

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

APPLE INC.,

Petitioner,

v.

IPR 2024-01091

SMITH INTERFACE

Patent No.

TECHNOLOGIES, LLC,

10,936,114

Patent Owner.

DEPOSITION OF VIJAY K. MADISETTI, PH.D.

July 17, 2025

10:30 a.m. Eastern Time

Reported by: Lori J. Goodin, RPR, CLR, CRR,
RSA, California CSR #13959

DIGITAL EVIDENCE GROUP

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Page 2 1 REMOTE DEPOSITION of 2 VIJAY K. MADISETTI, PH.D., in the above-titled 3 action, held on Thursday, July 17, 2025, 4 commencing at approximately 10:27 a.m. before 5 Lori J. Goodin, RPR, CRR, RSA, California CSR 6 #13959, Registered Professional Reporter, 7 Certified Realtime Reporter, Realtime Systems, 8 Administrator, and Certified Shorthand Reporter, 9 and Notary Public of the State of Florida, State 10 of California, State of Maryland, District of 11 Columbia, and State of Delaware. 12 13 14 15 16 17 18 19 20 21 22	Page 4 1 INDEX TO EXAMINATION 2 WITNESS: VIJAY K. MADISETTI, PH.D. 3 EXAMINATION BY PAGE 4 MS. HUANG 6 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
Page 3 1 REMOTE APPEARANCES: 2 3 ON BEHALF OF PETITIONER: 4 FISH & RICHARDSON PC: 5 BY: JENNY HUANG, ESQUIRE 6 111 Congress Avenue 7 Suite 2000 8 Austin, Texas 20024 9 512-472-5070 10 jhuang@fr.com 11 ON BEHALF OF PATENT OWNER: 12 NORTON ROSE FULBRIGHT US, LLP 13 BY: ART LICYGIEWICZ, ESQUIRE 14 BY: RYAN SHORT, ESQUIRE 15 2200 Ross Avenue 16 Suite 3600 17 Dallas, Texas 75201-7932 18 713-651-5000 19 ryan.short@nortonrosefulbright.com 20 art.licygiewicz@nortonrosefulbright.com 21 22 18 Also present: 19 Garrett Holbert, Summer Associate 20 21 22	Page 5 1 INDEX TO EXHIBITS 2 VIJAY K. MADISETTI, PH.D. 3 Apple Inc. v Smith Interface Technologies LLC 4 Thursday, July 17, 2025 5 Lori J. Goodin, RPR, CRR, RSA, 6 California CSR #13959 7 PREVIOUSLY MARKED EXHIBITS 8 PRIOR MARKED EXHIBITS FIRST REFERRAL 9 1001 APPLE-1001, '114 Patent 27 10 2008 Madisetti Declaration 50 11 12 13 14 15 16 17 18 19 20 21 22

Page 6 1 THURSDAY, JULY 17, 2025, 10:27 a.m. EST 2 PROCEEDINGS 3 * * * 4 Whereupon, 5 VIJAY K. MADISETTI, PH.D., 6 a witness called for examination, having been 7 first duly sworn, was examined and testified as 8 follows: 9 THE REPORTER: Unless an objection 10 is heard at this time, all parties to this 11 deposition are appearing remotely and have 12 agreed to the witness being sworn in 13 remotely. 14 * * * 15 EXAMINATION 16 BY MS. HUANG: 17 Q. This is Jenny Huang speaking for 18 petitioner Apple. 19 The witness is Dr. Vijay Madiseti, 20 and for the record this deposition addresses the 21 inter partes review proceeding for IPR 2024-01091 22 regarding U.S. Patent Number 10,936,114 titled	Page 8 1 A. Yes. 2 Q. And do you have any programs running 3 on your computer right now beyond Zoom for this 4 deposition? 5 A. No. I just have a PDF reader. 6 Q. Is there any file open on the PDF 7 reader? 8 A. No. 9 Q. Okay. I will ask that you not use 10 any other programs other than Zoom and the PDF 11 reader during this deposition. 12 Can you agree to that? 13 A. Yes. 14 Q. Do you have any notes, physical 15 notes or papers with you; either physical, I 16 guess, or electronic? 17 A. No. 18 Q. For the exhibits that we discuss 19 today, I will upload a copy of each document into 20 the Zoom chat when we get there. 21 I ask that you only use the copy 22 that I provide through the Zoom chat for the
Page 7 1 Gesture-Equipped Touchscreen System, Method, and 2 Computer Program Product. 3 Dr. Madiseti, before we get going, 4 I'm going to discuss a series of ground rules and 5 other preliminary matters. 6 If I refer to U.S. Patent 7 Number 10,936,114 as the '114 patent, will you 8 understand what I mean? 9 A. Yes. 10 Q. And that is Exhibit 1001, does that 11 sound right to you? 12 A. Yes, it does. 13 Q. So, if I refer to Exhibit 1001, will 14 you understand that I am referring to the '114 15 patent? 16 A. Yes. 17 Q. Dr. Madiseti, is there anyone in 18 the room with you today? 19 A. No. 20 Q. Do you understand that you cannot 21 communicate with anyone verbally or nonverbally 22 during the examination?	Page 9 1 deposition. 2 Can you agree to that? 3 A. Okay. 4 Q. And since this is a remote 5 deposition and we are using video conferencing 6 equipment, there is likely to be a slight delay 7 in our communications. 8 So, can we both agree to try to 9 speak slowly and try not to speak over one 10 another? 11 A. Yes. 12 Q. If I ask you a question and you 13 don't understand it, can you please ask me to 14 rephrase or clarify the question? 15 A. Yes. 16 Q. Is it fair for me to assume that if 17 you answer my question, then you understand my 18 question? 19 A. Yes. 20 Q. And do you understand that even 21 though we are conducting the deposition remotely 22 today, you are under oath just as if you were

Page 10 1 providing sworn testimony in front of a judge or 2 a jury? 3 A. Yes. 4 Q. And that you remain under oath for 5 as long as this deposition is ongoing? 6 A. Yes. 7 Q. And Dr. Madiseti, is there any 8 reason you cannot give true and accurate 9 testimony today? 10 A. No. 11 Q. I will try to take a break every 12 hour or so. 13 But, if you need a break, can you 14 just let me know? 15 A. I will. 16 Q. And I just ask that if there was a 17 question pending, that you answer that question 18 before we take a break. 19 Is that fair? 20 A. Okay. 21 Q. And when we do return from breaks, I 22 may ask whether you have had any discussions with	Page 12 1 A. Over the years I started as 2 assistant professor, and then went to associate 3 professor and then to a full professorship over 4 the last 30 years. 5 Q. Are you currently employed anywhere 6 else other than Georgia Tech? 7 A. No. 8 Q. Have you been retained as an expert 9 witness in any legal proceeding other than the 10 current IPR we are talking about today? 11 A. Yes. 12 Q. About how many times have you been 13 retained as an expert witness in a legal 14 proceeding other than the current IPR? 15 A. Over the past 5, 10 years. Quite a 16 few. 17 Q. Can you give me a number? 18 A. Over the past ten years, it is 19 somewhere between 50 and 100. 20 Q. Did you say 50 and 100 -- oh, okay, 21 somewhere between 50 and 100? 22 A. Yes.
Page 11 1 anyone regarding the substance of your testimony 2 today. 3 Those kinds of discussions are 4 prohibited, is that understood? 5 A. Yes. 6 Q. And again, I also ask that you not 7 consult any notes or documents during the breaks. 8 Can you agree to that? 9 A. Yes. 10 Q. Dr. Madiseti, who is your current 11 employer? 12 A. I am a professor at Georgia Tech. 13 Q. What is your current job title at 14 Georgia Tech? 15 A. I am a full professor of computer, 16 in the college of computing. 17 Q. And how long have you held that 18 title? 19 A. I have been here for more than 20 35 years. 21 Q. Have you held any other positions at 22 Georgia Tech?	Page 13 1 Q. Did you do any -- have you -- 2 Were you retained as an expert 3 witness in any legal proceedings prior to ten 4 years ago? 5 A. Yeah, yes. 6 Q. So, over the course of your career, 7 about how many times have you -- have you been 8 retained as an expert witness in a legal 9 proceeding, other than the current IPR we are 10 talking about today? 11 A. I don't remember the exact number. 12 Q. Over 150? 13 A. Probably around 70 to 100 different 14 unique cases, that would be the sort of number. 15 Q. Over your entire career? 16 A. Yeah. I mean, regarding parties. I 17 mean there may be 3, 4, IPRs for each party, that 18 sort of thing. 19 Q. Okay. And how many of those were 20 patent cases? 21 A. Most of them. 22 Q. When they weren't patent cases, what

Page 14 1 kind of work were you doing? 2 A. Typically trade secret or some other 3 similar matter. 4 Q. How many of the cases for which you 5 were retained as an expert witness did the case 6 specifically relate to electronic devices? 7 A. Most of them. 8 Q. How many of your earlier patent 9 cases related to touchscreen devices? 10 A. Maybe -- I don't remember the exact 11 number. Maybe a dozen or so. 12 Q. How many of your earlier patent 13 cases related to user interfaces involving 14 touchscreen devices? 15 A. I would say maybe around a dozen. 16 Q. Have you been engaged as an expert 17 adverse to Apple before this one? 18 A. I am not adverse to anyone, but I am 19 an independent expert. 20 In the cases where Apple was a party 21 or the party on the other side, I think probably 22 8 to 10 cases over the years.	Page 16 1 Q. Have you ever been engaged as an 2 expert by Apple? 3 A. No. 4 Q. Have you been deposed before? 5 A. Yes. 6 Q. Approximately how many times have 7 you been deposed before? 8 A. I don't remember the exact number. 9 Q. More than 100? 10 A. Yes. 11 Q. More than 200? 12 A. That sounds around right. I would 13 say around 200 would be over the last few years. 14 Q. What about over your career? 15 A. I don't know. 16 Q. But it is more than 200 over your 17 career? 18 A. Around 200 or more or less. That 19 sort of number. 20 Q. Okay. Have you been engaged as an 21 expert in an IPR proceeding before? 22 A. Yes.
Page 15 1 Q. And by cases, do you mean overall 2 disputes or individual patent cases? 3 A. Yes. Overall disputes. 4 Q. About how many individual patent 5 cases that were adverse to Apple were you engaged 6 as an expert? 7 A. I -- I don't know the number. 8 Q. Over 20? 9 A. That is possible. And, for example, 10 if you have a single dispute between two parties, 11 they may have 3, 4 cases. So, 2, 3, cases. 12 So, just one case, it depends. 13 Q. So, just to clarify, I'm wondering, 14 how many individual patents you were engaged to 15 work as an expert witness where the case was 16 adverse to Apple. 17 A. The number of patents involved? 18 Q. Yes. For which you were engaged as 19 an expert. 20 A. I don't remember the number. And it 21 could be 80 to 100. I don't remember the exact 22 numbers.	Page 17 1 Q. Approximately how many times have 2 you been engaged as an expert in an IPR 3 proceeding? 4 A. I don't remember. It's -- I don't 5 remember the exact number. It could be 50 to -- 6 50 or more disputes between various parties, each 7 of those disputes would have 10 to 15 IPRs. So, 8 five IPRs, it is not clear. 9 Q. Approximately how many IPRs have you 10 been engaged as an expert for? So, that would be 11 for individual patents. 12 A. I don't know the exact number. I 13 mean, it depends on the dispute and depends on 14 how many patents are at issue. In some cases 15 there are ten patents, some cases 15, some cases 16 two. 17 I don't know the exact numbers. 18 Q. More than 100? 19 A. Possible, yes. 20 Q. More than 200? 21 A. It is possible. 22 Q. You were engaged in this dispute by

Page 18 1 Smith Interface Technologies, LLC; is that 2 correct? 3 A. Yes. 4 Q. If I refer to Smith Interface 5 Technologies, LLC, or if I refer to them as Smith 6 or patent owner, will you understand what I mean? 7 A. Yes. 8 Q. And Smith is the owner of the '114 9 patent, correct? 10 A. That is my understanding. 11 Q. Have you heard of Smith before you 12 were engaged by them? 13 A. I don't recall one way or the other. 14 Q. Do you know what Smith does, what 15 their business is? 16 A. I don't know. I don't know 17 specifically. 18 Q. So even today, do you know what 19 Smith does as their business? 20 A. I don't know. 21 Q. Do you recall when you were engaged 22 by Smith for this proceeding?	Page 20 1 A. Not -- not at a very high level. I 2 don't think I have looked at those. 3 Q. Do you have any knowledge of Smith's 4 basis for alleging that Apple infringes the '114 5 patent? 6 A. I don't have any -- I have not done 7 work on the infringement side. 8 Q. But are you aware of their theory of 9 infringement? 10 A. No. 11 Q. Have you discussed any of the 12 infringement theory with anybody at Norton? 13 A. I don't think so. I didn't go 14 through any claim charts, anything. Maybe at a 15 very high level, but nothing -- I don't recall 16 any specificities. 17 Q. Do you know what functionality of 18 Apple devices is being accused by Smith? 19 A. No. I think it is something to do 20 with the touchscreen. But, I don't know 21 specifics. 22 Q. So, you have no knowledge of Smith's
Page 19 1 A. I think earlier this year. I think 2 sometime in February or around that time frame. 3 Q. Who contacted you? 4 A. This was the attorney for the patent 5 owner. 6 Q. So, this was an attorney of Norton 7 Rose? 8 A. Yes. 9 Q. Do you recall who that was? 10 A. I believe it was Mr. Daniel 11 Leventhal. 12 Q. Are you aware that the '114 patent 13 was asserted against Apple in a District Court 14 litigation that Smith filed against Apple? 15 A. Yes, at a high level. 16 Q. Are you familiar with this 17 litigation at all? 18 A. Yes, I am aware of it but I am not 19 keeping track of it. 20 Q. Are you familiar with Smith's 21 infringement contentions based on the '114 22 patent?	Page 21 1 basis for alleging that Apple infringes the '114 2 patent? 3 A. As I said -- 4 MR. LICYGIEWICZ: Objection to form. 5 THE WITNESS: -- I have not looked 6 at the specifics. I am just aware that there 7 are some infringement contentions that look 8 at that screen issues. 9 But, not more than that. 10 BY MS. HUANG: 11 Q. Did you review the IPR petition that 12 Apple filed against the '114 patent? 13 A. Yes. 14 Q. And do you recall that the IPR 15 petition included a listing of claims that 16 included the claims broken down by identifiers, 17 like [1.a], [1.b], [1.c]? 18 A. Yes. 19 Q. If I reference claim limitations 20 using those identifiers, like [1.f] or [32.g], 21 will you understand that I mean the claim 22 limitations referenced in the IPR petition?

Page 22 1 A. Yes. I can certainly look at my 2 declaration and link it to those. I don't 3 remember them. 4 Q. Okay. 5 A. Without looking at my declaration. 6 Q. Okay. So, if I ask questions that 7 reference those claim limitations and you are not 8 sure what limitation I am referencing, please do 9 ask me to clarify or ask for a document. I am 10 happy to provide that. 11 A. Thank you. 12 Q. You prepared a declaration for Smith 13 in this IPR proceeding relating to the '114 14 patent. Correct? 15 A. Yes. 16 Q. If I refer to your declaration as 17 Exhibit 2008, will you know what I am 18 referencing? 19 A. Yes. 20 Q. About how long did you spend 21 preparing your declaration for the '114 patent? 22 A. I don't remember the exact number.	Page 24 1 Q. Do you recall how many hours that 2 was in total? 3 A. Probably 5 to 6 hours. 4 Q. Does that include both time spent 5 with attorneys and time that you reviewed or 6 prepared on your own? 7 A. I did review some on my own, so that 8 would be a few more hours. 9 Q. 7 to 8 hours? 10 A. I couldn't hear you. 11 Q. 7 to 8 hours? 12 A. Yeah, a few more, a few more hours, 13 yes. Ten hours or so. 14 Q. What did you review in preparation 15 for this deposition? 16 A. Primarily my declaration and some of 17 the exhibits. 18 Q. Which exhibits? 19 A. The '114 patent, some of the 20 references relied upon by the petitioner. 21 Q. Anything else? 22 A. That should be about it.
Page 23 1 But, this was earlier this year. So, I think 2 around 50 to 100 hours. 3 Q. Does that time include your review 4 of petitioner's filings in this IPR proceeding? 5 A. I think so. 6 Q. Does that time include your review 7 of the exhibits that petitioner filed in support 8 of this petition? 9 A. Yes, those that were referred to by 10 the petition and the petitioner's expert. 11 Q. Does that time include the time you 12 spent writing the declaration? 13 A. Yes. 14 Q. Does that time include anything 15 further? 16 A. Discussions with attorneys and 17 everything else that goes into preparing that 18 report. 19 Q. And about how long did you spend 20 preparing for this deposition? 21 A. I had a couple of discussions with 22 the attorneys over the past couple of weeks.	Page 25 1 Q. Did you review the Board's 2 institution decision? 3 A. Yes. 4 Q. And that was in preparation for this 5 deposition? 6 A. Not recently but prior to the 7 declaration. 8 Q. Did you review the Board's order 9 regarding claim construction? 10 A. I believe so. 11 Q. Did you review that in preparation 12 for your deposition? 13 A. For my declaration. 14 Q. And about when did you start working 15 on this case for Smith? 16 A. Sometime in February. Around that 17 time frame. 18 Q. Am I correct in understanding that 19 Smith has not yet paid you for any of the time 20 you have spent on this case? 21 A. I'm going to -- I expect it will be 22 processed as usual.

Page 26 1 Q. What do you mean by as usual? 2 A. I expect to be paid, given the usual 3 processing delays for invoicing and subsequent 4 processing. 5 Q. Do you have anything in your 6 engagement agreements, typically, that ask for a 7 certain schedule for payment? 8 A. I don't recall one way or the other. 9 Q. Is it unusual to be paid more than 10 five months after you first start working on a 11 case? 12 A. I also had some delayed invoicing so 13 I still have, I was busy as well, so. They may 14 not have been timely invoicing. 15 Q. For the maybe 50 to 100 hours -- 16 strike that -- 17 So for the maybe 50 to 100 hours you 18 have spent working on this case, you have not yet 19 seen payment from Smith; is that correct? 20 A. As I said, I expect that the 21 processing will be followed through. 22 Q. All right. I'm going to upload	Page 28 1 Q. Before being engaged by Smith for 2 this matter, were you familiar with the '114 3 patent? 4 A. I don't recall one way or the other. 5 Q. So, you may have seen it and/or you 6 may not have seen it before? 7 A. Yes. 8 Q. You don't remember? 9 A. I don't recall one way or the other. 10 Q. As part of your preparation for 11 writing your declaration, did you review the '114 12 patent? 13 A. Yes. 14 Q. So, for the record, any questions 15 that I ask about the '114 patent during today's 16 deposition, I would like for you to answer from 17 the perspective of a person of ordinary skill in 18 the art. 19 Can you do that? 20 A. Yes. 21 Q. You said you did review the '114 22 patent.
Page 27 1 through the Zoom application Exhibit 1001. 2 If you will just bear with me for a 3 second here. 4 (Whereupon, previously marked 5 Exhibit 1001, 6 first referral.) 7 BY MS. HUANG: 8 Q. Can you let me know when you receive 9 that, Dr. Madiseti? 10 A. Are you uploading it to chat? 11 Q. I am, yes. To the Zoom chat 12 feature. 13 A. Okay, okay. 14 Okay. I have downloaded that. 15 Q. Can you open the file, please? 16 A. Okay. 17 Q. Do you recognize that file? 18 A. Yes. 19 Q. What is it? 20 A. It is the U.S. Patent 10,936,114. 21 Q. Is that Exhibit 1001? 22 A. Yes.	Page 29 1 Did you review all of the '114 2 patent? 3 A. I did review the '114 and 4 specifically the sections including and 5 specifically the sections relied upon in the 6 petition and its expert declarations. 7 Q. Did you review the '114 patent in 8 its entirety? 9 A. Yes. Specifically looking at the 10 sections relied upon in the petition and the 11 petition's declaration. 12 Q. Did you review it front to back? 13 A. Yes. As a part of my review of the 14 petition and the petition's declaration. 15 Q. Every section of the '114 patent? 16 A. Yes, I reviewed the sections that 17 were in the '114 and specifically those relied 18 upon in the petition. 19 Q. When you say specifically those 20 relied upon in the petition, did you review those 21 sections differently than the portions that were 22 not relied upon in the petition?

Page 30 1 A. I reviewed them in the same manner, 2 but I certainly paid more attention to them and 3 provided a rebuttal in my report. 4 Q. But, otherwise in the same manner? 5 A. The same manner with more attention 6 to the petitioner's arguments. 7 Q. About how much time did you spend 8 reviewing the '114 patent? 9 A. I don't remember the exact number 10 but I reviewed it several times. 11 So, I don't remember the exact 12 number. 13 Q. Two hours? 14 A. I couldn't hear you? 15 Q. Two hours? 16 A. No. More than that. I would say at 17 least ten. 18 Q. Does that include all of the time 19 you spent reviewing the '114 patent since your 20 work started in February? 21 A. Maybe a little more during the 22 preparation for the deposition.	Page 32 1 Q. What do you look for in the 2 specification of a patent when you are engaged as 3 an expert to try to look for or understand the 4 meaning of the claims of the patent? 5 MR. LICYGIEWICZ: Objection to form. 6 THE WITNESS: Again, it depends on 7 the case. It depends on the context of what 8 I have been asked to look for. 9 BY MS. HUANG: 10 Q. Can you give me some examples? 11 A. Prior art reference that was 12 asserted, I would look at the sections that were 13 relied upon by the petitioner's expert, for 14 example, to see if the arguments of the petition 15 or the petitioner's expert have met it. 16 If I was looking for certain 17 examples of how the claim would have been 18 practiced, some nonlimiting examples, I would 19 look at some embodiments. 20 It all depends on the context of the 21 particular task I was asked to do. 22 Q. You said if you were looking for
Page 31 1 But, as I said, I don't remember the 2 exact number. But it would be 10 to 15 hours 3 over the last 3, 4 months. 4 Q. Would you say it is fair that to 5 understand the meaning of claims of a patent, you 6 would naturally want to review the specification? 7 A. Again, I am not offering a legal 8 opinion here. 9 I believe that I reviewed the 10 specification and the claims and the assertions 11 by the petition. 12 Q. I guess I'm asking you a broader 13 question because you have said you have been 14 engaged on over 100 patent matters in your 15 career. 16 So, is it typical that when you are 17 engaged as an expert witness and you are asked to 18 understand the meaning of claims of a patent, you 19 naturally look to the specification to gain that 20 understanding? 21 A. At a high level. That is -- that is 22 typical.	Page 33 1 certain examples of the claims, how they would 2 have been practiced, you look for some 3 nonlimiting examples. 4 Is that something you did here? 5 A. As I said, my opinions are in my 6 declaration, so I'm not sure what specifically 7 you are asking. 8 But, whatever is in my declaration 9 means whatever I did. 10 Q. Yeah, I'm not asking for a specific 11 opinion here. 12 I'm asking for what the process was 13 for you in arriving at those opinions. 14 So, in this example, if you were 15 trying -- I guess the question is, were you 16 looking for certain examples of how the claims 17 would have been practiced in your review of the 18 '114 patent? 19 A. I was looking more at the petition 20 and the petition's declaration to see if the 21 arguments had met it and was supported. 22 Q. Did you look for nonlimiting

Page 34 1 examples of the claims in the '114 patent? 2 A. Not specifically. But, I certainly 3 looked at certain tasks that, for example, that 4 the board asked for additional clarification that 5 are documented in my declaration. 6 Q. You also said you might look at some 7 embodiments. 8 In your review of the '114 patent, 9 did you look for some embodiments of the claims 10 of the '114 patent? 11 A. I didn't. I did not look at them 12 specifically. 13 Q. When you review -- strike that. 14 When you reviewed the '114 patent, 15 did you first review the claims or did you start 16 from the front? 17 A. Both. I reviewed the claims, and 18 all the claims and then I looked at the 19 specification. 20 Q. So, did you start with the claims? 21 A. I think so. 22 Q. Is that typically your practice?	Page 36 1 motivations. I did review the specification 2 after reading the petition and the declarations 3 during my review of the matters that I opined 4 upon. 5 Q. Would you say it is fair to say that 6 to understand the meaning of the claims of a 7 patent, you would naturally want to review the 8 specification for discussion of the claims? 9 MR. LICYGIEWICZ: Objection to form. 10 THE WITNESS: It depends on the 11 context. It depends on what you are asked to 12 do. And it depends on the specific opinions 13 that you were asked to offer. 14 BY MS. HUANG: 15 Q. Were you asked to offer opinions 16 relating to the meaning of the claims of the '114 17 patent? 18 A. I was asked to offer opinions about 19 certain terms, I believe, that I discussed in my 20 declaration. 21 Q. And to understand the meaning of 22 certain terms of the claims of the '114 patent,
Page 35 1 A. It depends on the context and what I 2 was asked to do. 3 Q. But here you recall starting with 4 the claims? 5 A. Yes. 6 Q. Did you read the '114 patent just 7 once? 8 A. As I said, several times over the 9 past few months. 10 Q. So, after you read the claims and 11 the entirety of the patent, you read the patent 12 again? 13 A. I reviewed the claims, I reviewed 14 the petitioner's declarations, and the petition. 15 I reviewed the specification. I looked at the 16 basis of the petitioner's declarations. 17 I did it iteratively over a period 18 of time. 19 Q. Did you go back after you read the 20 claims and read the specification again to help 21 you gain an understanding of the claims? 22 A. Again, I don't remember the specific	Page 37 1 did you naturally want to review the 2 specification for discussion of those terms? 3 A. I do. It depends on the context and 4 what I was asked to do. 5 In this context I looked at the 6 petitioner's arguments, I looked at the 7 declaration, I looked at the claims, the plain 8 and ordinary meaning of the claims. I looked to 9 some portions of the specification and others. 10 So, it is a combination of things. 11 Q. When you said you looked to some 12 portions of the specification, how did you 13 identify what portions of the specification you 14 needed to look to? 15 A. It all depends. I don't remember 16 the specific sequence and thought process. 17 Q. Is there a reason why you limited 18 your review of the specification to understand 19 the claims to just some portions of the 20 specification? 21 A. That is not my testimony. My 22 testimony was that I was rebutting certain

Page 38 1 assertions by the petition and the petitioner's 2 declaration. 3 So, I did review certain portions 4 that were relevant to the petitioner's arguments. 5 I also reviewed other portions, for example, that 6 were referenced in my declaration with respect to 7 certain constructions that were asked. 8 So, it all depends on the scope of 9 the work. I have not memorized the exact 10 sequence of thought. 11 Q. So, to understand the meaning of 12 those specific '114 patent claim terms, was the 13 entirety of the '114 patent specification 14 informative to you or is it just limited to 15 portions of the specification? 16 A. I don't have a specific opinion on 17 that issue. 18 Q. Did you review the entirety of the 19 '114 patent to understand the meaning of the 20 claims? 21 A. I reviewed the specification and I 22 reviewed the claims, I reviewed all of the	Page 40 1 the art. 2 I looked at the petition, the 3 assertions, as well as the petitioner's 4 declaration. All of these along with the list of 5 things I was asked to do. 6 So, I had a specific task list that 7 I went through. 8 Q. Was your review of the '114 patent a 9 factor in helping you understand the meaning of 10 the claims of the '114 patent? 11 MR. LICYGIEWICZ: Object to the 12 form. 13 THE WITNESS: Again, I don't 14 understand the question, counsel. I think I 15 answered that. I reviewed the patent, the 16 claims, the specification. 17 I reviewed the petitioner's 18 assertions, the petitioner's declaration, I 19 responded to that as well as provided certain 20 opinions regarding certain terms I was asked 21 to opine. 22 BY MS. HUANG:
Page 39 1 claims. 2 And I reviewed the petition, and I 3 reviewed the petition's declarations. 4 Q. And when you reviewed the '114 5 patent, did you review it with an eye to 6 understand and identify discussions of the claims 7 of the '114 patent? 8 A. I think I answered that before. And 9 I don't remember exactly the whole thought 10 process. But, I reviewed the patent, the claims, 11 the specification. 12 I reviewed the petitioner's 13 assertions, the petition's declaration and what I 14 was asked to opine upon. And based on that, I 15 provided a declaration that contains my opinions 16 and my basis. 17 Q. Did reading the '114 patent help you 18 understand the meaning of the claims of the '114 19 patent? 20 A. I reviewed the patent, the 21 specification, the claims. I reviewed, I did it 22 from the view of a person of ordinary skill in	Page 41 1 Q. Did you review, on the front page of 2 the '114 patent, the section labeled references 3 cited? 4 A. Yes, I can see the section, 56. 5 Q. And do you understand that the 6 references cited is the section that is continued 7 from the cover page through page 15 of the '114 8 patent? 9 A. Yes. 10 Q. Did you review any of the references 11 cited on pages 1 through 15 of the '114 patent? 12 A. I don't recall reviewing, I may have 13 reviewed 1 of 2. But, I don't recall which ones. 14 But -- 15 To a large majority, I don't think I 16 reviewed it. 17 Q. So, sitting here right now, you have 18 no recollection of reviewing any of the 19 references cited on pages 1 through 15 of the 20 '114 patent? 21 A. Those that were referenced 22 explicitly in the file history, maybe. But, I

Page 42 1 don't think I reviewed most of them. 2 Q. But, even those that were referenced 3 in the file history, you think that only maybe 4 you reviewed them? 5 A. I don't recall specifically how 6 detailed I went into them. 7 Q. So, when you reviewed this section 8 labeled references cited on Pages 1 through 15 on 9 the '114 patent, you just reviewed the numbers 10 and the names of those references? 11 MR. LICYGIEWICZ: Objection to form. 12 THE WITNESS: As I said, I haven't 13 had a review of the file history. I had some 14 more details into some of them. 15 But, as I said, I don't recall 16 specifics. 17 BY MS. HUANG: 18 Q. Can you turn to page 41 of the '114 19 patent. That is where Column 1 starts. Can you 20 let me know when you are there. 21 A. Okay. 22 Q. Okay. Did you review any of the	Page 44 1 A. I don't recall specifics. It would 2 be through -- I don't recall the exact process. 3 It may have been through discussions with the 4 attorneys. I don't recall the specifics. 5 Q. But you didn't independently review 6 any of them absent specific instructions from the 7 attorneys? 8 A. Again, it was mutual discussions, I 9 believe. But, I don't recall the specifics. 10 Q. Do you know what it means to be a 11 related application? 12 A. Not sure as to the legal meaning. 13 But it could be something that is a continuation 14 of maybe a parent or a continuation or something 15 like that. 16 Q. Do you hold any patents, 17 Dr. Madiseti? 18 A. Yes. 19 Q. How many? 20 A. I believe about 75. 21 Q. Do you recall when you got your 22 first patent?
Page 43 1 references cited on page -- strike that. 2 Did you review the section labeled 3 cross-reference to related applications? 4 A. Yes. 5 Q. Did you review any of these related 6 applications? 7 A. I reviewed, I believe at least a 8 couple of the provisionals. But, other than 9 that, I don't think I reviewed the others in 10 detail. 11 Q. Do you recall which ones you 12 reviewed? 13 A. I think I reviewed the 918 14 provisional. Other than that, I don't recall 15 specifics. 16 Q. Why did you only review the 918 17 provisional? 18 A. That was something that I was -- I 19 reviewed as a part of, I believe, some of my 20 opinions. 21 Q. How did you decide which one of 22 these applications to review?	Page 45 1 A. Around ten years ago. I don't 2 remember. Maybe a bit later than that. 3 But, I don't remember the exact 4 dates. 5 Q. Are all of your patent filings or 6 any of your patent filings related to the work 7 that you do at Georgia Tech? 8 A. No. 9 Q. What do your patent filings relate 10 to? 11 A. They are all my own work. 12 Q. Are you a solo inventor on those 13 patents or did you collaborate with others? 14 A. I am the first lead inventor. I -- 15 typically I collaborated with maybe one other 16 inventor. 17 Q. Was that with a particular venture, 18 or just on the weekends? 19 A. I couldn't hear you. 20 Q. Was your -- are your patent filings 21 related to a particular venture? 22 A. No. They were just based on my

Page 46 1 personal interest. 2 Q. And what technology do your patents 3 relate to? 4 A. They relate to, generally to 5 computing. Electronics, computing, software, 6 blockchain. Artificial intelligence. 7 Q. Do you own all of your patents? 8 A. Yes. 9 Q. Have you filed any patents with 10 Georgia Tech as the owner? 11 A. No. 12 Q. Do any of your patents have 13 continuations or divisional applications? 14 A. Yes. 15 Q. Have you filed any provisional 16 patents before? 17 A. Yes. 18 Q. Do you know what a provisional 19 patent is? 20 A. Again, not from a legal point of 21 view. 22 But something that is filed to	Page 48 1 Q. Of the 75 patents that you hold, did 2 you draft any of them yourself? 3 A. Yes. 4 Q. About how many did you draft 5 yourself? 6 A. Almost all. 7 Q. Have you hired attorneys to file 8 patents for you before? 9 A. Yes. 10 Q. Have you hired attorneys to draft 11 patents for you? 12 A. They focus more on the claims, and 13 that has been the typical way I work with them. 14 Q. On Page 42 of the '114 patent at 15 Column 4, starting at line 4 -- 44, excuse me -- 16 do you see a section that is labeled brief 17 description of the several views of the drawings? 18 I guess it really starts around line 19 18 or 19. 20 Do you see that section? 21 A. Yes. 22 Q. Did you review all of those
Page 47 1 identify certain inventive aspects of some 2 invention. That then can be developed into a 3 nonprovisional application at a later date within 4 a year or so. 5 Q. Don't miss that year, it is kind of 6 important. 7 A. Yes. Within a year, yes. 8 Q. Do you know what a continuation 9 application is? 10 A. A continuation typically would use 11 the same specification but it would add other 12 claims. 13 Q. What about a divisional? How does 14 it differ from a divisional application? 15 A. Sometimes you have -- again, I don't 16 know the specific legal meanings. 17 But, at a high level, it means that 18 you may have different teams or different types 19 of inventions within the specification or a 20 patent, so you may be able to file different 21 types of claims. 22 But, I could be wrong.	Page 49 1 descriptions in the brief description of the 2 several views of the drawings? 3 A. I reviewed this section briefly. 4 Yes, I did. 5 Q. Did you also review the drawings? 6 A. Again, briefly. 7 Q. Would you say that the description 8 of the drawings fairly describes those drawings? 9 MR. LICYGIEWICZ: Objection to form. 10 THE WITNESS: I don't have an 11 opinion also, on that issue. 12 BY MS. HUANG: 13 Q. But you did review all of the 14 drawings; is that correct? 15 A. Very briefly. 16 Q. If you would turn to Page 31 of the 17 1001 patent -- sorry, I'm going to restate that. 18 Can you please turn to Page 31 of 19 the '114 patent? Do you see Figure 16? 20 A. I do. 21 Q. Do you recall reviewing Figure 16? 22 A. At a high level, I have reviewed it

13 (Pages 46 to 49)

Page 50 1 briefly. 2 Q. Does Figure 16 inform your opinions 3 related to the '114 patent? 4 A. I'm not sure if I had referred to 5 Figure 16 in my declaration. 6 Could I have a copy of my 7 declaration? 8 Q. Yes. Let me upload that for you. 9 A. Uh-huh. 10 Q. Headed your way. 11 (Whereupon, previously marked 12 Exhibit 2008, 13 first referral.) 14 THE WITNESS: Okay. I have 15 downloaded the exhibit. 16 BY MS. HUANG: 17 Q. So, to repeat the question, did 18 Figure 16 inform your opinions related to the 19 '114 patent? 20 MR. LICYGIEWICZ: Objection to form. 21 THE WITNESS: I don't think I 22 provided an opinion on Figure 16.	Page 52 1 '114 patent? 2 MR. LICYGIEWICZ: Objection to form. 3 THE WITNESS: I don't have an 4 opinion on that, counsel, to the best of my 5 knowledge. I don't believe I referenced it 6 in my declaration unless you can point to me 7 otherwise. 8 It does talk about, as I said, my 9 declarations capture my opinions and the 10 basis. 11 I don't believe I commented on 12 Figure 24 of the '114 unless you show me 13 where in the declaration I did provide an 14 opinion. 15 BY MS. HUANG: 16 Q. On Page 43 of the '114 patent -- 17 A. 43? 18 Q. Yes. Page 43. I will wait for you 19 to get there. Sorry, I'm jumping around a little 20 bit. 21 A. Yeah, okay. So, I am on page 43. 22 Q. Do you see where Column 5 starts and
Page 51 1 If you can remind me if I did. I 2 don't believe I provided an opinion with 3 reference to Figure 16 in my declaration. 4 BY MS. HUANG: 5 Q. Can you turn to Page 39 of the 10 -- 6 I'm sorry, of the '114 patent? 7 A. Okay. 8 Q. Do you see what is labeled as Figure 9 24? 10 A. I do. 11 Q. Is this one of the drawings you 12 reviewed in your analysis? 13 A. Very briefly. I mean, to the extent 14 as I said earlier, I focused on the petition and 15 what the petition and its declarant relied upon. 16 I don't believe -- I don't believe I 17 have reviewed this. 18 I believe I reviewed the entire 19 specification in the patent in that context as to 20 a rebutting the assertions of the petition. 21 Q. Did Figure 24 inform your opinions 22 relating to any of the challenged claims of the	Page 53 1 then near the end there is a section labeled 2 detailed description? 3 A. I do. 4 Q. Did you review all of the detailed 5 description of the '114 patent? 6 A. I briefly have gone through the 7 specification and the claims several times. And, 8 as I said, my focus was on rebutting and 9 addressing the assertions by the petitioner and 10 its declarant. 11 Q. But you did review the entire 12 detailed description? 13 A. I reviewed it briefly. 14 Q. And that would be -- 15 A. And focused, and focused on the 16 assertions of the petition. 17 Q. So, you reviewed from Column 5 about 18 Line 51 to Column 97 or so? 19 A. Very briefly. 20 Q. Okay. 21 A. Very briefly to focus on the 22 assertions by the petition and its declarant.

14 (Pages 50 to 53)

Page 54 1 Q. Apologize, I'm going to jump you 2 again. 3 Can you please turn to Page 83 of 4 the '114 patent? 5 A. Okay. 6 Q. Do you see the text that begins at 7 Column 86 Line 30? 8 A. Yes. 9 Q. Do you see that list of patent 10 applications and patents that starts at Column 86 11 Line 30 of the '114 patent? 12 A. Yes, I do. 13 Q. Did you review any of those patent 14 applications and patents? 15 A. I don't think I reviewed most of 16 them. Unless they are referenced in my 17 declaration. 18 Q. And why did you not review them? 19 A. Again, I was focusing more on the 20 petition and its assertions and what I was asked 21 to do for my declaration with respect to certain 22 claim terms.	Page 56 1 in this case did not challenge all of the claims 2 of the '114 patent. Right? 3 A. That is right. 4 Q. Did you review Claim 1 of the '114 5 patent? 6 A. Yes. 7 Q. Did you review Claim 32 of the '114 8 patent? 9 A. Yes. 10 Q. Did you review Claim 34 of the '114 11 patent? 12 A. Yes. 13 Q. Did you review Claim 64 of the '114 14 patent? 15 A. Yes. 16 Q. Did you review any other claims of 17 the '114 patent? 18 A. I reviewed Claims, I believe, 30 and 19 62 as well. I mean, I reviewed all of the 20 claims. 21 But, I focused in my declaration on 22 Claims 1, 32, 34, and 64. And Claims 30 and 62,
Page 55 1 But, I don't believe I have -- I 2 did -- I did -- I believe that I just looked at 3 these in a very high level manner for these 4 columns. 5 I don't think I reviewed these 6 specific applications in detail. 7 Q. You said you didn't review them in 8 detail. 9 Did you review them at all? 10 A. I don't think so. Unless they are 11 referenced in my application. 12 Q. So, unless they were referenced in 13 your declaration, you did not review any of these 14 documents? 15 A. I don't think so. 16 Q. Can you turn to Page 89 of the '114 17 patent. 18 A. Yes. 19 Q. Do you see where the claims begin 20 near the top of Column 97? 21 A. I do. 22 Q. Now, you understand that petitioner	Page 57 1 I believe. 2 Q. Did you look at -- oh, I'm sorry, 3 please continue. 4 A. Those were the main focus of my 5 declaration. 6 Q. Did you review Claims 27 or 59? 7 A. I believe I reviewed all the claims 8 of '114. But, which claims did you say? 9 Q. 27 and 59. Did you review those two 10 claims in detail? 11 A. 27. I reviewed these. I was not 12 asked to offer an opinion on them. 13 Q. Based on your review of the '114 14 patent, did you fairly understand the meaning of 15 those claims? 16 MR. LICYGIEWICZ: Objection to form. 17 THE WITNESS: I did not focus on 18 these claims, counsel. I was not asked to 19 offer an opinion on them. 20 BY MS. HUANG: 21 Q. Based on your review of the '114 22 patent, did you fairly understand the meaning of

15 (Pages 54 to 57)

Page 58 1 Claims 1, 30, 32, 34, 62, and 64? 2 A. I opined about the, in my 3 declaration, as to the topics I was asked to 4 opine on with respect to these claims as a part 5 of my analysis. 6 I provided a declaration and the 7 basis of my opinions in the declaration. 8 Q. Did you review any of the dependent 9 claims? 10 A. I reviewed all the claims during my 11 review. 12 Q. Did your review of the dependent 13 claims help you to gain an understanding of the 14 independent claims? 15 A. As I said, I don't specifically 16 recall which dependent claims, which issues. 17 But, I reviewed all the claims. 18 Q. Sure. Can you turn to your 19 declaration at Paragraph 118. 20 A. Which page is that? 21 Q. Yes, it is Page 64 of the PDF but it 22 is 61 as marked, sort of. It is both 61 and 64.	Page 60 1 with reference to dependent Claim 8. 2 Q. So, did your review of dependent 3 claims of the '114 patent help you to gain an 4 understanding of the independent claims? 5 A. To the extent that I referenced them 6 in my declaration. 7 Q. If they are not referenced in your 8 declaration, did they not inform your 9 understanding? 10 A. As I said, I did not offer opinions 11 on certain -- on all of the dependent claims, on 12 all the claims in that respect to the extent that 13 I have an opinion. 14 I provide the opinion on the basis 15 in my declaration. 16 Q. So, to the extent the dependent 17 claims are referenced in your declaration, those 18 claims help you to gain an understanding of the 19 independent claims? 20 A. The way I would state that is that 21 in my declaration I provided some support. But 22 some of my opinions and some of the support may
Page 59 1 I trust you will find it. 2 A. Okay, the PDF. Let's go for the 3 PDF, thank you. 4 Q. Okay, PDF number 64. 5 A. Which is page number 61, I believe. 6 Q. Correct. 7 A. Okay. 8 Q. Let me know when you are there. 9 A. I am on Page 61. Printed page 61. 10 And, sorry. I am -- it says Page 64 of 69. 11 Q. Exactly. That is what I was trying 12 to give you a lot of options so we can find it 13 together. 14 A. So, let us -- 15 Q. Take a minute and read it. 16 A. Yeah, yeah, okay. 17 Q. Do you want to take a second, just 18 read the paragraph? 19 A. Which paragraph? 20 Q. Paragraph 118. 21 A. 118. Okay. 22 Yes, I have reviewed Paragraph 118	Page 61 1 reference dependent claims for the reasons that I 2 state in my declaration. 3 Q. Were there opinions that you arrived 4 at in your review that you did not put in your 5 declaration? 6 A. I don't recall. 7 Q. So, sitting here right now, is there 8 any other opinion that you omitted from your 9 declaration? 10 A. I don't believe so. 11 Q. Do you understand that the scope of 12 a dependent claim must fit within the independent 13 claim? 14 MR. LICYGIEWICZ: Objection, form. 15 THE WITNESS: Could you please 16 explain a little more? 17 BY MS. HUANG: 18 Q. Sure. 19 A. What are you trying to say? 20 Q. Yeah. So, you mention you have 75 21 patents. 22 Do you understand what the claims

Page 62 1 relate -- do you understand how the claims relate 2 to a patent? 3 A. At a high level, yes. 4 Q. Do you understand the difference 5 between an independent claim and a dependent 6 claim? 7 A. Yes. 8 Q. Do you understand that if something 9 were to read on a dependent claim, then it must 10 also read on the independent claim? 11 A. At a high level, yes. 12 MS. HUANG: We have been going about 13 an hour. Would you like to take a break? 14 THE WITNESS: Yes, that is fine. 15 (Recess taken -- 11:29 a.m.) 16 (After recess -- 11:40 a.m.) 17 BY MS. HUANG: 18 Q. Dr. Madiseti, welcome back. 19 Just to confirm, you didn't speak 20 with anybody regarding the substance of your 21 testimony during the break, correct? 22 You are muted, Dr. Madiseti.	Page 64 1 And it is a user touch that is 2 initially detected on the touchscreen that the 3 object has, for example, in limitations [1.e], 4 [32.e] and [34.f]. 5 And, gestures include patent based 6 and multiple actions that may be recognized in 7 the form of an ordered sequence, and so gestures 8 are discussed further in the sections below. 9 I mean, the gestures typically start 10 with some sort of initial detection of a user's 11 touch, and it is a singly continuous touch that 12 may result in one or more actions or events that 13 are based on the duration as described in the 14 claim. As I describe in my declaration. 15 Q. Are you done? I'm sorry, I didn't 16 mean to speak over you. 17 A. Yeah, I did several paragraphs, so I 18 was trying to summarize it rather than read 19 through all of them. 20 Q. Is your understanding of what the 21 term gesture means in the '114 patent, the plain 22 and ordinary meaning as a POSITA would understand
Page 63 1 A. I did not speak to anybody. 2 Q. As part of your analysis, did you 3 consider the meaning of any of the terms recited 4 in the claims of the '114 patent? 5 A. As outlined in my declaration, I 6 provided certain opinions about claim terms and I 7 believe these are listed in Section 9 which is 8 titled Claim Interpretation. 9 I may have done some other opinions 10 in other sections, but this is where I believe I 11 offered some opinions with respect to claim 12 interpretation. 13 Q. Did you consider what the meaning is 14 of the term gesture as it is used in the '114 15 patent? 16 A. As I described in Section 9, I 17 provided certain opinions about that. 18 Q. What is the meaning of the term 19 gesture as it is used in the '114 patent? 20 A. So, as I describe in Paragraph 58 21 onwards, the claims discuss a gesture or they 22 include the term, or recite the term gesture.	Page 65 1 it? 2 A. A POSITA would understand it like 3 how I described it in the context of the plain 4 and ordinary language of the claims. 5 Q. So, is your interpretation the plain 6 and ordinary meaning of the term gesture? 7 A. As I described in my declaration in 8 Section 9 starting in Paragraph 58, that one of 9 ordinary skill in the art would understand that 10 the gesture begins with this, in the claims, 11 begins with this initial detection of the user's 12 touch. 13 And it is a single continuous touch 14 that may result in different types of actions, 15 events, based on the limitations of the claim. 16 For example, on the duration. Meeting certain 17 conditions. 18 So, that would be the sort of, my 19 understanding of how one of ordinary skill in the 20 art would understand the plain and ordinary 21 meaning. 22 Q. Does a gesture have to begin with

Page 66 1 detection of a touch on an object on the 2 touchscreen? 3 A. As in the claims, for example, Claim 4 1 or Claim 32, or Claim 34, it begins -- it 5 begins with the -- 6 Looking at the Claim 1, the gesture 7 begins with the detection on the touchscreen on 8 the object that is limitation, I believe, [1.e]. 9 Q. Is a gesture a user touch initially 10 detected on the touchscreen at the object that is 11 evaluated under the collective logic recited by 12 the conditional limitations? 13 MR. LICYGIEWICZ: Objection to form. 14 THE WITNESS: The claims speak for 15 themselves. So, I'm not sure what you are 16 asking. 17 But, to the extent that you are 18 asking whether the gesture is a user touch 19 initially detected on the touchscreen object, 20 the answer is yes. 21 And then, you have to satisfy the 22 limitations of the claim based on the	Page 68 1 the user action. 2 So, when the magnitude of a duration 3 being detected is less than a first magnitude 4 threshold you can perform an operation and then 5 that is limitation F. 6 And then limitation G talks about 7 the magnitude of the duration of the gesture, 8 which is the anticipated basis is greater than a 9 first magnitude of a performing the scaling and 10 all of that. And then that is limitation G. 11 And then there is a limitation I, 12 where the magnitude of the duration of the 13 gesture because it again references back to the 14 gesture of limitation [1.e], for example. E as 15 in Echo. 16 That magnitude of the duration is 17 again referencing back to the initial detection. 18 Q. Does single continuous touch mean 19 that a user cannot lift his or her finger at all 20 during the interaction with the device? 21 A. It has to satisfy the limitations of 22 Claim 1 or 34, or 32.
Page 67 1 duration and the various events that are 2 recited therein. 3 BY MS. HUANG: 4 Q. Does a gesture have to be a single 5 continuous touch? 6 A. As used in the claims of the '114 7 that are at issue here. For example, Claims 1, 8 32, 34, and so on. 9 One of ordinary skill in the art 10 would understand that it would be a single 11 continuous, singly continuous gesture. 12 Q. What is a single continuous touch? 13 A. A single continuous touch would be, 14 for example, if you look at the claim of the 15 '114, you have a -- 16 Q. I'm sorry, which claim? 17 A. Claim 1. 18 Q. Okay. 19 A. So, in Claim 1 you have a detection 20 of the gesture. In the limitation [1.e], and 21 then there is a singly continuous touch where you 22 are focused on the magnitude of the user event or	Page 69 1 So, in this case counsel, the 2 limitations, the answer is yes. It cannot. The 3 magnitude has to be evaluated as per the 4 requirements F, G, and I. 5 Q. Is a single instance of a user input 6 a gesture? 7 MR. LICYGIEWICZ: Objection to form. 8 THE WITNESS: I don't understand the 9 specific question. What do you mean by 10 instance? 11 BY MS. HUANG: 12 Q. Sure. Can you turn to page, it is 13 PDF Page 38 of your declaration, please? 14 A. Uh-huh. Okay. 15 Q. And look at Paragraph 64. 16 A. Uh-huh. 17 Q. The first sentence that is not 18 italicized in your declaration you write, "A 19 single instance of user input that met limitation 20 [1.f] would also not meet [1.g], or [1.i], and 21 vice versa." 22 What do you mean by a single

Page 70 1 instance of user input? 2 A. Yes. I mean, for example, if a user 3 is holding, for example, the user is carrying out 4 a gesture for a particular duration, as an 5 example, pressing down for a particular period of 6 time, that period of time that the user event 7 happens, as a part of this gesture, would satisfy 8 one of those limitations, [1.f], [1.g], or [1.i]. 9 It could be the less than or greater 10 than a particular threshold. It can't be both 11 less than or greater than. 12 So, therefore, I say that the single 13 instance of user input that met limitation [1.g] 14 may not meet limitation [1.a]. 15 Q. So is it fair to say that a single 16 instance of user input is the same thing as a 17 single detected gesture? 18 MR. LICYGIEWICZ: Objection to form. 19 THE WITNESS: We are talking user -- 20 we are talking about user inputs here as a 21 part of the gesture. 22 So, there is a single gesture, and	Page 72 1 event, duration detected on the touchscreen of 2 the object referring back to [1.e] is greater 3 than the first magnitude threshold, it performs 4 skill. 5 So, the user event is determining 6 the duration in these limitations. 7 Q. What is a user event? 8 A. User event could be the user input. 9 The input from the user regarding the duration. 10 So, you detect the gesture on [1.e] 11 as in Echo, then the user inputs that press for a 12 particular duration, for example, and that is an 13 example of a user input. 14 Q. You said, "A user input that press 15 for a particular duration is an example of a user 16 input." 17 Did I quote that correctly? 18 A. Yes. For example, the magnitude of 19 the duration of that press that was initiated in 20 limitation [1.e], as in Echo, is an example of a 21 user input that is part of that gesture. 22 Q. I'm going to read back what the
Page 71 1 the user input in this case could be carried 2 out for a particular duration that has to 3 meet one or more of those conditions 4 depending on the claim. 5 BY MS. HUANG: 6 Q. What is the relationship between a 7 single instance of user input and a single 8 detected gesture? 9 A. A single detected gesture means you 10 are detecting the gesture in limitation. If you 11 look at the claim, [1.e] says that you are 12 detecting a gesture on the touchscreen and on 13 object. 14 And then, you have a user event that 15 says a particular magnitude of that duration of 16 the gesture. 17 If the magnitude is less than a 18 first magnitude threshold, then the gesture that 19 includes that duration would satisfy [1.f] and 20 therefore, it will perform an operation. 21 Similarly, if it -- if the magnitude 22 or the duration of the gesture which is that user	Page 73 1 stenographer wrote to make sure I heard you 2 correctly. 3 "The magnitude of the duration of 4 that press that was initiated in limitation 5 [1.e], is an example of a user input that is part 6 of that gesture." 7 Is that what you meant to say? 8 A. Yes. I was referring to an example 9 of a user input in this case with respect to 10 Claim 1. 11 Q. Are you saying that the magnitude of 12 the duration is part of the gesture? 13 A. The user input that determines the 14 magnitude of the duration of the gesture is part 15 of the gesture that was initiated in limitation 16 [1.e], as in Echo. 17 Q. What is the relationship between a 18 user input and a gesture? 19 A. The user input is part of the 20 gesture, and it starts with the user touching the 21 object on the touchscreen that initiates the 22 detection of the gesture in limitation [1.e].

Page 74 1 And that the user, for example, 2 continues the touch as a user event makes the 3 magnitude of the duration of the touch that is 4 referenced in [1.e], is less than a first 5 magnitude threshold. Then that is an operation 6 that is exhibited. 7 So, that is how the user event is 8 part of the gesture with respect to limitation 9 [1.f]. 10 Q. You said "and that the user, for 11 example, continues the touch as a user event 12 makes the magnitude of the duration of the touch, 13 that is referenced in [1.e], is less than a first 14 magnitude threshold." 15 What is the touch that is referenced 16 in [1.e]? 17 A. It is when you detected the gesture 18 being started. 19 Q. Do you mean -- sorry. 20 A. So, as an example, you touch a 21 particular item that is the detection of the 22 gesture.	Page 76 1 started in limitation [1.e] and was carried 2 through in limitations F, G, H, and I. 3 Q. I want to make sure I understand 4 what you are saying and I think part of the 5 confusion is that, and you will see it on the 6 transcript, that you seem to be interchanging the 7 word gesture and touch. 8 Are those two words interchangeable 9 in your mind? 10 A. No. The gesture is initiated with a 11 user touch or a user input, and the user input or 12 the user touch continues for a particular 13 duration of time, depending on the duration of 14 time satisfying one or more limitations, [1.f], 15 [1.g], [1.h], or [1.i], a suitable action is 16 taken. 17 But, they all reference the same 18 gesture which started with the user touch or the 19 user input in limitation [1.e] as in Echo. 20 Q. Let's go back to your declaration, 21 maybe you are still there. 22 But at Paragraph 64.
Page 75 1 Then you touch that item for -- did 2 you speak, counsel? 3 Q. I did not. 4 A. Okay. Then when you detect that 5 touch on the item and you continue that touch for 6 a duration, that is less than a first magnitude 7 threshold, that touch that was referenced in 8 [1.e] in limitation [1.f] then the claim requires 9 that you perform an operation. 10 If that same touch continues to be 11 continued from limitation [1.e] to be greater 12 than the first magnitude threshold referenced in 13 limitation [1.f], then a scaling operation is 14 performed with that object. 15 And then finally, if the -- from 16 limitation I, when the magnitude of the duration 17 of the gesture which started in [1.e] as in Echo 18 being detected on the touchscreen on the object 19 is greater than a second magnitude threshold, you 20 perform another operation. 21 So, it is a single continuous touch 22 that is part of the gesture of the claim that	Page 77 1 A. Uh-huh. 2 Q. The words in italics, am I correct 3 in saying that those words are a question posed 4 by the board? 5 A. Yes. I think so. 6 Q. So, that is whether conditional 7 limitations [1.f], [1.g], and [1.i] could be met 8 by a single detected gesture. 9 Did I read that correctly? 10 A. Yes. 11 Q. And then does your full answer to 12 the Board's question follow in Paragraph 64? 13 A. Yes. 14 Q. Do you have anything further you 15 want to add to that paragraph? 16 A. As I said, I may reference other 17 portions of the declaration but that is where I 18 believe the substance lies. 19 Q. And the substance for your answer 20 lies in what would be three sentences in 21 Paragraph 64 that you wrote; is that correct? 22 A. Read in context of that section.

Page 78 1 So, I would say that you read that entire section 2 in context. 3 Q. But you don't reference a, quote, 4 single detected gesture anywhere in your answer, 5 do you? 6 A. I disagree. 7 Q. Can you tell me where you use the 8 words single detected gesture? 9 A. So, it says that a single instance 10 of user input. And, it is continuing from the 11 limitation [1.e]. 12 Q. So, is it your position that a 13 single instance of user input is the same thing 14 as a gesture? I'm sorry, strike that. 15 Is it your position that a single 16 instance of user input is the same thing as a 17 single detected gesture? 18 A. It is my opinion that, if you look 19 at the Claim 1, for example, the gesture that is 20 detected in limitation [1.e] is carried through 21 in the remaining limitations F, G, H, and I. 22 And that same gesture referenced as	Page 80 1 case has a duration. 2 The magnitude of the duration is 3 then evaluated according to the limitations 4 [1.f], [1.g], and [1.i], and suitable actions as 5 enumerated in the claim limitations f, g, h, and 6 i, are carried out depending on the magnitude of 7 the duration satisfying certain conditional 8 conditions, such as being less than or greater 9 than a threshold. 10 But, all the durations referenced 11 back to the gesture that was detected in 12 limitation [1.e]. 13 Q. Is that the single instance of user 14 input? 15 A. Again, I refer to my earlier answer 16 that the [1.e] is where the detection of the 17 gesture starts with the user input on the object 18 and the duration of the touch, for example, on 19 the object is evaluated according to limitations 20 [1.f], [g], [h], and [i]. 21 And depending on the duration of 22 that gesture detected in limitation [1.e],
Page 79 1 the gesture, has an antecedent basis to 2 limitation [1.e] as in Echo, and that references 3 the single continuous input from the user on the 4 touchscreen. And the duration of it is evaluated 5 with respect to the conditions [1.f], [g], [h], 6 and [i]. 7 Q. So, is the, quote, single instance 8 of user input, end quote, that you reference in 9 your answer to the board, the same gesture that 10 is detected in element [1.e] of the '114 patent? 11 A. The gesture that is detected in 12 element [1.e] is then carried through and its 13 duration is evaluated in subsequent limitations, 14 but it is the same gesture that is referenced in 15 element [1.e] that is evaluated with respect to 16 its duration in elements F, G, H, and I. 17 Q. So, is the gesture that is detected 18 in element [1.e] and then carried through in 19 subsequent limitations [1.f], [1.g], and [1.i] 20 the same single instance of user input? 21 A. The way I said is that you detect 22 the gesture in [1.e] and the user input in this	Page 81 1 certain observations are carried out. But it's 2 one and the same gesture as in [1.g], [h], and 3 [i] as in limitation [1.e]. 4 Q. Could conditional limitations, 5 [1.f], [1.g], and [1.i] be met by a single 6 detected gesture? 7 MR. LICYGIEWICZ: Objection to form. 8 THE WITNESS: As I described, it is 9 the user input which is the duration. 10 If the user has a duration that is 11 less than the first magna threshold then the 12 limitation [f] would be met. 13 If the magnitude of the duration is 14 greater than a first magnitude threshold, 15 then limitation [g] would be met, but [f] 16 would not be. 17 If the magnitude of the duration of 18 the gesture that is detected in [1.e] is 19 greater than a second magnitude threshold, 20 then limitation [i], condition [i] will be 21 satisfied. 22 But, any -- this is a programming

Page 82 1 claim. So, we are talking about 2 instructions. 3 The claim would be evaluated for all 4 of these conditional conditions based on the 5 magnitude of the duration of the gesture that 6 started in [1.e]. 7 So, all these conditions would need 8 to be evaluated based on the duration. 9 BY MS. HUANG: 10 Q. And this might just be because I'm 11 looking at a live realtime transcript. 12 But, what I am reading as the 13 beginning of your answer was "As I described, it 14 is the user input which is the duration." 15 Is that right or did you mean to say 16 something else? 17 A. I said that there is a detection -- 18 in [1.e], there is a detection of a gesture which 19 could be a user input that touches an object. 20 And then that user input which is 21 the touch may be continued for the duration. And 22 that single continuous touch is evaluated in	Page 84 1 [1.f], [g], and [i]. And all of them 2 reference back to the gesture in [1.e] as in 3 Echo, which begins with an initial touch. 4 BY MS. HUANG: 5 Q. You understand the Board's question 6 was whether conditional limitations [1.f], [1.g], 7 and [1.i] could be met by a single detected 8 gesture, right? 9 A. Which paragraph are you looking at? 10 Q. I am referencing Paragraph 64 of 11 your declaration. 12 A. Yes. So, I am saying here that the 13 gesture that begins in [1.e] has a duration based 14 on a user input event. 15 The user may decide to hold it for a 16 certain period of time, which is the user input, 17 that has a duration. 18 And based on the duration, 19 conditions [1.g] may be met, or [1.i] could be 20 met. 21 So, a single detected gesture may 22 meet one or the other. So, as I describe here,
Page 83 1 terms of its duration by limitations [1.f], 2 [1.g], and [1.i]. 3 And, based on -- based on the -- and 4 based on the conditional values of the duration, 5 a suitable operation would be performed. But all 6 limitations, [f], [g], [h], and [i], reference 7 the same gesture that was detected in [e]. 8 Q. Does the gesture have a duration? 9 MR. LICYGIEWICZ: Objection, form. 10 THE WITNESS: When you -- for 11 example, I was giving you an example in this 12 claim where in limitation [1.e] you detect 13 the gesture. And in this case, the magnitude 14 of the duration of the gesture. So, we were 15 referencing something like a touch. And the 16 touch could be continued for a duration, 17 which is the magnitude or its length. 18 And so, if that is less than a first 19 threshold, the conditional limitation [f], 20 [1.f] is met. So, in this case, the gesture 21 has a single continuous action which is the 22 duration that is evaluated in limitations	Page 85 1 limitation [1.f], if the user duration met [1.f], 2 it would not meet [1.g] or [1.i]. 3 If it met [1.g], it would not meet 4 [1.f], for example. 5 Q. Is there any significance to your 6 use of the phrase single instance of user input 7 as opposed to single detected gesture as the 8 Board Asked? 9 A. The single detected gesture would 10 mean that it references back to [1.e] where you 11 have a single instance, which is one continuous 12 user input that has a duration. 13 And the duration is evaluated as and 14 whether it meets limitations [1.f], [g], or [i]. 15 So, if it meets [1.f], it does not 16 meet [g] or [i], for example. 17 Q. Can you turn back a couple of pages 18 in your declaration, it would be to page, PDF 19 Page 36 of your declaration. 20 A. Okay. 21 Q. Paragraph 61, specifically. 22 A. Okay.

Page 86 1 Q. You wrote in paragraph 61, "At the 2 same time, because the claims referred to the 3 logic used to evaluate numerous instances of user 4 input, it is not necessary that the prior art 5 include logic where the preconditions for each 6 limitation would be met in response to a single 7 user input." 8 I would like to better understand 9 what you mean by this sentence. 10 Can you explain that to me? 11 A. So, it means that -- what it means 12 is that if you are in claim limitations [1.e], 13 you are -- you are -- you are -- you detect a 14 gesture with the user touch in limitations [1.e]. 15 And that touch has a duration. So, 16 the duration from a user could be many different 17 lengths or durations. 18 The prior art should include logic 19 that evaluates all the conditions. So, 20 therefore, you -- if you have a one instance with 21 a duration of ten, and the first threshold was 22 11, you could have another instance of the user	Page 88 1 arguments are very similar. 2 Q. When you refer to numerous instances 3 of user input in the first sentence of paragraph 4 61, what do you mean? 5 A. It means that the user input would 6 have different durations, for example. 7 Q. Are you saying a single user input 8 could have different durations? 9 A. No, an instance. For example, in 10 case in example 1, [1.e] could be initiated and 11 then the user input would have a duration of ten. 12 In another instance, the duration 13 could be 15. In another instance, the duration 14 could be 20 or something. So, these are 15 different examples of how long the durations can 16 be. 17 Q. Are those different instances? 18 MR. LICYGIEWICZ: Objection to form. 19 THE WITNESS: They would be called 20 as different durations, yes, which is the 21 user input takes a different duration. 22 BY MS. HUANG:
Page 87 1 duration being 14 where the threshold was 11. 2 All of these conditional limitations 3 should be present in the prior art. However, for 4 a particular user input, one of the conditionals 5 would be evaluated based on its value. 6 Q. Just one of the conditionals would 7 be evaluated based on its value? 8 A. All the conditions need to be 9 evaluated as a part of any prior art disclosure, 10 if necessary, to satisfy the claims. 11 But, based on a particular value of 12 a duration, it would satisfy one of the 13 conditionals but it will not satisfy the others. 14 Q. When you -- thank you, by the way. 15 I have been trying to understand this sentence. 16 When you refer to the claims in the 17 sentence, in the first sentence in Paragraph 61, 18 are you referring to all of the claims of the 19 '114 patent or something specific? 20 A. All of the claims I discuss but 21 specifically, for example, I reference the Claims 22 1, 32 and 34 and 64, specifically. But, the	Page 89 1 Q. Is each instance -- strike that. 2 You mention an instance with a 3 duration of ten and an instance with a duration 4 of 15. 5 Are those two separate instances of 6 user input? 7 A. No. They are -- they are part of 8 the same gesture. So, they both are relating 9 back to the gesture that was detected in 10 limitation [1.e]. 11 Q. Do you mean instances in time? Is 12 that what you are saying? 13 A. They are -- they are instances -- as 14 an example, if you detected gesture in limitation 15 [1.e] as a touch, one instance of that gesture 16 detected in limitation [1.e] could have a 17 duration of ten. Another instance of the same 18 gesture that would be detected would have a 19 duration of 14. 20 But, the conditions are all 21 evaluated as required based on the durations. 22 But, the same gesture that is evaluated would be

Page 90 1 referenced back to limitation [1.e] because of 2 the precedent of the antecedent there. 3 Q. Is it fair to say, then, that the 4 same gesture can have multiple instances with 5 different durations? 6 A. They could be. The claim requires a 7 single gesture that is detected in [1.e]. 8 And depending on the duration of 9 that single gesture, the duration being a single 10 continuous touch, one of those conditions would 11 be satisfied based on the duration. 12 But, the conditional limitations are 13 all required to be evaluated. 14 Q. So, using your example of a gesture 15 with an instance, with a duration of ten, and an 16 instance with a duration of 15, but all part of 17 the same gesture, if the first magnitude 18 threshold was five, do you then meet conditions 19 [1.g] and [1.i]? 20 MR. LICYGIEWICZ: Objection to form. 21 THE WITNESS: You would -- what I am 22 trying to say is that if you have a gesture	Page 92 1 cannot point to different gestures in different 2 limitations. They all have to be part of the 3 original gesture that was detected in limitation 4 [1.e]. 5 Q. I'm a little bit confused, so 6 forgive me, I'm going to go back a little bit. I 7 can't find it. I'm just going to ask. 8 Did you say earlier that a single 9 gesture could include an instance of a duration 10 of ten and also an instance of a duration of 15? 11 A. No. These are different invocations 12 of that gesture. The gesture has a duration. 13 The duration could be ten as one example. 14 Another example of another part of a gesture 15 could be the user could hold it for 15. 16 But, what is required in the claim 17 is that all these evaluations are done with a 18 gesture that was detected in element [1.e]. 19 Q. So, if you have one instance of user 20 input that has a duration of 10, and one instance 21 of a user input that has a duration of 15, is 22 that two separate gestures?
Page 91 1 and you detected in limitation [1.e] and the 2 magnitude of gesture is less than -- you said 3 the first threshold was what? 4 BY MS. HUANG: 5 Q. Five. 6 A. Yeah. So, if it was, first 7 threshold was five and you've held it for ten, 8 then the magnitude, then the first conditional is 9 not met. 10 So, then it goes to limitation 11 [1.g]. And, with the magnitude of the duration 12 of the gesture which is a single continuous 13 gesture that was detected in [1.e] is ten, which 14 is greater than five but less than the second 15 magnitude. 16 So, it would perform the operation 17 of scale because it would be satisfying [g]. 18 But, if it is less than -- if it is greater than 19 a second magnitude threshold, then it performs 20 another operation. 21 But, they all reference back to the 22 gesture that was detected in [1.e]. So, you	Page 93 1 A. The way I would answer that is that 2 you have to look at the claims first because you 3 have to look at the claim. 4 The claim says you detect the 5 gesture in element [1.e]. And if the duration of 6 the hold, or the duration of that press as an 7 example, were a particular value, you would 8 evaluate the value based on the conditionals that 9 are following limitations [1.e] which are 10 limitations [f], [g], [h], and [i]. 11 But, you cannot reference other 12 unrelated gestures in limitations [1.f], [g], 13 [h], and [i]. You have to reference back to that 14 limitation [1.e] which references detecting a 15 gesture. 16 So, there is an antecedent basis. 17 Q. If you have two instances of user 18 input that have different durations, can that not 19 be the same gesture? 20 A. I don't understand. That is not how 21 I understand the question to be evaluated. 22 I am saying here that you have to

Page 94 1 detect the gesture in limitation [1.e]. 2 And the gesture has a duration and 3 the duration can be any value. It can be 10 or 4 15. 5 So, if it is ten, then the magnitude 6 is 11, evaluation [f] would be satisfied. 7 If the duration were 15 and the 8 first magnitude threshold were 11 and the second 9 magnitude were 20, then the, maybe one of the 10 other two limitations would be satisfied and 11 certain actions taken. 12 So, you have to start with the 13 gesture in [1.e] and evaluate the duration, 14 whether it is 10 or 15, based on the threshold 15 values and the evaluations of [1.f], [g], or [h], 16 you would evaluate the gesture that was detected 17 in [1.e] to take suitable action. 18 So, it is a single continuous action 19 of a particular duration. 20 Q. Let's go back to the first sentence 21 in Paragraph 61 of your declaration. 22 You write "At the same time because	Page 96 1 same gesture, that single gesture that was 2 detected in element [1.e]. 3 All limitations, [f], [g], [h], and 4 [i], should reference back to the gesture that 5 was detected in element [1.e] as in Echo. 6 Q. Can a single gesture have different 7 values of its duration? 8 A. Again, looking at the claim, the 9 gesture starts with the limitation [1.e] and it 10 has a particular value of duration. It could be 11 ten, it could be 12, it could be 11. But, it has 12 to be one of them. 13 If it is ten, then it -- and the 14 threshold were 11, then it would be evaluated 15 under the limitation [1.f]. 16 But, a single gesture has a 17 particular value of duration. And that duration 18 is evaluated in limitations [1.f], [g], [h], or 19 [i]. 20 But, all of those evaluations of 21 [f], [g], [h], and [i], refer back to that 22 gesture that was detected in limitation [1.e].
Page 95 1 the claims refer to the logic used to evaluate 2 numerous instances of user input." 3 What are the numerous instances of 4 user input referenced in the claim? 5 A. So, for example, if there was a 6 gesture detected in element [1.e] and the 7 duration of that was ten. That is one example or 8 one instance. 9 If there was a gesture detected in 10 element [1.e] and the duration was 15, that is 11 another example or instance of the user input. 12 But, in all cases, you are 13 referencing back to the detected gesture in 14 element [1.e] as in Echo. 15 Q. So, you are saying that the claims 16 have logic that can just deal with different 17 types of gestures. 18 Is that fair? 19 A. No. I am saying that the claims 20 have logic that deal with the different values of 21 the duration. 22 But, they all have to go back to the	Page 97 1 You cannot have different gestures 2 for [f], [g], [h], and [i], that are different 3 from that detected in [1.e] as in Echo. 4 Q. Could we turn just to the next page, 5 PDF Page 37, Paragraph 62? 6 A. Okay. 7 Q. Second sentence you say, "As 8 explained below, limitation [1.f] will not be met 9 during the same instance of user touch as 10 limitations [1.g], or [1.i], and vice versa. 11 And there is a reference to a 12 footnote that says "This is also true of the 13 similar limitations in Claims 32, 34, and 64." 14 Did I read that correctly? 15 A. I mean, you are reading from 16 Paragraph 62 in the context that it was supposed 17 to be read in the context of the entire section. 18 So, that is one line. 19 Q. But did I read that fairly? 20 A. You read that one line in the 21 context of Paragraph 62. 22 Q. Is it your position that limitation

Page 98 1 [1.f] will not be met by the same detected 2 gesture as limitation [1.g] and [1.i], and vice 3 versa? 4 A. I didn't use the word gesture there. 5 I am saying that if there is a limitation -- if 6 there is a gesture that is detected in [1.e], the 7 same gesture has to be evaluated in [f], [g], 8 [h], and [i]. 9 So, all the evaluations have to 10 be -- all of the limitations [1.f], [1.g], and 11 [1.i] have to be evaluated with respect to a 12 duration of the same gesture that was detected in 13 [1.e]. 14 That is what it says. 15 Q. Can the gesture that was detected in 16 one eat -- I must be hungry. I said one eat, 17 strike that. Give me a second here. 18 Can the same gesture that was 19 detected in limitation [1.e] meet both of 20 limitations [1.f] and [1.g]? 21 A. Yes. The same gesture is to be 22 evaluated.	Page 100 1 limitation [1.e] as in Echo, as the single 2 gesture that was detected. And it has a 3 duration. That duration is evaluated in 4 limitations [g], [h], and [i] -- [f], [g], [h], 5 and [i]. 6 Q. Let's go back to the examples that 7 you were talking about earlier. 8 If you -- if we have a magnitude 9 threshold -- a first magnitude threshold of 11, 10 and a gesture is detected in [1.e], with a 11 duration of five, does that detected gesture meet 12 limitation [1.f]? 13 A. That detected -- the magnitude of 14 the duration of the gesture you said was ten? 15 Q. Five. 16 A. Was five. And the threshold was? 17 Q. 11. 18 A. 11, okay. So you detected gesture 19 that is in Step [1.e] and in [f] you identify 20 that the magnitude of the duration of the gesture 21 was five, which is less than the first threshold 22 which was ten.
Page 99 1 The key is to be evaluated. But the 2 gesture's value in terms of the duration would 3 meet one of the limitations. The same gesture 4 should be evaluated in limitations [1.g], [h], 5 and [i]. 6 But, the gesture has a particular 7 duration and the duration is evaluated. 8 So, limitations [i] and -- sorry, 9 limitations [f], [g], [h], and [i], evaluated the 10 same gesture that was referenced in [e] but they 11 evaluated the magnitude of the duration. And the 12 magnitude of the duration would satisfy one or -- 13 one of those various limitations. 14 But, that -- what is common between 15 all of those limitations, [f], [g], [h], and [i], 16 is that they reference the same gesture that was 17 detected in [1.e]. 18 You cannot say that [g] is a double 19 tap or [h] is a hold, or [h] is something else, 20 or [i] is some other operation or some other 21 gesture, compare them. 22 You have to reference back to	Page 101 1 So, then you would perform an 2 operation. 3 Q. Would that meet limitation [1.f]? 4 A. It would -- it would -- it would 5 perform an operation because [1.f], the condition 6 that is evaluated in [1.f] is satisfied. 7 Q. So, if we have a gesture detected in 8 limitation [1.e], that has a magnitude duration 9 of five, and a first magnitude threshold of 11, 10 and an operation is thus performed, does that 11 detected gesture meet limitation [1.f]? 12 A. The evaluation of [1.f] is carried 13 out, and as a result, it references back to the 14 gesture of -- that was detected in [1.e]. 15 Therefore, the requirement of 16 limitation [1.f] means that it performs an 17 operation. 18 Q. Is that also true for limitation 19 [32.f]? 20 A. It would be similar. 21 Q. Is there any difference between 22 claim element [1.f] and claim element [32.f] for

Page 102 1 purposes of that question? 2 A. It is again very similar. So it 3 would reference back to the gesture that was 4 detected on the touchscreen on the first object. 5 And all of the limitations that follow would 6 reference back to that same gesture which was 7 detected on the first object. 8 Q. Is there anything different in Claim 9 32 that would affect your opinion on whether this 10 example gesture would also meet the limitation of 11 [32.f]? 12 A. As I said, I mean you detect, you 13 detect the gesture on the first object in the 14 limitation [32.e] and that same gesture in this 15 case would be evaluated with respect to the 16 duration of the components. 17 And -- but they would all -- each of 18 the components of the gesture would be -- would 19 reference back to the gesture of [32.e] that was 20 detected. 21 Q. Sticking to our example of a gesture 22 detected that has a magnitude of a duration of	Page 104 1 because I don't remember the specific -- 2 Q. Yeah. I will upload the petition. 3 Just give me one second. If you want to go to 4 Page 9 that is where Claim 34 is. PDF 9. 5 A. So, you are detecting the gesture 6 here in limitation [34.f]. 7 Q. Uh-huh. 8 A. And then you are, based on the 9 magnitude of the duration, you are evaluating 10 that in [34.g], [h], and [i]. And [j]. 11 Q. [g], [h] and [j], I think. 12 A. [g], [h] and [j]. 13 Q. Yes. 14 A. And all of them reference the 15 gesture that was detected in [34.f] as in Frank. 16 Q. So, going back to the question, 17 would our example with a gesture having a 18 magnitude of a duration of five and a first 19 magnitude threshold of 11, that resulted in 20 performance of an operation meet the requirements 21 of element [34.g]? 22 A. It has to be the same gesture that
Page 103 1 five, and a first magnitude threshold of 11, 2 sticking to that example, and assuming that the 3 duration results in the operation being 4 performed, does that example also meet limitation 5 [34.g]? 6 And you might want to reference the 7 petition because the lettering is a little 8 different for Claims 34 and 64. 9 I haven't given you the petition, I 10 can do that, or maybe your declaration would 11 suffice. I don't know, otherwise I'm happy to 12 give you the -- 13 A. I'm not sure what you are asking, 14 counsel. 15 Q. Yeah. Let me -- I can upload the 16 petition or I could tell you that I'm referring 17 to the -- the parallel limitation of independent 18 Claim 34. 19 So, they are not [f] there, it 20 actually aligns with [g]. 21 Do you understand what I am asking? 22 A. Yes, I would like to look at that,	Page 105 1 was detected in [34.f]. 2 Q. Sure. If it was the same -- the 3 same gesture detected in [34.f], and had a 4 magnitude of a duration of five, and the first 5 magnitude threshold was 11 and resulted in 6 performance of the operation, would that detected 7 gesture meet the requirements of claim element 8 [34.g]? 9 A. I would say that it satisfies the 10 evaluation of [34.g]. 11 So, it would execute or perform an 12 operation. 13 On the other hand, if the duration 14 was 15 and the first threshold was ten, and the 15 second threshold was 20, then it would be 16 evaluated, it would not, it would not perform the 17 operation of [34.g] but instead perform the 18 operation that was listed in [34.h] which is the 19 scaling. 20 So, that is another example of 21 another duration. 22 So, the logic is described in

Page 106 1 elements [34.g], [h], and [i]. 2 And in all cases that logic should 3 be applied back to the gesture that was 4 recognized in -- for the first time and detected 5 for the first time in [34.f]. 6 Q. Is your position the same for the 7 corresponding limitations of Claim 64? 8 A. 64 is again -- [64.f] would be the 9 detecting. And that position would be again 10 similar for limitation [64.g], [h], and [i], and 11 [j]. 12 They would all have to refer back to 13 the same gesture that was detected in [64.f] as 14 in Frank. 15 Q. Why don't we take a break. It has 16 been about an hour. 17 (Recess taken -- 12:45 p.m.) 18 (After recess -- 1:16 p.m.) 19 BY MS. HUANG: 20 Q. Dr. Madiseti, welcome back. I hope 21 you had a nice lunch. 22 A. Thank you.	Page 108 1 recited operation of [1.f]? 2 A. It must -- if you are talking about 3 a device that practices the claim, it should meet 4 all the limitations including [e], [f], [g], [h], 5 [i], as well. 6 Not just [f]. All the limitations 7 have to be met. 8 Q. And if the all the limitations are 9 met by a particular device, is it true that any 10 gesture that is detected by that device that 11 meets the condition of [1.f] has to perform the 12 operation recited in [1.f]? 13 MR. LICYGIEWICZ: Objection to form. 14 THE WITNESS: Again, I don't 15 understand the specific question, counsel. 16 We have to be sure that if there is 17 a -- if a gesture is detected in [1.e], 18 limitations [f], [g], [h], and [i] apply to 19 that gesture that is identified in limitation 20 [1.e] as in Echo. 21 So, all of the succeeding 22 limitations, [f], [g], [h], and [i], will be
Page 107 1 Q. Just to confirm, you didn't speak 2 with anybody regarding the substance of your 3 testimony during the break, correct? 4 A. I did not. 5 Q. Is it fair to say that Claim 1 6 requires that for a particular device, any 7 detected gesture on an object on the touchscreen 8 in limitation [1.e] that has a magnitude of a 9 duration that is less than the first magnitude 10 threshold, that device must then perform the 11 recited operation of [1.f]? 12 A. I am not sure as to what 13 specifically you are asking. 14 The claim limitations have to be 15 practiced if that is what you are asking. I'm 16 not sure what you are asking. 17 Q. So, if you had a device that 18 practiced Claim 1, would it then be true that any 19 detected gesture on an object on touchscreen in 20 limitation [1.e] that has a magnitude of a 21 duration that is less than the first magnitude 22 threshold, that device must then perform the	Page 109 1 referenced as magnitude of basis to that 2 gesture that was detected in element [1.e]. 3 BY MS. HUANG: 4 Q. Would a device that reads on Claim 1 5 be able to detect different gestures? 6 A. No opinion on that. As long as the 7 claim is met and the claim is met by making sure 8 that the gesture that is detected in element 9 [1.e] is practicing the limitations [f], [g], 10 [h], and [i]. 11 For that detected gesture of [1.e], 12 then the claim limitation is met. 13 I don't have any other way of 14 describing the claims. So, I don't agree with 15 your generalization. 16 Q. Is your position the same for Claim 17 32? 18 A. All limitations of the claim have to 19 be practiced, the device to practice the claim. 20 I mean, that is my opinion that is true. 21 Q. And that is the same for Claim 34? 22 A. Yes, all limitations of the claim

Page 110 1 have to be practiced. 2 Q. And that is also true for Claim 64? 3 A. Yes, if the conditions are evaluated 4 for all of the limitations, based on the gesture 5 that was detected in the event [1.e], for 6 example, the claim is practiced. 7 Q. Let's go back to the hypotheticals 8 we had before. 9 Let's say that the thresholds are 10 first magnitude threshold is ten and the second 11 magnitude threshold is 15. Nice round numbers, 12 easy to remember. 13 A. Okay. 14 Q. If I put my finger down on the 15 touchscreen of a device on an object for 16 16 seconds. 17 A. Uh-huh. 18 Q. And the scaling recited in element 19 [1.g] is performed and another operation of 20 element [1.i] is performed, does that read on the 21 claim? 22 MR. LICYGIEWICZ: Objection to form	Page 112 1 requirements of this claim which is equally 2 applied to prior art? 3 A. As I said, the prior art has to show 4 that the same gesture is being referenced in 5 elements [f], [g], [h], and [i], and that same 6 gesture would be first detected in element [d]. 7 That would be the requirements in my 8 opinion. 9 Q. Can you give me an example of a 10 detected gesture in [1.i] that meets the 11 requirements of Claim 1? 12 A. If it satisfies every limitation 13 including element [i], and the requirement is 14 when the magnitude of the duration of the gesture 15 being detected on the touchscreen on the object 16 is greater than a second magnitude threshold, 17 perform another operation. 18 So, for example, if you had -- if 19 the second magnitude threshold were 20 and your 20 magnitude of the duration were 30, that 21 limitation, for example, would be evaluated and 22 it performs another operation in response to that
Page 111 1 and incomplete hypothetical. 2 THE WITNESS: I don't understand 3 what specifically you are asking, counsel. 4 BY MS. HUANG: 5 Q. Yeah, it is -- would it be 6 sufficient for a device to detect a gesture as 7 referenced in limitation [1.e] that has a 8 magnitude of 16 where the first magnitude 9 threshold is ten and the second magnitude 10 threshold is 15. 11 And the device responds by 12 performing both the scaling of [1.g] and the -- 13 another operation of [1.i]. 14 Would that meet the requirements of 15 Claim 1? 16 MR. LICYGIEWICZ: Form. 17 THE WITNESS: As I said, I don't 18 have an opinion on infringement at this time, 19 so I don't wish to offer an opinion on that. 20 BY MS. HUANG: 21 Q. I'm not asking about infringement, 22 I'm just trying to understand what would meet the	Page 113 1 same gesture. 2 Q. In your example with the gesture 3 detected as referenced in limitation [1.e], with 4 the duration of 30, also performed the scaling 5 reference in element [1.g]? 6 A. Again, you are going into more 7 nuanced aspects of claim construction here, and 8 so I don't have an opinion on that issue at this 9 point. 10 Q. You don't have an opinion as to 11 whether your example gesture would meet Claim 1? 12 A. No, I don't have an opinion on that 13 second question as to whether -- with respect to 14 element [g]. 15 So, in my opinion, if the magnitude 16 is one way this limitation could be, this claim 17 could be met, is to have a gesture where you are 18 touching the screen, an object, and if the 19 magnitude of the duration is 30 and the magnitude 20 of the second threshold is 20, then limitation 21 [i] would be practiced. 22 But, I don't wish to limit the claim

Page 114 1 in any way other than how it is written. 2 Q. Would your example gesture also have 3 to perform the scaling operation in order to have 4 met the claim? 5 A. I don't know. As I said, I don't 6 wish to have looked at all the scope and the 7 entire aspects of the claim at this point that 8 opines on infringement. 9 So, I don't have an opinion on that 10 issue. 11 All I'm saying is that in the art 12 that was proffered by the petition, the gesture 13 that is referenced in limitations [f], [g], and 14 [i], are referencing different gestures than the 15 detected gesture in the analysis provided by the 16 petitioner declarant with respect to element [e] 17 as in Echo. 18 There may be other reasons why it 19 may not satisfy -- the product may not satisfy 20 the claim. 21 But, those are my primary opinions. 22 Q. So, Claim 1 is a system claim or an	Page 116 1 would not satisfy. 2 Q. So, sitting here right now -- sorry, 3 go ahead. 4 A. Why the grounds did not satisfy the 5 claims for the reasons that I described. 6 Q. So, sitting here right now, can you 7 give me an example of a gesture that would be 8 detected by a device that meets the limitations 9 [1.f], [1.g], [1.h], and [1.i]? 10 MR. LICYGIEWICZ: Objection, beyond 11 the scope. 12 THE WITNESS: Yeah, as I said, that 13 is not something I offered an opinion on 14 infringement. 15 And if asked and allowed in the 16 future, I may do so. 17 But, at this point I don't have an 18 opinion because that is not something I 19 considered. 20 BY MS. HUANG: 21 Q. You considered invalidity, though; 22 is that correct?
Page 115 1 apparatus, right? 2 A. It is a system, yes. 3 Q. So, in your example, if we had a 4 system that received or detected a gesture that 5 was 30 -- a duration of 30, and the second 6 magnitude threshold was 20, you've said that 7 would meet the claim -- 8 A. No, if it practiced all the 9 limitations I said. I didn't say that. 10 My standard answer is that if a 11 claim has -- if a claim is practiced, if all its 12 limitations are practiced by a device, that is 13 all. 14 I don't wish to narrow it down to 15 any particular limitation or not. 16 Q. So, can you give me an example of a 17 detected gesture that would meet all of the 18 limitations of Claim 1? 19 A. I don't have an opinion on that 20 issue as part of my declaration. 21 All I can say is that I opined that, 22 based on the proffered grounds, why the grounds	Page 117 1 A. Yes. For the reasons of -- that is 2 stated in my declaration, I provided a rebuttal 3 to the grounds raised by the petition and its 4 declarant. Nothing else. 5 Q. You read the entirety of the '114 6 patent, though; isn't that correct? 7 A. I reviewed it in the context of the 8 challenge raised by the petitioner and its 9 declarant. So, I responded specifically. And I 10 was asked to respond to certain topics. 11 And I confined my declaration and my 12 analysis to those topics. I don't wish to expand 13 the scope of my declaration on the fly. 14 Q. And the challenge raised by the 15 petitioner is the validity of a challenged 16 claims, correct? 17 A. Based on certain grounds which I 18 analyzed and rebutted. 19 Q. And part of determining the validity 20 of the challenged claims involves understanding 21 the meaning of those challenged claims, doesn't 22 it?

Page 118 1 A. As I said, I disagree with -- I 2 disagree to the extent that you are asking me to 3 guess about certain infringement issues on the 4 fly. 5 Q. And that is not what I -- 6 A. No, no, I provided a full analysis 7 and rebutted the grounds proffered by the 8 petition and its declarant, and my declaration 9 contains all the opinions that I wish to offer at 10 this time. 11 Q. So, my question was that part of 12 determining the validity of the challenged 13 claims, on your part, involves understanding the 14 meanings of those challenged claims, doesn't it? 15 A. I don't have a legal opinion on 16 that, counsel. I have provided a full 17 declaration with opinions and their basis. 18 Q. So, in order to offer your opinion 19 on the validity of the claims, did you not have 20 to understand what the claims meant? 21 A. Again, as I said, counsel, I have 22 reviewed the claims, I have looked at the	Page 120 1 statement of my opinions and the basis, and that 2 is all I have to offer. 3 Q. So, you won't say right now that you 4 had to understand the meaning of the claims in 5 order to opine on them, on invalidity or 6 validity? 7 A. At this point I don't have an 8 opinion on the full scope of what and what does 9 not infringe or satisfy or anything else. 10 My declaration is the full statement 11 of my opinions and their basis. 12 Q. And just to clarify, I'm not asking 13 what does or does not infringe the claims. 14 I'm asking, did you have to fully 15 understand the meaning of the claims in order to 16 figure out whether they are valid claims? 17 A. All I had to do in my understanding 18 was to provide a rebuttal based on the grounds 19 provided by Apple and its declarant, which I did, 20 and my declaration has my full opinions and their 21 basis. 22 If it is something in my declaration
Page 119 1 proffered grounds and the challenges by the 2 petitioner and its declarant and rebutted them 3 and provided a complete statement of opinions in 4 my declaration. 5 I don't have and did not offer in my 6 declaration a full analysis of what meets the 7 claims under each and every condition or its full 8 scope. 9 That is not what I was asked to do. 10 And I didn't have it. 11 To the extent I am asked to do so in 12 the future, I may do so if allowed and asked to 13 do so. 14 But at this point I was not. 15 Q. So, in order to opine on an 16 invalidity, did you have to understand the 17 meaning of the claims? 18 A. As I said, I don't want to offer -- 19 opine on a legal issue. 20 I reviewed the petition and the 21 declarant's declaration, and I offered my 22 rebuttal, and my declaration contains the full	Page 121 1 that you wish to discuss, I'm glad to do that. 2 Q. To provide a rebuttal based on the 3 grounds provided by Apple and -- strike that. 4 To provide a rebuttal based on the 5 grounds provided by Apple, did you have to 6 understand the meaning of the claims? 7 A. I don't wish to offer a legal 8 opinion, counsel. 9 All I said is I offered a technical 10 opinion as to why, in my opinion, the claims are 11 not practiced for the grounds that were offered 12 by Apple and its declarant. Nothing more. 13 Q. Could you tell me right now, sitting 14 here right now, do you understand what the claims 15 of the '114 patent mean? 16 A. As I said, my declaration describes 17 my understanding and the basis for my rebuttal 18 opinions. 19 I don't wish to analyze the full 20 scope of the claim beyond what my declaration has 21 done. 22 I understand, even quotes construe

Page 122 1 claims to the extent that, to dissolve disputes 2 between the parties if they exist. 3 It is my opinion that by applying 4 the plain and ordinary meaning, I have provided a 5 fulsome and complete analysis. I have not 6 analyzed every possible use case that would meet 7 or not meet the claims. 8 Q. Did you analyze any use case that 9 would meet the claims? 10 A. As part of my declaration, that is 11 not what I was asked to do. I was asked to 12 evaluate the technical strengths of the proffered 13 grounds from Apple and its declarant, which I 14 did. 15 And other actions that I discussed 16 in my declaration. Nothing more. 17 Q. So, sitting here right now, can you 18 think of any use case that would meet the claims? 19 MR. LICYGIEWICZ: Objection to form. 20 THE WITNESS: As I explained, 21 counsel, that is not what I was asked to do. 22 If asked and allowed at the right	Page 124 1 validity, you did not consider a single use case 2 that would meet the limitations of the challenged 3 claims? 4 MR. LICYGIEWICZ: Objection to form. 5 THE WITNESS: To be very clear, I 6 applied the plain and ordinary meaning of the 7 claims as I described in my declaration. 8 And I applied my understanding of 9 the view of a POSITA to the prior art 10 challenges raised by the petitioner and 11 provided by rebuttal, and answered certain 12 questions from the board from a technical 13 point of view. 14 That is all I have done in my 15 declaration. I was not asked to identify a 16 use case that would not infringe. 17 BY MS. HUANG: 18 Q. And I'm not asking for a use case 19 that would not infringe. 20 I'm asking for a use case that would 21 read on the claims. 22 Is that something you were also not
Page 123 1 time I may provide other opinions. But, that 2 is not an opinion I was asked to do -- I was 3 asked to examine. That was not an opinion 4 that I was asked to offer. 5 BY MS. HUANG: 6 Q. Is now not the right time? 7 A. I was not asked to offer that 8 opinion. You don't want me to guess at this 9 point, do you, counsel? 10 I have offered the declaration and I 11 am being deposed on the opinions and their basis. 12 That is not something that I was asked to offer 13 in the declaration at the time of writing. So I 14 didn't. 15 In future, if I would be asked to 16 offer some opinions on infringement, I may do so. 17 But that is a different report, a different time, 18 where you can examine me on those issues. 19 Q. So, when providing your opinion on 20 validity, you did not analyze a single -- strike 21 that. 22 In providing your opinion on	Page 125 1 asked to provide? 2 MR. LICYGIEWICZ: Objection to form. 3 Asked and answered. Counsel, this is getting 4 to be argumentative. 5 THE WITNESS: As I said, counsel, I 6 was asked to rebut from a technical point of 7 view the challenges raised by the petition 8 and its declarant, which I believe I did. 9 And I was asked to do a couple of 10 other things with respect to the Board's 11 directives, which I also did. And that is 12 all I have. 13 BY MS. HUANG: 14 Q. So, you said earlier that it was 15 your opinion that by applying the plain and 16 ordinary meaning I have provided a fulsome and 17 complete analysis. 18 What plain and ordinary meaning are 19 you referencing there? 20 A. I understand the courts require you 21 to apply a plain and ordinary meaning of the 22 claims and in the view of one of ordinary skill

Page 126 1 in the art. 2 And that is what I did in my 3 analysis of the proffered challenges from Apple 4 in its petition and through its declarant. 5 Q. Does that include the plain and 6 ordinary meaning of the term gesture? 7 A. I have described what I understand 8 by the terms in my -- in my declaration. And 9 that is the full extent that -- of my opinions. 10 Q. Is your opinion on the meaning of a 11 gesture the plain and ordinary meaning of a 12 gesture? 13 Or is it something else? 14 MR. LICYGIEWICZ: Objection to form. 15 THE WITNESS: My opinions on the 16 terms that were required by the board are 17 provided in my declaration. 18 BY MS. HUANG: 19 Q. You mention you have 75 patents. 20 Have you ever heard that a patent 21 applicant can be his own lexicographer? 22 A. At a very high level, yes.	Page 128 1 A. I don't think I offered an opinion 2 with respect to that issue, counsel, in my 3 declaration. 4 If asked and allowed to do so in the 5 future, I may do so. 6 But, I don't think I have offered 7 such an opinion in my declaration. 8 Q. Do you recall reading one on your 9 several reviews of the '114 patent and ten hours 10 spent reviewing it? 11 A. As I said, it is not something I was 12 looking for. I was not asked to do that. So, I 13 don't have an answer. 14 Q. Can you think of a single gesture 15 having three different durations that result in 16 three different actions? 17 A. As I said, counsel, I don't want to 18 guess. That is not something I offered an 19 opinion on and I don't want to speculate. 20 If asked and allowed in the future 21 I may do so, but I have not as a part of my 22 declaration.
Page 127 1 Q. Do you understand what that means? 2 A. Again, from -- I am not 100 percent 3 sure. I am only offering technical opinions, 4 counsel. 5 Q. Is your understanding of a gesture 6 as you have laid out in your declaration the 7 plain and ordinary meaning as would be understood 8 by a POSITA? 9 A. Again, all I can say is that, I 10 would say that the claim requires that the 11 gesture of element [l.e] be the same gesture as 12 elements [f], [g], [h], and [i]. And that is 13 what I said. 14 And I also provided additional 15 details on how a person of ordinary skill in the 16 art would understand the word gestures as used in 17 the context of these claims at issue. I have 18 nothing more to add. 19 Q. Does the '114 patent provide an 20 example of a single gesture having three 21 different durations that result in three 22 different actions?	Page 129 1 Q. Is there any part of the '114 patent 2 specification that you believe directly relates 3 to Claim 1 of the '114 patent? 4 A. As I said, counsel, my report and 5 declaration captures all of my opinions. I'm not 6 sure if you are referring to a particular 7 paragraph. 8 Q. Have you offered any opinions about 9 whether the '114 patent specification describes 10 or provides support for the claims of the '114 11 patent? 12 A. I described in my -- in my 13 declaration certain terms that I identified at 14 the request of the counsel based on the request 15 from the Board. 16 Those opinions are present and 17 everything else is an analysis of the grounds. 18 So, my declaration, I believe, 19 captures what it does. I don't wish to add or 20 subtract from what it does or characterize it in 21 a single line as to what it does or does not do. 22 I rely and I intend to rely on the

Page 130 1 entirety of my declaration as outlined in the 2 table of contents on Pages 1 and 2 for all that 3 is written. 4 Q. Can you point me to anywhere in your 5 declaration where you offered opinions about 6 whether the '114 patent specification provides 7 support for the claims of the '114 patent? 8 A. I offer certain sections where I 9 describe the background in section six. 10 I also describe in section nine on 11 claim interpretation and other portions. So, I 12 do describe portions of the specification that 13 support the claims. I just don't want to provide 14 anything beyond whatever I said in my 15 declaration. 16 Q. Did you offer in your declaration an 17 opinion on whether the '114 patent supports the 18 claims of the '114 patent? 19 MR. LICYGIEWICZ: Objection to form. 20 THE WITNESS: What I offered is what 21 is in my declaration which is answers to the 22 questions raised by the Board in section nine	Page 132 1 challenges raised by Apple on its grounds through 2 its petition and the declaration, and I provided 3 a rebuttal as described in my opinions and the 4 basis in my declaration. 5 Q. Do you recall when reviewing the 6 '114 patent, any discussion of any magnitude of a 7 duration of any gesture? 8 A. That is not what I was looking for. 9 If you are saying, asking me to identify a 10 portion of the specification, I certainly 11 identified my understanding of the gestures in 12 response to the Board's question in my 13 declaration. 14 Q. Do you understand the board also 15 asked a question relating to the meaning of a 16 magnitude of a duration of a gesture; is that 17 correct? 18 A. I discussed that again in section 19 nine on claim interpretation. And I say that 20 the -- it is -- duration, for example, refers to 21 the time during which something exists or lasts. 22 Q. Can you point me to where you are,
Page 131 1 and some background in section -- in section 2 six. 3 BY MS. HUANG: 4 Q. Can you take a look at the '114 5 patent Column 97, and that would be on PDF Page 6 89. 7 A. Okay. Looking at Column 97 which is 8 Claim 1, I believe. 9 Q. Yes. We are on the same page, 10 literally. 11 A. Okay, uh-huh. 12 Q. Is the text at Column 97 lines 24 to 13 26 referenced as element [1.f] in the IPR 14 petition? 15 A. I think so. 16 Q. So, if I refer to that as [1.f], is 17 that fair? 18 A. Yes. 19 Q. Okay. You mentioned earlier you 20 reviewed the '114 patent in its entirety, right? 21 A. As I said, I reviewed the 22 specification, the claims in the context of the	Page 133 1 just so we are on the same page? 2 A. Paragraph 59 as an example in my 3 declaration. 4 Q. 59. 5 A. The claim language itself also 6 defines what is meant by the duration of the 7 gesture. Specifically the claim language conveys 8 that a duration of the gesture is the magnitude 9 of a period that begins when the gesture begins, 10 which is upon detection of the touch on the 11 touchscreen. 12 And the duration means the time 13 during which something exists or lasts. That was 14 from Paragraph 59. And then I have a footnote 15 four and other such discussions in Paragraph 60, 16 61. 17 Q. Did you rely on anything 18 specifically stated in the '114 patent to inform 19 your understanding of a magnitude of a duration 20 of a gesture? 21 A. I think we described here that the 22 claim language as in Paragraph 59 of my

Page 134 1 declaration, that the plain language of the claim 2 conveys that the duration of the gesture is the 3 magnitude of the period that begins when the 4 gesture begins, which is upon detection of the 5 touch on the touchscreen. 6 Q. So you used -- 7 A. Then I go further and say the period 8 that starts after the gesture is not the duration 9 of the gesture, and then I provide some analysis 10 there. 11 Q. Are you done? 12 A. Yes. 13 Q. Okay. Sorry, I didn't mean to speak 14 over you. I just wanted to confirm. 15 Did you cite to anything in the '114 16 patent in support of your position of the meaning 17 of a magnitude of a duration of a gesture? 18 A. I have not memorized my declaration 19 so I have to look through it. 20 Q. Okay. 21 A. Okay. Can I take a two-minute break 22 because someone is sending me some messages and I	Page 136 1 a duration of a gesture? 2 A. Also Figure 24 of the incorporated 3 by reference 918 provision. 4 Q. Anything else? 5 A. Those are the things I can see right 6 away. But, I reserve the right to rely on 7 everything in my declaration. Even if I don't 8 remember it or I'm unable to look it up at this 9 present time. 10 Q. I am not trying to make it a test 11 for you to find things. 12 But, if it is not in your 13 declaration, is it fair to say that you didn't 14 rely on it for purposes of coming up with your 15 meaning of a magnitude of a duration of the 16 gesture? 17 A. As I said, I pointed to the claim 18 language, I pointed to certain figures. I 19 pointed to the background. I pointed to Figure 20 23 of the '114 or Figure 24 of the 918 provision. 21 I believe I identified to you in response to your 22 question.
Page 135 1 just want to silence the phone. 2 MS. HUANG: Okay. 3 (Recess taken -- 1:54 p.m.) 4 (After recess -- 1:56 p.m.) 5 BY MS. HUANG: 6 Q. So, the question that I asked was, 7 did you cite to anything in the '114 patent in 8 support of your position of the meaning of a 9 magnitude of a duration of a gesture? 10 A. I think I said I don't remember my 11 entire declaration. So -- 12 Q. You did say that and I said please 13 go ahead and take a look. I believe I provided 14 you the declaration. 15 A. Oh, I see, okay. 16 Q. Yes, sorry if that wasn't clear. 17 A. I think I refer to Figure 23 in the 18 specification. And that refers to a length of 19 time which is the constant with my declaration. 20 Q. Is there anything else that you 21 referenced in the '114 patent in support of your 22 position regarding the meaning of a magnitude of	Page 137 1 But, if there are other instances, I 2 would still rely on them to the extent they 3 exist. 4 Q. What do you mean by "If there are 5 other instances, I would still rely on them"? 6 A. Again, if it is something I couldn't 7 find right now and it is there in my declaration, 8 then I certainly don't want to give that up. 9 Q. Meaning if you had previously 10 referenced them in your declaration, you are 11 reserving the right to rely on them going 12 forward. 13 Is that right? 14 A. Yes, yes. 15 Q. Okay. 16 A. In addition to what I have described 17 to you today, just now. 18 Q. But if you didn't point to certain 19 portions of them, you didn't rely on them in 20 coming up with the meaning of that term; is that 21 right? 22 MR. LICYGIEWICZ: Objection to form.

Page 138 1 THE WITNESS: If it looks reasonable 2 and that I did not rely on certain aspects, I 3 did not rely on them. 4 But, I believe that I did rely on 5 the portions that is cited that include the 6 specification and the claims and the 7 background. 8 BY MS. HUANG: 9 Q. Are there any dependent claims that 10 you relied on to understand the term "a magnitude 11 of a duration of a gesture"? 12 MR. LICYGIEWICZ: Objection to form. 13 THE WITNESS: The dependent claim 14 would include the independent claims. So, in 15 that sense I relied upon the portions of the 16 dependent claims as well. 17 BY MS. HUANG: 18 Q. Can you tell me what portions of the 19 dependent claims that you relied on? 20 A. At least those that depend on the -- 21 that are incorporated from the independent claim, 22 that is what I was trying to say.	Page 140 1 MR. LICYGIEWICZ: Objection to form. 2 THE WITNESS: I think I answered 3 that question saying that the dependent claim 4 would include the independent claim language 5 as well. 6 BY MS. HUANG: 7 Q. So, where in your declaration are 8 you referencing? 9 MR. LICYGIEWICZ: Objection. 10 THE WITNESS: So, for example, 11 Paragraph 118 I reference that the dependent 12 claims, the dependent claims of the '114 13 confirm the understanding that in Claim 1 the 14 second magnitude threshold is greater than 15 the first magnitude threshold. 16 And I offer an opinion with respect 17 to citing Exhibit 1001, Column 98 lines 1 18 through 8 in Paragraph 118. 19 BY MS. HUANG: 20 Q. Can I turn your attention to, I will 21 make it easy, the second to last page of the '114 22 patent. So, that is page 99.
Page 139 1 Q. What -- what dependent claims do the 2 independent claims incorporate? 3 MR. LICYGIEWICZ: Objection to form. 4 THE WITNESS: You said the right 5 way? 6 BY MS. HUANG: 7 Q. I was just reading from your answer. 8 So you said -- 9 A. No, what I said is that the 10 dependent claims would include the dependent -- 11 independent claim in it, right. 12 Q. I understand. 13 A. I said more, yes. 14 So, in that sense, my citation to an 15 independent claim would also reference any 16 dependent claim that cites it. 17 Q. Did you write -- strike that. 18 Can you point to anywhere in your 19 expert declaration where you relied upon a 20 dependent claim of the '114 patent to inform your 21 understanding of a magnitude of a duration of a 22 gesture?	Page 141 1 A. Okay. 2 Q. And Column 118 starting at line 42, 3 do you see what starts as Claim 64? 4 A. Yes. 5 Q. Actually, why don't we turn to the 6 petition, that might be a little bit easier to 7 follow because it is all going to be on one page. 8 Could you go to the petition instead 9 on PDF page 11, so then I have my claim 10 limitations. 11 A. Okay. 12 Q. Let me know when you are there. 13 A. Yes, I am on the petition. Which 14 page should I go? 15 Q. It will be PDF 11. 16 A. Okay. 17 Q. And then do you see the conditional 18 limitations, I guess it will span across Pages 11 19 and 12, the conditional limitations [64.g], 20 [64.h], and then on the next page [64.j]. 21 A. Uh-huh, yes. 22 Q. What does "in response to a first

Page 142 1 component of the gesture being detected or a 2 magnitude of a duration of the gesture being 3 detected on the touchscreen on the first object 4 is detected to be less than a first magnitude 5 threshold" in 64[g], mean? 6 A. So it references the gesture that 7 was detected in 64[f]. 8 So, in 64[f] you are detecting at 9 least one component of a gesture on a touchscreen 10 and in response to a first component of the 11 gesture being detected where a magnitude of 12 duration of the gesture being detected on the 13 touchscreen on the first object. 14 So, it is referencing the gesture of 15 64[f] as in Frank. 16 Q. What is "in response to a first 17 component of the gesture being detected where a 18 magnitude of the duration of the gesture being 19 detected on the touchscreen on the first object 20 is detected to be less than the first magnitude 21 threshold," actually entail? 22 MR. LICYGIEWICZ: Objection to form.	Page 144 1 language says. 2 So, I won't summarize the claim 3 language in any other way. 4 So, 64[g] depends on the same 5 gesture that is detected in 64[f] and the entire 6 language of 64[g] holds. 7 Q. Referring back to 64[g], [h], and 8 [j], is it fair to say that all three of those 9 limitations has a condition associated with them? 10 A. They are detected, or a condition is 11 detected for each of them. And they all 12 reference the same gesture of 64[f]. 13 Q. Can the gesture referenced in 64[f] 14 meet the conditions that are recited in 64[g], 15 64[h], and [64.j] at the same time? 16 MR. LICYGIEWICZ: Objection to form. 17 THE WITNESS: Again, I don't wish to 18 offer an opinion on infringement. 19 But, those limitations all refer to 20 the same gesture that is present in 64[f]. 21 BY MS. HUANG: 22 Q. Do they also refer to the same
Page 143 1 THE WITNESS: It entails what it 2 says in the plain and ordinary meaning. I'm 3 not sure if you are asking -- again, I'm not 4 sure what specifically are you asking. If 5 you are asking for -- 6 BY MS. HUANG: 7 Q. Is that a condition? Is that your 8 understanding in response to a first component of 9 the gesture being detected where a magnitude of 10 the duration of the gesture being detected on the 11 touchscreen on the first object is less than the 12 first magnitude threshold -- 13 A. Yes, it is the condition, it is the 14 condition. 64[h] and [g] are conditions on the 15 same gesture that is pointed to in 64[f] as in 16 Frank. 17 Q. So, if the condition for 64[g] is 18 met, does that mean that the gesture referenced 19 in the element 64[f] has a magnitude of a 20 duration that is less than the first magnitude 21 threshold? 22 A. It just means what the claim	Page 145 1 magnitude of the duration of the gesture? 2 A. Again, the language of the claim 3 speaks what it means. 4 I don't wish to again summarize it 5 or limit it to any particular way. 6 Q. 64[g], 64[h], and [64.j] all 7 reference a component of the gesture being 8 detected. 9 Do you see that? 10 MR. LICYGIEWICZ: Objection to form. 11 THE WITNESS: The reference to the 12 first component of the gesture being detected 13 where, and they, that is in 64[g]. 14 64[h] is in response to a second 15 component of the gesture being detected. 16 So, they all share the initial 17 starting point of the same gesture that is 18 referenced in 64[f] as in Frank. 19 BY MS. HUANG: 20 Q. After detecting the gesture 21 referenced in 64[f], is it possible to detect all 22 three of the components in 64[g], 64[h], and

Page 146 1 [64.j], specifically the first component, the 2 second component, and the third component of the 3 same gesture? 4 MR. LICYGIEWICZ: Objection to form. 5 THE WITNESS: I'm not sure, 6 specifically as to what your question is 7 asking. 8 It is saying here that, in response 9 to the first component of the gesture being 10 detected, where the magnitude of a duration 11 of the gesture being detected. 12 So, it is the first component of the 13 gesture of 64[f]. 14 So -- so, that is what the claim 15 language is saying. 16 So, it is referring back to the 17 gesture that contains the first, second, and 18 third components. 19 BY MS. HUANG: 20 Q. Is it possible to have a single 21 detected gesture as referenced in element 64[f] 22 that includes a first component that meets the	Page 148 1 talking about the meaning of the term gesture. 2 Is that fair to say? 3 A. I am describing as a part of the 4 claim interpretation of Section 9, Paragraph 58 5 is part of the section on claim interpretation 6 for those terms. 7 Q. And in Paragraph 58, you reference 8 the '114 patent in a citation that cites to 9 Column 75 lines 24 to 26; is that right? 10 A. Yes. 11 Q. Is it fair to say that you relied on 12 those portions of the '114 patent in providing 13 your understanding as to the plain and ordinary 14 meaning of a gesture? 15 A. I was referring to something called 16 a decision tree there. 17 So, Column 75, Column 75. It refers 18 that there is a patent based gesture, may be 19 recognized in the form of an ordered sequence of 20 tuples using a decision tree. 21 So, I was referring to the use of a 22 decision tree.
Page 147 1 condition of 64[g], a second component that meets 2 the condition of 64[h], and a third component 3 that meets the condition of [64.j] all at the 4 same time from the same gesture? 5 MR. LICYGIEWICZ: Objection to form. 6 THE WITNESS: Again, I am not sure 7 specifically what you are asking, counsel. 8 Again, it looks like you are asking about a 9 use case for infringement. 10 So, I don't have an opinion on that 11 at this particular point. 12 MS. HUANG: We have been going about 13 an hour, let's take ten. 14 THE WITNESS: Okay. 15 (Recess taken -- 2:20 p.m.) 16 (After recess -- 2:28 p.m.) 17 BY MS. HUANG: 18 Q. Can I turn your attention, 19 Dr. Madiseti, to your declaration at Page 33, 20 PDF Page 33, Paragraph 58. 21 A. Okay. 22 Q. And in Paragraph 58, you start	Page 149 1 Q. Did that discussion of the '104 2 patent help you understand the plain and ordinary 3 meaning of a gesture? 4 A. It describes the use of a decision 5 tree that explains, for example, the 6 conditionals. 7 Q. Why did you cite Column 75 lines 24 8 through 26 in your discussion of the meaning of a 9 gesture? 10 A. I was discussing that there is a 11 decision tree that is evaluated for conditionals. 12 Q. Is it your position, then, that a 13 gesture as an understood in the context of the 14 '114 patent must use a decision tree to evaluate 15 conditionals? 16 MR. LICYGIEWICZ: Objection to form. 17 THE WITNESS: In certain 18 embodiments, not in a limiting map. It is 19 not a limiting requirement. 20 BY MS. HUANG: 21 Q. Do you cite to any other portion of 22 the '114 patent in support of your understanding

Page 150 1 of the plain and ordinary meaning of gesture as 2 used in the '114 patent? 3 A. Again, I have not memorized my 4 declaration. So, I would rely on what is cited 5 and what is present in my discussion in Section 6 9. 7 Q. Is it fair to say that if you didn't 8 cite to other portions of the '114 patent in your 9 declaration, then you didn't rely on those 10 portions to inform your understanding of the 11 plain and ordinary meaning of a gesture? 12 A. Again, I would say that I have not 13 memorized my declaration. 14 But, to the extent that something 15 may not have been directly or indirectly cited, I 16 think that would be -- that would be -- that may 17 be reasonable under certain conditions. 18 But, I believe that I have provided 19 full support for my opinions. 20 Q. Could we turn back to Claim 1. If 21 you need to look at it again, that might be 22 helpful.	Page 152 1 being detected on the touchscreen on the object 2 is less than a first magnitude threshold, perform 3 an operation"? 4 A. You are reading from element [1.f]. 5 So, you have read element [1.f]. 6 Q. Is that -- 7 A. Yes, I believe you read element 8 [1.f] from the claim in lines 23 to 25. 26. 9 Q. And then element [1.i] in Column 97 10 lines 35 through 38 read "When the magnitude of 11 the duration of the gesture being detected on the 12 touchscreen on the object is greater than a 13 second magnitude threshold, perform another 14 operation." 15 Did I read that correctly? 16 A. You read lines 38 through -- 35 17 through 38 of Claim 1 of the '114. 18 Q. Can the operation recited in [1.i] 19 be the same as the -- another operation recited 20 in element [1.i]? 21 MR. LICYGIEWICZ: Objection to 22 scope.
Page 151 1 A. Yes. I am looking at it. 2 Q. I don't know what the best place to 3 look at it. Okay. Let me know when you are 4 there. 5 A. Yes, I am. 6 Q. Okay. So, element [1.f] says that 7 if the condition that is laid out there is met, 8 you perform an operation, right? 9 A. No. It says that if there is a 10 condition on the same gesture that is detected in 11 [1.e], you perform an operation. 12 So, you can't think of it and 13 summarize the language of the claim to something 14 that is not there. 15 So, you have to realize that it is 16 the gesture which relies on an antecedent basis 17 to the gesture that is detected in element [e] as 18 in Echo. 19 Q. I was getting lazy and not reading 20 the full condition so I will ask it again. 21 Is it fair to say that [1.f] says 22 "When a magnitude of a duration of the gesture	Page 153 1 THE WITNESS: So, for example, I say 2 that in Paragraph 78 that a POSITA would 3 understand that to perform another operation 4 as listed in limitation [1.i], the duration 5 of the user's single continuous touch must be 6 greater than both the first magnitude 7 threshold and the second magnitude threshold. 8 BY MS. HUANG: 9 Q. Can another operation be the same 10 operation that was recited in element [1.f]? 11 MR. LICYGIEWICZ: Same scope 12 objection. 13 THE WITNESS: I don't have a 14 specific opinion on that issue. I can't 15 respond. 16 MS. HUANG: Can you give me five? 17 I'm close to done. I just want to look at my 18 notes. 19 MR. LICYGIEWICZ: Yes, no problem. 20 (Recess taken -- 2:38 p.m.) 21 (After recess -- 2:43 p.m.) 22 BY MS. HUANG:

Page 154 1 Q. If I hold my finger down on an 2 object on a touchscreen, for a duration greater 3 than the first magnitude threshold and the second 4 magnitude threshold, and the device performs an 5 operation per 64[g] of scaling per 64[h] and 6 64[i], and another operation per 64[j], would 7 that meet Claim 64? 8 A. As I said, I am not offering an 9 opinion on infringement at this point. 10 So, I don't have a specific opinion 11 on that issue. 12 MS. HUANG: Okay. I have no further 13 questions. 14 MR. LICYGIEWICZ: I don't have any 15 questions for Dr. Madiseti. We will read 16 and sign -- 17 THE WITNESS: I would like to sign 18 the transcript. 19 MR. LICYGIEWICZ: What I was just 20 saying. We will read and sign the 21 transcript. 22 THE WITNESS: Okay.	Page 156 1 CERTIFICATE OF NOTARY 2 I, LORI J. GOODIN, RPR, CRR, 3 CA CSR # 13959 the Notary for this deposition, do 4 hereby certify that the witness whose testimony 5 appears in the foregoing deposition was sworn by 6 me; that I am neither counsel for, related to, 7 nor employed by any of the parties to the action 8 in which this deposition was taken; and, further, 9 that I am not a relative or employee of any 10 attorney or counsel employed by the parties 11 hereto, or financially or otherwise interested 12 in the outcome of this action. 13 14 <u>LORI J. GOODIN, RPR, CRR</u> 15 Notary Public in and for: 16 17 STATE OF FLORIDA, COUNTY OF SARASOTA 18 Notary Commission Number: GG987804 19 My Commission expires: May 12, 2028 20 STATE OF CALIFORNIA, CA CSR# 13959 21 My Commission expires: February 22, 2027 22 23 STATE OF MARYLAND, COUNTY OF ANNE ARUNDEL 24 My Commission expires: August 2, 2025 25 DISTRICT OF COLUMBIA, WASHINGTON DC 26 My Commission expires: June 1, 2026 27 28 STATE OF DELAWARE, COUNTY OF KENT 29 My Commission expires: September 9, 2025
Page 155 1 (Whereupon, signature not having been waived, 2 the deposition suspended at 2:44 p.m.) 3 * * * 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	Page 157 1 Vijay K. Madiseti, Ph.D., c/o 2 NORTON ROSE FULBRIGHT US, LLP 3 2200 Ross Avenue, Suite 3600 4 Dallas, Texas 75201-7932 5 6 Case: Apple Inc. v. Smith Interface Technologies, LLC 7 Date of deposition: July 17, 2025 8 Deponent: Vijay K. Madiseti, Ph.D. 9 10 Please be advised that the transcript in the above 11 referenced matter is now complete and ready for signature. 12 The deponent may come to this office to sign the transcript, 13 a copy may be purchased for the witness to review and sign, 14 or the deponent and/or counsel may waive the option of 15 signing. Please advise us of the option selected. 16 Please forward the errata sheet and the original signed 17 signature page to counsel noticing the deposition, noting the 18 applicable time period allowed for such by the governing 19 Rules of Procedure. If you have any questions, please do 20 not hesitate to call our office at (202)-232-0646. 21 22 Sincerely, 23 Digital Evidence Group 24 Copyright 2025 Digital Evidence Group 25 Copying is forbidden, including electronically, absent 26 express written consent.

Page 158 1 Digital Evidence Group, L.L.C. 1730 M Street, NW, Suite 812 2 Washington, D.C. 20036 (202) 232-0646 3 4 SIGNATURE PAGE Case: Apple Inc. v. Smith Interface Technologies, LLC 5 Witness Name: Vijay K. Madisetti, Ph.D. Deposition Date: July 17, 2025 6 7 I do hereby acknowledge that I have read and examined the foregoing pages of the transcript of my deposition and that: 8 9 (Check appropriate box): () The same is a true, correct and 10 complete transcription of the answers given by me to the questions therein recorded. 11 () Except for the changes noted in the attached Errata Sheet, the same is a true, 12 correct and complete transcription of the 13 answers given by me to the questions therein 14 recorded. 15 16 17 _____ DATE WITNESS SIGNATURE 18 19 20 21 _____ 22 DATE NOTARY	
Page 159 1 Digital Evidence Group, LLC 2 1730 M Street, NW, Suite 812 3 Washington, D.C. 20036 4 (202)232-0646 5 6 ERRATA SHEET 7 8 Case: Apple Inc. v. Smith Interface Technologies, LLC 9 Witness Name: Vijay K. Madisetti, Ph.D. 10 Deposition Date: July 17, 2025 11 Page No. Line No. Change 12 13 14 15 16 17 18 19 20 21 _____ 22 Signature Date	