Exhibit D

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

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APPLE INC., a California corporation,

Plaintiff,

vs.

Case No. 11-CV-01846-LHK

SAMSUNG ELECTRONICS CO., LTD, a Korean business entity; SAMSUNG ELECTRONICS AMERICA, INC., a New York corporation; SAMSUNG TELECOMMUNICATIONS AMERICA, LLC, a Delaware limited liability company,

Defendants.

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HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY

VIDEOTAPED DEPOSITION OF JOHN HAUSER, a witness called by the Defendants, taken pursuant to the applicable provisions of the Federal Rules of Civil Procedure, before James A. Scally, RMR, CRR, a Notary Public in and for the Commonwealth of Massachusetts, at the offices of WilmerHale, 60 State Street, Boston, Massachusetts, on Friday, April 27, 2012, commencing at 9:31 a.m.

TSG Job # 48803

So normally when you hear these surveys on television, they say, you know, 55 percent for candidate A, 45 percent for candidate B, and then they give a plus or minus. Okay. That plus or minus is actually two times the standard deviation -- roughly two times the standard error. So that's that sort of the precision with which I'm -- I'm estimating this parameter. In the case of the political candidate, it's, you know, the votes they're going to get or the people favoring them or whatever. In my estimates, it's the estimate of a particular partworth. 16:47:09 16:47:13 16:47:22 16:47:27 16:47:30 16:47:34 16:47:37 16:47:42 16:47:45 16:47:50

Now, just, again, for the record, kind of mixing a little bit of philosophy here between frequentist and Bayesian statistics, in terms of the Bayesian, it's the posterior Bayesian confidence interval; they've got fancy words, but it's usually best to think of it as the confidence interval. So for every one of the parameters in my population, I can give you both the estimate and in Exhibit -- I thought it was here. 16:47:55 16:48:01 16:48:06 16:48:10 16:48:15 16:48:17 16:48:21 16:48:28

MR. ILLOVSKY: Are you looking for 12, K in your report? 16:49:17 16:49:18

THE WITNESS: Yeah. I can't find 12. 16:49:20

MR. ILLOVSKY: Use that. 16:49:21

THE WITNESS: Okay. 16:49:22

A. Exhibit 12, which is K, you can see the standard error of the market level mean. 16:49:23 16:49:27

So to interpret this, they say table K1. We have the first feature, which is "Reliable Touch, Auto-Switch (1 to 2 Fingers, Rubberband, Tap and Re-center the Zoom," the average market level mean is 64.5, and we also have medians in there, and I'll explain the difference in a moment, and the standard error is 2.1. So you can see it's, you know, that's pretty good precision. 16:49:30 16:49:38 16:49:42 16:49:45 16:49:51 16:49:54 16:49:58

Q. Does this mean that the willingness to pay for any given individual is measured with high precision? 16:50:00 16:50:05

A. Oh, no. Absolutely not. 16:50:10

Q. Okay. 16:50:13

A. You know, and I actually give an example of flipping coins to try and motivate this concept. You can have high precision at the population level, but not high precision at the level of each and every individual. 16:50:25 16:50:27 16:50:31 16:50:36

Q. Okay. Let's go to page 48 of Exhibit 1. Okay. So do you see -- do you see table 3A in your report? 16:50:41 16:51:00

A. Yes, I do. 16:51:05

Q. And then if you flip the page, you'll see table 3B? 16:51:06 16:51:08

A. Yes, I do. 16:51:09

Q. Okay. So these are the -- here's the -- the means and the standard deviations; right? 16:51:10 16:51:15

A. No. Let's be clear what we have here. Okay. There is an estimate of the mean and the market 16:51:17 16:51:21

heterogeneity, which is the distribution, standard distribution, of these partworths across the population. 16:51:24 16:51:27

Q. This is the population of the respondents, or is this the population of -- of the 10,000? 16:51:32 16:51:36

A. I -- I have -- I mean I think you're confusing draw as from a posterior distribution with the population. 16:51:45 16:51:49

Q. What are you -- okay. So the pop -- what do you mean by the population? 16:51:56 16:51:58

A. Okay. So I have four hundred and -- this is smartphones -- 455 respondents. 16:51:59 16:52:02

Q. Uh-huh. 16:52:05

A. Okay. And what I'm doing is I'm estimating for the target population, now, the mean level of the partworth and how much it varies. So think of it as you may have a different partworth than I do, and Dr. Sukumar may have yet another partworth, and Eugene may have a different partworth, et cetera. I can't -- I can't actually -- I can get an estimate of each one of those partworths, but -- but not with a lot of high precision. But I can estimate how these vary across the population. And I can do that with high precision. 16:52:06 16:52:12 16:52:18 16:52:24 16:52:28 16:52:30 16:52:34 16:52:37 16:52:40 16:52:44

So it's kind of like saying if I drive in the Southeast Expressway, it's going to take me 20 minutes plus or minus 10 minutes. I can get a pretty good estimate that on average it takes me 20 minutes, of course that's 16:52:47 16:52:52 16:52:55 16:52:58

A. Yes. You shouldn't -- you should not use ACBC if you have less than five attributes. That's what it means. 17:04:03 17:04:05

Q. It doesn't -- it doesn't -- it doesn't recommend using -- so the way you read this is not a recommendation that you use ACBC when you have more than five attributes; you don't read it that way? 17:04:11 17:04:14 17:04:17 17:04:21

A. Did you read the technical manual? 17:04:22

Q. I did not. Did you? 17:04:24

A. Yes, I did. 17:04:25

Q. And what does it say? 17:04:26

A. Okay. I'm quite happy to explain ACBC to you. 17:04:27

Q. No, that's not -- that's not the question. You know, I've been patient today with -- with the responses that are really nonresponsive to a lot of the questions. But we're running out of time, and I am just asking you is your interpretation of a printout from Sawtooth's website where it says "When to Use ACBC" and it indicates "Five or more attributes," it is -- it's your understanding that ACBC should not be used when you have fewer than five attributes; is that your understanding? 17:04:31 17:04:33 17:04:38 17:04:41 17:04:49 17:04:53 17:04:57 17:05:05 17:05:09

MR. ILLOVSKY: Wait. So hold on. 17:05:11

I've got to object to the preface. The answers have been perfectly responsive when the questions have been comprehensible, which has not been a large percentage of 17:05:12 17:05:14 17:05:16 17:05:18

the time. So object to the preface, object to the question. 17:05:20 17:05:23

Go ahead. 17:05:26

A. Can you ask -- re-ask the question? 17:05:28

Q. Let's move on. Look at the -- look at the last paragraph on page 1 of what's been marked as Exhibit 20. It says, "In addition to the standard partworth utilities that are useful for segmentation and market simulation, we captured the specific 'must-have' and 'unacceptable' rules that respondents expressed during the screening process." 17:05:39 17:05:41 17:05:45 17:05:49 17:05:51 17:05:55

You're familiar with that term "must-have"; right? 17:06:00

A. Well, if you had read the technical manual, you'll see that they're pretty widely quoting many of my papers. So, yes, I am definitely familiar with this. 17:06:03 17:06:05 17:06:12

Q. Okay. 17:06:14

A. And I'd like to also point out that we did these tests on our data. And what these refer to is lexicography. And they're -- in many cases consumers are lexicographic when there are a lot of features or when the choice task is speeded up or other things. And we did do lexicography tests in our data, which are entirely doable with all the information we gave you. 17:06:14 17:06:17 17:06:20 17:06:25 17:06:29 17:06:32 17:06:37

And I can tell you that out of seven features times roughly, you know, 800 respondents, it's like 5600 possible tasks, exactly one was lexicographic, and it was 17:06:39 17:06:44 17:06:53

lexicographic on price. So we did do the test as to whether or not we should have must-have features in there, which can be done after the fact, and it fully essentially confirms that there is no lexicography; because there's no lexicography, we don't need ACBC. 17:06:59 17:07:02 17:07:05 17:07:10 17:07:13

Now, of course, I only did this after I had the data. So I made a judgment up front, again, from my experience, from also the qualitative interviews, that we probably did not need to worry about lexicography in this particular study. And that turned out to be correct. So to have one out of like 5600, that can almost even be by chance. 17:07:16 17:07:20 17:07:23 17:07:26 17:07:31 17:07:35 17:07:39

Q. Why didn't you -- why didn't you mention in your report that you tested for must-have features? 17:07:40 17:07:43

A. Oh, I -- I only did this test after I read Dr. Sukumar's results, because I didn't -- I mean we did not have any indications that there should be any lexicography. Also, you know, I know Sawtooth says "five or more" here, but you're really -- it's going to be very rare that you have lexicography for as little as five attributes. It's going to be upwards of 20 or so before you start having it. I did not expect it. But given that he raised it, Dr. Sukumar raised it, and given that I could test it with the data that you had been given, I tested it. 17:07:47 17:07:51 17:07:55 17:07:59 17:08:03 17:08:07 17:08:10 17:08:13 17:08:17 17:08:21

Q. Part of your opinion is -- is the value placed on 17:08:28

the '915, the '161, and the '381 patents combined. Are you able to break out the individual value of those patents? 17:08:32 17:08:39

A. Okay. Let me just add that you've been given all the code that we ran for the lexicographic tests. 17:08:42 17:08:44

So can you -- can you re-ask that question? 17:08:49

Q. Part of your opinion is the value placed on the '915, the '161, and the '381 patents combined. Are you able to break out the individual value of those patents to Samsung consumers? 17:08:52 17:08:55 17:09:01 17:09:04

A. Okay. So -- 17:09:05

MR. ILLOVSKY: Objection to form. 17:09:05

A. Take a look at the report again. 17:09:07

MR. GALVIN: I withdraw the question. 17:09:23

Let's take a break, please. 17:09:45

THE VIDEOGRAPHER: Going off the record. The time is 5:09. 17:09:46 17:09:47

(Recess.) 17:09:49

(Exhibit 21, DVD labeled "Hauser Survey Data Files," marked.) 17:20:54 17:20:58

THE VIDEOGRAPHER: We're back on the record. The time is 5:20. 17:20:59 17:21:00

BY MR. GALVIN: 17:21:11

Q. Dr. Hauser, for each of your respondents, how many records are there? 17:21:12 17:21:15

A. I am not sure I understand the -- 17:21:21

at the willingness to pay estimates at some point? On an individual level, did you examine all -- 17:30:13 17:30:22

A. I, in fact, not only didn't I do it, but I -- I gave the example with the head -- with the coin-flipping example, and, again, at least nine places in the report, it was in two of the footnotes, I'm very explicit as to why that would -- that is not what one should do, and that that would be a naive thing to do. I've got enough experience with hierarchical Bayes to know these issues are in there. 17:30:25 17:30:28 17:30:30 17:30:35 17:30:38 17:30:42 17:30:46

And, you know, when I read Dr. Sukumar's results, and he's getting numbers like he modified the code, and he got numbers that are absurd. And you should look at those and say, well, gee, they are absurd. So why are they absurd? Well, because the code was modified. 17:30:50 17:30:52 17:30:55 17:30:59 17:31:03

Q. Well, did you get results that were absurd? 17:31:05

A. No. I did the calculations correctly. 17:31:07

Q. But you didn't look on an individual level at the -- at the calculations, did you? 17:31:09 17:31:12

MR. ILLOVSKY: Objection to form. 17:31:16

A. You know, I -- I wrote a set of procedures; I wrote the set of procedures that are correct. We're now talking about 10,000 draws for 800 consumers times -- four times -- times 28 partworths. So what is that? Millions, billions? No, I didn't look at a billion different numbers. I looked at the appropriate output of 17:31:17 17:31:20 17:31:23 17:31:31 17:31:35 17:31:38

calculations based on whatever it is, a billion different numbers. 17:31:40 17:31:43

Q. Did you look at the median of those calculations? 17:31:44

A. I looked at -- I did the median appropriately. 17:31:48

Q. So what was the -- what was the median? 17:31:51

A. The median, as described, it's -- we can look it up, you know. 17:31:55 17:31:58

Q. Do you remember? 17:31:59

A. Is it a memory test? 17:32:00

Q. No. It's -- I'm asking you if you remember or not. 17:32:02 17:32:04

A. Do I remember the exact number? 17:32:05

Q. Uh-huh. 17:32:06

A. The exact number's in my report. We can look it up. 17:32:07 17:32:10

Q. Okay. Let's go -- let's go there. 17:32:10

A. (Pause.) Well, it's basically footnote 72, 73, and you'll note that in 72 it says, "For each of these samples, I computed a median willingness to pay for the market. I then computed an overall market level willingness to pay by taking the median of the 10,000 sample medians," okay? And then I cautioned, "As explained in the earlier coin-flipping examples, reporting a willingness to pay for an individual respondent would not be sufficiently precise; however, the overall market level 17:33:15 17:33:22 17:33:30 17:33:34 17:33:37 17:33:41 17:33:44 17:33:47 17:33:50

willingness to pay is sufficiently precise." So I definitely cautioned that. 17:33:54 17:33:58

Now, in -- in paragraph 73, doing those median calculations, so doing the medians within the sampler, okay, so in the -- getting the posterior distribution of the medians, I then, having gotten that posterior distribution of the medians, we can now say something like the willingness to pay estimates at a base price of 199, customers would be willing to pay $40 more for a smartphone that has the functionality associated with patent '915. And then it goes on from there. 17:34:00 17:34:04 17:34:08 17:34:11 17:34:17 17:34:20 17:34:25 17:34:28 17:34:32

And you'll note that how this, then, is used is up in paragraph 104, and it says, "The median willing -- consumer willingness to pay calculation leads price premium estimates that are similar to what I estimate using the market simulation." So I'm using it for a convergent check. 17:34:35 17:34:39 17:34:44 17:34:48 17:34:51 17:34:54

Q. So if we look at -- if we look at any one respondent's draws, that doesn't really -- that doesn't really tell us their willingness to pay for -- for any of the features? 17:34:57 17:35:11 17:35:17 17:35:20

A. Again, let's go back to the coin-flipping example. If I end up with two heads, my estimate, you know, for that particular respondent, you know, in fact, my maximum likelihood estimate is 100 percent. You know, so I'm not 17:35:23 17:35:26 17:35:31 17:35:35

going to be very precise. 17:35:38

Q. Okay. 17:35:40

A. So in -- when I look at any individual, I have 48 constraints, plus I have a number of monotonicity constraints, and I think if we count up the number of features, it's something like 7 times 3. Not completely, because there's -- not everything's monotone. So, you know, I basically have, what, maybe 60 constraints for 20, 21 features. I can't expect that to be precise. However, when I get up to 20,000 constraints, which is what I have for the population, I can expect that to be fairly precise. 17:35:41 17:35:47 17:35:53 17:35:55 17:36:00 17:36:04 17:36:10 17:36:13 17:36:18

So, no, you should not look at it at the individual level, and as in the documents that you don't like to refer to, you say, well, some of these appear to be negative, again, just doing the arithmetic calculation, almost none of those are sufficiently precise to -- to say they're negative. 17:36:23 17:36:26 17:36:29 17:36:32 17:36:36 17:36:40

What we can say is that for roughly -- and also they're conflated. We can look at it the other way around and say that for 94 percent of the people, they have positive partworths for one of the patents. But I don't want to conflate it either way. 17:36:42 17:36:45 17:36:49 17:36:52 17:36:55

The key thing is none of those are significant -- I think one of those are significant out of all those tests. And there are people who -- who don't value. I 17:36:59 17:37:02 17:37:04