

# EXHIBIT A

1 UNITED STATES DISTRICT COURT  
2 NORTHERN DISTRICT OF CALIFORNIA  
3 SAN JOSE DIVISION  
4

5 APPLE INC., a California  
6 corporation,

7 Plaintiff,

8 vs.

CASE NO. 11-CV-01846-LHK

9 SAMSUNG ELECTRONICS CO., LTD.,

A Korean business entity;

10 SAMSUNG ELECTRONICS AMERICA,

INC., a New York corporation;

11 SAMSUNG TELECOMMUNICATIONS

AMERICA, LLC, a Delaware

limited liability company,

12 Defendants.  
13 \_\_\_\_\_/

14  
15 C O N F I D E N T I A L  
16 A T T O R N E Y S ' E Y E S O N L Y  
17 O U T S I D E C O U N S E L  
18

19 VIDEOTAPED DEPOSITION OF RAVIN BALAKRISHNAN, Ph.D.

20 SAN FRANCISCO, CALIFORNIA

21 TUESDAY, AUGUST 16, 2011  
22

23 BY: ANDREA M. IGNACIO HOWARD, CSR, RPR, CCRR, CLR

24 CSR LICENSE NO. 9830

25 JOB NO. 41176

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TUESDAY, AUGUST 16, 2011

9:10 a.m.

VIDEOTAPED DEPOSITION OF RAVIN BALAKRISHNAN,  
Ph.D., taken at QUINN EMANUEL URQUHART &  
SULLIVAN, 50 California Street, 22nd Floor,  
San Francisco, California, pursuant to  
Notice, before me, ANDREA M. IGNACIO HOWARD,  
CLR, CCRR, RPR, CSR License No. 9830.

1     A P P E A R A N C E S :

2

3             FOR APPLE INC.:

4                     MORRISON & FOERSTER

5                     By:    ANDREW E. MONACH, Esq.

6                             DEOK KEUN AHN, Esq.

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12             FOR SAMSUNG ELECTRONICS CO. LTD:

13                     QUINN EMANUEL URQUHART & SULLIVAN

14                     By:    KEVIN JOHNSON, Esq.

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23             ALSO PRESENT:   Alan Dias, Videographer

24

25

1 opinion.

2 THE WITNESS: I don't think I talked about  
3 internal boundary at all.

4 MR. JOHNSON: Okay.

5 Q Can an electronic document have an internal  
6 boundary?

7 MR. MONACH: Object.

8 MR. JOHNSON: We talked about it in the  
9 context of the contacts on the Tab 7 that had the --  
10 the list of names.

11 MR. MONACH: Object to the form of the  
12 question as vague, misstating the prior testimony.

13 MR. JOHNSON: Q. So do you understand my  
14 question?

15 A I -- I'm not 100 percent sure, because the  
16 word "internal boundary" I don't think, has come up  
17 yet, and if I look at the con- -- if I go back to the  
18 contacts list discussions, if I recall correctly this  
19 morning, the only thing that when we talked about the  
20 boundary of the contact list, I mean, there's the  
21 application that has more decorations around it,  
22 but -- so it -- you know, maybe you can be more  
23 specific about what you mean by -- when you say  
24 "internal boundary."

25 Q Okay. So if we -- you can put that one down

1 and pick up the tab -- this is Tab 7.

2 A Okay.

3 Q And if you go to the contacts --

4 A Yes, I'm at the contacts.

5 Q -- location, right.

6 If you -- so my question is: I think earlier  
7 you said, use a pen, if you want to use a pen, can you  
8 draw -- just can you just sort of show the camera what  
9 the electronic document is in that context?

10 MR. MONACH: Object to the form of the  
11 question; calls for a legal conclusion, incomplete  
12 hypothetical; asking for a new opinion.

13 THE WITNESS: Okay. Let me just refresh  
14 myself on what this thing does here.

15 So I think I -- I believe I testified that  
16 the electronic document -- this would be a portion of  
17 the electronic document, because the entirety is not  
18 shown. It's will be this, this stuff that's displayed  
19 in this rectangular column, and right now it's showing  
20 me a partial --

21 MR. JOHNSON: Yeah.

22 THE WITNESS: -- amount.

23 MR. JOHNSON: Q. So there -- there are  
24 pieces above the F and below the T?

25 A There --

1 MR. MONACH: Object to form.

2 MR. JOHNSON: Q. Or maybe not below it.

3 A Yeah, there is stuff above the F and below  
4 the T, yes.

5 Q Okay. So all I was asking was, you can have  
6 an electronic document that has an internal boundary  
7 within a screen; right?

8 MR. MONACH: Object to the form of the  
9 question as vague. Objection; calls for a legal  
10 conclusion.

11 THE WITNESS: So I -- I'm not -- again, I'm  
12 still not sure what you mean by "internal." It --

13 MR. JOHNSON: I'm --

14 THE WITNESS: Are you saying that this is the  
15 boundary of the electronic document?

16 MR. JOHNSON: Yeah.

17 Q I just meant that that's internal because  
18 it's -- it's located within the middle of the screen?

19 A So in that -- that boundary doesn't match the  
20 edge of the screen --

21 Q Exactly.

22 A -- is what you're -- is that what you're  
23 saying?

24 Q Exactly.

25 A Sure, the boundary of the document doesn't

1 have to align with the screen.

2 Q So you can have -- you can have the edge of  
3 the boundary be something other than the edge of the  
4 screen?

5 MR. MONACH: Objection; vague.

6 MR. JOHNSON: I think we're saying the same  
7 thing. I'm just -- I'm really bad with trying to --

8 A I want to make sure I say the right thing  
9 with my understanding of what you're saying, too.

10 Q So all I'm saying is, under your view of an  
11 electronic document, an electronic document can have a  
12 boundary that is internal to the screen or, you know,  
13 doesn't have to be at the edge of the screen --

14 MR. MONACH: Objection; form.

15 MR. JOHNSON: Q. -- right?

16 MR. MONACH: Objection; calling for a legal  
17 conclusion; asked and answered.

18 You can do it again.

19 THE WITNESS: So as I answered earlier, and  
20 my opinion is that the boundary of the electronic  
21 document, in this case, this -- this edge is one  
22 boundary of it, does not have to match the edge of the  
23 screen, yes.

24 MR. JOHNSON: Okay.

25 Q So just, during the lunch, I had the guys

1 just print up a sheet of paper with some squares on it  
2 for me. So if you imagine, sir, that the -- the  
3 quadrants that are labeled 1 to 36 on here are the  
4 entire -- that's this -- that's the screen of the  
5 display.

6 A So the whole -- the big rectangular is the  
7 screen?

8 Q Right.

9 A Okay.

10 Q So you can have an electronic document that  
11 consists of smaller grids within the screen; right?

12 MR. MONACH: Object to the form of the  
13 question; calling for a legal conclusion; incomplete  
14 hypothetical; asking for a new opinion.

15 THE WITNESS: It would depend on what one  
16 considers to be the electronic document. It could be  
17 one of these, let me call it sub rectangles that you  
18 can label with numbers. It could be some combination  
19 of them. It --

20 MR. JOHNSON: Right.

21 THE WITNESS: -- really depends on -- depends  
22 on how, you know, you want to put the boundary around  
23 it.

24 MR. JOHNSON: Q. So you could draw a  
25 boundary, hypothetically, around squares 15, 16, 17,

1 18, 21 and 22, 23 and 24?

2 A Say -- sorry. 15, 16, 17, 18, 21?

3 Q 22, 23, and 24.

4 A So kind of like this?

5 Q Yeah, go ahead and draw it.

6 MR. MONACH: Object to the -- object to the  
7 form of the question as vague and ambiguous;  
8 incomplete hypothetical.

9 MR. JOHNSON: Q. Make it a little more  
10 noticeable for me.

11 A We've got black lines around it.

12 Q Yeah, okay.

13 So that could be an electronic document;  
14 right?

15 A Depend --

16 MR. MONACH: Same objection.

17 THE WITNESS: Sorry. I jumped in there.

18 Depending on the context, depending on the  
19 application, it could be.

20 MR. JOHNSON: Okay.

21 THE WITNESS: Or some other collection.

22 MR. JOHNSON: Q. It's not limited to that;  
23 right?

24 A I would not say it's limited.

25 Q So it could be also a -- a six-by-six grid or

1 application and what a document means in that context.

2 MR. JOHNSON: Q. If -- going back to the  
3 original two-by-four rectangle of 15, 16, 17, 18, 21,  
4 22, 23, 24, if you look at that, is it fair to say  
5 that this line right here is an edge of the electronic  
6 document?

7 A The line --

8 MR. MONACH: Object.

9 Hang on a second.

10 THE WITNESS: I'm sorry.

11 MR. MONACH: Objection; vague and ambiguous;  
12 incomplete hypothetical; calling for a legal  
13 conclusion and a new opinion.

14 THE WITNESS: So, again, I haven't considered  
15 this prior to this, you putting this in front of me.

16 Thinking on the fly here, so you're saying  
17 this line -- the vertical line between --

18 MR. JOHNSON: Since the witness is pointing,  
19 I just want to make sure you get what he's pointing  
20 to.

21 Yeah.

22 THE WITNESS: The vertical line between 14  
23 and 15, and 20 and 21, here, this --

24 Q That -- that's right, yeah.

25 A -- line.

1 MR. JOHNSON: Sir --

2 THE WITNESS: -- electronic document in the  
3 con- -- but I have not studied this application in  
4 detail enough to determine what the contact of use of  
5 this application is. Maybe in this application it  
6 might be considering each of these tiles as a separate  
7 electronic document. I do not know that.

8 MR. JOHNSON: Q. I'm asking you, does the  
9 2x2 tiles that we see currently on the screen, does  
10 that meet your definition of "electronic document," as  
11 that term is used in the '381 patent?

12 MR. MONACH: Objection; lack of foundation;  
13 incomplete hypothetical; asking the witness to draw a  
14 legal conclusion and a new opinion for the first time  
15 at the deposition with inadequate information.

16 THE WITNESS: And as I believe I already  
17 answered, it depends on what the context of use is.

18 So if -- if, indeed, the application  
19 considers those four things as one entity and is --  
20 has defined boundaries, then that might meet the  
21 electronic document definition, as used in the claims,  
22 but it -- it might not.

23 It might -- it might be that each of those --  
24 each of these tiles or quadrants might be a separate  
25 electronic document. I would have to study this in

1 the context of use of this -- of these pieces of tiles  
2 in this application to determine that with any  
3 certainty.

4 MR. JOHNSON: Q. So you don't know right  
5 now, sitting here?

6 A I cannot give you a definitive answer. It  
7 could be an electronic document, depending on the  
8 context of use.

9 Q So when -- when he slides it slightly to the  
10 left, does that display a first portion of an  
11 electronic document if you assume that that 2x2 grid  
12 is an electronic document?

13 MR. MONACH: Same objection.

14 THE WITNESS: So if we make that assumption  
15 that that 2x2 grid in its entirety is an electronic  
16 document and after he slid it, that could be a first  
17 portion.

18 Now, I would still note that when he moved  
19 it, the -- if the electronic document was the  
20 entirety, including that blue circle in the middle,  
21 when he moved it, the blue circle did not move --

22 Q Are --

23 A -- so not all -- let me finish, please.

24 The -- the blue circle did not move, so the  
25 entirety of the document --

1 MR. JOHNSON: Q. So is a web page not an  
2 electronic document?

3 MR. MONACH: Same objection; vague and  
4 ambiguous.

5 THE WITNESS: So Claim 7 says the electronic  
6 document is a digital image, so it's -- it's trying  
7 to -- my understanding is it's trying to give a more  
8 specific instance of what an electronic document is,  
9 in that -- in that example, in that claim.

10 MR. JOHNSON: Right.

11 Q Using your -- what is the -- what is the -- I  
12 already asked you this. I mean, using your  
13 definition -- strike that.

14 Using the definition of a person of ordinary  
15 skill in the art would understand a digital image to  
16 mean, does Exhibit 114 meet the limitations of  
17 Claim 7?

18 MR. MONACH: Same objections as previously  
19 stated.

20 THE WITNESS: And I think I've already  
21 answered that.

22 I -- without knowing more information about  
23 what that -- those four tiles are that you have  
24 represented to be the electronic document, is that a  
25 single image? Is it multiple images? Is it some

1 text?

2 MR. JOHNSON: Well, take a look --

3 THE WITNESS: I can't tell from -- this could  
4 be four images that are concatenated together to form  
5 one document.

6 MR. JOHNSON: Q. So would that not meet the  
7 limitation? If it's a concatenated series of images,  
8 does that avoid Claim 7?

9 MR. MONACH: Same objection.

10 THE WITNESS: I don't know. I haven't  
11 considered that scenario. It says here the electronic  
12 document is a digital image. It doesn't talk about a  
13 concatenated set of images.

14 MR. JOHNSON: Okay.

15 THE WITNESS: And so I would have to study  
16 that scenario in detail before answering that  
17 question.

18 MR. JOHNSON: Q. Does a concatenated series  
19 of images satisfy the definition of a digital image as  
20 it's used in the '381 patent?

21 MR. MONACH: Same objection; asked and  
22 answered.

23 THE WITNESS: I would say, again, to my --  
24 similar answer to what I just gave, it -- it would  
25 depend on the application. If the application

1 considered that -- sorry -- I think you asked whether  
2 it's a digital image.

3 I would say a concatenation would be a series  
4 of a bunch of digital images combined together. Now,  
5 if that combination is treated by the application as a  
6 single image, then maybe it is. It would depend on  
7 the context. So I do not know enough about the  
8 context of this application and how it's treating any  
9 potential concatenation of images to answer that  
10 question in -- in -- with any certainty, at this  
11 point.

12 MR. JOHNSON: I heard you earlier say that  
13 the claim language of the '381 patent is simple and  
14 straightforward.

15 Q So are you telling me that looking at this  
16 screen that we see here in Exhibit 114, and what we  
17 see on it, you can't tell me whether that is a digital  
18 image?

19 MR. MONACH: Object to the form of the  
20 question.

21 THE WITNESS: That's not what I said. I said  
22 I can't tell that's one digital image or four digital  
23 images concatenated together, so it has nothing to do  
24 with whether the -- the language. The claim is  
25 straightforward. The claim states "a digital image."

1 perspective, no surprise, I suspect, the deposition is  
2 over.

3 THE VIDEOGRAPHER: This is the end of today's  
4 deposition.

5 We are off the record at 6:37 p.m.

6 The master disk will be held by TSG.

7 (WHEREUPON, the deposition ended at

8 6:37 p.m.)

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J U R A T

I, RAVIN BALAKRISHNAN, Ph.D., do hereby certify under penalty of perjury that, I have read the foregoing transcript of my deposition taken on August 16, 2011; that I have made such corrections as appear noted herein in ink, initialed by me; that my testimony as contained herein, as corrected, is true and correct.

DATED this \_\_\_\_ day of \_\_\_\_\_, 2011,  
at \_\_\_\_\_.

\_\_\_\_\_

SIGNATURE OF WITNESS

CERTIFICATE OF REPORTER

1  
2  
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4  
5 I, ANDREA M. IGNACIO HOWARD, hereby certify  
6 that the witness in the foregoing deposition was by me  
7 duly sworn to tell the truth, the whole truth, and  
8 nothing but the truth in the within-entitled cause;  
9

10 That said deposition was taken in shorthand  
11 by me, a Certified Shorthand Reporter of the State of  
12 California, and was thereafter transcribed into  
13 typewriting, and that the foregoing transcript  
14 constitutes a full, true and correct report of said  
15 deposition and of the proceedings which took place;  
16

17 That I am a disinterested person to the said  
18 action.  
19

20 IN WITNESS WHEREOF, I have hereunto set my  
21 hand this 17th day of August, 2011.  
22

23 \_\_\_\_\_  
24 ANDREA M. IGNACIO HOWARD, RPR, CCRR, CLR, CSR No. 9830  
25