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BEFORE THE PATENT TRIAL AND APPEAL BOARD

DYSON TECHNOLOGY LIMITED
AND DYSON, INC.,

Petitioners, Case No.
vs. IPR 2024-00690

OMACHRON INTELLECTUAL U.S. Patent
PROPERTY INC., No. 10,117,550

Patent Owner.

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CROSS-EXAMINATION OF  
ROBERT GIACHETTI, PH.D.

November 26, 2024  
9:01 AM Central  
333 Wolf Point Plaza  
Chicago, Illinois

Stenographically Reported By:  
Deanna Amore - CRR, RPR, CSR - 084-003999

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APPEARANCES OF COUNSEL  
(All Participants Appeared Remotely.)

On Behalf of the Petitioner, DYSON TECHNOLOGY  
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Job Number: 7043287

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I N D E X

|                                |             |
|--------------------------------|-------------|
| WITNESS                        | EXAMINATION |
| ROBERT GIACHETTI, Ph.D.        |             |
| EXAMINATION BY MR. ZHANG       | 5           |
| EXAMINATION BY MR. HERSHKOWITZ | 58          |

EXHIBITS

|           |                          |    |
|-----------|--------------------------|----|
| Exhibit 1 | IPR2024-00670 Patent     | 5  |
|           | Owner Notice of          |    |
|           | Deposition of Mr. Robert |    |
|           | Giachetti                |    |
| Exhibit 2 | IPR2024-00690 Patent     | 5  |
|           | Owner Notice of          |    |
|           | Deposition of Robert     |    |
|           | Giachetti                |    |
| Exhibit 3 | U.S. Patent 10,117.550   | 6  |
| Exhibit 4 | U.S. Patent 8,607,407    | 6  |
| Exhibit 5 | Declaration of Robert    | 9  |
|           | Giachetti Regarding U.S. |    |
|           | Patent 8,607,407         |    |
| Exhibit 6 | Declaration of Robert    | 9  |
|           | Giachetti Regarding U.S. |    |
|           | Patent 10,117,550        |    |
| Exhibit 7 | Curriculum Vitae of      | 19 |
|           | Robert Giachetti, Ph.D., |    |
|           | P.E.                     |    |

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|            |                          |    |
|------------|--------------------------|----|
| Exhibit 8  | Patent Specification     | 47 |
|            | 283,179 (IPVG)           |    |
| Exhibit 9  | U.S. Patent 2007/0209335 | 47 |
| Exhibit 10 | Swiss Federal Institute  | 54 |
|            | Of Intellectual Property |    |
|            | No. 203675               |    |
| Exhibit 11 | U.S. Patent 4,473,923    | 54 |

1 (Whereupon, the witness was  
2 duly sworn at 9:01 AM.)

3 THE STENOGRAPHER: You may proceed.

4 ROBERT GIACHETTI, Ph.D.,  
5 called as a witness herein, having been first duly  
6 sworn, was examined and testified as follows:

7 EXAMINATION

8 BY MR. ZHANG:

9 Q. Good morning, Mr. Giachetti.

10 How do you pronounce your name, please? 09:01:18

11 A. Giachetti. Good morning.

12 Q. Giachetti. Okay.

13 A. Yes.

14 MR. ZHANG: So here is Exhibit 1.

15 (Whereupon, Giachetti Exhibit 1  
16 was marked for identification.)

17 MR. ZHANG: And Exhibit 2.

18 (Whereupon, Giachetti Exhibit 2  
19 was marked for identification.)

20 BY MR. ZHANG: 09:01:44

21 Q. So what I marked as Exhibits 1 and 2 are  
22 the deposition notices for today's deposition in  
23 connection with IPR Case Numbers 2024-670 and  
24 2024-690. There's a typo on the front page of  
25 Exhibit 1 that's to the patent number, but if you

Page 5

1 flip, the headers are correct.

2 So have you seen these two documents  
3 before?

4 A. I think I have, but I don't recall.

5 Q. Do you understand that you're here today  
6 to testify in relation to these two IPR cases?

7 A. Yes.

8 MR. ZHANG: Exhibit 3.

9 (Whereupon, Giachetti Exhibit 3  
10 was marked for identification.) 09:02:51

11 MR. ZHANG: And Exhibit 4.

12 (Whereupon, Giachetti Exhibit 4  
13 was marked for identification.)

14 BY MR. ZHANG:

15 Q. So do you recognize Exhibits 3 and 4?

16 A. Yes.

17 Q. What are they?

18 A. These are the patents by Shark Omachron  
19 for this matter.

20 Q. So, to be clear, do you understand that 09:03:16  
21 Exhibit 3, which is U.S. Patent Number 10,117,550,  
22 and Exhibit 4, which is U.S. Patent  
23 Number 8,607,407, to be the challenged patents in  
24 these two IPR cases?

25 A. Yes, that's right.

Page 6

1 Q. What's your understanding of the  
2 challenged claims in each of the two IPR patents at  
3 issue? What are the challenged claims?

4 A. I don't remember them exactly off the top  
5 of my head, but they're all listed in my  
6 declaration.

7 Q. Okay. Do you understand the differences  
8 between independent claims and dependent claims?

9 MR. HERSHKOWITZ: Objection to the extent it  
10 calls for a legal conclusion. 09:04:14

11 THE WITNESS: I have been provided an  
12 understanding which I applied in my declarations.

13 BY MR. ZHANG:

14 Q. Okay. So when were you retained in these  
15 two IPR cases?

16 MR. HERSHKOWITZ: I'll just caution the witness  
17 not to reveal any privileged communications.

18 THE WITNESS: I don't remember the specific  
19 date, but I believe it was the end of last year  
20 sometime in the fall. 09:04:44

21 BY MR. ZHANG:

22 Q. By whom were you retained in connection  
23 with these two IPR cases?

24 A. Kirkland & Ellis retained me. Retained  
25 Fusion Engineering, I should say.

Page 7

1 Q. What is Fusion Engineering?

2 A. Fusion Engineering is a scientific and  
3 engineering firm, and we provide consulting  
4 services in the engineering and scientific field.

5 Q. Are you an employee of Fusion Engineering?

6 A. Yes.

7 Q. Are you an owner of Fusion Engineering?

8 A. No.

9 Q. Which attorney reached out to you or  
10 Fusion Engineering for these two IPR cases? 09:05:36

11 MR. HERSHKOWITZ: I'll just also caution the  
12 witness again not to reveal any privileged  
13 communications.

14 THE WITNESS: You know, I don't actually  
15 remember her name off the top of my head, but it  
16 wasn't anyone in this room.

17 BY MR. ZHANG:

18 Q. Prior to the SharkNinja cases, have you  
19 ever been retained by or worked with  
20 Kirkland & Ellis? 09:06:09

21 A. Not that I remember.

22 Q. Have you ever been retained by or worked  
23 with any Kirkland attorneys you're working with?

24 A. Not that I'm aware of.

25 MR. ZHANG: Exhibit 5.

Page 8

1 (Whereupon, Giachetti Exhibit 5  
2 was marked for identification.)

3 MR. ZHANG: Exhibit 6.

4 (Whereupon, Giachetti Exhibit 6  
5 was marked for identification.)

6 MR. ZHANG: Counsel, did I provide you the  
7 '550?

8 MR. HERSHKOWITZ: No.

9 Do you want to go off the record briefly?

10 MR. ZHANG: Yes. Please. 09:08:22

11 (Brief interruption.)

12 MR. ZHANG: Back on the record.

13 MR. HERSHKOWITZ: And I'll just note for the  
14 record, Exhibit 5, which is the declaration of  
15 Robert Giachetti for the '407, and Exhibit 6, which  
16 is the declaration of Robert Giachetti for the '550  
17 declaration, don't seem to include the other  
18 exhibits of the petition; is that right?

19 MR. ZHANG: Correct.

20 BY MR. ZHANG: 09:09:58

21 Q. So, Mr. Giachetti, do you recognize these  
22 two documents?

23 A. Just briefly flipping through them, it  
24 appears to be my declaration for the '407 and the  
25 declaration for the '550 without the exhibits.

Page 9

1 Q. Okay. Let's talk about Exhibit 5 first,  
2 which is your declaration for the '407 patent.

3 Does it represent your complete opinions  
4 regarding the IPR petition?

5 A. Yes, as I sit here, it does.

6 Q. So please flip to Section III,  
7 Roman numeral III.

8 You list the facts and documents you  
9 considered in forming your opinions. Is that a  
10 complete list? 09:10:59

11 A. Yes, that is.

12 Q. Okay. In forming your opinions, did you  
13 review any documents from the Massachusetts  
14 litigation other than the infringement contentions?

15 A. When I formed the opinions for this  
16 declaration, I don't believe that I did that.

17 Q. Okay.

18 A. Not that I recall at least.

19 Q. And when you formed your opinions, did you  
20 review any documents from the ITC litigation? 09:11:38

21 A. I don't recall doing that.

22 Q. And flip to the '550 report, Exhibit 6.

23 Does it represent your complete opinions  
24 regarding the IPR petition?

25 A. Yes, it does.

1 Q. And, again, flip to section Roman  
2 numeral III.

3 A. Okay.

4 Q. Is that a complete list of the facts and  
5 documents you reviewed and considered in forming  
6 your opinions?

7 A. Yes, it is.

8 Q. And, again, to confirm, did you review any  
9 other documents from the Massachusetts litigation  
10 other than the infringement contentions? 09:12:42

11 A. I only recall reviewing what's listed  
12 here.

13 Q. Okay. Again, to confirm, did you review  
14 any documents from the ITC litigation?

15 A. Not that I recall as I sit here.

16 Q. What did you do to prepare for your  
17 deposition today?

18 A. I reviewed my declarations. I reviewed  
19 some of the prior art, and I had some meetings with  
20 counsel. 09:13:13

21 Q. Okay. Whom did you speak to?

22 MR. HERSHKOWITZ: I'll just object to the  
23 extent it calls for privileged communications and  
24 caution the witness not to reveal any privileged  
25 communications with the attorneys.

Page 11

1 THE WITNESS: So I spoke with Adam, Matt, Jake,  
2 and Jay, that I recall.

3 BY MR. ZHANG:

4 Q. And when were the meetings?

5 MR. HERSHKOWITZ: Same caution.

6 THE WITNESS: We had a meeting yesterday, and  
7 I believe we probably spoke in advance of that, but  
8 I don't recall for sure.

9 BY MR. ZHANG:

10 Q. How long was the meeting yesterday? 09:13:51

11 A. Give or take, probably 9:00 to 4:30,  
12 around that time.

13 Q. Did you review any documents during that  
14 meeting?

15 A. Yes, the -- what I just mentioned a few  
16 seconds ago.

17 Q. Did you review any documents prior to your  
18 meetings with counsel?

19 A. Yes.

20 Q. What are they? 09:14:22

21 A. I reviewed my declarations to some extent,  
22 and I reviewed some of the prior art.

23 Q. Did you take notes during your meeting  
24 yesterday?

25 A. No.

Page 12

1 Q. Did you take any notes prior to your  
2 meeting with counsel yesterday?

3 A. No.

4 Q. Who drafted the first draft of the report  
5 for the '407 patent?

6 A. It was a collaborative effort between  
7 myself and Kirkland & Ellis.

8 Q. Who drafted the first draft for the '550  
9 report?

10 A. That's the same answer. It was a 09:15:09  
11 collaborative effort.

12 Q. And when was the first draft of the '407?

13 A. I have no idea. I think I signed it  
14 sometime in the spring of this year. Yeah, so  
15 I finalized it on March 4. So it was probably a  
16 month in advance of that or a week or two,  
17 something along those lines.

18 Q. So in connection with the '407 report, how  
19 many rounds of back-and-forth between you and your  
20 counsel were there before you finally signed off? 09:15:49

21 A. I have no idea.

22 Q. Again, what about the '550 report?

23 A. That's basically the same answer. I don't  
24 recall back that long.

25 Q. Who conducted the analysis that you relied

1 on in the report for the '407?

2 A. So that analysis was a collaborative  
3 effort with myself and Kirkland & Ellis.

4 Q. Who selected the exhibits you had in the  
5 '407 report?

6 A. That was also a collaborative effort for  
7 which art to put in there.

8 Q. What about '550? Who conducted the  
9 analysis and who selected the exhibits?

10 A. It's all the same answer. It was a 09:16:57  
11 collaborative effort between myself and  
12 Kirkland & Ellis.

13 Q. How much time did you bill drafting the  
14 '407 report?

15 A. Oh, I could not remember. As I sit here  
16 right now, I have no idea.

17 Q. Is that -- do you have the same answer for  
18 '550?

19 A. Correct. It was, you know, almost a year  
20 ago. I don't remember. 09:17:26

21 Q. And do you remember how much time you  
22 spent for reviewing documents related to the  
23 '407 IPR?

24 A. I spent a long time. I could not tell you  
25 in terms of hours how much time I spent.

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1 Q. Do you have the same answer for the '550  
2 report?

3 A. That's correct.

4 Q. How many IPR declarations have you  
5 submitted in total related to the SharkNinja versus  
6 Dyson cases?

7 A. I could not give you an exact number as  
8 I sit here. It's -- there were several for sure.

9 Q. And approximately how much time did you  
10 spend in total for each IPR declaration? 09:18:15

11 A. Each one has been on the order of weeks,  
12 I would say.

13 Q. And I understand that you have also  
14 submitted reports in relation to the Massachusetts  
15 case; is that correct?

16 A. I believe so.

17 Q. How much time have you spent on  
18 declarations and reports submitted in the  
19 Massachusetts case?

20 A. Also, that's on the order of weeks. 09:18:50

21 Q. I understand you have also submitted  
22 declarations and reports in relation to the ITC  
23 case; is that correct?

24 A. I believe that is true.

25 Q. And how much time have you spent on

1 declarations and reports submitted in the ITC case?

2 A. Also that's been weeks.

3 Q. Other than the SharkNinja cases, are you  
4 working on any other projects for Fusion?

5 MR. HERSHKOWITZ: I'll just caution the  
6 witness, to the extent you have any confidentiality  
7 obligations to third parties, to keep those in mind  
8 in your response.

9 THE WITNESS: Yes, I have several other  
10 projects. 09:19:45

11 BY MR. ZHANG:

12 Q. As of today, do you have any -- are you  
13 aware of any errors or corrections to make to your  
14 '407 or '550 declarations which are  
15 Exhibits 6 and 5?

16 A. I don't think that I have any corrections  
17 to add that I'm aware of right now -- maybe  
18 clarifications but not corrections.

19 Q. Have you worked with Dyson before the  
20 SharkNinja cases? 09:20:19

21 A. No.

22 Q. Have you ever worked for Dyson?

23 A. No.

24 Q. Have you ever worked with SharkNinja  
25 before?

Page 16

1 A. Yes.

2 Q. When was that?

3 A. 2012 maybe, something along those lines.

4 Q. And what case was that?

5 A. I do not recall. It was -- it was  
6 developing testing for them, and it never got off  
7 the ground.

8 Q. Do you know what products that project was  
9 related to?

10 A. It was an upright vacuum. That's all 09:21:06  
11 I remember right now.

12 Q. Other than the cases for Dyson against  
13 SharkNinja, have you provided any testimony or  
14 expert opinion in any other legal proceedings?

15 A. Can you say that again?

16 Q. Other than the SharkNinja versus Dyson  
17 cases, have you provided any testimony or expert  
18 opinion in any other legal proceedings?

19 A. Yes, I have.

20 Q. How many proceedings are there? 09:21:47

21 A. That number is in the hundreds if we  
22 consider every report I've ever written for a  
23 litigation matter, yeah.

24 Q. So how long have you been providing  
25 testimony or expert opinion in legal proceedings?

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1           A.   Probably since 2008.  Of course, I wasn't  
2           the person at the top of the totem pole at that  
3           point.  So I was in the background, and then slowly  
4           I moved up.  So I probably didn't actually provide,  
5           you know, any opinions in a legal setting probably  
6           until 2010 or 2011 on my own.

7           Q.   Have you been deposed before?

8           A.   Yes, I have.

9           Q.   How many times?

10          A.   Probably somewhere in the neighborhood of       09:22:49  
11          20 to 30 times, give or take.

12          Q.   Are you a lawyer?

13          A.   I am not a lawyer.

14          Q.   And do you understand that in your reports  
15          your description of the law and your understanding  
16          of the law, as well as your understanding of the  
17          patent office practices, are not admissible?

18          MR. HERSHKOWITZ:  Objection to the extent it  
19          calls for a legal conclusion.

20          THE WITNESS:  The descriptions of the law in my       09:23:16  
21          declarations are just a description of the  
22          understanding that I've been provided by counsel.  
23          So that is basically the limit of my legal  
24          knowledge.

25          MR. ZHANG:  Exhibit 7.

1 (Whereupon, Giachetti Exhibit 7  
2 was marked for identification.)

3 BY MR. ZHANG:

4 Q. Do you recognize this document?

5 A. Yes, I do.

6 Q. What is this document?

7 A. This appears to be my CV from early last  
8 year.

9 Q. Did you draft this document?

10 A. Yes, I did. 09:24:04

11 Q. Were you the only drafter of this  
12 document?

13 A. Yes.

14 Q. So this document accurately recounts your  
15 educational and professional background; is that  
16 correct?

17 A. That's right. From -- it's been updated  
18 slightly since then, but this is an accurate  
19 depiction.

20 Q. So I see, on top of your professional 09:24:33  
21 experience, there's a listing of Exponent,  
22 Incorporated. Do you see that?

23 A. Yes.

24 Q. What does Exponent Incorporated do?

25 A. Exponent is a scientific and engineering

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1 consulting firm. They are a global entity that  
2 provides all sorts of scientific and engineering  
3 work. Yeah. It's a --

4 Q. You mentioned that you're currently with  
5 Fusion. Did you not list Fusion over here?

6 A. Well, Fusion's at the letterhead.

7 Q. Is Exponent the same as Fusion?

8 A. No, they are completely different  
9 companies.

10 Q. Okay. Is Fusion related to Exponent? 09:25:40

11 A. Not in the slightest.

12 Q. Okay. But do they provide similar  
13 services?

14 A. Yes, I think from an engineering  
15 perspective, they do.

16 Q. What is your current title at Fusion?

17 A. My current title is senior vice president.

18 Q. What are your roles at Fusion?

19 A. I wear many hats at Fusion Engineering.

20 I perform analysis. I work cases. I attend 09:26:26  
21 conferences and interface with clients as part of  
22 my role there and mentor younger staff.

23 Q. Did you join Fusion right after Exponent?

24 A. I did.

25 Q. So that means you left Exponent and joined

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1 Fusion in 2020?

2 A. That's right.

3 Q. Did your roles change during your time at  
4 Fusion?

5 A. The roles are pretty much the same.  
6 I would say I've just kind of expanded my reach.

7 Q. Expanded in what ways?

8 A. So maybe I did some mentoring in a small  
9 way, but now I take more of an effort for that or,  
10 you know, when I joined, I wasn't familiar with 09:27:33  
11 everyone or all the things that Fusion could do,  
12 and as I gained familiarity, then I became more  
13 comfortable, you know, expanding, like, the  
14 amplitude of those tasks as opposed to just kind of  
15 being shy about it.

16 Q. And what were your roles at Exponent?

17 A. My role at Exponent was to -- you know,  
18 I managed some people. I was responsible for  
19 bringing in work and distributing that work and  
20 keeping up with the technical community and all the 09:28:29  
21 other stuff was all very similar to what I do at  
22 Fusion. It was just in more of a corporate  
23 setting, I should say.

24 Q. You said that you were responsible for  
25 bringing in work for Exponent?

1 A. Correct.

2 Q. What kind work?

3 A. Consulting work. So that could be, like,  
4 an industrial project or a litigation-type project.

5 Q. How many projects have you -- how many  
6 projects did you bring in for Exponent?

7 A. I did not keep track of that, but, you  
8 know, I had been bringing in projects there  
9 probably since 2012 on my own, and so, you know,  
10 over an eight-year span, there were probably a 09:29:26  
11 number, you know, a bunch of them.

12 Q. Approximately how many?

13 A. I could not even approximate it.

14 Q. Is it in the hundreds or fewer than 100?

15 A. I mean, this is totally a shot in the --  
16 it's more of a guess than anything. Probably on  
17 the order of 100, a couple hundred, something like  
18 that.

19 Q. Are you also bringing in work for Fusion?

20 A. Yes. 09:30:00

21 Q. Also both industrial and litigation  
22 projects?

23 A. That's correct.

24 Q. So for your time at Fusion, what's the  
25 approximate proportion of individual projects

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1       versus litigation projects?

2           A.    It changes from year to year.  So in 2023  
3       I worked more industrial than litigation, and this  
4       year, it is more litigation than industrial work.

5           Q.    For the litigation work you are currently  
6       conducting for Dyson, did you bring in the project?

7           A.    Dyson actually found me and reached out to  
8       me.  So it wasn't -- it wasn't something that  
9       I actively found.

10          Q.    How did Dyson find you? 09:30:58

11          A.    I think they found me on LinkedIn, but for  
12       more details, you'd have to ask them.

13          Q.    So you were first contacted by Dyson via  
14       LinkedIn; is that correct?

15          A.    I think I might have received an email,  
16       and I'm not sure if they sent me that from a --  
17       through LinkedIn or if they then looked me up in  
18       other ways and then sent me a message or if they  
19       called me.  I don't recall as I sit here.

20          Q.    On your CV under Exponent, your 09:31:41  
21       description mentions that you conducted  
22       intellectual property analysis, patent  
23       infringement, and validity.

24                Do you see that?

25          A.    Yes.

Page 23

1 Q. What kind of patents did you analyze?

2 A. So I assisted with several patents while  
3 I was there, all regarding machines and the  
4 components within those machines, like mechanisms  
5 where actions -- well, I should just leave it at  
6 mechanisms. So I was support on some of those.

7 And then I did a patent for an air  
8 mattress, and then I did work on a patent for a  
9 manual treadmill.

10 Q. For the machines you just mentioned, what 09:32:56  
11 kind of machines are they?

12 A. So there was an industrial food making  
13 machine, and I think that that whole proceeding was  
14 put under seal afterwards. So I don't think I can  
15 say anything else about it.

16 There was also I supported for a -- like a  
17 joystick controller for some consumer-grade  
18 equipment that was mechanical. There were no  
19 electronics in it.

20 Q. So all of the patent analysis you 09:33:45  
21 conducted, were they all related to the litigation  
22 projects that you mentioned?

23 MR. HERSHKOWITZ: Objection. Vague.

24 THE WITNESS: Yeah. Can you state that  
25 question again?

1 BY MR. ZHANG:

2 Q. You mentioned that at Exponent you had  
3 both industrial projects and litigation projects;  
4 correct?

5 A. Yes.

6 MR. HERSHKOWITZ: Objection to the extent it  
7 mischaracterizes testimony.

8 BY MR. ZHANG:

9 Q. Were these patent analysis you conducted  
10 at Exponent related to those litigation projects? 09:34:20

11 A. I think I would lump those into what  
12 I would consider litigation.

13 Q. And then in your description, you  
14 mentioned that you had occupational injury  
15 analysis; human vibration monitoring; slip, trip,  
16 and falls.

17 Do you see that?

18 A. Where -- I know that's in here somewhere.  
19 I just don't --

20 Q. It's right in your description under 09:35:21  
21 Exponent.

22 A. Oh.

23 MR. HERSHKOWITZ: Object to the extent it  
24 mischaracterizes the document.

25 THE WITNESS: I see that under the highlights

Page 25

1 of types of work that I did at Exponent, yes.

2 BY MR. ZHANG:

3 Q. So does that mean your projects at  
4 Exponent, some of them also related to human injury  
5 analysis?

6 A. Yes, some of my projects did involve that.

7 I mean, my background is mechanical  
8 engineering and biomechanics. So I try to marry  
9 those two in the types of analyses that I perform.

10 Q. You had a background in biomechanics. 09:36:14  
11 From what education did you have that background?

12 A. Well, I began doing some generalized  
13 research for my senior design in undergraduate, and  
14 then as my master's work was primarily -- the  
15 research was primarily biomechanics for total knee  
16 replacements and contact stresses in those  
17 components that are the knee replacement.

18 And then as a Ph.D. researcher,  
19 I researched muscular coordination and how people  
20 exert forces with their limbs. 09:37:00

21 Q. Other than what you just described, did  
22 you have a background in medicine?

23 A. There is a little bit of overlap, but I am  
24 not a medical doctor, and I have not taken specific  
25 medical courses. Now, having said that, I have

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1       seen cadavers and performed experiments using  
2       cadavers.

3           Q.    Have you ever conducted operations on live  
4       patients?

5           A.    No.

6           Q.    And you describe these studies as, quote,  
7       "biomechanical"; is that correct?

8           A.    Yes.

9           Q.    You spent 12 years at Exponent.

10          Why did you leave in 2020? 09:38:00

11          A.    I just felt like it was time for a change  
12       for me. 12 years is a long time.

13          Q.    And after leaving Exponent, you started  
14       immediately at Fusion; is that correct?

15          A.    Give or take a couple of days.

16          Q.    Did your roles change during those  
17       12 years at Exponent?

18          A.    I would say that they did.

19          Q.    Okay. How did the roles change?

20          A.    When I started, I was totally at the 09:38:40  
21       bottom of the food chain. I relied on everyone  
22       internally to -- for the work that I did. I had to  
23       get that all from inside the walls of Exponent, and  
24       I only assisted other people with their work.

25                Slowly, I started to break out of that and

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1 found my own clients, and then slowly, as I grew,  
2 then I had people who supported me in my tasks, and  
3 then I tried to assist them get on the same path.

4 And, you know, during that whole time, my  
5 reach within the company expanded. I tried to take  
6 more of a role in steering things that I wanted to  
7 do, which, you know, when you start, you have no  
8 pull whatsoever.

9 Q. Senior managing engineer was the title  
10 when you left; is that correct? 09:39:57

11 A. That's correct.

12 Q. What other titles did you have during your  
13 12 years at Exponent?

14 A. So I started as an engineer, and then  
15 within a few weeks, it changed to associate because  
16 I didn't have an engineering license, and then when  
17 I got my engineering license, then it went back to  
18 engineer, and I don't recall if I became a senior  
19 associate or if I went to senior engineer after  
20 that. I don't recall. 09:40:34

21 But, anyway, I had associate engineer,  
22 senior engineer, and then senior managing engineer.

23 Q. What happened between 2001 and 2008?

24 A. 2001 and 2008, you mean, in terms of work  
25 or...

1 Q. Both work and education.

2 A. So in those times I was working basically  
3 as a teacher/teaching assistant at University of  
4 Wisconsin, and then also during that time is when  
5 I was pursuing a Ph.D., and that's -- those things  
6 are listed on pages later in the CV.

7 Q. And prior to your Ph.D. you listed that  
8 you were an intern at BioTechPlex. Do you see  
9 that?

10 A. Yes. 09:41:41

11 Q. What were your responsibilities as an  
12 intern at BioTechPlex?

13 A. I don't remember very specifically. That  
14 was a summer internship. I was working on some --  
15 I don't know if it was analysis or not, but I was  
16 assisting with the review of some assay trays for  
17 one of BioTechPlex's clients. So that involved  
18 meeting with the clients, going to their site,  
19 getting their documentation, and going through some  
20 things. I think I did some crude finite element 09:42:23  
21 modeling for them, and that's about all I remember.

22 Q. So this intern experience was a summer  
23 internship; is that correct?

24 A. That's correct.

25 Q. When did you graduate from your master's

1 degree?

2 A. I think that was in 2000, if I remember.

3 Yes, 2000.

4 Q. What did you do between the graduation of  
5 master's to the summer of 2001?

6 A. I was -- I was taking courses at  
7 University of Wisconsin for Ph.D. work.

8 Q. So you started your Ph.D. studies right  
9 after you graduated from master's; is that correct?

10 A. Yes. I don't remember if there were a few 09:43:24  
11 months in between or not, but basically, I went  
12 from one right to the other.

13 Q. Why did you decide to pursue a Ph.D.  
14 degree?

15 A. I was interested in -- it was something  
16 that I always wanted from when I was little. So  
17 that was certainly one of the reasons. I enjoyed  
18 the academic environment, and it was something  
19 I was really interested at that time.

20 Q. Was the internship at BioTechPlex 09:43:58  
21 something that you found through the University of  
22 Wisconsin?

23 A. Actually, it came through University of  
24 Illinois.

25 Q. The institution where you had your

1 master's degree?

2 A. Correct.

3 Q. And you graduated with your Ph.D. degree  
4 in 2008; is that correct?

5 A. That's right.

6 Q. Right after that you went into Exponent?

7 A. Yes, I did.

8 Q. Why are you smiling?

9 A. Oh, because I defended my Ph.D. on  
10 Wednesday. I made the revisions on Thursday. 09:44:59  
11 I submitted it for finalization on a Friday, and  
12 I moved to Chicago on Saturday, and I started at  
13 Exponent on Monday, and it was my birthday.

14 Q. Quite a memory.

15 A. I cannot forget that.

16 Q. Did you find the Exponent position through  
17 University of Wisconsin?

18 A. Yeah, they had reached out. One of their  
19 recruiters reached out to my advisor asking if he  
20 had any students that were -- had a background in 09:45:36  
21 biomechanics and were near graduation, and he gave  
22 them my name.

23 Q. Who was your advisor?

24 A. Kreg Gruben.

25 Q. Did you only have one advisor during the

1 entire time of your Ph.D. studies?

2 A. No.

3 Q. Who were the other advisors?

4 A. My initial advisor, when I got to  
5 University of Wisconsin, was Terry Richard.

6 Q. And what was your thesis for Ph.D.?

7 A. The thesis for the Ph.D. was -- I don't  
8 remember the title of it off the top of my head --  
9 but, basically, it was trying to get at the control  
10 system -- a high-level control system for exerting 09:46:37  
11 the coordination in the legs for pushing efforts so  
12 that people could -- so that people stay upright  
13 when they're standing.

14 Q. Is that something you would call  
15 biomechanic study?

16 A. Yes.

17 Q. I see here that you mention you had a  
18 minor in mechanics and aeronautics during your  
19 Ph.D.?

20 A. That's right. 09:47:13

21 Q. What aspects of mechanics and aeronautics  
22 did you have?

23 A. So I don't know if they still have that  
24 college, but in the college of engineering, there  
25 was a specific track called mechanics and

1       aeronautics. Just like electrical engineering and  
2       mechanical engineering, there was one that was  
3       mechanics and aeronautics. So that's essentially  
4       equivalent to a master's in that field.

5       Q. Did your focus or thesis change during  
6       your time pursuing a Ph.D.?

7       A. I would say it developed over the time  
8       I was there.

9       Q. How did it develop?

10       A. Well, actually, when I got there, my first       09:48:07  
11       advisor, Dr. Richard, he didn't want me to do any  
12       research at all. He just wanted me to take  
13       classes. So I would say, you know, I came out of a  
14       research lab at University of Illinois that was  
15       very focused on research and publishing.

16               And then I hit kind of like a completely  
17       opposite type of lab environment.

18               So -- and with him, he was kind of  
19       interested in -- you know, we thought about doing  
20       some hand-on vibration stuff for people holding       09:48:48  
21       tools. So I started slightly doing some of that.  
22       I did some analysis for, like, trying to figure out  
23       how much torque a motor was exerting based on the  
24       sound of the motor. So I did a little bit of that,  
25       and then -- and that was like wavelet analysis.

1           And then this is like around maybe 2003 or  
2   2002 -- the memory is a little vague -- but I think  
3   at that time I wanted to do something that was more  
4   biomechanics related than just like maybe hand-on  
5   vibration, and so then I reached out to Dr. Gruben  
6   and basically joined his lab where the focus was  
7   more biomechanics, like how does the body function  
8   and control itself, like muscular coordination,  
9   things like that.

10        Q.   How long did your master's degree take?           09:49:52

11        A.   I would have to just guess right now.  
12   I think it was only two years, but the first  
13   semesters I was doing courses on the weekend. So  
14   I still had a full-time job when I started the  
15   master's.

16        Q.   When did you start taking classes for the  
17   master's?

18        A.   1998. That's a long time ago. I don't  
19   remember completely, but that sounds about right to  
20   me.                                                           09:50:31

21        Q.   For your master's degree, did you just  
22   take courses or you also had a thesis for your  
23   master's?

24        A.   I did research and wrote a thesis for my  
25   master's.

1 Q. What was the thesis for your master's  
2 degree?

3 A. Again, I don't remember the title, but it  
4 basically was doing 3D computer modeling of total  
5 knee replacements to figure out how alignment could  
6 cause an increase in stress in those components.

7 Q. Is that something you would call  
8 biomechanic study?

9 A. Yes. It had lot of biomechanical  
10 engineering into it too because of the stress 09:51:23  
11 stuff.

12 Q. I see here, on the first page, from  
13 1998 to 1999, you were a project engineer at  
14 Brainer USA; is that correct?

15 A. That's right.

16 Q. Is this a full-time job you had while  
17 taking night classes for your master's degree?

18 A. That's where I was working when I started  
19 at Illinois.

20 Q. What were your roles as a project engineer 09:51:55  
21 at Brainer?

22 A. So I would get specifications for a  
23 machine, and then it would be my job to make all  
24 the drawings and layouts for construction for that  
25 machine.

1           So they made steel coil processing lines,  
2       and in general, I did the -- I was responsible for  
3       the recoiler part. So after the sheet metal had  
4       been unrolled and processed, then it has to get  
5       rolled back up, and in general, that's the part of  
6       machine I did. So if any sort of engineering  
7       calculation had to go into sizing the machine or  
8       bearings or whatever, I would be responsible for  
9       doing that, and then also creating like the bill of  
10      materials and getting all the shop drawings           09:52:52  
11      prepared so that it could be fabricated.

12           Q. And then further down, in 1998, you listed  
13      that you were an estimator for Alloy Sling Chain  
14      Industries, Limited; is that correct?

15           A. That's right.

16           Q. Was this the first job you had after  
17      college?

18           A. It was.

19           Q. What were your roles as an estimator?

20           A. I did a little bit of everything. So if           09:53:30  
21      it was -- if it was a part that was like an  
22      off-the-shelf part, then I would quote the price,  
23      and Alloy Sling Chain was a shop where local places  
24      could just fax in, like, something that they needed  
25      to be fabricated.

So, like, we would just get these faxes that were, like, super crude, and it would be my job to -- they would be, like, say they needed some sort of weird-shaped hook to lift 500 pounds or something, just as like a hypothetical example. So it would be my job to take basically their napkin sketch and to come up with costing for that as well as how to make it so that it would withstand whatever loading they said they needed to withstand. So that was part of the job.

And then as I was there, then they had me basically go into, like, become, like, full-time estimator for wire rope and chain repairs in their shop.

So, basically, a guy would go out into the field, bring the chain back into the shop. The shop would be like this, this, and this needs to be fixed on it, and then I would take that information, and then I would cost how much it would be to repair that chain or I would offer them a cost for a new chain, and that was the role I had before I left.

Q. How long did you stay at Alloy Sling Chain?

A. Probably less than six months, maybe six

1 months, around there, something like that.

2 Q. And how long did you work for Brainer USA?

3 A. That was probably like a year.

4 Q. Have you ever designed a vacuum cleaner?

5 A. Yes.

6 Q. When was that?

7 A. 1993-1994.

8 Q. That was during your college time?

9 A. That's right.

10 Q. How did you come to design a vacuum 09:55:49  
11 cleaner during your college?

12 A. So at Marquette there's a year-long  
13 freshman design project, and I don't remember the  
14 details of how we ended up on a vacuum cleaner,  
15 but -- I don't remember what the challenge  
16 statement was to the group, but our freshman design  
17 project, basically, the output of it at the end of  
18 the year was a functioning autonomous vacuum  
19 cleaner that ran on a 286 motor board in 1993  
20 and '94. 09:56:27

21 Q. Other than the freshman project, have you  
22 ever designed a consumer product?

23 A. I have provided a lot of consulting for  
24 other people's designs on consumer products, but  
25 I don't have any ownership of those designs.

1 MR. HERSHKOWITZ: Just object to the question  
2 on -- to the extent it mischaracterizes prior  
3 testimony.

4 BY MR. ZHANG:

5 Q. Have you ever had a project related to  
6 fluid mechanics?

7 A. Yes.

8 Q. What are they?

9 A. I can probably give you a few examples.  
10 There are too many for me to remember off the top 09:57:09  
11 of my head.

12 I've done fluid flow through nozzles of  
13 several different types: garden hoses, garden hose  
14 nozzles like simple ball valves, and a little more  
15 complicated valves where the pattern of the spray  
16 changes as you twist the end.

17 I've also done projects for determining  
18 the failure of collets, which is basically, like,  
19 I don't know if you ever had a finger trap where  
20 you put your fingers in, and you try to pull your 09:57:53  
21 fingers out, it constricts. So there is a  
22 connector called a collet that is used to connect  
23 different pipes, and it's, like, a quick connect,  
24 and the company was using some for a long time.

25 They changed manufacturers that had about

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1 the same specs and should have worked, and it  
2 didn't. They were popping off and flooding all  
3 sorts of different types of buildings. So  
4 I basically designed a whole set of test suites to  
5 get to the bottom of that, which involved me making  
6 manifolds and having pumps and sensors and  
7 automated valve actions to test that sort of thing.

8 I also did something similar for garden  
9 hoses, which started off as a pneumatically driven  
10 system to pressurize the garden hose and then 09:58:44  
11 relieve it and then eventually that turned into  
12 totally just a water pump-based system.

13 I've done -- I've worked on leaf blowers.

14 I'm trying to think of what else. I've  
15 probably touched a number of other ones that I just  
16 don't remember as I sit here right now. I did some  
17 pneumatics in grad school. I've done a number of  
18 cases involving hydraulics, hydraulic cylinders,  
19 mapping the fluid paths through them.

20 As I sit here, those are the ones that 09:59:34  
21 come off the top of my head.

22 Q. Thank you.

23 And other than the projects in college  
24 that you mentioned, have you ever designed a vacuum  
25 cleaner?

1 A. No, I don't believe I have.

2 Q. Other than the college experience you  
3 mentioned, have you ever designed components of a  
4 vacuum cleaner?

5 A. Well, I mean, the components of a vacuum  
6 cleaner are pretty straightforward, common,  
7 everyday mechanical objects. So I think from that  
8 perspective, I probably have in terms of, like,  
9 making an air box or a plenum, should I say. You  
10 know, I've certainly gotten a motor and a fan and 10:00:26  
11 those sorts of things and put them together to push  
12 air around. So from that perspective, yes.

13 Q. So in your reports, Exhibits 5 and 6, in  
14 sections Roman numeral V of both, you had a  
15 definition of a person of skill in the art.

16 A. I should say for that question earlier  
17 what you asked me what kind of projects, I think  
18 I've listed other projects within my declarations  
19 that I should also incorporate into that answer as  
20 well. 10:01:17

21 But, yes, I see Section V right here.

22 Q. In your two reports they are slightly  
23 worded differently, but I understand that they are  
24 essentially the same definition which is bachelor's  
25 degree in mechanical engineering plus two to three

1 years professional experience in the relevant  
2 field.

3 Can you please take a look at both  
4 sections?

5 MR. HERSHKOWITZ: Objection to the extent it  
6 mischaracterizes the documents.

7 BY MR. ZHANG:

8 Q. Do you think your definitions in both  
9 reports are basically the same?

10 MR. HERSHKOWITZ: Same objection. 10:02:06

11 THE WITNESS: I'm looking for where the  
12 differences are. I don't -- as I sit here, I'm not  
13 spotting the difference, but I would say that, you  
14 know, the words speak for themselves, and I have  
15 not -- I have not changed from this opinion of a  
16 POSA.

17 BY MR. ZHANG:

18 Q. In your definition, you describe the  
19 professional experience as two to three years of  
20 experience in machine design including machines 10:03:04  
21 that include fluid dynamics or fluid path such as  
22 vacuum cleaners.

23 Do you see?

24 A. I see that.

25 Q. What is machine design?

1           A.   Machine design incorporates building  
2   machines.   So a machine -- a vacuum cleaner counts  
3   as a machine.   It can involve simply putting them  
4   together from known elements or it could be  
5   designing them so that they are reliable, or it  
6   could be, you know, performing other calculations  
7   for the stresses in them, but it could be all of  
8   those things.   It could be just one of them.  
9   I would say all of those things constitute machine  
10  design. 10:03:55

11           Q.   And in your definition here, you said "two  
12  to three years of experience in machine design,  
13  including machines that include fluid dynamics or  
14  fluid path such as vacuum cleaners."

15                    "Including" -- by "including," do you mean  
16  that in order for someone to qualify as a person of  
17  skill in the art, he or she has to have machine  
18  design experience that includes fluid dynamics or  
19  fluid path or the clause you have after "including"  
20  is just an example of what machine design could 10:04:36  
21  include?

22           A.   I think for the POSA, the POSA has to have  
23  knowledge of how air goes from one place to the  
24  other.   So that's where the fluid dynamics, fluid  
25  paths, come into play.

1           Also, after that, I do state that the POSA  
2       could gain the needed experience from other  
3       educational backgrounds or other sort of  
4       experiences.

5           So I think as, like, an example would be,  
6       you know, mechanical engineering gives you the  
7       broad base. It includes courses in fluid dynamics.  
8       Certainly, when I was an undergraduate, I had at  
9       least two courses in fluid dynamics before  
10      I graduated. So you get the conceptual                      10:05:28  
11      understanding of that from your undergraduate, and  
12      then the experience with machine design is how you  
13      put things together, and then the experience with  
14      fluid dynamics or fluid paths is also -- makes  
15      putting things together more specific with the  
16      vacuum art.

17           Q. To confirm, do you think in order for  
18      someone to qualify as a POSA, he or she has to have  
19      either two or three years of experience in  
20      designing machines that include fluid dynamics or                      10:06:09  
21      fluid path or education in the same studies; is  
22      that correct?

23           MR. HERSHKOWITZ: Objection. Misstates prior  
24      testimony and vague.

25           THE WITNESS: I think that if they didn't have

1 additional experiences or training or education,  
2 then that would probably be accurate, but they can  
3 substitute equivalent experiences to gain the  
4 knowledge needed to be a POSA.

5 BY MR. ZHANG:

6 Q. And then the next paragraph you state that  
7 you have been a POSA since at least 2003; is that  
8 correct?

9 A. That's correct.

10 Q. What work experience or education prior to 10:06:50  
11 2003 can you point to to demonstrate your  
12 experience in machine design including machines  
13 that include fluid dynamics or fluid path such as  
14 vacuum cleaners?

15 A. Sure. So at that point in time, I had  
16 already spent a year building a vacuum cleaner  
17 from -- you know, we started building it with --  
18 from scratch basically, and then we ended up  
19 getting parts. That project was sponsored by  
20 Hoover, as a matter of fact, and we reached out to 10:07:30  
21 them to gain that sponsorship. So we ended up  
22 using all sort of different existing vacuum cleaner  
23 parts and developing the air pathways and how to  
24 power it and all sorts of things which, you know,  
25 there wasn't a lot of good battery technology back

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1       then, and you couldn't just get like a Raspberry Pi  
2       and power it and control it.

3               So we spent a lot of time with that.

4               Also, I had had -- I had gotten a master's  
5       and that coursework included compressible gas  
6       dynamics. So I had even more fluid dynamic  
7       background than just an undergraduate at that point  
8       in time, and I had also worked in industry as a  
9       machine designer for over a year at that point, and  
10      I had worked with hydraulics. Those machines at       10:08:23  
11      Brainer USA were -- had hydraulic components in  
12      them, which I spec'd.

13              And then also at University of Wisconsin,  
14      I had done some pneumatic things.

15              So all of those things together, by 2003,  
16      I had the experience and education needed.

17              Is this a good time to take, like, five  
18      minutes?

19              Q.     Sure.

20              A.     Thank you.                               10:09:01

21                               (A break was taken from 10:09 AM  
22                               to 10:20 AM.)

23      BY MR. ZHANG:

24              Q.     Welcome back.

25              A.     Thank you.

1 Q. Have you spoken to your counsel regarding  
2 the substance of the deposition today?

3 A. No.

4 MR. ZHANG: Exhibit 8.

5 (Whereupon, Giachetti Exhibit 8  
6 was marked for identification.)

7 MR. ZHANG: Exhibit 9.

8 (Whereupon, Giachetti Exhibit 9  
9 was marked for identification.)

10 BY MR. ZHANG: 10:21:17

11 Q. Do you recognize the two exhibits?

12 A. Yes, I do.

13 Q. What are they?

14 A. So one is the Conrad '335, and the other  
15 is -- I don't remember the name of it off the top  
16 of my head here. It's the German patent.

17 Q. Can we call Exhibit 8 IPGV today?

18 A. Yes.

19 Q. And can we call Exhibit 9 Conrad '335  
20 today? 10:22:10

21 A. That works.

22 Q. Have you reviewed these two documents?

23 A. I have.

24 Q. Let's open up your report for '407 which  
25 is Exhibit 5. Let's flip to paragraph 149.

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1 A. You said 149?

2 Q. Yep. 149.

3 A. Okay.

4 Q. Are you there?

5 A. Yes, I'm there.

6 Q. Here, in this paragraph, you say, in the  
7 middle of the paragraph, quote, "For example,  
8 Conrad '335 teaches that its cyclonic separator  
9 teachings 'may be used---to create...a stick vacuum  
10 cleaner' or 'a hand vacuum.'" 10:23:56

11 Do you see that?

12 A. I see that.

13 Q. So it is your opinion that a POSA would  
14 include a cyclonic separator according to  
15 Conrad '335 into IPVG's embodiment; is that  
16 correct?

17 A. Yes, they are motivated to combine those  
18 two.

19 Q. Let's flip back one page to page 62 of  
20 your report. You see there's a colored figure? 10:24:46

21 A. Yes.

22 Q. And where would a POSA put the cyclone  
23 inlet onto the cyclonic separator according to  
24 Conrad '335?

25 A. So the cyclone inlet could be taken

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1 directly from Conrad or it could have -- he could  
2 have taken it -- it could be placed in other  
3 locations based on whatever their design goals  
4 happen to be. Take a quick look here. Yeah.  
5 Yeah. It could have been -- I mean, a POSA has the  
6 knowledge to place that depending on where they  
7 like it, but I believe, straight from Conrad, it  
8 could be on the side as well.

9 Q. And flip back two pages in your report,  
10 page maybe 58. You see in the middle of the page 10:27:01  
11 there's a color figure that you put here showing  
12 the embodiment of IPGV; is that correct?

13 A. Yes.

14 Q. Do you see there's a conduit leading into  
15 what you label as a screwed cover? The conduit  
16 being labeled -- I think that's number four in this  
17 figure. Do you see that?

18 A. Oh, yes. The attachment, yes.

19 Q. And when a POSA replace -- when a POSA  
20 would replace the dust bag with Conrad 335's 10:27:48  
21 cyclone separator, where would he or she put that  
22 attachment or conduit that's numbered number 4  
23 here?

24 A. So that attachment point could be  
25 implemented in the way Martelliere implements

1       theirs, which retains the central location, which  
2       would be not a challenge for the POSA, or it could  
3       be placed on the side or near the edge of the  
4       front.

5           Q.    And when a POSA would replace IPVG's dust  
6       bag with Conrad '335's cyclonic separator, where  
7       would he or she put the plate according to  
8       Conrad '335?

9           A.    Can you clarify which plate you're  
10      describing? 10:29:30

11          Q.    I refer to the abstract of Conrad '335  
12      that's on the first page of Exhibit 9. Do you see  
13      the abstract?

14          A.    Oh, up here. Yes.

15          Q.    Yes.

16                So in the abstract, it says "A surface  
17      cleaning apparatus comprises a dirt inlet, a  
18      handle, a cyclone separator having an outer wall, a  
19      fluid inlet downstream from the dirt air inlet and  
20      a fluid outlet, a plate having a cyclone chamber 10:30:17  
21      surface and positioned to substantially divide the  
22      cyclone separator into a cyclone chamber and a dirt  
23      collection chamber, the plate being removably  
24      mounted in the cyclone separator, a passage  
25      extending between the cyclone chamber and the dirt

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1 collection chamber and a fluid flow motor."

2 Do you see that?

3 A. I see that.

4 Q. So when a POSA replaces the dirt bag of  
5 IPGV with a cyclonic separator, according to  
6 Conrad '335, where would he or she put the plate  
7 according to Conrad's disclosure?

8 A. I think that they would follow Conrad's  
9 disclosure and use that plate to separate the  
10 cyclonic area from the dirt collection chamber. 10:31:29

11 Q. And where would a POSA put the passage  
12 extending between the cyclone chamber and the dirt  
13 collection chamber?

14 A. I think that would follow Conrad's  
15 teachings for that.

16 Q. Okay. On paragraph 157 of your report --  
17 do you see that?

18 A. I see -- I'm at 157.

19 Q. -- which is on page 69? Do you see that?

20 A. I see that. 10:32:36

21 Q. It is your opinion that IPVG's screwed  
22 cover and Conrad 335's openable door can be used  
23 interchangeably; is that correct?

24 A. That's correct.

25 Q. And then going two paragraphs down to

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1 paragraph 159.

2 A. Yes.

3 Q. Is there any disclosure about a  
4 front-located tangential air cyclone inlet in that,  
5 in either IPGV or Conrad '335?

6 A. Well, IPGV says that it could use the bag  
7 or like. So that tells you -- tells the POSA that  
8 you could use a cyclonic filter for IPGV. So from  
9 that perspective, yes, that's in IPGV.

10 Conrad '335 shows the entrance, the inlet 10:33:53  
11 to the cyclonic chamber on the side opposite the  
12 plate.

13 Q. Go down a few paragraphs to paragraph 163,  
14 which is on page 72. Do you see that?

15 A. I'm at paragraph 163.

16 Q. Is there any disclosure in IPGV or  
17 Conrad '335 about accessories that project through  
18 openable front door?

19 A. I don't know as I sit here. I could  
20 review them more specifically, if they mention that 10:35:04  
21 in particular, but it is certainly within the  
22 knowledge base and the technical skill of the POSA  
23 to run the accessory to the existing inlet of  
24 Conrad '335 without much effort.

25 Q. Flip quite a few pages down to page 112,

1       which is paragraph 259. Are you there?

2           A. I'm there.

3           Q. It is your opinion that a POSA would have  
4 understood that this limitation is met when  
5 Conrad '335's teachings are incorporated with  
6 IPGV's; is that correct?

7           A. Which limitation are you describing?

8           Q. Take a look at the previous page. This is  
9 about claim 11. Do you see that?

10          A. I see that. 10:36:38

11          Q. So this limitation requires, among other  
12 things, that the dirt collection chamber is  
13 removable. Do you see that?

14          A. I see that.

15          Q. How would a POSA incorporate the cyclone  
16 separator according to Conrad '335 into IPGV so  
17 that the cyclone separator is removable?

18          A. Well, it could have used screws as shown  
19 in IPGV, and the POSA has a number of other known  
20 mechanisms that they could also use. So screws, 10:37:41  
21 latches also exist in the known art as well. So  
22 those are well-known methodologies for that.

23          MR. ZHANG: Exhibit 10.

24

25

1 (Whereupon, Giachetti Exhibit 10  
2 was marked for identification.)

3 MR. ZHANG: Exhibit 11.

4 (Whereupon, Giachetti Exhibit 11  
5 was marked for identification.)

6 BY MR. ZHANG:

7 Q. Do you recognize these two documents?

8 A. I do.

9 Q. What are they?

10 A. This is -- Exhibit 11 is Neroni as what 10:39:08  
11 I've called in my declaration, and the other one is  
12 in my declaration as Peter, I believe.

13 Q. Have you reviewed these two documents?

14 A. I have.

15 Q. Does Peter disclose a cyclonic separator?

16 A. Yes.

17 Q. Where does it disclose a cyclonic  
18 separator?

19 A. Well, Figure 1 shows the inlet with an  
20 airflow path that comes in to the side, like 10:40:57  
21 Martelliere, and there's the conical shape of the  
22 dust collection chamber there, and the arrow shapes  
23 are basically the same as what you see in  
24 Martelliere. So Figure 1 shows a cyclonic  
25 filtering system.

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1 Q. Does Neroni disclose a cyclonic separator?

2 A. I don't know that I have an opinion about  
3 Neroni disclosing that.

4 Q. So Exhibit 6, your '550 report, on  
5 pages 150 and the next page, that's paragraph 323.  
6 Are you there?

7 A. Paragraph 323, yes, where I talk about the  
8 receptacle.

9 Q. There's a figure where you mark the  
10 central part -- the central portion of the tank 10:45:20  
11 above it. Do you see that?

12 A. Yes.

13 Q. Can you please clarify where the central  
14 portion of the tank is? because I only see two  
15 parallel lines, and it's hard to tell in that  
16 figure.

17 A. Yes. So I think I state a few other  
18 places in this declaration that the central portion  
19 could constitute a number of different things. In  
20 this one, the central portion could be geometric in 10:45:58  
21 terms of forward to back or it could be volumetric  
22 like in the middle or radially in the center. So  
23 these two lines are just generic, and they  
24 encompass the motor and the pathway between the  
25 motor and the power receptacle.

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1 Q. A few paragraphs back on pages 146 to 147,  
2 which is paragraph 318 -- are you there?

3 A. 318. I just got to that page.

4 Q. Paragraph 318.

5 A. Okay.

6 Q. It is your opinion that the electrical  
7 connection is provided on the front end of  
8 separation unit; is that correct?

9 A. That's right.

10 Q. In the same ground, can you flip to 10:47:14  
11 claim 3?

12 A. Can you give me a page number?

13 Q. One second. I think that's page 173 and  
14 flipping further to 174.

15 A. Okay. 174. Okay. I just got to that  
16 page.

17 Q. And then the next page in the middle, 175,  
18 you have a figure. Do you see that?

19 A. I see the figure.

20 Q. And in the paragraph preceding it, it is 10:48:46  
21 your opinion that "Peter teaches a projection of  
22 the longitudinally extending conduit axis  
23 intersects the hand grip portion."

24 Do you see that?

25 A. Yes.

1 Q. So it is your opinion that the  
2 longitudinal extending -- longitudinally extending  
3 conduit axis intersects with the hand grip portion  
4 when the hand grip portion and the conduit access  
5 are coaxial; is that correct?

6 A. Based on that image, yes, you can see that  
7 the dashed line contacts the rubber grip portion.

8 MR. HERSHKOWITZ: Just object to that question  
9 on the basis to the extent it mischaracterizes the  
10 document. 10:49:58

11 BY MR. ZHANG:

12 Q. Then flip to page 181.

13 A. Oh, I'm at 180.

14 Q. 181 relating to claims 9 and 18. Do you  
15 see that?

16 A. Yes.

17 Q. Does either Peter or Neroni disclose  
18 electrical cables extending rearwardly adjacent to  
19 an inlet passage?

20 A. Yeah. In Neroni, here you've got -- on 10:51:06  
21 the front page of Neroni, there's the electrical  
22 receptacle 16 that runs to the motor that's  
23 depicted as M on the cover page and also in  
24 Figure 1.

25 And then there's also a wiring diagram

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1       that shows -- oh, and also the cylindrical  
2       receptacle there, canister, so that's number 12.

3               And so if you look at the wiring diagrams  
4       there, it actually shows the wiring going through  
5       12 to the motor. So -- and also in Figure 6 shows  
6       that as well. So, yeah, Neroni discloses that.

7       MR. ZHANG: Actually, I don't have further  
8       questions, and I'm going to pass the witness.

9       MR. HERSHKOWITZ: Let's go off the record  
10      briefly. 10:52:24

11                       (A break was taken from 10:52 AM  
12                       to 10:58 AM.)

13                       EXAMINATION

14      BY MR. HERSHKOWITZ:

15       Q.   Dr. Giachetti, earlier during your  
16       questioning by Mr. Zhang, you testified that you do  
17       not recall whether you had an opinion as to whether  
18       Neroni discloses a cyclonic cleaning apparatus. Do  
19       you recall that?

20       A.   I do recall that. 10:58:33

21       Q.   And if I can direct your attention to  
22       paragraph 283 of Exhibit 6, which is your  
23       declaration regarding the '550 patent.

24       A.   Give me one second to get there.

25               Paragraph 283?

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1 Q. Yes.

2 Does paragraph 283 of the '550 patent  
3 include your opinion as to whether Neroni discloses  
4 a cyclone unit?

5 A. Yes. Yes, it does. So, yeah, I do have  
6 an opinion that's described in that paragraph,  
7 which basically is that Neroni or Neroni has a  
8 cylindrical dust collection volume that appears to  
9 be the conventional form factor for a cyclonic  
10 filtration system. 10:59:46

11 MR. HERSHKOWITZ: I have no more questions.

12 Any re-cross?

13 MR. ZHANG: No further questions.

14 MR. HERSHKOWITZ: Thank you very much for your  
15 time. Thank you.

16 (Whereupon the proceedings  
17 concluded at 10:59 a.m.)  
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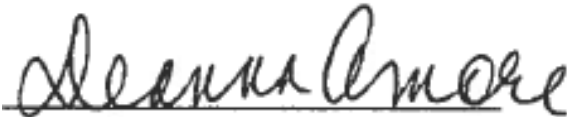
C E R T I F I C A T E

I, DEANNA AMORE, a Shorthand Reporter and  
notary public, within and for the State of  
Illinois, County of DuPage, do hereby certify:

That ROBERT GIACHETTI, Ph.D., the witness  
whose examination is hereinbefore set forth, was  
first duly sworn by me and that this transcript of  
said testimony is a true record of the testimony  
given by said witness.

I further certify that I am not related to  
any of the parties to this action by blood or  
marriage, and that I am in no way interested in the  
outcome of this matter.

IN WITNESS WHEREOF, I have hereunto set my  
hand this 1st day of December 2024.



Deanna M. Amore, CRR, RPR, CSR

SHUO JOSH ZHANG

szhang@gibsondunn.com

DECEMBER 4, 2024

RE: Dyson Technology Limited v. Omachron Intellectual Property  
11/26/2024, Robert Giachetti , Ph.D., (#7043287).

The above-referenced transcript has been  
completed by Veritext Legal Solutions and  
review of the transcript is being handled as follows:

\_\_\_ Per CA State Code (CCP 2025.520 (a)-(e)) - Contact Veritext  
to schedule a time to review the original transcript at  
a Veritext office.

\_\_\_ Per CA State Code (CCP 2025.520 (a)-(e)) - Locked .PDF  
Transcript - The witness should review the transcript and  
make any necessary corrections on the errata pages included  
below, notating the page and line number of the corrections.  
The witness should then sign and date the errata and penalty  
of perjury pages and return the completed pages to all  
appearing counsel within the period of time determined at  
the deposition or provided by the Code of Civil Procedure.  
Contact Veritext when the sealed original is required.

\_\_\_ Waiving the CA Code of Civil Procedure per Stipulation of  
Counsel - Original transcript to be released for signature  
as determined at the deposition.

\_\_\_ Signature Waived - Reading & Signature was waived at the  
time of the deposition.

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1     \_\_\_ Federal R&S Requested (FRCP 30(e)(1)(B)) - Locked .PDF  
2     Transcript - The witness should review the transcript and  
3     make any necessary corrections on the errata pages included  
4     below, notating the page and line number of the corrections.  
5     The witness should then sign and date the errata and penalty  
6     of perjury pages and return the completed pages to all  
7     appearing counsel within the period of time determined at  
8     the deposition or provided by the Federal Rules.  
9     \_X\_ Federal R&S Not Requested - Reading & Signature was not  
10    requested before the completion of the deposition.

1 Dyson Technology Limited v. Omachron Intellectual Property  
2 Robert Giachetti, Ph.D. (#7043287)

3 E R R A T A S H E E T

4 PAGE\_\_\_\_\_ LINE\_\_\_\_\_ CHANGE\_\_\_\_\_

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24 (Robert Giachetti, Ph.D.) Date

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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                    |
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| <b>&amp;</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>146</b> 56:1                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>2007/0209335</b>                                                                                                                                                                                                                                                                                                                                                                                                                       | 53:16                                                                                                                                                                                                              |
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[6 - bachelor's]

|                                                                                                                                                                                                 |                                                                                                                                                                                                                 |                                                                                                                                                                            |                                                                                                                                            |
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[claims - controller]

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[conventional - designed]

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[designed - engineering]

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[straight - titles]

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[welcome - zhang]

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Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

THE ABOVE RULES ARE CURRENT AS OF APRIL 1, 2019. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

VERITEXT LEGAL SOLUTIONS

COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

Veritext Legal Solutions is committed to maintaining the confidentiality of client and witness information, in accordance with the regulations promulgated under the Health Insurance Portability and Accountability Act (HIPAA), as amended with respect to protected health information and the Gramm-Leach-Bliley Act, as amended, with respect to Personally Identifiable Information (PII). Physical transcripts and exhibits are managed under strict facility and personnel access controls. Electronic files of documents are stored in encrypted form and are transmitted in an encrypted

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Inquiries about Veritext Legal Solutions' confidentiality and security policies and practices should be directed to Veritext's Client Services Associates indicated on the cover of this document or at [www.veritext.com](http://www.veritext.com).