

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

- - - - - X Case No.
SAMSUNG ELECTRONICS CO., : PGR2024-00030
LTD., SAMSUNG ELECTRONICS : U.S. Patent No.
AMERICA, INC., : 11,868,178
Petitioner, : OUTSIDE
v. : ATTORNEYS' EYES
OURARING, INC., : ONLY PROTECTIVE
Patent Owner. : ORDER MATERIAL
- - - - - X

Wednesday, June 18, 2025

Videoconference Deposition of ANDREW T. CLARKE, a witness herein, called for examination by counsel for Petitioner in the above-entitled matter, pursuant to notice, the witness being duly sworn by Desirae S. Jura, a Notary Public in and for the District of Columbia, held at O'Melveny & Myers, LLP, 1625 I Street, NW, Washington, DC, at 9:03 a.m., ET, Wednesday, June 18, 2025, and the proceedings being taken down by Stenotype by Desirae S. Jura, RPR, CSR (CA), and transcribed under her direction.

JOB NO.: 114241

ATTORNEY'S EYES ONLY

Page 2 1 UNITED STATES PATENT AND TRADEMARK OFFICE 2 BEFORE THE PATENT TRIAL AND APPEAL BOARD 3 - - - - - X Case No. 4 SAMSUNG ELECTRONICS CO., : PGR2024-00039 5 LTD., SAMSUNG ELECTRONICS : U.S. Patent No. 6 AMERICA, INC., : 11,874,702 7 Petitioner, : OUTSIDE 8 v. : ATTORNEYS' EYES 9 OURARING, INC., : ONLY PROTECTIVE 10 Patent Owner. : ORDER MATERIAL 11 - - - - - X 12 Wednesday, June 18, 2025 13 Videoconference Deposition of ANDREW T. 14 CLARKE, a witness herein, called for examination by 15 counsel for Petitioner in the above-entitled matter, 16 pursuant to notice, the witness being duly sworn by 17 Desirae S. Jura, a Notary Public in and for the 18 District of Columbia, held at O'Melveny & Myers, LLP, 19 1625 I Street, NW, Washington, DC, at 9:03 a.m., ET, 20 Wednesday, June 18, 2025, and the proceedings being 21 taken down by Stenotype by Desirae S. Jura, RPR, CSR 22 (CA), and transcribed under her direction. 23 24 25	Page 4 1 APPEARANCES (Continued): 2 3 On behalf of the Patent Owner: 4 JASJIT S. VIDWAN, ESQ. 5 Mayer Brown LLP 6 1999 K Street, NW 7 Washington, DC 20006-1101 8 (202) 263-3065 9 jvidwan@mayerbrown.com 10 -and 11 ROBERT G. PLUTA, ESQ. 12 Mayer Brown LLP 13 71 South Wacker Drive 14 Chicago, Illinois 60606 15 (312) 782-0600 16 rpluta@mayerbrown.com 17 18 ALSO PRESENT: 19 ROBERT A. LEONARD, Videographer 20 21 22 23 24 25
Page 3 1 APPEARANCES: 2 3 On behalf of the Petitioner: 4 5 JOHN KAPPOS, ESQ. 6 O'Melveny & Myers, LLP 7 2801 North Harwood Street 8 Suite 1600 9 Dallas, Texas 75201 10 (972) 360-1900 11 jkappos@omm.com 12 -and- 13 ARGIRENIA ZERVOS, ESQ. 14 O'Melveny & Myers, LLP 15 1625 I Street, NW 16 Washington, DC 20006 17 (202) 383-5300 18 rzervos@omm.com 19 20 21 -- 22 23 24 25	Page 5 1 C O N T E N T S 2 WITNESS EXAMINATION BY COUNSEL FOR 3 ANDREW T. CLARKE PETITIONER PATENT OWNER 4 BY MR. KAPPOS 10 5 BY MR. PLUTA 235 6 7 8 E X H I B I T S 9 CLARKE EXHIBIT NO. PAGE 10 2019/178 - Case No. PGR2024-00030, US 11 Patent No. 11,868,178, 12 Declaration of Andrew T. 13 Clarke, CFA 17 14 Exhibit 1 - Updated Appendix 4, Oura 15 Income Statement Q2 FY 2022 - 16 Q1 FY 2025 19 17 2019/702 - Case No. PGR2024-00039, US 18 Patent No. 11,874,702, 19 Declaration of Andrew T. 20 Clarke, CFA 20 21 1001/178 - United States Patent, 22 Patent No: US 11,868,178 B2 26 23 1001/702 - United States Patent, 24 Patent No: US 11,874,702 B2 26 25 Exhibit 2 - Swappa.com, Oura Ring Gen 2 79

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3	2073 - Verifiedmarketresearch.com,		3	number 1 in the deposition of Andrew T. Clarke in the	
4	Smart Ring Market Size &		4	matter of Samsung Electronics Company et al., versus	
5	Forecast	172	5	Ouraring, Inc. -- Incorporated, Case Number	
6	2107 - Oura Health Oy, Oura Group		6	PGR202400039, Patent Number 11,874,702, and	
7	Consolidation USD		7	PGR20240030, Patent Number 11,868,178.	
8	(Consolidated), Income		8	This deposition is taking place at	
9	Statement, From Jan 2022 to		9	O'Melveny & Myers, LLP, in Washington, DC. This	
10	Sep 2022	179	10	deposition is taken by the Petitioner. Today's date	
11	2108 - Oura Health Oy, Oura Group		11	is June 18th, 2025. The time on my video monitor is	
12	Consolidation USD		12	9:03 a.m., Eastern time. My name is Robert Leonard.	
13	(Consolidated), Income;		13	I'm the video specialist. I represent First Legal	
14	Statement, From Oct 2022 to		14	Depositions. The court reporter today is Desirae	
15	Sep 2023	180	15	Jura. She also represents First Legal.	
16	2109 - Oura Health Oy, Oura Group		16	Will counsel please identify themselves	
17	Consolidation USD		17	verbally and state who they represent, starting with	
18	(Consolidated), Income		18	the taking attorney.	
19	Statement, From Oct 2023 to		19	MR. KAPPPOS: John Kappos of O'Melveny &	
20	Sep 2024	180	20	Myers, and with me is Renia Zervos, also of O'Melveny	
21	2110 - Oura Health Oy, Oura Group		21	& Myers, representing the Samsung Petitioners.	
22	Consolidation USD		22	MR. PLUTA: Rob Pluta with Mayer Brown on	
23	(Consolidated), Income		23	behalf of Ouraring.	
24	Statement, Oct 2024, Q1 2025,		24	MR. VIDWAN: Jasjit Vidwan, also with	
25	Nov 2024, Dec 2024	181	25	Mayer Brown, on behalf of Ouraring.	

ATTORNEY'S EYES ONLY

Page 10 1 THE COURT: Will the court reporter please 2 swear in the witness. 3 Whereupon, 4 ANDREW T. CLARKE 5 having been duly sworn by the Notary Public, was 6 examined and testified as follows: 7 EXAMINATION BY COUNSEL FOR PETITIONER 8 BY MR. KAPPOS: 9 Q. Good morning, Mr. Clarke. 10 A. Good morning. 11 Q. Have you been deposed before? 12 A. I have, yes. 13 Q. How many times? 14 A. I believe seven at last count. 15 Q. Have you ever given testimony in court, in 16 person, in front of a judge or jury? 17 A. Yes, I have. The International Trade 18 Commission. 19 Q. Only at the ITC? 20 A. To date, that's correct, yes. 21 Q. How many times was that? 22 A. I believe a total of three different times 23 in two different investigations. 24 Q. And who did you appear for on behalf of at 25 the ITC?	Page 12 1 A. Yes, I need to go back to my CV to make 2 sure we have them all, but it's also the 1373 3 investigation at the ITC, as well as -- I believe it 4 was -- it was an enforcement hearing at the ITC. I 5 believe it was 1294, but I'd want to double check my 6 CV to make sure I have the number correct on that. 7 Q. In that case, were you appearing on behalf 8 of the Petitioner or the Respondent? 9 A. In that case, specifically on behalf of 10 the -- well, sorry, just to clarify. I just 11 mentioned two different cases. 12 Q. Okay. Let's take them one at a time. 13 A. The 1373, I was testifying on behalf of 14 Respondent. And then the 12 -- I would have to go 15 back -- in the enforcement action, that was on behalf 16 of the Respondent as well in that case. 17 Q. And by Respondent, we're talking about the 18 party that was accused of violating the import 19 statute, is that correct? Or the party that was 20 accused of patent infringement? Maybe that's the 21 easier way to say it. 22 A. So the cases have ranged, in terms of 23 topic. Some pertained to patents, some related to 24 trade secrets, others to unfair competition. That 25 leads to another case, ITC 1381, in which I was
Page 11 1 A. So in one investigation, the ITC 1352 2 investigation, I appeared on behalf of Respondents. 3 Q. And who was the Respondent? 4 A. It was a joint group, primarily related 5 to -- one party was Asquedos Bioscience. I don't 6 remember the exact legal names of the others, but I 7 believe they were related companies. 8 Q. Okay. And you were about to say the other 9 cases where you appeared at the ITC? 10 A. And the other case that I appeared at the 11 ITC was on behalf of -- I have to go back and double 12 check my resume, and make sure I get the name 13 correctly. It was the 1365 investigation. 14 Q. Was that a Respondent or was that the 15 Petitioner in that case? 16 A. In that case, it was the Respondent. 17 Q. And you mentioned that you had been 18 deposed, I think you said seven times? 19 A. That's correct. 20 Q. And I presume some of those were in the 21 two ITC cases? 22 A. That's correct. 23 Q. Were there any other cases that you've 24 been deposed in, apart from the ITC cases that you 25 mentioned?	Page 13 1 deposed, and provided testimony on behalf of a group 2 of Respondents. 3 But those have been on behalf of the party 4 that's either been accused of import violations or 5 other unfair actions. Most recently, I was deposed 6 in the 1420 investigation at the ITC on behalf of the 7 Complainant in that case. 8 Q. Have you ever appeared in a district court 9 litigation? 10 A. Not to date, no. 11 Q. And what about an IPR, other than the one 12 that we're talking about here today? 13 A. I think, to be clear, I've also submitted 14 reports on two IPRs, in addition to the two PGRs that 15 I believe we're here to talk about today. But 16 outside those four, no, I have not. 17 Q. What were the two other IPRs that you are 18 referring to, other than the ones that we're here to 19 talk about today? 20 A. I want to double check the patents 21 associated with them, but I think it was related to 22 the '859 and the '953 patents, although I'd want to 23 confirm that. 24 Q. Okay. So it's on behalf of Oura, and it's 25 connected to this matter, but different patents. Is

Page 14 1 that what you're saying? 2 A. I don't want to provide a legal opinion as 3 to whether it's related to this matter or not. I 4 understand there's separate petitions. But, yes, 5 they are related. They are on behalf of Oura. I can 6 agree with that. 7 Q. And they are matters for which Samsung is 8 the Petitioner in the IPR; is that right? 9 A. That's my understanding, yes. 10 Q. Are all of your cases listed in your CV, 11 as far as you can recall? 12 A. Excuse me. The one exception to that 13 would be the ITC 1420 investigation that I just 14 mentioned that -- that deposition occurred subsequent 15 to the ones that appear in my CV. But otherwise, 16 yes. 17 Q. So given that you've been deposed a number 18 of times, I'll take it that you generally understand 19 the drill. Please let me know if you don't 20 understand a question that I ask. You can ask for 21 clarification. Is that clear? 22 A. Understood. 23 Q. And is there any reason that you cannot 24 give your best truthful testimony today? 25 A. No.	Page 16 1 a lawyer? 2 MR. PLUTA: Object to form. 3 BY MR. KAPPOS: 4 Q. And I mean that just generally, in 5 connection with this matter, not limited to 6 preparation for your deposition. 7 A. So I had one conversation with personnel 8 from Oura, with counsel as well. 9 Q. Can you tell me who that was that you 10 spoke to? 11 MR. PLUTA: Object to form, lack of 12 foundation. 13 THE WITNESS: Going by recollection, it 14 was Christopher Dawson and Conor Crowley, in addition 15 to the -- I believe both in-house and outside 16 counsel. 17 BY MR. KAPPOS: 18 Q. And was that -- I don't want to know 19 anything about communications or discussions with 20 lawyers. But just generally, was that to acquire 21 some information from the company? 22 MR. PLUTA: Object to form, relevance. 23 THE WITNESS: So I think the way I would 24 phrase it instead is that it was to clarify questions 25 that I had, to make sure my interpretation and
Page 15 1 Q. How was your declaration in this case 2 written? 3 A. Can you clarify what you mean by, how was 4 it written? 5 Q. Well, was it written by counsel and 6 provided to you, or did you write it? I mean, just 7 generally, I'm asking about the process by which you 8 came to write your declaration. 9 A. So, no, the declaration was written by me 10 assisted by staff at Analysis Group supporting me. 11 But I wrote my declaration. 12 Q. And what's your affiliation with Analysis 13 Group? 14 A. So I am a vice president at Analysis 15 Group. 16 Q. What documents did you review in 17 preparation for your deposition today? 18 A. So those would include my declarations 19 themselves, as well as the exhibits referenced and 20 cited to those. I think that would form the bulk of 21 what I reviewed. I think I also reviewed the initial 22 determination from Judge Hines in the ITC 1398 23 investigation. But I think, collectively, those form 24 certainly the majority of what I reviewed. 25 Q. Did you talk to anybody at Oura who is not	Page 17 1 understanding of some of their financial documents 2 was accurate. 3 BY MR. KAPPOS: 4 Q. Do you have an Oura Ring? 5 A. I do not. 6 Q. Have you ever had one? 7 A. No, I have not. 8 Q. Do you know anybody that has one? 9 A. Yes, I believe I do. 10 Q. What's their relation to you? 11 A. They're colleagues, clients. 12 Q. But no wife or family member has an Oura 13 Ring? 14 A. That's correct. 15 (Clarke Exhibit No. 2019/178 was 16 identified for the record.) 17 BY MR. KAPPOS: 18 Q. I am handing you what's previously been 19 marked as Exhibit 2019, which I understand to be your 20 declaration concerning the '178 Patent. Can you just 21 look at that and confirm that that's your declaration 22 in connection with the '178 Patent? 23 A. It appears to be, yes. 24 Q. Are there any errors or corrections that 25 you would like to tell me about before we move

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1 further, that perhaps you noticed something in
2 preparing for the deposition that is in error? Is
3 there anything like that?

4 A. So there is nothing that I would consider
5 to be an error. I recall, as I was preparing, I may
6 have come across one or two typos, typographical
7 mistakes. But I don't have those to mind. But if I
8 see them over the course of the day, I will point
9 them out.

10 Q. Okay.

11 A. The other thing I would note is that the
12 Appendix 4, in preparing for my deposition, I wanted
13 to -- a little more -- a little more granularity to
14 some of the -- one of the line items in Appendix 4.
15 And so I also considered an updated version of
16 Appendix 4 that essentially expands on row 15.

17 Q. Do you have that updated version with you
18 today?

19 A. Yes, I believe so.

20 MR. KAPPOS: Counsel, you have it?

21 MR. PLUTA: Yes.

22 MR. KAPPOS: Okay.

23 BY MR. KAPPOS:

24 Q. Why don't we go ahead and mark that as an
25 exhibit.

1 [REDACTED]
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21 (Clarke Exhibit No. 2019/702 was
22 identified for the record.)
23 BY MR. KAPPOS:
24 Q. I'm handing you a document that's been
25 marked as Exhibit 2019. This is your declaration in

Page 19

Page 21

1 (Clarke Exhibit No. 1 was identified
2 for the record.)
3 BY MR. KAPPOS:
4 Q. So the court reporter has handed you a
5 document that's marked as Exhibit 1. It's labeled at
6 the top Updated Appendix 4. Do you have that
7 document in front of you?
8 A. Yes, I do.
9 Q. And do you recognize this document as the
10 -- what you referred to a minute ago as a corrected
11 or updated version of Exhibit 4?
12 A. So I would disagree with corrected. I
13 would agree with updated.
14 Q. Okay, updated version of Exhibit 4?
15 A. Correct, yes.
16 Q. I think you mentioned that it gave you
17 greater granularity. Can you explain that?
18 A. [REDACTED]

1 connection with the '702 patent. I'll just give you
2 a moment to look at that, and you can confirm for me
3 if that's -- it looks like your declaration for the
4 '702 patent.

5 A. Yes, it does.

6 Q. And are there any errors, corrections that
7 you want to point out in connection with the '702
8 declaration that you noticed during preparation?

9 A. So it would be a similar answer to the
10 question related to the '178 declaration. There, I
11 believe, may have been one or two typographical
12 errors that I saw as I was going through, but nothing
13 that impacts my opinions.

14 Similarly, the information contained in
15 the updated Appendix 4, Exhibit 1 of this deposition
16 would be relevant to the '702 as well.

17 Q. Is your '702 declaration the same as the
18 '178 declaration, with the only difference being that
19 the patent numbers that are referred to are different
20 in the two?

21 A. So I think the two declarations provide
22 two different opinions related to each of the two
23 patents. And I think it's a separate analysis for
24 each.

25 O. But the text of the declarations, are they

Page 22 1 the same, with the only difference being that one 2 refers to the '178 and the other one refers to the 3 '702 patent? 4 A. I think there are many words that are the 5 same, but I don't know that I could agree that, in 6 total, they are the same. I think the opinion -- the 7 opinion reached -- there is a separate opinion 8 reached in each one of them. 9 And I don't -- I guess I'm a little 10 hesitant to agree that everything is the same. I 11 agree that there are many words and several of the 12 analyses that indicate -- that are similar and 13 include similar numbers, in some cases the same 14 numbers, between the two declarations. 15 Q. Well, other than the patent numbers, can 16 you point out any difference between the two? 17 A. I think, for example, paragraph 27 -- 18 excuse me, paragraph 28 of each of them differs by 19 more than simply the patent number specific to the 20 patents themselves. 21 Q. You mean insofar as there are different 22 dates that are referred to for when the patents 23 issued? 24 A. Different dates than the patents issued. 25 I understand they are different patents. So there's	Page 24 1 any other difference that you recall between the two 2 declarations, again, setting aside the patent number 3 being different? 4 A. I think clearly in paragraph 2, I believe 5 there are different claims at issue. So one -- my 6 understanding is, in one case, it's claims 1 through 7 18 of the '178. And the '702, it's claims 1 through 8 17. So there's a slight difference there. But by 9 and large, much of the information that I reviewed 10 and was the basis for my opinions regarding the '702 11 and the '178 is similar, yes. 12 Q. So let's start with your '178 declaration. 13 In paragraph 10, you say that "the Oura 14 Ring is a commercial embodiment of the claims of the 15 challenged patent and is coextensive with the 16 patented inventions." Do you see that language? 17 A. Before we go to that, I just wanted to 18 ask, I have the clean copies that are just bound 19 slightly differently of the 2019. Do you have any 20 objection -- 21 Q. I do not have any objection. Your clean 22 copies, they don't have any writing or notes on them, 23 correct? 24 A. That's correct. 25 Q. Okay. Yeah, you can refer to either one.
Page 23 1 the patent, the patent names in each of the two. 2 That's -- that is what I'm referring to in that 3 sense, that each -- paragraph 28 in each declaration 4 is individual to that particular patent. To the 5 extent some of the words and inventors remain the 6 same, then, yes, those same words appear in both 7 paragraphs. 8 Q. Well, the inventors are the same and the 9 title's the same, correct? 10 A. So the -- the title of each is Wearable 11 Computing Device, and the inventors of the '178 are 12 Curt von Badinski, Michael Strasser, and Peter Twiss. 13 And the inventors of the '702 are von Badinski, 14 Michael Strasser, and Peter Twiss. 15 Q. Okay. And so the only difference is the 16 patent number is different and the issue date is 17 different, correct? 18 A. I guess I can't quite agree with the only 19 difference being those things. My understanding is 20 they are two different patents with two different 21 claims and different language behind them. I agree 22 that the titles and the inventors are the same, and 23 they appear both in the declaration for the '702 and 24 for the '178. 25 Q. Okay. Other than paragraph 28, is there	Page 25 1 If you prefer your bound copy, that's fine. 2 A. Thank you. 3 Q. And I'm in paragraph 10. 4 A. Yes. All right, I'm at paragraph 10. 5 Q. Yeah. And do you see the language in 6 paragraph 10, where you say that "the Oura Ring is a 7 commercial embodiment of the claims of the challenged 8 patent and is coextensive with the patented 9 inventions"? 10 A. I see those words. You left out the 11 beginning of the sentence which was, "According to 12 Dr. Mercier, whose opinions I have reviewed and 13 considered." But then I agree with the rest of that 14 statement. 15 Q. Have you analyzed -- well, let me start 16 with this. Have you reviewed the '178 patent? 17 A. Yes, I have. 18 Q. And you've reviewed the '702 patent as 19 well? 20 A. That's correct. 21 Q. Did you analyze the differences between 22 the '178 and the '702 patent? 23 MR. PLUTA: Object to form. 24 THE WITNESS: So I am not offering a 25 technical opinion regarding either the '178 or the

Page 26 1 '702 patents. So my review of those patents was in 2 the context as an economist, and my understanding of 3 the patents, and some of the information included in 4 those. But I have not separately analyzed the claims 5 of the '702 or the '178 patents. 6 BY MR. KAPPOS: 7 Q. Did you do anything to analyze the 8 differences between the '178 and '702 patents? 9 MR. PLUTA: Object to form. 10 THE WITNESS: Again, I think that seems to 11 require a legal -- or a legal or technical 12 interpretation of the two patents. And I did not 13 seek to provide technical interpretation or analysis 14 of the two patents. 15 BY MR. KAPPOS: 16 Q. But you did read the two patents, correct? 17 A. Yes, I did. 18 (Clarke Exhibit No. 1001/178 was 19 identified for the record.) 20 (Clarke Exhibit No. 1001/702 was 21 identified for the record.) 22 BY MR. KAPPOS: 23 Q. I'm handing you a copy of what's been 24 marked as Exhibit 1001, which is a copy of the '178 25 patent. And I am also handing you Exhibit 1001,	Page 28 1 A. So I think I would phrase it a little 2 differently. Paragraph 28 is part of the background 3 section of my declaration, which is getting into my 4 understanding of the patented technology and the 5 patent. I would not suggest that I have an opinion 6 related to the technology of the '178 patent. I 7 believe I explained already, I'm not here to offer a 8 technical opinion related to the '178 or to the '702. 9 Q. Okay. In stating that the '178 relates to 10 a smart ring that includes a curved housing having a 11 U-shaped interior storing components, did you 12 consider anything other than the abstract of the '178 13 patent? 14 A. As I previously said, that sentence is a 15 quote from the abstract in forming my background and 16 research into this case, and my assignment here, I 17 certainly read through the '178 patent, including the 18 claims. But from -- for purposes of my background 19 information as an economist, this was a summary of my 20 understanding from the abstract here. 21 Q. And the language that you used referring 22 to a U-shaped interior, that language does not appear 23 in the claims of the '178 patent, correct? 24 MR. PLUTA: Object to form. 25 THE WITNESS: I think I would have to go
Page 27 1 which is a copy of the '702 patent. 2 BY MR. KAPPOS: 3 Q. You've described the '178 patent as 4 relating to a smart ring that includes a curved 5 housing having a U-shaped interior storing 6 components. You refer to that, I think, in a number 7 of places in your declaration. Do you recall that 8 description? One example is paragraph 28. 9 A. Yeah, paragraph 28 is the one that I was 10 thinking of, in which I state that the '178 patent 11 relates to a smart ring that, "includes a curved 12 housing having a U-shaped interior storing 13 components." 14 Q. Okay. Where does that language appear in 15 the '178 patent claims? 16 A. So I believe that quote comes from the 17 abstract of the patent, of the '178 patent, Exhibit 18 1001, in the first -- the first two lines of the 19 abstract there. 20 Q. Is the abstract the only part of the '178 21 patent that you considered in reaching that opinion? 22 A. Can you clarify what opinion you're 23 referring to? 24 Q. Well, the opinion that you just read from 25 paragraph 28.	Page 29 1 back and read over the claims. But whether it 2 appears or not, I'm not offering a technical opinion 3 related to the -- to any of the claims here. 4 BY MR. KAPPOS: 5 Q. Okay, let me ask it a different way. 6 Without reading the entirety of the claims, you would 7 not be able to refer me to where the U-shaped 8 interior storing components, where that language 9 appears in the claims of the '178 patent; is that 10 correct? 11 A. So, again, I would preface this with, I'm 12 not offering a technical opinion related to the '178 13 patent. My understanding in terms of the background 14 of the '178 patent is based on the quote which I've 15 pointed you to which comes from the abstract of the 16 '178 patent. But I've not -- I'm not interpreting or 17 offering any technical analysis of what is in the 18 claims of the '178 patent. 19 Q. And would your answer be the same for the 20 '702 patent? 21 A. I similarly am not offering a technical 22 opinion related to the '702 patent, that's correct. 23 Q. And you can't point us -- without reading 24 the entire claim language, you wouldn't be able to 25 refer us to where the description of a U-shaped

Page 30 1 interior storing components, where that appears in 2 the '702 claims, correct? 3 MR. PLUTA: Object to form. 4 THE WITNESS: So I would, again, preface 5 my answer with, I'm not providing a technical opinion 6 related to the '702 patent. And -- paragraph 28 of 7 my '702 declaration is, again, providing a quote, 8 based on the abstract of the '702 patent without 9 specific reference to the claims of the '702. 10 BY MR. KAPPOS: 11 Q. Is it your understanding that the abstract 12 defines the scope of the patent? 13 MR. PLUTA: Object to form. 14 THE WITNESS: I think that calls for a 15 legal opinion that I'm not offering here today. 16 BY MR. KAPPOS: 17 Q. Where did the claims of the '178 patent 18 talk about a smart ring? 19 MR. PLUTA: Object to form. 20 THE WITNESS: Again, I'm not offering an 21 interpretation of the claims of the '178 or what 22 words are included in those or not included in those. 23 I'd be happy to take a look at the claims, but I'd be 24 offering my view as -- from an economic perspective, 25 which is certainly not that of a technical or legal	Page 32 1 not offering a technical opinion related to what the 2 '178 claims specifically are focused on. 3 Q. Well, in paragraph 28, you said the '178 4 patent relates to a smart ring that includes a curved 5 housing having a U-shaped interior storing 6 components. So is it your testimony, then, that your 7 only basis for that statement was the abstract of the 8 '178 patent? 9 A. I think I provided a similar statement 10 before that I'm not offering a technical opinion 11 related to the claims of the '178 or the '702 patent. 12 The information contained in paragraph 28 is 13 background information relevant to my opinion, but it 14 simply is describing this quote from the abstract of 15 the '178 patent. 16 Q. And your answer would be the same for the 17 '702 patent, correct? 18 A. I'd agree that I'm not offering a 19 technical opinion related to the '702 or the claims 20 of the '702. In that paragraph 28 of my declaration 21 related to the '702 patent is by way of background, 22 understanding of the patent, not any interpretation 23 of the patent. 24 Q. Can you point to anything other than the 25 abstract as your basis for this statement that the
Page 31 1 perspective. 2 BY MR. KAPPOS: 3 Q. Without reading line by line the claims, 4 do you recall the term smart ring appearing in the 5 claims of the '178 patent? 6 MR. PLUTA: Object to form. 7 THE WITNESS: I would repeat my statement 8 that I'm not providing a technical opinion regarding 9 the claims of the '178 patent. So as I sit here as 10 an economist, I don't believe I have a recollection, 11 one way or the other, as to whether or not the claims 12 specifically include the phrase smart ring or not. 13 BY MR. KAPPOS: 14 Q. And would your answer be the same for the 15 '702 patent? 16 MR. PLUTA: The same objection. 17 THE WITNESS: Related to the '702 patent, 18 I'm similarly not offering any technical opinion 19 related to the scope of the claims or the language 20 used specifically in the claims. 21 BY MR. KAPPOS: 22 Q. In your opinion, the '178 patent is 23 directed to the curved housing with a U-shaped 24 interior; is that correct? 25 A. So I think as I've said several times, I'm	Page 33 1 '178 patent relates to a smart ring that includes a 2 curved housing having a U-shaped interior storing 3 components? 4 A. I'm sorry, I think I lost track of the 5 middle of that question. Could you repeat it? 6 Q. Can you point to anything other than the 7 abstract of the '178 patent as your basis for this 8 statement in paragraph 28 of your declaration that 9 the '178 patent relates to a smart ring that includes 10 a curved housing having a U-shaped interior 11 components -- sorry, let me say it again. 12 Can you point to anything other than the 13 abstract of the '178 patent as your basis for the 14 statement in paragraph 28 of your declaration that 15 the '178 patent relates to a smart ring that includes 16 a curved housing having a U-shaped interior storing 17 components? 18 MR. PLUTA: Object to form. 19 THE WITNESS: So again, I'm not offering a 20 technical opinion related to the '178 patent or the 21 claims of that patent. The quote that I've quoted in 22 that sentence of paragraph 28 is the quote coming 23 from the abstract of the '178 patent. I'm not 24 excluding the fact that there may be other discussion 25 related to any of those words elsewhere in the

Page 34 1 patent, but that quote comes from the abstract. 2 BY MR. KAPPOS: 3 Q. But you cannot point us to any other 4 discussion elsewhere in the patent that forms the 5 basis for what you expressed in paragraph 28, that 6 last sentence, correct? 7 MR. PLUTA: Object to form. 8 THE WITNESS: So I think my paragraph 28, 9 which I've described as background to my opinion, is 10 not interpreting or being exhaustive or attempting to 11 be exhaustive in defining where certain information 12 may come from or may not come from. 13 The quote that I've provided at this 14 second sentence of paragraph 28 is a quote from the 15 abstract itself, but I'm not offering a technical 16 opinion as to whether or not there is -- whether any 17 of those words appear elsewhere in the patent. 18 BY MR. KAPPOS: 19 Q. And your answer would be the same for the 20 '702 patent, correct? 21 A. So I can agree that related to the '702 22 patent, I'm not offering a technical opinion related 23 to that patent or the claims of that patent. And the 24 quote that I've used out of -- from the '702 patent 25 is coming from the abstract. I don't have an	Page 36 1 MR. PLUTA: Object to form. 2 THE WITNESS: Again, that sounds like it's 3 calling for a technical opinion that I am not 4 providing here related to the '178 or the '702 5 patents. 6 BY MR. KAPPOS: 7 Q. If I were to add a protrusion to the 8 surface of the ring, would you then agree with me 9 that the ring is no longer a curved housing, as 10 you've described in paragraph 28 for the '178 patent? 11 MR. PLUTA: Object to form, relevance. 12 THE WITNESS: Again, that seems to be 13 calling for a technical opinion that I am not here to 14 provide related to the -- I may have missed the word, 15 protuberance or whatnot. I am not offering a 16 technical opinion related to the '178 patent. 17 BY MR. KAPPOS: 18 Q. And your answer would be the same for the 19 '702 patent? 20 MR. PLUTA: Object to form, relevance. 21 THE WITNESS: So I'd agree that I am not 22 here to provide a technical opinion related to the 23 scope or claims of the '702 patent, yes. 24 BY MR. KAPPOS: 25 Q. And so you have no view as to whether a
Page 35 1 opinion, one way or the other, as to whether or not 2 there is other language elsewhere in the patent. And 3 it doesn't impact my opinion, one way or the other. 4 Q. In your view, does the curved housing that 5 you discuss in paragraph 28, does that curved housing 6 have to be uniform around the entire ring? 7 MR. PLUTA: Object to form. 8 THE WITNESS: Again, that sounds like 9 that's calling for a technical opinion that I'm not 10 here to provide today. 11 BY MR. KAPPOS: 12 Q. So you have no view as to whether the '178 13 patent relates to a smart ring that includes a curved 14 housing where that curved housing is uniform around 15 the entire ring, 360 degrees; is that correct? 16 MR. PLUTA: Object to form. 17 THE WITNESS: I think you've put a lot 18 into that question. My response is, similarly, that 19 I am not offering a technical opinion as to the scope 20 or claims or the details of the '178 patent or the 21 '702 patent. 22 BY MR. KAPPOS: 23 Q. Does the thickness of the ring need to be 24 uniform in order to fall within the scope of the '178 25 patent?	Page 37 1 protrusion on the surface of the ring would still 2 fall within the scope of the ring having a curved 3 housing as you've described in paragraph 28; is that 4 correct? 5 MR. PLUTA: Object to form, asked and 6 answered, relevance. 7 THE WITNESS: So, first, I am not offering 8 a technical opinion. And that sounds like it's 9 requiring a technical opinion related to the '702 10 patent. Also, I just wanted to clarify that the 11 words curved housing is not the language that I came 12 up with. That's a quote from the abstract of the 13 patent itself. 14 BY MR. KAPPOS: 15 Q. Well, you used that term, though, or you 16 at least quote it in your declaration. Does it have 17 a meaning to you? 18 MR. PLUTA: Object to form. 19 THE WITNESS: I think the meaning I would 20 ascribe -- I don't have a technical opinion as to the 21 meaning or the import of specific words within that 22 -- within the quote that I've taken from the patent. 23 BY MR. KAPPOS: 24 Q. Do you have any opinion of what the term 25 curved housing means?

Page 38 1 A. That sounds -- 2 MR. PLUTA: Object to form, relevance. 3 THE WITNESS: Apologies. That sounds like 4 that's a technical question, and I am not offering a 5 technical opinion as to the meaning of those words. 6 BY MR. KAPPOS: 7 Q. Would you agree with me, then -- let me 8 back up and start over. 9 So if we look at the paragraph 28 of your 10 declaration for the '178 patent and paragraph 28 of 11 your declaration for the '702 patent, they both have 12 the same concluding sentence, differing only by the 13 patent number with regard to the quote that you've 14 stated from the abstract. Do you see that? 15 A. So I see that the words of the last 16 sentence of paragraph 28 in the -- regarding the '178 17 patent and paragraph 28 from my declaration of the 18 '702 patent, yes, I see that those words are the same 19 with the exception of the patent number. 20 Q. And so both the '178 and the '702 patents 21 are directed to the same smart ring with the U-shaped 22 interior housing, correct? 23 MR. PLUTA: Object to form. 24 THE WITNESS: So I'd need to qualify my 25 answer that I'm not here to offer a technical opinion	Page 40 1 technical opinion related to the '178 patent. As I 2 state here in my summary of opinions, and then later 3 in paragraph 46 of my declaration, I am relying on 4 Dr. Mercier's opinion that the Oura Ring is the 5 commercial embodiment, and is coextensive with the 6 patented inventions. 7 BY MR. KAPPOS: 8 Q. Okay. So you did no analysis to determine 9 that the Oura Ring is coextensive with the claims of 10 the '178 patent, other than relying on your 11 colleague, Dr. Mercier; is that correct? 12 A. Consistent with what I said previously, I 13 have not -- I'm not offering a technical opinion 14 related to the coextensiveness of the Oura Ring and 15 the patented inventions myself. I'm relying on 16 Dr. Mercier's opinion that the Oura Ring is 17 coextensive with the patented inventions. 18 I do have other opinions related to -- or 19 related more broadly to nexus. But with respect to 20 coextensive, the fact that the Oura Ring is 21 coextensive with the patented inventions, with that, 22 I'm relying on Dr. Mercier's opinion. 23 Q. And your answer would be the same for the 24 '702 patent, correct? 25 A. I just want to be a little careful and
Page 39 1 related to the '178 patent or the '702 patent. You 2 said relates to the same, the fact that they're two 3 different patents from a lay perspective suggests 4 that they're not the same. I agree that those 5 words -- the quote that I've taken from the abstract 6 of both patents includes the same words. 7 BY MR. KAPPOS: 8 Q. What analysis have you done to determine 9 that the Oura Ring is coextensive with the claims of 10 the '178 patent? 11 A. So as I explain in paragraph 10 of my 12 declaration for the '178 patent, it's my 13 understanding, based on Dr. Mercier's opinions and 14 declaration, that the Oura Ring is a commercial 15 embodiment of the claims of the patent, and 16 coextensive with the patented inventions. I have not 17 separately made a technical analysis of whether the 18 Oura Ring is coextensive with the patented 19 inventions. 20 Q. Did you do any analysis to determine that 21 the Oura Ring is coextensive with the claims of the 22 '178 patent? 23 MR. PLUTA: Object to form. 24 THE WITNESS: So I preface my answer in a 25 couple things. First, that I'm not offering a	Page 41 1 state that, yes, for the '702 patent -- the way I'd 2 prefer to put it is, for the '702 patent, yes, I'm 3 relying on Dr. Mercier's opinion that the Oura Ring 4 is both an embodiment and coextensive with the 5 patented inventions, yes. 6 Q. Do the claims of the '178 patent require a 7 communication module? 8 MR. PLUTA: Object to form, relevance. 9 THE WITNESS: That sounds like that's a 10 technical question that I don't have an opinion on. 11 BY MR. KAPPOS: 12 Q. Do you know if the Oura Ring, the 13 commercial device, has a communication module? 14 MR. PLUTA: Object to form. 15 THE WITNESS: Again, that sounds like it's 16 calling for a technical opinion that I'm not offering 17 here today. 18 BY MR. KAPPOS: 19 Q. So I'm not asking you for an opinion. I'm 20 just asking you for your understanding. Does the 21 Oura Ring commercial device have a communication 22 module, to your knowledge? 23 MR. PLUTA: Object to form. 24 THE WITNESS: I don't think I can abstract 25 that from the fact that a communication module sounds

Page 42 1 like a technical term that likely has specific 2 meaning. And I'm not providing any interpretation as 3 to what that communication module means, what that 4 could include. 5 BY MR. KAPPOS: 6 Q. So you don't know? 7 A. I think I would stick with my previous 8 answer that I am not offering any technical opinion 9 as to whether the Oura Ring has a -- I believe you 10 said communications module or not. 11 Q. Do you know what a communication module 12 is? 13 MR. PLUTA: Object to form, relevance. 14 THE WITNESS: Going back to my previous 15 answer, it sounds like that is a specific term. And 16 I don't have an opinion, one way or the other, as to 17 what is meant by communication module. So, no, I 18 don't have an opinion of that. 19 BY MR. KAPPOS: 20 Q. What if I use the term transmitter? Do 21 you know whether the Oura Ring commercial device has 22 a transmitter that communicates with some other 23 electronic device? 24 MR. PLUTA: Object to form. 25 THE WITNESS: So again, I'm not offering a	Page 44 1 platform? 2 A. I am aware that Oura has an application, 3 yes. 4 Q. Do you know whether that application is 5 something that runs on a smartphone, as opposed to 6 running on the Oura Ring? 7 A. So it appears you're making a distinction 8 that is probably technical in nature, and I don't 9 have a specific opinion on. My understanding is that 10 the Oura app is available on the Apple Store or on 11 the Android for download on to smartphones 12 presumably. But as to -- I don't have any technical 13 opinion as to where the app exists. 14 Q. Do you know what sort of information is 15 processed by the Oura app, once it's downloaded on to 16 a smartphone? 17 MR. PLUTA: Object to form, relevance. 18 THE WITNESS: I'm sorry, could you repeat 19 back the beginning of that question? 20 BY MR. KAPPOS: 21 Q. Do you know what information is processed 22 by the Oura app, once it is downloaded to a 23 smartphone? 24 A. Again, that seems to call for a technical 25 opinion that I'm not offering here today. I don't
Page 43 1 technical opinion related to the Oura Ring or to the 2 scope of the patents. And whether we're talking 3 communication module or transmitter, I don't have an 4 opinion as to whether or not the Oura Ring has either 5 of those. 6 BY MR. KAPPOS: 7 Q. And likewise, you do not know whether the 8 claims of the '178 or '702 patent require either a 9 communication module or a transmitter; is that right? 10 A. I would say that I'm not offering a 11 technical opinion related to either the '178 or the 12 '702 patent. And those terms, communication module 13 and transmitter, seem to require some element of 14 technical interpretation which I'm not here to 15 provide. 16 Q. Do you have any understanding of whether 17 the Oura Ring commercial device is able to 18 communicate with a smartphone? 19 MR. PLUTA: Object to form. 20 THE WITNESS: So again, I'm not offering 21 any technical opinion related to the '178 or the Oura 22 Ring, specifically. 23 BY MR. KAPPOS: 24 Q. Have you heard of something called an 25 application or an app that relates to the Oura	Page 45 1 have an opinion as to where any processing may occur. 2 Q. Do you know whether the Oura app processes 3 information from the person who is wearing the Oura 4 Ring? 5 MR. PLUTA: Object to form, relevance. 6 THE WITNESS: Again, I'm not here to 7 provide a technical opinion related to the Oura Ring 8 or the Oura app or how information is processed. 9 BY MR. KAPPOS: 10 Q. So you don't know? 11 A. I think I'd stick with my previous answer, 12 that I am not offering a technical opinion related to 13 the Oura Ring or how that processing may or may not 14 be done. 15 Q. Do the claims of the '178 patent require 16 that the internal housing component be made of a 17 transparent material? 18 MR. PLUTA: Object to form. 19 THE WITNESS: So that certainly seems to 20 be calling for a technical opinion that I'm not here 21 to offer related to the '178. 22 BY MR. KAPPOS: 23 Q. And your answer would be the same for the 24 '702 patent, correct? 25 A. I am also not offering a technical opinion

Page 46 1 related to the '702 patent, that's correct. 2 Q. And your answer about the questions on the 3 communication module and the transmitter would be the 4 same for the '702 patent as what you said about the 5 '178; is that correct? 6 A. I would say that I am not offering a 7 technical opinion related to the '702 patent. And 8 those terms you just used, communication module and 9 transmitter, sound like they would require some 10 technical interpretation, which I am not offering. 11 Q. Do you know whether the Oura Ring 12 commercial device has a transparent material, such as 13 potting on the internal housing? 14 MR. PLUTA: Object to form. 15 THE WITNESS: Again, I believe that 16 relates to a technical interpretation of the Oura 17 Ring, which I'm not providing any opinion on today. 18 BY MR. KAPPOS: 19 Q. Do the claims of the '178 patent require 20 software that analyzes a sensed measurement from the 21 user? 22 MR. PLUTA: Object to form, relevance. 23 THE WITNESS: I'm not offering a technical 24 or legal opinion as to what the specific claims of 25 the '178 patent relate to.	Page 48 1 view of software is it's -- it's certainly not a 2 technical definition, but it relates to the 3 instructions to -- for some device to perform some 4 action. But that's a -- obviously, a very high-level 5 lay opinion. That's not technical in any nature. 6 BY MR. KAPPOS: 7 Q. Do you know whether the app that we were 8 talking about earlier that I think you said you could 9 download it to a smartphone, is that app something 10 that you would consider software within your 11 definition? 12 MR. PLUTA: Object to form, relevance. 13 THE WITNESS: So it sounds, again, like 14 that's calling for somewhat of a technical opinion, 15 which I don't have, and I'm not providing. To the 16 extent it's relevant, I don't have an opinion, one 17 way or the other, as to whether something I would 18 download to a smartphone would be software. 19 If the difference is software versus 20 hardware, I might be more inclined, from my lay 21 perspective, to see it as software, but I don't have 22 any opinion, certainly of any technical nature, on 23 that. 24 BY MR. KAPPOS: 25 Q. But from your lay perspective, I'm
Page 47 1 BY MR. KAPPOS: 2 Q. And your answer would be the same for the 3 '702 patent; is that right? 4 MR. PLUTA: Object to form, relevance. 5 THE WITNESS: I am similarly not offering 6 a technical or legal opinion related to the claims of 7 the '702 patent, that's correct. 8 BY MR. KAPPOS: 9 Q. Do you know whether the Oura ring 10 commercial device uses software to analyze a sensed 11 measurement? 12 MR. PLUTA: Object to form, relevance. 13 THE WITNESS: Again, that seems to be 14 calling for a technical opinion, perhaps a legal 15 opinion, that I am not here to provide. 16 BY MR. KAPPOS: 17 Q. Do you know what software is, in a general 18 sense? 19 A. From a technical perspective, I don't have 20 an opinion as to what that is. From a general lay 21 perspective, yes, I know -- I have a lay 22 understanding of software. 23 Q. What's your lay understanding of software? 24 MR. PLUTA: Object to form, relevance. 25 THE WITNESS: That as an economist, my	Page 49 1 adopting your lay perspective, you cannot point out 2 anywhere in the claims of the '178 or the '702 3 patents that require software or any type of 4 algorithm that analyzes a sensed measurement; is that 5 correct? 6 MR. PLUTA: Object to form, relevance. 7 THE WITNESS: Again, I'm not sure if 8 you're quoting from the claims, but it's certainly 9 sounding like it needs a technical opinion, legal 10 opinion, and I'm not providing either one of those 11 here today. 12 BY MR. KAPPOS: 13 Q. The app that we were talking about before 14 that's downloaded to a smartphone, is it your 15 understanding that for the Oura Ring commercial 16 device, the app runs on the smartphone as opposed to 17 on the Oura Ring; is that correct? 18 MR. PLUTA: Object to form, relevance, 19 lack of foundation. 20 THE WITNESS: I'm sorry, I think you asked 21 somewhat of a similar question before. I don't have 22 an opinion, one way or the other, from a technical or 23 legal perspective as to where any software may be 24 run. 25 BY MR. KAPPOS:

Page 50 1 Q. Can you look at paragraph 20 in your 2 declaration, '178. The first sentence says, "The 3 Oura Ring works in conjunction with the Oura 4 application, available for both Apple and Android 5 mobile devices, enabling users to review measured 6 data and gain insights into their health and 7 wellness." 8 Did I read that correctly? 9 A. I believe you did. 10 Q. And so it is still your testimony that you 11 have no opinion on whether the app -- the Oura 12 application, or as we've been calling it the app, 13 runs on the smartphone as opposed to the Oura Ring; 14 is that correct? 15 A. So I think what I've said before is 16 consistent with the sentence here in paragraph 20. 17 My understanding, from a lay perspective, from the 18 economic perspective, that the ring works in 19 conjunction with the Oura application. It sounds 20 like you are looking into specific details as to 21 where perhaps software or something more technical 22 occurs, and that I'm not offering any opinion on here 23 today. 24 Q. What did you mean by the word 25 "conjunction," works in "conjunction with"? What	Page 52 1 But that's the extent of my understanding as a lay 2 user from the economic perspective. 3 BY MR. KAPPOS: 4 Q. And if one were to download the Oura app 5 onto either an Apple or Android mobile device, would 6 you expect that the app, then, is running on that 7 mobile device? 8 A. So again, that sounds like it's calling 9 for a technical opinion that I'm not here to offer 10 today related to it. 11 Q. So you don't know whether the app is 12 running on the mobile device, as opposed to running 13 on the Oura Ring. Is that your testimony? 14 A. I think as I've previously stated, it 15 sounds like we're getting into technical delineation 16 of where an app -- where the app is running. And I 17 don't have an opinion related to that, that's 18 correct. 19 Q. But do you have an understanding as to 20 whether the app runs on a device that is separate 21 from the Oura Ring? 22 MR. PLUTA: Object to form, relevance. 23 THE WITNESS: Again, I'm not offering a 24 legal or technical opinion related to where the 25 application is running. My understanding, as stated
Page 51 1 does that mean? 2 A. From the economic perspective, it's that 3 the two work together. That the Oura Ring works 4 alongside the Oura application. The Oura application 5 allows for, as I say here, the users to review the 6 data measured by the Oura Ring. 7 Q. Does the application work on the mobile 8 device? 9 MR. PLUTA: Object to form. 10 THE WITNESS: I think I would -- as I 11 previously said, I'm not offering a technical opinion 12 or legal opinion related to how the ring works with 13 the app. This is my understanding in the background 14 section of my opinion related to the ring and 15 application. 16 BY MR. KAPPOS: 17 Q. Yeah, my question was not about how the 18 ring works with the app. I'm simply asking you 19 whether the app works on the mobile device? 20 MR. PLUTA: Object to form. 21 THE WITNESS: So again, that feels like 22 there's a technical side to it that I'm not offering 23 an opinion on or entirely understanding. It's my 24 understanding that one can download the Oura app from 25 the -- on either an Apple or Android mobile device.	Page 53 1 here in paragraph 20, is that the ring works in 2 conjunction with the application and that the 3 application is available for both Apple and Android 4 devices. 5 BY MR. KAPPOS: 6 Q. Have you seen anything in the claims of 7 the '178 or the '702 patents that require the app to 8 be run on a device other than the ring? 9 MR. PLUTA: Object to form. 10 THE WITNESS: That, again, calls for a 11 legal interpretation of the claims and a technical 12 opinion that I'm not offering here today. 13 BY MR. KAPPOS: 14 Q. Have you seen anything in the claims of 15 the '178 or '702 patents that require an app or an 16 application running anywhere? 17 MR. PLUTA: Object to form, relevance. 18 THE WITNESS: I think my answer is the 19 same as previously, that that calls for a legal or 20 technical opinion that I am not here to offer today. 21 BY MR. KAPPOS: 22 Q. Have you heard of something called a 23 readiness score in connection with Oura's platform? 24 A. Yes, I have heard of a readiness score, 25 yes.

Page 54 1 Q. What does the readiness score mean to you? 2 A. As I explained here in paragraph 20, it's 3 one of the three scores that are available to all 4 Oura Ring users. 5 Q. Can you elaborate and explain what it 6 means? 7 A. Not in any technical sense as to what it 8 means, no. 9 Q. I'm not asking for a technical sense. I'm 10 just asking for what it means to you. 11 A. I think my answer is as I provided before, 12 it's one of the three scores that are available to 13 any user of the Oura Ring and application. 14 Q. There's nothing that you can tell us 15 beyond that? 16 A. To make sure I'm answering the question, 17 can you clarify what you mean? 18 Q. There's nothing you can tell us about what 19 is a readiness score, beyond that it's one of the 20 three scores that are available to any user of the 21 Oura Ring and application? 22 A. I don't have detailed information as to 23 how the readiness score is calculated or what factors 24 go into that calculation, no. 25 Q. Do you have any information?	Page 56 1 BY MR. KAPPOS: 2 Q. Do the claims of the '178 or '702 patents 3 require the use of a user interface to show a 4 readiness score? 5 MR. PLUTA: Object to form. 6 THE WITNESS: Again, I don't have an 7 opinion as to the specific language of the claims of 8 the '178 or the '702. That requires a legal or 9 technical opinion that I'm not offering. 10 BY MR. KAPPOS: 11 Q. But the Oura Ring, the commercial device, 12 it does allow for the calculation and display of a 13 readiness score to the user, correct? 14 A. Sorry, could you repeat that one? 15 Q. The Oura Ring, as a commercial device, it 16 does allow for the calculation and display of a 17 readiness score to the user, correct? 18 MR. PLUTA: Object to form. 19 THE WITNESS: So again, that sounds like 20 it's calling for a technical opinion, which I'm not 21 here to provide. It's my understanding, though, as 22 a -- from a lay perspective, that the Oura Ring 23 itself does not have a display. But that's, again, 24 from a lay perspective. I'm not providing any 25 interpretation of the claims of the patents.
Page 55 1 MR. PLUTA: Object to form. 2 THE WITNESS: I think as I've said here, I 3 think the information I have relates to it being one 4 of the several scores that are available to any Oura 5 Ring user via the application. I think that's the 6 extent of my -- the extent of the detail that I have 7 with respect to the readiness score. 8 BY MR. KAPPOS: 9 Q. In your view, what is the difference 10 between the Oura Ring and the Oura application? 11 MR. PLUTA: Object to form, relevance. 12 THE WITNESS: So it sounds like that's 13 calling for a technical interpretation or perhaps a 14 legal interpretation, neither of which I'm here to 15 provide. My understanding from the economic 16 perspective is that the Oura Ring and the application 17 work together to provide a full solution to a 18 customer. 19 BY MR. KAPPOS: 20 Q. Do the claims of the '178 or '702 patents 21 require calculating a readiness score? 22 MR. PLUTA: Object to form. 23 THE WITNESS: I believe that calls for a 24 legal opinion or a technical opinion that I'm not 25 here to offer today.	Page 57 1 BY MR. KAPPOS: 2 Q. Does the Oura Ring platform allow for the 3 display of information by way of the application or 4 the app? 5 A. I think I missed the middle of that 6 question. Could you repeat it, please? 7 Q. Does the Oura Ring platform allow for the 8 display of information by way of the application or 9 the app? 10 A. And could you define the Oura Ring 11 platform as you're using it there? 12 Q. Any part of what Oura sells to a customer. 13 A. So I think I'd go back to my understanding 14 that the Oura Ring and application work in 15 conjunction with each other, and that the readiness 16 score is visible to the user via the application. 17 That's my lay interpretation. My lay understanding. 18 I'm not offering a technical opinion on that. 19 Q. So it's visible to the user where? 20 A. Again, with the caveat that I'm not 21 offering any technical opinion, it's my understanding 22 that the readiness score would be available to the 23 user via the Oura application. 24 Q. And so where would it be displayed to the 25 user? Let me rephrase.

Page 58 1 Where would the readiness score be 2 displayed to the user? 3 MR. PLUTA: Object to form, relevance. 4 THE WITNESS: Again, I'm not offering a 5 technical opinion on this, or how the system works. 6 My understanding is that the scores are available in 7 the application. 8 MR. PLUTA: Counsel, we've been going 9 about 75 minutes. Would you like to take a break? 10 MR. KAPPOS: Yeah, give me just a minute 11 or two. 12 MR. PLUTA: Sure. 13 BY MR. KAPPOS: 14 Q. Would the readiness score be displayed on 15 the mobile device? 16 MR. PLUTA: Object to form, relevance. 17 THE WITNESS: So again, I'm not offering a 18 technical opinion related to how the system works. 19 It's my lay understanding from the economic 20 perspective that the score is available -- the 21 readiness score is available to a user on the -- on 22 the application. 23 BY MR. KAPPOS: 24 Q. But you mentioned a minute ago that the 25 ring does not have a display, to your knowledge,	Page 60 1 Q. Does the app have a user interface? 2 MR. PLUTA: Object to form, relevance. 3 THE WITNESS: I don't have a technical 4 opinion whether it has a user interface or not. My 5 understanding is that there is, from a lay 6 perspective, an application that I've certainly seen 7 screenshots of that would appear to have at least 8 some element of a user interface. But to the extent 9 user interface is a term of art, I don't have an 10 opinion related to that, one way or the other. 11 BY MR. KAPPOS: 12 Q. You referred to screenshots. Screenshots 13 taken from where? 14 A. My recollection is that I've seen 15 screenshots of the app, I believe on Oura's website. 16 Q. And you don't know where those screenshots 17 were captured from; is that correct? 18 A. I'm sorry, I don't quite understand the 19 question or at least the way it's phrased. 20 Q. The screenshots that you saw on Oura's 21 website, do you have an understanding of where those 22 screenshots were captured from? 23 A. As I sit here, I don't have an 24 understanding, one way or the other, as to the 25 specific product or device or location at which those
Page 59 1 correct? 2 A. Again, I'm not offering a technical 3 opinion, but it's my understanding that the ring does 4 not have a display. 5 Q. And so if the user is going to have access 6 to the readiness score, what device would that access 7 occur on? 8 MR. PLUTA: Object to form, relevance. 9 THE WITNESS: So I'm not offering a 10 technical opinion as to how the score is conveyed to 11 the user. My lay understanding is that the readiness 12 score is provided within the application to the end 13 user. 14 BY MR. KAPPOS: 15 Q. But you have no understanding of where 16 that readiness score is actually displayed to the 17 user; is that correct? 18 MR. PLUTA: Object to form, asked and 19 answered. 20 THE WITNESS: Again, I'm not offering a 21 technical opinion. My understanding is that the 22 readiness score is displayed in the context of the 23 app and the user using the app. But that's my lay 24 understanding. 25 BY MR. KAPPOS:	Page 61 1 screenshots were taken, that's correct. It's not 2 relevant to my opinion. 3 MR. KAPPOS: Okay. Let's take a break. 4 THE VIDEOGRAPHER: We're going off the 5 record at 10:19 a.m., Eastern time. 6 (Recess.) 7 THE VIDEOGRAPHER: This is video file 8 number 2. We are continuing with Andrew Clarke. 9 We're back on the record at 10:30 a.m. You may 10 begin. 11 BY MR. KAPPOS: 12 Q. Welcome back. So we were discussing 13 before the break the readiness score. Do you recall 14 that? 15 A. I recall questions related to the 16 readiness score, yes. 17 Q. Would the user interface include something 18 like the display on a smartphone? 19 MR. PLUTA: Object to form. 20 THE WITNESS: I think I, again, would say, 21 I am not offering a technical opinion as to what is 22 or is not a user interface here. I think the extent 23 of my -- the extent of what I'd have to say would be 24 related to, as I think we were discussing before in 25 paragraph 20 of my declaration, where we referenced

Page 62 1 the Oura Ring used in conjunction with the 2 application, which is available for Apple and Android 3 mobile devices. 4 BY MR. KAPPOS: 5 Q. But it is your understanding that when 6 used in conjunction with those devices, the Oura Ring 7 commercial device can provide the user with a 8 readiness score, correct? 9 A. So again, I'm not offering a technical 10 opinion as to how the Oura Ring or the application 11 work together. But my understanding is that Oura can 12 provide its user a readiness score, yes. 13 Q. And the claims of the '178 and '702 14 patents do not require the calculation or display of 15 a readiness score, correct? 16 MR. PLUTA: Object to form. 17 THE WITNESS: So again, I'm not offering a 18 legal opinion or a technical opinion related to the 19 claims of the '178 patent. 20 BY MR. KAPPOS: 21 Q. What are the materials that are used in 22 the housing of the Oura Ring commercial device? 23 MR. PLUTA: Object to form, relevance. 24 BY MR. KAPPOS: 25 Q. And let me specify, I'm talking about the	Page 64 1 a legal opinion. And you used the word housing in 2 there. That sounds like there's likely a specific 3 meaning or definition of which I'm not offering here. 4 I think, as I said, the extent of my 5 awareness related to titanium is the reference that 6 is in paragraph 18 here related to the all new 7 circular titanium-based design. But I don't have a 8 separate opinion as to whether or not that titanium 9 is in the housing specifically or not. 10 Q. So what did you mean, then, by the 11 language that you quoted about the all new circular 12 titanium-base design? 13 A. Sorry, can you clarify that question? 14 Q. What did you mean by the language that you 15 quoted about the all new circular titanium-based 16 design? 17 A. I think the meaning is not beyond what we 18 see in paragraph 18, that sentence, that description 19 of some of the features that Oura referenced with 20 regard to the Oura Ring Gen 4. 21 Q. So you have no understanding beyond the 22 quote? 23 A. I'm not providing any technical opinion 24 related to the existence of titanium or lack thereof. 25 Whether that's in that housing or any other
Page 63 1 Gen 4, at least initially. 2 MR. PLUTA: The same objections. 3 THE WITNESS: I don't have a specific 4 opinion related to the composition of the Oura Ring 5 Gen 4. 6 BY MR. KAPPOS: 7 Q. Do you know whether titanium is one of the 8 materials that's used in the Gen 4 Oura Ring housing? 9 MR. PLUTA: Object to form, relevance. 10 THE WITNESS: So again, I'm not offering a 11 technical or a legal opinion as to the composition of 12 the ring. I can agree that, as stated in paragraph 13 18 of my declaration related to the '178 patent, that 14 with respect to the fourth generation Oura Ring, it 15 was described as bringing battery life improvements, 16 greater measurement accuracy, and an all new circular 17 based titanium-based design. So I am aware of those 18 words, but that is the extent of my knowledge of it. 19 And I don't have a technical opinion related to the 20 composition. 21 BY MR. KAPPOS: 22 Q. So would you agree with me, then, that 23 titanium is one of the materials that's used in the 24 Oura Ring Gen 4 housing? 25 A. I am not providing a technical opinion or	Page 65 1 component, I'm not offering a technical opinion 2 related to the Oura Ring Gen 4 in this investigation 3 here. 4 Q. Do you know if there are any materials 5 that are used in the Oura Ring Gen 4 other than 6 titanium? 7 A. I'm not offering a technical or legal 8 opinion as to the materials that are included within 9 the Oura Ring Gen 4. 10 Q. And so you don't know whether there are 11 any materials other than titanium used in the Oura 12 Ring Gen 4; is that correct? 13 A. Again, I'm not offering a legal opinion or 14 technical opinion. But I don't believe I've reviewed 15 information that suggests, one way or the other, what 16 materials may be included in the ring. 17 Q. Do you know whether the claims of the '178 18 or '702 patents specify the use of titanium in any 19 part of the claimed ring structure? 20 MR. PLUTA: Object to form, relevance. 21 THE WITNESS: So I believe that calls for 22 a legal and/or technical opinion related to the 23 interpretation of the claims in the '178 patent, 24 which I am not providing here today. 25 BY MR. KAPPOS:

Page 66 1 Q. Do you know whether the claims of the '178 2 or '702 patents say anything about the materials that 3 are used in the claimed ring structures? 4 MR. PLUTA: Object to form, relevance. 5 THE WITNESS: So that, again, relates -- 6 or seems to call for an interpretation of the claims 7 which require a legal opinion that I am not offering, 8 or a technical opinion that I'm not offering here 9 today. 10 BY MR. KAPPAS: 11 Q. What is the battery life duration of the 12 Oura Ring Gen 4? 13 A. So as I sit here, I don't recall that 14 specific parameter. 15 Q. In paragraph 18 of your declaration, to 16 which you just referred a moment ago, you talk about 17 bringing battery life improvements. Do you see that 18 language? 19 A. I see those words as part of a quote, yes. 20 Q. What does that mean to you? 21 A. From an economic perspective or a lay -- a 22 non-technical perspective, that would suggest to me 23 the battery life is either longer or somehow better, 24 would be an improvement over something before. But I 25 don't have a technical view as to what is meant	Page 68 1 understanding -- a technical understanding of the 2 patent claims, which I'm not offering here today. 3 BY MR. KAPPAS: 4 Q. You state in your declaration that the 5 Oura Ring is an embodiment of certain claims of the 6 '178 and '702 patents. Am I correct? 7 A. I think I'd want to be careful with the 8 way it's phrased. I think in paragraph 10, where I 9 mention commercial embodiment, it's the understanding 10 that it's, according to Dr. Mercier, the Oura Ring is 11 the commercial embodiment of the claims of the 12 challenged patent. And in paragraph 27, again, it's 13 -- the statement is according to Dr. Mercier, the 14 Oura Ring is an embodiment of certain claims of the 15 challenged patents. 16 Q. And the challenged patent -- one of the 17 challenged patents is the '178 and the other one is 18 the '702, correct? 19 A. I understand the two patents that we are 20 here today to talk about are the '178 and the '702, 21 yes. 22 Q. So if I use the term challenged patents 23 plural, you'll understand that I'm talking about both 24 the '178 and the '702? 25 A. Okay.
Page 67 1 precisely by those words. 2 Q. By battery life, do you understand that to 3 mean the duration that one charge will last, or that 4 that means something else to you? 5 A. So, again, I don't have a technical 6 opinion as to what that phrase means. I think that 7 the interpretation you just offered is one 8 possibility. Another possibility is the 9 charge/discharge cycle, the number of -- the extent 10 to which a battery can last through multiple charges 11 and discharges. That can be another way to look at 12 battery life. 13 Q. Do the claims of the '178 or '702 patent 14 require a specific battery life? 15 MR. PLUTA: Object to form. 16 THE WITNESS: Again, that calls for a 17 legal interpretation, an opinion, technical opinion 18 related to the claims of the patent, which I'm not 19 providing here today. 20 BY MR. KAPPAS: 21 Q. Do the claims of the '178 or '702 patent 22 require a specific battery duration? 23 MR. PLUTA: Object to form. 24 THE WITNESS: So my answer to that is the 25 same, that that would require a legal interpretation,	Page 69 1 Q. So you did not do any independent 2 comparison between the claims of the challenged 3 patents and the Oura Ring commercial products, 4 correct? 5 A. So I think as I testified earlier this 6 morning, my opinion related to the commercial 7 embodiment and the coextensiveness of the Oura Ring 8 and the challenged patents is based on the opinion of 9 Dr. Mercier. 10 Q. By your own review, does the '178 -- let 11 me start over again. 12 By your own review, do the challenged 13 patents cover the Oura Ring Gen 1? 14 MR. PLUTA: Object to form. 15 THE WITNESS: So that sounds like it would 16 require a legal and/or technical opinion that I'm not 17 here offering today. 18 BY MR. KAPPAS: 19 Q. So you don't know whether the challenged 20 patents cover the Gen 1 Oura Ring, which I understand 21 to be the first generation. Is that your testimony? 22 A. I think I'd stick with the language that I 23 provided that I'm not -- I don't have a technical 24 opinion related to what the claims of the '178 or the 25 '702 patent specifically cover. For the opinions

Page 70 1 related to the embodiment and coextensiveness of the 2 Oura Ring, I'm relying on the opinions of 3 Dr. Mercier. 4 Q. You did render an opinion about commercial 5 success in your declaration, correct? 6 A. Yes, I think as summarized in paragraph 10 7 of my declaration, it's my understanding that the 8 Oura Ring has been a marketplace success -- or it's 9 my opinion that the Oura Ring has been a marketplace 10 success. 11 And that according to Dr. Mercier, the 12 ring is a commercial embodiment and coextensive with 13 the patented inventions. And so there's a 14 presumption of nexus between the success in the 15 marketplace of the ring and the inventions of the 16 patent. And I've seen other information that is 17 consistent with there being a nexus, and as a result, 18 that the inventions of the patent have been a 19 commercial success. 20 Q. Are you familiar with the Oura Ring Gen 1? 21 A. Not from a technical perspective, but from 22 a high-level lay perspective, I am aware of the 23 product, yes. 24 Q. What does that mean, Gen 1? 25 A. My understanding from the lay perspective	Page 72 1 the basis for that is coming from. 2 Q. Well, you said that it looks different. 3 So I'm asking, would those differences be manifested 4 in it being uncomfortable to wear the Gen 1 Oura 5 Ring? 6 A. I don't have an opinion, one way or the 7 other, as to whether it would have been uncomfortable 8 to wear. 9 Q. In rendering your opinion on marketplace 10 success, as you referred to it, did you count the 11 sales of the Oura Ring Gen 1 device? 12 A. You're going to have to explain what you 13 mean by, did I count the sales of the Gen 1 device. 14 Q. Well, in order to reach an opinion on 15 marketplace success, you took into account various 16 sales numbers from certain generations of the Oura 17 Ring device. Would you agree with that? 18 A. I would agree that I looked at sales and 19 growth of those sales over time. 20 Q. Okay. 21 A. As indicative of marketplace success. 22 Q. Sorry, I didn't mean to interrupt you. 23 Would it be fair to say that part of your conclusion 24 is based on the sale numbers of the Gen 4, the fourth 25 generation Oura Ring device? Would you agree with
Page 71 1 is that the Gen 1 ring was the first Oura Ring that 2 was launched in May 2015 -- excuse me, March 2015. 3 Q. And have you seen the Gen 1 device or a 4 picture of it? 5 A. I believe I have seen a picture of it 6 before. 7 Q. Would you agree with me that it was bulky? 8 A. So I am not offering as a technical 9 opinion related to whether something is bulky or not. 10 But I would agree that the appearance of the Gen 1 11 ring is, from a lay perspective, looks different than 12 later generations. 13 Q. And from a lay perspective, would you 14 agree that it was bulky? 15 A. I think I'd prefer to stick to the words 16 that I provided you before. I don't disagree that it 17 looks different than -- from a lay perspective, from 18 other generations. I don't know that I necessarily 19 would say bulky or not bulky. It feels like a 20 relative term, but -- 21 Q. Was the Gen 1 Oura Ring uncomfortable to 22 wear? 23 A. That sounds like that's a quote from 24 something that -- if you could point me to it, I'd 25 appreciate it. But I'm not sure what the -- where	Page 73 1 that? 2 A. I would agree that I took into 3 consideration the sales over the first few months 4 after launch of the Gen 4 device, yes. 5 Q. Okay. And so you counted those sales as 6 an indication of commercial success, correct, 7 or marketplace -- let me rephrase. 8 You counted the sales of the Gen 4 device 9 as an indication of marketplace success, correct? 10 A. You're using the word counted, and I'm not 11 quite sure what you mean in that -- specifically in 12 that context. I think I would agree with you that I 13 considered the sales of the Oura Ring Gen 4 in 14 reaching my opinions, yes. 15 Q. And how did you consider them? 16 A. By looking at the unit sales, as well as 17 the revenue generated from the sale of those rings. 18 Q. And by looking at them, if the sales were 19 higher, then you would consider that to be a greater 20 indication of marketplace success than if the sales 21 were lower, wouldn't you? 22 A. So I think looking at anything in a vacuum 23 is a dangerous place to be. I think you need to 24 consider those sales in the context of other 25 information that you have available to you, which is

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1 what I did with regard to the Gen 4 sales.

2 Q. And if the Gen 4 sales were higher,
3 wouldn't you agree that all other things being equal,
4 higher sales would be a greater indication of
5 marketplace success, correct?

6 A. I think I can agree that higher sales and
7 increasing sales over time are consistent with a
8 product being successful in the marketplace.

9 Q. Okay.

10 A. That doesn't -- sorry.

11 Q. No, go ahead. I didn't mean to interrupt.

12 A. That in and of itself isn't necessarily
13 the end of the story. As I said before, I think
14 everything needs to be considered in the context of
15 the company and the industry.

16 Q. [REDACTED]

[illegible]

24 Q. Okay, what about Gen 1 and Gen 2? How, if
25 at all, did you consider those sales in reaching your

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1 opinion about marketplace success?

2 A. My opinion is primarily focused on the
3 Oura Rings that are available in the marketplace
4 today, which are the Gen 3 and the Gen 4 rings. It's
5 my understanding the Gen 1 and Gen 2 rings are no
6 longer available in the marketplace. So consistent
7 with Dr. Mercier's opinions related to nexus, I
8 focused my analysis on Gen 3 and Gen 4.

9 Q. [REDACTED]

[illegible]

14 Q. [REDACTED]

[illegible]

Page 76

[illegible]

Page 77

[illegible]

10 Q. And so the Oura Ring Gen 1 and Gen 2 are
11 not commercial embodiments of the '178 and '702
12 patents, correct?

13 MR. PLUTA: Object to form.

14 THE WITNESS: I'm not offering that
15 opinion. That would require a technical opinion that
16 I'm not offering here today.

17 BY MR. KAPPAS:

18 Q. Well, you said Dr. Mercier testified that
19 the commercial embodiment for the '178 and '702 is
20 the Gen 3 and Gen 4. And so I'm asking you, is it
21 your understanding that the Gen 1 and Gen 2 are not
22 commercial embodiments of the challenged patents?

23 MR. PLUTA: Object to form.

24 THE WITNESS: So I think, as I thought I
25 answered before, I'll try again. I think it's my

Page 78 1 understanding that Dr. Mercier testified related -- 2 or testified that the Oura Ring Gen 3 and the Oura 3 Ring Gen 4 are commercial embodiments and are 4 coextensive with the -- each of the challenged 5 patents. 6 I don't have a technical or legal opinion 7 as to whether or not the Oura Ring Gen 1 or Oura Ring 8 Gen 2 are, and I don't see that opinion in 9 Dr. Mercier's -- Dr. Mercier's declaration. But 10 that, I believe, is different than I think the 11 distinction you were trying to draw, that they are 12 not commercial embodiments or coextensive. I'm 13 simply saying that I focused on Dr. Mercier's 14 testimony that the Gen 3 and Gen 4 are commercial 15 embodiments and coextensive. 16 BY MR. KAPPOS: 17 Q. Okay. So as you sit here today, you have 18 no opinion on whether the Oura Ring Gen 1 or Gen 2 is 19 or is not a commercial embodiment of the challenged 20 patents, correct? 21 A. So that seems to call for a technical or 22 legal opinion, and I'm not offering a legal opinion 23 as to whether or not the Oura Ring Gen 1 or Gen 2 are 24 commercial embodiments of the '178 or '702 patents. 25 Q. On the Gen 2 Oura Ring, have you seen a	Page 80 1 A. So this Exhibit 2 is not something that I 2 have seen before. I'm not -- I'm not familiar with 3 the website off of which this was pulled. I see it's 4 an image of what appears to be a wearable ring that's 5 identified as being the Oura Ring Gen 2. 6 Q. Yeah, my question is, does that refresh 7 your recollection about the shape of the Oura Ring 8 Gen 2? 9 A. Consistent with what I said previously, I 10 am not certain as to where the picture or the website 11 came from. I can take it on representation that that 12 is a picture of the Oura Ring Gen 2, if you would 13 like me to, but I don't have any independent 14 understanding as to whether or not that specifically 15 is the Oura Ring Gen 2 or it's something else. 16 Q. Do you recall whether the Oura Ring Gen 2 17 is something that you've ever seen being 18 characterized as uncomfortable to wear because of a 19 flat section on the ring's circumference? 20 MR. PLUTA: Object to form, lack of 21 foundation. 22 THE WITNESS: As I sit here, I don't 23 recall any discussion, one way or the other, related 24 to the ring being comfortable or uncomfortable to 25 wear. Excuse me, to clarify, the Gen 2 ring.
Page 79 1 picture of that or have you seen a Gen 2 Oura Ring? 2 A. I believe I have, and I think in the same 3 picture with the Gen 1 ring. 4 Q. And would you agree with me that there is 5 a flat section on the ring's circumference for the 6 Gen 2? 7 MR. PLUTA: Object to form. 8 THE WITNESS: I'd need to see the picture 9 again. I don't recall, as I sit here today, the 10 exact shape. 11 MR. KAPPOS: I'm going to ask the court 12 reporter to mark this as Exhibit 2. 13 MR. PLUTA: Counsel, was this previously 14 marked in the proceeding? 15 MR. KAPPOS: I don't think it was. 16 MR. PLUTA: I'm going to just lodge an 17 objection to the introduction of this evidence, from 18 an authentic perspective and completeness. 19 (Clarke Exhibit No. 2 was identified 20 for the record.) 21 BY MR. KAPPOS: 22 Q. The court reporter has handed you Exhibit 23 2, which is a picture of the Oura Ring Gen 2. Does 24 that refresh your recollection about the shape of the 25 Oura Ring Gen 2?	Page 81 1 BY MR. KAPPOS: 2 Q. So you say in your declaration that the -- 3 you talk quite a bit about the form factor. And you 4 say "that the benefit of the challenged patent (i.e., 5 the ring form factor)" -- and this is in paragraph 6 10, at the bottom of page 4. Let me start over. 7 You say, "the benefit of the challenged 8 patent (i.e., the ring form factor) is a driver of 9 consumers' purchase decisions." 10 Did I read that correctly? 11 A. There were a couple other words in there. 12 But generally speaking, that's similar to the 13 language in paragraph 10. 14 Q. By the couple other words, you're talking 15 about before the part that I quoted? 16 A. Yes. The full sentence is, "Moreover, 17 evidence from Oura, its customers, and third parties 18 indicate that the benefit of the challenged patent 19 (i.e., the ring form factor) is a driver of 20 consumers' purchase decisions, and thus there is a 21 nexus between the marketplace success of the Oura 22 Ring and the challenged patent." 23 Q. And you used the abbreviation i.e. to 24 mean, in other words, the ring form factor; is that 25 correct?

Page 82 1 A. Generally speaking, yes. And I expand on 2 this point in paragraph 47 of my declaration, where 3 the second sentence discusses the fact that I'm not 4 offering a technical opinion, but I generally 5 understand that the challenged patent relates to the 6 form factor of the Oura Ring. 7 Q. Is the ring form factor the only benefit 8 of the '178 and '702 patent? 9 A. I don't know that I have a technical 10 opinion related to whether it is the only benefit. 11 My understanding, as I stated in paragraph 46 -- 12 excuse me, 47, is that, generally speaking, the 13 challenged patent relates to the form factor of the 14 ring. 15 Q. Can you tell me any other benefit of the 16 '178 or '702 patent? 17 MR. PLUTA: Object to form. 18 THE WITNESS: So that, again, is going to 19 call for a technical opinion that I am not offering 20 related to the specific language in the claims of the 21 two challenged patents here. So I'm not offering 22 that opinion here today. 23 BY MR. KAPPAS: 24 Q. Is it your opinion that the only driving 25 force of the consumer purchasing decision is the ring	Page 84 1 or other possibilities that could drive demand would 2 be related to other features or other factors that 3 Oura advertises and it's seeking to inform -- seeking 4 to inform consumers about the Oura Ring product. So 5 that certainly includes the ring form factor, which 6 I've described in paragraphs 47 through 49, but it 7 certainly could include others as well. 8 Q. What are the other features or factors 9 that you believe could be drivers of demand? 10 A. So as I sit here, I don't have the 11 documents in front of me, specifically. But as I 12 mentioned, I think if we looked at the sources in 13 paragraphs 46 -- excuse me, 47 through 49, those may 14 discuss other features, other attributes that Oura 15 believes may be informative and important to 16 customers in reaching the purchase decision. 17 Q. So you can't think of any others without 18 reference to documents. Is that your testimony? 19 A. It's my testimony, I can't provide you an 20 exhaustive list of other features that may be 21 important to consumers. What I focused my analysis 22 on is the ring form factor, and evidence related to 23 that ring form factor, in particular, being important 24 and relevant to customers in reaching their purchase 25 decisions.
Page 83 1 form factor? 2 A. I don't think I've offered the opinion 3 that the ring form factor is the only driver of 4 demand for the Oura Ring. 5 Q. Yes, but I'm asking, what is your opinion? 6 Is it your opinion that the only driving force of 7 consumers' purchasing decisions is the ring form 8 factor? 9 A. You used the phrase there driving force. 10 I'm not sure if that's the same as demand driver or 11 if there's something that you're specifically 12 referring to with that. If you can clarify. 13 Q. Yeah, I'll rephrase it. 14 Is it your opinion that the only demand 15 driver of consumer purchasing decisions is the ring 16 form factor? 17 A. So I think I'd reiterate what I said 18 before, that I am not offering an opinion that the 19 ring form factor is the only or the sole driver -- or 20 sole reason that someone may purchase the Oura Ring. 21 It certainly, based on my analysis, is one of the 22 drivers of demand. 23 Q. Can you name any other driver of demand 24 besides the form factor? 25 A. So I would expect other drivers of demand,	Page 85 1 Q. And I'm not asking for an exhaustive list. 2 I'm just asking for you to name one other feature, 3 other than the form factor, that you believe is a 4 driver of demand. 5 A. And I think as I answered before, the 6 materials or the information that Oura shows to the 7 public and touts to the public are going to -- are 8 expected to be ones that are going to be of relevance 9 to at least some portion of the consuming -- the 10 consuming public. And those factors could have an 11 impact driving demand for the product. 12 Q. Is the form factor of the Oura Ring 13 similar to any other ring that you can think of 14 that's on the market? 15 MR. PLUTA: Object to form. 16 THE WITNESS: So I'll preface my answer 17 with, I'm not offering a technical opinion related to 18 the ring. It's my understanding that the Oura Ring 19 is not the only ring available in the marketplace. 20 BY MR. KAPPAS: 21 Q. And what are the other rings that are 22 available that have a form factor that you would 23 consider to be the same as or similar to the Oura 24 Ring? 25 A. So I think that question may have read

Page 86 1 more into my -- the answer than I intended to. There 2 are other -- there are other smart rings available in 3 the marketplace, is my understanding, which are in 4 the shape of a ring and are wearable by end 5 consumers. 6 But I think there's something at the end 7 of your question that seemed to suggest that 8 something was the same. And I would agree that, from 9 the lay perspective, there are other rings available 10 in the marketplace. But I want to be careful that 11 I'm not suggesting that the rings are the same in any 12 technical sense. 13 Q. Do you consider any of the other smart 14 rings that are available in the marketplace to have 15 the same form factor as the Oura Ring -- let's say 16 the Oura Ring Gen 4? 17 A. So with the caveats I've provided before, 18 that I'm not offering a technical opinion about the 19 definition of whether or not they are the same, there 20 are other products out in the marketplace, including 21 the Samsung ring, that are also rings and available 22 for sale in the marketplace. 23 Q. Any others besides the Samsung ring? 24 A. So I believe there are other smart rings 25 that -- at least had been available for sale in the	Page 88 1 question. 2 Q. Is there anything that you consider to be 3 a difference in the form factor as between the Oura 4 Ring Gen 4 and the three examples that you just gave 5 us, RingConn, Ultrahuman, and the Samsung ring? 6 MR. PLUTA: Object to form. 7 THE WITNESS: I think this is treading 8 into a line of a legal opinion as to unique or not. 9 I think the evidence I've seen suggests that it's the 10 form factor, and that the form factor is important to 11 purchasers of the Oura Ring. And that's been the 12 focus of my analysis. 13 BY MR. KAPPOS: 14 Q. And so you can't point to any difference 15 between the form factor of the Oura Ring and the 16 other three that you've identified, correct? 17 MR. PLUTA: Object to form. 18 THE WITNESS: So I don't think that's 19 exactly what I said. I think I'd stick with the way 20 I phrased it before, in that it sounds like you're 21 looking for a technical difference between the rings, 22 and I'm not providing a technical opinion related to 23 the rings. 24 My observation, from an economic 25 perspective, is that the ring form factor is an
Page 87 1 marketplace, including Ultrahuman and RingConn are 2 two others that come to mind. I believe Circular as 3 well, but -- and I would agree that those are rings 4 that are used and have been available to consumers. 5 Q. And so just taking those three as 6 examples, Ultrahuman, RingConn, and the Samsung ring, 7 as you referred to it, do you consider that any of 8 those examples have the same or similar form factor 9 as the Oura Ring? 10 MR. PLUTA: Object to form. 11 THE WITNESS: So again, this is where I 12 want to be careful about the not offering a technical 13 opinion related to whether something is the same or 14 not. I would agree that from an economic 15 perspective, that those are -- those are ring form 16 factors. And Samsung identified or talked about the 17 form factor, and talked about a ring form factor in 18 some of its statements. I would agree that they are 19 rings wearable by consumers. 20 BY MR. KAPPOS: 21 Q. Is there anything that you consider to be 22 unique about the form factor of the Oura Ring? 23 A. I think I need a little more -- or at 24 least a little clarification on, when you say unique 25 to the Oura Ring -- maybe if you can just restate the	Page 89 1 important driver to consumers looking for that -- a 2 ring, in forming their purchase decisions. 3 BY MR. KAPPOS: 4 Q. Have you heard the term wearability in 5 connection with ring devices or smart ring devices? 6 A. I feel like I've seen that word, 7 wearability, in product reviews or similar. I don't 8 have a specific document in mind. 9 Q. What's your general understanding of 10 wearability from, you know, the usage that you've 11 seen in the review articles? 12 A. So the word wearability that I was 13 recalling is in paragraph 48 of my declaration, the 14 last sentence quoting from the Men's Health article 15 that talks about the exceptional wearability of the 16 Oura Ring. And I want to go back and look at that 17 exhibit to see if there's a specific explanation of 18 how they were using the term wearability in that 19 context. 20 Q. Well, in a general sense, what does the 21 term mean to you? 22 A. In a general sense, from an economic 23 perspective, I believe wearability can relate to the 24 comfort, could relate to the functionality, it could 25 relate to the ease of use of the product. It could

Page 90 1 cover a number of different dimensions. 2 Q. So using your understanding, is the 3 wearability of the Oura Ring different from the other 4 rings that you mentioned, Ultrahuman, RingConn, 5 Samsung? 6 MR. PLUTA: Object to form. 7 THE WITNESS: So I think as this 8 sentence -- two sentences, technically, I guess, 9 point out at the end here of paragraph 48, this one 10 review is looking at the Oura Ring in context of 11 other health tracking devices, and believes that the 12 wearability of the Oura Ring to be exceptional. It's 13 consistent with other evidence I've seen related to 14 the comfortable fit and functionality, and the 15 ability to wear the ring through the night, through 16 sleeping. So it's consistent with that theme. 17 BY MR. KAPPOS: 18 Q. Do you believe that customers of the Oura 19 Ring know how the ring is constructed? 20 MR. PLUTA: Object to form, relevance. 21 THE WITNESS: I don't have an opinion, one 22 way or the other, as to whether a customer knows the 23 exact composition of the Oura Ring. I think that -- 24 BY MR. KAPPOS: 25 Q. Or how it's made.	Page 92 1 drives the sorts of information that companies make 2 available by way of providing that information to 3 their customers. 4 Q. Do you believe that Oura makes available 5 to its customers the details of how its rings are 6 constructed? 7 A. So as I sit here, I don't recall the level 8 of detail that Oura provides. I know they certainly 9 describe the design process and information going 10 into that. But the exact specifics, I don't recall, 11 as I sit here. 12 Q. Do you know whether the customers are 13 aware of the transparent materials that are used in 14 the Oura Ring that allow for transmission of light to 15 and from a sensor? 16 MR. PLUTA: Object to form. 17 THE WITNESS: I want to be a little 18 careful. It sounds like there's some technical terms 19 that you're assuming in there, and I don't have an 20 opinion, one way or the other, on whether those are 21 accurate. 22 I think in a general sense, Oura's 23 consumers, from an economic perspective, assume 24 consumers seek certain information in reaching their 25 purchase decision. And to the extent Oura makes
Page 91 1 A. Sorry, could you repeat that question? 2 Q. You changed it to composition, and I 3 wasn't asking you about composition. I was asking 4 you, do you believe that customers of the Oura Ring 5 know how the ring is constructed? 6 MR. PLUTA: Object to form, relevance. 7 THE WITNESS: So I believe Oura's 8 customers are certainly -- to the extent they've 9 consumed reviews and information provided by Oura, 10 that -- and to the extent that's included in that 11 information, that certainly may be something that the 12 consumers are aware of. I don't recall, as I sit 13 here, whether or not the details of that are made 14 available. 15 BY MR. KAPPOS: 16 Q. And so you don't have any evidence to 17 support the view that the consumers have actually 18 read the reviews that you're referring to and would 19 know how the ring is constructed; is that correct? 20 A. So the customers are going to -- before 21 making a purchase decision, economic theory suggests 22 that there's an information sharing and information 23 gathering phase of the purchase decision. 24 And in that phase, there's likely to be 25 information that they would consume, and that often	Page 93 1 those details available, I would expect that 2 consumers take that into consideration. 3 I don't recall, as I sit here, whether or 4 not those specific points that you've referenced are 5 identified. Certainly the evidence that I've seen 6 and discuss in paragraphs 47, 48, and 49 point to the 7 importance of the ring form factor to the consumers, 8 or the expected importance of it. 9 BY MR. KAPPOS: 10 Q. Do you think that customers would care 11 about the light source emitting light through a 12 transparent material or sensors receiving light 13 through a transparent material? 14 MR. PLUTA: Object to form, calls for 15 speculation. 16 THE WITNESS: So again, I am not offering 17 a technical opinion as to whether or not those 18 specific words are true or relevant or important 19 here. There are certain elements that consumers are 20 going to be interested in. And to the extent -- 21 there may be some consumers that are interested in 22 the sensors or the ability to measure with a ring. 23 BY MR. KAPPOS: 24 Q. Do you know whether the Oura Ring Gen 4 is 25 charged wirelessly?

Page 94 1 A. So as I sit here, I don't have an 2 understanding as to whether or not the charging is 3 entirely wireless or if there's a plug involved or 4 the exact mechanism by which the device -- the ring 5 is charged. 6 Q. Do you know whether the Oura Ring uses a 7 curved battery? 8 MR. PLUTA: Object to form. 9 THE WITNESS: I'm not offering a technical 10 opinion as to the shape of the battery within the 11 Oura Ring Gen 4. 12 BY MR. KAPPOS: 13 Q. So you don't know, one way or the other, 14 whether it uses a curved battery? 15 A. No, I don't believe the curvature of the 16 battery is -- that certainly calls for -- to the 17 extent it's curved or curvature of it is a technical 18 element, I don't have an opinion related to that. 19 Q. And that would be the same answer for all 20 the generations of the Oura Ring? I'm not limiting 21 it to Gen 4. Would your answers be the same for Gens 22 1, 2, and 3? 23 A. I don't have a technical opinion as to the 24 shape of the battery in Gens 1, 2, or 3. 25 Q. From a consumer perspective, do you think	Page 96 1 As I describe in paragraphs 46 through 48, 2 there's also evidence that the ring form factor is 3 important to customers and a driver of demand for 4 customers generally. I'm not excluding the fact that 5 the extent to which a customer is interested in the 6 aesthetics of the ring does not detract from the 7 importance of the ring form factor in their purchase 8 decision. 9 BY MR. KAPPOS: 10 Q. Are the aesthetics of the ring another 11 driver of demand? 12 A. So it's possible, for a subset of 13 consumers, that the aesthetics may be a factor in 14 their purchase decision, alongside the fact that it 15 is a -- there's interest in the ring. That 16 doesn't -- that doesn't negate or take away from the 17 importance of the ring form factor for those 18 consumers. 19 Q. What about the comfort and ease of use of 20 the ring, would those be additional drivers of 21 demand? 22 A. So I want to be careful, because I think 23 there are a couple concepts that go together. And 24 the comfort, the ease of use are some of the benefits 25 associated with the ring form factor, in general.
Page 95 1 that the customers would care whether the battery is 2 curved or not? 3 A. With the caveat that I'm not offering a 4 technical opinion related to this, but from a 5 marketplace consumer standpoint, to the extent that 6 curve of the battery enables the form factor of a 7 ring, I think consumers could care about that and -- 8 from a lay perspective. 9 Q. Can you think of any evidence, or have you 10 seen anything specifically that would indicate 11 customers would be aware of the form of the battery? 12 A. I think to the extent that customers take 13 into consideration the form factor of the ring, and 14 the ability to have the battery contained within that 15 ring, I think that could be relevant to consumers and 16 is consistent with the interest in a ring-shaped form 17 factor. 18 Q. Would you agree with me that the 19 aesthetics of the ring are another reason that the 20 Oura Ring is successful in the marketplace? 21 MR. PLUTA: Object to form. 22 THE WITNESS: So my analysis of the 23 marketplace success of the Oura Ring is based on the 24 evidence related to sales and sales growth, and the 25 importance of the ring to Oura as a company.	Page 97 1 So, yeah, I think those -- some of those components 2 are intertwined together with each other. 3 Q. Okay. But in any event, you would agree 4 that the comfort and ease of use would be additional 5 drivers of demand for the Oura Ring, correct? 6 A. I think I'd repeat my previous answer is I 7 think the comfort and ease of use are a direct -- or 8 directly related to the form factor of a ring. So I 9 don't know that I could agree necessarily that those 10 are wholly separate or different drivers of demand. 11 I think that's kind of a component associated with 12 the attribute of the ring form factor. 13 Q. Marketplace success for the Oura Ring -- 14 let me back up. 15 Do the marketing efforts by Oura 16 contribute to the ring's marketplace success? 17 A. So I think when we think about marketing 18 efforts, a lot of times that's associated with the 19 provision of information and the informing customers 20 as to the features of a product. And so in the sense 21 that marketing is what enables customers to learn 22 about and to understand products and understand the 23 features of the products, I think that can 24 contribute. And one of the features that we see 25 marketed by Oura relates to the form factor of the

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1 ring.

2 Q. So marketplace success can be based on
3 other aspects of the Oura Ring, not just the form
4 factor, correct?

5 MR. PLUTA: Object to form.

6 THE WITNESS: So I think I'd prefer to
7 stick with the language that I actually used in my
8 declaration, which was that it's my understanding
9 that one of the benefits of the challenged patents
10 relate to the form factor. And the evidence that
11 I've seen in this investigation suggests that the
12 form factor is a driver of demand for the Oura Ring
13 which I have opined is a success in the marketplace.

14 BY MR. KAPPOS:

15 Q. You discuss something that you refer to as
16 membership in the Oura Ring environment or ecosystem.
17 Do you know what I'm referring to?

18 A. I am aware of the Oura membership, yes.

19 Q.

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1 customer's purchase decision. But from an economic
2 perspective, that still goes back to data that's
3 being generated and sourced from the readings taken
4 by the Oura Ring.

5 Q. So in paragraph 31 of your declaration,
6 you state, "I understand that the possible existence
7 of other demand drivers for a product does not equate
8 to a lack of commercial success and instead,
9 understand that the patented technology can be just
10 one driver of the product's success."

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11      Did I read that correctly?
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12 A. I believe you did.

13 Q. In your declaration, you express an
14 opinion on commercial success, but no other factor
15 regarding obviousness of a patent; is that correct?

16 A. I'm sorry, I think it's my fault. I was
17 reading that sentence, and then listing to your
18 question. It sounds like -- could you repeat the
19 question?

20 Q. In your declaration, you express an
21 opinion on commercial success, but no other factor
22 regarding obviousness of the challenge patents; is
23 that correct?

24 A. So I would agree that my opinion is
25 related to the commercial success indicia. I have

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1 not provided an opinion related to copying or long
2 unfelt need, or several of the other indicia of
3 non-obviousness. That is correct.

4 Q.

4 Q. And the Oura membership allows for the
5 user to gain health insights about their measured
6 parameters. Would you agree with that?

7 A. I think I'd prefer to stick with the
8 language that I use in paragraph 21 that the Oura
9 membership enables the user to receive additional
10 personalized data and insights through the Oura
11 application, which can include sleep analysis, heart
12 rate monitoring, as well as some others that are
13 mentioned there.

14 Q. Aren't the health insights that are
15 provided by the membership a reason that the Oura
16 Ring is successful in the marketplace?

17 A. So from an economic perspective, the fact
18 that Oura has invested in the development of the app
19 and the information attainable and insights derived
20 from the data, all of which originates from the Oura
21 Ring to start with, that they've invested in that
22 suggests that there's, from an economic perspective,
23 a value to providing that information to consumers.

24 So to the extent a consumer is interested
25 in those particular features, that could inform a

[illegible][illegible]

1 [REDACTED]

2 [REDACTED]

3 Q. You mentioned that there was a period of

4 time when a new product is released and there are

5 sales for the new product and for the old product

6 during that period. Do you recall mentioning that a

7 moment ago?

8 A. Generally speaking, yes. When a new

9 product launches, there are still versions of the

10 previous generation that are available for a short

11 period of time.

12 Q. What do you call that period of time?

13 A. I don't know the specific name associated

14 with that period of time.

15 Q. Okay. If I call it a crossover period,

16 will you understand what I'm referring to?

17 A. Okay, I can take that representation.

18 Q. Okay. For the crossover period, how did

19 you assign sales figures to each of the two available

20 product generations?

21 A. [REDACTED]

22 [REDACTED]

23 [REDACTED]

24 [REDACTED]

25 [REDACTED]

[illegible]

1 [REDACTED] Page 106 [REDACTED]	1 [REDACTED] Page 108 [REDACTED]
1 [REDACTED] Page 107 [REDACTED]	[REDACTED] Page 109 [REDACTED] 21 Q. The Oura membership that you referenced 22 earlier, that Oura membership is a paid-for product 23 offering, correct? 24 A. It's my understanding that the Oura 25 membership, yes, is priced at either 5.99 per month

1 or 69.99 per year for U.S. individuals.
 2 Q. So the sales of the Oura Ring and the Oura
 3 membership are different, correct?
 4 A. I can agree with you that Oura generates
 5 revenue both from the sale of its rings and
 6 accessories and from its recurring membership
 7 subscription model, yes.
 8 Q. And those are accounted for differently,
 9 correct?
 10 A. You're going to have to be more precise in
 11 what you mean by accounted for differently.

[REDACTED]

[REDACTED]

5 Q. The Oura Ring commercial product, in the
 6 absence of purchasing the membership, just provides
 7 three basic metrics or health metrics. Would you
 8 agree with that? And I'm referring to the sleep,
 9 readiness, and activity scores that you talked about
 10 in your declaration.

11 MR. PLUTA: Object to form.

12 THE WITNESS: Could you repeat the first
 13 part of that?

14 BY MR. KAPPOS:

15 Q. Yeah, the Oura Ring commercial product, in
 16 the absence of purchasing the membership, provides
 17 three metrics, correct?

18 A. I think as I explain in paragraph 20 -- 20
 19 and I guess 21 to some extent. The Oura Ring -- if a
 20 consumer were not to purchase the Oura membership,
 21 that they would have access to the application and
 22 that they could access three scores, sleep,
 23 readiness, and activity scores.

24 Q. And it's only those three scores, correct?

25 A. I believe those are the three that I've

1 seen referenced. I think it was on Oura's website,
 2 but I can't be certain that there's nothing else.
 3 But I think those are the three that they reference.
 4 Q. Do you know if there's a term that Oura
 5 uses to describe to this base application use, the
 6 one that we're talking about before you get the
 7 membership?
 8 A. So I'm not sure about your words of before
 9 the membership. But if I'm understanding your
 10 question, I am not aware of a name specifically for
 11 the functionality of those three scores without the
 12 membership. There may be. As I sit here, I don't
 13 recall one.

14 Q. So if I buy an Oura Ring, but I don't
 15 purchase the membership -- I do not purchase the
 16 membership, I get the three basic applications. Can
 17 we agree to refer to those as the basic applications?
 18 Is that a fair way to describe it?

19 A. If you want to use that term. You say
 20 applications, plural. I don't know. Previously, we
 21 were discussing application. I don't know to what
 22 extent there's overlap there. And we just discussed,
 23 we know that there's access to those three scores. I
 24 don't recall if there's access to anything beyond
 25 that.

1 Q. Okay, I won't use the plural. I'll just
 2 call it the basic application. Is that fair?

3 A. Again, without making a technical
 4 understanding, I can agree that if we want to talk
 5 about the provision of those three scores as
 6 describing that as a basic application, I can take
 7 that representation.

8 When we get to a breaking spot, can we
 9 take a break?

10 Q. Yeah, in just a minute.

11 A. Sure.

12 Q. So without membership, there's no
 13 description of the user's heart rate. Would you
 14 agree with that?

15 MR. PLUTA: Object to form.

16 THE WITNESS: Could you repeat the last
 17 part of that question again?

18 BY MR. KAPPOS:

19 Q. Without purchasing the membership, the
 20 user does not get a readout of their heart rate,
 21 correct?

22 A. I think as I explained in paragraph 20 of
 23 my declaration, my understanding is without access to
 24 the membership, you have access to those three
 25 scores. Whether or not heart rate is a component

Page 114 1 that's provided along with those three scores or as 2 part of one of those three scores, I don't have an 3 opinion related to that. 4 Q. And would you have the same answer for 5 blood oxygen sensing? 6 A. A similar answer, that to the extent that 7 -- my understanding is that you have access to those 8 three scores. If there's something beyond those 9 three scores or if blood oxygen sensing is 10 incorporated into those scores, it's possible. But I 11 don't have -- I don't have an opinion, one way or the 12 other, on that. 13 Q. What about period prediction? 14 A. It's going to be a similar answer. To the 15 extent that the -- to the extent that that is somehow 16 incorporated into those scores or is provided along 17 some element of that, or components of that are 18 provided along with those scores, it's possible it's 19 available without a subscription. 20 Q. Do you know if there are any other metrics 21 that are made available with membership that are not 22 available as part of the basic application use? 23 MR. PLUTA: Object to form. 24 THE WITNESS: That sounds like a little 25 bit of a reverse of the previous questions. And it's	Page 116 1 concepts, yes. 2 Q. And you said, it's my understanding that 3 there are a number of factors, and some of which are 4 identified in paragraph 21 -- I think you were 5 referring to your declaration -- that are certainly 6 made available as part of the membership. And you 7 went on to say, and I would agree without the 8 membership, my understanding is you have access to 9 those three scores from the lay perspective here. 10 What were the three scores that you were 11 referring to? 12 A. So my recollection of that discussion was 13 we were talking about, I forget the -- I think the 14 phrase you used was basic application. So I think 15 the three scores that I was referring to were the 16 sleep, the readiness, and activity scores that I 17 understand are available to any Oura Ring owner via 18 the application without access to the membership. 19 Q. And so without the membership, the owner 20 of the Oura Ring does not have access to heart rate, 21 blood oxygen sensing, and period prediction, correct? 22 MR. PLUTA: Object to form. 23 THE WITNESS: So I think you asked me a 24 similar question with respect to each of those before 25 the break. And I think the answer I gave then and
Page 115 1 my understanding that there are a number of factors, 2 and some of which are identified in paragraph 21, 3 that are certainly made available as part of the 4 membership. 5 And I would agree, without the membership, 6 my understanding is you have access to those three 7 scores from a lay perspective here. I don't have the 8 details of how those scores are calculated or if 9 there's any more detailed elements provided along 10 with those. 11 MR. KAPPOS: Okay, let's take a break. 12 THE VIDEOGRAPHER: We are going off the 13 record at 11:59 a.m., Eastern time. 14 (Recess.) 15 THE VIDEOGRAPHER: This is video file 16 number 3. Back on the record with Andrew Clarke. 17 The time is 12:40 p.m., Eastern time. You may begin. 18 BY MR. KAPPOS: 19 Q. Mr. Clarke, welcome back. 20 A. Thank you. 21 Q. Before the break, we were talking about 22 the health parameters, heart rate, blood oxygen 23 sensing, and period prediction. Do you recall that 24 discussion? 25 A. I recall some discussion of those	Page 117 1 will give again is that to the extent that any of 2 those -- those being the heart rate monitoring, the 3 period prediction, I think forget the third you 4 mentioned, but to the extent those are incorporated 5 into the scores, the sleep, readiness, or activity 6 scores, they could be available. 7 But -- and I don't have the specifics as 8 to whether any of those -- any elements of those are 9 available within the sleep, readiness, and activity 10 scores. 11 BY MR. KAPPOS: 12 Q. Okay. But the heart rate, the blood 13 oxygen sensing, and the period prediction are not 14 reported as such to the user in the absence of the 15 membership, correct? 16 MR. PLUTA: Object to form. 17 THE WITNESS: So I think I'd go back to 18 what I said before. My understanding is without the 19 membership, you have access to the sleep, the 20 readiness, and activity scores. I don't -- as I sit 21 here today, I don't recall whether or not there's any 22 more granularity provided with any of those that 23 would provide you any of the information associated 24 with the heart rate monitoring or temperature, body 25 temperature.

Page 118 1 So I don't want to specifically say that 2 none of them are available. My understanding is that 3 the scores are available. And to the extent that 4 those -- any of those are provided through or as a 5 component of the score, that could be available to 6 members without the membership -- or excuse me, to 7 Oura owners without the membership. 8 BY MR. KAPPOS: 9 Q. Okay. The heart rate, the blood oxygen 10 sensing, and the period prediction, they are reported 11 as such to the owner of the Oura Ring with purchase 12 of the membership, correct? 13 A. So my understanding is that Oura's members 14 have access to in-depth and detailed analysis related 15 to their sleep and heart rate monitoring and blood 16 oxygen percentages and period prediction, yes. 17 Q. And a user with the Oura membership also 18 gets, as you put it, in-depth sleep analysis every 19 morning, correct? 20 A. So the phrase I used in paragraph 21 of my 21 declaration is in-depth sleep analysis. There's 22 nothing specific in that paragraph 21 that refers to 23 it being delivered in the morning. 24 But my recollection is that from reading 25 Oura's information website, is that that information	Page 120 1 so in-depth sleep analysis, personalized health 2 insights, heart rate monitoring, blood, temperature 3 readings, and I think we also mentioned blood oxygen 4 sensing. So my question is, those parameters are 5 provided as such to the user only when the user 6 becomes an Oura member, correct? 7 MR. PLUTA: Object to form. 8 THE WITNESS: I'm not quite sure I 9 understand your use of "as such" in that question. I 10 agree that, as explained in paragraph 21, that first 11 sentence, there are certain metrics that Oura users 12 can access through the membership, including in-depth 13 sleep analysis, live and accurate heart rate 14 monitoring, body temperature readings, early illness 15 detection, and period prediction, as well as others, 16 that those are available through the Oura membership. 17 And I think as we've discussed previously, 18 my understanding is those owners of an Oura Ring who 19 have not subscribed to the membership have access to 20 three daily scores, the sleep, readiness, and 21 activity scores. 22 Q. You go on to say that "The Oura Ring and 23 Oura membership work 'hand-in-hand' such that the 24 user's experience improves over time as the Oura Ring 25 gathers more data, enabling Oura to generate more
Page 119 1 is provided in the morning. But I don't have a clear 2 recollection as to whether it's always in the morning 3 or some other time. But I agree that there is 4 in-depth sleep analysis available through the Oura 5 membership. 6 Q. And the Oura members also receive 7 personalized health insights, correct? 8 A. I understand those are -- personalized 9 health insights are things available to Oura's 10 members through the membership, yes. 11 Q. And the members also receive body 12 temperature readings for early illness detection and 13 period prediction, correct? 14 A. Yes, consistent with the first sentence of 15 paragraph 21 of my declarations, yes, I understand 16 that body temperature readings very early illness 17 detection and period prediction, amongst other 18 information, are available for Oura members. 19 Q. And those parameters are provided only 20 when the user becomes an Oura member, correct? 21 MR. PLUTA: Object to form. 22 THE WITNESS: Could you define what you 23 mean by those parameters? 24 BY MR. KAPPOS: 25 Q. The parameters that we just went through,	Page 121 1 nuanced insights into the user." Correct? 2 A. That is the sentence further in paragraph 3 21, yes. 4 Q. But the users pay separately from the 5 initial purchase of the ring for these added 6 features, correct? 7 A. So I would agree that the Oura membership 8 is, generally speaking, a paid membership that users 9 pay for. I agree with that, yes. 10 Q. Our's revenue, as discussed in your 11 declaration, paragraph 14, that revenue comes both 12 from the sale of the Oura Ring and the membership, 13 correct? 14 A. So the revenue that is reported in 15 paragraph 14 of my declaration is -- does refer to 16 Our's overall total revenue, which as I believe we 17 discussed before the break, does include revenue 18 related to the sales of the rings, as well as the 19 subscription to the Oura membership. 20 I believe elsewhere in my report, such as 21 paragraph 35 of the declaration, I specifically focus 22 on the revenue generated from ring sales. But I 23 would agree that paragraph 14 includes revenue from 24 both sales of the ring as well as sales of the 25 subscription.

Page 122

Q.

Page 124

1 percentage of customers who have bought rings and
2 then purchased a membership subscription still have
3 that subscription after the first trial month?

22

Page 123

Page 125

25 Q. Do you have an understanding as to what

25 Q. In paragraph 15 of your declaration, you

Page 126 1 say that for -- I think it's for Gen 1 that you're 2 referring to, "monitored sleep and daily activity 3 through a number of sensors." Do you see that 4 language? 5 A. I do, yes. 6 Q. And to monitor sleep and daily activity, 7 that required the user to download the Oura 8 application, correct? 9 MR. PLUTA: Object to form. 10 THE WITNESS: I think that's calling for a 11 technical opinion that I'm not offering today, as 12 we've discussed. 13 BY MR. KAPPOS: 14 Q. Okay. Do you have any understanding as to 15 whether the use of the Gen 1 Oura Ring would have 16 required the user to download the Oura application? 17 Actually, let me rephrase. 18 Do you have any understanding as to 19 whether the Gen 1 Oura Ring would have required the 20 user to have the Oura application in order to monitor 21 sleep and daily activity? 22 MR. PLUTA: Object to form. 23 THE WITNESS: So I think as we discussed 24 earlier, the focus of my analysis has been on the 25 Oura Ring Gen 3 and Gen 4. And providing this	Page 128 1 back and look at the Exhibits 2047 and 2052 to 2 confirm, but that's my understanding, yes. 3 Q. You say in paragraph 16 that the "Gen 2 4 introduced new hardware and software features." Do 5 you see that? 6 A. Compared to Oura Ring Gen 1, yes, I see 7 that. 8 Q. What were the new hardware features that 9 were introduced? 10 A. As I sit here, I don't recall the specific 11 hardware features that were introduced as part of 12 Oura Ring Gen 2. 13 Q. Do you remember anything about them? 14 A. I think I'd have to go back to the sources 15 that I cite here. And my understanding is that there 16 were -- that there may have been some specific 17 explanations. But I don't recall the specific words 18 they used, off the top of my head. 19 Q. Do you recall whether there was any change 20 in the battery life between Gen 1 and Gen 2? 21 A. As I sit here, I don't believe I have the 22 information related to battery life of Gen 1 relative 23 to battery life of Gen 2. 24 Q. And what were the new software features in 25 Gen 2?
Page 127 1 paragraph regarding Oura Ring Gen 1 is by way of 2 background understanding of the rings. I don't have 3 a technical understanding as to whether or not the 4 Gen 1 required use of an app. 5 BY MR. KAPPOS: 6 Q. Do you know whether the Gen 1 allowed for 7 use of an app? 8 A. I think I'd repeat my similar answer, that 9 the focus has been on -- my analysis has been on Gen 10 3 and Gen 4. I don't have a technical opinion or 11 understanding as to whether or not the Oura Ring Gen 12 1 utilized an app. 13 Q. So moving, then, to paragraph 16 of your 14 declaration, now you're talking about the Oura Ring 15 Gen 2, which you say was released in November of 16 2017, correct? 17 A. That's my understanding, yes. 18 Q. How many models were released of the Oura 19 Gen 2? 20 A. So I think as I say later in that same 21 sentence, there were two models in four colors 22 related to the Oura Ring Gen 2. 23 Q. And were the models named Balance and 24 Heritage? 25 A. That was my understanding. I'd have to go	Page 129 1 A. So I think my answer is going to be 2 similar, that I need to look back at the way they 3 described it. I don't remember the specific software 4 features that were identified by Oura -- identified 5 as being new in the Gen 2. 6 Q. Where would you need to look to find that? 7 A. For starters, the sources that I 8 identified in that paragraph 16 would be one place 9 that I would look. That may not be the extent or all 10 of them, but I certainly believe that source cited 11 some features. 12 (Clarke Exhibit No. 2047 was 13 identified for the record.) 14 BY MR. KAPPOS: 15 Q. I am handing you a document that's been 16 marked as Exhibit 2047. That's one of the sources 17 that I believe you cited in that paragraph. 18 A. It is a source I cite in this paragraph, 19 yes. 20 Q. Does that help you to identify either the 21 new hardware features or the new software features in 22 Gen 2? 23 A. So this was not a document I cited for 24 that specific sentence that we've referenced related 25 to new hardware/software features. And I don't

Page 130 1 recall or don't see them, as I look at this again 2 today, that those hardware/software features are 3 explicitly called out in this document. But there 4 are others that I've cited in that paragraph. 5 Q. So in Exhibit 2047, which you now have in 6 front of you, at page 5, it states, "Throughout 7 2018," let me know when you get there. Do you see 8 that text in the bottom paragraph? 9 A. I see the phrase "Throughout 2018." 10 Q. "Throughout 2018, Oura reached about 50 11 employees, expanding into the United States and 12 establishing a more formal management team. The 13 addition of experienced professionals in marketing, 14 sales, and product development helped Oura build its 15 global presence." 16 With regard to the Gen 2 Oura product, 17 what is your understanding of the number of global 18 marketing personnel that were added? 19 A. So based on the information in this 20 investigation, I don't believe there are details of 21 the employees, Oura's employees that I've relied on 22 in reaching my conclusions in this proceeding. 23 Q. Moving on to paragraph 17. Here, you talk 24 about Gen 3, and you note that it was launched in 25 October of 2021, correct?	Page 132 1 of a user's heart rate, blood oxygen sensing, period 2 prediction, among other metrics." What were the 3 other metrics? 4 A. So I think some of that may be identified 5 in Exhibits 2043 and Exhibits 2055. But the ones 6 that I've included specifically there are the ones 7 that obviously come to mind at this moment, but there 8 certainly may have been others as well. 9 Q. But those are the only ones that you're 10 aware of, as you sit here today, correct? 11 A. I think those are the only ones that I've 12 specifically identified in the context of paragraph 13 17. As I said, there may be others. 14 Q. Are you aware of any of the others? 15 A. I couldn't tell you another one, off the 16 top of my head. I think there may have been others. 17 Certainly there was additional partnerships going 18 forward that relate to certain elements, certain 19 information that the ring was measuring, but I don't 20 recall, as I sit here, which other features or 21 elements of the ring were included. 22 Q. Do the green LED sensors and the red LED 23 sensors enable improved monitoring of a user's heart 24 rate? 25 MR. PLUTA: Object to form.
Page 131 1 A. That is correct. 2 Q. Compared to Gen 2, what did the Gen 3 Oura 3 Ring introduce or change from Gen 2? 4 A. So a not exhaustive list of that is 5 included in the rest of that sentence that I've 6 identified, including new green LED sensors, red LED 7 sensors, upgraded temperature sensors, allowing for 8 improved monitoring of a user's heart rate, blood 9 oxygen sensing, period prediction, amongst others. 10 Q. How many models of the Oura Ring Gen 3 11 were there? 12 A. So I don't believe I have that specific 13 information here in paragraph 17, but my recollection 14 was that there were two different models of the Oura 15 Ring Gen 3. 16 Q. And what were they called? 17 A. I don't want to look back to double-check. 18 My recollection was one was called Horizon and -- 19 Q. Was the other called Heritage maybe? 20 A. It's possible it could be Heritage. If 21 you want to represent that to me, I can take that. 22 Q. Back to paragraph 17, the part that you 23 just read, you said the Oura Ring Gen 3 "included new 24 green LED sensors, red LED sensors, and upgraded 25 temperature sensors allowing for improved monitoring	Page 133 1 THE WITNESS: So my understanding is 2 that's how those have been characterized in Exhibits 3 2043 and/or Exhibits 2055. I don't believe that's a 4 -- I'm not separately offering an independent opinion 5 that those sensors enable that or allow for that. 6 That would require a technical opinion. But my 7 understanding is those are connected. 8 BY MR. KAPPOS: 9 Q. Is it also your understanding that the 10 green and red LED sensors enable detection of blood 11 oxygen sensing? 12 A. So I think that goes to a technical level 13 of information that I don't have the specific details 14 on. I don't recall which of the LED sensors enables 15 blood oxygen sensing. I know that, generally, as a 16 lay matter, that those sensors are involved in 17 measuring blood oxygen, but I couldn't tell you 18 specifically which one. 19 Q. And is your answer the same for period 20 prediction? 21 A. I think my answer is similar, that I don't 22 have an independent technical opinion as to which of 23 the sensors enable the analysis related to period 24 prediction, that's correct. 25 Q. Did the measurements of heart rate, blood

Page 134 1 oxygen sensing, and period prediction in the Gen 3 2 product, did they require changes to the Oura 3 application? 4 MR. PLUTA: Object to form. 5 THE WITNESS: So I don't think I have a 6 separate opinion as to whether they required a change 7 in the Oura application. I'm not sure if I'm 8 understanding what you mean by a change to the Oura 9 application. So maybe we should start with asking 10 for clarity on what sort of change you're talking 11 about here. 12 BY MR. KAPPOS: 13 Q. Do you know if the Oura application was 14 updated for Generation 3? 15 A. So my recollection is, in conjunction with 16 the release or shortly thereafter the release of the 17 Oura Ring Gen 3, the Oura membership was launched. 18 Q. What about the application? Was it 19 updated in any way that you know of? 20 A. As I sit here, I don't recall the exact 21 differences or similarities between the application 22 just before the launch of the Gen 3 versus the 23 application just after the launch of the Gen 3. 24 Q. And you said, in conjunction with the 25 release of Gen 3 or shortly thereafter, the Oura	Page 136 1 A. I believe people at Analysis Group on my 2 staff captured this -- or didn't capture this web 3 page, but went to the web archive and identified this 4 page, yes. 5 Q. At the top of the first page of Exhibit 6 2098 under the heading, "A really smart ring," it 7 says, "A small but powerful piece of technology, Oura 8 translates what your body is telling you to paint a 9 holistic picture of your health." Do you see that? 10 A. I see those words, yes. 11 Q. And that doesn't say anything about the 12 form factor, does it? 13 A. I think the smart ring, by definition, is 14 speaking to the form factor of it being a ring. 15 Q. And so just the mere mention of the word 16 smart ring is telling you something about the form 17 factor of the Oura Ring? That's your interpretation? 18 MR. PLUTA: Object to form. 19 THE WITNESS: My interpretation is that 20 this website is focusing on conveying to consumers 21 that it is a really smart ring. It is a ring. So, 22 and "A small but powerful piece of technology" 23 relates to the size. So one of the benefits and 24 interests in this form factor is the relative size. 25 And as we discussed earlier, the wearability and
Page 135 1 membership was launched. And by that, you mean there 2 was no Oura membership before Gen 3, correct? 3 A. My understanding is that the -- the 4 subscription-based Oura membership was launched at or 5 around the time of the Oura Ring Gen 3 being launched 6 in October 2021, yes. 7 (Clarke Exhibit No. 2098 was 8 identified for the record.) 9 BY MR. KAPPOS: 10 Q. I have handed you Exhibit 2098. Do you 11 understand Exhibit 2098 to be the Oura website? 12 A. I think, to be specific, I would say that 13 my understanding of Oura Exhibit 2098 is an archived 14 version from web.archive.org of the Oura website as 15 of -- I believe it looks like July 2024. 16 Q. Archived where? 17 A. Archived on -- the source is generally the 18 Internet Archive or the Wayback Machine, where you 19 can identify specific web pages at previous points in 20 time. So that the URL of the archive is at the 21 bottom of this page. And the long number after the 22 web and down there is, in my experience, relates to 23 the date on which that screen grab -- screen capture 24 was taken. 25 Q. Did you do the screen capture?	Page 137 1 comfort of a ring. 2 BY MR. KAPPOS: 3 Q. The exhibit then goes on to discuss 4 pinpoint accuracy and discusses how the changes in 5 heart rate, heart rate variability, and temperature 6 changes are tracked. Do you see that? 7 A. I see those words after several others, 8 yes. 9 Q. That discussion relates to measurements 10 that rely on the sensors, correct? 11 MR. PLUTA: Object to form. 12 THE WITNESS: To my lay understanding, it 13 would be that the heart rate and the heart rate 14 variability would be a function of the sensors which 15 are embedded within the ring. So at least in that 16 sense, it still, to me, is speaking to the ring and 17 the ability of a ring form factor to provide -- and 18 to enable a customer with those attributes, those 19 benefits. 20 BY MR. KAPPOS: 21 Q. And the ability to process parameters of 22 heart rate, heart rate variability, and temperature, 23 that processing occurs in the application; is that 24 correct? 25 MR. PLUTA: Object to form.

Page 138 1 THE WITNESS: It sounds like it's going 2 for a legal -- or excuse me, a technical opinion as 3 to where that processing takes place. And I don't 4 have an opinion related to where that processing 5 takes place. 6 BY MR. KAPPOS: 7 Q. Do you see "Two distinct styles" that are 8 listed at the bottom of that page? 9 A. I see that heading, yes. 10 Q. And one of them is called the Horizon and 11 the other one is called Heritage. Do you see that? 12 A. I do see that. 13 Q. For the Heritage, it says, which is "A 14 classic, plateau design." Do you see that? 15 A. I see those words, yes. 16 Q. To an economist, what does that mean to 17 you? 18 A. I'm sorry, the specific words, "a classic 19 plateau design"? 20 Q. Yes. 21 A. So I think both of those -- both of the 22 description there relate to the design and the 23 relative shape and form factor of the ring. And that 24 there are -- or it's described here two distinct 25 styles related to the ring.	Page 140 1 Q. Yes. 2 A. So I would agree that Exhibit 2098 refers 3 to Heritage and says a classic plateau design. And I 4 agree that Exhibit 2056 appears to be a web page from 5 Oura Ring, and appears to be the Heritage ring 6 itself. As for what is precisely meant by plateau 7 design, I don't have an independent opinion of that. 8 Q. So you don't have any view or any 9 understanding as to where the plateau is shown in 10 Exhibit 2056, correct? 11 A. To the extent that's calling for a 12 technical opinion related to a plateau that has a 13 specific meaning, I don't have an opinion related to 14 that. 15 Q. Well, let me ask it this way. As an 16 economist, you don't have any understanding as to 17 where the plateau is shown in Exhibit 2056, correct? 18 A. So I think as an economist, I understand 19 that Exhibit 2056 shows that the Heritage -- the 20 Oura's Heritage model of the Oura Ring Gen 3. I 21 agree with that. 22 Q. Yes. But as an economist, you don't have 23 an understanding as to where the plateau is shown in 24 Exhibit 2056, correct? 25 A. I don't have a separate technical
Page 139 1 Q. Are those different form factors as 2 between the Horizon and the Heritage? 3 A. So I don't think I would provide a 4 technical opinion on whether they are different form 5 factors. My understanding is they are both rings, 6 and in that regard, they are both representative of a 7 ring form factor. 8 (Clarke Exhibit No. 2056 was 9 identified for the record.) 10 BY MR. KAPPOS: 11 Q. I am handing you a document that's been 12 marked as Exhibit 2056. Do you see at the top, it 13 says, "Shop Oura Ring Gen3 Heritage Silver"? 14 A. I do, yes. 15 Q. Do you understand the picture that's in 16 the middle of Exhibit 2056 to be the image of the Gen 17 3 Heritage Oura Ring? 18 A. Going off memory, I believe that's 19 consistent with my understanding of the Heritage 20 ring, yes. 21 Q. And there is a region that has kind of a 22 different reflection on it. Is that the area that is 23 referred to as the plateau? 24 A. I assume by plateau, you're referring back 25 to Exhibit 2098?	Page 141 1 interpretation of what the plateau is that's in 2 reference in Exhibit 2056. 3 Q. Do you see there are two inflection points 4 as you go around the ring in Exhibit 2056? 5 A. From a lay perspective, I see that there 6 are two places that -- two places that the shading 7 associated with this black and white image seems to 8 change, yes, I do see that. 9 Q. And what would you call the region that's 10 between the two places where the shading associated 11 with the black and white image seems to change? 12 A. I don't know that I have a specific name 13 for that region. It appears to, based on my 14 understanding of where the sensors are intended to 15 pick up readings, I would assume that's -- that is 16 toward the top of the ring. But I don't have an 17 understanding or name for it other than that. 18 Q. Referring again to Exhibit 2098, at the 19 top of page 2, you see where it discusses "Oura 20 Membership," it says, "just keeps getting better"? 21 A. I see those words, yes. 22 Q. And at the bottom of the page, on page 2 23 and on to page 3, there's discussion of quality 24 materials and then battery life. Do you see that? 25 A. So there is a section at the bottom of

Page 142 1 page 2 of Exhibit 2098 related to tech specifications 2 that includes quality materials, as well as battery 3 life, yes. 4 Q. And then on to page 3, there's discussion 5 of water resistance, weight, and dimensions, 6 compatibility, connectivity, and Oura Ring charger. 7 Do you see that? 8 A. Yes, I would say the first four that you 9 mentioned are kind of under the section related to 10 tech specifications, and the charger's in a separate 11 "What's included" section. But, yes, I see that. 12 Q. Okay. And do you see anything under the 13 tech specifications that refers to the circular form 14 factor of the ring? 15 A. It looks like there are a couple places 16 that, at least in my mind, relates to the ring, and 17 refers to quality materials, there's the second 18 sentence related to the Oura Ring. So by definition, 19 it's speaking about a ring there. 20 Similarly, under water resistance, it's 21 discussing the Oura Ring being water resistant. So 22 those, I would suggest, do relate to the fact that it 23 is a ring form factor. And then finally, under 24 weight and dimensions, there's some explicit 25 reference to the size and the dimensions being	Page 144 1 Is this a description of what you mean by 2 form factor? 3 A. Could you repeat just the question? 4 Q. Is this what you mean by form factor? 5 A. So I would say that this paragraph here is 6 consistent with the discussion of the form factor and 7 the importance of form factor. It's not -- 8 specifically, it's not the section that you read, or 9 not the section that I quoted in my paragraph 48 of 10 my declaration, but it is focused on the ring and the 11 appearance of the ring, and the fact that it is a 12 ring. 13 Q. And so does the ring have to be snazzy or 14 fashionable to have the Oura form factor, in your 15 opinion as an economist? 16 A. First, I believe the word snazzy is in 17 reference to the Gucci version of an Oura Ring. And 18 my understanding is most of the available models of 19 the Oura Ring are not the Gucci version of that. 20 I think the form factor being -- the 21 importance of the form factor for consumers is that 22 it's -- it comes in the -- it is the form of the 23 ring. It's not specifically the aesthetics of what 24 that ring -- of the appearance of the ring. It's 25 more the factor -- the form factor of the ring, as
Page 143 1 approximately the size of a wedding band. Obviously, 2 in most cases, as relates to a ring in most 3 people's -- in my experience, most people's 4 imaginations. 5 Q. And so you believe those are references to 6 the form factor? 7 A. I believe those are instances in which 8 Oura is describing the hardware of the Oura Ring, 9 yes. 10 (Clarke Exhibit No. 2099 was 11 identified for the record.) 12 BY MR. KAPPAS: 13 Q. I am handing you a document that's been 14 marked as Exhibit 2099. On the third page, there's a 15 section heading that says, "No one will know it's a 16 smart ring." Do you see that section heading? 17 A. Yes, on page 3, I see a heading called "No 18 one will know it's a smart ring." 19 Q. And that section then discusses, "For a 20 ring with such fashionable devotees," and it goes on 21 to say, "My gold Heritage review unit isn't too far 22 off from what Frodo schlepped to Mordor." "Since 23 launch, Oura's also introduced a snazzier Oura x 24 Gucci version that costs" -- and then it goes on to 25 say \$950.	Page 145 1 opposed to, for example, a smart watch. 2 Q. And so form factor and aesthetics are two 3 different things, correct? 4 A. So I think you're trying to perhaps paint 5 it too black and white. There's probably some 6 overlap between the two. I think one of the benefits 7 of the ring form factor can be the fact that, as this 8 article cites, "No one will know it's a smart ring," 9 that the ring form factor and the different 10 iterations of the Oura Ring are increasingly looked 11 at as more pieces of jewelry, or similar in size to a 12 piece of jewelry. And so that seems to be an 13 important relevant factor in some consumers' purchase 14 decisions. 15 Q. On page 4, the article goes on to say, "It 16 doesn't catch on your clothes, it'll never buzz when 17 you get notifications, and it's way more comfortable 18 than wearing a smart watch 24/7." 19 Do you see that? 20 A. I see those words, yes. 21 Q. And does the description of not catching 22 on your clothes, not buzzing when you receive 23 notifications, and being more comfortable than a 24 smart watch, are those aspects of the form factor, in 25 your view?

Page 146 1 A. Those aspects speak to the benefit of a 2 form factor being a ring. And so, yes, to that 3 extent, they are, I believe. 4 Q. As an economist, reading the challenged 5 patents, did you see anything to indicate that 6 smoothness was a claimed feature in the challenged 7 patents? 8 A. So again, I'm not offering a technical 9 opinion as to what's in the -- either of the 10 challenged patents. It's my understanding that the 11 patent generally relates to the form factor of the 12 ring itself being a ring. 13 Q. How do you define the term form factor? 14 MR. PLUTA: Object to form. 15 THE WITNESS: I think to an extent, the 16 form factor relates to the size, the shape, the fact 17 that it is a ring, as opposed to other form factors. 18 For example, as I point out in paragraph 45 related 19 to Samsung's ring, they evaluated different form 20 factors and settled on that of the ring. So it's a 21 combination of those elements that relate to the 22 overall shape and feel from an economic perspective 23 of a ring. 24 BY MR. KAPPOS: 25 Q. Other than the size and the shape, is	Page 148 1 different elements to it, but I think I wouldn't rule 2 out that the smoothness could relate to the form 3 factor. 4 Q. In order to have the form factor that you 5 understand as an economist is covered by the 6 challenged patents, that would mean the housing has 7 to be smooth, correct? 8 MR. PLUTA: Object to form. 9 THE WITNESS: So again, I think that calls 10 for a technical opinion that I'm not providing here. 11 BY MR. KAPPOS: 12 Q. So you have no understanding as to whether 13 the challenged patents require a smooth housing. 14 A. Again, I am not providing a technical 15 opinion as to what the claims of the challenged 16 patents require or don't require. 17 Q. In order to meet the requirement that you 18 stated for the form factor of the challenged patents, 19 that would mean the housing has to be free of 20 protuberances, correct? 21 MR. PLUTA: Object to form. 22 THE WITNESS: So I don't think that's what 23 I said at all. 24 BY MR. KAPPOS: 25 Q. Okay. Well, I want to know your opinion.
Page 147 1 there any other aspect that you would include in your 2 definition of form factor? 3 A. So I think, in general, it's going to 4 relate to the combination of features that we're 5 talking about being able to incorporate. And my 6 understanding is being able to incorporate these 7 sensors into that size -- that size and that shape 8 and that form factor. 9 So it's -- I don't think it's not quite as 10 narrow as looking at just size and shape. I think 11 it's the combination of being able to provide the 12 sensors and different components, all within that 13 object. 14 Q. So the sensors are part of the form 15 factor? 16 A. To the extent that they are included 17 within the ring, yes. I think it's the provision of 18 a product that has the capabilities in the shape and 19 size form factor of a ring that is at least a driver 20 of demand for the Oura Ring. 21 Q. Is a smooth surface part of the form 22 factor? 23 A. So I think the smoothness, or lack 24 thereof, of the surface could be a component of the 25 form factor. I think the form factor may have	Page 149 1 Would you agree that in order for the form factor to 2 meet the requirement that you've stated for the 3 challenged patents, that the housing would have to be 4 free of protuberances? 5 MR. PLUTA: Object to form, relevance. 6 THE WITNESS: So I think that's, again, 7 calling for a technical interpretation of the patents 8 that I am not providing here. 9 (Clarke Exhibit No. 2100 was 10 identified for the record.) 11 BY MR. KAPPOS: 12 Q. I am handing you a document that's been 13 marked as Exhibit 2100. It's entitled "Oura Ring 14 Gen3: We Tried It, and Here's Our Unfiltered 15 Opinion." Do you see that in the title? 16 A. Yes, I do. 17 Q. On page 11 of Exhibit 2100, the top 18 paragraph states, "The Oura Ring stands out in 19 several aspects when compared to other health 20 tracking devices." 21 Did I read that correctly? 22 A. Yes, you did. 23 Q. And then it goes on to say, "But above 24 all, its wearability is exceptional." 25 Do you see that?

Page 150 1 A. I do. 2 Q. The next sentence says, "Unlike bulkier 3 smart watches or fitness bands, the Oura Ring is 4 sleek and compact." 5 Do you see that? 6 A. I see those words. 7 Q. So wearability is achieved because the 8 device is sleek and compact; is that correct? 9 A. I'm not sure that that necessarily 10 follows. I think the sleek and compactness may 11 impact the wearability. But I think you may be 12 reading more into the author's sentence than is 13 there. 14 Q. Wearability is not claimed in the 15 challenged patents, as you read them as an economist, 16 correct? 17 MR. PLUTA: Object to form. 18 THE WITNESS: So I am not offering a 19 technical opinion as to what's in the patents or 20 what's not in the patents. I don't recall seeing the 21 word wearability, but I don't have an opinion related 22 to that. 23 BY MR. KAPPAS: 24 Q. According to the author of Exhibit 2100, 25 wearability is tied to uniform thickness and width,	Page 152 1 based on my reading as an economist, is that each of 2 the rings, whether you're at a size 6 or wearing a 3 size 13, or a size 11, that the thickness and the 4 width is going to be the same for each of those three 5 rings. 6 Q. And it's going to be the same -- the 7 thickness and the width is going to be the same 8 around the circumference of the ring, correct? 9 A. So I don't believe you can read that into 10 this sentence here. I think you're making an 11 assumption about that. And I don't have an opinion, 12 one way or the other, as to whether it's surrounding 13 the circumference. 14 Q. Now moving on back to your declaration, to 15 Gen 4, which I think you talk about in paragraph 18, 16 and possibly a number of other places. But starting 17 in 18, Gen 4 was launched in October of 2024, 18 correct? 19 A. That's my understanding, yes. 20 Q. How many models are available for Gen 4? 21 A. I would want to go to the URL website to 22 confirm. My recollection is there may only be one in 23 several different colors or finishes, but I would 24 want to go back to confirm that. 25 Q. Do you remember what the name is for the
Page 151 1 correct? 2 A. Is there a specific place in Exhibit 2100 3 you want to direct me to? 4 Q. Yeah, let's look at page 11. And we were 5 at the top before. If you go down to the third 6 paragraph, it says, "The good news is that the 7 thickness and width are the same for every size, 8 whether you're a 6 or 13." Is 6 or 13, is that 9 referring to age, or ring size, or how do you 10 understand that? 11 A. So my lay understanding would be that 12 would relate to the ring size, whether a size 6 ring 13 or size 13 ring. 14 Q. Okay. And that sentence that I just read, 15 do you understand that to be referring to the 16 thickness being uniform and the width being uniform? 17 A. So I think I would read into this specific 18 just what's written here, that the thickness and the 19 width are the same for each of the sizes. 20 Q. And what does that mean? Does that mean 21 the thickness and the width are uniform? 22 A. Again, you keep referring to the -- using 23 this word "uniform," and I'm not sure if there's a 24 technical sense that you're trying to imbue into 25 that. I think my understanding of the sentence,	Page 153 1 one that you remember? 2 A. Not off the top of my head, I don't recall 3 the name of it. 4 Q. What did the Gen 4 change or introduce 5 that was different from Gen 3? 6 A. As identified in the first sentence of 7 paragraph 18, some of those factors include battery 8 life improvements, greater measurement accuracy, and 9 an all-new circular titanium-based design, which I 10 think we spoke about earlier, as well as the smart 11 sensing algorithm. 12 Q. As an economist, do you know what was 13 changed about the battery life? 14 A. I don't have a specific information on 15 what was changed related to the battery. 16 Q. Do you have any understanding of what the 17 battery live improvements entailed? 18 A. When you say entailed, you mean from a -- 19 a functional question as to whether the battery is 20 larger or smaller, or the efficiency of the battery? 21 Q. Any of the above, and anything else that 22 changed about the battery. 23 A. I don't have specific details on how the 24 improvements to the battery life were made. 25 Q. Okay. Setting aside specific details, do

Page 154 1 you have any information or understanding about any 2 changes that were made to the battery as an economist 3 sitting here today? 4 A. So I think as I explained here, I 5 understand that there were improvements to the 6 battery. The battery life, that were made, I think 7 we -- I don't recall if I -- specifics but my 8 recollection is it may have been the hours between 9 charges that changed. But I don't recall the 10 specific details. 11 Q. You refer to "'smart Sensing' algorithm, 12 which improves the ring's ability to take 13 measurements continuously regardless of hand 14 position." What did you mean by that? 15 A. I mean the words that are written there in 16 paragraph 18. It's my understanding, based on the 17 descriptions of the smart sensing algorithm, that it 18 improves the way that the sensors and the ring can 19 capture data related to the individual and the user, 20 that is more flexible and enables the ring to be in 21 different positions on the wearer's hand. 22 Q. The smart sensing algorithm is not recited 23 in any of the claims of the challenged patents, 24 correct? 25 MR. PLUTA: Object to form.	Page 156 1 understanding related to that. 2 Q. And how the measurements are handled 3 within the ring, that's not recited in the claims of 4 the challenged patents, correct? 5 MR. PLUTA: Object to form. 6 THE WITNESS: So that would require a 7 technical opinion that I'm not offering here, a legal 8 opinion related to what's in the claims or not in the 9 claims. 10 BY MR. KAPPOS: 11 Q. Would the user of the Oura Ring device be 12 aware of how the measurements are handled within the 13 ring? 14 MR. PLUTA: Object to form. 15 THE WITNESS: So again, I can't offer a 16 technical opinion related to that. My understanding 17 is one of the benefits of the smart sensing 18 algorithm, from a lay perspective, is that it 19 improves the reliability of the measurements, and 20 that is something that I would expect a consumer may 21 be aware of. 22 BY MR. KAPPOS: 23 Q. Would the user of the Oura Ring device 24 have any knowledge of how the sensors are placed 25 within the ring?
Page 155 1 THE WITNESS: So that's going to require a 2 legal opinion or technical opinion that I'm not 3 providing here. 4 BY MR. KAPPOS: 5 Q. Do you have any understanding as an 6 economist as to whether the smart sensing algorithm 7 is recited in any of the claims of the challenged 8 patents? 9 MR. PLUTA: Object to form. 10 THE WITNESS: So I don't have an 11 independent opinion as to whether or not the smart 12 sensing algorithm is found in the claims of the 13 patents. I haven't tried to interpret the patents. 14 BY MR. KAPPOS: 15 Q. Do you have an understanding as an 16 economist that this smart sensing algorithm is 17 implemented in software? 18 A. So I think with the caveat that you 19 provided in the question that I'm not offering a 20 technical opinion as to how this is done, or how it 21 is implemented. My understanding is -- my lay 22 understanding is that it relates to more than 23 software. It relates to how measurements are handled 24 within the ring and perhaps the sensor placement 25 within the ring. But that's the extent of my	Page 157 1 A. To confirm, we're discussing the Oura Ring 2 Gen 4? 3 Q. Correct, yes. 4 A. So my understanding is that there are some 5 differences in the sensor -- my lay understanding is 6 that there's some differences in the sensors in Oura 7 Ring Gen 4 and how those are -- or not how, but 8 relative to the Oura Ring Gen 3. And its certainly 9 conceivable that the consumers would notice that or 10 be aware of that. 11 Q. How would they become aware of that? 12 MR. PLUTA: Object to form. 13 THE WITNESS: So again, I can't offer a 14 technical opinion as to how they would know that. 15 But I think from a lay perspective, I mentioned one 16 earlier related to the greater accuracy associated 17 with the benefit of the smart sensing algorithm. My 18 recollection is there may be something as well 19 related to the sensors themselves and the ability 20 to -- for the user to feel the sensors on their 21 finger. 22 BY MR. KAPPOS: 23 Q. So you're saying because the user would 24 know about greater accuracy, that would somehow tell 25 them about the placement of the sensors within the

Page 158 1 ring? 2 A. So I believe you're mischaracterizing what 3 I said before. I think we'd have to go back and see 4 the question, but I believe what I'm saying is -- or 5 I believe you asked whether or not a user would be 6 aware of -- aware of that. And my response was that 7 the way in which a user could be aware of that is 8 through the greater accuracy of the measurements. 9 Q. How would greater accuracy of the 10 measurements tell the user anything about the 11 placement of the sensors within the ring? 12 MR. PLUTA: Object to form. 13 THE WITNESS: From a lay perspective, I 14 think it's going to -- it could provide the 15 consumer -- or the fact that there's more accurate 16 data providing the consumer some understanding that 17 there's an easier ability to measure the different 18 metrics with a variety of different hand placements 19 or finger placements of the ring. 20 MR. PLUTA: Can we take a short break? 21 MR. KAPPOS: Sure. Let's do it now. 22 THE VIDEOGRAPHER: We are going off the 23 record at 1:54 p.m., Eastern time. 24 (Recess.) 25 THE VIDEOGRAPHER: This is video file	Page 160 1 right? 2 A. The one I have is 2054. 3 Q. 2054. Okay. 4 MR. PLUTA: I have 2053. 5 MR. KAPPOS: So I'm going to give opposing 6 counsel 2054, and here's 2053. 7 (Clarke Exhibit No. 2054 was 8 identified for the record.) 9 MR. KAPPOS: So now you have both of them, 10 2053 and 2054. 11 BY MR. KAPPOS: 12 Q. Can you just confirm that for me, 13 Mr. Clarke, that you have both now? 14 A. I have Exhibit 2053 as well as 2054 and 15 2052. 16 Q. Okay. And I believe that these were the 17 exhibits earlier that you said you would need to look 18 at in order to tell us what were the added hardware 19 features in the Gen 2 Oura Ring. 20 A. So technically, that sentence in footnote 21 -- excuse me, in paragraph 16 also references Exhibit 22 2024. And I don't believe I have a copy of that 23 sitting in front of me, but if I'm -- 24 Q. Is that an ITC transcript that you're 25 referring to?
Page 159 1 number 4. Back on the record with Andrew Clarke at 2 2:08 p.m., Eastern time. You may begin. 3 MR. KAPPOS: Welcome back, Mr. Clarke. 4 THE WITNESS: Thank you. 5 (Clarke Exhibit No. 2052 was 6 identified for the record.) 7 BY MR. KAPPOS: 8 Q. I'm handing you a document that's been 9 marked as Exhibit 2052. This is the other document 10 that you had referred to in paragraph 16 in 11 discussion of the Gen 2 device, our discussion 12 earlier. And I had asked you what your understanding 13 was of new hardware and software features. Do you 14 recall that? 15 A. I recall we discussed the Oura Ring Gen 2 16 and new hardware/software features. And this is one 17 of the two exhibits that I cite with respect to 18 that -- that sentence, yes. 19 (Clarke Exhibit No. 2053 was 20 identified for the record.) 21 BY MR. KAPPOS: 22 Q. And then I'm going to hand you another 23 document. 24 A. Thank you. 25 Q. So I just handed you Exhibit 2053; is that	Page 161 1 A. I believe -- yes, I believe that is day 1 2 of the 1398 evidentiary hearing. 3 Q. Okay. Based on the exhibits that I have 4 given you here, 2052, 2053, 2054, can you explain, 5 based on those exhibits, what were the new hardware 6 features in the Gen 2 Oura Ring? 7 A. So I think -- I don't think I can give you 8 a complete answer, at least without seeing Exhibit 9 2024. But I think, based on 2052 and with reference 10 back to paragraph 15 related to the Oura Ring Gen 1, 11 I think there's some information here that enables a 12 determination related to some of that. 13 Q. Okay. So based on the documents that 14 you're looking at, what were the new hardware 15 features in the Oura Ring Gen 2? 16 A. So again, with the caveat that this may 17 not include all of them, but I believe there are 18 differences with respect to the information measured 19 by the infrared LEDs in Gen 2. The first bullet on 20 the first page of 2052 refers to the infrared LEDs 21 for monitoring nighttime heart rate and respiratory 22 rate. Gen 1 related to the IR LEDs, it specifically 23 just says nighttime biosignals and sleep stages 24 detection. 25 Q. Okay. Are there any other hardware

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[illegible]

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Q. In your declaration, you say that smart rings "are part of a broader wearable marketplace," correct?

A. There is language like that in paragraph 23 of my declaration reading, "Smart rings, such as the Oura Ring, are part of a broader wearables marketplace, including smart watches and fitness trackers."

Q. And the Oura Ring is part of a marketplace for wearable devices that monitor and assess health and fitness parameters, correct?

A. So I don't know that I necessarily use those specific words. But as a general concept, I don't disagree that the wearables market, including smart rings, can track and monitor users' metrics and behavior.

Q. Well, would you agree that the Oura Ring is part of a marketplace for wearable devices that monitor and assess health parameters?

A. I think we've discussed that the Oura Ring can measure certain metrics, including body temperature and blood oxygen levels, amongst others. And as a layperson, I would interpret those as being health-related metrics. So by that -- by virtue of that, I think I can agree with that statement at a

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1 general level.

2 Q. Okay. And do you agree that the Oura Ring

3 is part of a marketplace for wearable devices that

4 monitor fitness parameters?

5 A. So it's my understanding that the Oura

6 Ring and other smart rings can measure attributes

7 such as steps and movement and activity, which one

8 could include within a broad rubric of fitness

9 parameters. I don't know that I've used those

10 specific words.

11 Q. In the marketplace that we're talking

12 about for wearable devices, that would include the

13 Apple Watch, correct?

14 A. So the broader wearables marketplace, I

15 would say, does include smart watches and fitness

16 trackers. And the Apple Watch is, I understand, a

17 smart watch. So it would be included within that,

18 yes.

19 Q. And the Samsung Galaxy Watch, have you

20 heard of that?

21 A. I have, yes.

22 Q. And that would also be included in the

23 market of wearable devices that monitor and assess

24 health and fitness parameters, correct?

25 A. To the extent that the Gala Watch is a

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1 smart watch, which I understand it to be, then it
2 could be within the broader wearables marketplace.

3 Q. Well, you say it could be. You don't have
4 an understanding, one way of the other?

5 A. I'm sorry, that the Galaxy smart watch, I
6 believe -- Galaxy Watch, smart watch is within the
7 broader wearables marketplace, a segment of which is
8 the smart rings that we're talking about here.

9 Q. Have you heard of a product called the
10 Garmin?

11 A. It's my understanding that Garmin is
12 either a company or a brand. But I believe there are
13 several different products.

14 Q. Do you know of a product by Garmin that is
15 a wearable device that monitors and assesses health
16 and fitness parameters?

17 A. So I'm not sure if there's a place in my
18 declaration that you're specifically relating --
19 specifically pointing to, or a document you want to
20 point me to. I understand that, generally, Garmin
21 manufacturers and sells smart watches and potentially
22 also fitness trackers that would also be included
23 within the broader wearables marketplace.

24 Q. What about Fitbit? Have you heard of the
25 Fitbit?

Page 170 1 A. Again, I've heard of Fitbit as a brand 2 which I believe there may be products within that, 3 yes. 4 Q. And do you know if Fitbit makes a product 5 in the wearable market that monitors and assesses 6 health and fitness parameters? 7 A. I think I would stick with the phrasing 8 that I have identified at the end of paragraph 23, 9 that the smart watch and the fitness tracker 10 marketplaces include companies that we've talked 11 about, and including Fitbit. So Fitbit fitness 12 trackers, yes, I understand would be included within 13 the broader wearables marketplace. 14 Q. Have you heard of a company called Movi, 15 M-O-V-I? 16 A. As I sit here, I don't recall a product 17 from Movi. But I don't -- if you want to represent 18 to me there's a company. 19 Q. What about McLear, M-C-L-E-A-R? 20 A. Can you spell that one more time. 21 Q. M-C-L-E-A-R. 22 A. The name is vaguely familiar, but I don't 23 have a specific product in mind. 24 Q. So you do not know whether McLear makes a 25 smart ring?	Page 172 1 Have you heard of that company? 2 A. Xiaomi, yes, I have. 3 Q. Okay. Do they make a smart ring? 4 A. I need to look back, but I don't recall if 5 they do or not. 6 (Clarke Exhibit No. 2073 was 7 identified for the record.) 8 BY MR. KAPPOS: 9 Q. Let me give you another exhibit which I'm 10 handing you now, and it's Exhibit 2073. And I'm 11 referring to page 5. Do you see key players, that 12 heading? 13 A. I'm sorry, page 5? 14 Q. Yes. Under the heading key players, the 15 first paragraph. Do you see that? It says, "The 16 'Smart Ring Market' study report will provide 17 valuable insight with an emphasis on the global 18 market." 19 A. I see those words, yes. 20 Q. And then it says, "The major players in 21 the market are Oura Health, Movi, McLear, NFC Ring, 22 Wisewear, MoodLab, Gavin, Casio, Samsung, Xiaomi, 23 Infineon Technologies, Nimb, RingCentral, Empath, 24 Siren, SoRings, and Keto Mojo." Do you see that 25 list?
Page 171 1 A. As I sit here today, I don't recall 2 whether or not they make a smart ring, no. 3 Q. Have you heard of a company called NFC 4 Ring? 5 A. I don't recall a company called NFC Ring. 6 I don't dispute that it may exist. 7 Q. What about a company called Wisewear, 8 spelled W-I-S-E-W-E-A-R? 9 A. That company sounds vaguely familiar, but 10 I don't have a product in mind associated with the 11 company. 12 Q. What about the company MoodLab, M-O-O-D, 13 Lab? 14 A. Again, as I sit here, I don't have a 15 product in mind associated with Mood Lab. 16 Q. How about Gavin, G-A-V-I-N? 17 A. I don't have a recollection of a specific 18 product associated with a company called Gavin. 19 Q. Casio, I presume you've heard of that 20 company. Do you know if they make a smart ring? 21 A. I have heard of the company or the brand 22 Casio. I don't recall if there's a -- if they have a 23 smart ring available or not. 24 Q. I don't know how to pronounce the next one 25 that I want to ask about. It's spelled X-I-A-O-M-I.	Page 173 1 A. Yes, I do. 2 Q. So setting aside Oura, which of course 3 you'll recognize, and Samsung, which of course you'll 4 recognize, do you recognize any of the other 5 companies as making a smart ring? 6 A. So I believe we already discussed several 7 of them that you were reading to me previously, and I 8 said that I was not aware whether they had a ring or 9 not. I wasn't disputing it one way or the other. 10 RingCentral sounds familiar, but the company that I'm 11 familiar with by that name does something completely 12 unrelated to wearables or smart rings. So it's 13 likely a different -- presumably a different company. 14 Q. So you do not recognize any of the other 15 companies listed here as ones that have a ring device 16 for the health and wellness market; is that right? 17 A. I think I would say that I understand that 18 there's the -- that of the companies listed here, the 19 Oura Ring -- Oura Health and Samsung certainly have 20 rings, and certainly have smart rings. The others, I 21 have no way to dispute that they have rings or do not 22 have rings. 23 Q. You just don't know either way, correct? 24 A. I would agree that my analysis is not 25 dependent on each of those companies having a smart

1 ring in the marketplace.

2 Q. Yeah, I realize that. But I'm asking, you
3 don't know, one way or the other, whether the other
4 companies, other than Oura or Samsung, have a smart
5 ring or do not, correct?

6 A. I have no reason to dispute the article
7 here from this market research company that those are
8 other companies with rings, so -- but, no, I have
9 no -- no reason to dispute that.

10 Q.

[illegible][illegible][illegible][illegible]

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2 Q. But with the Oura Ring 3, that was the
3 first time that Oura launched the membership,
4 correct?

5 A. It's my understanding that, as we
6 discussed earlier, that the membership was introduced
7 around the same time as the Oura Ring Gen 3 was
8 introduced, yes.

9 Q. And the sales numbers for the period
10 encompassed by the Oura Ring Gen 3 include both the
11 ring and the membership sales, correct?

12 A. I'm not sure I understand your question.

13 Q. We'll come back to that. Let me keep
14 going.

15

[illegible]

7 Q. Were there related updates to the Oura
8 membership with the launch of the Gen 4 Oura Ring?
9 A. As I sit here, I don't have a clear
10 recollection as to whether or not there were changes
11 to the membership or to the information included in
12 the membership with the launch of Gen 4.
13 (Clarke Exhibit No. 2107 was
14 identified for the record.)
15 BY MR. KAPPOS:

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

(Clarke Exhibit No. 2109 was

identified for the record.)

BY MR. KAPPOS:

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[illegible]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

9 Q. Now, you discuss raising capital as an
10 indicator of Oura's value. Do you recall that?

11 A. So I would describe the discussion as
12 being a little more -- a little broader than that.
13 But I do recall certain valuations of Oura as being
14 relevant to my opinion, yes.

15 Q. Raising capital goes to the valuation of
16 the company, correct?

17 A. So the specific metrics related to the
18 value of the company, yes, by definition, relate to
19 the value of the company. In this specific instance,
20 given that the Oura Ring is the product and that all
21 revenue is associated at the end of the day with the
22 Oura Ring, I find it relevant to the value, the value
23 of the Oura Ring that the value of Oura as a company
24 has increased.

25 Q. The marketplace success analysis focuses

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1 on product sales, not valuation of the company,
2 correct?

3 A. I think I would say that the marketplace
4 analysis is focused on products and the success of
5 those products in the marketplace. But I think one
6 measure, given the unique characteristic of this
7 situation, is that all of Oura's revenue is related
8 to the product at issue, the Oura Ring. I believe
9 that the valuation of the company is a reflection of
10 the marketplace success of the company's product, the
11 Oura Ring.

12 Q. But the Oura Ring membership is an
13 additional product offering, correct?

14 A. So I think we've discussed this a couple
15 times today. My understanding is that the Oura
16 membership, while it's a separate revenue stream,
17 that revenue stream is predicated on the existence of
18 the Oura Ring. And so it's still related to Oura's
19 single product which is the Oura Ring.

20 Q. Did you do anything to try to apportion
21 the company's valuation between the Oura Ring and the
22 value of the membership?

23 A. So I don't think that was necessary to do
24 from a -- for my opinion.

25 Q. So you did not, correct?

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1 A. I don't think it would be appropriate to
2 do. And as we just discussed, the revenue associated
3 with the Oura membership is predicated on the Oura
4 Ring and the existence of the Oura Ring and
5 information captured by the Oura Ring. So to that
6 extent, I don't think there could be a meaningful
7 separation of one from the other, in my opinion.

8 Q. Well, I didn't ask if you thought it was
9 appropriate to do so. All I was asking was whether
10 or not you did so. So it sounds like you did not do
11 that apportionment, correct?

12 A. I think, as I just testified, it would not
13 be appropriate to do, and I did not do so.

14 Q. And did you do anything to account for the
15 multiple product offerings with regard to the
16 company's valuation?

17 A. Can you explain --

18 MR. PLUTA: Object to form.

19 THE WITNESS: Can you explain what you
20 mean by multiple product offerings?

21 BY MR. KAPPOS:

22 Q. Let me ask a different question. Did you
23 take into account the extent to whether company
24 valuation might be attributable to future or
25 contemplated product offerings that are not currently

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1 in existence?

2 A. So I think as a matter of finance and
3 economics, a company's value is going to be dependent
4 on its stream of future cash flows. [REDACTED]

13 Q. And so your analysis of valuation did not
14 contemplate that Aura might have additional products
15 at some point in the future, correct?

16 A. No, I don't think I can agree with that.
17 I think the valuations are a function of the
18 expectations of the company going forward. And all
19 evidence I've seen suggests that the company is
20 focused on the Oura Ring. And that ring is the
21 foundation of the valuations that are being generated
22 in the marketplace.

10 Q. And so you say you don't think you can
11 quite agree with that. Well, then what future
12 product, independent of the Oura Ring, did you take
13 into account in assessing the company's valuation?

14 A. I haven't seen evidence of future products
15 available in the marketplace, or available that Oura
16 has discussed that are underlying that valuation.
17 The valuation's based on individuals understanding of
18 the company and its prospects in the future. And as
19 we've discussed, currently all of the company's
20 revenue are related to the Oura Ring and revenue
21 streams related to the Oura Ring.

22 Q. Are you familiar with business
23 partnerships that Oura has currently in p

24 A. I'm generally familiar with the fact that
25 Oura has engaged in a number of partnerships with

Page 202 1 different companies, yes. 2 Q. Is one of those companies a company called 3 Natural Cycles? 4 A. I believe one of those companies is 5 Natural Cycles, yes. 6 Q. And Natural Cycles is a company that is 7 dedicated to women's reproductive health, correct? 8 A. I don't know if I would have the exact 9 phrasing of how they characterize themselves. But I 10 understand that Natural Cycles relates to 11 contraceptives and reproductive health, yes. 12 Q. And the features that have -- let me ask 13 this. Has that business partnership with Natural 14 Cycles resulted in any features on the Oura Ring or 15 Oura application? 16 MR. PLUTA: Object to form. 17 THE WITNESS: So it's my understanding 18 that the Oura Ring and the Oura application has 19 information that, as we discussed earlier, relate to 20 period prediction. I think your question is whether 21 there's a causal direction between whether the 22 Natural Cycles partnership came first or later, and I 23 don't have a clear understanding or insight as to the 24 order of those. 25 BY MR. KAPPOS:	Page 204 1 not aware that the ring itself has a display. So 2 wouldn't the information have to be output on the 3 application? 4 A. I think you're presupposing several things 5 in there. And the partnership, my understanding, was 6 announced in November 2024. What I don't have a 7 clear information on is whether or not that 8 information is available through the Oura app or it 9 if it's -- there's information available in some 10 other way. 11 I think the information that as I've 12 explained in paragraph 40 relates to the integration 13 of the Dexcom's glucose data with data from the Oura 14 Ring. But precisely how that data is then conveyed 15 to the user, I don't have insight into that. 16 Q. Glucose biosensing and period prediction 17 are both features that are part of the paid 18 membership of the Oura platform, correct? 19 A. I don't think I can agree with that. As 20 we discussed and just mentioned, paragraph 21 of my 21 declaration, that information related to period 22 prediction is included through the membership. I 23 don't recall, as I sit here, whether there's 24 information that the Oura Ring itself, or 25 application, delivers specific to glucose levels.
Page 203 1 Q. Do you know whether the feature or 2 features related to period prediction are available 3 through the Oura application to the user? 4 A. I think I would refer back to -- I believe 5 it was paragraph 21 where I described -- talked about 6 earlier that through the Oura membership, the user 7 can receive additional data and insights including, 8 amongst other, period prediction. 9 Q. Is Dexcom another company with whom Oura 10 has a partnership? 11 A. My understanding is that Oura has reached 12 a strategic partnership with Dexcom, yes. 13 Q. And is that strategic partnership focused 14 on glucose monitoring? 15 A. I think the way I would phrase it is 16 Dexcom, I understand, is a company focused on glucose 17 biosensing, and that the partnership relates to the 18 combination or the use of the Dexcom data with data 19 from the Oura ring. 20 Q. The glucose biosensing data is output to 21 the user on the Oura application, correct? 22 A. So I don't think I've seen specific 23 information that suggests how the integration is 24 provided to the user. 25 Q. But I think you said earlier that you're	Page 205 1 Q. You referred to an article from CNBC in 2 your declaration. Do you recall that discussion? 3 It's paragraph 41, I believe. 4 A. I see the sentence that you're referring 5 to. 6 (Clarke Exhibit No. 2089 was 7 identified for the record.) 8 BY MR. KAPPOS: 9 Q. I've handed you a document that's marked 10 as Exhibit 2089. Is this the CNBC article that you 11 referred to? 12 A. No, it does not appear to be. 13 Q. So let's refer back to your declaration, 14 paragraph 41. The CNBC article states that Oura is 15 "'one of the market pioneers' for the smart ring 16 marketplace segment," correct? 17 A. The full sentence is, "CNBC credited Oura 18 as 'one of the market pioneers' for the smart ring 19 marketplace segment." 20 Q. And that means there were other pioneers, 21 correct? 22 A. I don't dispute that there may have been 23 other rings. 24 Q. Have you heard of a company called Whoop, 25 W-H-O-O-P?

Page 206 1 A. Yes, I have. 2 Q. And what do they do, to your knowledge? 3 A. My recollection is that they have a 4 fitness tracker band. I think it falls more in that 5 category than a smart watch. 6 Q. By band, do you mean like a bracelet? 7 A. Yes. That's my understanding. 8 Q. What about Movano Health's Evie ring? 9 Have you heard of that? 10 A. I have heard of that, yes. 11 Q. Is that a smart ring? 12 A. That's my understanding, that it is a ring 13 shape, yes. 14 Q. What about Amazfit Helio Ring? Have you 15 heard of that? 16 A. I think I've heard of Amazfit, and I 17 think, Helio Ring, I think I've seen reference to. 18 Q. Helio Ring. And that's a smart ring as 19 well? 20 A. That's my understanding, is that it's 21 marketed as a smart ring, yes. 22 Q. What about RingConn? Have you heard of 23 them? 24 A. I have heard of them, yes. 25 Q. And they make a smart ring also?	Page 208 1 marketplace. But I think, secondly, my recollection 2 of Whoop was that it was more of a fitness band 3 tracker as opposed to a ring. But it's possible 4 there's a ring that I'm not recalling off the top of 5 my head. 6 Q. Would you agree with me that Movano 7 Health's Evie Ring, Amazfit Helio Ring, the RingConn 8 ring, and the YogiFi ring are all smart rings within 9 the smart ring segment of the wearables market? 10 A. So would I agree that the Movano Health 11 and the Amazfit and RingConn and YogiFi have rings 12 that they suggest are smart rings, which I have no 13 reason to dispute are within the smart ring market 14 segment. 15 Q. In Exhibit 2089, there's discussion on the 16 first page of the Movano Health's Evie Ring near the 17 bottom of the page, just above the smart ring 18 competitors heading. Do you see that? 19 A. I see that, yes. 20 Q. It states that the Movano ring was first 21 showcased in 2022 as "a female-first wearable" ring 22 which has "a simplified app that tracks heart rate, 23 activity, menstrual cycles and blood oxygen" to track 24 and "identify patterns over time." Did I read that 25 correctly?
Page 207 1 A. It's my understanding that RingConn has 2 had a smart ring in the marketplace, yes. 3 Q. And YogiFi, they also make a smart ring; 4 is that correct? 5 A. So the company YogiFi does sound familiar. 6 I don't recall, as I sit here, whether it's a smart 7 ring versus another product, but -- 8 Q. In the exhibit that I just gave you, 2089, 9 do you see at the bottom of the first page where it 10 says smart ring competitors? 11 A. I see those words, yes. 12 Q. And then on the -- it continues on to the 13 next page. And I believe that YogiFi appears right 14 below the image of the Ultrahuman ring. Do you see 15 the paragraph below that says, "Other smart rings 16 offer more niche features." And then it refers to 17 YogiFi? 18 A. I do see that sentence. 19 Q. So the companies that I mentioned, Whoop, 20 Movano, Amazfit, RingConn, and YogiFi, would you 21 agree with me that they're all part of the smart ring 22 market? 23 A. So I don't think I could quite agree with 24 the way you've phrased that for a couple reasons. I 25 refer to the smart ring segment within the wearables	Page 209 1 A. There are a few other words mixed in 2 there. But generally speaking, yes, I see those 3 words. 4 Q. Isn't that description similar to what 5 Oura is now endeavoring to do with Natural Cycles? 6 A. So I think I would disagree with the way 7 you've characterized that as something Oura is 8 currently endeavoring to do with Natural Cycles. My 9 understanding is that Oura partnered with Natural 10 Cycles in August of 2022. 11 But as specified in paragraph 17 of my 12 declaration, back in October 2021, Oura launched the 13 Oura Ring Gen 3 which included the ability to work to 14 provide metrics related to period prediction. So I 15 don't think I could provide a blanket agreement that 16 what they're doing currently is trying to catch up 17 with the Evie Ring, which sounds like the implication 18 of what you were saying. Perhaps I misunderstood. ██ ██ ██ ██ ██ ██ ██ ██

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14 BY MR. KAPPOS:

15 Q. Oura's not a publicly-traded company,
16 correct?

17 A. That's my understanding.

18 Q. And so Oura doesn't have public financial
19 reporting requirements that would make their
20 financial numbers available to the public, correct?

21 A. So as a private company, it's my
22 understanding Oura doesn't provide detailed financial
23 data to the public for consumption. There is still
24 information related to Oura's overall value. For
25 example, the metrics discussed in paragraph 38 of my

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1 declaration related to the value of Oura. That is
2 all based on publicly available information. So
3 those numbers certainly would be visible to Samsung
4 and provided by Samsung.

5 Q. Are you familiar with Everett Rogers' work
6 on adoption and diffusion of new products?

7 A. The name isn't specifically ringing a
8 bell, but something I may have seen before.

9 MR. KAPPOS: Can we take a ten-minute
10 break?

11 MR. PLUTA: Sure.

12 THE VIDEOGRAPHER: We are going off the
13 record at 3:43 p.m., Eastern time.
14 (Recess.)

15 THE VIDEOGRAPHER: This is video file
16 number 5. Back on the record with Andrew Clarke at
17 3:55 p.m., Eastern time. You may begin.

18 BY MR. KAPPOS:

19 Q. Welcome back, Mr. Clarke.

20 A. Thank you.

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3 Q. And the period of time that we're talking
4 about is -- can you remind me, it's what to what?

5 A. For the Oura Ring Gen 3, we've been
6 looking at the timeframe starting with its launch in
7 October of 2021 through the launch of the Oura Ring
8 Gen 4 in October 2024.

9 Q. And the Gen 3 and the Gen 4 are the only
10 two that you considered, correct?

11 MR. PLUTA: Object to form.

12 THE WITNESS: I think I would agree that
13 the opinions that I've reached with respect to
14 commercial success are focused on the Oura Ring Gen 3
15 and the Oura Ring Gen 4. I think there is data, as
16 we've discussed earlier today, that pertains to sales
17 of Oura during the period of time in which the Oura
18 Ring Gen 2 was available for sale.

19 And there are certainly references and
20 comparisons, as we discussed in paragraph 33, that
21 compare sales prior to the launch of Oura Ring Gen 3
22 with sales after the launch of Oura Ring Gen 3.

23 BY MR. KAPPAS:

24 Q. The period of time that you just outlined
25 from October of 2021 through the launch of the Oura

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1 Ring 4 in October of 2024, that was just for Gen 3,
2 wasn't it?

3 A. So I think we should be careful to be
4 consistent with the conversation we've had earlier
5 today. Those -- the sales that I've been looking at
6 over -- are in those months from the launch of Gen 3
7 in October 2021 through the launch of the Gen 4 in
8 October 2024, as well as beyond through February
9 2025.

10 Q. And the through February 2025, that's the
11 part that I was getting at. That was primarily
12 focused on Gen 4 sales, correct?

13 A. Yes, I believe as we discussed earlier,
14 that Oura, in its ordinary course of business, I
15 understand doesn't track sales by generation. They
16 track sales of units of the Oura Ring. But my
17 understanding is that the vast majority of all sales
18 after the launch of the Gen 4 in October 2024 would
19 relate to the Oura Ring Gen 4.

20 Q. Why did you stop in February of 2025?

21 A. I believe that is the most recent data
22 that I had access to.

23 Q. Did you ask for more recent data?

24 A. No, I felt that that was sufficient to
25 reach the opinions that I have.

1 BY MR. KAPPOS:

2 Q. Did Oura enter new markets during that
3 period? Like, for instance, maybe there was a time
4 where they weren't selling in China and then there
5 came a time when they started selling in China. That
6 would be an example of a geographic growth. So let
7 me ask the question again.

8 During the period that you just mentioned,
9 October of 2021 through February of 2025, did Oura's
10 sales grow geographically.

1 Let me withdraw that question and ask, do
2 you understand what I mean by the term saturation
3 within a market?

4 A. That was the question I was going to ask
5 you to clarify, what you had in mind by saturation.

6 Q. Do you have an understanding of how that
7 term is used in an economic sense when you're talking
8 about markets?

9 A. I have a general understanding as an
10 economist related to saturation and the extent to
11 which a product is expanded throughout a marketplace,
12 yes.

13 Q. And what's your general understanding of
14 how saturation would work and what that would mean in
15 an economic sense within a marketplace?

16 A. My general understanding is that
17 saturation is going to be a relative term, and that
18 it's going to be bounded by demand in the
19 marketplace, for one. But it also can relate to the
20 extent and ubiquity of products within the
21 marketplace.

22 I think the common example is smartphones
23 and the quick adoption to more than 90, 95 percent of
24 U.S. individuals, consumers having smartphones
25 within -- I forget the exact timeframe, but the speed

1 at which a certain technology is conveyed and
2 distributed throughout the marketplace.

3 Q. Is the simple way to think about the
4 saturation is once everybody has one, there aren't
5 many more that are going to need to be purchased. Or
6 at least once everybody who wants one gets it, then
7 they're not going to purchase too many more? Is that
8 a simplified way to look at it?

9 A. I think I would suggest that one way to
10 look at it is you certainly have satisfied the
11 initial demand of people who are interested in the
12 product. But as you just referenced, there may be
13 certain segments of the market that a product becomes
14 of interest and becomes more acceptable to them over
15 time. So there may be other market segments that get
16 opened over time. So saturation with respect to an
17 early adopter may be different than saturation for an
18 overall marketplace, for example.

19 Q. Is the smart ring segment of the wearable
20 market becoming saturated, to your understanding, at
21 this point?

22 A. I think as discussed in paragraph 25, and
23 to some extent paragraph 26 of my declaration, I
24 think the -- it's my understanding that the smart
25 ring segment is expected to be one of the faster

24 Q. Are you aware of any level of saturation
25 of the smart ring segment of the wearable market?

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1 growing segments within the broader wearables
2 marketplace. And that would suggest that there has
3 not been a saturation of the marketplace with respect
4 to smart rings at this point.

5 Q. Would you agree with me that the smart
6 ring segment of the wearable market is a niche
7 segment of that market?

8 A. I don't think I would agree with that
9 terminology.

10 Q. You don't consider the smart ring segment
11 to be a niche area within the wearable market?

12 A. I have a vague recollection that there may
13 be a document that referenced smart rings as either
14 being niche or moving from a niche position to a
15 broader position. And -- give me one minute.

16 And for example, in paragraph 45 of my
17 declaration, there's an interview from Mr. Hale of
18 Aura, the CEO of Aura, where he described the impact
19 of the launch of the Samsung Galaxy Ring as being a
20 validation of the smart ring market segment.

21 Q. Do you think that supports the view that
22 it's a niche market or refutes the view that it's a
23 niche market?

24 A. I think from an economic perspective, that
25 is indicative or suggestive that to the extent that

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1 smart rings were at one point a niche market, that it
2 is moving to become more of a broader mainstream
3 segment.

4 (Clarke Exhibit No. 2063 was
5 identified for the record.)

6 BY MR. KAPPAS:

[illegible]

23 Q. Do you know what the installed base was
24 for any of the competitors to the Oura Ring at the
25 time of launch of the Oura Ring Gen 3?

Page 226 1 A. I don't believe I've seen those numbers as 2 of October 2021. I don't recall those numbers as I 3 sit here. 4 Q. Do you have any understanding as to what 5 was the percentage of the installed base of the smart 6 ring segment of the wearable market that Oura 7 represented at any point in time from October 2021 to 8 February of 2025? 9 A. There a couple metrics related to Oura's 10 share related to the smart ring marketplace segment, 11 two of which I reference in paragraph 26 of my 12 declaration. I would have to look back at the exact 13 sources to see the precise wording they put around 14 it, whether that's a share based on sales over a set 15 period of time or related to the installed base. 16 Q. We've been talking a number of times today 17 about the smart ring segment of the wearable market. 18 But do you understand that the smart ring segment is 19 further segmented into other subcategories? 20 A. Are there specific subcategories you have 21 in mind? 22 Q. Let me give you one. Is there a health 23 and wellness subsegment of the smart ring segment of 24 the wearables category? 25 A. So I think earlier today, you were	Page 228 1 2077. 2 Q. Which one is identified in 2073? 3 A. 2073 is a printout from a company, 4 Verified Market Research. 5 Q. And have you seen the estimates from the 6 various market research firms? Have you seen any of 7 those estimates of the market size of the smart ring 8 segment of the wearables market today or 9 approximately current? 10 A. So I would have to see those exhibits 11 again to be certain. My recollection is that there 12 are estimates of the size of the smart ring market 13 segment within them. I don't recall the specific 14 numbers. 15 (Clarke Exhibit No. 2077 was 16 identified for the record.) 17 BY MR. KAPPOS: 18 Q. I am handing you a document that's been 19 marked as Exhibit 2077. Is that one of the market 20 research firm reports that you're referring to? 21 A. So this is another of the market research 22 firms, and specifically one referenced in my 23 paragraph -- paragraph 25, yes. 24 Q. And does this tell you -- give you an 25 approximate estimate of the smart ring segment of the
Page 227 1 pointing me to an exhibit, Exhibit 2073, which on 2 page 4 asserts that there are certain applications 3 within the smart ring marketplace, one of which being 4 health and wellness. 5 Q. Do you consider that to be a subsegment of 6 the smart ring segment of the wearables market? 7 A. The evidence that I've reviewed in this 8 investigation focuses more on the smart ring segment 9 as a whole. I don't believe I've seen much 10 differentiation between health and wellness versus 11 the other applications that are identified in Exhibit 12 2073. 13 Q. How big is the smart ring segment of the 14 wearables market today? 15 A. I don't believe I've included a precise 16 number associated with the smart ring marketplace -- 17 excuse me, smart ring market segment. There are a 18 number of different market research firms, and I 19 believe they may have differing estimates of what 20 that market size may be. 21 Q. Who are the market research firms that 22 you're referring to? 23 A. My recollection is they would include the 24 ones identified -- the one I identified in Exhibit 25 2073, as well as 2075, Exhibit 2076, and Exhibit	Page 229 1 wearables market currently or within the last year? 2 A. So this provides this analyst's or this 3 research firm's estimate, forecast -- or, excuse me, 4 estimate as well as forecast of the smart ring 5 segment, yes. It, I believe, differs, as we see from 6 the dollar value in the Exhibit 2073. But, yes, this 7 is one. 8 Q. And what's the estimate? What number 9 should I be looking at in Exhibit 2077? 10 A. So the estimate included in this report is 11 \$251.2 million. 12 Q. Do you know what the approximate size of 13 the smart ring segment in the wearables market was 14 five years ago? 15 A. I apologize. Can you repeat that back? 16 Q. Do you know the approximate size of the 17 smart ring segment in the wearables market five years 18 ago? 19 A. I don't recall the precise number as I sit 20 here, and looking at the two examples we have here, 21 we certainly see differences in numbers. So I think 22 perhaps the relative growth is perhaps more important 23 coming from these dollar values. 24 Q. What is the number from Exhibit 2073? You 25 said it's different. What is the number that we

Page 230 1 would look at in that document? 2 A. So the words in the first line relate to 3 smart ring market size valued at 7.11 million in 4 2024, so -- 5 Q. That's pretty dramatically different from 6 the 251, I think you said, in the other report? 7 A. I would agree those are different numbers. 8 Q. Any idea as to why the analysts would come 9 out with such markedly different numbers? 10 A. I don't have any specific insight into the 11 differences between them. I think different market 12 research firms have different focuses and different 13 strengths. And it's not uncommon, in my experience, 14 that market industry sizes differ across different 15 companies. 16 Q. But you don't recall what it was five 17 years ago; is that right? 18 A. As I sit here, I don't recall the numbers 19 related to five years ago. It's possible one of 20 these, if I look carefully through it or one of the 21 other ones referenced in paragraph 25 may have a 22 number for several years ago, but I don't recall, as 23 I sit here. 24 Q. Do you remember seeing in any of the 25 documents what the market size estimates was ten	Page 232 1 Q. Well, even if it was the same as what's 2 reported in Exhibit 2077, so let's assume it was \$250 3 million five years ago. In your opinion, would that 4 size market have justified entry by a large business? 5 A. I think in that hypothetical that you 6 asked, there are a number of other factors that I 7 would need to know more information on before I could 8 provide an opinion on. 9 Q. Such as? 10 A. You mentioned it was a large business. I 11 don't know what the -- I don't know the details of 12 that company or that business, what it's -- what else 13 it may have invested in, what its cash flow looks 14 like, what its R&D capabilities are. So there are a 15 number of factors that go into whether or not it 16 would make sense for it to do that. And I don't 17 believe I have all that information. 18 Q. Do you believe that the smart ring segment 19 of the wearables market is now a mature market? 20 A. You're going to have to define for me what 21 you mean by a mature market. 22 Q. As an economist, have you heard certain 23 markets characterized as being mature? 24 A. There's a concept of maturation over a 25 product life cycle.
Page 231 1 years ago? 2 A. I think I would have a similar answer. I 3 don't recall the document ten years ago specifically 4 reporting an expected market size. 5 Q. If we take the higher of the two numbers, 6 the \$251 million. I think that was the one that was 7 in Exhibit 2077. You'd expect that the market size 8 would have been lower five years ago, right? 9 A. I think the way to answer that is, it's my 10 understanding that there's been growth. And 11 certainly if we look at the Oura itself, revenue, and 12 the growth of Oura's revenue, we see significant 13 growth over the last several years. So my 14 expectation is that the smart ring market segment 15 would have been smaller five years ago. 16 Q. And would it be your expectation that the 17 smart ring segment five years ago would have been 18 less than \$100 million? 19 MR. PLUTA: Object to form. 20 THE WITNESS: So I haven't separately 21 analyzed what the smart ring market segment would 22 have been five years ago. I think I would need to 23 look back at the evidence to see if there's documents 24 supporting a specific number. 25 BY MR. KAPPOS:	Page 233 1 Q. Can you explain that concept to me? 2 A. It relates, to some extent, as we were 3 discussing earlier, related to saturation, that 4 there's a period of time where individuals are 5 learning about a product, then becoming informed of a 6 product. And there reaches a point, oftentimes, a 7 point in time in which that information is conveyed 8 and consumers understand products and understand what 9 they're doing. So there can be different definitions 10 specifically of what is a mature market. 11 I think it generally would relate to a 12 situation in which much of that information has been 13 conveyed. That doesn't mean there's not still 14 innovation, there's still expansion within that 15 marketplace. You could consider the marketplace for 16 automobiles as being a relatively mature one in the 17 sense that it's a common technology that most folks 18 are familiar with and yet we still see extensive 19 innovation within that marketplace. 20 Q. Using your definition of market 21 maturation, do you consider the smart ring segment of 22 the wearables market to have reached maturation? 23 A. I could -- again, it depends on how you're 24 going to interpret the word maturation. There is 25 certainly an expanded acceptance and understanding of

Page 234 1 the capabilities of smart rings today versus several 2 years in the past. But I don't know that I would 3 necessarily say that that implies that the 4 marketplace is mature. There's still ongoing 5 innovation and expansion, to my understanding. 6 Q. You mentioned earlier today that there 7 were some errors that you noted in your declarations 8 and you would let me know if you saw where they are 9 today. Did you notice where any of those errors 10 were? 11 A. So I think if we look back -- I believe I 12 described them as typos or typographical. 13 [REDACTED] 14 [REDACTED] 15 [REDACTED] 16 [REDACTED] 17 [REDACTED] 18 [REDACTED] 19 [REDACTED] 20 [REDACTED] 21 [REDACTED] 22 [REDACTED] 23 [REDACTED] 24 Q. Were there any others? 25 A. That's the one I saw during the course of	Page 236 1 relevant to both declarations. 2 Q. Okay. 3 MR. PLUTA: I have no further questions. 4 I may have -- I think I said this, but I 5 would like to mark the transcript outside attorneys' 6 eyes only, protective order material. 7 MR. KAPPOS: We are done. 8 THE VIDEOGRAPHER: Since there are no more 9 questions, this marks the end of the video deposition 10 of Andrew Clarke. We are going off the record and 11 ending this deposition at 4:42 p.m., Eastern time. 12 (Whereupon, at 4:42 p.m., ET, the instant 13 deposition ceased.) 14 15 16 17 18 19 20 21 22 23 24 25
Page 235 1 the day that I recall. 2 Q. Okay. 3 MR. KAPPOS: Pass the witness. 4 MR. PLUTA: Let's just take a little 5 break. 6 MR. KAPPOS: Sure. 7 THE VIDEOGRAPHER: We're going off the 8 record at 4:34 p.m., Eastern time. 9 (Recess.) 10 THE VIDEOGRAPHER: This is video file 11 number 5. Back on the record with Andrew Clarke at 12 4:41 p.m., Eastern time. You may begin. 13 EXAMINATION BY COUNSEL FOR PATENT OWNER 14 BY MR. PLUTA: 15 Q. Mr. Clarke, do you recall the testimony 16 about your updated Appendix 4, which is Exhibit 1 to 17 this deposition? 18 A. I do, yes. 19 Q. And up in the right-hand corner is Case 20 Number PGR2024-00030. Do you see that? 21 A. I do. 22 Q. Does your updated Appendix 4 also apply to 23 the other declaration we've been discussing here 24 today? 25 A. Yes, the information would be similarly	Page 237 1 CERTIFICATE OF REPORTER 2 3 UNITED STATES OF AMERICA) ss: 4 DISTRICT OF COLUMBIA) 5 I, Desirae S. Jura, RPR, CSR (CA), the officer 6 before whom the foregoing proceedings were taken, do 7 hereby certify that the foregoing transcript is a 8 true and correct record of the proceedings; that said 9 proceedings were taken by me stenographically to the 10 best of my ability and thereafter reduced to 11 typewriting under my supervision; and that I am 12 neither counsel for, related to, nor employed by any 13 parties to this case and have no interest, financial 14 or otherwise, in its outcome. 15 16 17 <i>Desirae S. Jura</i> 18 Notary Public in and for 19 The District of Columbia 20 21 22 My commission expires: 1/31/2030 23 24 25

ATTORNEY'S EYES ONLY

1 STATE OF _____) 2) ss. 3 COUNTY OF _____) 4 5 6 I, the undersigned, declare under penalty of 7 perjury that I have read the foregoing transcript, and 8 I have made any corrections, additions, or deletions 9 that I was desirous of making; that the foregoing is a 10 true and correct transcript of my testimony contained 11 therein. 12 EXECUTED this _____ day of _____, 13 20____, at _____, _____. 14 (City) (State) 15 16 17 18 19 _____ 20 ANDREW T. CLARKE 21 22 23 24 25	Page 238
1 Errata Sheet 2 3 NAME OF CASE: SAMSUNG ELECTRONICS CO., et al. vs OURARING, INC. 4 DATE OF DEPOSITION: 06/18/2025 5 NAME OF WITNESS: ANDREW T. CLARKE 6 Reason Codes: 7 1. To clarify the record. 8 2. To conform to the facts. 9 3. To correct transcription errors. 10 Page _____ Line _____ Reason _____ 11 From _____ to _____ 12 Page _____ Line _____ Reason _____ 13 From _____ to _____ 14 Page _____ Line _____ Reason _____ 15 From _____ to _____ 16 Page _____ Line _____ Reason _____ 17 From _____ to _____ 18 Page _____ Line _____ Reason _____ 19 From _____ to _____ 20 Page _____ Line _____ Reason _____ 21 From _____ to _____ 22 Page _____ Line _____ Reason _____ 23 From _____ to _____ 24 25 _____	Page 239

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June 18, 2025

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ATTORNEY'S EYES ONLY

ANDREW T. CLARKE

June 18, 2025

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