say "the defined refresh rate." Are you  
15 using "refresh rate" and "retrieval rate"  
16 interchangeably in this paragraph, or are we  
17 talking about something other than the subject  
18 matter of Claim 22?

19 MR. MICALLEF: Object to form.

20 A. I wouldn't say necessarily that I am  
21 using them interchangeably, but that the things  
22 that we have been saying about refresh rates  
23 are -- there are matching things to say about  
24 retrieval rates.

25 Q. Well, I'm just -- I'm confused

1 D. Karger  
2 because at one point we're talking about  
3 retrieval rates in paragraph 170, then in the  
4 next paragraph we're talking about a defined  
5 refresh rate. Is the refresh rate different  
6 from the retrieval rate in Claim 22?

7 MR. MICALLEF: Objection, form,  
8 relevance, foundation.

9 A. What we're doing in this part of the  
10 expert report is trying to understand the word  
11 "rate." Right? And so again, this is  
12 something on which the board has ruled, right?  
13 They've made their decision about what this  
14 means. But in this portion of the report,  
15 we're talking about what a retrieval rate is.  
16 Right? And there's a previous portion of the  
17 report talking about what a refresh rate is.  
18 But they're sort of parallel constructions.  
19 Even if they don't mean exactly the same thing,  
20 we expect that the use of the word "rate" is  
21 being used in the same way in both  
22 constructions.

23 Q. Okay.

24 A. So these examples are being drawn out  
25 to understand how that "rate" modifier is

1 D. Karger

2 applied on "retrieval" and "refresh."

3 Q. So in Claim 22, as you understand the  
4 claim, is retrieval rate -- sorry, does  
5 Claim 22 require information from said first  
6 information source to be retrieved in  
7 accordance with a first retrieval rate? And  
8 just so we're clear, I'm looking at column 25,  
9 starting at line 34.

10 A. Uh-huh.

11 Q. Okay. So is it true, based on your  
12 understanding of Claim 22, that the claim  
13 requires information to be retrieved from the  
14 first information source in accordance with a  
15 first retrieval rate?

16 MR. MICALLEF: Objection,  
17 relevant -- relevance.

18 A. Yes.

19 Q. Okay. It doesn't -- Claim 22 doesn't  
20 allow it to be -- doesn't allow this  
21 information to be retrieved by some -- in  
22 accordance with something other than a  
23 retrieval rate; correct?

24 MR. MICALLEF: Object to form,  
25 relevance, foundation.

1 D. Karger

2 A. The claim requires retrieval in  
3 accordance with a retrieval rate.

4 Q. Okay. Are you saying, then, that  
5 when you cited in paragraph 171 of your report  
6 the example of locally stored word  
7 processing -- sorry, locally stored word  
8 processing or spreadsheet files, the user might  
9 configure the tiles to refresh only when the  
10 underlying data is written to the local hard  
11 drive, that that's not an example of a  
12 retrieval rate within the scope of Claim 22?

13 MR. MICALLEF: Object to form,  
14 relevance.

15 A. So when we were talking about that  
16 example before, I explained a sense in which  
17 one could infer a retrieval rate for the case  
18 of the document on the hard drive in the sense  
19 that if you have to poll the hard drive in  
20 order to see whether there has been a change,  
21 that would be a kind of retrieval rate at which  
22 you are doing that polling.

23 Q. I'm sorry. Is that your answer?

24 A. Yeah.

25 Q. Okay. '403 patent doesn't say

1 D. Karger

2 anything about polling in that example, does  
3 it?

4 MR. MICALLEF: Object to form,  
5 relevance.

6 A. It does not say anything.

7 Q. It would be possible to use an  
8 interrupt mechanism to perform exactly the same  
9 thing, wouldn't it?

10 A. It would be possible.

11 Q. All right. So again, you put in  
12 paragraph --

13 A. It would not be -- it would not be  
14 typical.

15 Q. In paragraph 171, you repeated the  
16 words from the specification, and what I'm  
17 trying to find out is in your opinion, is this  
18 example of refreshing only when underlying data  
19 is written to the local hard drive, is that an  
20 example of a retrieval rate in Claim 22 or  
21 isn't it?

22 MR. MICALLEF: Object to form,  
23 relevance, lack of foundation.

24 A. So the polling example that I just  
25 gave you would, I think, be an example of



1 D. Karger

2 retrieval information in accordance with a  
3 rate.

4 Q. Are you saying that the  
5 interrupt-driven example would not be?

6 MR. MICALLEF: Object to form,  
7 relevance.

8 A. If the retrieval -- if the refresh  
9 happened only at an interrupt, which might  
10 happen only once, after all, then no, I do not  
11 think that would fit the definition of a rate.

12 Q. What if it happened both during an  
13 interrupt and on some other basis?

14 MR. MICALLEF: Object to form,  
15 relevance, lack of foundation.

16 A. You could certainly have some sort of  
17 mixed system where you were polling at a  
18 particular rate and also taking interrupts.

19 Q. Would that be within the scope of a  
20 retrieval rate of Claim 22 or wouldn't it?

21 MR. MICALLEF: Object to form,  
22 foundation, relevance.

23 A. Well, if you were polling at a given  
24 rate, then yes, it would be in the scope of  
25 Claim 22.

1 D. Karger

2 Q. Even though you're also writing on an  
3 interrupt basis, in addition to whatever  
4 polling you were doing?

5 MR. MICALLEF: Object to form,  
6 foundation, relevance.

7 A. Yes, my understanding is that as long  
8 as you satisfy the claims as stated, what else  
9 you're doing doesn't actually matter.

10 Q. Did you alert the reader in your  
11 report as to this distinction you're making  
12 about when this example in the spec is relevant  
13 to what a rate is and what it's not?

14 A. Well, as I said, in our text, we do  
15 attempt to draw this distinction, that there  
16 can be refreshes happening -- that refreshes  
17 are happening not only at a rate but that there  
18 can be other manners of -- let me look for the  
19 exact text. Right, refreshes may occur when  
20 information is written to a hard drive or  
21 according to a defined retrieval rate. So I  
22 think we're making it pretty clear that writing  
23 to a hard drive is not in the class of defined  
24 retrieval rate.

25 Q. But it's not clear that writing to

1 D. Karger

2 the hard drive is not in the larger class of  
3 refresh rates, is it?

4 MR. MICALLEF: Object to form,  
5 relevance.

6 A. I just said it isn't, right? Why  
7 would we say written to a hard drive or  
8 according to a refresh rate?

9 Q. You said, in fact, a defined refresh  
10 rate, didn't you, in your report?

11 A. Yes.

12 Q. And Claim 22 doesn't say "defined  
13 refresh rate," does it?

14 MR. MICALLEF: Object to form,  
15 relevance.

16 A. That's correct.

17 Q. So your report doesn't alert the  
18 reader that when data's written to the hard  
19 drive according to the example, it's not within  
20 the scope of Claim 22, which doesn't recite  
21 defined refresh rate, does it?

22 A. Again, in this report, we explain or  
23 I explain how I think "rate" should be  
24 interpreted, and I talk about it being a  
25 recurring time interval, right? So hard drive

1 D. Karger

2 isn't there, right? It just doesn't fit into  
3 the definition that I'm giving. I mean, I --  
4 I'm not sure how I could have been clearer than  
5 that about this is what I think a refresh rate  
6 is.

7 Q. Isn't it true you forgot your earlier  
8 distinction when you got to this paragraph and  
9 you're using this to support the notion that  
10 the refresh rates can be different or the  
11 retrieval rates can be different?

12 A. I don't understand the question. I  
13 forgot what?

14 Q. That you forgot what you had said  
15 earlier about this example not being an example  
16 of a rate when you went to find support for the  
17 proposition that the rates could be different?

18 A. Oh, no, I --

19 MR. MICALLEF: Object to form.

20 A. Actually, I didn't forget at all  
21 because this was something I spent some time  
22 thinking about to try to understand what the  
23 patent was saying. I simply wanted to ground  
24 what I was saying in what I had actually  
25 written.

1 D. Karger

2 Q. Okay. And you believe here in  
3 paragraph 171 your discussion of something  
4 that's not a rate is going to help somebody  
5 understand what retrieval rate in Claim 22  
6 means; is that right?

7 MR. MICALLEF: Object to form,  
8 relevance, foundation, argumentative.

9 A. Yes.

10 MR. HEINTZ: Great. Thanks. I'm  
11 cognizant of the fact we're running  
12 pretty late in the day now. It's 12:47.  
13 If it's acceptable, I think we should  
14 probably break for lunch.

15 MR. MICALLEF: Sure.

16 THE VIDEOGRAPHER: Off the record  
17 at 12:47 p.m.

18 (A luncheon recess was taken from  
19 12:47 p.m. through 1:56 p.m.)

20 THE VIDEOGRAPHER: Back on the  
21 record at 1:56 p.m.

22 BY MR. HEINTZ:

23 Q. Okay, Dr. Karger, just a couple of  
24 follow-up questions on what we discussed prior  
25 to the break. First of all, did you have any

1 D. Karger

2 discussions with anybody during the break?

3 A. No.

4 Q. Okay.

5 A. About anything relevant to this case.

6 Q. Okay. So going back again to

7 Exhibit 1003, and the discussion in paragraph

8 171.

9 A. Yes.

10 Q. Okay? In particular, the first full

11 sentence on page 53 of Exhibit 1003. The

12 sentence reads, "For example, refreshes may

13 occur when information is written to a hard

14 drive or according to a defined refresh rate."

15 Do you see that?

16 A. Yes.

17 Q. Does that mean that refreshing when

18 information is written to a hard drive is not a

19 refresh rate?

20 MR. MICALLEF: Objection,

21 relevance.

22 A. That's correct, certainly according

23 to the board's interpretation of refresh rates.

24 Information -- having the criterion be that the

25 information is written to a hard drive is not a

1 D. Karger

2 refresh rate criteria.

3 Q. You answered that question with  
4 respect to the board's construction. Is the  
5 answer the same with respect to your  
6 construction?

7 A. Yes.

8 MR. MICALLEF: Objection,  
9 relevance.

10 Q. Okay. Now, going back to  
11 Exhibit 1001 --

12 A. Just to clarify something.

13 Q. Sure.

14 A. You could imagine writing to a hard  
15 drive at a certain rate, where it says sort of  
16 periodic write to a hard drive, which would  
17 then cause the refresh to happen at a  
18 particular rate.

19 But I just -- the writing -- the  
20 criterion being refresh when there's a write to  
21 the hard drive is not a refresh rate.

22 Q. Right. Thank you. So going back to  
23 Exhibit 1001, then, the '403 patent again.  
24 I'll direct you to the passage we looked at  
25 earlier at column 12. So that would mean under

1 D. Karger  
2 your construction, then, that the example that  
3 starts on line 53, that the user might  
4 configure the tiles to refresh only when the  
5 underlying data is written to the local hard  
6 drive, is not in fact an example of the grid  
7 managing the refresh rate of each tile in the  
8 grid. Is that correct?

9 MR. MICALLEF: Objection.

10 Objection, relevance.

11 A. I wouldn't say that. For example, to  
12 decide not to assign a refresh rate is a way of  
13 managing the refresh rate.

14 Q. In Claim 1 of the '403 patent -- and  
15 if you'd like to refer to it, it's column 24 --  
16 there's a step in Claim 1 that reads at line  
17 23, "assigning a first refresh rate to a first  
18 tile of said array of tiles"; correct?

19 A. Yes.

20 Q. Okay. Does that mean then that the  
21 example at column 12, line 53, of the user --  
22 starting at line 53, of the user configuring  
23 the tiles to refresh only when the underlying  
24 data's written to the local hard drive, is not  
25 within the scope of Claim 1?



1 D. Karger

2 MR. MICALLEF: Objection, form,  
3 relevance.

4 A. I would say that it still can fit the  
5 form in the sense that a refresh rate of zero  
6 is sort of an edge case or a base case. Sorry,  
7 that's not quite the right word. What word am  
8 I looking for? A refresh rate of zero is a  
9 distinctive case in that it means that you're  
10 not refreshing. Right? There's no specific  
11 finite period of time within which the refresh  
12 just happened, but for convenience of  
13 discussion, it's useful to refer to that as a  
14 refresh rate of zero.

15 Q. Well, so I'm confused by your answer,  
16 so let's try to work backwards.

17 A. Uh-huh.

18 Q. You've said that with respect now to  
19 the statement in paragraph 171 of Exhibit 1003,  
20 that refreshing when information is written to  
21 a hard drive is not according to a -- sorry,  
22 not refreshing according to a refresh rate;  
23 correct?

24 MR. MICALLEF: Objection,  
25 relevance.

1 D. Karger

2 A. I'm trying to think of the proper  
3 example of what I want to explain.

4 So I guess with a diet soda you could  
5 refer to it as having zero calories or as  
6 having no calories. So we could get into a  
7 sort of a -- we could try and figure out  
8 whether zero calories is a -- whether having  
9 zero calories is a way of describing having  
10 calories or not, and I think in a similar  
11 fashion when you talk about a refresh rate of  
12 zero, it's a useful label for what is happening  
13 if you want to always talk in terms of refresh  
14 rates, but it's also very natural to talk in  
15 terms of not having a refresh rate if your  
16 refresh rate is zero.

17 Q. Well, you know, the difference in  
18 your example, I guess, is that in your example  
19 the soda has no calories, whereas in this  
20 example, the tile is going to be refreshed at  
21 various points; correct?

22 MR. MICALLEF: Objection, form,  
23 relevance.

24 A. That's correct, but that does not  
25 mean that it has a nonzero refresh rate.

1 D. Karger

2 Q. Okay. So again, yes or no, under  
3 your understanding of what refresh rate means,  
4 does refreshing -- sorry, is refreshing when  
5 information is written to a hard drive an  
6 example of refreshing according to a refresh  
7 rate?

8 MR. MICALLEF: Objection, form,  
9 relevance.

10 A. So I guess what I would say is that  
11 refreshing only when information is written to  
12 a hard drive, not any periodicity, is not  
13 refreshing according to a rate. However, it  
14 can happen that the -- in that circumstance, it  
15 is quite reasonable to talk about having a  
16 refresh rate of zero. It just means that  
17 you're never refreshing according to that rate  
18 because -- well, that rate would never make you  
19 refresh.

20 Q. So that would mean, I believe, would  
21 it not, that the example of configuring the  
22 tiles to refresh only when the underlying  
23 data's written to the local hard drive is not  
24 within the scope of Claim 1 under your  
25 construction of refresh rate; correct?

1 D. Karger

2 MR. MICALLEF: Object to form,  
3 objection based on relevance.

4 A. So I think what that question hinges  
5 on is whether -- forget about the hard drive  
6 updates at all. If you assign a refresh rate  
7 of zero to something and as a result it never  
8 updates, is that in accordance -- is that  
9 updating in accordance with a refresh rate? I  
10 think it's a bit ambiguous. Right?

11 To never update is indeed -- I mean  
12 that's in accordance with this refresh rate of  
13 zero. So it becomes sort of vacuously true  
14 that you are updating in accordance with the  
15 refresh rate of zero because you never update.  
16 So I think it could -- I think it can be read  
17 as fitting the claim.

18 Q. Does the '403 patent describe any  
19 examples of a zero refresh rate?

20 A. Well, we've just discussed one,  
21 right? The hard drive example is sort of  
22 implicitly describing a refresh rate of zero,  
23 or it's -- it's staying mum on the issue;  
24 right? As we discussed before, you could have  
25 a mixed rule where you refresh at a rate and

1 D. Karger

2 also on some sort of trigger. The patent, the  
3 specification doesn't say in that example  
4 whether there is also a refresh rate.

5 Q. Well, doesn't the --

6 A. The patent doesn't say whether there  
7 is also a nonzero -- whether there's a nonzero  
8 refresh rate or a zero refresh rate along with  
9 that criterion of updating where there is a  
10 write to the hard drive.

11 Q. Doesn't the passage say, for example,  
12 for locally stored word processing or  
13 spreadsheet files, the user might configure the  
14 tiles to refresh only when the underlying  
15 data's written to a local hard drive? And is  
16 it not correct that we've established that the  
17 example that's being discussed here is an  
18 example of the grid managing the refresh rate  
19 of each tile in the grid?

20 MR. MICALLEF: Objection, form,  
21 asked and answered, argumentative,  
22 compound, irrelevant.

23 A. You are correct. I think the telling  
24 word is "only." That if it asserts it is only  
25 going to refresh when data is written to the

1 D. Karger

2 hard drive, that would imply a refresh rate of  
3 zero.

4 Q. And yet that would be an example of a  
5 refresh rate according to this passage of the  
6 patent, would it not?

7 MR. MICALLEF: Objection, form,  
8 irrelevant.

9 A. It would be an example of assigning a  
10 refresh rate of zero.

11 Q. I'm sorry. Was there something  
12 further?

13 A. It would be an example of assigning a  
14 refresh rate of zero. However, none of the  
15 refreshes -- none of the refreshes that  
16 actually happened would be rate-driven  
17 refreshes.

18 Q. So would that example fall within the  
19 scope of Claim 1?

20 MR. MICALLEF: Objection, form,  
21 asked and answered, irrelevant.

22 A. I believe that it would in the sense  
23 that not refreshing at all is in accordance  
24 with a refresh rate of zero.

25 Q. And by refresh rate of zero in your

1 D. Karger  
2 answer, you refer to never refreshing at all or  
3 just not refreshing on any predetermined  
4 recurring time interval?

5 MR. MICALLEF: Objection, form,  
6 relevance.

7 A. The latter. Not refreshing at a time  
8 interval.

9 Q. Okay, thank you. Dr. Karger, I'd  
10 like you to turn to paragraph 217 of your  
11 report. The first line of paragraph 270 --  
12 sorry, 217 reads, "I'll be making frequent use  
13 of our community's understanding of  
14 abstraction, modularity, and reuse."

15 Do you see that?

16 A. Yes.

17 Q. What do you mean by "our community"  
18 in that sentence?

19 A. Computer programmers, software  
20 engineers, people who write software.

21 Q. Does that include -- is everyone of  
22 ordinary skill in the art in that community?

23 MR. MICALLEF: Objection, form.

24 A. In the art we are discussing today,  
25 yes.

1 D. Karger

2 Q. I'd also like you to direct your  
3 attention now to paragraph 223. Okay. Near  
4 the bottom of page 68 of Exhibit 1003, there's  
5 a discussion of xbiff, xperformon.

6 A. That's a typo. I think it's xperfmon  
7 is the actual --

8 MR. MICALLEF: Wait for the  
9 question.

10 THE WITNESS: Right. Sorry.

11 MR. HEINTZ: Please let him finish  
12 his answer before you admonish him,  
13 Mr. Micallef.

14 Q. And with that correction, on the  
15 following page, 69, there's also a reference to  
16 xclock.

17 Do you see that?

18 A. Yes.

19 Q. All right. Are you aware of anyone  
20 ever calling any of those three things a tile?

21 MR. MICALLEF: Objection.

22 Q. Are you aware of anyone referring to  
23 any of those three things as a tile?

24 MR. MICALLEF: Objection, form.

25 A. I don't think I -- I don't recall



1 D. Karger  
2 hearing anybody call them tiles, no.

3 MR. HEINTZ: Okay. All right, I'm  
4 going to ask the reporter to hand to  
5 Dr. Karger what's been marked as  
6 Exhibit 1007.

7 Before I do I'd like to make the  
8 record clear, Dr. Karger and Joe, I've  
9 taken Exhibit 1007, which is the MSIE  
10 resource kit reference, and only  
11 extracted the portions of it that I saw  
12 cited in your report. I do have a  
13 complete copy here if you'd like to  
14 refer to it, but just for ease of  
15 transportation I've done this. So I  
16 hope there'd be no objections to it on  
17 this basis.

18 MR. MICALLEF: As long as you have  
19 one that he can look at if he wants to.

20 MR. HEINTZ: I do.

21 MR. MICALLEF: Okay. In fact, I'll  
22 represent to you right now that this is,  
23 in fact, the entire Exhibit 1007.  
24 Please feel free to ask for this at any  
25 time.

1 D. Karger

2 THE WITNESS: All right.

3 MR. MICALLEF: Why don't you put it  
4 somewhere up here. We can close this  
5 here.

6 MR. HEINTZ: Here.

7 BY MR. HEINTZ:

8 Q. Okay. Dr. Karger, do you recognize  
9 at least the portions of Exhibit 1007 that have  
10 been placed before you?

11 A. Yes, I do.

12 Q. This is what's referred to as MSIE  
13 Kit in your declaration?

14 A. Yes.

15 Q. Thank you. All right. I'd like you  
16 to turn to paragraph 256 of -- now, this is  
17 Exhibit 1003, your declaration.

18 Do you see, sir, in paragraph 256 you  
19 say that "MSIE Kit explains that by default,  
20 Internet Explorer lays out new active desktop  
21 items on a 3-by-2 grid"?

22 A. Yes.

23 Q. You cite several places for support  
24 for that proposition. One of those places I  
25 believe is referred to as XXX, which is Roman

1 D. Karger

2 numeral XXX of Exhibit 1007; is that correct?

3 A. I can't see the page numbers. I'm  
4 getting there.

5 Q. If it helps, it's the page that --

6 A. Yes, I have it here.

7 Q. All right, great. Thank you. So  
8 while you're on that page, does MSIE Kit  
9 explain that by default Internet Explorer lays  
10 out new active desktop items on a 3-by-2 grid?

11 MR. MICALLEF: Object to form,  
12 foundation.

13 Q. Dr. Karger, my question's only with  
14 respect to page XXX, or Roman XXX.

15 A. Understood. The reason I've been  
16 looking elsewhere is that I don't think the  
17 point is that each of these independently  
18 demonstrates that Internet Explorer lays out  
19 items on a 3-by-2 grid, but is simply gathering  
20 several different elements that together make  
21 this point.

22 Q. Thank you. I see.

23 A. All right. This one was brought in  
24 because it has a 2-by-2 grid showing, to just  
25 give some context.

1 D. Karger

2 Q. Is that 2-by-2 grid you're referring  
3 to the one that includes what appears to be a  
4 picture of the Golden Gate Bridge in the lower  
5 left-hand corner?

6 A. Yes.

7 Q. Okay. Is that a single active  
8 desktop item based on your understanding, or  
9 multiple active desktop items?

10 MR. MICALLEF: Object to form.

11 A. I fear that the resolution is -- I  
12 fear that I can't tell from what is being shown  
13 in the picture.

14 Q. I'm going to direct your attention to  
15 the lower left-hand corner of the image of the  
16 Golden State Bridge -- Golden Gate Bridge.

17 Do you see that?

18 A. Yes.

19 Q. Do you see underneath that there's --  
20 there appears to be a square surrounded by a  
21 circle?

22 A. Maybe. What I see is a white smudge.

23 Q. To the right of that, there is some  
24 other smudge.

25 Do you see that?

1 D. Karger

2 A. Yes.

3 Q. And then all the way across, there is  
4 a -- what appears to be a somewhat circular  
5 object.

6 Do you see that?

7 A. Yes.

8 Q. Do you have any understanding as to  
9 whether those things represent some sort of bar  
10 that stretches across the entirety of the four  
11 images?

12 MR. MICALLEF: Object to form. I'm  
13 sorry to interrupt you, counsel, but are  
14 you looking at the same picture, the two  
15 of you?

16 THE WITNESS: Yes, we are.

17 MR. MICALLEF: I don't think so.

18 MR. HEINTZ: You're looking at --  
19 you're correct. You're looking at the  
20 declaration. Something has gone wrong.

21 MR. MICALLEF: It's smaller.

22 That's the point.

23 MR. HEINTZ: Right.

24 Q. So for the record I'd like you to --  
25 yeah, page 30, or Roman XXX -- I think those

1 D. Karger

2 are also Roman numerals, so I'm not sure.

3 MR. MICALLEF: XXX.

4 MR. HEINTZ: XXX of Exhibit 1007.

5 A. Okay. Here we are.

6 Q. To be clear, again, we are on  
7 Exhibit 1007, page XXX.

8 A. Yes.

9 Q. Okay. And again, with respect to  
10 what you previously characterized as a 2-by-2  
11 array of active desktop items?

12 A. That's not how I characterized it.

13 Q. I'm sorry. How did you characterize  
14 it?

15 A. I said that there was a 2-by-2 grid.

16 Q. Okay. With respect to the 2-by-2  
17 grid, I've asked you whether that's a single  
18 active desktop item or multiple active desktop  
19 items.

20 A. Right. And my response was that I  
21 can't tell given the resolution of the  
22 screenshot.

23 Q. If it turns out that that 2-by-2 grid  
24 is a single active desktop item, does that  
25 change your answer -- I'm sorry, does that

1 D. Karger

2 change your opinion that page XXX of  
3 Exhibit 1007 discloses or supports a disclosure  
4 that active -- I'm sorry, Internet Explorer  
5 lays out new active desktop items on a 3-by-2  
6 grid?

7 MR. MICALLEF: Object to form,  
8 foundation.

9 A. Yeah, again, at this resolution it's  
10 kind of hard to tell, right? If we posit that  
11 that's a single active desktop item, there's a  
12 thing with like a 15 which might be another  
13 active desktop item, which might be immediately  
14 below the map on the screen. The picture's  
15 just too fuzzy. So I fear I can't really -- I  
16 can't really say what could be inferred if it  
17 turns out -- well, it is conceivable that this  
18 image is not relevant to the assertion made in  
19 paragraph 256. The quote is from one of the  
20 other citations elsewhere in the -- from one of  
21 the other listed citations.

22 Q. Okay. I'm going to ask you to turn  
23 now -- and I'll represent to you that this  
24 is -- what I'm about to tell you is true. So  
25 we can stay in Exhibit 1007 and avoid

1 D. Karger

2 confusion.

3 The next thing you cite in your  
4 report after page XXX are pages 176 to 177 of  
5 MSIE Kit, Exhibit 1007.

6 A. Yes.

7 Q. Okay. And I believe you'll find that  
8 in the portion of Exhibit 1007 in front of you  
9 we've included those pages.

10 Do you see them, 176 to 177?

11 A. Yes, I do.

12 Q. Can you tell me, sir, what on those  
13 pages supports the notion that MSIE Kit  
14 explains that by default, Internet Explorer  
15 lays out new active desktop items on a 3-by-2  
16 grid?

17 MR. MICALLEF: Objection,  
18 foundation.

19 A. So to be clear, the quote in  
20 paragraph 256 is from page 183, okay? So this  
21 is --

22 Q. Thank you.

23 A. This is not a made-up-from-nowhere  
24 quote. It is coming out of the document. And  
25 it makes the point very clearly.



1 D. Karger

2 Q. I apologize if I implied anything to  
3 the contrary, but I am interested in what --

4 A. Why we added other --

5 Q. Yes.

6 A. Why I added other elements.

7 MR. MICALLEF: Object to form.

8 A. Yeah, I would probably ascribe this  
9 to a simple editing error. I mean, you know,  
10 all that's needed in support of this quote is  
11 number 183, and the others probably just came  
12 out -- came along in some copy and paste or  
13 something like that.

14 Q. Okay. Let's take a look at page 180.  
15 Were you able to find anything on page 180 that  
16 supports the notion that Internet Explorer lays  
17 out new active desktop items on a 3-by-2 grid  
18 by default?

19 MR. MICALLEF: Object to form,  
20 foundation.

21 A. I think again that I'll make the  
22 point that all that this paragraph is asserting  
23 is that the document states that by default,  
24 Internet Explorer lays out new active desktop  
25 items on a 3-by-2 grid. That can be found on

1 D. Karger

2 page 183 and it's unlikely to be found in any  
3 of these other quotations.

4 Q. So I can take that as a no, there's  
5 nothing on page 180 that supports that notion?

6 MR. MICALLEF: Object to form,  
7 foundation.

8 A. Sorry, can you ask the question once  
9 more?

10 Q. Yes. Is there anything on page 180  
11 of Exhibit 1007 that indicates that by default  
12 Internet Explorer lays out new active desktop  
13 items on a 3-by-2 grid?

14 MR. MICALLEF: Same objections.

15 A. So the problem is that this page  
16 references several other pages, and so in order  
17 to answer that question definitively, I will  
18 need to read other -- I will need to read  
19 chapter 16 and part 4 of the document. I can  
20 do so if you like.

21 Q. But it would be true that nothing on  
22 the page itself supports it; it might be found  
23 in other pages?

24 MR. MICALLEF: Object to form.

25 A. Well, does a reference to a place

1 D. Karger

2 that supports it count as something that  
3 supports it? I -- again, sort of asking what  
4 exactly you're asking.

5 Q. Okay. You don't cite chapter 16 in  
6 paragraph 256 of your report, do you?

7 A. That's correct. But as I said -- and  
8 it may not be relevant, but I'm simply pointing  
9 out that there's a reference to chapter 16 on  
10 this page 180. So if you want to say nothing  
11 supports it, I would have to read more  
12 extensively before I could agree to that  
13 statement.

14 Q. Okay. How about page -- let me ask  
15 you a question now. Going back to page 176 we  
16 talked about earlier, there is a -- what  
17 appears to be an HTML layer with active desktop  
18 items depicted on that page, isn't there?

19 A. Yes.

20 Q. And up in the upper left-hand corner  
21 there's something labeled an icon layer;  
22 correct?

23 A. Yes.

24 Q. And what's depicted underneath those  
25 words are not active desktop items, are they?

1 D. Karger

2 MR. MICALLEF: Object to form.

3 A. What's depicted underneath those  
4 words?

5 Q. In other words, the circles with the  
6 rectangles underneath them, those are icons.  
7 Those aren't active desktop items, are they?

8 MR. MICALLEF: Object to form.

9 A. Yes. If you look at page 175, you  
10 will see it clearly stated that the icon layer  
11 has the user's existing desktop shortcuts and  
12 the background HTML layer has all the active  
13 desktop items.

14 Q. So those symbols that appear to be  
15 composed of circles and rectangles are, in  
16 fact, the desktop items. Those are icons;  
17 correct?

18 MR. MICALLEF: Object to form.

19 A. That would be a natural way to  
20 interpret the diagram. It doesn't explicitly  
21 say.

22 Q. Would that be the way you interpret  
23 it?

24 A. Yes.

25 Q. All right. So what I see then on

1 D. Karger

2 page 1 -- in the figure on page 176 are perhaps  
3 two active desktop items referred to as desktop  
4 components, one square, one rectangular;  
5 correct?

6 A. Correct.

7 Q. And the square overlays or overlaps  
8 part of the rectangle; correct?

9 A. Correct.

10 Q. Would you characterize that as an  
11 array?

12 MR. MICALLEF: Object to form.

13 A. You still don't want me to look at  
14 the board report?

15 Q. No, just your understanding.

16 MR. MICALLEF: Objection,  
17 relevancy, lack of foundation.

18 Q. I'm going to withdraw that question.  
19 I said "array," I believe.

20 A. Yes, you did.

21 Q. What I meant to ask you is grid.  
22 Does anything on page 176 -- I'm sorry. Are  
23 the two what we've described as active desktop  
24 items depicted on 176, are they arranged in a  
25 grid?

1 D. Karger

2 A. All right. Can you restate the  
3 question?

4 Q. Yes. Are the active desktop items  
5 depicted on page -- in the figure on page 176  
6 on Exhibit 1007 arranged in a grid?

7 A. So this is again a case where I  
8 believe the board has something to say, which  
9 is what we should be paying attention to. But  
10 you're asking about my own personal opinion?

11 Q. Uh-huh.

12 MR. MICALLEF: Objection,  
13 relevance.

14 A. So my personal opinion would be that  
15 these two items, taken in isolation, are not  
16 arranged in a grid.

17 Q. When you say "taken in isolation," do  
18 you mean taken in isolation from the rest of  
19 the figure on that page?

20 A. No. I mean that with only two items,  
21 it's kind of hard to tell if there is a grid.

22 Q. Does the fact that one overlaps the  
23 other prevent it from being a grid under your  
24 understanding?

25 MR. MICALLEF: Objection,

1 D. Karger

2 relevance.

3 A. Again, since we're talking about my  
4 personal opinion rather than the board's  
5 interpretation, I think it would be possible to  
6 see overlaps and still perceive a grid.

7 Q. Okay. We're almost done with this  
8 line of questioning, Doc. Let's go to page  
9 174. Is there anything on page 174 that  
10 supports the notion that by default Internet  
11 Explorer lays out new active desktop items on a  
12 3-by-2 grid?

13 MR. MICALLEF: Object to form.

14 A. So again, this quote from page 180 is  
15 not duplicated on page 174. It's page 180  
16 which makes the key point.

17 Q. Well, I understand that the quote is  
18 not duplicated, but my question was: Does  
19 anything on page 174 support the notion of the  
20 quoted language?

21 A. No, I think the quoted language  
22 supports itself.

23 Q. Okay. And last page is page 213.  
24 The question again is: Does anything on page  
25 213 support the notion that by default,

1 D. Karger

2 Internet Explorer lays out new active desktop  
3 items on a 3-by-2 grid?

4 A. No.

5 Q. Okay. So let's turn to page 183 now  
6 of Exhibit 1007. That's the place where the  
7 quote appears; is that correct?

8 A. Correct.

9 Q. Okay. And that's in the paragraph  
10 next to the bullet point that starts "Smaller  
11 is better"; correct?

12 A. Correct.

13 Q. Just turn briefly to the first page  
14 of Exhibit 1007.

15 Do you see there in the upper  
16 left-hand corner there's a -- yes, that's it --  
17 there's a notation that says "CD-ROM included"?

18 A. Yes.

19 Q. Did you get a CD-ROM -- I'm sorry,  
20 have you looked at the CD-ROM that's included  
21 with this Internet Explorer?

22 A. No.

23 Q. Why haven't you looked at it?

24 A. Why haven't I looked at it? I think  
25 because I saw enough in the document to make



1 D. Karger

2 the points that I wanted to make.

3 Q. The CD-ROM is in your possession; is  
4 that right?

5 A. No.

6 Q. Not today, but I mean in your  
7 possession -- were you provided a copy of the  
8 CD-ROM that accompanied this reference?

9 A. No.

10 Q. Okay. Did you ask for the CD-ROM?

11 A. No.

12 Q. So you don't know whether the  
13 statement on page 183 of Exhibit 1007 is  
14 actually reflective of what the software on the  
15 CD-ROM does, do you?

16 MR. MICALLEF: Object to form, lack  
17 of foundation, irrelevant.

18 A. That's correct. Of course I will --  
19 if I can elaborate, I'll make the point that  
20 even if the software doesn't do it, that the  
21 manual does suggest that it can be done.

22 Q. I see. So let's turn to page -- I'm  
23 sorry, paragraph 267 of your report, which  
24 again is Exhibit 1003.

25 A. Yes.

1 D. Karger

2 Q. Okay. So the first line of paragraph  
3 267 reads, "MSIE Kit shows that Internet  
4 Explorer can use any graphic, audio, video,  
5 website, Java applet, ActiveX, HTML file as the  
6 information" -- sorry, "as the information  
7 source for a desktop item."

8 Do you see that statement?

9 A. Yes.

10 Q. Is that statement correct?

11 A. For a colloquial meaning of the word  
12 "any"; right? And I -- I -- that is, I'm sure  
13 I could find a strange esoteric graphics format  
14 that Internet Explorer doesn't know how to  
15 display. Right?

16 However, if we're talking about the  
17 common -- commonly recognized graphics formats,  
18 audio formats, video formats, and so forth,  
19 then I think "any" is a fair characterization.

20 Q. Now, are you talking about Internet  
21 Explorer as it exists today or as it existed at  
22 the time of the MSIE Kit reference?

23 A. So I guess I'm talking about "any" at  
24 the time when this -- at the time under  
25 discussion, right?

1 D. Karger

2 So if I said "any," I would have  
3 referred to -- I'm not sure if MP4 had been  
4 invented yet in 1998, and so probably it  
5 couldn't have displayed MP4 if there had been  
6 such an artifact.

7 Q. Are you familiar with a graphics  
8 program known as Harvard Graphics?

9 A. I've heard of it. I don't recall  
10 anything about what it does.

11 Q. Do you know whether a Harvard  
12 Graphics file could be displayed by Internet  
13 Explorer?

14 A. No, I don't.

15 Q. Would you classify Harvard Graphics  
16 as some sort of esoteric program?

17 MR. MICALLEF: Objection, form,  
18 lack of foundation, relevance.

19 A. So I think if I looked at just about  
20 any application, it would -- sorry, not any  
21 application, but many applications make use of  
22 idiosyncratic file formats for storing their  
23 information. And if you don't have those  
24 applications, you can't display the information  
25 that is stored using those idiosyncratic file

1 D. Karger

2 formats.

3 Q. Are you familiar with a program known  
4 as Microsoft Word?

5 A. Sure.

6 Q. Did Microsoft Word exist at the time  
7 of the MSIE Kit reference?

8 A. Yes, it did.

9 Q. Could Internet Explorer display a  
10 file in MS Word format?

11 A. It's a good question. I don't know.

12 Q. MS Word wouldn't be an esoteric kind  
13 of program; that was fairly well known.

14 A. Oh, absolutely. I'm just not sure  
15 whether Microsoft had chosen to allow display  
16 of Word documents on systems that did not have  
17 Word installed.

18 Q. Are you familiar with Microsoft  
19 Excel?

20 A. Yes.

21 Q. Did that exist at the time of MSIE  
22 Kit?

23 A. Yes.

24 Q. Was MSIE -- was Internet Explorer  
25 capable of displaying Excel files?

1 D. Karger

2 MR. MICALLEF: Object to form,  
3 relevance, lack of foundation.

4 A. So I'll say no but also argue that an  
5 Excel file is not a graphic, audio, or video.  
6 I mean, Excel document doesn't really fit into  
7 any of the categories listed here.

8 Q. I see. Are you familiar with  
9 WordPerfect?

10 A. Yes.

11 Q. What was WordPerfect?

12 A. It was a word processor.

13 Q. Did it exist at the time of the MSIE  
14 Kit reference?

15 A. I think so.

16 Q. Do you think Internet Explorer was  
17 capable of displaying WordPerfect files?

18 MR. MICALLEF: Objection,  
19 relevance, lack of foundation.

20 A. No, I do not.

21 Q. So what exactly does "any" mean here?

22 A. Well, again, here we're referring to  
23 any graphic, audio, video, website, Java  
24 applet. We're not saying any file or any  
25 object. All right? And obviously when we talk

1 D. Karger  
2 about any HTML file, well, we don't mean  
3 literally any HTML file because, for example,  
4 if the HTML file is malformed, then you might  
5 not be able to display it. Right? If the Java  
6 applet doesn't run, you might not be able to  
7 display it.

8 So the "any" here again refers to the  
9 things that one would -- the sort of basic set  
10 of graphics, audio, video, and HTML documents  
11 that we think of as not requiring a specialized  
12 application for display; right? So when we  
13 talk about a GIF nowadays, we don't really  
14 think that we need a special GIF application in  
15 order to view the GIF. We just assume that  
16 we're going to be able to look at it on a bare  
17 system because GIFs are kind of a standard  
18 graphics format.

19 Q. Did Microsoft Word support graphics  
20 at the time of the MSIE Kit reference?

21 MR. MICALLEF: Objection,  
22 relevance.

23 A. If by "support graphics," do you mean  
24 allow you to put a picture in a Word document?

25 Q. Yes.

1 D. Karger

2 A. Yes, I believe it did.

3 Q. And did MS Word support the ability  
4 to draw graphics with commands native to the  
5 application?

6 A. I don't really recall.

7 Q. Did Internet Explorer at the time of  
8 the MSIE Kit reference display GIF files on its  
9 own?

10 MR. MICALLEF: Objection,  
11 relevance. Objection, foundation.

12 A. I believe that was one of the formats  
13 that it was happy displaying.

14 Q. Was it capable of displaying MPEG  
15 files?

16 MR. MICALLEF: Objection, form,  
17 relevance.

18 A. I'm just not sure in terms of the  
19 dates, right? At what date it became capable  
20 of doing that, I don't recall.

21 Q. Was an active desktop item capable of  
22 calling anything other than the Internet  
23 Explorer browser application?

24 MR. MICALLEF: Object to form.

25 Q. I heard you say "calling." Is there

1 D. Karger

2 a lack of clarity about what I mean by that?

3 A. No, I think I understand what you're  
4 saying. Let me look.

5 Q. Let me ask some concrete examples. I  
6 don't want you to struggle too much with this  
7 one.

8 Was it possible to have an active  
9 desktop item call Microsoft Word application,  
10 the Microsoft Word application?

11 MR. MICALLEF: Object to form, lack  
12 of foundation, irrelevant.

13 MR. HEINTZ: Again, Dr. Karger, if  
14 you need it, I've got the whole book  
15 here.

16 THE WITNESS: Understood. I think  
17 I've got what I need here.

18 All right. Can you restate the  
19 question?

20 MR. HEINTZ: Would you read the  
21 question back?

22 (The reporter read from the record.)

23 MR. MICALLEF: Object to form.

24 BY MR. HEINTZ:

25 Q. Let me restate that.



1 D. Karger

2 A. It should be "call," not "called."

3 Q. Yeah, so let me restate the question.

4 Was it possible to have an active desktop item  
5 call the Microsoft Word application?

6 MR. MICALLEF: Objection,  
7 irrelevant, lack of foundation.

8 A. So I can only answer that partially,  
9 the reason being that I'm not an expert on  
10 Microsoft's APIs. The active desktop can  
11 contain both ActiveX controls and Java applets,  
12 which those are both powerful programming  
13 languages, so the capability to -- you can  
14 write programs in them.

15 On the far -- on the other end,  
16 Microsoft's -- Microsoft does have a set of  
17 APIs that let you programmatically invoke  
18 things like Microsoft Word or Microsoft Excel.  
19 So it is reasonable to speculate that one --  
20 that an ActiveX control or a Java applet could  
21 invoke these by proper use of the APIs. It is  
22 also conceivable that they decided for security  
23 reasons or something else to prevent that from  
24 actually happening.

25 And again, I know how to answer this

1 D. Karger  
2 question by going and digging through  
3 literature, but I don't have it in my head.

4 Q. Okay. I'd like to direct your  
5 attention, Dr. Karger, to paragraph 289 of  
6 Exhibit 1003, your declaration. Okay.  
7 Paragraph 289 states that "MSIE Kit explains  
8 that desktop items placed on an active desktop  
9 will be nonoverlapping and that each desktop  
10 item by default will have a uniform size and  
11 shape."

12 Do you see that?

13 A. I'm sorry. I'm in the wrong place.  
14 Did you say 289?

15 Q. Paragraph 289 of Exhibit 1003.

16 A. Good, yes.

17 Q. All right. So do you see the  
18 sentence there that says that the active  
19 desktop -- that MSIE Kit explains that desktop  
20 items placed on an active desktop will be  
21 nonoverlapping and that each desktop item by  
22 default will have a uniform size and shape?

23 A. Yes, I do.

24 Q. Okay. Now, I'd like -- and you cite  
25 there page 183 that we've looked at earlier;

1 D. Karger

2 correct --

3 A. Correct.

4 Q. -- of Exhibit 1007. So I'd like you  
5 to direct your attention to page 183 of  
6 Exhibit 1007 now.

7 A. Yes.

8 Q. Okay. We're going to go to that same  
9 bullet that we looked at earlier that begins  
10 "Smaller is better."

11 A. Yes.

12 Q. On the eighth line down there's a  
13 sentence that reads, "As more items are added  
14 to the desktop, they will start to overlap each  
15 other," period.

16 A. Correct.

17 Q. Okay? So it's not true, is it, that  
18 MSIE Kit explains that active -- that desktop  
19 items placed on an active desktop will be  
20 nonoverlapping. Some cases it may be true,  
21 some cases it may be not; correct?

22 MR. MICALLEF: Object to form.

23 A. So I think again here there's a --  
24 it's a minor editing issue -- that perhaps what  
25 should be said is that by default, items placed

1 D. Karger

2 on an active desktop will be nonoverlapping and  
3 will have uniform size and shape.

4 Q. But that's only true if the number of  
5 items is --

6 A. Is not too large.

7 Q. Is not too large. Okay. Thank you.

8 Let's look at paragraph 292 of your  
9 declaration, Exhibit 1003. You say that MSIE  
10 Kit also suggests that desktop items will be  
11 given a maximum size of 200 by 200 pixels when  
12 used on a 640-by-480 display area. And again  
13 you cite MSIE kit at page 183; correct?

14 A. Yes.

15 Q. Let's again look at page 183 of  
16 Exhibit 1007. The very last sentence under the  
17 "Smaller is better" bullet reads, "Internet  
18 Explorer 4 does not itself enforce any  
19 restrictions on the size of an active desktop  
20 item; correct?"

21 A. Correct.

22 Q. So it's not true, what you say here  
23 in paragraph 292 of Exhibit 1003, that desktop  
24 items will be given a maximum size of 200  
25 pixels when used on a 640 unless you add the

1 D. Karger

2 qualifier "by default"; is that correct?

3 MR. MICALLEF: Object to form, lack  
4 of foundation, irrelevant.

5 A. So I think this is actually a fair  
6 statement that could be worded better. Right?  
7 So what this should -- what this intends to say  
8 is that MSIE Kit suggests that desktop items be  
9 given a maximum size of 200 by 200 pixels.  
10 Right? It is not -- this is not intended to  
11 assert that it must happen. It is a  
12 suggestion, right? It is not a requirement  
13 that they must be 200 by 200 pixels.

14 Q. Well, now, when you say in this  
15 paragraph 292 that desktop items will be given,  
16 who or what is doing the giving?

17 MR. MICALLEF: Object to form, lack  
18 of foundation.

19 A. So what the -- page 183 is suggesting  
20 is that this would -- is that this will --  
21 would be a good size, right? That this will  
22 allow for them to have reasonable spacing and  
23 avoid overlap.

24 Q. Is that a good size -- is this  
25 suggesting -- is -- let me rephrase the

1 D. Karger

2 question.

3 Is this passage of MSIE Kit  
4 suggesting that -- suggesting to a user that a  
5 user give it this size?

6 MR. MICALLEF: Object to form.

7 A. So I observe that this page is part  
8 of a section on developing active desktop  
9 items. And I would read this as a suggestion  
10 to the developer of the access -- of the active  
11 desktop item that they assign a size of, at  
12 most, 200 by 200 pixels.

13 Q. So it wouldn't be the MSIE Kit  
14 application itself that's going to enforce this  
15 maximum size; correct?

16 A. So this text is not claiming that a  
17 maximum size will be enforced. In fact, it  
18 says that it's merely a guideline.

19 Q. Okay. Thank you.

20 MR. HEINTZ: Yeah, I guess we have  
21 been going for more than an hour.

22 THE VIDEOGRAPHER: This is the end  
23 of videotape number 2. Off the record  
24 at 2:57 p.m.

25 (Recess taken.)

1 D. Karger

2 MR. HEINTZ: I'm going to ask the  
3 reporter to hand to Dr. Karger what's  
4 been marked as Petitioner Microsoft  
5 Exhibit 1011, U.S. Patent Number  
6 6,832,355 to Duperrouzel, et al.

7 BY MR. HEINTZ:

8 Q. I'll refer to Duperrouzel. I'll ask  
9 you if you recognize Exhibit 1011.

10 A. Yes, I do.

11 Q. That's what's referred to in your  
12 report by Duperrouzel; correct?

13 A. Correct.

14 Q. I'll ask you to turn now back to  
15 paragraph 432 of your declaration,  
16 Exhibit 1003. That's on page 132.

17 A. Yes.

18 Q. You see in paragraph 40 -- sorry,  
19 432, you have the statement that Duperrouzel  
20 also shows that the information source can  
21 include text, graphics, video, sound, and any  
22 other format of electronic data.

23 Do you see that?

24 A. Yes, I do.

25 Q. Is "any other format of electronic

1 D. Karger

2 data" in that sentence being used in the  
3 colloquial sense as you described that word  
4 before?

5 MR. MICALLEF: Object to form,  
6 foundation, lack of foundation.

7 A. Yes. You can see that I'm quoting  
8 from column 1, line 36, which uses exactly this  
9 phrase, which says that the web page --  
10 provides many different formats of information  
11 including text, graphics, video, sound and any  
12 other format of electronic data, and indeed  
13 this does not mean literally any other format  
14 of electronic data.

15 Q. So do you have an understanding as to  
16 whether the web page display system described  
17 in Duperrouzel is capable of displaying  
18 information from a Microsoft Word file?

19 MR. MICALLEF: Object to form,  
20 relevance.

21 A. So this actually comes back to one of  
22 the questions that you asked earlier, which I  
23 was not equipped to answer, which was --  
24 because one of the ways Duperrouzel suggests  
25 for implementing their invention is through the



1 D. Karger

2 use of Internet Explorer, the Internet Explorer  
3 browser. And as I mentioned, there are APIs  
4 that allow different elements -- different  
5 components of Microsoft system to communicate  
6 with each other, and so it is conceivable that  
7 within -- that with what is there it is  
8 possible for the browser to communicate with  
9 Microsoft Word in order to embed and display a  
10 document that looks like it's in the browser  
11 even though it's actually Microsoft Word doing  
12 the work. But I can't say for certain without  
13 checking more documentation.

14 Q. Is there anything in Duperrouzel that  
15 suggests that -- other than what we just  
16 discussed, that his web page display system  
17 would display data from a Microsoft Word file?

18 MR. MICALLEF: Object to form,  
19 relevance.

20 A. Well, the paragraph that we were just  
21 looking at talks about downloading information  
22 from the Internet and various private networks.  
23 Private networks are often used as places to  
24 store documents. So if you're asking if  
25 there's anything that suggests that it might,

1 D. Karger

2 well, that suggests that it might.

3 Q. One of your earlier answers, you  
4 refer to an API; is that correct?

5 A. Yes.

6 Q. Just for the record, what does that  
7 signify?

8 A. An API is an application/programmer  
9 interface.

10 Q. Thank you.

11 MR. MICALLEG: Were you done your  
12 answer?

13 A. I can stop there if you like or I can  
14 explain what that means.

15 Q. Feel free. I don't want to cut you  
16 off.

17 A. An application/programmer interface  
18 is a description of how a programmer can  
19 communicate with a particular piece of  
20 software, what sort of requests can be made of  
21 that software, in what form the responses will  
22 be returned.

23 Q. Okay. Anything else? Did you  
24 finish?

25 A. That's it.

1 D. Karger

2 Q. Dr. Karger, I'd like you to turn to  
3 figure 4 of Exhibit 1011. Now, in figure 4, as  
4 shown in the upper left-hand corner, there's a  
5 portion of the www.gpo.gov home page; correct?

6 A. Yes.

7 Q. Now, if a user were to navigate to  
8 cnn.com in the upper left-hand pane as shown in  
9 figure 4, and then were to shut down his  
10 computer, what would the user see the next time  
11 he turned on his computer?

12 MR. MICALLEF: Object to form, lack  
13 of foundation.

14 A. I wanted to take my time to look this  
15 over because I believe that the document leaves  
16 it to be inferred, and there are two plausible  
17 answers to your question, if I shut it down and  
18 restart. One is that when I restart it, I  
19 will -- let me first say why there are two  
20 plausible answers.

21 This system is implemented as  
22 something which tiles several browser windows,  
23 and so it inherits a lot of the functionality  
24 of the underlying browser. It describes how  
25 that browser might be Internet Explorer, that

1 D. Karger

2 browser might be -- did it say the landscape  
3 navigator? Yes. Now, with those browsers,  
4 there are two natural things that happen if you  
5 restart a browser. One is that it shows you  
6 the page you were last looking at, and the  
7 other is that it shows you your home page or  
8 default, some default page that you specify to  
9 be loaded when you launch your system.

10 In the patent, there is a discussion  
11 of a setting of -- there's a "home all" button,  
12 which lets you -- which will navigate all of  
13 the pages that are being tiled, all of the  
14 tiles back to the home pages associated with  
15 those tiles, which makes clear that there is a  
16 notion of a bunch of home pages. And so one  
17 plausible implementation of this would have,  
18 when you open that browser, that it opens with  
19 the same set of tiles open to the same pages as  
20 you had open last time. Another is that it  
21 would have them open to the home pages that you  
22 had specified for the system.

23 Q. Okay. So let's go for the option  
24 when it goes to the last viewed web page.

25 A. Yeah, I can't guarantee that -- I

1 D. Karger

2 mean, again, you have to remember when that  
3 ability to return to the last viewed web page  
4 was actually made available in the browser. It  
5 does not -- the patent does not explicitly say  
6 that it will do that, but it's certainly a  
7 plausible interpretation.

8 Q. Okay. So if it were, in fact, to be  
9 implemented in the way that it went to the web  
10 page last viewed, when the user turned on the  
11 computer after having navigated to cnn.com in  
12 the upper left-hand pane of figure 4, what  
13 would the user see on this screen?

14 MR. MICALLEG: Object to form.

15 Q. Immediately after startup.

16 A. They would see -- they would see the  
17 cnn.com page.

18 Q. Are you aware that patent owner in  
19 this inter partes review has taken the position  
20 that tiles must be persistent?

21 A. I am aware that patent owner has  
22 taken that position, although the board has  
23 rejected it, if I remember correctly.

24 Q. You do.

25 If persistence is found to be -- let

1 D. Karger

2 me rephrase this.

3 If the Duperrouzel system were to act  
4 in the manner you just suggested, that it would  
5 show cnn.com, the site last viewed, in the  
6 upper left-hand pane of figure 4, would that  
7 pane be persistent?

8 MR. MICALLEF: Object to form, lack  
9 of foundation, irrelevant.

10 A. Do you mean persistence in the  
11 sense -- persistent in the sense that the  
12 patent owner is construing?

13 Q. Yes.

14 A. Because that's kind of up to the  
15 patent owner to decide, unless we can find the  
16 exact vocabulary that the patent owner is using  
17 to talk about persistence.

18 Q. Let me ask you this: Do you have an  
19 understanding of what persistence means, a  
20 plain and ordinary understanding?

21 A. Plain and ordinary, certainly.

22 Q. What is that?

23 MR. MICALLEF: Object to form,  
24 irrelevant.

25 A. Persistence means that some aspect

1 D. Karger

2 does not change.

3 Q. Some aspect or all aspects?

4 A. Oh, some.

5 Q. Okay.

6 A. I mean, something's always changing.

7 Q. Yeah. So with that understanding,  
8 would Duperrouzel's system, assuming it works  
9 the way we discussed, where the next time the  
10 user turns on the computer he sees cnn.com  
11 rather than gpo.gov, would that be persistent  
12 under your understanding of the plain and  
13 ordinary meaning of persistent?

14 MR. MICALLEF: Object to form,  
15 irrelevant.

16 A. So I would say that in that case, the  
17 system is persisting the location that is being  
18 displayed.

19 Q. Okay. Would you say that the pane is  
20 persistent?

21 MR. MICALLEF: Same objections.

22 Q. I'm sorry, let me rephrase that too.  
23 Would you say that the pane shown in the upper  
24 left-hand corner of figure 4 is persistent?

25 MR. MICALLEF: Same objections.

1 D. Karger

2 A. So it is possible for the pane to  
3 be -- shown in figure 4 to be persistent. For  
4 example, if the system described here were to  
5 remember the specific layout of panes, when you  
6 shut down this application and started it up  
7 again, that would be a persistent layout. That  
8 pane is a part of that layout and would  
9 therefore be persistent.

10 Q. Even though the pane points to a  
11 different location?

12 MR. MICALLEF: Go ahead.

13 A. Yes, even though the pane points to a  
14 different location.

15 Q. Now, it's your assertion, is it not,  
16 that the pane shown in figure 4 of Duperrouzel  
17 in the upper left-hand corner qualifies as a  
18 tile within the meaning of Claim 1 of the '403  
19 patent?

20 A. That's the wrong patent, sorry.

21 Q. Yes, we're talking about  
22 Exhibit 1001. Sorry.

23 A. Yes, that is my understanding.

24 Q. Okay. And Claim 1 requires that a  
25 tile -- sorry, do you have -- I'll wait for you



1 D. Karger

2 to get to Claim 1. Okay, so Claim 1 recites,  
3 for instance, updating information from a first  
4 information source in said plurality of  
5 information sources presented to said first  
6 tile in accordance with said first refresh  
7 rate.

8 Do you see that?

9 A. Yes, I do.

10 Q. If the tile has to be persistent and  
11 further requires that the information that's  
12 used to update the tile come from a first  
13 information source, would the pane in the upper  
14 left-hand corner of figure 4 of Duperrouzel  
15 qualify as a tile?

16 MR. MICALLEF: Object to form, lack  
17 of foundation, irrelevant.

18 A. So just to be clear, you've led off  
19 that question by saying if we ignore the  
20 board's interpretation of "tile."

21 Q. Correct.

22 A. And require it to be persistent.

23 Q. Correct.

24 A. Now can you read back the rest of the  
25 question?

1 D. Karger

2 Q. Right. So if a tile -- well, you've  
3 got the assumption in mind now. So with that  
4 understanding, would the pane of figure 4 of  
5 Duperrouzel qualify as a tile as required by  
6 Claim 1 of the '403 patent?

7 MR. MICALLEF: Object to form, lack  
8 of foundation, irrelevant.

9 A. I'm having a little -- it's taking me  
10 some time to work through that question because  
11 you've asked me to stack up hypotheticals. So  
12 first ignoring what the board said, and then  
13 working with this notion of -- the colloquial  
14 notion of persistence, not what the patent  
15 holder -- not any specific notion of  
16 persistence that the patent holder had in mind,  
17 but simply the colloquial notion of  
18 persistence?

19 Q. Yes, with the understanding that  
20 colloquial within the art to which the '403  
21 patent pertains.

22 A. Uh-huh, uh-huh.

23 MR. MICALLEF: Same objections.

24 A. I guess I would say that with that  
25 understanding, if -- you're saying if we

1 D. Karger

2 require it to be persistent, would it satisfy  
3 the specifications of a tile.

4 Q. Yes.

5 A. I think you could certainly implement  
6 it in a way that would fulfill that requirement  
7 to be persistent, and then it would satisfy the  
8 specification for being a tile.

9 Q. And one way in which you'd have to  
10 implement it would be so that it would -- the  
11 pane would return to the same website each time  
12 upon restarting a session; is that correct?

13 MR. MICALLEF: Object to form, lack  
14 of foundation, irrelevant.

15 A. Now we have to sort of talk about  
16 what exactly you mean by what is persistent;  
17 right? So is it the layout that is persistent?  
18 Is it the content that is persistent? What are  
19 you -- again, this is all very hypothetical,  
20 but what are you assuming is the persistent  
21 thing?

22 If you tell me to assume that it is  
23 persistent in terms of its location, then yes,  
24 that would tell me that it is returning to the  
25 same location.

1 D. Karger

2 Q. The specification of the '403 patent  
3 indicates that a tile has several attributes,  
4 one of which is the source of the information;  
5 correct?

6 A. Correct.

7 Q. If I use that understanding of what a  
8 tile is, that it includes a source as one of  
9 its attributes, would a tile -- I'm sorry,  
10 would one need to modify Duperrouzel so that  
11 the pane always returned to the same URL in  
12 order for that to be persistent?

13 MR. MICALLEF: Object to form, lack  
14 of foundation, irrelevant.

15 A. So as you say, a tile has many  
16 attributes. And so if you are just going to  
17 talk about the tile being persistent, you're  
18 not telling me persistent in what. Is it  
19 persistent in all attributes? Is it persistent  
20 in at least one attribute? How you -- exactly  
21 what kind of persistence you're talking about  
22 is going to tell me whether I -- or how I  
23 should respond to that question.

24 Q. Okay. So referring back to figure 4  
25 of Exhibit 1011, we talked earlier about an

1 D. Karger

2 implementation in which the last viewed  
3 websites or URLs, or URIs if you prefer, were  
4 displayed upon startup in the next session. If  
5 I navigated to four different successive URIs  
6 in the upper left-hand pane of figure 4, and  
7 then shut the computer off and then started  
8 it -- restarted it to start a new session,  
9 would all four of the panes be at a different  
10 location or would only one in the upper  
11 left-hand corner be in a different location as  
12 compared to the previous start of the session?

13 MR. MICALLEF: Object to form, lack  
14 of foundation, irrelevant.

15 A. So I think that there are several  
16 reasonable ways to implement this, and it's not  
17 clear to me from the specification which way it  
18 was actually done in this software, where the  
19 software actually implemented. That is, you  
20 could have a per-tile history and be navigating  
21 back to the most recent page of each tile, or  
22 you could have a more global history and be  
23 navigating back to the four most recent pages  
24 encountered in any of the tiles. You could be  
25 using, as I said, the sort of home pages

1 D. Karger  
2 concept. You could be using the offline or  
3 online versions. All of these would be very  
4 reasonable ways to implement this system.

5 MR. HEINTZ: Okay. I'd like to  
6 hand to Dr. Karger an exhibit marked as  
7 1015, U.S. Patent Number 5,432,932 to  
8 Chen.

9 THE WITNESS: Before we start this  
10 one can we go off the record for a  
11 moment?

12 MR. HEINTZ: Certainly.

13 MR. MICALLEF: Sure.

14 THE VIDEOGRAPHER: Off the record  
15 at 3:39 p.m.

16 (Discussion held off the record.)

17 THE VIDEOGRAPHER: Back on the  
18 record at 3:44 p.m.

19 BY MR. HEINTZ:

20 Q. Dr. Karger, you've had placed in  
21 front of you Exhibit 1015, U.S. Patent Number  
22 5,432,932 to Chen; correct?

23 A. Yes, I do.

24 Q. Do you recognize that exhibit?

25 A. Oh, yes.

1 D. Karger

2 Q. Is that the exhibit that you  
3 referenced in your declaration?

4 A. Yes, it is.

5 Q. Are you familiar with the term  
6 "instrument" as used in Exhibit 1015?

7 A. Yes.

8 Q. Can the instruments described in Chen  
9 display any type of graphic file, again with  
10 the colloquial understanding of "any" as you've  
11 used before?

12 A. No.

13 MR. MICALLEF: Object to form.

14 Q. Could it display any kind of text  
15 file?

16 MR. MICALLEF: Object to form,  
17 irrelevant.

18 A. No.

19 Q. Any type of audio file?

20 MR. MICALLEF: Same objections.

21 A. No.

22 Q. Any type of video file?

23 MR. MICALLEF: Same objections.

24 A. No.

25 Q. Can one of Chen's instruments ever

1 D. Karger

2 call another application?

3 MR. MICALLEF: Object to form,  
4 irrelevant.

5 A. I guess in a certain sense, yes.

6 Q. In what sense?

7 A. Well, these instruments are  
8 displaying information that is -- that can be  
9 retrieved from other sources, where there is a  
10 data supplier application, and so there is a  
11 sense in which the instruments are going to be  
12 communicating with these supplier daemons in  
13 order to request certain kinds of information.

14 Q. But what's running in the app --  
15 what's running in the instrument, excuse me, is  
16 one application, the one described in Chen that  
17 performs the functionality in Chen; correct?

18 MR. MICALLEF: Object to form.

19 A. Well, Chen also describes the data  
20 supplier daemons as another part of the system.

21 Q. Fair enough, fair enough. The data  
22 supplier daemons run on remote computers and  
23 the Chen instrument is displayed on what Chen  
24 describes as a local computer; correct?

25 A. The -- yes to the latter. As to the



1 D. Karger

2 former, I think that you could run a data  
3 supplier daemon on a local computer as well.

4 Q. All right. I'd like you to turn to  
5 paragraph 789 of Exhibit 1003.

6 Do you have that paragraph, sir?

7 A. Yes.

8 Q. Have you ever heard of anyone using  
9 active desktop items to monitor network  
10 statistics?

11 A. Have I ever heard of anyone using  
12 active desktop items to monitor network  
13 statistics.

14 MR. MICALLEF: Objection,  
15 relevance.

16 A. Maybe. So I'm sure you want me to  
17 elaborate.

18 Q. Please.

19 A. I've worked at Akamai in the past. A  
20 big part of what Akamai does is network  
21 monitoring. They build network monitoring  
22 tools. It's quite possible that they used  
23 active desktop for their network monitoring  
24 tools, but I'm not sure. I wasn't part of -- I  
25 wasn't connected to that part of the company.

1 D. Karger

2 Q. So you don't have any knowledge that  
3 they did so?

4 A. I don't have any explicit knowledge  
5 that they did so. On the other hand, it would  
6 have been a natural way to build such a network  
7 monitoring application.

8 Q. I'd like the reporter to hand  
9 Dr. Karger what's been marked as Exhibit 1013,  
10 U.S. Patent Number 6,118,493 to Duhault, et al.

11 Dr. Karger, I'll ask you, do you  
12 recognize what's been marked as Exhibit 1013?

13 A. I do.

14 Q. This is the Duhault 2 exhibit  
15 discussed in your report -- I'm sorry, your  
16 declaration; is that correct?

17 A. Correct.

18 MR. MICALLEF: Excuse me, counsel.

19 Did you just say Duhault 2?

20 MR. HEINTZ: I did. You're right.

21 MR. MICALLEF: This is Duhault 1.

22 MR. HEINTZ: You're right. I  
23 apologize. Let me hand Dr. Karger  
24 what's been marked as Exhibit 1014.

25 Q. I'll ask you, sir, if you recognize

1 D. Karger

2 that document.

3 A. Yes. This is Duhault 2.

4 Q. That's Duhault 2 as mentioned in your  
5 report, your declaration in Exhibit --

6 A. Correct.

7 Q. -- 1003. So, Dr. Karger, if I select  
8 one of the windows -- sorry, one of the video  
9 images shown on the figure on the front  
10 cover -- let's go to figure 1. Sorry. Let's  
11 go to figure 1 of Exhibit 1014.

12 A. Yes.

13 Q. Okay. If I don't select any of the  
14 video images labeled 141 through 149 of figure  
15 1, what is the refresh rate of each of the  
16 images?

17 MR. MICALLEF: Object to form,  
18 compound.

19 A. Now can you restate the question?

20 Q. Sure. If none of the video images  
21 141 through 149 are selected by the user, what  
22 will be the refresh rate of those images?

23 MR. MICALLEF: Object to form,  
24 compound.

25 A. So the patent does not articulate a

1 D. Karger  
2 specific refresh rate. Instead, it talks about  
3 a periodic refresh of the tiles using one or  
4 the other of the tuners under discussion.

5 Q. Is there a specific rate assigned to  
6 that refresh, or is it just refreshed as  
7 quickly as the hardware will allow?

8 MR. MICALLEF: Object to form.

9 A. Both options are available, as the  
10 patent -- I should verify this before saying.

11 So I took some time because I wanted  
12 to be sure what was in Duhault 2 and what was  
13 in Duhault 1, is kind of where --

14 Q. Sure.

15 A. So as far as I can tell, in Duhault  
16 2, the focus is on simply talking about a  
17 periodic rate of refresh.

18 In Duhault 1, it's made explicit that  
19 that periodic rate could be what is happening  
20 because of the tuner or could be a  
21 user-specified rate.

22 Q. That user-specified rate's not in  
23 Duhault 2; is that correct?

24 A. Answering in the negative, it takes  
25 longer.

1 D. Karger

2 Q. Let me ask it this way. Is there any  
3 place in your report where you state -- cite to  
4 a portion of Duhault 2 that discusses a  
5 user-settable refresh rate?

6 A. I'll check.

7 Q. Again, Duhault 2 -- I apologize for  
8 the confusion -- is Exhibit 1014.

9 A. Could you restate the question?

10 (The reporter read from the record.)

11 A. Well, when the user selects a tile  
12 and it goes to full motion, the user has set  
13 the refresh rate of that tile.

14 Q. Yes, I apologize. My answer -- my  
15 question was not quite precise. Putting aside  
16 the tile that's selected, is there any  
17 user-selectable refresh rate assigned to the  
18 tile -- to the unselected tiles?

19 MR. MICALLEF: In Duhault 2 we're  
20 talking about.

21 MR. HEINTZ: In Duhault 2.

22 A. Yes, because again it's explicit in  
23 Duhault 1 that it can be a user-assigned rate.  
24 Again, just to be careful about your question,  
25 when I select one tile, I am also assigning a

1 D. Karger

2 rate to the unselected tiles by the fact that  
3 they are not selected.

4 Q. And what rate are you assigning to  
5 those tiles?

6 A. Zero.

7 Q. Because they're not updating at all?

8 A. Right.

9 Q. And a rate of zero is a refresh rate?

10 MR. MICALLEF: Object to form.

11 A. So actually, backing up, I've lost  
12 track of whether we're talking about Duhault 1  
13 or 2.

14 Q. I'm only talking about Duhault 2.

15 A. So in Duhault 2, the unselected tiles  
16 are continuing to update --

17 Q. Okay.

18 A. -- using the second tuner, but at a  
19 lower, nonzero refresh rate.

20 Q. And does the software in Duhault 2  
21 assign a refresh rate to those tiles?

22 MR. MICALLEF: Object to form.

23 A. The software in Duhault 2 does  
24 determine a refresh rate for those tiles  
25 because -- again, in Duhault -- in -- the way

1 D. Karger

2 Duhault 2 describes it, sort of driven by the  
3 frequency at which the tuner can change its  
4 channels and receive the signals for the tiles  
5 that it is cycling through.

6 Q. So the software assigns a rate in the  
7 sense that it tells this -- one of the tuners  
8 to update those tiles, and because that tuner  
9 has a rate, the software's assigning the rate?

10 A. Correct.

11 MR. MICALLEF: Object to form.

12 Q. Okay. But there's no explicit  
13 disclosure in Duhault 2 of setting a rate to a  
14 particular number in the software?

15 A. Well, the rate will be a particular  
16 number, right? Again, it's a number which will  
17 be determined by the capabilities of the tuner.

18 Q. Correct. So if the tuner is capable  
19 of updating all the unselected tiles at 32  
20 frames per second, we won't see a line of  
21 software that says set the refresh rate equal  
22 to 32 frames per second for each of the  
23 unselected tiles; is that correct?

24 MR. MICALLEF: Object to form.

25 A. This goes to very low level

1 D. Karger

2 implementation details, but I am guessing that  
3 we would see such a line of software in the  
4 sense that the software would ask the tuner how  
5 fast it can change its channels, and it would  
6 then tell the tuner to change channels that  
7 quickly.

8 Q. Is there any disclosure of that in  
9 Duhault 2?

10 A. It's -- that is how I would assume  
11 that -- that is the natural way I would assume  
12 this would be implemented, given my limited  
13 knowledge of the APIs for tuners.

14 Q. But it's not necessarily so; is that  
15 correct?

16 A. Is it inherent? No, I think the  
17 software would have to have that number,  
18 because otherwise, how could it know what the  
19 tuner is doing; right? If the tuner just goes  
20 off and starts changing channels and throwing  
21 bits at the computer -- at the driving  
22 software, the software won't have any idea  
23 which channel is currently showing; right? So  
24 I think that outside of the tuner there will  
25 have to be some state in the driving program



1 D. Karger

2 that has a sense of how -- of the rate at which  
3 it is flipping through the different channels.

4 Q. Is it possible in Duhault 2 to set  
5 the nonselected refresh rates for -- sorry, is  
6 it possible in Duhault 2 to set the refresh  
7 rates for the nonselected tiles to different  
8 rates?

9 MR. MICALLEF: Object to form.

10 A. So Duhault 2 actually explains how,  
11 if we're talking about nonselected tiles, you  
12 might have tuner number 1 refreshing some of  
13 them and tuner number 2 refreshing others of  
14 them.

15 And depending on how many of those  
16 channels you assigned to tuner number 1 and  
17 tuner number 2, you may see different refresh  
18 rates on those that are being held by tuner 1  
19 and those that are being held by tuner 2.

20 Q. But there's no -- it's not  
21 necessarily true that Duhault has that  
22 capability; is that right?

23 A. No, I just said it's -- Duhault says  
24 that -- it describes how you might assign this  
25 many channels to tuner 1 and this many channels

1 D. Karger

2 to tuner 2, or alternatively, you might assign  
3 this different number of channels to tuner 1  
4 and this different number of channels to tuner  
5 2. And given that Duhault 2 has sort of  
6 expressed the -- that the refresh rate is going  
7 to emerge from the capabilities of the tuner,  
8 then if you have a different number of channels  
9 on the two tuners, then you're also going to  
10 have different refresh rates on the two tuners.

11 Q. Even if the -- scratch that. I'm  
12 probably just about out of time, so I will --  
13 one second. Anything else?

14 MR. HEINTZ: My colleague has  
15 informed me that I may have been  
16 referring to Duhault 2 as tiles when I  
17 meant to say video images, so --

18 MR. MICALLEF: Object.

19 MR. HEINTZ: -- for the record, all  
20 these statements that I -- all the  
21 questions I asked, I meant to use the  
22 term "video image" as used in Duhault 2.  
23 With that, I have no further questions.

24 MR. MICALLEF: Would you give me a  
25 minute and let me check my notes? We

1 D. Karger

2 will go off the record.

3 MR. HEINTZ: You need to check --

4 THE VIDEOGRAPHER: Off the record

5 at 4:05 p.m.

6 (Recess taken.)

7 EXAMINATION

8 BY MR. MICALLEF:

9 Q. Dr. Karger, you gave some testimony  
10 earlier about the level of ordinary skill in  
11 the art.

12 Do you remember that?

13 A. Yes, I do.

14 Q. In your opinion, was the field of  
15 computer science a mature technological field  
16 in 1998?

17 A. Yes.

18 MR. HEINTZ: Object to the form of  
19 the question.

20 Q. By 1998, were there many highly  
21 skilled computer scientists in the world?

22 MR. HEINTZ: Objection, vague.

23 A. Yes.

24 Q. By 1998, were Ph.D. programs at major  
25 universities for computer sciences common?

1 D. Karger

2 A. Yes.

3 Q. Was the field of user interfaces for  
4 computers a mature technological field in 1998?

5 MR. HEINTZ: Object to the form of  
6 the question. Objection, vague.

7 A. Yes.

8 Q. Do you have an understanding of when  
9 computer scientists first started working on  
10 user interfaces?

11 MR. HEINTZ: Objection, vague.

12 Object to the form of the question.

13 A. So as I stated before, almost from  
14 the very beginning of computer science, most of  
15 the things or many of the things that one did  
16 with a computer involved interaction with a  
17 human being, and therefore required some kind  
18 of user interface.

19 Certainly, by the late '60s, early  
20 '70s, when we had operating systems with  
21 command lines that users could type in, that  
22 was a user interface. And even full screen --  
23 we had full screen editing systems in the late  
24 '70s, so at least that far back.

25 Q. Other than the patent-in-suit here

1 D. Karger

2 and the prior art references that you've  
3 testified about here today, are you aware of  
4 any tiled user interfaces that had been  
5 developed prior to 1998?

6 MR. HEINTZ: Objection, beyond the  
7 scope. Move to strike the response.

8 A. I certainly am. And I think I  
9 already mentioned them earlier in the  
10 proceedings when I mentioned the SAPHIRE  
11 interface.

12 Q. Were there others too?

13 MR. HEINTZ: Objection, move to  
14 strike, beyond the scope.

15 A. Certainly.

16 Q. Can you name a couple?

17 MR. HEINTZ: Objection, move to  
18 strike, beyond the scope.

19 A. Sorry, restate the preceding  
20 question? I need the context.

21 Q. Sure. Could you just name, other  
22 than the ones we've already discussed today,  
23 and SAPHIRE which you just mentioned, can you  
24 name some other tiled user interfaces that had  
25 been developed before 1998?

1 D. Karger

2 MR. HEINTZ: Objection, beyond the  
3 scope, move to strike.

4 A. I believe that many of the  
5 applications that people worked with allowed  
6 you to tile, tools like Excel, for example, or  
7 Word probably allowed you to -- I know they do  
8 now and I believe they did quite a ways back,  
9 to tile multiple artifacts that you were  
10 looking at simultaneously.

11 Again, are we talking prior to this  
12 prior art? Because I mean Duperrouzel is  
13 certainly another example of a tiling user  
14 interface. I could go on, but --

15 Q. Okay. That's fine. Thank you. You  
16 mentioned something in your testimony about a  
17 refresh rate of zero.

18 Do you remember that?

19 A. Yes.

20 Q. Would a refresh rate of zero have a  
21 recurring interval?

22 A. No.

23 Q. You also mentioned an organization  
24 called Akamai. Do you remember that?

25 A. Akamai, yes.

1 D. Karger

2 Q. Akamai. I say it Akamai. Could you,  
3 just so the record's clear, what is Akamai?

4 A. Akamai is a company that provides  
5 caching and network services on the web.

6 Q. How long have they been in existence?

7 A. I can't remember the founding date.  
8 Sometime around the turn of the millennium. I  
9 can't recall -- certainly the research that we  
10 did on it was -- sort of predated. That was in  
11 1996 or so. And I think we got the company up  
12 before 2000, but it may have been after.

13 MR. MICALLEF: Okay, great. Thank  
14 you. No more questions.

15 MR. HEINTZ: No questions.

16 MR. MICALLEF: Great.

17 THE VIDEOGRAPHER: This is the end  
18 of the videotaped deposition. Off the  
19 record at 4:15 p.m.

20 (Discussion held off the record.)

21 MR. HEINTZ: So just for the  
22 record, we want to indicate that what  
23 was referred to by Dr. Karger as  
24 Exhibit 1007 was actually a portion of  
25 the full Exhibit 1007. The portion

1 D. Karger

2 Dr. Karger examined had the front page  
3 through page XLIV, and then chapters 14,  
4 15, 16, and 24. Let me just  
5 double-check that. I'm sorry. Chapter  
6 24, correct.

7 MR. MICALLEF: Okay.

8 (Deposition adjourned at 4:20 p.m.)

9  
10 

11 DAVID KARGER



1 D. Karger

2 C E R T I F I C A T E

3 DISTRICT OF COLUMBIA:

4  
5 I, MARY ANN PAYONK, Shorthand Reporter,  
6 do hereby certify:

7 That the witness whose deposition is  
8 hereinbefore set forth was duly sworn, and that  
9 such deposition is a true record of the  
10 testimony given by such witness.

11 I further certify that I am not related  
12 to any of the parties to this action by blood  
13 or marriage, and that I am in no way interested  
14 in the outcome of this matter.

15 IN WITNESS WHEREOF, I have hereunto set  
16 my hand this 17th day of January, 2014.

17  
18 \_\_\_\_\_  
19 MARY ANN PAYONK, Shorthand Reporter  
20 Washington, D.C.  
21  
22  
23  
24  
25

D. Karger

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- EXHIBITS REFERENCED -

(Previously marked)

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1 D. Karger

2 NAME OF CASE: Microsoft vs. SurfCast (Case IPR2013-0 )

3 DATE OF DEPOSITION: January 14, 2014

- 4 1. To clarify the record.  
5 2. To conform to the facts.  
6 3. To correct transcription error.

7 Page \_\_\_\_\_ Line \_\_\_\_\_ Reason \_\_\_\_\_  
8 From \_\_\_\_\_ to \_\_\_\_\_

9 Page \_\_\_\_\_ Line \_\_\_\_\_ Reason \_\_\_\_\_  
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23 \_\_\_\_\_  
24 \_\_\_\_\_

25 DAVID R. KARGER

SUBSCRIBED AND SWORN TO BEFORE ME

THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2014.

\_\_\_\_\_

(Notary Public)

My Commission expires: \_\_\_\_\_