In the Matter of:

v. SURFCAST, INC.

KLAUS LAGERMANN March 6, 2014

MERRILL LAD

1325 G Street NW, Suite 200, Washington, DC Phone: 800.292.4789 Fax:202.861.3425

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

--000--

MICROSOFT CORPORATION

Petitioner,

vs.

SURFCAST, INC.

Patent Owner.

Patent No. 6,724,403

Issued: April 20, 2004

Filed: October 30, 2000

Inventors: Ovid Santoro, et al.

Title: SYSTEM AND METHOD FOR SIMULTANEOUS DISPLAY

OF INFORMATION SOURCES

Inter Partes Review Nos. IPR2013-00292,
IPR2013-00292, IPR2013-00294, and IPR2013-00295

VIDEOTAPED DEPOSITION OF

KLAUS LAGERMANN

Thursday, March 6, 2014, 8:59 a.m.

```
Job No. 1-245251
 1
 2
      Pages 1 - 85
 3
      Reported by: Michele E. Eddy, RPR, CRR, CLR,
 4
                Videotaped Deposition of KLAUS LAGERMANN,
 5
      held at the offices of:
 6
                DLA PIPER, LLP
                500 Eighth Street, Northwest
 7
                Washington, D.C. 20004
                (202) 799-4000
 8
                Pursuant to Notice, before Michele E.
 9
10
      Eddy, Registered Professional Reporter, Certified
11
      Realtime Reporter, and Notary public in and for the
      District of Columbia.
12
13
14
15
16
17
18
19
20
21
22
```

	Page 3
1 2	APPEARANCES
3	ON BEHALF OF THE PETITIONER:
4	WONJOO SUH, ESQUIRE
5	Sidley Austin, LLP
6	1501 K Street, Northwest
7	Washington, D.C. 20005
8	(202) 736-8831
9	wsuh@sidley.com
10	
11	ON BEHALF OF THE PATENT OWNER:
12	JAMES M. HEINTZ, ESQUIRE
13	DLA Piper, LLP
14	11911 Freedom Drive, Suite 300
15	Reston, Virginia 20190
16	(703) 773-4148
17	jim.heintz@dlapiper.com
18	
19	ALSO PRESENT:
20	Richard Bone, Esquire (via teleconference)
21	David Cooper, Videographer
22	
1	

			Page 4
1		EXAMINATION INDEX	
2			PAGE
3	EXAMINATION BY	MR. SUH	8, 81
4	EXAMINATION BY	MR. HEINTZ	72
5			
6			
7			
8		EXHIBITS	
9	PREV	OUSLY MARKED AND REFERRED TO	
10		(Retained by Counsel)	
11	SURFCAST EXHIE	BITS	PAGE
12	Exhibit 2006	Declaration of Klaus Lagermann	, 16
13		13 pages	
14	Exhibit 2012	E-mail chain; top e-mail dated	61
15		8-11-99 from Ovid Santoro to	
16		Klaus Lagermann;	
17		20130207CTRL00006281, three page	ges
18	Exhibit 2018	E-mail chain; top e-mail dated	64
19		8-10-99 from Klaus Lagermann to	0
20		Richard Bone; 20130207CTRL0000	9608,
21		two pages	
22			
1			

			Page 5
1 2		EXHIBIT INDEX CONTINUED	
3	SURFCAST EXHIE	RTTS	PAGE
4		E-mail dated 8-19-99 from Klaus	
5		Lagermann to Richard Bone;	0 /
6		20130207CTRL00009669, one page	
7	Exhibit 2021		68
8		Lagermann to Richard G.A. Bone;	
9		IPR2013-00292, six pages	
10	Exhibit 2022		70
11		Lagermann to Richard Bone;	
12		20130207CTRL00009693, one page	
13	Exhibit 2023		36
14		IPR2013-00292, 25 pages	
15	Exhibit 2025	E-mail chain; top e-mail dated	41
16		12-5-98 from Ovid Santoro to	
17		Klaus Lagermann;	
18		KL_SC_0005524-5525	
19	Exhibit 2036	E-mail chain; top e-mail dated	42
20		12-2-98 from Klaus Lagermann to	
21		Ovid Santoro; SC0001016-20	
22			

Page 6

			Page 6
1 2		EXHIBIT INDEX CONTINUED	
3	SURFCAST EXHI	atmg	PAGE
4		Data Structure for SurfCast	44
5	2010	Grid; SC0036694-97	
6		CIId, Scooscoy I s,	
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

1 THE VIDEOGRAPHER: Here begins video disc 2 number 1 in the video deposition of Klaus Lagermann in the matter of Microsoft Corporation versus 3 4 SurfCast, Inc., in the United States Patent and 5 Trade Office before the Patent Trial and Appeal 6 Board, cases number IPR2013-00292, IPR2013-00293, 7 IPR2013-00294, IPR2013-00295. 8 Today is Thursday, March 6th, 2014. time on the video monitor is 9: -- correction, 8:59 9 10 We are now on the record. 11 My name is David Cooper. I'm the certified legal video specialist with Merrill LAD, 12 21 Church Street, Suite 150, Rockville, Maryland, 13 20850. 14 This video deposition is taking place at 15 DLA Piper, LLP, in the blue conference room located 16 17 at 500 8th Street, Northwest, Washington, D.C., 18 20004. 19 Would counsel please introduce themselves 20 and who they represent. 21 MR. SUH: This is Wonjoo Suh at Sidley 22 Austin representing Microsoft Corporation.

MR. HEINTZ: And James Heintz with DLA 1 Piper representing SurfCast, Inc. Also attending by 2 3 phone is Dr. Richard G.A Bone, also representing 4 Surfcast, Inc. 5 THE VIDEOGRAPHER: The court reporter, 6 Michele Eddy, of Merrill LAD will now swear in the 7 witness. PROCEEDINGS 9 KLAUS LAGERMANN, 10 having been duly sworn, testified as follows: EXAMINATION BY COUNSEL FOR PETITIONER 11 12 BY MR. SUH: 13 Good morning. 0 14 Α Good morning. Would you please state your full name and 15 16 address, please. 17 My name is Klaus Lagermann. I live at 18 Stock Holms Gade, number 19, in Copenhagen. 19 Do you understand that you are under oath 20 today? 21 Α I understand. 22 Are you on any medications that might

affect your ability to testify today? 1 No, I'm not. 2 Α 3 Is there any reason you cannot testify 0 truthfully today? 4 5 Α No. 6 You've been deposed before, correct? I have. Α 8 It seems like you're already aware of the 0 rules, but just as a reminder, your answers are 9 recorded by the court reporter so please answer 10 verbally. That means no shaking or nodding. 11 12 Α Understood. 13 When I ask you a question, could you wait for me to finish my question before you start 14 15 answering? 16 Α Yes. 17 And if you don't understand the question, please ask for clarification, otherwise I'll assume 18 that you understood the question. Is that fair? 19 20 Α That is fair. 21 And we will try to take short breaks every 22 hour. However, if you need a break at any time for

any reason, please let me know. All that I ask is 1 if we're in the middle of a question, we can take a 2 break after you finish your answer. Is that fair? 3 4 Α Thank you. 5 0 Could you tell me about your educational background beginning after high school? 6 7 Α I have a bachelor's degree in economics 8 from Copenhagen Business School. 9 0 That's it? 10 (Nodding head.) And can you tell me about your employment 11 0 12 history? 13 Starting from business school, from after Α business school, I worked at IBM in Denmark. 14 15 Q What year? 16 Α From '81 until '86. And in 1986, I joined a stock brokering company called Per Storhaug. 17 18 Moved on to another stock brokering company called 19 Sankt Annae Bank. From there moved to a company called Computer Resources International. 20 21 0 When was Sankt Annae Bank? 22 Sankt Annae Bank was '89 to '91. Α

And in '91, I had a short stay at Computer 1 Resources International and then moved on to a 2 3 start-up company called HyperCOM. And in 1995, I 4 started my own company, Cebra Technology. 5 Cebra was merged with a company called 6 CoCom in 1998, and was about a year later sold to 7 Cisco Systems. And I did not join Cisco Systems. 8 went back to my own company. 9 0 What is your own company, CoCom? 10 It was -- at the time it was called Lagermann Invest, and I was with that company until 11 12 it went bankrupt in 2006. 13 0 Any other companies? There were -- during that time from 2000 14 Α -- from 2001 until 2006, I also had consultancy 15 roles in other companies. Do you want me to mention 16 all of those? 17 18 0 Sure. 19 It's from memory so I may -- I may miss one, but I was with a company called Smartscart 20 21 Technology. From memory that was from 2001 to 2003. 22 And there I was working with a company called Dansk

- Bygnings Import, which was a steel building trading
 company.
- 3 Q Any other?
- 4 A There were a few other company names in
- 5 the group around Dansk Bygnings Import. One was
- 6 called Steel Building Europe. Another was called CK
- 7 Development. CK Industry. There may be a few more
- 8 within the same group.
- 9 0 Is that all?
- 10 A There are -- there are more. I'm just
- 11 trying to get the years right.
- 12 Q Okay. In 2007 I took a position in a
- 13 company called Speakkompagniet, and I still have
- 14 that task today. I'm also with a company from 2009
- 15 called Functional Foods or Functional Mad in Danish,
- 16 which is a health food import company. That's my
- main occupation today, in the health food company.
- 18 And I have a small role in a company called VBAG
- 19 Company, which is a motion picture accessory --
- 20 equipment accessory company. Then there are a few
- 21 companies where I have, like, board positions or
- 22 advisory board positions.

1	Q Which are those?
2	A There's one called Pax Recon.
3	Q Which year?
4	A Excuse me?
5	Q Which year was that?
6	A This is probably from it's going to be
7	from 2006 or something, around that time. Pax Recon
8	has holdings in various companies. And through my
9	involvement in Pax Recon, I have positions in those
10	companies. One is called XtraSpace. One is called
11	Nordisk Gestalt Institut. One is called Applied
12	Technologies and one is called Institute for
13	Leadership Dynamics.
14	I think that's all of them.
15	Q Were you ever an employee of SurfCast?
16	A That was in of course, apologies for
17	not remembering that. SurfCast was after the
18	sale of my first owned company to Cisco Systems,
19	then I started working with SurfCast people.
20	Q And which when was that?
21	A It began in '98 and in '99, 2000. I left
22	the company in 2001.

1 0 Thank you. Do you have any financial interest in 2 3 SurfCast? 4 As part of my consultancy agreement right 5 now, I have a small monthly income from SurfCast, 6 and I also have an option for SurfCast, yes. Can you please describe the options? Q The option is for -- I believe it to be 8 for half a percent of the company. 9 10 You'd gain financially if SurfCast obtains a money judgment against Microsoft in the Maine 11 12 litigation ... 13 Excuse me? Α You would gain financially if Microsoft --14 if SurfCast obtains a money judgment against 15 Microsoft in the Maine litigation, wouldn't you? 16 17 Α I suppose so. 18 You would agree that you have an interest 19 in the outcome of the litigation; is that correct? 20 MR. HEINTZ: Objection. Calls for a legal 21 conclusion. 22 Α I suppose so.

1 Q Are there any documents that you reviewed 2 in order to prepare for this deposition? 3 A Yes.	
3 A Yes.	
4 0 171-4 +10	
4 Q What are they?	
5 A The declaration that I submitted, the	
6 various documents that is mentioned in the	
7 declaration, as well as the '403 patent itself.	
8 Q Anything else?	
9 A Various e-mails pertaining to the	
10 communication between other SurfCast people and	
11 myself.	
12 Q Are you personally personally	
13 represented by counsel today, personally?	
14 A I'm uncertain.	
15 Q Are you represented by counsel today?	
16 A I don't have a personal lawyer, no.	
17 Q Is DLA Piper representing you?	
18 A Yes.	
19 Q And are you paying for the representation?	
20 A I am not.	
21 Q Do you know who's paying?	
22 A I don't know who's paying.	

	<u> </u>
1	(Exhibit 2006 was previously marked
2	and referred to.)
3	Q I'm going to hand you Exhibit 2006.
4	A Thank you.
5	Q Do you recognize this document?
6	A Yes.
7	Q What is it?
8	A It's a declaration.
9	Q Who wrote this declaration?
10	A This was written by me in cooperation with
11	DLA Piper staff.
12	Q On paragraph 2, it's on page 2, you say,
13	"I am currently providing services to Surfcast, Inc.
14	in connection with this Inter Partes review."
15	Do you see that?
16	A Yes.
17	Q What kind of services are you providing?
18	A I have a consultancy agreement and it
19	involves reviewing documents with respect to the
20	'403 patent and to this case.
21	Q Does it include preparation for today's
22	deposition?

1 Α Yes. Does it include taking today's deposition? 2 Q 3 MR. HEINTZ: Objection, form. I'm actually uncertain. 4 Α 5 So you don't know whether your services Q 6 includes taking this deposition; is that correct? 7 MR. HEINTZ: Objection, form. 8 Α I actually don't know. 9 Are you being paid for your services? 0 10 Α Yes. Are you being paid for your deposition 11 12 prep time? 13 Α Yes. Are you being paid for your time to take 14 15 the deposition today? 16 Α I'm uncertain about that, but I suppose 17 so. 18 Does your pay -- amount of the pay depend 0 on the outcome of the case? 19 20 Α No. 21 On page 2, the same page, if you can look 0 22 at paragraph 6, you say, "I conceived of the

- 1 inventions recited in at least independent claims 1,
- 2 22 and 46, and also dependent claims 2, 3, 5 to 9,
- 3 12, 17 to 21, 23 to 28, 30, 32 to 33, 35 to 37, 39
- 4 to 41, 47 and 48, of the '403 patent prior to June
- 5 29th, 1999."
- 6 Do you see that?
- 7 A I see that.
- 8 Q What claim interpretation did you use to
- 9 reach this conclusion?
- 10 A This was done in cooperation with DLA
- 11 Piper staff, and this series of numbers was proposed
- 12 to me and I believe them to be true.
- 13 O So -- do you know -- perhaps you didn't
- 14 ask -- understand my question.
- 15 Do you know what claim construction you
- 16 used to reach this conclusion?
- 17 A I'm not sure I understand your question.
- 18 O Did you read the Board's order instituting
- 19 the IPR proceeding that?
- 20 A Is that a document?
- 21 Q Yes.
- 22 A Do you have a copy of it?

I don't. 1 0 I've read so many documents in this case, 2 I would like to see it before I answer. 3 4 So you don't recall right now whether you Q 5 saw the Board's order instituting the IPR proceeding; is that correct? 6 I believe I did, but I would need to see it to recognize it. 8 In that document, the Board adopted 9 0 certain interpretations of certain various words and 10 phrases in the claims. 11 12 Do you remember that? 13 It sounds familiar. Α Did you use the Board's construction? 14 0 15 Α I'm uncertain what you mean. 16 You say it sounds familiar that the Board 0 interpreted certain claims in that document. Did 17 you use those interpretations from the Board to 18 reach this conclusion? 19 20 I don't think I can answer that question. Α 21 0 Is that a no? 22 MR. HEINTZ: Objection. Mischaracterizes

- 1 the testimony. I don't know. I don't think so. 2 3 Just so that I understand, SurfCast filed 0 4 a motion to amend the claims in this proceeding. 5 Are you aware of that? 6 Α Yes. 7 So just to be clear, when you say you 0 8 conceived the claims mentioned in paragraph 6, you're referring to the claims before any of these 9 10 amendments were made; is that correct? I'm not aware which amendment -- amendment 11 12 you mean and when these took effect. 13 Are you aware that there were proposed 0 amendments made by SurfCast in this IPR proceeding? 14 15 Α I believe so. I just wanted to make sure what the scope 16 0
 - 18 In reaching your conclusion, are you --

of this claims -- what you're saying is.

- 19 were you looking at the amended claims or the claims
- 20 before amendment?
- 21 A I believe that I saw both so I'm uncertain
- 22 as to which form the basis for this.

17

So you don't know which claims you were 1 0 2 referring to in paragraph 6; is that the testimony? 3 I just want to make it clear. 4 Α I'm uncertain. 5 0 On page 3, if you look at paragraph 8, you 6 say, "At the time a user had to open a variety of 7 programs to view different kinds of information," 8 correct? 9 Α Yes. 10 What do you mean by this? I mean that if you wanted to view a web 11 Α 12 page, you would open a web browser. If you wanted 13 to view a Word document, you would open a Word 14 application. So depending on what you wanted to see, 15 you would have to open the application that was 16 17 meant for displaying what you wanted to see. So when you say "at the time," are you 18 0 19 talking about what existed prior to June 29th, 1999? 20 Α Yes. 21 Is it your opinion that there's nothing 22 novel about calling a variety of programs to view

different kinds of information? 1 MR. HEINTZ: Objection. Form. Calls for 2 a legal conclusion. 3 4 I'm sorry, can I hear that question again. 5 I apologize. 6 (Record read.) 7 MR. HEINTZ: Same objections. "There is nothing novel" ... I believe 8 Α that what we described in our invention was novel. 9 10 No, that's not my question. I was asking you about whether calling a variety of programs to 11 view different kinds of information was novel or 12 13 not. MR. HEINTZ: Objection, form. Objection, 14 calls for a legal conclusion. 15 16 Α What I wrote here, that the user had to 17 open the program meant for displaying the data he 18 wanted to see was common at this time and not novel. 19 Was not novel. So calling a variety of programs to view different kinds of information was 20 21 not novel, correct? 22 MR. HEINTZ: Objection. Mischaracterizes

- 1 the testimony. Objection, form.
- 2 A It's -- you say calling.
- 3 O Yes.
- 4 A I say the user had to open. So it's a
- 5 user action. To me calling is something different.
- 6 Q Let me -- how is calling different from
- 7 open?
- 8 A That it's a user action to open this
- 9 program to view that and this program to view that.
- 10 The main idea of our invention was that the SurfCast
- grid and tile would take care of that for you.
- 12 Q So the -- are you saying the user cannot
- 13 call a variety of programs; is that what you're
- 14 saying?
- MR. HEINTZ: Objection, form.
- 16 A I mean, I'm a programmer, so I know that
- opening a program means that you perform some user
- 18 action that results in the calling of a certain
- 19 function in a program.
- 21 time. Do you mean that opening a program
- 22 necessarily calls the program?

Opening a program surely must call a 1 Α function to initialize the program. 2 3 And your -- is it your position that 0 4 calling a variety of programs to view different 5 kinds of information was not novel; is that correct? 6 MR. HEINTZ: Objection, form. 7 No, I -- the difference is in the user Α 8 intervention, that the user is doing something 9 actively to open each program. In our invention, 10 this was done for him so that's why I think it's different. 11 12 Let me step back. Q 13 Α Okay. Is it your opinion that there's nothing 14 novel about opening a variety of programs to view 15 different kinds of information? 16 MR. HEINTZ: Objection, form. Objection, 17 18 calls for a legal conclusion. 19 There was, at the time, nothing novel about a user opening various programs to view 20 21 various information. 22 So, then, is it your opinion that there's

- nothing novel about calling a variety of programs to view different kinds of information?
- MR. HEINTZ: Objection, form. Objection,
- 4 calls for a legal conclusion.
- 5 A I would say the same as before, that we
- 6 thought that the invention we did was novel, that
- 7 the SurfCast grid and tiles would take care of
- 8 opening whichever system would be needed for
- 9 displaying the information that the user wanted to
- 10 see. That's why we did it.
- 11 Q That was not my question. I wasn't asking
- 12 about what SurfCast did. I was asking about your
- 13 statement here in paragraph 8, and you testified
- that a user opening a variety of programs to view
- 15 different kinds of information was not novel. And
- 16 my question was whether there's anything novel about
- 17 calling a variety of programs to view different
- 18 kinds of information.
- 19 MR. HEINTZ: Objection. Form.
- 20 A I would agree to the extent that if the
- 21 user did it by user interaction, then there was
- 22 nothing novel, but we believed there was something

novel in the way that we did it. 1 How is -- how is the way we did it? 2 Excuse me? 3 Α Objection, form. 4 MR. HEINTZ: 5 Q Strike that. 6 When you say "the way we did it," what do 7 you mean by that? The SurfCast grid and tile invention. Α Can you describe it in this context? 9 0 10 MR. HEINTZ: Objection to form. The vision we had at this time was that 11 Α 12 there would be a SurfCast grid and tile application 13 that would display everything that you wanted to see 14 on your screen at the same time. That was the basis for the idea. So different tile types would take 15 care of displaying different information. 16 17 So is it your opinion that calling a Q 18 variety of programs to view different kinds of 19 information was your invention -- strike that. 20 Calling a variety of programs to view 21 different kinds of information, was that SurfCast's 22 invention?

MR. HEINTZ: Objection. Mischaracterizes 1 2 the testimony. Objection, form, and calls for a legal conclusion. 3 4 Α I'm sorry. 5 MR. SUH: Can you repeat the question. 6 (Record read.) 7 MR. HEINTZ: Same objections. That was not SurfCast's invention. 8 Α more than that. 9 So was that known in 1999? Was that 10 feature known, calling a variety of programs to view 11 different kinds of information, was that feature 12 13 known at the time, which is 1999? 14 MR. HEINTZ: Objection, form. The feature was -- the feature was known, 15 that you could write a program that could call 16 17 functions, call other programs. So this feature was 18 known. The SurfCast invention is something else. 19 On page 4, paragraph 11, you say, "At the time the user typically had to click on each window 20 21 to view updated information from the information 22 source." Correct?

1	A Yes.
2	Q Why typically?
3	MR. HEINTZ: Objection, form.
4	Q Why did you use the word "typically" in
5	this sentence?
6	A In order to describe it, I would have to
7	assume a typical use of applications on a computer
8	screen.
9	Q Was there any programs that did not
10	require clicking on each window to view updated
11	information from the information source?
12	A This section is about is about how you
13	use applications on a computer screen and if you
14	wanted to interact with a program, for example, a
15	web browser or a word processing program, you would
16	have to make that program the foreground
17	application, the one receiving the user interface
18	actions.
19	So if you were scrolling down a Word
20	document and you wanted to see the next page or see
21	another page of a web page that was in another
22	application, then you would have to activate that

application to bring it to the foreground. 1 This -- this section is about describing 2 how SurfCast was different, that we would display 3 4 any data that the user wanted to see on the screen 5 simultaneously. 6 Now, I'll get to that. But my question 7 was, at the time you say the user typically had to click on each window --Α Yes. 10 -- to view updated information from the information source. 11 12 And my question is, why do you use the 13 word "typically"? Does that mean there were certain 14 other programs that did not require this? 15 There were certainly applications that would -- that would display -- display -- display 16 17 updated information without the user interacting. 18 That depended on the application. For example, I 19 told you I was in the stockbroking industry. And the updating of a stock price on the screen did not 20 21 require user intervention. It was something that 22 was triggered by outside events.

What kind of outside events? 1 0 2 Α Whatever -- whatever was happening at the stock exchange providing the information. 3 4 0 Any other examples you can think of? 5 MR. HEINTZ: Objection to form. Are there any other samples that did not 6 0 7 require clicking on each window to view updated information from the information source? 8 9 I can think one up right now, but -- do Α you want me to do that? 10 11 0 Sure. 12 For example, I worked also in -- with 13 television technology in my own company, and one was -- one application was teletex pages. These would 14 update without user intervention depending on the 15 broadcaster's priority and transmission. So if you 16 17 were viewing a sports result, the page would 18 automatically scroll to the next page whenever the 19 broadcaster transmitted this next page. That would be an example of that. 20 21 0 Thank you. 22 Then you say in paragraph 11, the next

sentence, you say, "But each mosaic or mini screen 1 on our new user interface would be updated without 2 the user having to intervene, " correct? 3 4 Α Yes. 5 0 What do you mean by "intervene"? The whole idea of the SurfCast grid and 6 7 tile was that -- that the tiles would provide information that would update according to a 9 configuration so the user could sit back and just 10 watch his screen, and his tiles would update according to the configuration. The tiles would 11 12 present information from various information 13 sources, so you wouldn't have to click on the stock price for it to update. That would be triggered 14 either by a time interval or an outside event. 15 16 When you say "outside event," are you Q talking about what you just referred to in your 17 18 previous example of what existed at the time when the user did not have to click on each window to 19 view updated information? 20 21 Α Yes. 22 MR. HEINTZ: Objection, form.

We certainly had stock exchange 1 information systems that would update on the 2 screen -- the screen without the user having to do 3 4 anything. 5 0 So how is our new user interface novel to 6 the extent that it would be updated without the user 7 having to intervene? Objection, form. Calls for a 8 MR. HEINTZ: 9 legal conclusion. The title of the SurfCast invention 10 includes the word display, simultaneous display of 11 12 multiple data streams, and the invention was about 13 managing and controlling the display of information from multiple data streams and presenting this to 14 the user. So that's why it was different, that it 15 16 was -- it was able to manage and code these different data streams from different sources at the 17 18 same time without the user having to intervene. 19 So just to understand, I don't see what you just said in this statement where it says "but 20 21 each new mosaic or mini screen on our new interface 22 would be updated without the user having to

1 intervene." So the feature of being updated without 2 the user having to intervene was not novel; is that 3 4 correct? 5 MR. HEINTZ: Objection, form. Objection, 6 mischaracterizes the testimony. 7 If you read the sentence that's in the Α 8 same paragraph, that the user could see simultaneously in one screen updated information 9 10 from all the information sources that he wanted. Yes, but --11 0 12 That's the novel part. Α 13 So this is the novel part, and the part where the user interface is updated without the user 14 having to intervene, that -- there's nothing novel 15 16 about that; is that correct? 17 MR. HEINTZ: Objection, form. Objection, 18 mischaracterizes the testimony. 19 If you take that feature out of the context, I agree that updating information on a 20 21 computer screen without the user having to intervene 22 in itself is not novel. Our invention was about

simultaneous display of multiple data streams which 1 we believe to be novel. 2 Here when you say "Our new user interface 3 0 4 would be updated without the user having to 5 intervene, " so you mean that your user -- new user interface would be updated without the user making 6 7 any selection of the tiles; is that correct? Α The user would have to configure his tiles and set up his grids with various tiles. And then 9 10 the next time he would open his SurfCast grid and tiles system, they would be like he left them the 11 12 last time. So it -- it was set up previously the 13 way the user wanted to see his information, the 14 arrangement of the tiles and the configuration of the tiles. 15 16 0 I'm trying to understand what you mean when you say "Our new user interface would be 17 18 updated without the user having to intervene." 19 Would you agree that your new user interface would be updated without the user making any kind of 20 21 selection within the tiles? 22 MR. HEINTZ: Objection, foundation.

Objection, form. 1 Apart from the previous configuration and 2 setup, he would -- he would get updated information 3 4 without intervening. 5 0 Without any selection? MR. HEINTZ: Objection, foundation. 6 7 Objection, form. Without any selection, would your new user 0 interface be updated even without any selection of 9 the tiles? 10 11 Α Yes. 12 If the user puts a mouse over the tile --Q 13 Α Yes. -- does that qualify as intervening? 14 0 MR. HEINTZ: Objection, form. Objection, 15 foundation. 16 There are -- yes, it qualifies as 17 18 intervention. If the user left clicks an element of the 19 user interface, does that qualify as intervening? 20 21 Α Yes. 22 If the user right clicks the element of

the user interface, does that qualify as 1 2 intervening? 3 Α Yes. 4 If the user double clicks an element of a 5 user interface, does that qualify as intervening? 6 Α Yes. 7 (Exhibit 2023 was previously marked and referred to.) 8 For the record, I'm handing you Exhibit 9 Q 2023. Do you recognize this document? 10 11 Α Yes. 12 What is this? Q 13 I recognize the handwriting, and I believe this to be one of Ovid Santoro's notebooks. 14 If you could turn to page 20, there's a 15 statement saying, "Tiles are like bookmarks except 16 17 they are a live link with the website." 18 Do you see that? 19 I see that. Α 20 Do you agree with this statement? Q 21 Α To a certain extent. I would have to go 22 back and tell you that Ovid Santoro is -- was at the

- 1 time not a programmer or a technologist. He was a
- 2 man with ideas and a background in banking, among
- 3 many other things, and I was a programmer at the
- 4 time, so these -- these notes would be normally
- 5 taken by Ovid after our sessions and would be his
- 6 interpretation of the things that we talked about.
- 7 Sometimes he would share these with me and I would
- 8 comment on them and sometimes he would not share
- 9 them. So I believe this to be Ovid's version of
- 10 what we talked about at the time.
- 11 Q As you read it now, are you saying that
- 12 what's written here, at least this statement, is not
- 13 accurate?
- 14 A I would say tiles are a lot more than
- 15 that.
- 16 Q But do you agree that tiles are a live
- 17 link with a website?
- 18 A Well, there's one tile type that is a
- 19 browser tile type which can be configured to do what
- 20 it says here.
- 21 Q So you do agree with this statement; is
- 22 that correct?

MR. HEINTZ: Objection, mischaracterizes 1 2 testimony. I disagree with this as a description of 3 4 what tiles are, but this is a description of what 5 one type of tile could be like. So to rephrase that, just so that I 6 7 understand, are you saying tiles can be a live link with a website? 8 9 Α Yes, they can be, yes. 10 If you can turn to page 7. It says, "So, every frame/second a new tile/channel updates." 11 12 Do you see that? 13 I see that. Α 14 0 Do you know what this means? 15 I don't know Mr. Santoro's meaning of it, but I can tell you what I think it is. 16 17 Please. Q 18 Okay. In these discussions at this time, 19 I would tell Mr. Santoro and whoever participated in the discussions about different technology areas, 20 21 mostly the ones that I knew about and had worked 22 with before this. And I had worked quite a lot with

television technology and with teletex technology, 1 which the television has frames per second 2 properties and teletex has update technologies. 3 4 believe that Ovid would use some of these technical 5 expressions as a way to explain to himself what this 6 tile refresh system was about. So he would catch on 7 to a way of formulating it, perhaps taking from different technology areas. And this is an example of that. I can see some of these -- some of these 9 10 words stem from -- from television technology or teletex technology. 11 12 So does this mean that the tiles would 13 update -- new tiles would update every second, for example, in a round robin fashion? 14 The way that we talked about tile refresh 15 was that it was configurable individual for each 16 So each individual tile could have its own 17 tile. 18 refresh settings. For some application areas or 19 some tile types, it would make sense to have 20 frequent updates either triggered by a time 21 interval, like is mentioned here, five, ten or 15 22 seconds, or the update could be triggered by another

method such as outside events. 1 The round robin idea was something that 2 came from an analogy that we used like a slide 3 4 projector carousel. It displays the slides in a 5 round robin fashion. And this was used as -- as a 6 way to understand tile updating, but it was 7 certainly not meant as a way to describe the tile refresh system that we envisioned or that I envisioned. 9 10 But if you only focus on the sentence "So every frame/second a new tile/channel updates," 11 12 This is talking about the round robin fashion; is 13 that correct? It looks like it, yes. I believe this 14 context was if you had a television tuner in a PC --15 at the time the tuners were able to be tuned to one 16 17 single station at the time. We were using analog 18 television signals at the time. 19 So if you wanted, for example, eight tiles on your screen to display television channels, the 20 21 tuner would have to tune to each station, grab a 22 frame, tune to the next station, grab a frame.

would be, in effect, a round robin fashion. 1 So for the television channel tile, this 2 could very well describe how it could update unless 3 4 you had individual priority settings for the update, 5 such as more frequent update of one channel than the other channel. But this -- this could very well 6 7 describe one way of updating tiles. (Exhibit 2025 previously marked and 9 referred to.) 10 I'm going to hand you Exhibit 2025. 0 Do you recognize this document? 11 12 Α No. 13 What is it? It's an e-mail trail between Mr. Santoro 14 Α 15 and myself. 16 0 If you look on page 2 of Exhibit 2025, Mr. Santoro writes an e-mail to you with a subject 17 18 line "Web EPG" and says "I have an idea." 19 Do you see that? 20 Yes, I see that. Α 21 0 What does this mean? 22 Let me clarify. What does web EPG mean?

1 Again, the EPG was a concept from the television area. It was an abbreviation for 2 electronic program guide, which is what we today 3 4 think of as a TV guide, what's on on what channel. 5 I believe at this time that Ovid's initial idea 6 would be an electronic program guide for websites. 7 So he would take a technology from the television area and at least envision it being used in a web browser area, website area. 9 10 Your response to Mr. Santoro's e-mail was 11 R-U-Z-Y-R-I-O-S. 12 Yes. Α 13 What does this mean? 14 Α It means are you serious. And it's --15 it's actually about how Mr. Santoro and I 16 communicated at the time. We would throw crazy 17 ideas at each other. And I just needed to check with him if he really meant this as a seed of a new 18 19 idea. 20 (Exhibit 2036 was previously marked 21 and referred to.) 22 I'm going to hand you Exhibit 2036. Q

This is an e-mail marked SC 000101621020 1 in the bottom, which is from the Maine litigation. 2 3 Do you recognize this document? 4 Α Yes, I do. 5 In preparing for your deposition today, 0 did you read your prior deposition transcript? 6 7 Α Yes, I did. Do you recall testifying about this e-mail 8 in your prior deposition? 9 10 I believe so, yes. Do you recall testifying in that prior 11 12 deposition that this e-mail does not say anything 13 about assigning a refresh rate to a tile? Let me just browse through it. 14 Α I can't find the word refresh rate or 15 assigning refresh rate to a tile, but I can 16 17 certainly find descriptions of tiles being live or 18 play, which to me is the same thing as refreshing. 19 But that was not my question. My question was, do you recall testifying in that prior 20 21 deposition that this e-mail does not say anything 22 about assigning a refresh tile -- a rate to a tile?

I believe so. 1 Α (Exhibit 2048 was previously marked 2 3 and referred to.) 4 I'm going to hand you Exhibit 2048. Q 5 you recognize this document? 6 Α Yes, I do. 7 What is it? 0 It is a document that I submitted to the 8 9 patent attorney. 10 Are you there? Are you done answering? 11 Α Yes. 12 I would like to go through the example in Q this box on page 1. 13 14 Α Yes. Starting with html. What does that mean? 15 Q 16 Html is a language for defining websites. Α It's called -- I think the abbreviation is hypertext 17 18 markup language. 19 So this is an html language; is that 20 correct? 21 Α In the document I mention in the first 22 paragraph that I called this pseudocode, which is

largely similar to html. So in order to tune in the

- reader to my way of thinking, I'm using an html-like structure.

 So when you say pseudocode, what features were not similar to html?

 A There were -- some of the keywords in the
- 7 tile definition that starts with TD and ends with
- 8 slash TD would be something that I thought of and
- 9 not something that's normal in a table cell
- 10 definition.

1

- 11 Q So TD is not a standard html command; is
- 12 that correct?
- 13 A TD is a table cell definition and is a
- 14 normal way of marking content as something that is
- in a table cell. I would use it in this context as
- 16 a tile definition and inside those two tags, TD and
- 17 slash TD, would be the markup defining each tile.
- 18 O Other than TD, are there other commands
- 19 that are not standard in html?
- 20 A For example, my use of the keyword
- "source," my use of the keyword "refresh."
- 22 0 Is that it?

1 The way I use the onmouseover and 2 onmouseout is not the -- the syntax is not correct according to html so it's part of my pseudocode, 3 4 just meant for displaying or showing how I thought 5 this could be defined in a --6 So what was the definition you were 7 thinking --8 MR. HEINTZ: I'm sorry, please let the witness answer his question. 9 10 MR. SUH: Sorry. 11 Α -- in a language context. 12 Are you done? Q 13 Α Yes. So what did onmouseover mean? 14 0 This was an example of invoking certain 15 functions of the tile by performing user actions. 16 17 For example, hovering the mouse over the tile would 18 trigger this action 1 with an argument, if one --19 argument 1, in this example. And when you then 20 remove the mouse from the tile, the onmouseout would 21 be called -- would be -- would trigger the function 22 action 2 with another argument.

1 0 Can you give me an example of action 1 and 2 action 2? Yes, I can give you one example. If, say, 3 Α 4 I had a stock price tile with the price of, let's 5 say, the Microsoft stock was displayed as a number, as a decimal number, I would -- like 27.35. 6 7 I then hovered the mouse over the tile, the tile could, on that action, display further key figures 8 9 derived from the stock price, for example, the price earnings ratio or the percentage gain or loss within 10 the day. So the level of detail would be influenced 11 12 by my user intervention. 13 Action 1 is a function name for displaying 0 14 other keys or what you just described? It's just -- yes, it means that the user 15 -- user intervention to move the mouse over could 16 17 trigger a function in this system that could do 18 something. 19 And what is -- can you give me an example of argument 1, ARG 1? 20 21 Α The example would be that the tile was, 22 for example, a map, map tile type that would show

the city I live in. And the argument on the 1 mouseover could be the precision of the mouse so 2 that the action function that was called would know 3 4 where I was placing the mouse specifically on the 5 map in order to, for example, display information 6 about the point on the map that I was hovering over. So argument 1 --Q 8 Would be the precision. Sorry. Would be in general -- just to go over 9 0 this a lot faster, it would be, in general, a 10 variable that goes into the function action 1; is 11 12 that correct? 13 Α Yes. 14 0 You also mentioned refresh; can you 15 describe that, please? 16 Α Yes, I've given an example of a refresh definition that one way of defining refresh rates 17 18 was time-based, that these refreshes would occur 19 after a certain time period had elapsed. example, refresh timeout 200 would mean it was a 20 21 time-based refresh and it would occur after 200 time 22 units had elapsed.

Are the units milliseconds or seconds? 1 0 They are not defined at this time. 2 Α 3 But can be milliseconds? 0 They could be milliseconds or seconds or 4 Α 5 tens of seconds. So just to go through all of these three 6 0 7 faster, would you agree that any time you had refresh or timeout and the number following the 8 9 timeout in parenthesis is the refresher; is that 10 correct? That's one way of describing it, yes. I 11 Α 12 had -- as we talked about earlier, I had several 13 other refresh definition styles in my mind at the time, outside events, derived events or even to 14 update based on something completely different. 15 Are those -- are those other embodiments 16 0 in this example? 17 18 MR. HEINTZ: Objection, form. 19 In this particular code we're looking at Α right now? 20 21 0 Yes. 22 They're only timeout. Those are specific Α

timeout definition. It's in the third tile 1 definition where it has timeout zero. That's an 2 3 example of a tile type displaying some information 4 that doesn't require refreshing after a specific 5 time has elapsed. In this case, at least the text here indicates that it's a local document, and local 6 7 documents have a tendency not to update unless the user does something. 9 So if I understand correctly, when you say 0 refresh equals timeout (zero), it's a refresh rate 10 of zero; is that correct? 11 12 Α Yes. 13 Can we go up to HREF equals --14 Α Yes. 15 0 http://www.somewhere.com/sometarget.html? 16 17 Α Yes. 18 What does this mean? The HREF keyword is, again, taken from 19 html inspiration. Along with the anchor definition, 20 21 the A just before it, is a way of describing what 22 happens if this tile is triggered to launch.

- 1 then whichever -- whichever application is
- 2 responsible for displaying html documents will
- 3 launch as an application and display what data comes
- 4 from this URL. This form is somewhat similar to a
- 5 URL.
- 6 Q Isn't the HREF followed by that command,
- 7 isn't that command used to create hyperlinks in
- 8 html?
- 9 A Yes, it is.
- 10 Q If I understand correctly, with a link
- "http://www.somewhere.com/sometarget.html," would
- 12 this link appear in the tile?
- 13 A Not necessarily. It's a way of describing
- 14 that the tile, I call it the tile target, so when a
- 15 tile is, for example, double-clicked, if that is
- 16 what is required to launch this tile, then you would
- 17 be taken to this URL using whichever application
- 18 your system was configured to use for displaying
- 19 html documents. In this instance it would launch a
- 20 browser.
- 21 Q Do you agree that the HREF command here is
- 22 a standard html command?

I do agree that the HREF tag exists in the 1 html specification. But, again, I would like you to 2 note that this is pseudocode and not necessarily 3 4 html. I'm just using an html-like structure. 5 0 Is there anything in this example, 6 pseudocode, suggesting that the link will not appear 7 in the tile? Well, there is -- if we want to be Α inspired by html, there's something missing here in 9 10 order to display the link, and that is the rest of the anchor tag that's not even included here. 11 12 the way that -- which I also explained to the 13 recipient of this document, that the HREF is not meant as a visible link to click but, rather, as a 14 launch address once the tile is double-clicked to 15 launch if double-click was the launch action. 16 17 Are you referring to the bottom of page 1 Q 18 where it says "The HREF keyword decides what happens 19 if the user actually selects the tile"? 20 Yes, that's one way of describing that. Α 21 0 So what does this mean? 22 MR. HEINTZ: Objection, form.

This means that if the tile is launched, 1 that means the user has done to the tile what is 2 needed to launch it, then this HREF is what will be 3 4 It's a URL and, in this case, an html launched. 5 document, so the resulting -- the resulting -- the 6 result of the operation would be that a browser 7 would appear on the screen with this particular URL document in it. 9 So if I understand correctly, if the user 0 selects the tile, the URL next to this HREF command 10 will launch; is that correct? 11 12 Yes, if the tile is made to launch by user Α 13 intervention. Launching could be done by double 14 clicking. That means if I double click the tile, a 15 browser would appear with whatever the content of somewhere.com/sometarget displayed in it. 16 17 In this example, can you show me where --0 how -- where it describes how the user can actually 18 19 select the tile? 20 MR. HEINTZ: Objection, form. 21 Α The way that I describe this was that the 22 content -- if you look at the source keyword, the

- 1 source keyword points to a tile description file,
- 2 and this is called
- 3 surfcast.com/tilelibrary/tile2.til. This is a file
- 4 that describes what the tile can do and how it does
- 5 it. So if I can get you to turn the page and see
- 6 the next boxed content --
- 7 Q Page 2?
- 8 A Yes, on page 2, here is a definition -- or
- 9 is a more elaborate definition of a tile. And this
- 10 could be in this tile definition file or it could be
- in the -- what we looked at before was actually the
- 12 grid definition file. Here you see more keywords
- 13 such as clickmap, toolbar and alarm that would
- 14 further specify the properties, features and
- 15 functions of a tile. And especially the clickmap
- 16 has, in this example, three different areas where
- 17 you can click and resulting in three different
- 18 functions of the system to be called. And this
- 19 means depending on where you click on the tile,
- 20 certain actions would take place. So that's why
- 21 I -- just before when we talk about selecting and
- 22 launching a tile, it's actually definable what --

- 1 what the user action of clicking on a tile would do.
- 2 It could be clicking in the top of the tile did
- 3 something, but clicking in the bottom of the tile
- 4 would do something different. One thing could be
- 5 launching it to an external application or another
- 6 thing could be invoking a configuration setting or
- 7 something like that. So that's why it's complicated
- 8 to talk about because it's configurable.
- 9 Q Are you finished?
- 10 A Yes.
- 11 Q So you mention, page 2, clickmap. I see a
- 12 lot of numbers. First I see -- the first line
- 13 starts with number 0, 0,50 and 50, and you mention
- 14 three different areas. Is this one of the three
- 15 different areas that you mention?
- 16 A This is -- it's my attempt at defining
- 17 pixel area in the tile that is clickable. So the
- 18 0, 0,50,50 would be X,Y of the top left corner and
- 19 X,Y on the bottom left corner of a rectangle on the
- screen that is clickable, invoking clickfunction1
- 21 with clickargument1.
- MR. SUH: We can take a break.

THE VIDEOGRAPHER: This concludes disc 1 2 number 1 of the video deposition of Klaus Lagermann. The time is 10:13:31 a.m. We are now off the 3 4 record. 5 (A brief recess was taken.) 6 THE VIDEOGRAPHER: This begins disc number 7 2 of the video deposition of Klaus Lagermann. time is 10:29:57 a.m. We are now on the record. BY MR. SUH: 9 10 Mr. Lagermann, we left off in the middle of Exhibit 2048. So just to recap, page 1 is an 11 12 example of the grid you mentioned, grid of tiles, 13 with three tiles. An example -- the second example 14 on page 2 is an example of a single tile. 15 Α Yes. And we were talking about this clickmap. 16 0 17 Α Yes. 18 And I see three click functions, clickfunction1, clickfunction2, clickfunction3. 19 Is it fair to characterize these as 20 21 different functions for different click areas? 22 Α Yes.

And next to that I see three click 1 0 arguments, clickargument1, clickargument2, 2 3 clickargument3. Are these variables that control the individual click functions? 4 5 Α Yes, it could be an argument passed to the function from the user interface, for example, exact 6 7 pixel coordinates of where the user clicked. And in this example I see three click 0 9 functions with three click arguments for different -- three different click areas. 10 11 Α Yes. 12 And do you agree that users can select a Q 13 tile by selecting certain areas within the tile? MR. HEINTZ: Objection, form. 14 The way this was -- this was made to 15 Α demonstrate that there could be different functions 16 17 invoked by -- by selecting the tile in different locations on the tile, but all three of these would 18 mean the tile was selected. 19 20 And when you select these certain areas, 21 these certain areas need not be the entire tile; is 22 that correct?

That would be --1 Α MR. HEINTZ: Objection, form. 2 3 That would be -- there would be specific Α 4 functions called. If you clicked in these defined 5 areas and if you clicked outside of these areas, the default behavior for this tile type would take 6 7 action. Is it your opinion that clicking on an 0 area within a tile, certain areas, is indeed 9 10 selecting a tile itself? MR. HEINTZ: Objection, form. 11 12 I believe that clicking inside the tile area no matter where you click is selecting the 13 tile. 14 And it is your opinion that clicking on a 15 portion of tile can be selecting the tile itself. 16 17 Α Yes. 18 Can we go back to the first page. we left off at the HREF command. 19 20 Α Yes. 21 I think you testified that examples of how 22 users actually select a tile is shown in page 2,

clickmap. 1 2 Α That is one example. 3 MR. HEINTZ: Objection, form. 4 Can you give me another example? 0 5 Α If no clickmap is defined, then the default behavior of the specific tile type would 6 7 kick in on the user clicking on the tile and, as such, selecting it. 8 9 Can the user select the tile by selecting 0 10 the link? Objection, form. Objection, 11 MR. HEINTZ: 12 mischaracterizes the testimony. Objection, 13 foundation. 14 I'm not sure what you mean by link. Let's go to lines -- the ninth line in 15 16 this first box where it says "HREF equals" and 17 there's a URL. 18 Α Yes. 19 Is there anything in this example 20 indicating that this link will not appear in the 21 tile? 22 Α Yes.

Can you point me to that? 1 It's something that's missing. In order 2 for the link to appear in the tile, there would need 3 4 to be a further specification of what the link would 5 look like, and it's not present in this example. 6 Can you give me an example of what needs 7 to be there in order for a link to appear? If we, again, using the html analogy, why 8 Α 9 this is not html but html-like pseudocode, then the normal way of displaying a link is to, inside the 10 anchor tag, the one that begins with the capital A, 11 12 to have the representation of the link defined 13 before the closure of the anchor tag. There's no representation of the link defined here. 14 In fact, this is slightly incomplete as we are missing a 15 16 closing tag. 17 But my use of the HREF is -- also is noted 18 below, that this is what will happen if the user 19 selects the tile, and by selecting the tile I mean the default behavior of selecting a tile, which 20 21 means launching the tile or, in fact, launching the 22 tile HREF.

1	(Exhibit 2012 was previously marked
2	and referred to.)
3	Q I'm handing you Exhibit number 2012.
4	Do you recognize this document?
5	A Yes, I do.
6	Q You agree that this exhibit does not
7	mention patent anywhere in the document, correct?
8	A It does not seem to mention the patent.
9	Q If we can go back to Exhibit 2006 on page
10	9, paragraph 24.
11	A I have 24 on page page 9. Sorry.
12	Q Yes, page 9 of the document, page 10 of
13	the
14	A I got it.
15	Q You cite Exhibit 2012 to support your
16	statement "I exchanged e-mails with my coinventor
17	Ovid Santoro regarding obtaining a patent on a tile
18	user interface invention."
19	Correct?
20	A I see that.
21	Q So was the conversation regarding
22	obtaining a patent in what is now redacted in

Exhibit 2012? 1 2 MR. HEINTZ: Objection. I'm sorry, can I have that sentence reread? May I have that question 3 4 reread, please? 5 (Record read.) BY MR. SUH: 6 I think my question was, was the 0 conversation regarding "obtaining a patent" in what 8 is now redacted in Exhibit 2012? 9 10 MR. HEINTZ: I'm going to caution the witness not to reveal any attorney-client 11 12 communication in answering that question. 13 I think the question is but does it call for anything but just cautioning you not to reveal 14 anything about the content of the communication, if 15 you can answer that question. 16 17 The way I see this e-mail is that Α 18 Mr. Santoro is writing to me while he is also in 19 conversation Andrew Gray. So the message to me is he's -- he's asking me what are they waiting for, 20 21 please, please. And I explained to Ovid, to 22 Mr. Santoro, sorry, what they are waiting for.

Did you review the unredacted version of 1 0 Exhibit 2012 before preparing your declaration? 2 I did not. The thing I reacted to was the 3 -- was the call from -- the message from Ovid 4 5 Santoro, from Mr. Santoro, urging me to deliver 6 something that was missing. 7 So other than you mention -- mentioning 0 Andrew Gray in the e-mail, there's no other basis 8 9 for your conclusion that this exchange of e-mails between Mr. Santoro and you was regarding obtaining 10 a patent; is that correct? 11 12 MR. HEINTZ: Objection to form. 13 Α It is to me because the "they" that we're 14 talking about, what are they waiting for and they -they are Pennie & Edmonds, our patent attorney and 15 16 17 Yes, other than that fact --Q 18 MR. HEINTZ: I'm sorry, please let the 19 witness finish his answer. 20 At the time, the only communication I 21 would have with Pennie & Edmonds would be concerning 22 the patent, so the fact that I was to send something

to Pennie & Edmonds would certainly be concerning 1 the patent application. 2 3 And for the record, you don't know what's 0 4 in this redacted box, correct? 5 Α I got this e-mail back in '99 and it was 6 not redacted at that time so I have seen it once, 7 but right now sitting here I don't recall what's in there. 9 (Exhibit 2018 previously marked 10 and referred to.) I'm handing you Exhibit 2018. Do you 11 Q 12 recognize this document? 13 I recognize it. Α What is it? 14 0 It's an e-mail from me to Richard Bone at 15 Pennie & Edmonds. 16 Do you know what was redacted? 17 I vaguely recall that, since any 18 communication with Richard would be about documents 19 about the patent application, that Richard had asked 20 21 me, as is shown further down, whether or not I received a fax from him. 22

So in the redacted -- I'm sorry. 1 0 2 No, no, not in the redacted, but in his e-mail to me, the one I'm responding to by sending 3 4 this e-mail back to him, he's asking me whether or 5 not his fax was received at my end. 6 0 And above that there is a box that was 7 redacted. 8 Α Yes. 9 Do you know what that is? Q I believe -- I believe it would be an 10 answer to his question, whether I received the fax 11 12 or not. 13 Do you know or do you just speculate --0 14 are you speculating? From -- from -- I know I've seen this 15 e-mail back then, in '99, so I don't know -- I don't 16 17 recall the words or remember the words, but it would 18 be --19 MR. HEINTZ: I'm going to -- sorry to interrupt you, sir. I'm going to instruct you to be 20 21 cautious not to reveal any attorney-client 22 privileged communications in answering Mr. Suh's

1 question. 2 THE WITNESS: Okay. BY MR. SUH: 3 4 So are you declining to answer based on 0 5 your counsel's instructing you not to answer? MR. HEINTZ: You know, I -- just -- to 6 7 clarify the record. I'm not instructing you not to answer. I'm just instructing you not to reveal any 9 attorney-client communication -- any attorney-client 10 privileged communications --11 THE WITNESS: Right. 12 MR. HEINTZ: -- in your answer. If you can answer his question --13 14 THE WITNESS: Okay. MR. HEINTZ: -- without doing so you may 15 16 answer. 17 I sincerely believe that the redacted 18 portion is my answer to his question, whether I 19 received his fax or not. 20 But you don't know as a matter of fact 21 whether that is or isn't redacted; is that correct? 22 Sitting here today, no, I don't know for a Α

fact. I believe it to be so. 1 2 Q Thank you. (Exhibit 2020 was previously marked 3 4 and referred to.) 5 I'm handing you Exhibit 2012 -- 2020. 0 6 do you recognize this document? 7 Α Yes. What is it? 8 It's an e-mail from me to Richard Bone in 9 Α continuation of the e-mail we just talked about. 10 Do you know what's in this redacted box? 11 12 MR. HEINTZ: Again, I'll caution the 13 witness not to reveal any attorney-client privileged communications in answering that question. 14 If you can answer his question without 15 revealing those communications, you may do so. 16 17 Yes, the same as with the previous Α 18 exhibit, I don't -- do not sitting right here remember the words that were redacted, but I can see 19 20 that I attached a document, so my sincere guess is 21 that it's -- it's comments accompanying the attached 22 document, so it would be a sentence about what's in

the document. 1 But you don't recall what you said in 2 3 these redacted boxes; is that correct? 4 Α No, I don't recall. 5 (Exhibit 2021 was previously marked and referred to.) 6 7 I'm handing you Exhibit 2021. Do you Q recognize this document? 8 9 Α Yes. 10 What is it? 0 This is a document concerning input for 11 12 our -- for SurfCast's patent application sent from 13 me to Mr. Richard Bone. Almost everything is redacted here. 14 you know what's in these redacted boxes? 15 16 MR. HEINTZ: Again, I'll instruct the 17 witness that -- not to reveal any attorney-client 18 privileged communications. To the extent you can 19 answer Mr. Suh's question without doing so, you may 20 answer the question. 21 Α From a vague memory and help by the first 22 sentence in the document, I believe this to be notes

and comments for figures meant for inclusion in the 1 2 patent application. 3 Well, the first sentence, "Here are my 0 4 notes and comments for the figures and 5 specifications." Other than that, do you know what are --6 7 what are in these redacted boxes? Objection, form. Objection, 8 MR. HEINTZ: same instruction about revealing -- not revealing 9 any attorney-client communications that are 10 privileged. 11 12 I would say that the way it's laid out on 13 the pages indicate to me that these are figures -drawings or figures meant for inclusion in the 14 15 patent application. 16 Do you recall which figures and which Q portions of the specification were listed in these 17 18 redacted boxes? I don't recall at this time. I vaquely 19 remember many figures and diagrams that are -- that 20 21 was exchanged -- that was in the patent application, but I don't recall which ones was in this document.

22

Do you recall if there were any 1 0 attorney-client communications in these redacted 2 3 portions? 4 MR. HEINTZ: Objection, calls for a legal 5 conclusion. Objection, form. Well, this is a communication between the 6 7 attorney, and at that time, I was the client. 8 0 Are you done? 9 So -- so this is attorney-client Α 10 communication. Yes. My -- my question was, your counsel 11 0 12 instructed you -- instructed you to caution and not 13 disclose attorney-client communications, and did you decline to answer anything that you remember based 14 on that objection? 15 16 Α No, no. I really don't remember. 17 (Exhibit 2022 previously marked 18 and referred to.) 19 I'm handing you Exhibit 2022. Do you 0 recognize this document? 20 21 Α I recognize it. 22 What is it? 0

It's an e-mail from myself to Richard Bone 1 at Pennie & Edmonds. 2 3 Do you know what's in this redacted boxes? Q 4 MR. HEINTZ: Again, I'll caution the 5 witness not to reveal any privileged attorney-client 6 communications in responding to Mr. Suh's question. 7 If you can answer his question without doing so, you 8 may answer. Given the date of this e-mail and the 9 Α 10 previous communication between myself and Mr. Bone, I believe this to be comments -- further comments 11 12 about the document that I sent to him a few days 13 earlier. 14 Do you know what comments that was? Sitting here today, I don't know. 15 16 remember what the comments were. 17 Q In your answer is there any attorney-client communication that you are declining 18 19 to reveal based on your counsel's instruction to caution not to disclose any attorney-client 20 21 communications? 22 No. No, I simply don't remember.

MR. SUH: So I think this is all, but I 1 2 would like to check my notes to see if --3 MR. HEINTZ: Yes, why don't we go off 4 record and it will give you a chance to go back and 5 see and consider what I want to do on redirect. 6 MR. SUH: Thanks. 7 THE VIDEOGRAPHER: The time is 10:52:40 We are now off the record. 8 a.m. 9 (A brief recess was taken.) 10 THE VIDEOGRAPHER: The time is 11:11:36 a.m. We are now on the record. 11 12 BY MR. SUH: 13 Mr. Lagermann, did you talk to your counsel about the case during this break or the 14 15 previous break? 16 Α No, I did not. 17 MR. SUH: I would like to pass the 18 witness. EXAMINATION BY COUNSEL FOR PATENT OWNER 19 20 BY MR. HEINTZ: 21 Mr. Lagermann, I would like you to pick up, again, Exhibit 2048. 22

Can you recall your earlier testimony 1 about that exhibit? 2 3 Yes. Α 4 I'll direct your attention in particular 5 to page 1 of Exhibit 2048. And on page 1, I would 6 ask you to direct your attention in particular to 7 the first line, which I think you characterize as a tile definition that begins "<TD><A 9 HREF=http://www.somewhere.com/sometarget.html." 10 Do you see that? I see that. 11 Α 12 Can you explain again what that line Q 13 represents. 14 Α Yes. 15 0 Please do. 16 That line represents the default launch Α target for this tile. 17 18 Okay. And I think Mr. Suh asked you 19 earlier whether the words -- sorry, whether the URL would appear as a link in the tile, in other words, 20 21 whether the user would be able to see 22 www.somewhere.com/sometarget.html, those letters

1 would appear on the tile. 2 Α Objection, form. Let me rephrase it. 3 0 4 Would the letters that make up the URL in 5 that line appear in a tile to a user? 6 MR. SUH: Same objection. 7 The URL would not appear in the tile. Α 8 What would appear in the tile? 0 Whatever the tile was defined to display. 9 Α Where would the definition of what the 10 tile was defined to display appear? 11 12 Α That definition would be given in what is 13 mentioned at the source keyword where the tile -the tile definition file, which is the file 14 tile2.til. That file would define what is actually 15 shown in the tile screen space. 16 17 And when you say "shown in a tile screen Q 18 space," is that what the user would see? 19 MR. SUH: Objection to form. That is what the user would see on his 20 Α 21 screen, yes. 22 You said earlier that the 0

somewhere.com/sometarget.html would be what would happen when the tile was launched, I believe. 2 3 Α Yes. 4 Did the behavior of the tile when launched 5 depend on what was visible in the tile to the user? 6 MR. SUH: Objection, form. 7 Sorry, as defined in the tile2.til file. Q Objection, foundation. 8 MR. SUH: The behavior of the tile is defined in 9 Α 10 several areas. One area is the tile type itself. For example, the browser tile type would display a 11 12 portion of a web page, but it could also display 13 something else as defined in the tile definition

file even if it was a browser tile. Can I give an

16 0 Yes.

example?

1

14

15

- 17 If for example -- if I wanted my family 18 website -- if I wanted access to my family website 19 in my SurfCast grid and tile application, I could
- 20 choose to depict this tile. That means the tile
- 21 would show a picture of my grandson, but when I
- 22 clicked on it, it would go to -- it would launch our

- 1 family website. So the launch target of a tile does
- 2 not necessarily have to do with what is displayed in
- 3 the tile. It can be defined as something else.
- 4 Q So does that mean that -- scratch that.
- 5 Let me rephrase that. Actually that's fine.
- 6 I'm going to ask you to direct your
- 7 attention to Exhibit 2023. That is in the notebook
- 8 that you have in front of you somewhere.
- 9 I'll ask you to turn to page 7 of Exhibit
- 10 2023. Do you recall testifying about the contents
- of page 7 of Exhibit 2023?
- 12 A Yes.
- 13 O Do you recall in one of your answers you
- 14 referred to the 5/10/15 seconds on the third line of
- 15 page 7 of Exhibit 2023?
- 16 MR. SUH: Objection, beyond the scope.
- 17 Move to strike.
- 18 Q Do you recall that, sir?
- 19 A Yes.
- 20 Q What do -- what is the significance of the
- 21 5/10/15 seconds --
- MR. SUH: Objection, form.

MR. HEINTZ: Sorry, let me finish the 1 2 question, please. 3 What is the significance of the 5/10/154 seconds on the third line of Exhibit 3, if any? 5 MR. SUH: Objection, form. 6 MR. HEINTZ: What's the objection? 7 MR. SUH: Form. 8 MR. HEINTZ: What's the basis of the objection? 9 10 MR. SUH: Significance. MR. HEINTZ: Meaning it's not clear what 11 12 significance means? 13 MR. SUH: Vaque and ambiguous. BY MR. HEINTZ: 14 Mr. Lagermann, do you have any 15 understanding as to what the -- what the notation 16 5/10/15 seconds on page 20 -- page 7 of Exhibit 2023 17 18 refers? 19 MR. SUH: Same objection. In the way I read this sentence is that --20 Α 21 that this tile would change, meaning update every 5 22 or 10 or 15 seconds, that it was -- it was a refresh

- 1 rate setting of a tile.
- Q I'm sorry, I did forget to go back. I'm
- 3 going to ask you to go back again to Exhibit 2048.
- 4 We're done with Exhibit 2023. So please go back to
- 5 Exhibit 2048.
- It was in the html code section.
- 7 A Sorry. Got it.
- 8 Q Okay. I'm going to direct your attention
- 9 to the third instance where the words "HREF" appear.
- 10 That's near the middle of page 1 of Exhibit 2048.
- 11 Do you see that?
- 12 A Yes.
- 13 O I believe you testified earlier that this
- 14 section of code was a definition of a third tile.
- 15 Is that correct?
- 16 A Yes.
- 17 Q Okay. And, again, just to speed this
- 18 along, I think you said that this had to do with a
- 19 tile relating to a locally stored document. Is that
- 20 correct?
- 21 A That's correct.
- 22 Q Mr. Suh asked you a question about the

- 1 meaning of the line "Refresh equals timeout (zero),"
- 2 correct?
- 3 A Yes.
- 4 O Does that mean that the tile had no
- 5 refresh rate that was a function of time associated
- 6 to it; in other words, there was no time at which
- 7 the tile would be scheduled to refresh?
- 8 MR. SUH: Objection. Mischaracterizes the
- 9 testimony. Objection, foundation. Objection,
- 10 leading.
- 11 Q All right. Let me rephrase the question.
- 12 Did this line of code result in a refresh
- 13 rate specified by a time?
- MR. SUH: Same objections.
- 15 A This example shows a tile that refreshes
- only at its initial display, but then does not
- 17 refresh again because the timeout zero in this
- 18 example means that there is no timeout triggering a
- 19 refresh.
- 20 Q You -- I'm sorry, I didn't mean to cut you
- 21 off. Please.
- 22 A Just meaning that if we look at the other

two definitions of timeout where in the first 1 instance there's 200 time units, in the second 2 that's 500 time units, in this third instance, there 4 are no time units, meaning that there's an 5 indefinite period of time or an infinite period of time until refresh. 6 7 Does that mean that the tile does not 8 refresh at all? Not necessarily, because the source definition of the tile could have an additional 9 definition of what triggers this tile to refresh. 10 Can I continue the example? 11 12 Absolutely. Q 13 If, for example, this document that is being referenced is located on a shared drive or a 14 shared server, and somebody else changes this 15 document, then the nature of the document tile type 16 17 would monitor this document and, based on a change 18 in the document, would refresh the tile. But it is 19 not based on a timeout. It's based on an external 20 event. 21 MR. HEINTZ: Thank you. No further 22 questions.

```
FURTHER EXAMINATION BY COUNSEL FOR PETITIONER
 1
      BY MR. SUH:
 2
 3
           0
                Can I ask you some follow-up questions.
 4
                So refresh will time out (zero).
 5
                Do you recall your testimony saying that
      this is indicating a refresh rate of zero?
 6
           Α
                Yes.
 8
                MR. SUH: Thank you. No further
 9
      questions.
10
                MR. HEINTZ: I don't think I get a
      recross. We can go off the record.
11
                                    This concludes the
12
                THE VIDEOGRAPHER:
13
      video deposition of Klaus Lagermann consisting of
14
      two DVD discs. The time is 11:23:44 a.m.
      now off the record.
15
16
17
                (Signature having not been waived, the
18
      deposition of Klaus Lagermann was concluded at
19
      11:23 a.m.)
20
21
22
```

	Page 82
1	* * *
2	ACKNOWLEDGEMENT OF WITNESS
3	I, KLAUS LAGERMANN, do hereby acknowledge
4	that I have read and examined the foregoing
5	testimony, and the same is a true, correct and
6	complete transcription of the testimony given by me,
7	and any corrections appear on the attached Errata
8	sheet signed by me.
9	
10	
11	
12	(DATE) (SIGNATURE)
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	

1	CERTIFICATE OF SHORTHAND REPORTER
2	I, Michele E. Eddy, Registered
3	Professional Reporter and Certified Realtime
4	Reporter, the court reporter before whom the
5	foregoing deposition was taken, do hereby certify
6	that the foregoing transcript is a true and correct
7	record of the testimony given; that said testimony
8	was taken by me stenographically and thereafter
9	reduced to typewriting under my supervision; and
10	that I am neither counsel for, related to, nor
11	employed by any of the parties to this case and have
12	no interest, financial or otherwise, in its outcome.
13	
14	IN WITNESS WHEREOF, I have hereunto set my
15	hand and affixed my notarial seal this 10th day of
16	March, 2014.
17	
18	My commission expires June 30, 2017
19	
20	
21	MICHELE E. EDDY NOTARY PUBLIC IN AND FOR
22	THE DISTRICT OF COLUMBIA

1			
1			ERRATA SHEET
2	IN RE:	MICROS	OFT CORPORATION V. SURFCAST, INC.
3			
4			
5	RETURN	BY:	
6	PAGE	LINE	CORRECTION AND REASON
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
			
21			
22	(DATE)		(SIGNATURE)

1		ERRATA SH	EET
2	IN RE:	MICROSOFT CORPORATION V	. SURFCAST, INC.
3			
4	RETURN	BY:	
5	PAGE	LINE COP	RRECTION AND REASON
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22	(DATE)	()	SIGNATURE)

A	49:7 51:21 52:1	22:5	assume
abbreviation	57:12 61:6	Appeal	9:18 28:7
42:2 44:17	agreement	1:2 7:5	attached
ability	14:4 16:18	appear	67:20,21 82:7
9:1	al	51:12 52:6 53:7,15	attempt
able	1:13	59:20 60:3,7 73:20	55:16
32:16 40:16 73:21	alarm	74:1,5,7,8,11 78:9	attending
Absolutely	54:13	82:7	8:2
80:12	ambiguous	application	attention
	77:13	21:14,16 26:12 28:17	73:4,6 76:7 78:8
access 75:18	amend	28:22 29:1,18 30:14	attorney
	20:4	39:18 51:1,3,17 55:5	44:9 63:15 70:7
accessory 12:19,20	amended	64:2,20 68:12 69:2	attorney-client
	20:19	69:15,21 75:19	62:11 65:21 66:9,9
accompanying 67:21	amendment	applications	67:13 68:17 69:10
=	20:11,11,20	28:7,13 29:15	70:2,9,13 71:5,18,20
accurate	amendments	Applied	Austin
37:13	20:10,14	13:11	3:5 7:22
acknowledge	amount	April	automatically
82:3	17:18	1:11	30:18
ACKNOWLEDGE	analog	area	aware
82:2	40:17	42:2,8,9,9 55:17 58:9	9:8 20:5,11,13
action	analogy	58:13 75:10	a.m
23:5,8,18 46:18,22	40:3 60:8	areas	1:22 7:10 56:3,8 72:8
47:1,2,8,13 48:3,11	anchor	38:20 39:8,18 54:16	72:11 81:14,19
52:16 55:1 58:7	50:20 52:11 60:11,13	55:14,15 56:21 57:10	
actions	Andrew	57:13,20,21 58:5,5,9	В
28:18 46:16 54:20	62:19 63:8	75:10	В
activate	Annae	ARG	4:8
28:22	10:19,21,22	47:20	bachelor's
actively	answer	argument	10:7
24:9	9:10 10:3 19:3,20 46:9		back
additional	62:16 63:19 65:11	48:1,7 57:5	11:8 24:12 31:9 36:22
80:9	66:4,5,8,12,13,16,18	arguments	58:18 61:9 64:5 65:4
address 8:16 52:15	67:15 68:19,20 70:14	57:2,9	65:16 72:4 78:2,3,4
	71:7,8,17	arrangement	background
adopted 19:9	answering	34:14	10:6 37:2
	9:15 44:10 62:12	asked	Bank
advisory 12:22	65:22 67:14	64:20 73:18 78:22	10:19,21,22
affect	answers	asking	banking
9:1	9:9 76:13	22:10 25:11,12 62:20	37:2
affixed	Apart	65:4	bankrupt
	35:2	assigning	11:12
83:15	apologies	43:13,16,22	based
agree 14:18 25:20 33:20	13:16	associated	49:15 66:4 70:14
34:19 36:20 37:16,21	apologize	79:5	71:19 80:17,19,19
34.17 30.20 37.10,21	F		

basis	break	14:20 22:2,15 23:22	72:4
20:22 26:14 63:8 77:8	9:22 10:3 55:22 72:14	24:18 25:4 27:2 32:8	change
	72:15	70:4	77:21 80:17
began 13:21			
	breaks	can't	changes
beginning	9:21	43:15	80:15
10:6	brief	capital	channel
begins	56:5 72:9	60:11	41:2,5,6 42:4
7:1 56:6 60:11 73:8	bring	care	channels
BEHALF	29:1	23:11 25:7 26:16	40:20
3:3,11	broadcaster	carousel	characterize
behavior	30:19	40:4	56:20 73:7
58:6 59:6 60:20 75:4,9	broadcaster's	case	check
believe	30:16	16:20 17:19 19:2 50:5	42:17 72:2
14:8 18:12 19:7 20:15	brokering	53:4 72:14 83:11	choose
20:21 22:8 34:2	10:17,18	cases	75:20
36:13 37:9 39:4	browse	7:6	Church
40:14 42:5 43:10	43:14	catch	7:13
44:1 58:12 65:10,10	browser	39:6	Cisco
66:17 67:1 68:22	21:12 28:15 37:19	caution	11:7,7 13:18
71:11 75:2 78:13	42:9 51:20 53:6,15	62:10 67:12 70:12	cite
believed	75:11,14	71:4,20	61:15
25:22	building	cautioning	city
beyond	12:1,6	62:14	48:1
76:16	business	cautious	CK
blue	10:8,13,14	65:21	12:6,7
7:16	Bygnings	Cebra	claim
board	12:1,5	11:4,5	18:8,15
1:2 7:6 12:21,22 19:9		cell	claims
19:16,18	C	45:9,13,15	18:1,2 19:11,17 20:4,8
Board's	C	certain	20:9,17,19,19 21:1
18:18 19:5,14	3:1 8:8	19:10,10,17 23:18	clarification
Bone	call	29:13 36:21 46:15	9:18
3:20 4:20 5:5,8,11 8:3	23:13 24:1 27:16,17	48:19 54:20 57:13,20	clarify
64:15 67:9 68:13	51:14 62:13 63:4	57:21 58:9	41:22 66:7
71:1,10	called	certainly	clear
bookmarks	10:17,18,20 11:3,5,10	29:15 32:1 40:7 43:17	20:7 21:3 77:11
36:16	11:20,22 12:6,6,13	64:1	click
bottom	12:15,18 13:2,10,10	CERTIFICATE	27:20 29:8 31:13,19
43:2 52:17 55:3,19	13:11,12 44:17,22	83:1	52:14 53:14 54:17,19
box	46:21 48:3 54:2,18	certified	56:18,21 57:1,4,8,9
44:13 59:16 64:4 65:6	58:4	2:10 7:12 83:3	57:10 58:13
67:11	calling	certify	clickable
boxed	21:22 22:11,19 23:2,5	83:5	55:17,20
54:6	23:6,18,20 24:4 25:1	chain	clickargument1
boxes	25:17 26:17,20 27:11	4:14,18 5:15,19	55:21 57:2
68:3,15 69:7,18 71:3	calls	chance	clickargument2
00.5,15 07.7,10 71.5		Chance	chekai guillelitz
	1	1	1

-			
57:2	comments	14:21 18:9,16 19:19	3:21 7:11
clickargument3	67:21 69:1,4 71:11,11	20:18 22:3,15 24:18	cooperation
57:3	71:14,16	25:4 27:3 32:9 63:9	16:10 18:10
clicked	commission	70:5	coordinates
57:7 58:4,5 75:22	83:18	conference	57:7
clickfunction1		7:16	Copenhagen
55:20 56:19	common 22:18	configurable	8:18 10:8
clickfunction2	communicated	39:16 55:8	
56:19	42:16		copy 18:22
clickfunction3	communication	configuration 31:9,11 34:14 35:2	
		*	corner
56:19	15:10 62:12,15 63:20	55:6	55:18,19
clicking	64:19 66:9 70:6,10	configure	Corporation
28:10 30:7 53:14 55:1	71:10,18	34:8	1:4 7:3,22 84:2 85:2
55:2,3 58:8,12,15	communications	configured	correct
59:7	65:22 66:10 67:14,16	37:19 51:18	9:6 14:19 17:6 19:6
clickmap	68:18 69:10 70:2,13	connection	20:10 21:8 22:21
54:13,15 55:11 56:16	71:6,21	16:14	24:5 27:22 31:3 33:4
59:1,5	companies	consider	33:16 34:7 37:22
clicks	11:13,16 12:21 13:8	72:5	40:13 44:20 45:12
35:19,22 36:4	13:10	consisting	46:2 48:12 49:10
client	company	81:13	50:11 53:11 57:22
70:7	10:17,18,19 11:3,4,5,8	construction	61:7,19 63:11 64:4
closing	11:9,11,20,22 12:2,4	18:15 19:14	66:21 68:3 78:15,20
60:16	12:13,14,16,17,18,19	consultancy	78:21 79:2 82:5 83:6
closure	12:20 13:18,22 14:9	11:15 14:4 16:18	correction
60:13	30:13	content	7:9 84:6 85:5
CLR	complete	45:14 53:15,22 54:6	corrections
2:3	82:6	62:15	82:7
CoCom	completely	contents	correctly
11:6,9	49:15	76:10	50:9 51:10 53:9
code	complicated	context	counsel
32:16 49:19 78:6,14	55:7	26:9 33:20 40:15	4:10 7:19 8:11 15:13
79:12	computer	45:15 46:11	15:15 70:11 72:14,19
coinventor	10:20 11:1 28:7,13	continuation	81:1 83:10
61:16	33:21	67:10	counsel's
Columbia	conceived	continue	66:5 71:19
2:12 83:22	17:22 20:8	80:11	course
comes	concept	CONTINUED	13:16
51:3	42:1	5:1 6:1	court
command	concerning	control	8:5 9:10 83:4
45:11 51:6,7,21,22	63:21 64:1 68:11	57:3	crazy
53:10 58:19	concluded	controlling	42:16
commands	81:18	32:13	create
45:18	concludes	conversation	51:7
comment	56:1 81:12	61:21 62:8,19	CRR
37:8	conclusion	Cooper	2:3
		•	

currently	75:7,9,13 76:3	describing	displaying
16:13	defining	29:2 49:11 50:21	21:17 22:17 25:9
cut	44:16 45:17 48:17	51:13 52:20	26:16 46:4 47:13
79:20	55:16	description	50:3 51:2,18 60:10
	definition	38:3,4 54:1	displays
D	45:7,10,13,16 46:6	descriptions	40:4
D	48:17 49:13 50:1,2	43:17	District
8:8	50:20 54:8,9,10,12	detail	2:12 83:22
Danish	73:8 74:10,12,14	47:11	DLA
12:15	75:13 78:14 80:9,10	Development	2:6 3:13 7:16 8:1
Dansk	definitions	12:7	15:17 16:11 18:10
11:22 12:5	80:1	diagrams	document
data	degree	69:20	16:5 18:20 19:9,17
6:4 22:17 29:4 32:12	10:7	didn't	21:13 28:20 36:10
32:14,17 34:1 51:3	deliver	18:13 79:20	41:11 43:3 44:5,8,21
date	63:5	difference	50:6 52:13 53:5,8
71:9 82:12 84:22	demonstrate	24:7	61:4,7,12 64:12 67:6
85:22	57:16	different	67:20,22 68:1,8,11
dated	Denmark	21:7 22:1,12,20 23:5,6	68:22 69:22 70:20
4:14,18 5:4,7,10,15,19	10:14	24:4,11,16 25:2,15	71:12 78:19 80:13,16
David	depend	25:17 26:15,16,18,21	80:16,17,18
3:21 7:11	17:18 75:5	27:12 29:3 32:15,17	documents
day	depended	32:17 38:20 39:8	15:1,6 16:19 19:2 50:7
47:11 83:15	29:18	49:15 54:16,17 55:4	51:2,19 64:19
days	dependent	55:14,15 56:21,21	doesn't
71:12	18:2	57:9,10,16,17	50:4
decides	depending	direct	doing
52:18	21:15 30:15 54:19	73:4,6 76:6 78:8	24:8 66:15 68:19 71:7
decimal	depict	disagree	don't
47:6	75:20	38:3	9:17 15:16,22 17:5,8
declaration	deposed	disc	19:1,4,20 20:2,2 21:1
4:12 15:5,7 16:8,9	9:6	7:1 56:1,6	32:19 38:15 64:3,7
63:2	deposition	disclose	65:16,16 66:20,22
decline	1:20 2:4 7:2,15 15:2	70:13 71:20	67:18 68:2,4 69:19
70:14	16:22 17:2,6,11,15	discs	69:22 70:16 71:15,15
declining	43:5,6,9,12,21 56:2,7	81:14	71:22 72:3 81:10
66:4 71:18	81:13,18 83:5	discussions	double
default	derived	38:18,20	36:4 53:13,14
58:6 59:6 60:20 73:16	47:9 49:14	display	double-click
definable	describe	1:15 26:13 29:3,16,16	52:16
54:22	14:7 26:9 28:6 40:7	29:16 32:11,11,13	double-clicked
define	41:3,7 48:15 53:21	34:1 40:20 47:8 48:5	51:15 52:15
74:15	described	51:3 52:10 74:9,11	Dr
defined	22:9 47:14	75:11,12 79:16	8:3
46:5 49:2 58:4 59:5	describes	displayed	drawings
60:12,14 74:9,11	53:18 54:4	47:5 53:16 76:2	69:14
	<u> </u>	<u> </u>	<u> </u>

drive	49:16	44:12 45:20 46:15,17	external
3:14 80:14	employed	46:19 47:1,3,9,19,21	55:5 80:19
	83:11	47:22 48:5,16,20	e-mail
duly		49:17 50:3 51:15	
8:10 DVD	employee		4:14,14,18,18 5:4,7,10
DVD	13:15	52:5 53:17 54:16	5:15,15,19,19 41:14
81:14	employment	56:12,13,13,14 57:6	41:17 42:10 43:1,8
Dynamics	10:11	57:8 59:2,4,19 60:5,6	43:12,21 62:17 63:8
13:13	ends	75:11,15,17 79:15,18	64:5,15 65:3,4,16
D.C	45:7	80:11,13	67:9,10 71:1,9
2:7 3:7 7:17	entire	examples	e-mails
	57:21	30:4 58:21	15:9 61:16 63:9
	envision	exchange	
E	42:8	30:3 32:1 63:9	
2:3,9 3:1,1 4:8 8:8,8	envisioned	exchanged	fact
83:2,21 84:1,1,1 85:1	40:8,9	61:16 69:21	60:14,21 63:17,22
85:1,1	EPG	Excuse	66:20 67:1
earlier	41:18,22 42:1	13:4 14:13 26:3	fair
49:12 71:13 73:1,19	equals	exhibit	9:19,20 10:3 56:20
74:22 78:13	50:10,13 59:16 79:1	4:12,14,18 5:1,4,7,10	familiar
earnings	equipment	5:13,15,19 6:1,4 16:1	19:13,16
47:10	12:20	16:3 36:7,9 41:8,10	family
economics	Errata	41:16 42:20,22 44:2	75:17,18 76:1
10:7	82:7	44:4 56:11 61:1,3,6,9	fashion
Eddy	especially	61:15 62:1,9 63:2	39:14 40:5,12 41:1
2:3,10 8:6 83:2,21	54:15	64:9,11 67:3,5,18	faster
Edmonds	Esquire	68:5,7 70:17,19	48:10 49:7
63:15,21 64:1,16 71:2	3:4,12,20	72:22 73:2,5 76:7,9	fax
educational	et	76:11,15 77:4,17	64:22 65:5,11 66:19
10:5	1:13	78:3,4,5,10	feature
effect	Europe	EXHIBITS	27:11,12,15,15,17
20:12 41:1	12:6	4:11 5:3 6:3	33:2,19
eight	event	existed	features
40:19	31:15,16 80:20	21:19 31:18	45:4 54:14
Eighth	events	exists	figures
2:6	29:22 30:1 40:1 49:14	52:1	47:8 69:1,4,13,14,16
either	49:14	expires	69:20
31:15 39:20	exact	83:18	file
elaborate	57:6	explain	54:1,3,10,12 74:14,14
54:9	EXAMINATION	39:5 73:12	74:15 75:7,14
elapsed	4:1,3,4 8:11 72:19	explained	filed
48:19,22 50:5	81:1	52:12 62:21	1:12 20:3
electronic	examined	expressions	financial
42:3,6	82:4	39:5	14:2 83:12
element	example	extent	financially
35:19,22 36:4	28:14 29:18 30:12,20	25:20 32:6 36:21	14:10,14
embodiments	31:18 39:8,14 40:19	68:18	find
	31.10 37.8,14 40.19	00.10	
	ı	I	1

43:15,17	39:7	given	36:9 61:3 64:11 67:5
*	foundation	48:16 71:9 74:12 82:6	68:7 70:19
76:5	34:22 35:6,16 59:13	83:7	handwriting
finish	75:8 79:9		36:13
		g0	
	frame	36:21 44:12 48:9 49:6	Handwritten
finished 55.0	40:22,22	50:13 58:18 59:15	5:13
	frames 39:2	61:9 72:3,4 75:22	happen
first		78:2,3,4 81:11	60:18 75:2
,	frame/second	goes	happening
58:18 59:16 68:21	38:11 40:11	48:11	30:2
	Freedom	going	happens
five	3:14	13:6 16:3 41:10 42:22	50:22 52:18
	frequent	44:4 62:10 65:19,20	head
focus	39:20 41:5	76:6 78:3,8	10:10
	front	Good	health
followed	76:8	8:13,14	12:16,17
	full	grab	hear
following	8:15	40:21,22	22:4
	function	grandson	Heintz
follows	23:19 24:2 46:21	75:21	3:12 4:4 8:1,1 14:20
8:10	47:13,17 48:3,11	Gray	17:3,7 19:22 22:2,7
follow-up	57:6 79:5	62:19 63:8	22:14,22 23:15 24:6
	Functional	grid	24:17 25:3,19 26:4
food	12:15,15	6:5 23:11 25:7 26:8,12	26:10 27:1,7,14 28:3
,	functions	31:6 34:10 54:12	30:5 31:22 32:8 33:5
Foods	27:17 46:16 54:15,18	56:12,12 75:19	33:17 34:22 35:6,15
12:15	56:18,21 57:4,9,16	grids	38:1 46:8 49:18
foregoing	58:4	34:9	52:22 53:20 57:14
82:4 83:5,6	further	group	58:2,11 59:3,11 62:2
foreground	47:8 54:14 60:4 64:21	12:5,8	62:10 63:12,18 65:19
28:16 29:1	71:11 80:21 81:1,8	guess	66:6,12,15 67:12
forget		67:20	68:16 69:8 70:4 71:4
78:2	G	guide	72:3,20 77:1,6,8,11
form	G	42:3,4,6	77:14 80:21 81:10
17:3,7 20:22 22:2,14	8:8	G.A	held
23:1,15 24:6,17 25:3	Gade	5:8 8:3	2:5
25:19 26:4,10 27:2	8:18		help
27:14 28:3 30:5	gain	H	68:21
31:22 32:8 33:5,17	14:10,14 47:10	H	hereunto
35:1,7,15 49:18 51:4	general	4:8 84:1 85:1	83:14
52:22 53:20 57:14	48:9,10	half	he's
58:2,11 59:3,11	Gestalt	14:9	62:20,20 65:4
63:12 69:8 70:5 74:2	13:11	hand	high
74:19 75:6 76:22	give	16:3 41:10 42:22 44:4	10:6
77:5,7	47:1,3,19 59:4 60:6	83:15	history
formulating	72:4 75:14	handing	10:12

holdings	52:11	inspiration	31:15 39:21
13:8	includes	50:20	intervene
Holms	17:6 32:11	inspired	31:3,5 32:7,18 33:1,3
8:18	inclusion	52:9	33:15,21 34:5,18
hour	69:1,14	instance	intervening
9:22	income	51:19 78:9 80:2,3	35:4,14,20 36:2,5
hovered	14:5	Institut	intervention
47:7	incomplete	13:11	24:8 29:21 30:15
hovering	60:15	Institute	35:18 47:12,16 53:13
46:17 48:6	indefinite	13:12	introduce
40.17 48.0 HREF	80:5	instituting	7:19
50:13,19 51:6,21 52:1	independent	18:18 19:5	invention
52:13,18 53:3,10	18:1	instruct	22:9 23:10 24:9 25:6
58:19 59:16 60:17,22	INDEX	65:20 68:16	26:8,19,22 27:8,18
78:9	4:1 5:1 6:1	instructed	32:10,12 33:22 61:18
HREF=http	indicate	70:12,12	inventions
73:9	69:13	instructing	18:1
html	indicates	66:5,7,8	Inventors
44:15,16,19 45:1,5,11	50:6	instruction	1:13
45:19 46:3 50:20	indicating	69:9 71:19	Invest
	59:20 81:6	Inter	11:11
51:2,8,19,22 52:2,4,9 53:4 60:8,9 78:6	individual	1:17 16:14	invoked
33:4 00:8,9 78:0 html-like	39:16,17 41:4 57:4	interact	57:17
45:2 52:4 60:9	industry	28:14	invoking
	12:7 29:19		46:15 55:6,20
http 50:16 51:11	infinite	interacting 29:17	involvement
	80:5	interaction	13:9
HyperCOM 11:3	influenced		involves
		25:21	16:19
hyperlinks	47:11	interest	10:19 IPR
51:7	information	14:2,18 83:12	18:19 19:5 20:14
hypertext	1:16 21:7 22:1,12,20	interface	IPR2013-00292
44:17	24:5,16,21 25:2,9,15	28:17 31:2 32:5,21	
I	25:18 26:16,19,21	33:14 34:3,6,17,19	1:17,18 5:9,14 7:6
IBM	27:12,21,21 28:11,11	35:9,20 36:1,5 57:6	IPR2013-00293
10:14	29:10,11,17 30:3,8,8	61:18	7:6 IPR2013-00294
idea	31:8,12,12,20 32:2 32:13 33:9,10,20	International 10:20 11:2	1:18 7:7
23:10 26:15 31:6 40:2	34:13 35:9,10,20		
41:18 42:5,19	initial	interpretation 18:8 37:6	IPR2013-00295 1:18 7:7
ideas	42:5 79:16	interpretations	isn't
37:2 42:17	initialize	19:10,18	51:6,7 66:21
import	24:2	interpreted	Issued
12:1,5,16	input	19:17	1:11
include	68:11	interrupt	it's
16:21 17:2	inside	65:20	11:19 13:6 16:8,12
included	45:16 58:12 60:10	interval	23:2,4,8 24:10 41:14
	75.10 50.12 00.10	mici vai	23.2,4,0 24.10 41.14

40 14 15 44 15 46 3		1	<u> </u>
42:14,15 44:17 46:3	keys	language	69:17
47:15 50:1,6,10	47:14	44:16,18,19 46:11	litigation
51:13 53:4 54:22	keyword	largely	14:12,16,19 43:2
55:7,8,16 60:2,5	45:20,21 50:19 52:18	45:1	live
64:15 67:9,21,21	53:22 54:1 74:13	launch	8:17 36:17 37:16 38:7
69:12 71:1 77:11	keywords	50:22 51:3,16,19	43:17 48:1
80:19	45:6 54:12	52:15,16,16 53:3,11	LLP
I'll	kick	53:12 73:16 75:22	2:6 3:5,13 7:16
9:18 29:6 67:12 68:16	59:7	76:1	local
71:4 73:4 76:9	kind	launched	50:6,6
I'm	16:17 30:1 34:20	53:1,4 75:2,4	locally
7:11 9:2 12:10,14	kinds	launching	78:19
15:14 16:3 17:4,16	21:7 22:1,12,20 24:5	53:13 54:22 55:5	located
18:17 19:15 20:11,21	24:16 25:2,15,18	60:21,21	7:16 80:14
21:4 22:4 23:16 27:4	26:18,21 27:12	lawyer	locations
34:16 36:9 41:10	Klaus	15:16	57:18
42:22 44:4 45:2 46:8	1:21 2:4 4:12,16,19	Leadership	look
52:4 59:14 61:3 62:2	5:4,7,10,17,20 7:2	13:13	17:21 21:5 41:16
62:10 63:18 64:11	8:9,17 56:2,7 81:13	leading	53:22 60:5 79:22
65:1,3,19,20 66:7,8	81:18 82:3	79:10	looked
67:5 68:7 70:19 76:6	KL_SC_0005524-55	left	54:11
78:2,2,8 79:20	5:18	13:21 34:11 35:19	looking
I've	knew	55:18,19 56:10 58:19	20:19 49:19
19:2 48:16 65:15	38:21	legal	looks
	know	7:12 14:20 22:3,15	40:14
J	10:1 15:21,22 17:5,8	24:18 25:4 27:3 32:9	loss
James	18:13,15 20:2 21:1	70:4	47:10
3:12 8:1	23:16 38:14,15 48:3	letters	lot
jim.heintz@dlapipe	64:3,17 65:9,13,15	73:22 74:4	37:14 38:22 48:10
3:17	65:16 66:6,20,22	let's	55:12
Job	67:11 68:15 69:6	47:4 59:15	
2:1	71:3,14,15	level	M
join	known	47:11	M
11:7	27:10,11,13,15,18	line	3:12
joined		41:18 55:12 59:15	Mad
10:16	L	73:7,12,16 74:5	12:15
judgment	LAD	76:14 77:4 79:1,12	main
14:11,15	7:12 8:6	84:6 85:5	12:17 23:10
June	Lagermann	lines	Maine
18:4 21:19 83:18	1:21 2:4 4:12,16,19	59:15	14:11,16 43:2
	5:5,8,11,17,20 7:2	link	making
K	8:9,17 11:11 56:2,7	36:17 37:17 38:7	34:6,20
K	56:10 72:13,21 77:15	51:10,12 52:6,10,14	man
3:6	81:13,18 82:3	59:10,14,20 60:3,4,7	37:2
key	laid	60:10,12,14 73:20	manage
47:8	69:12	listed	32:16
		11000	
	•	-	-

managing	11:19,21 68:21	motion	normal
32:13	mention	12:19 20:4	45:9,14 60:10
map	11:16 44:21 55:11,13	mouse	normally
47:22,22 48:5,6	55:15 61:7,8 63:7	35:12 46:17,20 47:7	37:4
March	mentioned	47:16 48:2,4	Northwest
1:22 7:8 83:16	15:6 20:8 39:21 48:14	mouseover	2:6 3:6 7:17
marked	56:12 74:13	48:2	Nos
4:9 16:1 36:7 41:8	mentioning	move	1:17
42:20 43:1 44:2 61:1	63:7	47:16 76:17	notarial
64:9 67:3 68:5 70:17	merged	moved	83:15
marking	11:5	10:18,19 11:2	Notary
45:14	Merrill	multiple	2:11 83:21
markup	7:12 8:6	32:12,14 34:1	notation
44:18 45:17		32.12,14 34.1	77:16
Maryland	message 62:19 63:4	N	note
7:13	02:19 03:4 method	$\frac{1}{N}$	52:3
matter	1:15 40:1	3:1 8:8	notebook
7:3 58:13 66:20	Michele	name	5:13 76:7
	2:3,9 8:6 83:2,21	7:11 8:15,17 47:13	notebooks
may 11:19,19 12:7 62:3	2:5,9 8:0 85:2,21 Microsoft	names	36:14
66:15 67:16 68:19	1:4 7:3,22 14:11,14,16	12:4	
		nature	noted
71:8	47:5 84:2 85:2	80:16	60:17
mean	middle	near	notes
19:15 20:12 21:10,11	10:2 56:10 78:10	78:10	37:4 68:22 69:4 72:2
23:16,21 26:7 29:13	milliseconds	necessarily	Notice
31:5 34:5,16 39:12	49:1,3,4	23:22 51:13 52:3 76:2	2:9
41:21,22 42:13 44:15	mind	80:8	novel
46:14 48:20 50:18	49:13	need	21:22 22:8,9,12,18,19
52:21 57:19 59:14	mini	9:22 19:7 57:21 60:3	22:21 24:5,15,19
60:19 76:4 79:4,20	31:1 32:21		25:1,6,15,16,22 26:1
80:7	mischaracterizes	needed	32:5 33:3,12,13,15
meaning	19:22 22:22 27:1 33:6	25:8 42:17 53:3	33:22 34:2
38:15 77:11,21 79:1	33:18 38:1 59:12	needs 60:6	number
79:22 80:4	79:8	neither	7:2,6 8:18 47:5,6 49:8
means	missing	83:10	55:13 56:2,6 61:3
9:11 23:17 38:14	52:9 60:2,15 63:6		numbers
42:14 47:15 53:1,2	money	new	18:11 55:12
53:14 54:19 60:21	14:11,15	31:2 32:5,21,21 34:3,5	0
75:20 77:12 79:18	monitor	34:17,19 35:8 38:11 39:13 40:11 42:18	$\left \frac{0}{0} \right $
meant	7:9 80:17		~
21:17 22:17 40:7	monthly	ninth 59:15	8:8
42:18 46:4 52:14	14:5		oath 8:19
69:1,14	morning	nodding 9:11 10:10	objection
medications	8:13,14	9:11 10:10 Nordisk	14:20 17:3,7 19:22
8:22	mosaic	13:11	22:2,14,14,22 23:1
memory	31:1 32:21	15:11	22.2,14,14,22 23.1
	I	I	I

02.15.04.6.17.17	24.10	76.0 11 15 77 17 17	12.10 15:10
23:15 24:6,17,17	34:10	76:9,11,15 77:17,17	13:19 15:10
25:3,3,19 26:4,10	opening	78:10 84:6 85:5	percent
27:1,2,14 28:3 30:5	23:17,21 24:1,15,20	pages	14:9
31:22 32:8 33:5,5,17	25:8,14	2:2 4:13,17,21 5:9,14	percentage
33:17 34:22 35:1,6,7	operation	30:14 69:13	47:10
35:15,15 38:1 49:18	53:6	paid	perform
52:22 53:20 57:14	opinion	17:9,11,14	23:17
58:2,11 59:3,11,11	21:21 24:14,22 26:17	paragraph	performing
59:12 62:2 63:12	58:8,15	16:12 17:22 20:8 21:2	46:16
69:8,8 70:4,5,15 74:2	option	21:5 25:13 27:19	period
74:6,19 75:6,8 76:16	14:6,8	30:22 33:8 44:22	48:19 80:5,5
76:22 77:5,6,9,19	options	61:10	personal
79:8,9,9	14:7	parenthesis	15:16
objections	order	49:9	personally
22:7 27:7 79:14	15:2 18:18 19:5 28:6	part	15:12,12,13
obtaining	45:1 48:5 52:10 60:2	14:4 33:12,13,13 46:3	pertaining
61:17,22 62:8 63:10	60:7	Partes	15:9
obtains	outcome	1:17 16:14	Petitioner
14:10,15	14:19 17:19 83:12	participated	1:5 3:3 8:11 81:1
occupation	outside	38:19	phone
12:17	29:22 30:1 31:15,16	particular	8:3
occur	40:1 49:14 58:5	49:19 53:7 73:4,6	phrases
48:18,21	Ovid	parties	19:11
October	1:13 4:15 5:16,21	83:11	pick
1:12	36:14,22 37:5 39:4	pass	72:21
Office	61:17 62:21 63:4	72:17	picture
1:1 7:5	Ovid's	passed	12:19 75:21
offices	37:9 42:5	57:5	Piper
2:5	owned	patent	2:6 3:13 7:16 8:2
Okay	13:18	1:1,2,8,10 3:11 7:4,5	15:17 16:11 18:11
12:12 24:13 38:18	Owner	15:7 16:20 18:4 44:9	pixel
66:2,14 73:18 78:8	1:8 3:11 72:19	61:7,8,17,22 62:8	55:17 57:7
78:17		63:11,15,22 64:2,20	place
once	P	68:12 69:2,15,21	7:15 54:20
52:15 64:6	P	72:19	placing
ones	3:1,1 8:8	Pax	48:4
38:21 69:22	page	13:2,7,9	play
onmouseout	4:2,11 5:3,6,12 6:3	pay	43:18
46:2,20	16:12 17:21,21 21:5	17:18,18	please
onmouseover	21:12 27:19 28:20,21	paying	7:19 8:15,16 9:10,18
46:1,14	28:21 30:17,18,19	15:19,21,22	10:1 14:7 38:17 46:8
000	36:15 38:10 41:16	PC	48:15 62:4,21,21
1:3	44:13 52:17 54:5,7,8	40:15	63:18 73:15 77:2
	55:11 56:11,14 58:18	Pennie	78:4 79:21
open 21:6,12,13,16 22:17	58:22 61:9,11,11,12	63:15,21 64:1,16 71:2	78:4 79:21 point
	61:12 73:5,5 75:12		1 -
23:4,7,8,20 24:9	01.12 13.3,3 13.12	people	48:6 60:1
	ı	ı	1

points	28:15	67:14,15 68:19,20	receiving
54:1	Professional	70:11 71:6,7 77:2	28:17
portion	2:10 83:3	78:22 79:11	recess
58:16 66:18 75:12	program	questions	56:5 72:9
portions	22:17 23:9,9,17,19,21	80:22 81:3,9	recipient
69:17 70:3	23:22 24:1,2,9 27:16	quite	52:13
position	28:14,15,16 42:3,6	38:22	recited
12:12 24:3	programmer	36.22	18:1
positions	23:16 37:1,3	R	recognize
12:21,22 13:9	,	R	16:5 19:8 36:10,13
*	programs 21:7,22 22:11,20	3:1 8:8 84:1,1 85:1,1	41:11 43:3 44:5 61:4
precision	· · · · · · · · · · · · · · · · · · ·	rate	
48:2,8	23:13 24:4,15,20	43:13,15,16,22 50:10	64:12,13 67:6 68:8
prep	25:1,14,17 26:18,20	78:1 79:5,13 81:6	70:20,21
17:12	27:11,17 28:9 29:14	rates	Recon
preparation	projector	48:17	13:2,7,9
16:21	40:4	ratio	record
prepare	properties	47:10	7:10 22:6 27:6 36:9
15:2	39:3 54:14	reach	56:4,8 62:5 64:3
preparing	proposed		66:7 72:4,8,11 81:11
43:5 63:2	18:11 20:13	18:9,16 19:19	81:15 83:7
present	provide	reaching 20:18	recorded
3:19 31:12 60:5	31:7		9:10
presenting	providing	reacted	recross
32:14	16:13,17 30:3	63:3	81:11
previous	pseudocode	read	rectangle
31:18 35:2 67:17	44:22 45:4 46:3 52:3,6	18:18 19:2 22:6 27:6	55:19
71:10 72:15	60:9	33:7 37:11 43:6 62:5	redacted
previously	public	77:20 82:4	61:22 62:9 64:4,6,17
4:9 16:1 34:12 36:7	2:11 83:21	reader	65:1,2,7 66:17,21
41:8 42:20 44:2 61:1	Pursuant	45:2	67:11,19 68:3,14,15
64:9 67:3 68:5 70:17	2:9	really	69:7,18 70:2 71:3
price	puts	42:18 70:16	redirect
29:20 31:14 47:4,4,9,9	35:12	Realtime	72:5
prior		2:11 83:3	reduced
18:4 21:19 43:6,9,11	Q	reason	83:9
43:20	qualifies	9:3 10:1 84:6 85:5	referenced
priority	35:17	recall	80:14
30:16 41:4	qualify	19:4 43:8,11,20 64:7	referred
privileged	35:14,20 36:1,5	64:18 65:17 68:2,4	4:9 16:2 31:17 36:8
65:22 66:10 67:13	question	69:16,19,22 70:1	41:9 42:21 44:3 61:2
68:18 69:11 71:5	9:13,14,17,19 10:2	73:1 76:10,13,18	64:10 67:4 68:6
probably	18:14,17 19:20 22:4	81:5	70:18 76:14
13:6	22:10 25:11,16 27:5	recap	referring
proceeding	29:6,12 43:19,19	56:11	20:9 21:2 52:17
18:19 19:6 20:4,14	46:9 62:3,7,12,13,16	received	refers
processing	65:11 66:1,13,18	64:22 65:5,11 66:19	77:18
	l		l

refresh	15:13,15	16:19	goving
	representing	Richard	saying 20:17 23:12,14 36:16
39:6,15,18 40:8 43:13	7:22 8:2,3 15:17	3:20 4:20 5:5,8,11 8:3	37:11 38:7 81:5
43:15,16,22 45:21	,		
48:14,16,17,20,21	represents	64:15,19,20 67:9	says
49:8,13 50:10,10	73:13,16	68:13 71:1	32:20 37:20 38:10
77:22 79:1,5,7,12,17	require	right	41:18 52:18 59:16
79:19 80:6,8,10,18	28:10 29:14,21 30:7	12:11 14:4 19:4 30:9	SC
81:4,6	50:4	35:22 49:20 64:7	43:1
refresher	required	66:11 67:18 79:11	scheduled
49:9	51:16	robin	79:7
refreshes	reread	39:14 40:2,5,12 41:1	school
48:18 79:15	62:3,4	Rockville	10:6,8,13,14
refreshing	Resources	7:13	scope
43:18 50:4	10:20 11:2	role	20:16 76:16
regarding	respect	12:18	scratch
61:17,21 62:8 63:10	16:19	roles	76:4
Registered	responding	11:16	screen
2:10 83:2	65:3 71:6	room	26:14 28:8,13 29:4,20
related	response	7:16	31:1,10 32:3,3,21
83:10	42:10	round	33:9,21 40:20 53:7
relating	responsible	39:14 40:2,5,12 41:1	55:20 74:16,17,21
78:19	51:2	RPR	scroll
remember	rest	2:3	30:18
19:12 65:17 67:19	52:10	rules	scrolling
69:20 70:14,16 71:16	Reston	9:9	28:19
71:22	3:15	R-U-Z-Y-R-I-O-S	SC0001016-20
remembering	result	42:11	5:21
13:17	30:17 53:6 79:12		SC0036694-97
reminder	resulting	<u>S</u>	6:5
9:9	53:5,5 54:17	S	seal
remove	results	3:1 4:8 8:8 84:1 85:1	83:15
46:20	23:18	sale	second
repeat	Retained	13:18	39:2,13 56:13 80:2
27:5	4:10	samples	seconds
rephrase	RETURN	30:6	39:22 49:1,4,5 76:14
38:6 74:3 76:5 79:11	84:5 85:4	Sankt	76:21 77:4,17,22
Reported	reveal	10:19,21,22	section
2:3	62:11,14 65:21 66:8	Santoro	28:12 29:2 78:6,14
reporter	67:13 68:17 71:5,19	1:13 4:15 5:16,21	see
2:10,11 8:5 9:10 83:1	revealing	36:22 38:19 41:14,17	16:15 18:6,7 19:3,7
83:3,4,4	67:16 69:9,9	42:15 61:17 62:18,22	21:15,17 22:18 25:10
represent	review	63:5,5,10	26:13 28:20,20 29:4
7:20	1:17 16:14 63:1	Santoro's	32:19 33:8 34:13
representation	reviewed	36:14 38:15 42:10	36:18,19 38:12,13
15:19 60:12,14	15:1	saw	39:9 41:19,20 54:5
represented	reviewing	19:5 20:21	54:12 55:11,12 56:18
	5		, , , , , , , , , , , , , , , , , , ,

57.1 0 (1.20 (2.17	<i>55.67</i> 0.1		
57:1,8 61:20 62:17	55:6 78:1	sincerely	sources
67:19 72:2,5 73:10	settings	66:17	1:16 31:13 32:17
73:11,21 74:18,20	39:18 41:4	single	33:10
78:11	setup	40:17 56:14	space
seed	35:3	sir	74:16,18
42:18	shaking	65:20 76:18	Speakkompagniet
seen	9:11	sit	12:13
64:6 65:15	share	31:9	specialist
select	37:7,8	sitting	7:12
53:19 57:12,20 58:22	shared	64:7 66:22 67:18	specific
59:9	80:14,15	71:15	49:22 50:4 58:3 59:6
selected	sheet	six	specifically
57:19	82:8	5:9	48:4
selecting	short	slash	specification
54:21 57:13,17 58:10	9:21 11:1	45:8,17	52:2 60:4 69:17
58:13,16 59:8,9	SHORTHAND	slide	specifications
60:19,20	83:1	40:3	69:5
selection	show	slides	specified
34:7,21 35:5,8,9	47:22 53:17 75:21	40:4	79:13
selects	showing	slightly	specify
52:19 53:10 60:19	46:4	60:15	54:14
send	shown	small	speculate
63:22	58:22 64:21 74:16,17	12:18 14:5	65:13
sending	shows	Smartscart	speculating
65:3	79:15	11:20	65:14
sense	Sidley	sold	speed
39:19	3:5 7:21	11:6	78:17
sent	signals	somebody	sports
68:12 71:12	40:18	80:15	30:17
sentence	Signature	somewhat	staff
28:5 31:1 33:7 40:10	81:17 82:12 84:22	51:4	16:11 18:11
62:3 67:22 68:22	85:22	somewhere.com/so	standard
69:3 77:20	signed	53:16	45:11,19 51:22
series	82:8	somewhere.com/so	start
18:11	significance	75:1	9:14
serious	76:20 77:3,10,12	sorry	started
42:14	similar	22:4 27:4 46:8,10 48:8	11:4 13:19
server	45:1,5 51:4	61:11 62:2,22 63:18	Starting
80:15	simply	65:1,19 73:19 75:7	10:13 44:15
services	71:22	77:1 78:2,7 79:20	starts
16:13,17 17:5,9	simultaneous	sounds	45:7 55:13
sessions	1:15 32:11 34:1	19:13,16	start-up
37:5	simultaneously	source	11:3
set	29:5 33:9	27:22 28:11 29:11	state
34:9,12 83:14	sincere	30:8 45:21 53:22	8:15
setting	67:20	54:1 74:13 80:8	statement
scuing	07.20	J+.1 /4.13 0U.0	Statement
	1	1	ı

25:13 32:20 36:16,20	72:6,12,17 73:18	T	30:13 39:1,2,10 40:15
37:12,21 61:16	74:6,19 75:6,8 76:16	$\frac{1}{T}$	40:18,20 41:2 42:2,7
States	76:22 77:5,7,10,13	_	tell
1:1 7:4	77:19 78:22 79:8,14	4:8 84:1,1 85:1,1	10:5,11 36:22 38:16
station	81:2,8	table	38:19
40:17,21,22	Suh's	45:9,13,15	ten
	65:22 68:19 71:6	tag	39:21
stay 11:1	Suite	52:1,11 60:11,13,16	tendency
steel	3:14 7:13	tags	50:7
12:1,6		45:16	tens
	supervision 83:9	take	49:5
stem 39:10		9:21 10:2 17:14 23:11	
	support 61:15	25:7 26:15 33:19	testified
stenographically		42:7 54:20 55:22	8:10 25:13 58:21
83:8	suppose	58:6	78:13
step	14:17,22 17:16	taken	testify
24:12	sure	37:5 50:19 51:17 56:5	9:1,3
stock	11:18 18:17 20:16	72:9 83:5,8	testifying
8:18 10:17,18 29:20	30:11 59:14	talk	43:8,11,20 76:10
30:3 31:13 32:1 47:4	surely	54:21 55:8 72:13	testimony
47:5,9	24:1	talked	20:1 21:2 23:1 27:2
stockbroking	SurfCast	37:6,10 39:15 49:12	33:6,18 38:2 59:12
29:19	1:7 4:11 5:3 6:3,4 7:4	67:10	73:1 79:9 81:5 82:5
stored	8:2,4 13:15,17,19	talking	82:6 83:7,7
78:19	14:3,5,6,10,15 15:10	21:19 31:17 40:12	text
Storhaug	16:13 20:3,14 23:10	56:16 63:14	50:5
10:17	25:7,12 26:8,12	target	Thank
streams	27:18 29:3 31:6	51:14 73:17 76:1	10:4 14:1 16:4 30:21
32:12,14,17 34:1	32:10 34:10 75:19	task	67:2 80:21 81:8
Street	84:2 85:2	12:14	Thanks
2:6 3:6 7:13,17	SurfCast's	TD	72:6
strike	26:21 27:8 68:12	45:7,8,11,13,16,17,18	that's
26:5,19 76:17	surfcast.com/tilelib	73:8	10:9 12:16 13:14
structure	54:3	technical	22:10 24:10 25:10
6:4 45:3 52:4	swear	39:4	32:15 33:7,12 45:9
styles	8:6	technologies	49:11 50:2 52:11,20
49:13	sworn	13:12 39:3	54:20 55:7 60:2 76:5
subject	8:10	technologist	78:10,21 80:3
41:17	syntax	37:1	there's
submitted	46:2	technology	13:2 21:21 24:14,22
15:5 44:8	system	11:4,21 30:13 38:20	25:16 33:15 36:15
suggesting	1:15 25:8 34:11 39:6	39:1,1,8,10,11 42:7	37:18 52:9 59:17
52:6	40:8 47:17 51:18	teleconference	60:13 63:8 80:2,4
Suh	54:18	3:20	They're
3:4 4:3 7:21,21 8:12	systems	teletex	49:22
27:5 46:10 55:22	11:7,7 13:18 32:2	30:14 39:1,3,11	thing
56:9 62:6 66:3 72:1		television	43:18 55:4,6 63:3
		<u> </u>	

things	80:7,9,10,16,18	4:14,18 5:15,19 55:2	36:15 38:10 54:5 76:9
37:3,6	tiles	55:18	TV
think	25:7 31:7,10,11 34:7,8	Trade	42:4
13:14 19:20 20:2	34:9,11,14,15,21	7:5	two
24:10 30:4,9 38:16	35:10 36:16 37:14,16	TRADEMARK	4:21 45:16 80:1 81:14
42:4 44:17 58:18,21	38:4,7 39:12,13	1:1	type
62:7,13 72:1 73:7,18	40:19 41:7 43:17	trading	37:18,19 38:5 47:22
78:18 81:10	56:12,13	12:1	50:3 58:6 59:6 75:10
thinking	tile/channel	trail	75:11 80:16
45:2 46:7	38:11 40:11	41:14	types
third	tile2.til	transcript	26:15 39:19
50:1 76:14 77:4 78:9	74:15 75:7	43:6 83:6	typewriting
78:14 80:3	time	transcription	83:9
thought	7:9 9:22 11:10,14 13:7	82:6	typical
25:6 45:8 46:4	17:12,14 21:6,18	transmission	28:7
three	22:18 23:21 24:19	30:16	typically
4:17 49:6 54:16,17	26:11,14 27:13,20	transmitted	27:20 28:2,4 29:7,13
55:14,14 56:13,18	29:7 31:15,18 32:18	30:19	
57:1,8,9,10,18	34:10,12 37:1,4,10	Trial	U
throw	38:18 39:20 40:16,17	1:2 7:5	uncertain
42:16	40:18 42:5,16 48:19	trigger	15:14 17:4,16 19:15
Thursday	48:21 49:2,7,14 50:5	46:18,21 47:17	20:21 21:4
1:22 7:8	56:3,8 63:20 64:6	triggered	understand
tile	69:19 70:7 72:7,10	29:22 31:14 39:20,22	8:19,21 9:17 18:14,17
23:11 26:8,12,15 31:7	79:5,6,13 80:2,3,4,5	50:22	20:3 32:19 34:16
35:12 37:18,19 38:5	80:6 81:4,14	triggering	38:7 40:6 50:9 51:10
39:6,15,17,17,19	timeout	79:18	53:9
40:6,7 41:2 43:13,16	48:20 49:8,9,22 50:1,2	triggers	understanding
43:22,22 45:7,16,17	50:10 79:1,17,18	80:10	77:16
46:16,17,20 47:4,7,7	80:1,19	true	understood
47:21,22 50:1,3,22	time-based	18:12 82:5 83:6	9:12,19
51:12,14,14,15,16	48:18,21	truthfully	United
52:7,15,19 53:1,2,10	title	9:4	1:1 7:4
53:12,14,19 54:1,4,9	1:15 32:10	try	units
54:10,15,19,22 55:1	today	9:21	48:22 49:1 80:2,3,4
55:2,3,17 56:14	7:8 8:20 9:1,4 12:14	trying	unredacted
57:13,13,17,18,19,21	12:17 15:13,15 17:15	12:11 34:16	63:1
58:6,9,10,12,14,16	42:3 43:5 66:22	tune	update
58:16,22 59:6,7,9,21	71:15	40:21,22 45:1	30:15 31:8,10,14 32:2
60:3,19,19,20,21,22	today's	tuned	39:3,13,13,22 41:3,4
61:17 73:8,17,20	16:21 17:2	40:16	41:5 49:15 50:7
74:1,5,7,8,9,11,13,14	told	tuner	77:21
74:16,17 75:2,4,5,9	29:19	40:15,21	updated
75:10,11,13,14,19,20	toolbar	tuners	27:21 28:10 29:10,17
75:20 76:1,3 77:21	54:13	40:16	30:7 31:2,20 32:6,22
78:1,14,19 79:4,7,15	top	turn	33:2,9,14 34:4,6,18
	l		l

34:20 35:3,9	variety	62:20,22 63:14	15:21,22
updates	21:6,22 22:11,19	waived	window
38:11 39:20 40:11	23:13 24:4,15 25:1	81:17	27:20 28:10 29:8 30:7
updating	25:14,17 26:18,20	want	31:19
29:20 33:20 40:6 41:7	27:11	11:16 21:3 30:10 52:8	witness
urging	various	72:5	8:7 46:9 62:11 63:19
63:5	13:8 15:6,9 19:10	wanted	66:2,11,14 67:13
URL	24:20,21 31:12 34:9	20:16 21:11,12,15,17	68:17 71:5 72:18
	VBAG	22:18 25:9 26:13	82:2 83:14
51:4,5,17 53:4,7,10	. =		
59:17 73:19 74:4,7	12:18	28:14,20 29:4 33:10	Wonjoo
use	verbally	34:13 40:19 75:17,18	3:4 7:21
18:8 19:14,18 23:20	9:11	Washington	word
28:4,7,13 29:12 39:4	version	2:7 3:7 7:17	21:13,13 28:4,15,19
45:15,20,21 46:1	37:9 63:1	wasn't	29:13 32:11 43:15
51:18 60:17	versus	25:11	words
user	7:3	watch	19:10 39:10 65:17,17
21:6 22:16 23:4,5,8,12	video	31:10	67:19 73:19,20 78:9
23:17 24:7,8,20 25:9	7:1,2,9,12,15 56:2,7	way	79:6
25:14,21,21 27:20	81:13	26:1,2,6 34:13 39:5,7	worked
28:17 29:4,7,17,21	Videographer	39:15 40:6,7 41:7	10:14 30:12 38:21,22
30:15 31:2,3,9,19	3:21 7:1 8:5 56:1,6	45:2,14 46:1 48:17	working
32:3,5,6,15,18,22	72:7,10 81:12	49:11 50:21 51:13	11:22 13:19
33:3,8,14,14,21 34:3	Videotaped	52:12,20 53:21 57:15	wouldn't
34:4,5,5,6,8,13,17,18	1:20 2:4	60:10 62:17 69:12	14:16 31:13
34:19,20 35:8,12,19	view	77:20	write
35:20,22 36:1,4,5	21:7,11,13,22 22:12	web	27:16
46:16 47:12,15,16	22:20 23:9,9 24:4,15	21:11,12 28:15,21	writes
50:8 52:19 53:2,9,12	24:20 25:2,14,17	41:18,22 42:8 75:12	41:17
53:18 55:1 57:6,7	26:18,20 27:11,21	website	writing
59:7,9 60:18 61:18	28:10 29:10 30:7	36:17 37:17 38:8 42:9	62:18
73:21 74:5,18,20	31:20	75:18,18 76:1	written
75:5	viewing	websites	16:10 37:12
users	30:17	42:6 44:16	wrote
57:12 58:22	Virginia	went	16:9 22:16
	3:15	11:8,12	wsuh@sidley.com
V	visible	we're	3:9
\mathbf{V}	52:14 75:5	10:2 49:19 63:13 78:4	www.somewhere.co
84:2 85:2	vision	what's	50:16 51:11 73:9,22
vague	26:11	37:12 42:4 64:3,7	
68:21 77:13	vs	67:11,22 68:15 71:3	X
vaguely	1:6	77:6,8	$\overline{\mathbf{X}}$
64:18 69:19		WHEREOF	4:8
variable	W	83:14	XtraSpace
48:11	wait	whichever	13:10
variables	9:13	25:8 51:1,1,17	X,Y
57:3	waiting	who's	55:18,19
		WIIU S	

Y	27:19 30:22	200	2022
	11:11:36	48:20,21 80:2	5:10 70:17,19
year	72:10	2000	2023
10:15 11:6 13:3,5	11:23	1:12 11:14 13:21	5:13 36:7,10 76:7,10
years	81:19	20004	76:11,15 77:17 78:4
12:11	11:23:44	2:7 7:18	2025
You'd	81:14	20005	5:15 41:8,10,16
14:10	11911	3:7	2036
you're	3:14	2001	5:19 42:20,22
9:8 20:9,17 23:13	12	11:15,21 13:22	2048
You've	18:3	2003	6:4 44:2,4 56:11 72:22
9:6	12-2-98	11:21	73:5 78:3,5,10
$\overline{\mathbf{z}}$	5:20	2004	20850
	12-5-98	1:11	7:14
zero 50:2,10,11 79:1,17	5:16	2006	21
81:4,6	13	4:12 11:12,15 13:7	7:13 18:3
01.4,0	4:13	16:1,3 61:9	22
0	15	2007	18:2
0	39:21 77:22	12:12	23
55:13,18	150	2009	18:3
0,50	7:13	12:14	24
55:13	1501	2012	61:10,11
0,50,50	3:6		25
55:18	16	4:14 61:1,3,15 62:1,9 63:2 67:5	5:14
000101621020	4:12	20130207CTRL000	27.35
43:1	17	4:17	47:6
43.1	18:3	20130207CTRL000	28
1	19	4:20	18:3
1		20130207CTRL000	29th
2:2 7:2 18:1 44:13	8:18		
46:18,19 47:1,13,20	1986	5:6	18:5 21:19
47:20 48:7,11 52:17	10:16	20130207CTRL000	3
56:2,11 73:5,5 78:10	1995	5:12	$\frac{3}{3}$
1-245251	11:3	2014	18:2 21:5 77:4
2:1	1998	1:22 7:8 83:16 2017	30
10	11:6 1999		1:12 18:3 83:18
61:12 77:22		83:18	300
10th	18:5 21:19 27:10,13	2018	3:14
83:15	2	4:18 64:9,11	32
10:13:31	$\frac{2}{2}$	20190	18:3
56:3	16:12,12 17:21 18:2	3:15	33
10:29:57	41:16 46:22 47:2	202	18:3
56:8	54:7,8 55:11 56:7,14	2:7 3:8	35
10:52:40	58:22	2020	18:3
72:7	20	5:4 67:3,5	36
11	1:11 36:15 77:17	2021	5:13
11	1.11 30.13 //:1/	5:7 68:5,7	3.13
	I	I	I

			1490 10
37	68	7:9 18:2 61:10,11,12	
18:3	5:7	91	
39	7	10:22 11:1	
18:3	7	98	
4	38:10 76:9,11,15	13:21	
4	77:17	99	
27:19	70	13:21 64:5 65:16	
403	5:10		
15:7 16:20 18:4	703		
41	3:16		
5:15 18:4	72		
42	4:4		
5:19	736-8831		
44	3:8		
6:4	773-4148		
46	3:16		
18:2	799-4000		
47	2:7		
18:4			
48	8		
18:4	8		
5	4:3 21:5 25:13		
5	8th		
	7:17		
18:2 77:21 5/10/15	8-10-99 4:19		
76:14,21 77:3,17	8-11-99		
50	4:15		
55:13	8-19-99		
500	5:4,7		
2:6 7:17 80:3	8-24-99		
	5:10		
6	8:59		
6	1:22 7:9		
1:22 17:22 20:8 21:2	81		
6th	4:3 10:16		
7:8	85		
6,724,403	2:2		
1:10	86		
61	10:16		
4:14	89		
4.19	10:22		
4:18	9		
67 5:4	9		
J. 4	7		
		<u> </u>	