

**EXHIBIT 11**  
**FILED UNDER SEAL**

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.,  
10 A Korean business entity;  
11 SAMSUNG ELECTRONICS AMERICA,  
12 INC., a New York corporation;  
13 SAMSUNG TELECOMMUNICATIONS  
14 AMERICA, LLC, a Delaware  
15 limited liability company,

16 Defendants.  
17 \_\_\_\_\_/

18 C O N F I D E N T I A L  
19 A T T O R N E Y S ' E Y E S O N L Y  
20 O U T S I D E C O U N S E L

21 VIDEOTAPED DEPOSITION OF RAVIN BALAKRISHNAN, Ph.D.  
22 SAN FRANCISCO, CALIFORNIA  
23 TUESDAY, AUGUST 16, 2011

24 BY: ANDREA M. IGNACIO HOWARD, CSR, RPR, CCRR, CLR  
25 CSR LICENSE NO. 9830  
JOB NO. 41176

1 MR. LIEN: Henry Lien, representing Samsung.

2 MR. BRIGGS: Todd Briggs, representing  
3 Samsung.

4 MR. AHN: Matthew Ahn, of Morrison &  
5 Foerster, on behalf of Apple.

6 THE VIDEOGRAPHER: Will the court reporter  
7 please swear in the witness.

8  
9 RAVIN BALAKRISHNAN, Ph.D.,  
10 having been sworn as a witness,  
11 by the Certified Shorthand Reporter,  
12 testified as follows:

13  
14  
15 THE VIDEOGRAPHER: You may proceed.

16  
17 EXAMINATION BY MR. JOHNSON

18 MR. JOHNSON: Good morning, Mr. Balakrishnan.

19 Q Have -- you've been deposed before?

20 A Yes, I have.

21 Q Okay. About how many times?

22 A About a half a dozen times, roughly.

23 Q I'll try to ask coherent questions, and if  
24 you -- hopefully you'll provide some answers, and  
25 if -- to the extent that you don't understand any of

1 of the document, and it's showing a third portion of  
2 the electronic document, which, you know, ends at the  
3 bottom, with Joe -- again, I can't read the last name  
4 of that contact because my finger is obscuring it,  
5 but, clearly, this third portion is different and  
6 smaller than the first portion. It has less  
7 information. It's smaller than the first portion I  
8 showed earlier.

9 And, then, now, the last element of the claim  
10 says, "In response to detecting that the object is no  
11 longer on or near the touchscreen display, translating  
12 the electronic document in a second direction until  
13 the area beyond the edge of the electronic document is  
14 no longer displayed to display a fourth portion of the  
15 electronic document, wherein the fourth portion is  
16 different from the first portion."

17 So -- oops, I accidentally just did that, but  
18 I'll -- I'll do this again. So I'm in the third  
19 portion here. I'm gonna release my finger, which  
20 means the system detects that my object or the finger  
21 is no longer on the touchscreen display, and it has  
22 translated the -- the electronic document in a second  
23 direction, in a different direction from the direction  
24 it was going earlier, so that the area beyond the edge  
25 of the electronic document is no longer displayed.

1           So if you saw in the third -- in the segment  
2 before this, there was a black area or gray area  
3 beyond the word -- the header "create document," now  
4 that's no longer there. It's -- it's gone back up.

5           And the fourth portion now that -- what you  
6 see here is clearly different from the -- the very  
7 first portion that we started with, which had, if I  
8 recall correctly, a -- the bottom contact was  
9 something N, a name with N, something or the other on  
10 it.

11           I think that should cover Claim 1.

12           Q     Okay. And it's also your opinion that  
13 Exhibit 20 in the contacts application infringes  
14 Claims 19 and 20, as well?

15           MR. MONACH: Same -- same objection  
16 previously stated about asking him to form opinions on  
17 the fly at the deposition, but you can answer.

18           THE WITNESS: So, again, to the extent that  
19 I've only had a very short time to look at this, so  
20 this is my, kind of, off-the-cuff answer, is this  
21 contacts application clearly is running on a computer  
22 in the smartphone, and although I haven't had a chance  
23 to look at the instructions of the code, per se, it  
24 must be running some set of instructions in order for  
25 this application, the contacts application, to perform

1 the functions that I just showed, and as such, it  
2 would infringe Claim 19.

3 And, similarly, for Claim 20, I, again,  
4 haven't opened this up to look at the memory in there,  
5 given the short time that I have here. But, once  
6 again, the -- the program that's running for this  
7 contacts application has instructions, and like any  
8 other computer program, it would have to be stored in  
9 some kind of storage medium or memory that can then be  
10 executed to perform these actions. So I would say,  
11 yes, it -- it does infringe Claim 20, as well.

12 MR. JOHNSON: Q. Based on your review of  
13 Exhibit 20, do the contact features -- strike that.

14 Based on your review of Exhibit 20, does the  
15 gallery and contact features operate the same way as  
16 the Galaxy S 4G that you looked at for purposes of  
17 infringement of the '381 patent?

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

20 THE WITNESS: So I would have to say that in  
21 order to answer that completely accurately, I'd have  
22 to put both of the devices side by side and look very  
23 carefully at whether they're exactly the same.

24 Just off the cuff here, going by what I've  
25 just played with for the last, I don't know, five,

1 ten minutes, and my memory of -- of what I looked at a  
2 couple of weeks ago on the Galaxy S 4G device that  
3 I -- I use, I would say the -- the essence or the --  
4 maybe not the word "essence" -- the -- the basics of  
5 the operation, with regards to the infringing of the  
6 claims, it would be the same. But whether the  
7 specifics of the look and feel is exactly the same,  
8 I'd have to spend quite a bit more time making sure  
9 that that's true.

10 MR. JOHNSON: Q. And all -- what I'm really  
11 trying to ask you is just whether the -- for only  
12 purposes of alleged infringement of the '381 patent,  
13 is whether these features operate basically the same  
14 way. I'm not interested in -- in subtle nuances or  
15 specific differences between the contacts and gallery  
16 applications between the two. I'm just trying to  
17 understand whether, for purposes of infringement, the  
18 features operate the same way between Exhibit 20 and  
19 the Galaxy S 4G, and I'm gonna -- I'm gonna hand you  
20 what's been previously marked as Exhibit 21, a  
21 Galaxy S 4G, and you can -- if you could take a look  
22 at that and just tell me -- it was marked at another  
23 deposition.

24 Just -- so that -- in your right hand,  
25 Exhibit 21 is a Galaxy S 4G, and so if you could just

1 specifically to determine if those three limitations  
2 in the claims were met?

3 MR. MONACH: Objection; asked and answered.  
4 You can do it again.

5 THE WITNESS: If you mean the Android  
6 publicly available source code, I did not look at it  
7 and match up -- I did not do the matching --

8 MR. JOHNSON: Okay.

9 THE WITNESS: -- of the -- of the code to the  
10 claims. I did not do that.

11 MR. JOHNSON: All right.

12 Q Let -- let's go back to the limitation that  
13 says "displaying an area beyond the edge of a  
14 document."

15 You obviously didn't look at any code to  
16 determine whether or how the displaying of -- of any  
17 of the documents occurs; right?

18 MR. MONACH: Objection; vague.

19 THE WITNESS: I did not -- I'm sorry. You're  
20 done?

21 MR. MONACH: Yes.

22 THE WITNESS: I -- I did not look at code  
23 that -- specifically looking for how a particular  
24 document or area beyond the document might have been  
25 displayed.



1 MR. JOHNSON: Q. And there -- there --  
2 you're not aware of any instructions in any code,  
3 whether it's Samsung code or Android code, to draw an  
4 area beyond the edge of the document, as required in  
5 Claim 1 of the '381 patent; right?

6 MR. MONACH: Objection; vague.

7 THE WITNESS: I have not seen the code,  
8 per se, but there would have to be that code, because  
9 the functionality, as I'm working -- as I've  
10 demonstrated on all these devices, clearly displays an  
11 area beyond the edge of the document, so that  
12 functionality is there. It's not magic. There would  
13 have to be some code somewhere on the device that's  
14 making that happen.

15 MR. JOHNSON: Q. Well, actually, do you have  
16 any experience with AMO LED displays? You do; right?  
17 AMO LED?

18 A I'm sorry. What do you mean by A --

19 Q AMO LED.

20 Do you have experience with AMO LED displays?

21 A In terms of using them?

22 Q Using them, analyzing them, working with  
23 them.

24 A I haven't analyzed the hardware in any  
25 fashion at all.

1 Q But I thought you said -- well, strike.

2 Do you know whether any of the Samsung  
3 accused devices use AMO LED displays?

4 A I do not know what particular hardware  
5 display they're using.

6 Q That's not of any importance to your  
7 analysis?

8 MR. MONACH: Object to the form of the  
9 question.

10 THE WITNESS: I don't believe for these  
11 particular claims the type of display, or beyond the  
12 fact that it's a touchscreen display, the type of  
13 whether it's an LCD, LED, whatever underlying  
14 technology, the claim simply says a touchscreen  
15 display, that is able to detect movement.

16 MR. JOHNSON: Q. What is --

17 A So, for those claims, I did not see the need  
18 to consider what particular type of hardware  
19 technology, beyond the fact that it's a touchscreen  
20 display.

21 Q What is an AMO LED display?

22 MR. MONACH: Objection; lack of foundation.

23 THE WITNESS: I -- I haven't thought about  
24 that in conjunction with this case, and I haven't --  
25 you know, haven't formed an opinion on that, so I'm