

# Exhibit G

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UNITED STATES DISTRICT COURT NORTHERN  
DISTRICT OF CALIFORNIA SAN JOSE DIVISION  
-----X  
APPLE INC., a California corporation,  
  
PLAINTIFF,  
  
-against-  
  
SAMSUNG ELECTRONIC CP., LTD., a Korean  
business entity; SAMSUNG ELECTRONICS  
AMERICAN, INC., A New York Corporation;  
SAMSUNG TELECOMMUNICATIONS AMERICA, LLC,  
a Delaware limited liability company,  
  
DEFENDANTS.  
-----X

REVISED

\*\*\*CONFIDENTIAL\*\*\*  
DEPOSITION OF TULIN ERDEM  
New York, New York  
Wednesday, November 7, 2012

Reported by:  
Rebecca Schaumloffel, RPR, CLR  
Job No: 55304

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1 T. ERDEM

2 of demand is for Samsung smartphones? 11:20AM

3 A. Based on the research, the ones 11:20AM

4 that are, again, often cited as important 11:20AM

5 ones tend to be things that -- actually, you 11:20AM

6 can even read. Can I refer -- there is a 11:20AM

7 paragraph that lists from Samsung documents 11:20AM

8 what they think consumers look at. For 11:20AM

9 example, in their case, brand is a driver. 11:21AM

10 Q. Just to be clear, I'm not asking 11:21AM

11 for what features generally are important or 11:21AM

12 what the top three features or top seven 11:21AM

13 features are. I'm simply asking, do you have 11:21AM

14 an opinion on what the single primary driver 11:21AM

15 of demand is for a smartphone? 11:21AM

16 A. I'm saying that kind of question, 11:21AM

17 single primary demand factor, there is no 11:21AM

18 single primary demand factor in most 11:21AM

19 categories, including here, although there 11:21AM

20 might be some consumers where one single 11:21AM

21 thing makes them to decide. 11:21AM

22 Q. So it is your opinion that there 11:21AM

23 is no single primary driver of demand for 11:21AM

24 smartphones? 11:21AM

25 A. If you want me to single out one 11:21AM

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1 T. ERDEM

2 attribute that determines demand and not 11:21AM

3 others, I can't name such a single attribute. 11:21AM

4 Q. And again, you haven't tested for 11:22AM

5 that in terms of your own primary research, 11:22AM

6 right? 11:22AM

7 A. I haven't done my own primary 11:22AM

8 research. I'm relying on, as I said, both 11:22AM

9 Apple and Samsung internal marketing research 11:22AM

10 where they cite multiple attributes. 11:22AM

11 Q. You devote some time in your 11:22AM

12 Declaration to this distinction between 11:22AM

13 features and sub-features, correct? 11:22AM

14 A. Um-hum. 11:22AM

15 Q. I believe that you characterize 11:22AM

16 the patents at issue in this case, the 11:22AM

17 patents and features for the three utility 11:22AM

18 patents, the '163, the '915, the '381, as 11:22AM

19 relating to sub-features, correct? 11:22AM

20 A. I did mention -- I did refer them 11:22AM

21 as sub-features, not to say 11:22AM

22 sub-sub-sub-features. Just a minute ago, you 11:22AM

23 asked me, for example, whether ability to 11:22AM

24 listen to music or ability to look at 11:22AM

25 pictures, whether they drive demand. Even 11:22AM

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1 T. ERDEM

2 those are a sub-feature. So the narrowly 11:22AM

3 defined patents are kind of such a granular 11:23AM

4 level, it is like sub-sub-sub-sub-features. 11:23AM

5 Q. Is having a clock on a smartphone 11:23AM

6 a sub-feature, in your view? 11:23AM

7 A. It depends on how consumers view 11:23AM

8 that. I didn't see any research in terms of 11:23AM

9 what consumers view -- 11:23AM

10 Q. What about -- 11:23AM

11 A. -- in terms of a clock. 11:23AM

12 Q. Sorry. Are you done? 11:23AM

13 A. Yes. 11:23AM

14 Q. I'm going to try hard not to cut 11:23AM

15 you off. 11:23AM

16 As between a world clock -- do 11:23AM

17 you know what a world clock is? 11:23AM

18 A. Just one that shows different 11:23AM

19 time zones in different -- okay. 11:23AM

20 Q. Correct. As between use of a 11:23AM

21 world clock as distinct from an ordinary 11:23AM

22 clock, do you have a view as to whether the 11:23AM

23 world clock would be a sub-feature of the 11:23AM

24 phone? 11:23AM

25 A. Again, it would depend on how 11:23AM

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1 T. ERDEM  
2 are things that are, like in the smartphone 11:25AM  
3 category, connectivity, ease of use, these -- 11:25AM  
4 if you want, you can use the term 11:25AM  
5 "mega-attributes." 11:25AM

6 Things like, does it have a clock 11:25AM  
7 or not, these are not as big features but you 11:25AM  
8 can call them features in terms of whether it 11:25AM  
9 has a clock or not. Whether it has -- what 11:25AM  
10 else could a phone have? All these things 11:25AM  
11 that sort of most clocks have are some 11:25AM  
12 functional features of that product. 11:25AM

13 Q. Do you have a view as to whether 11:25AM  
14 a patented feature of a multi-touch phone can 11:25AM  
15 ever be the primary driver of demand? 11:25AM

16 A. It depends what that patented 11:25AM  
17 feature is. 11:25AM

18 Q. As you sit here today, are you 11:25AM  
19 able to think of such a feature that could in 11:25AM  
20 fact constitute a primary driver of demand 11:26AM  
21 for a multi-touch smartphone? 11:26AM

22 MR. WATSON: Hang on one second. 11:26AM  
23 Can you clarify something? In your 11:26AM  
24 prior question you referred to "the" 11:26AM  
25 primary driver of demand. In your 11:26AM

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1 T. ERDEM

2 second question, you said "a" primary 11:26AM

3 driver of demand. Which of those do 11:26AM

4 you want her to speak to? 11:26AM

5 MR. HUNG: I will restate the 11:26AM

6 question. 11:26AM

7 Q. As you sit here today, are you 11:26AM

8 able to think of a feature that could 11:26AM

9 constitute the primary driver of demand for a 11:26AM

10 smartphone? 11:26AM

11 A. For a patent feature? 11:26AM

12 Q. Correct. 11:26AM

13 A. I'm not aware of any patent 11:26AM

14 feature that might drive the demand. But if 11:26AM

15 I do research, maybe I was given or I do my 11:26AM

16 own research, maybe there is. I don't know 11:26AM

17 what is all the patent features, because I 11:26AM

18 looked only at those three patents. So I 11:26AM

19 don't know -- 11:26AM

20 Q. And I understand there was a 11:26AM

21 limitation on what you reviewed or did not 11:26AM

22 review in the month that you have worked on 11:27AM

23 this case. My question is with respect to, 11:27AM

24 can you conceptualize, can you think of a 11:27AM

25 patented feature that would constitute the 11:27AM

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1 T. ERDEM

2 primary driver of demand for a smartphone? 11:27AM

3 A. At this point, I can't really. I 11:27AM

4 mean, I can't say for -- this is going out of 11:27AM

5 the smartphone category, but let's say if 11:27AM

6 pharmaceutical company comes up with a new 11:27AM

7 drug that cures cancer and then patents that, 11:27AM

8 I can see that drives demand for that 11:27AM

9 company. 11:27AM

10 I cannot right now from the top 11:27AM

11 of my head think of a similar thing in a 11:27AM

12 smartphone that is patented and it 11:27AM

13 corresponds to kind of curing cancer. 11:27AM

14 Q. Let's be clear. Part of today's 11:27AM

15 exercise, again, is understanding what your 11:28AM

16 opinions are, what your opinions aren't, what 11:28AM

17 work you have done and what work you haven't 11:28AM

18 done. 11:28AM

19 Did you conduct any research with 11:28AM

20 respect to running a study with respect to 11:28AM

21 determining what the primary patented feature 11:28AM

22 would be that drives demand for a smartphone? 11:28AM

23 A. I haven't done my own primary 11:28AM

24 research in the context of like collecting 11:28AM

25 data and doing something like a conjoint. 11:28AM



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1 T. ERDEM

2 start again. 11:34AM

3 Did you speak with anyone at 11:34AM

4 Samsung in preparing your opinion for this 11:34AM

5 case? 11:34AM

6 A. No. 11:34AM

7 Q. Did you speak with anyone at 11:34AM

8 Apple in preparing your opinions for this 11:34AM

9 case? 11:35AM

10 A. No. 11:35AM

11 Q. Did you ask to speak to anyone at 11:35AM

12 Samsung in preparing your opinions for this 11:35AM

13 case? 11:35AM

14 A. No. 11:35AM

15 Q. Did you speak with any consumers 11:35AM

16 in preparing your opinions for this case? 11:35AM

17 A. I didn't do any primary research. 11:35AM

18 Q. Did you ask anyone whether the 11:35AM

19 patents and features in the '163 patent was a 11:35AM

20 factor in their purchase of a smartphone? 11:35AM

21 A. No, because if -- unless you do a 11:35AM

22 study, one person's opinion wouldn't matter 11:35AM

23 in any case. Wouldn't be a scientific -- 11:35AM

24 plus I wasn't even allowed to ask. This is 11:35AM

25 not public information, I guess. 11:35AM

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1 T. ERDEM

2 Q. Samsung's -- the fact that the 11:35AM  
3 jury found at least for some products Samsung 11:35AM  
4 infringes the '163 patent, you believe is a 11:35AM  
5 confidential matter? 11:35AM

6 A. The infringement information is 11:35AM  
7 out, I think. But obviously, I wouldn't 11:36AM  
8 discuss the details of the case. Unless I'm 11:36AM  
9 conducting on -- in the context of the case, 11:36AM  
10 my own research, I wouldn't discuss it with 11:36AM  
11 people. 11:36AM

12 Plus it is kind of difficult to 11:36AM  
13 differentiate what is public information, 11:36AM  
14 what is not at this -- it is more cautious to 11:36AM  
15 err on the conservative side and not to talk 11:36AM  
16 about it. 11:36AM

17 Q. Do you have any empirical 11:36AM  
18 evidence that consumers were not driven to 11:36AM  
19 purchase Samsung products because of the 11:36AM  
20 infringing technology relating to the '163, 11:36AM  
21 the '381 and the '915 patents? 11:36AM

22 A. There was no empirical evidence 11:36AM  
23 in everything I reviewed that links the 11:36AM  
24 patented features to demand except for an 11:37AM  
25 attempt by the Hauser study, and we can 11:37AM

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1 T. ERDEM  
2 discuss that, combined with my expertise in 11:37AM  
3 decision making and all the frameworks that 11:37AM  
4 were verified in many different contexts, 11:37AM  
5 which show us patterns in terms of how 11:37AM  
6 consumers behave in such markets, like they 11:37AM  
7 don't go through these very granular-level 11:37AM  
8 features and then these very granular 11:37AM  
9 features driving their demand. The totality 11:37AM  
10 of that analysis made me to opionate the 11:37AM  
11 way I did. 11:37AM

12 Q. Did you perform any Internet 11:37AM  
13 research in preparing your opinions for this 11:37AM  
14 case? 11:37AM

15 A. No. I didn't do Internet 11:37AM  
16 research in terms of to base my opinion on. 11:37AM

17 Q. Did you do any research in terms 11:37AM  
18 of periodicals, newspapers, magazines, 11:37AM  
19 articles? 11:38AM

20 A. Not in terms of linking the 11:38AM  
21 patented features to -- there is -- there 11:38AM  
22 wouldn't be that kind of research out there. 11:38AM

23 Q. Did you do any research on the 11:38AM  
24 Internet to determine whether in fact 11:38AM  
25 customers even liked the features patented in 11:38AM

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1 T. ERDEM

2 the '915, '381 and '163 patents? 11:38AM

3 A. Well, everything I relied on in 11:38AM  
4 terms of the opinions expressed are already 11:38AM  
5 in Exhibit 2, so it is constrained by those. 11:38AM

6 Q. Were you given a set of materials 11:38AM  
7 to rely on in this case? 11:38AM

8 A. I asked them to send me all the 11:38AM  
9 relevant marketing research documents, like 11:38AM  
10 everything, so I had basically everything. I 11:38AM  
11 had given -- I was given declarations, 11:38AM  
12 reports, like I read Hauser report as well as 11:38AM  
13 Vince Declaration. 11:39AM

14 Again, they are listed in 11:39AM  
15 Exhibit 2. 11:39AM

16 Q. Did you feel it was important or 11:39AM  
17 unimportant to do any Internet searching to 11:39AM  
18 determine whether consumers liked the 11:39AM  
19 patented features or not? 11:39AM

20 A. I did, for example, background 11:39AM  
21 research in terms of not to opionate on 11:39AM  
22 this, but to familiarize myself with the 11:39AM  
23 terms like Android platform, et cetera. So 11:39AM  
24 it was just that kind of -- so I know the 11:39AM  
25 terms that are used in all these forums. 11:39AM

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1 T. ERDEM

2 level, people making, aha, this must be with 12:31PM  
3 a high price. So that's the kind of thing I 12:32PM  
4 am talking about. 12:32PM

5 Q. Let me quickly turn to 12:32PM  
6 paragraph 46 of your Declaration. In the 12:32PM  
7 first line of paragraph 46 you state, 12:32PM  
8 "Consequently, the consumer research 12:32PM  
9 available from Apple and Samsung has been 12:32PM  
10 conducted in a manner that it will rarely, if 12:32PM  
11 ever, be possible to link a specific patent 12:32PM  
12 of the types at issue here to a feature 12:32PM  
13 attribute contained in the consumer research, 12:32PM  
14 especially in a manner that would reasonably 12:32PM  
15 permit one to conclude that the patents have 12:32PM  
16 any impact on consumer demand." 12:32PM

17 Did I read that correctly? 12:33PM

18 A. Yes, you read it correctly. 12:33PM

19 Q. In your view, is it possible to 12:33PM  
20 perform consumer research that would link a 12:33PM  
21 specific patent of the types at issue here to 12:33PM  
22 a feature attribute contained? 12:33PM

23 A. What I have seen in the research 12:33PM  
24 done, it wasn't done. Hypothetically, it can 12:33PM  
25 be done. It could, but one needs to be 12:33PM

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1 T. ERDEM

2 extremely difficult -- extremely careful. 12:33PM

3 Q. Did you run any tests to check or 12:33PM

4 determine whether the features excluded in 12:33PM

5 Hauser's conjoint survey bias the estimates? 12:33PM

6 A. No, I haven't done any, you know, 12:33PM

7 primary research to test Hauser's results. 12:33PM

8 That was Wind's job. 12:33PM

9 Q. Your report -- I understand that 12:33PM

10 you are adopting Dr. Wind's opinions. Your 12:33PM

11 Declaration does not include 12:34PM

12 characterizations, for lack of a better word, 12:34PM

13 of how one should have run the Hauser 12:34PM

14 conjoint study, correct? 12:34PM

15 A. Can you repeat that? 12:34PM

16 Q. Sure. 12:34PM

17 Your report does not specifically 12:34PM

18 include suggested improvements to 12:34PM

19 Dr. Hauser's conjoint study separate and 12:34PM

20 apart from your adoption of Dr. Wind's 12:34PM

21 opinions? 12:34PM

22 A. No. My report itself doesn't 12:34PM

23 cover it. 12:34PM

24 Q. Do you know who Art Sukumar is? 12:34PM

25 A. I heard it was one of the 12:34PM

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1 T. ERDEM

2 witnesses, but I don't know. 12:34PM

3 Q. Had you heard of him before your 12:34PM

4 involvement in this case? 12:34PM

5 A. No. 12:34PM

6 Q. You don't know whether he is an 12:34PM

7 academic or a -- 12:34PM

8 A. I don't know. 12:34PM

9 Q. -- statistician or economist? 12:34PM

10 A. He is not one of the usual 12:34PM

11 players for me, people like Russ or John or 12:35PM

12 Jerry. 12:35PM

13 Q. Do you know whether he performed 12:35PM

14 a conjoint study analysis for Samsung in this 12:35PM

15 case? 12:35PM

16 A. I don't know. 12:35PM

17 Q. You don't know one way or the 12:35PM

18 other? 12:35PM

19 A. No. 12:35PM

20 Q. So I take it that you didn't 12:35PM

21 review any expert report that Dr. Sukumar 12:35PM

22 might have done in this case? 12:35PM

23 A. No, I haven't reviewed a report 12:35PM

24 from him. 12:35PM

25 Q. If Dr. Sukumar's -- strike that. 12:35PM

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1 T. ERDEM

2 Q. I am asking just as a general 02:29PM  
3 proposition. I understand you are qualified, 02:29PM  
4 your qualifications. 02:29PM

5 As a general proposition, is it 02:29PM  
6 true that the demand curve can be 02:29PM  
7 characterized as a willingness-to-pay curve? 02:29PM

8 MR. WATSON: Objection. Asked 02:29PM  
9 and answered. 02:29PM

10 A. There is a correspondence to it 02:29PM  
11 if willingness to pay is correctly defined 02:29PM  
12 and captured. That's my answer. 02:29PM

13 Q. Earlier, we talked about this 02:29PM  
14 concept of transactional data. You mentioned 02:29PM  
15 this concept of secondary research. Do you 02:29PM  
16 recall that? 02:29PM

17 A. Yes. 02:29PM

18 Q. I had asked you, when you don't 02:30PM  
19 have public surveys that give you granular 02:30PM  
20 data, don't you typically perform your own 02:30PM  
21 primary research, when writing your academic 02:30PM  
22 papers, as an example. Do you recall that 02:30PM  
23 discussion? 02:30PM

24 A. We talked about that you can 02:30PM  
25 have -- if you don't have transactional data, 02:30PM



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1 T. ERDEM

2 you don't have any other data, and you have a 02:30PM

3 specific question that can be answered by you 02:30PM

4 collecting your own data, you can do so. 02:30PM

5 Q. And that's exactly what I was 02:30PM

6 going to ask you. When you don't have public 02:30PM

7 surveys and you don't have secondary data, 02:30PM

8 transactional data, one commonly or 02:30PM

9 frequently does perform your own primary 02:30PM

10 research to get the granular data that one 02:30PM

11 might need, right? 02:30PM

12 MR. WATSON: Vague and 02:30PM

13 ambiguous. 02:30PM

14 A. Again, it depends. Because in 02:30PM

15 some contexts, it might be not possible. In 02:30PM

16 some contexts, it is possible. We have to 02:30PM

17 define the exact context, whether it is 02:30PM

18 doable or not. 02:31PM

19 Q. Here, you did not conduct your 02:31PM

20 own primary research, I believe you stated in 02:31PM

21 part due to time, correct? 02:31PM

22 A. That's correct. I haven't done 02:31PM

23 any primary research. 02:31PM

24 MR. HUNG: Thank you for your 02:31PM

25 time, Dr. Erdem. 02:31PM

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T. ERDEM

THE WITNESS: Thank you. 02:31PM

THE VIDEOGRAPHER: This 02:31PM

concludes today's deposition. The 02:31PM

time is 2:31 p.m.; we are off the 02:31PM

record. 02:31PM

(Whereupon, at 2:31 p.m., the  
Examination of this Witness was  
concluded.)

\_\_\_\_\_

TULIN ERDEM

Subscribed and sworn to before me  
this \_\_\_\_ day of \_\_\_\_\_, 2012.

\_\_\_\_\_

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