

UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD
FOR THE DISTRICT OF COLUMBIA

SPECTRUM SOLUTIONS LLC,)
Petitioner,)
) IPR2023-01424
v.) U.S Patent No.
) 11,536,632
DNA GENOTECK INC.,)
Patent Owner.)

REMOTE DEPOSITION OF
PROFESSOR STEVE WERELEY

September 10, 2024
10:01 a.m. Eastern Standard Time

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

DIGITAL EVIDENCE GROUP
1730 M Street, NW, Suite 812
Washington, D.C. 20036
(202) 232-0646

Spectrum Ex. 1033
Spectrum v. DNA Genotek
IPR2023-01424

1 REMOTE APPEARANCES:

2 FOR THE PETITIONER:

3 KNOBBE MARTENS OLSON & BEAR LLP

4 BY: BENJAMIN B. ANGER, ESQUIRE

5 2040 Main Street, 14th Floor

6 Irvine, California 92614

7 949-760-0404

8 ben.anger@knobbe.com

9

10 FOR THE PATENT OWNER:

11 MORRISON & FOERSTER LLP

12 BY: MEHRAN ARJOMAND, ESQUIRE

13 BY: STEVE SUNDBERG, ESQUIRE

14 707 Wilshire Boulevard, Suite 6000

15 Los Angeles, California 90017

16 212-892-5200

17 marjomand@mofo.com

18 ssundberg@mofo.com

19

20 Also Present:

21 Marley Macarewich, summer associate, Morrison

& Foerster

22 Henry Marte, Videographer/Document Tech

1 INDEX TO EXAMINATION

2 WITNESS: PROFESSOR STEVE WERELEY

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4 EXAMINATION BY

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PROFESSOR STEVE WERELEY

Spectrum Solutions LLC vs DNA Genotek Inc.

Tuesday, September 10, 2024

Lori J. Goodin, RPR, CRR, RSA

California CSR #13959

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1 TUESDAY, SEPTEMBER 10, 2024, 10:01 a.m. EST.

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PROCEEDINGS

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THE VIDEOGRAPHER: We are now on the record. My name is Henry Marte, videographer with Digital Evidence Group. Today's date is September 10th, 2024, and the time is 10:01 a.m.

This deposition is being held in the matter of Spectrum Solutions LLC versus DNA Genotek Inc. Deponent today is Dr. Steven Wereley. All parties to this deposition are appearing remotely and have agreed to the witness being sworn in remotely.

So, please identify themselves for the record. Afterwards, the court reporter will administer the oath to the witness.

MR. ANGER: Good morning. My name is Ben Anger. I'm here on behalf of the petitioner, Spectrum Solutions and I'm from the law firm Knobbe Martens.

1 MR. ARJOMAND: Good morning. My
2 name is Mehran Arjomand of Morrison &
3 Foerster. I am here on behalf of patent
4 owner DNA Genotek and Professor Steven
5 Wereley.

6 With me at this deposition are also
7 Steven Sundberg and Marley Macarewich of
8 Morrison & Foerster.

9 Whereupon,

10 STEVEN WERELEY,
11 a witness called for examination, having been
12 first duly sworn, was examined and testified as
13 follows:

14 * * *

15 EXAMINATION

16 BY MR. ANGER:

17 Q. Good morning, Dr. Wereley.

18 A. Good morning.

19 Q. How are you today?

20 A. I'm doing well. How are you?

21 Q. I am doing fine, thank you.

22 I want to ask, is there any reason

1 you cannot testify truthfully and accurately
2 today?

3 A. No, there is not.

4 Q. Okay. Have you had a chance to
5 prepare for today's deposition?

6 A. Yes, I have.

7 Q. What did you do to prepare for your
8 deposition?

9 MR. ARJOMAND: Objection.

10 Objection. To the extent that it seeks
11 attorney/client communication and work
12 product privilege, I instruct the witness not
13 to answer.

14 Professor Wereley, you can proceed
15 without disclosing the content of our
16 meetings.

17 THE WITNESS: Okay. I reviewed the
18 -- my declaration. I reviewed Mr. Leinsing's
19 declaration, and then the associated
20 exhibits.

21 BY MR. ANGER:

22 Q. Okay. Did you have a chance to read

1 through your declaration that you submitted in
2 support of Genotek's motion to amend?

3 A. Yes, I did.

4 Q. Okay. When was the last time you
5 reviewed your declaration?

6 A. This morning.

7 Q. Okay. And that is Exhibit 2014; is
8 that correct?

9 A. That's correct.

10 MR. ANGER: Okay. Why don't we go
11 ahead and bring that exhibit up.

12 I would like to introduce
13 Exhibit 2014 which is the declaration of
14 Dr. Steven Wereley.

15 (Previously marked
16 Exhibit 2014, first referral.)

17 BY MR. ANGER:

18 Q. Okay. Dr. Wereley, you're aware
19 that the patent owner in this case has amended
20 the claims as part of this proceeding, correct?

21 MR. ARJOMAND: Objection. Form.

22 THE WITNESS: Yes, I am.

1 BY MR. ANGER:

2 Q. I'll have you turn to Page 26 --
3 strike that.

4 I'll have you turn to Page 11 of
5 your declaration.

6 A. Okay.

7 Q. And do you see there starting at
8 Paragraph 27 it states Claim 21?

9 A. Yes, I see that.

10 Q. Okay. And then, that Claim 21
11 extends on to Page 13, correct?

12 A. Yes, it does.

13 Q. Okay.

14 MR. ARJOMAND: Ben, just so that the
15 record is clear, are you using the native
16 pages or the stamped page numbers?

17 MR. ANGER: I was using the native
18 page numbering. Okay. Thank you for
19 clarifying.

20 To the extent possible I will use
21 the native page numbering in these exhibits.

22 BY MR. ANGER:

1 Q. Okay. So, turning back to the
2 declaration, Professor Wereley, you see that the
3 Claim 21 starting on Page 11 includes several
4 underlined portions on Pages 12 and 13, correct?

5 A. I see that.

6 Q. Okay. And do you understand why
7 those portions are underlined?

8 A. Yes, I do.

9 Q. And why is that?

10 A. Those are words that were not in the
11 original Claim 1.

12 Q. Okay. So, you understand these are
13 the amended claims that -- strike that.

14 You understand that this is the
15 amended claim that Genotek has proposed in this
16 IPR, correct?

17 A. Yes.

18 Q. Okay. And then let's turn to
19 Paragraph 28.

20 A. Okay.

21 Q. All right. So, you can see there,
22 it states, "As shown above, substitute

1 independent Claim 21 adds further recitations to
2 challenged independent Claim 1 in three ways."

3 Do you see that?

4 A. I do.

5 Q. All right. Can you go ahead and
6 read those for us?

7 MR. ARJOMAND: Ben, sorry to
8 interrupt, but, I was just noticing that when
9 you are speaking someone is highlighting the
10 exhibit.

11 Is that -- are you doing that or is
12 that somebody else?

13 THE VIDEOGRAPHER: That's myself,
14 that is the tech.

15 MR. ARJOMAND: Uh-huh.

16 THE VIDEOGRAPHER: I don't have to
17 do that, but...

18 MR. ANGER: Yeah. We can -- we can
19 go ahead and not do that. That's fine. We
20 can limit that, if you prefer, Mehran.

21 MR. ARJOMAND: Yeah. I think -- I
22 don't mind Mr. Marte showing Paragraph 28

1 like, expanding it so that it's bigger on the
2 screen.

3 But I would prefer him not to
4 highlight various portions of the
5 declaration, if that is okay with you, Ben.

6 MR. ANGER: Yeah, that's fine.

7 MR. ARJOMAND: Okay.

8 BY MR. ANGER:

9 Q. Okay. So, let's turn back to
10 Paragraph 28 here. And my question was about the
11 three ways that independent Claim 1 has been
12 amended.

13 Can you read those into the record,
14 Dr. Wereley, please?

15 A. Sure. "One, amending the
16 description of the 'cap' recitation to also
17 comprise an 'outer wall.'

18 Two, "clarifying that the 'first
19 cylinder' and the 'second cylinder' of the
20 'annular valve' are 'housed within the boundaries
21 of the outer wall of the cap.'

22 And three, "clarifying that the

1 'first cylinder' and 'second cylinder' are
2 relatively moveable within the boundaries of the
3 outer wall of the cap."

4 Q. Okay. Thank you.

5 So, the first way that independent
6 Claim 1 has been modified is to amend the
7 description of the cap recitation to also
8 comprise an outer wall, correct?

9 MR. ARJOMAND: Objection. Form.

10 THE WITNESS: Yes, that's what
11 Point 1 says.

12 BY MR. ANGER:

13 Q. Okay. So, the claims as recited
14 previously did not include an outer wall,
15 correct?

16 MR. ARJOMAND: Objection. Form.

17 THE WITNESS: Could you repeat the
18 question, please?

19 BY MR. ANGER:

20 Q. The claims prior to being amended
21 did not recite an outer wall, correct?

22 MR. ARJOMAND: Same objection.

1 THE WITNESS: The original Claim 1
2 did not contain reference to an outer wall in
3 that location.

4 BY MR. ANGER:

5 Q. Okay. And then for Number 2, you
6 indicate that the claims were amended to clarify
7 that the first cylinder and the second cylinder
8 of the annular valve are housed within the
9 boundaries of the outer wall of the cap, correct?

10 A. That's correct.

11 Q. And what do you mean there when you
12 say "clarifying"?

13 A. Providing further detail or
14 explanation of the first cylinder and second
15 cylinder's location.

16 Q. Okay. So, do you mean to say that
17 the first cylinder and the second cylinder were
18 not housed within the boundaries of the outer cap
19 of the wall in original independent Claim 1?

20 MR. ARJOMAND: Objection. Form.

21 THE WITNESS: I don't have original
22 Claim 1 in front of me.

1 But based on the way that I have
2 marked up amended Claim 21, the location of
3 the first cylinder and second cylinder was
4 not pointed out in Claim 1, original Claim 1.

5 BY MR. ANGER:

6 Q. Okay. And so, you refer there to
7 the location of the first cylinder and the second
8 cylinder.

9 And I believe you are referring to
10 the fact that it says now -- strike that.

11 I believe the -- you're referring to
12 the fact that the claim now recites the
13 limitation housed within the boundaries of the
14 outer wall of the cap, correct?

15 MR. ARJOMAND: Objection. Form.

16 THE WITNESS: Yes. That location,
17 or that phrasing appears in the description
18 of the first cylinder and the second cylinder
19 in amended Claim 21.

20 BY MR. ANGER:

21 Q. Okay. And so, what is your
22 understanding of the first cylinder and the

1 second cylinder being housed within the
2 boundaries of the outer wall of the cap?

3 MR. ARJOMAND: Objection. Form.

4 THE WITNESS: The first cylinder and
5 the second cylinder, the meaning of that
6 phrasing is that the first cylinder and the
7 second cylinder are contained within the
8 boundaries of the outer wall of the cap.

9 BY MR. ANGER:

10 Q. Okay. Dr. Wereley, I'm going to
11 have you take a look at a different portion of
12 your declaration here.

13 Let's turn to Paragraph 17. And
14 that is on Page 7.

15 A. I see that.

16 Q. Okay. Why don't you take a minute
17 and go ahead and read that and let me know when
18 you are finished reading it.

19 A. Okay. I'm ready.

20 Q. Great. So, do you see in
21 Paragraph 17 part way down there's a sentence
22 that begins with "I have also been informed that

1 the framework."

2 Do you see that?

3 A. I do.

4 Q. Can you go ahead and read that
5 sentence for us, please?

6 A. "I have also been informed that the
7 framework for determining obviousness involves
8 considering the following factors:

9 "One, the scope and content of the
10 prior art. Two, the differences between the
11 prior art and the claimed subject matter. Three,
12 the level of ordinary skill in the art. Four,
13 any objective evidence of nonobviousness."

14 Q. Okay. So, Dr. Wereley, have you
15 applied this framework in your analysis in this
16 declaration?

17 MR. ARJOMAND: Objection. Form.

18 THE WITNESS: Yes, I have.

19 BY MR. ANGER:

20 Q. So, regarding Factor 1, you
21 evaluated the scope and content of the prior art?

22 A. Yes, I did.

1 Q. Okay. And regarding Number 2, you
2 have evaluated the differences between the prior
3 art and the claimed subject matter, right?

4 A. Yes, I have.

5 Q. Okay. And you considered the level
6 of ordinary skill in the art?

7 A. Yes, I have.

8 Q. Okay. And have you evaluated any
9 objective evidence of nonobviousness?

10 A. Yes. I have.

11 Q. Okay. What evidence of
12 nonobviousness have you evaluated?

13 A. Are you asking in reference to
14 particular, any particular portion, or the
15 amended Claim 21?

16 What's the scope of the question?

17 Q. Sure, I can rephrase that.

18 So, Number 4 states any objective
19 evidence of nonobviousness, correct?

20 A. Yes, it does.

21 Q. In there, are you referring to any
22 secondary considerations of nonobviousness?

1 A. I think that sounds like legal
2 jargon. I'm not quite sure of the implication of
3 secondary concerns of nonobviousness.

4 Q. Okay. Is there any portion of
5 the -- strike that.

6 Is there any portion of your
7 declaration that you can point to that
8 specifically addresses objective evidence of
9 nonobviousness?

10 A. I could -- offhand, I'm not aware of
11 locations of the use of the term "nonobvious" in
12 my declaration.

13 But, I'd be happy to look for them.

14 Q. No, that's fine. Maybe we can
15 revisit it a bit later.

16 MR. ANGER: Okay. I want to
17 introduce a new exhibit. Let's bring up
18 Exhibit 2015.

19 (Previously marked.

20 Exhibit 2015 first referral.)

21 BY MR. ANGER:

22 Q. All right. Dr. Wereley, have you

1 seen Exhibit 2015 previously?

2 A. Yes, I have.

3 Q. And what is it?

4 A. It is the provisional patent
5 application for the, the '003 provisional patent
6 application.

7 Q. Okay. So, my understanding is that
8 this is a non-provisional application that led to
9 the '632 patent.

10 Is that your understanding also?

11 A. So, yeah. Maybe since I'm not a
12 legal expert, maybe I said provisional, I should
13 have said non-provisional.

14 So, provided, to the extent that
15 that's the correct way to refer to it, yes, I
16 agree; this is the '003 non-provisional
17 application.

18 Q. Okay. And so, just to clarify, if
19 we quickly turn back to your declaration,
20 Paragraph 28, you do cite to Exhibit 2015 in the
21 last sentence there.

22 Do you see that?

1 A. Yes, I do.

2 Q. And you state that Exhibit 2015 is
3 the original disclosure of the application that
4 issued as the '632 patent, correct?

5 A. I do state that, yes.

6 Q. Okay. And the '632 patent is the
7 underlying patent that was the subject of the
8 original petition that Spectrum filed in this
9 IPR, correct?

10 A. That is my understanding.

11 Q. Okay, great. So, now we can turn
12 back to Exhibit 2015.

13 Dr. Wereley, when was the last time
14 you reviewed Exhibit 2015?

15 A. Probably yesterday.

16 Q. So, you're familiar with the
17 contents of Exhibit 2015?

18 A. Yes, I am.

19 Q. I will have you turn to Figures 3A
20 and 3B.

21 And these are on Page 40 of the
22 stamped page numbering.

1 A. Okay. I see those, yeah.

2 Q. Okay. Okay. And you're familiar
3 with Figures 3A and 3B, correct?

4 A. Yes, I am.

5 Q. And is it your opinion that
6 Figures 3A and 3B provides support for the claim
7 amendments that Spectrum has submitted in this
8 case?

9 A. These figures, Figures 3A and 3B are
10 part of the support provided for amended
11 Claim 21.

12 Q. Okay. Let's turn to Paragraph 75 in
13 Exhibit 2015.

14 Are you there, Dr. Wereley?

15 A. Yes.

16 Q. And, I'm sorry, I'm just going to
17 ask the questions a little bit tangential here.

18 So, Dr. Wereley, do you have other
19 documents up on your screen right now?

20 A. I do, yes.

21 Q. Okay. Do you have any documents
22 that are marked up or notes or anything like

1 that?

2 A. No, I do not.

3 Q. Okay. If I can make a request, I
4 would appreciate it if you could comply and just
5 have up the documents that we are referring to in
6 this case, as well as obviously the Zoom screen.

7 A. Yes.

8 Q. If that works for you?

9 A. Yes, no problem.

10 Q. Okay. All right. So, let's take a
11 look at Paragraph 75 here.

12 Do you see there, the first
13 sentence, it's referring to an embodiment of the
14 Sample Collection Device 200 that is shown by way
15 of example in Figures 3A to 3C?

16 A. I see that.

17 Q. And you understand that that is
18 referring to the Figures 3A and 3B that we were
19 looking at just a moment ago?

20 MR. ARJOMAND: Objection, form.

21 THE WITNESS: That is my
22 understanding.

1 BY MR. ANGER:

2 Q. Okay. I'm going to have you take a
3 look at a sentence that -- well, strike that.

4 Let's just start at the beginning
5 here, the next sentence.

6 It says, "More specifically,
7 Figure 3A shows a cross-section of the Cap 12
8 prior to being coupled to the Tube 14."

9 Do you see that?

10 A. Yes, I do.

11 Q. And then the next sentence says,
12 "The Cap 12 can include an Outer Wall 24 and cap
13 engaged members 34 along an inside surface 26 of
14 the Outer Wall 24."

15 A. I do see that.

16 Q. Okay.

17 MR. ANGER: Mr. Marte, is it
18 possible to bring up Figure 3A and 3B that we
19 were looking at just a moment ago, side by
20 side? Thank you.

21 BY MR. ANGER:

22 Q. Dr. Wereley, do you see that on the

1 screen that we've got, the Paragraph 75 as well
2 as the figures up on the screen?

3 A. Yes, I do see that.

4 Q. Okay. Just hoping we can make it
5 easier for us to talk about portions of the
6 figures here.

7 Okay. So, do you see where it's, in
8 Figure 3A it's pointing to Label 24?

9 A. I see Label 24 on Figure 3A and 3B,
10 yes.

11 Q. And, looking at Paragraph 75, that's
12 actually referred to as the outer wall, correct?

13 MR. ARJOMAND: Objection. Form.

14 THE WITNESS: Paragraph 75 does say
15 surface 26 of the outer wall, 24.

16 So, it does identify Item 24 as the
17 outer wall.

18 BY MR. ANGER:

19 Q. Okay. Great. And then the next
20 sentence states in paragraph -- strike that.

21 The next paragraph -- I'm sorry, let
22 me start over.

1 The next sentence in Paragraph 75
2 states, "The interior surface 20 may be at least
3 partially defined by at least one of an Inner
4 Wall 18 or Outer Wall 24 of the Cap 12."

5 Do you see that?

6 A. I believe you misspoke and said
7 surface 20 and not space 20.

8 Q. Wow. Okay, I'll go ahead and start
9 over one more time.

10 The next sentence in Paragraph 75
11 states, "The Interior Space 20, may be at least
12 partially defined by at least one of an Inner
13 Wall 18, or Outer Wall 24 of the Cap 12."

14 Correct?

15 A. Yes, I see that sentence.

16 Q. Okay, great.

17 And, in looking at Figures 3A and
18 3B, do you see the Interior Space 20?

19 A. I do see the Item 20 pointing to a,
20 to a location on figure -- both Figure 3A and
21 Figure 3B.

22 Q. Okay. And so, according to

1 Paragraph 75, the interior space 24, can refer to
2 the volume of space in the cap, correct?

3 MR. ARJOMAND: Objection. Form.

4 THE WITNESS: 24 is identified as
5 the outer wall of the cap in the
6 Paragraph 75.

7 BY MR. ANGER:

8 Q. Right. So, the sentence there says
9 that the Interior Space 20 may be at least
10 partially defined by at least one of the Inner
11 Wall 18 or Outer Wall 24, of the cap.

12 So, wouldn't you agree that looking
13 at Outer Wall 24, the Interior Space 20 can be
14 referring to the volume of space in the cap.
15 Correct?

16 MR. ARJOMAND: Objection. Form.

17 THE WITNESS: So, specifically, that
18 sentence says "Interior Space 20 may be at
19 least partially defined by at least one of an
20 Inner Wall 18 or Outer Wall 24 of the cap."

21 So, that -- that space 20 that is
22 identified in Figures 3A and 3B is expected

1 or described as being defined by a
2 combination of surface outer, Outer Wall 24
3 and Inner Wall 18.

4 BY MR. ANGER:

5 Q. Okay. And then if we look at
6 Figure 3A and 3B, label 20 is pointing to the
7 interior of the chamber there, right, in the
8 cylinder; is that right?

9 MR. ARJOMAND: Objection. Form.

10 THE WITNESS: So, the -- the
11 Figure 3A that we're looking at, the 20 is
12 pointing to the inside of a rectangle, which
13 is, this is a cross-sectional view of the cap
14 and that square would represent, you know, a
15 volume because it's rotated.

16 So, interior space.

17 BY MR. ANGER:

18 Q. Okay. So, just so I understand,
19 you're saying that label 20 is pointing to the
20 volume of space that is inside that rectangle,
21 right?

22 MR. ARJOMAND: Objection. Form.

1 THE WITNESS: Yes. In Figure 3A,
2 that label 20 points to the inside of the
3 volume that we've been talking about.

4 BY MR. ANGER:

5 Q. Okay, great.

6 And just to be clear, so, the
7 rectangle that we are pointing to or talking
8 about here, you would consider that to be the
9 inner cylinder, correct?

10 MR. ARJOMAND: Objection. Form.

11 THE WITNESS: The particular
12 embodiment that's sketched in 3A and
13 described in Paragraph 75, the Volume 20 is
14 contained within the wall that's identified
15 by Item 18.

16 BY MR. ANGER:

17 Q. Okay. And then if we're talking
18 about the claim language, you would agree that
19 that wall 18, makes up one of the cylinders and
20 specifically here, it would be an inner cylinder
21 or the second cylinder, correct?

22 MR. ARJOMAND: Objection. Form.

1 THE WITNESS: So, in the embodiment
2 shown in Figure 3A, the Item 18 is the inner
3 wall, is identified as the inner wall.

4 In Paragraph 18, it is also
5 Cylinder 2, or talked about as Cylinder 2
6 elsewhere.

7 And 20 is identified in Figure 3A as
8 the space interior to 18, to Outer wall 18.

9 BY MR. ANGER:

10 Q. Okay.

11 A. So that Inner Wall 18, sorry.

12 Q. Okay. You know what, let's back up
13 a little bit. I just want to make sure we're on
14 the same page.

15 Let's go to, back to your
16 declaration.

17 A. Okay.

18 Q. And let's go to Page 11, going on to
19 Page 12 and 13. And that's the independent
20 Claim 21.

21 Do you see that?

22 A. I do see that.

1 Q. Okay. And on Page 12, do you see
2 that it states that there is "a moveable annular
3 valve positioned in the second aperture, the
4 moveable annular valve comprising," and then if
5 you go down below, "a first cylinder comprising a
6 third aperture." Right?

7 Do you see that?

8 A. Yes, I do.

9 Q. And then below that, a second
10 cylinder comprising the vent.

11 Do you see that?

12 A. Yes, I see that.

13 Q. And you have stated that Claim 21 is
14 supported in the -- in the written description by
15 Figures 3A and 3B, correct?

16 MR. ARJOMAND: Objection. Form.

17 THE WITNESS: I have stated that
18 it's supported by the '003 application, and
19 the, and other documents.

20 BY MR. ANGER:

21 Q. Okay. So, I guess I just want to
22 clarify; can you point to the support for the

1 first cylinder comprising a third aperture in
2 Figure 3A?

3 MR. ARJOMAND: Objection. Form.

4 BY MR. ANGER:

5 Q. Let's go back to the '003
6 application which is Exhibit 2015.

7 A. Okay.

8 Q. And then looking at figures -- well,
9 strike that.

10 Looking at Figure 3A, would you
11 agree that the first cylinder is that portion --
12 hold on one second. Let me get the right label.

13 Okay. So, if we look at Figure 3A,
14 do you see the Label 62?

15 A. I do.

16 Q. And do you agree that that portion
17 that it's pointing to there is the outer
18 cylinder -- strike that -- is the -- sorry.

19 And do you agree that that portion
20 that Label 62 is pointing to in Figure 3A is the
21 first cylinder recited in Claim 21?

22 MR. ARJOMAND: Objection. Form.

1 THE WITNESS: Item 62 is meant to be
2 a cross-sectional view of the Cylinder 1.

3 BY MR. ANGER:

4 Q. Okay. And by "Cylinder 1," do you
5 mean the first cylinder as it's recited in the
6 claim?

7 A. Yes, that's what I mean.

8 Q. Okay, great.

9 And then looking at the rectangle
10 that is interior to that, that has the Inner
11 Wall 18, would you agree that that rectangle
12 there is the second cylinder recited in Claim 21?

13 MR. ARJOMAND: Objection. Form.

14 THE WITNESS: 18 is identified in
15 the, in Exhibit 2015 as Inner Wall 18.

16 It is a portion of, or, it is what
17 the second cylinder, it is the second
18 cylinder that we're referring to in amended
19 Claim 22.

20 BY MR. ANGER:

21 Q. And I believe you mean amended
22 Claim 21; is that correct?

1 A. 21, that's correct.

2 Q. Okay. All right. So, I just want
3 to make sure we're on the same page when we're
4 looking at Figure 3A that we know that we are
5 talking about the second cylinder being the inner
6 cylinder and defined by that portion that is
7 pointed to by label 18.

8 Do you agree?

9 MR. ARJOMAND: Objection. Form.

10 THE WITNESS: In Exhibit 2015,
11 Item 18 points to what is called the Inner
12 Wall 18. That defines a cylinder which is
13 the second cylinder that we're referring to
14 in amended Claim 21.

15 BY MR. ANGER:

16 Q. Okay. Great. And then when we're
17 looking at Figure 3A, and we're discussing the
18 portion identified by label 62, you also
19 understand that that is what is referred to as
20 the first cylinder in amended Claim 21, correct?

21 MR. ARJOMAND: Objection. Form.

22 THE WITNESS: Item 62 in Figure 3A

1 of Exhibit 2015 points to a cylinder that we
2 subsequently describe as Cylinder 1 in
3 amended Claim 21.

4 BY MR. ANGER:

5 Q. And by "Cylinder 1," I think you
6 mean first cylinder, right?

7 A. Yes, that's correct.

8 Q. Okay. All right. Great.

9 MR. ANGER: Okay. Could we bring up
10 Paragraph 75 side by side again?

11 BY MR. ANGER:

12 Q. Okay. So, looking at Paragraph 75,
13 in that sentence we were looking at before where
14 it refers to the Interior Space 20?

15 That Interior Space 20 can be
16 referring to the volume of space in the inner
17 cylinder, correct?

18 MR. ARJOMAND: Objection. Form.

19 BY MR. ANGER:

20 Q. Let me rephrase the question; the
21 Interior Space 20 as discussed in Paragraph 75,
22 can be referring to the volume of space in the

1 second cylinder as that term is used in Claim 21,
2 correct?

3 MR. ARJOMAND: Objection. Form.

4 THE WITNESS: Sorry. Paragraph 75
5 describes Interior Space 20 as maybe at least
6 partially defined by at least one of an Inner
7 Wall 18 or Outer Wall 24 of Cap 12.

8 BY MR. ANGER:

9 Q. Okay. And then if we translate that
10 to the claim language, you would agree that the
11 Interior Space 20, as discussed in Paragraph 75,
12 can be referring to the volume of space in the
13 second cylinder as that term is used in Claim 21,
14 correct?

15 MR. ARJOMAND: Objection. Form.

16 THE WITNESS: In the way that
17 Figure 3A and 3B are drawn, Volume 20 appears
18 to be interior to Outer Wall 18, which is
19 second cylinder, but is described as
20 partially defined by at least one of Inner
21 Wall 18 or Outer Wall 24 of Deck 12.

22 BY MR. ANGER:

1 Q. Okay. And just to clarify, because
2 I think you may have mixed up outer wall and
3 inner wall there.

4 I believe your testimony is that in
5 the way that Figure 3A and 3B are drawn,
6 Volume 20 appears to be interior to the Inner
7 Wall 18.

8 Is that right?

9 MR. ARJOMAND: Objection. Form.

10 THE WITNESS: Volume 20 as it's
11 shown in the Figure 3A and B and described in
12 Paragraph 75 of the 2015, of Exhibit 2015,
13 does show Interior Space 20 inside of Inner
14 Wall 18. But describes it as at least
15 partially defined by Inner Wall 18 or Outer
16 Wall 24.

17 Q. Right, okay. So the interior space
18 can also be the volume of space that is defined
19 by the Outer Wall 24 of the Cap 12, correct?

20 MR. ARJOMAND: Objection. Form.

21 THE WITNESS: So, reading that
22 sentence again, the Interior Space 20 is

1 maybe at least partially defined by Inner
2 Wall 18 and Outer Wall 24.

3 So, it's a combination of those two
4 walls, may define Volume 20.

5 BY MR. ANGER:

6 Q. Okay. And by "Volume 20," there's
7 -- the specification actually refers to it as
8 Interior Space 20, correct?

9 A. That's correct.

10 Q. Okay. Let's have you jump down two
11 sentences -- actually, skip one sentence and go
12 with the sentence that starts with the "The Inner
13 Wall 18 may further define."

14 Do you see that sentence?

15 A. Yes, I do.

16 Q. Can you read that for us, please?

17 A. Sure. "The Inner Wall 18 may
18 further define an Aperture 22 which may be open
19 or closed depending on the position of an Annular
20 Blocking Member 62 relative to the Aperture 22."

21 Q. Okay. So, there the -- well, if you
22 look over at Figure 3A, you can see Label 22.

1 Do you see that?

2 A. I do.

3 Q. Okay. And so, that's referring to
4 the aperture, correct?

5 MR. ARJOMAND: Objection. Form.

6 THE WITNESS: Item 22 does refer to
7 the aperture.

8 BY MR. ANGER:

9 Q. Okay. And that Aperture 22 is the
10 opening in the site of the second cylinder,
11 correct?

12 MR. ARJOMAND: Objection. Form.

13 THE WITNESS: So, in Exhibit 2015 of
14 Paragraph 75 it describes the Item 22 as
15 referring to the aperture in the Inner
16 Wall 18.

17 BY MR. ANGER:

18 Q. Okay. And that aperture is an
19 opening in the side of the cylinder, correct?

20 MR. ARJOMAND: Objection. Form.

21 THE WITNESS: So, interpreting the
22 drawing, I would infer that 22 indicates a

1 hole through wall, Inner Wall 18, which is
2 identified as an Aperture 22.

3 BY MR. ANGER:

4 Q. Okay. So, you are referring to it
5 as a hole through Inner Wall 18; is that right?

6 MR. ARJOMAND: Objection. Form.

7 THE WITNESS: The description says,
8 "The Inner Wall 18 may further define an
9 Aperture 22."

10 So, the description refers to 22 as
11 an aperture in Inner Wall 18.

12 So, it is an aperture as a hole, and
13 a hole is going from, you know, the outside
14 to the inside.

15 BY MR. ANGER:

16 Q. Okay. So, how thick is that
17 Aperture 22?

18 MR. ARJOMAND: Objection. Form.

19 THE WITNESS: Can you be more
20 precise?

21 In terms of thickness, I think there
22 would be a number of, at least three

1 measurements in quantifying the size of the
2 aperture.

3 Could you be more precise about what
4 you are asking about?

5 BY MR. ANGER:

6 Q. I guess my question is, isn't the
7 thickness of that aperture just the thickness of
8 the wall of the inner cylinder?

9 MR. ARJOMAND: Objection. Form.

10 THE WITNESS: Yes. In order to
11 construct an aperture, the rectangle that's
12 labeled or bounding the region that's
13 referred to as 22, that rectangle, in order
14 for it to be an aperture, would have to go
15 from the outside of wall, Inner Wall 18 to
16 the inside of Inner Wall 18. It would have
17 to go through Inner Wall 18.

18 BY MR. ANGER:

19 Q. Right. And so, the distance there
20 is just the thickness of the Wall 18, correct?

21 MR. ARJOMAND: Objection. Form.

22 BY MR. ANGER:

1 Q. Dr. Wereley, did you understand my
2 question?

3 A. Yes, I did. I am composing an
4 answer.

5 So, it's clear that the thickness of
6 Outer Wall 18 varies. It has threads constructed
7 upon inner wall -- did I say outer wall?

8 It is clear that Inner Wall 18, the
9 thickness of Inner Wall 18 varies. It has
10 threads constructed upon the inner wall as shown
11 in Figure 3A.

12 The thickness of the Aperture 22,
13 which I would refer to as the depth in this
14 figure, in this view of 3A, the depth goes from
15 the outside of 18 to the inside of 18, Inner
16 Wall 18, which means that its thickness would be
17 at most the outer diameter of the threads and at
18 least, the inner diameter of the threads.

19 Q. Okay.

20 A. It's an absence of something and
21 that -- that we're talking about.

22 Q. Okay. And so, Aperture 22 in the

1 side of what the claims refer to as the second
2 cylinder, is an opening in that cylinder,
3 correct?

4 MR. ARJOMAND: Objection. Form.

5 THE WITNESS: So, the way the
6 sentence in Paragraph 75 that we're looking
7 at reads, the Inner Wall 18 may further
8 define an aperture, which I interpret to mean
9 the removal of or absence of material of the
10 wall 18 in a certain place is, creates the
11 aperture.

12 The aperture goes through Inner
13 Wall 18.

14 BY MR. ANGER:

15 Q. Would you agree that the inventors
16 are using the term "aperture" here according to
17 its ordinary meaning?

18 MR. ARJOMAND: Objection. Form.

19 THE WITNESS: Like many words in the
20 English language, you know, aperture has a
21 range of meanings.

22 I was -- or, I would look to the

1 sketch or look to the drawing 3A and 3B and
2 the description of an aperture and conclude
3 that it's a hole from the outside of 18 to
4 the inside of 18.

5 And I think that's a fairly standard
6 use of the word "aperture," but not the only
7 use.

8 BY MR. ANGER:

9 Q. What are other uses of the word
10 "aperture"?

11 MR. ARJOMAND: Objection. Form.
12 Outside the scope of his testimony.

13 THE WITNESS: Aperture has many
14 different uses in different fields of
15 science, engineering, consumer products.

16 For instance, an aperture is the
17 hole in a camera that lets light in to -- to
18 the imaging element of a camera.

19 And, there are many others, which I
20 won't enumerate. I would go back to the way
21 in which it's used in the sentence that we
22 are looking at in Paragraph 75 is to me, a

1 fairly standard use of the word "aperture."

2 BY MR. ANGER:

3 Q. Okay. So, you would agree that the
4 inventors, in preparing this application, did not
5 give the term "aperture" any special definition,
6 correct?

7 MR. ARJOMAND: Objection. Form.
8 Seeks a legal conclusion.

9 THE WITNESS: When I read this
10 sentence that we're talking about and look at
11 Figure 3A, I understand the Aperture 22
12 that's indicated in Figure 3A to refer to a
13 hole from the outside to the inside of the
14 Inner Cylinder 18.

15 And I don't conclude that anything,
16 if there's any -- well, I'm not a legal
17 expert, so I don't make any conclusions about
18 any legal definition of the word "aperture."

19 BY MR. ANGER:

20 Q. Let me ask you this; Dr. Wereley,
21 you have reviewed the '003 application which is
22 Exhibit 2015, right?

1 A. Yes, I have.

2 Q. And in your review of that
3 application, did you see where the inventors had
4 ever given the term "aperture" a special
5 definition different than its ordinary meaning?

6 MR. ARJOMAND: Objection. Form.
7 Seeks a legal conclusion.

8 THE WITNESS: I have reviewed
9 Exhibit 2015, the '003 application.

10 And, I can't say at this point all
11 of the instances in which the word "aperture"
12 may have occurred and whether there was some
13 particular legal meaning construed to the
14 term.

15 I'm reading it -- reading
16 Paragraph 75 and I don't see a special
17 meaning for the word "aperture."

18 BY MR. ANGER:

19 Q. Okay. And you, in your review,
20 didn't see a special definition anywhere else in
21 the specification, correct?

22 MR. ARJOMAND: Objection. Form.

1 THE WITNESS: From my recollection
2 of my review of this document, I don't recall
3 a special or novel understanding of the, of
4 the term "aperture" in application '003.

5 BY MR. ANGER:

6 Q. Okay. Thank you. So, let's take a
7 look at Figure 3A again.

8 So, if we're just now switching
9 gears and we take a look and discuss the aperture
10 of the cap, you would agree that that refers to
11 the bottom of the cap in the drawing, correct?

12 MR. ARJOMAND: Objection. Form.

13 BY MR. ANGER:

14 Q. Let me ask the question again.

15 So, if we're taking a look at
16 Figure 3A now and we're defining the aperture of
17 the cap, you would agree that that is the opening
18 at the bottom of the cap, correct?

19 MR. ARJOMAND: Objection. Form.

20 THE WITNESS: So, the cap defined by
21 Outer Wall 24 in Figure 3A is concave
22 downwards and has a, an opening in the bottom

1 of the cap.

2 That is not mentioned as an aperture
3 in Paragraph 75.

4 BY MR. ANGER:

5 Q. Okay. Are you familiar with
6 anywhere in the specification that discusses the
7 aperture of the cap?

8 MR. ARJOMAND: Objection. Form.

9 THE WITNESS: Which specifications
10 are we talking about here?

11 BY MR. ANGER:

12 Q. Yeah, let me be clear here.

13 So, referring to Exhibit 2015, are
14 you familiar with anywhere in the application
15 '003 submitted as Exhibit 2015 that discusses the
16 aperture of the cap?

17 MR. ARJOMAND: Objection. Form.

18 THE WITNESS: From my recollection
19 of my review of Exhibit 2015, I don't recall
20 where the circle that is the perimeter of
21 Outer Wall 24 is referred to as the aperture.

22 That is a -- I would refer to that

1 opening as one of many words, and one of
2 those could be aperture.

3 BY MR. ANGER:

4 Q. Okay. Let me make sure I
5 understand.

6 So, you testified that the cap shown
7 in Figure 3A has an opening, correct?

8 A. Yes. 20 -- Outer Wall 24 defines a
9 cylinder. And it's closed at the top and open at
10 the bottom.

11 So, there is an opening in the
12 bottom of the cylinder defined by Outer Wall 24.

13 Q. Okay. And that opening at the
14 bottom defined by Outer Wall 24 is an aperture of
15 the cap, correct?

16 MR. ARJOMAND: Objection. Form.

17 THE WITNESS: There are, there are
18 several different words I could use to refer
19 to that opening. One is opening.

20 But, aperture is, it would also be
21 applicable.

22 BY MR. ANGER:

1 Q. Okay.

2 MR. ARJOMAND: Ben, if this is a
3 good time for a break, we've been going for
4 about an hour. I think we should take one.

5 MR. ANGER: Yeah. That would be
6 fine. Let's go ahead and take a ten-minute
7 break.

8 MR. ARJOMAND: Okay.

9 THE VIDEOGRAPHER: The time
10 is 11:10 a.m. Off the record.

11 (Recess taken -- 11:10 a.m.)

12 (After recess -- 11:24 a.m.)

13 THE VIDEOGRAPHER: The time
14 is 11:24 a.m. We are back on the record.

15 BY MR. ANGER:

16 Q. Dr. Wereley, did you discuss the
17 substance of your testimony with anyone during
18 the break?

19 A. No, I did not.

20 Q. Okay. So, just to recap where we
21 left off, you testified that one way to describe
22 the opening of the bottom of the cap in Figure 3A

1 is just an opening, correct?

2 MR. ARJOMAND: Objection. Form.

3 THE WITNESS: So, we're talking
4 about the outer wall, the C-shaped outer
5 wall, the bottom surface of that defines --
6 there's an opening in the bottom surface of
7 that Outer Wall 24. And one could call that
8 an aperture.

9 BY MR. ANGER:

10 Q. Okay. Okay. Thank you. I just
11 wanted to clarify.

12 MR. ANGER: So, let's bring up
13 Exhibit 2015 again. And go back to Figures 3A
14 and 3B. And those are on Page 40, according to
15 the stamped page number.

16 THE WITNESS: Okay.

17 MR. ANGER: And I'd like to
18 introduce a new exhibit which we will
19 introduce as Exhibit 1025. And let me get
20 the name of it here.

21 It's going to be U.S. application
22 17-510003, Figures 3A and 3B. Could we

1 include that in the download, please.

2 THE VIDEOGRAPHER: Sure, no problem.

3 And this is going to be Exhibit 2025, right?

4 MR. ANGER: No, it's going to
5 be 1025.

6 THE VIDEOGRAPHER: 1025, sorry.

7 (Exhibit 1025 marked for
8 identification.)

9 BY MR. ANGER:

10 Q. Dr. Wereley, have you had a chance
11 to download that exhibit?

12 A. No, I have not.

13 Q. Okay.

14 A. Okay. Now I see it in the Box.
15 Okay. Exhibit 1025?

16 Q. Yes, it is marked as Exhibit 1025
17 now.

18 A. All right. One second. Okay. So,
19 this -- let me make sure I'm looking at the right
20 document here. It's a single page?

21 Q. Correct. It's a single page and
22 it's an excerpt from Exhibit 2015, Page 40. It's

1 just that single page.

2 And now I'm introducing it as new
3 Exhibit 1025 with the annotation of the red line
4 on Figure 3B.

5 Do you see that?

6 A. Yes, I do.

7 Q. Okay.

8 MR. ARJOMAND: So, just -- sorry
9 Ben, just to be clear, because the annotated
10 page doesn't have that Exhibit Number, but
11 that's the page that you're referring to as
12 Exhibit 1025, even though it's marked
13 currently at Exhibit 2015.

14 MR. ANGER: Yeah. We'll mark it at
15 the bottom, we will Bates Stamp it -- or
16 sorry, just designate it as 1025.

17 But, because it hasn't been
18 introduced into the IPR yet, it doesn't have
19 an exhibit and official number.

20 But I'm introducing it as new
21 Exhibit 1025 and it includes the existing
22 stamp of Exhibit 10 -- sorry, 2015, but

1 that's just because it's an excerpt from
2 Page 40 of Exhibit 2015.

3 So, hopefully that's clear for the
4 record.

5 MR. ARJOMAND: All right, thank you,
6 Ben.

7 MR. ANGER: Okay.

8 BY MR. ANGER:

9 Q. Dr. Wereley, do you understand that
10 this is just an excerpt from Exhibit 2015?

11 A. Yes, I do.

12 Q. Okay. And so, this is again showing
13 Figures 3A and 3B from the '003 application,
14 correct?

15 A. It appears to be, yes.

16 Q. Okay. And in Figure 3B, do you see
17 that there's a red line that's been added there?

18 A. Yes, I see that.

19 Q. And there, do you see that the
20 bottom portion of what we understand is the
21 second cylinder is not drawn consistently between
22 Figures 3A and 3B. Correct?

1 MR. ARJOMAND: Objection. Form.

2 THE WITNESS: So, this is an excerpt
3 from the Exhibit 2015, which means that that
4 cylinder labeled 24 is labeled as the outer
5 wall.

6 And I would, I would agree the
7 bottom of the outer wall shown in Figure 3A
8 is not at the location where that red line is
9 drawn in 3B.

10 BY MR. ANGER:

11 Q. Okay. And comparing that to
12 Figure 3A, you would agree then, that the
13 location of the inner cylinder also known as the
14 second cylinder is not the same as it is shown in
15 Figure 3B, right?

16 MR. ARJOMAND: Objection. Form.

17 THE WITNESS: So, Figure 3B -- well,
18 both of these figures are from Exhibit 2015,
19 the patent, or the application.

20 And in these, comparing Figures 3A
21 and 3B in these, in this figure that we're
22 looking at, the wall, the Outer Wall 24 is

1 longer in Figure 3B than it is, than it's
2 shown in Figure 3A.

3 BY MR. ANGER:

4 Q. Okay. So you are pointing to the
5 outer wall as being longer, correct?

6 MR. ARJOMAND: Objection. Form.

7 THE WITNESS: I'm pointing to the
8 Outer Wall 24 as having different lengths in
9 Figure 3A and 3B.

10 BY MR. ANGER:

11 Q. Okay. Can you think of any reason
12 why that would be the case?

13 MR. ARJOMAND: Objection. Form.

14 THE WITNESS: Yes, I can.

15 BY MR. ANGER:

16 Q. And what are those reasons?

17 MR. ARJOMAND: Objection. Form.

18 THE WITNESS: I would suspect when
19 Figure 3A was drawn, it was constructed from
20 Figure 3B, it was excised from some previous
21 version of 3B.

22 And the cut-and-paste operation, the

1 artist who did that ended at the bottom of
2 outer wall -- or sorry, Inner Wall 18 rather
3 than at the bottom of Outer Wall 24.

4 BY MR. ANGER:

5 Q. Okay. So, you would agree that the,
6 the location of the outer wall relative to the
7 inner wall is not consistent between Figure 3A
8 and 3B, right?

9 MR. ARJOMAND: Objection. Form.

10 THE WITNESS: The shown length of
11 Outer Wall 24 is not the same in Figures 3A
12 and 3B.

13 I would conclude, it is my opinion
14 that the difference between the two is not
15 significant, the invention being described.

16 BY MR. ANGER:

17 Q. And why is that?

18 MR. ARJOMAND: Objection. Form.

19 THE WITNESS: The length of the
20 outer wall in Figure 3A is still long enough
21 that it contains the Inner Wall 18 within it.

22 BY MR. ANGER:

1 Q. Okay. But these are supposed to be
2 the same cap, correct? In Figures 3A and 3B?

3 MR. ARJOMAND: Objection. Form.

4 THE WITNESS: So, the first sentence
5 of Paragraph 75 describes that sample
6 collection 200 is shown by way of example in
7 Figures 3A through 3C. Let's see.

8 So, Figure 3A shows a cross-section.

9 I would interpret that the intention
10 of the, the intention of Figure 3, Figure 3
11 is to show multiple views of the same device.

12 But, that they have slight
13 immaterial differences among the three.

14 BY MR. ANGER:

15 Q. Okay. Let's perhaps come back to
16 this.

17 MR. ANGER: Let's go ahead and bring
18 up Exhibit 2022, an exhibit that was previously
19 marked as Exhibit 2022.

20 (Previously marked
21 Exhibit 2022, first referral.)

22 THE WITNESS: Okay. I see that.

1 BY MR. ANGER:

2 Q. All right. Are you familiar with
3 this exhibit, Dr. Wereley?

4 A. Yes, I have reviewed this.

5 Q. And what is it?

6 A. Offhand, I -- I guess I don't want
7 to read into the record what it's described as.

8 My understanding is it's an
9 application for the -- for the invention we have
10 been discussing.

11 Q. Okay. Why don't we set the stage.

12 Why don't we go back to your
13 declaration and -- sorry, one second here. Okay.

14 Yes, back in your declaration, let's
15 turn to Paragraph 19, which is on Page 8.

16 A. Okay. I'm there.

17 Q. And then, near the bottom of that
18 paragraph, it says, "The '632 patent also claims
19 priority to U.S. Provisional Application
20 Number 61/498584," and then in parentheses says
21 Exhibit 2022.

22 Do you see that?

1 A. I do see that.

2 Q. And that is referred to as the '584
3 application, correct?

4 A. Yes.

5 Q. Okay. And then if we turn to
6 Page 18 of your declaration, there's a table that
7 begins at the bottom of the page, correct?

8 Are you there?

9 A. Yes, I am.

10 Q. Okay. And that's the substitute
11 independent claim as shown in the right column,
12 that's Claim 21, right?

13 A. Sorry, could you repeat that?

14 Q. The substitute independent claim is
15 shown in the left column?

16 A. That's correct.

17 Q. Okay. And then in the right
18 column --

19 A. When I asked you to repeat, I think
20 you said right column, but that's why I was
21 asking you to repeat it.

22 Q. Thank you. You're right. I

1 misspoke earlier.

2 And then in the right column it
3 states, "Supporting the '584 application
4 Exhibit 2022," and then the '003 application,
5 2015, right?

6 A. I see that.

7 Q. Okay. So, you have cited to both
8 Exhibit 2022 and Exhibit 2015 as support for the
9 limitations recited in independent Claim 21,
10 right?

11 A. Yes.

12 Q. And then if we turn to Page 19, it
13 looks like it's actually a carryover from Page 18
14 and 19 but there's a section there in the
15 right-hand column, it says "First cylinder and
16 second cylinder are housed within the boundaries
17 of the outer wall."

18 Do you see that?

19 A. Yes, I do.

20 Q. And it cites to Exhibit 2015 and
21 lists some paragraphs and then lists Figure 3A
22 to 3B.

1 Do you see that?

2 A. I do.

3 Q. And it also lists Exhibit 2022 and
4 some page numbers and then Figures 3A to 3B?

5 A. Yes, I see that.

6 Q. Okay. Good. So, are you okay if we
7 refer to Exhibit 2022 as the '584 application?

8 A. Yes.

9 Q. Okay. And then let's go back to
10 the '584 application, Exhibit 2022.

11 A. Okay.

12 Q. And I will have you turn to Page 16,
13 according to the stamped page number?

14 A. Okay. I am there.

15 Q. Okay. Dr. Wereley, do you see
16 Figures 3A and 3B on this page?

17 A. I do see that.

18 Q. And these are the Figures 3A and 3B
19 that you were citing as support for amended
20 independent Claim 21, correct?

21 A. Yes. That's correct.

22 Q. And you see that these Figures 3A

1 and 3B are hand drawn, right?

2 A. I do notice that, yes.

3 Q. Okay. And so you would agree that
4 these hand-drawn figures lack any sort of
5 precision and specificity, correct?

6 MR. ARJOMAND: Objection. Form.

7 THE WITNESS: They did not have the
8 preciseness that I would expect with, you
9 know, an engineering drawing.

10 BY MR. ANGER:

11 Q. Okay. And would you characterize
12 Figure 3A and 3B in Exhibit 2015 the same way
13 that they don't have the preciseness that you
14 would expect with an engineering drawing?

15 MR. ARJOMAND: Objection. Form.

16 THE WITNESS: Figure 3A and 3B in
17 Exhibit 2015 are also exemplars of a -- of a
18 sketch meant to show the, how the relative
19 components are arranged in the description
20 of, in their descriptions.

21 They're not engineering drawings
22 with tolerances and dimensional lines.

1 But, they are meant to be sketches
2 of how the components relate to each other.

3 MR. ARJOMAND: Ben, just so we're
4 clear, your question was directed to
5 Exhibit 2015, but what's being shown is
6 Exhibit 2022.

7 MR. ANGER: Yes. My question was
8 about 2015. We can bring that back up if you
9 would prefer. Let's do that. And let's go
10 to figures 3A and 3B again. Okay.

11 BY MR. ANGER:

12 Q. So, just to clarify, Dr. Wereley,
13 you agree that Figures 3A and 3B shown in
14 Exhibit 2015 are not engineering drawings with
15 tolerances and dimensional lines, right?

16 MR. ARJOMAND: Objection. Form.

17 THE WITNESS: Figures 3A and 3B from
18 Exhibit 2015 are not engineering drawings.

19 BY MR. ANGER:

20 Q. Okay. And so they lack tolerances
21 and dimensional lines, correct?

22 A. Yes, I don't see --

1 MR. ARJOMAND: Objection. Form.

2 Objection, form.

3 THE WITNESS: I don't see in
4 Figure 3A and 3B tolerances or dimensional
5 lines.

6 BY MR. ANGER:

7 Q. Okay. And without tolerances and
8 dimensional lines, you're not able to tell the
9 relative size of one component to another,
10 correct?

11 MR. ARJOMAND: Objection. Form.

12 THE WITNESS: These drawings, 3A
13 and 3B in Exhibit 2015, are meant to show the
14 relationship among the various components of
15 those -- of the drawings, but not necessarily
16 indicate their precise sizes.

17 BY MR. ANGER:

18 Q. Okay. And let's go back to
19 Exhibit 2022, Figures 3A and 3B.

20 A. Okay.

21 Q. And again, this is the '584
22 application which the '632 patent claims priority

1 to.

2 And so here also you would agree
3 that Figures 3A and 3B in Exhibit 2022 show a
4 relationship between various components of the
5 drawings but do not indicate their precise sizes,
6 correct?

7 MR. ARJOMAND: Objection. Form.

8 THE WITNESS: This, this sketch is
9 intended to show the relationship among the
10 components of the device, but not necessarily
11 their precise sizes.

12 MR. ANGER: Okay. And similar to
13 how we looked at an excerpted version of
14 Figure 3A and 3B in Exhibit 2015, I'm going
15 to do the same thing here and introduce a new
16 exhibit, which is an excerpted page, and that
17 will be marked as new exhibit -- sorry, new
18 Exhibit 1026.

19 And that should be available in the
20 box soon. If I can get Mr. Marte to include
21 it there?

22 THE VIDEOGRAPHER: Is that the one

1 that says U.S. App 61?

2 MR. ANGER: Correct.

3 THE VIDEOGRAPHER: Got it.

4 (Exhibit 1026 marked for
5 identification.)

6 THE WITNESS: Sorry, I see U.S.
7 App 61, but it's labeled as Exhibit 2022. Is
8 that correct? I thought you said 2026.

9 THE VIDEOGRAPHER: So that, if you
10 refresh the page, you should -- you should
11 see the excerpt.

12 THE WITNESS: Oh, yeah. Okay. Now,
13 I see it. Okay. I've got it.

14 BY MR. ANGER:

15 Q. Dr. Wereley, do you see that this
16 new Exhibit 1026 has been annotated with red
17 lines along the opening of the cap shown in
18 Figures 3A and 3B?

19 A. Yes, I do.

20 Q. Okay. And do you see that in
21 Figure 3A, the bottom of the inner cylinder there
22 has a upwards slope going left to right relative

1 to the red line that has been added?

2 MR. ARJOMAND: Objection. Form.

3 THE WITNESS: I see that the, the --
4 and we're talking about Figure 3A, correct?

5 BY MR. ANGER:

6 Q. Yeah.

7 A. So, Figure 3A does show a slight
8 upward angle to the inner Cylinder 5.

9 Q. Okay.

10 MR. ARJOMAND: Ben, before we go
11 further, I just want to state for the record
12 that we object to Exhibits 1025 and 1026 to
13 the extent that the annotations are not
14 accurate.

15 I'm just making the objection for
16 the record.

17 MR. ANGER: Okay. I'm not sure I
18 understand your objection. Your objection is
19 to the extent the annotations are not
20 accurate compared to what?

21 MR. ARJOMAND: Sure. For example,
22 whether the drawings -- sorry, for example,

1 whether the lines are drawn accurately as
2 straight or not, specifically the red lines.

3 MR. ANGER: Okay.

4 MR. ARJOMAND: It's just because we
5 don't, I don't have the document in hand,
6 it's hard for me to tell the accuracy of the
7 red lines.

8 So, I just want to make that
9 objection --

10 MR. ANGER: Okay.

11 MR. ARJOMAND: -- to 1025 and 1026,
12 just for the record.

13 MR. ANGER: Noted. Noted.

14 So, your concern is whether the
15 annotated red lines there are horizontal or
16 not; is that right?

17 MR. ARJOMAND: Exactly.

18 MR. ANGER: All right. Noted.

19 BY MR. ANGER:

20 Q. Okay. So, Dr. Wereley, I guess my
21 question is, you would agree that Figures 3A
22 and 3B are not drawn consistently between the

1 two, right?

2 MR. ARJOMAND: Objection. Form.

3 THE WITNESS: First off, I have an
4 additional concern with this figure and not
5 knowing its providence.

6 Oftentimes, copies of figures or
7 printouts will have the -- the whole page
8 rotated.

9 And so, I guess without knowing the,
10 where this figure came from, I don't know
11 if -- if the whole figure is turned in the,
12 in the printout of the application, or if the
13 angle comes from the original drawing.

14 BY MR. ANGER:

15 Q. Okay. That's fine. Why don't we
16 just take a look at Exhibit 2022 on the left, the
17 unannotated versions of Figure 3A and 3B.

18 Does it appear to you that the inner
19 cylinder has an upwards slope going left to right
20 in Figure 3A?

21 MR. ARJOMAND: Objection. Form.

22 THE WITNESS: Well, I have a similar

1 concern about this.

2 Whether the -- so, now I am looking
3 at Exhibit 2022 and have a similar concern
4 about whether the, whether the document is --
5 what the source of the document was.

6 So, if it's a digital document, then
7 horizontal is horizontal.

8 If it's scanned in or it has some
9 other origin, then it could be inclined, it
10 could be an angle.

11 BY MR. ANGER:

12 Q. I can represent that this is the
13 exhibit that your counsel served as part of its
14 case here in the motion to amend.

15 So, I have just taken the digital
16 version that we received and are using it.

17 A. So, let's say -- I would say that
18 there, in the orientation in which we're looking
19 at these figures, there is, appears to be -- a,
20 the inner Cylinder 5 in Figure 3A seems to move
21 or proceed --

22 The bottom surface of the inner

1 Cylinder 5 seems to slope upwards and to the
2 right in the way that it is sketched.

3 Q. Okay. And would you agree that
4 Figures 3A and 3B are not consistent -- strike
5 that.

6 Are not drawn -- strike that.

7 Would you agree that Figures 3A
8 and 3B in Exhibit 2022 are not drawn consistently
9 between the two?

10 MR. ARJOMAND: Objection. Form.

11 THE WITNESS: In terms of the
12 question drawn consistently, I think they are
13 sketched consistently. They're meant to show
14 the same thing.

15 If I was drawing this and I wanted
16 them to be actually the same thing, I would
17 cut and paste it.

18 Q. Okay.

19 A. They don't seem to be cut-and-paste
20 copies of each other.

21 Q. Okay. So, just to clarify, you
22 would agree that the cap shown in figures --

1 strike that.

2 You would agree that the cap shown
3 in Figure 3A is drawn differently than the cap
4 shown in Figure 3B, right?

5 MR. ARJOMAND: Objection. Form.

6 THE WITNESS: Figure 3B is meant to
7 show outer Cylinder 10, or Outer Wall 10 in
8 the upper position.

9 And in Figure 3A it's in the lower
10 position. So, they are necessarily
11 different.

12 BY MR. ANGER:

13 Q. Right. Okay.

14 But, if we're talking about the same
15 components in Figure 3A and 3B, you would agree
16 that the same component shown in Figure 3A and 3B
17 are drawn differently in those figures, right?

18 MR. ARJOMAND: Objection. Form.

19 THE WITNESS: So, if I consider,
20 say, the outer wall, which is labeled two, it
21 isn't exactly a cut-and-paste copy in
22 Figure 3A and 3B.

1 BY MR. ANGER:

2 Q. Okay. So, the outer wall is not
3 drawn consistently between Figures 3A and 3B,
4 right?

5 MR. ARJOMAND: Objection. Form.

6 THE WITNESS: The question, I guess
7 I would ask for further clarification on
8 "consistently."

9 The outer wall in Figure 3A and 3B
10 are meant to represent the same thing.

11 BY MR. ANGER:

12 Q. And the outer wall in Figure 3A
13 and 3B, despite meaning to represent the same
14 thing, are not drawn consistently between the two
15 figures, correct?

16 MR. ARJOMAND: Objection. Form.

17 THE WITNESS: I have to come back to
18 the word "consistently."

19 They are consistent sketches.
20 They're meant to represent the same thing and
21 they show essentially the same thing with
22 variations to allow for the accuracy of

1 sketches between Figure 3A and 3B.

2 BY MR. ANGER:

3 Q. Okay. But you would agree that
4 Figures 3A and 3B lack precision, correct?

5 MR. ARJOMAND: Objection. Form.

6 THE WITNESS: I would suggest that
7 the precision they exhibit is typical of a --
8 of an engineer -- of a -- of a hand sketch.

9 BY MR. ANGER:

10 Q. Okay. We can set that aside.

11 A. Okay.

12 Q. I would like to go back to
13 Exhibit 2014, and that's your declaration that
14 you submitted in this case.

15 A. Okay.

16 Q. Let's go to Page 21.

17 A. Okay.

18 Q. Okay. So we looked at paragraph --
19 I'm sorry, give me one second.

20 Okay. I apologize.

21 So, Page 21, this is where you
22 discuss Ground 1, and you indicate there that

1 substitute independent Claim 21 is patentable
2 over Plante in view of Cho, correct?

3 MR. ARJOMAND: Objection. Form.

4 BY MR. ANGER:

5 Q. I'm just looking at the heading
6 there for Roman Numeral VIII.

7 A. Yes, that's the subject of this, the
8 next section of this report.

9 Q. Okay. And you say that the
10 combination of Plante and Cho does not teach all
11 of the features of substitute independent
12 Claim 21, right?

13 A. Yes. That's Heading A under
14 Roman VIII.

15 Q. Okay. And earlier you testified
16 that you considered the differences between the
17 prior art and the claimed subject matter,
18 correct?

19 A. Yes, I did.

20 Q. And Dr. Wereley, what is the
21 difference between the Cho reference and the
22 claim subject matter?

1 MR. ARJOMAND: Objection. Form.

2 THE WITNESS: Are you asking for a,
3 you know, an enumerated list of the
4 differences between Cho and the claimed, or
5 sorry, the Exhibit 2014 -- not 2014, sorry,
6 the amended language in the '632 patent?

7 BY MR. ANGER:

8 Q. You know what, maybe that's not fair
9 to you. Let me ask a different question.

10 So, I'll actually point you to
11 Paragraph 39, and give you a minute to review
12 that.

13 A. Okay. Ready.

14 Q. So, starting part way through the
15 first sentence, it says, "The inner cylinder
16 component, Slider 636, which extends beyond the
17 boundaries of Inner Cap 634 and into the mouth of
18 the Bottle Body 610." And then it continues from
19 there.

20 Do you see that?

21 A. I see that, yes.

22 Q. Is that one of the differences that

1 you've identified between the prior art and the
2 claimed subject matter?

3 MR. ARJOMAND: Objection. Form.

4 THE WITNESS: Yes, it is.

5 BY MR. ANGER:

6 Q. Okay. And have you identified any
7 other differences between Cho and the claimed
8 subject matter?

9 MR. ARJOMAND: Objection. Form.

10 THE WITNESS: The question is, have
11 I identify any other differences between Cho
12 and the amended '632? Yes.

13 BY MR. ANGER:

14 Q. Okay. Where have you identified
15 other differences between Cho and the claimed
16 subject matter?

17 A. So, with a, let's say constructing a
18 non-exhaustive list.

19 So, one, another difference that
20 comes to mind between Cho and the amended
21 language in the '632 patent, is that they are
22 pointing to different, or they describe being

1 used in difference scenarios.

2 So, Cho talks about beverage
3 containers and chemical containers, and the
4 application area for the '632 patent is sample
5 collection device.

6 Q. Okay. Any other differences?

7 MR. ARJOMAND: Objection. Form.

8 THE WITNESS: Yes. But from memory
9 I'm not going to create a, an enumerated
10 list.

11 BY MR. ANGER:

12 Q. Okay.

13 A. They are detailed in my -- my
14 declaration.

15 Q. Let's go to Paragraph 68. It looks
16 like that's on Page 43.

17 A. Wait, wait a sec, I'm sorry. Did
18 you say Paragraph 43? No. Paragraph 68 on
19 Page 43.

20 Q. Correct.

21 A. Okay. Sorry, I was -- was a bit, I
22 couldn't locate it there for a second. Okay. Go

1 ahead.

2 Q. Okay. So, here on Page 43, it's the
3 beginning of a section titled A POSITA Would Not
4 Have a Reasonable Expectation of Success
5 Substituting Plante's Cap With Cho's Cap.

6 Correct?

7 A. Yes.

8 Q. Okay. And then if we jump down to
9 Paragraph 70, you state, "Plante's cap is
10 designed to minimize contamination."

11 Do you see that?

12 A. Yes, I do.

13 Q. How is Plante's cap designed to
14 minimize contamination?

15 MR. ARJOMAND: Objection. Form.

16 THE WITNESS: So, Plante's cap is
17 designed to -- is low and flat.

18 It's a short squat cylinder in which
19 the user would be likely to pick it up from
20 the sides of the cylinder labeled 14, and not
21 from the top and the bottom of the cylinder
22 where a user might contaminate a sample with

1 their, anything they happen to have on their
2 hands.

3 BY MR. ANGER:

4 Q. Okay. Thanks.

5 And I believe here you state that
6 "Plante's reservoir protrudes only slightly
7 beyond Plante's cap." Correct?

8 A. Yes. I state that there.

9 Q. Okay. And, then you conclude that,
10 "This significantly reduces the risk that an
11 individual would touch the film." Correct?

12 MR. ARJOMAND: Objection. Form.

13 THE WITNESS: I do go on to state,
14 "This significantly reduces the risk that an
15 individual would touch the film."

16 BY MR. ANGER:

17 Q. Okay. And you're referring there to
18 the fact that the reservoir protrudes only
19 slightly beyond Plante's cap, right?

20 MR. ARJOMAND: Objection. Form.

21 THE WITNESS: From the previous
22 sentence I observe that Plante's reservoir

1 protrudes only slightly beyond Plante's cap.

2 BY MR. ANGER:

3 Q. And based on that, you say that this
4 significantly reduces the risk that an individual
5 would touch the film, right?

6 MR. ARJOMAND: Objection. Form.

7 THE WITNESS: So, the sentence
8 beginning, "This significantly," immediately
9 follows the one in which I observed that the
10 construction of Plante's cap, a reservoir,
11 protrudes only slightly beyond Plante's cap.

12 Which, in this sentence beginning
13 "This significantly," I'm referring to the
14 previous sentence about the construction of
15 the reservoir and protruding only slightly
16 beyond the cap.

17 BY MR. ANGER:

18 Q. Okay. So, a reservoir does not need
19 to be housed entirely within the cap to be able
20 to significantly reduce the risk that an
21 individual would touch the reservoir, correct?

22 MR. ARJOMAND: Objection. Form.

1 THE WITNESS: I would say the way
2 that this reservoir is constructed, only
3 protruding slightly beyond the boundaries of
4 the cap, render it as, render that, or create
5 the situation where the risk of an individual
6 touching it is significantly reduced.

7 MR. ANGER: Okay. I don't have any
8 further questions at this time, but reserve
9 the right for any recross, should your
10 counsel do any redirect testimony.

11 MR. ARJOMAND: Great. Let's take a
12 quick break and I can take a look at my notes
13 and we can get back on the record after I do
14 that.

15 THE WITNESS: When should we --
16 should I wait for a communication from you
17 all or should I --

18 MR. ARJOMAND: Yeah.

19 THE WITNESS: -- be back at a
20 certain time.

21 MR. ANGER: Just wait for a
22 communication from us.

1 THE WITNESS: I will wait for
2 somebody on my headset. Okay.

3 THE VIDEOGRAPHER: The time
4 is 12:15 p.m. Off the record.

5 (Recess taken -- 12:15 p.m.)

6 (After recess -- 12:32 p.m.)

7 THE VIDEOGRAPHER: The time
8 is 12:32 p.m. Back on the record.

9 MR. ARJOMAND: We have no questions
10 for Professor Wereley.

11 I believe this concludes the
12 deposition.

13 THE VIDEOGRAPHER: Okay. This marks
14 the end of today's deposition.

15 The time is 12:33 p.m.

16 (Whereupon, signature not having
17 been waived, the deposition suspended at
18 12:33 p.m. EST)

19 * * *

20

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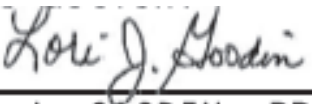
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19 My Commission expires: September 9, 2025

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22 My Commission expires: April 5, 2025

1 Professor Steve Wereley, c/o
2 MORRISON & FOERSTER LLP
3 707 Wilshire Boulevard, Suite 6000
4 Los Angeles, California 90017

5
6 Case: Spectrum Solutions LLC v. DNA Genotek Inc.
7 Date of deposition: September 10, 2024
8 Deponent: Professor Steve Wereley

9
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11 I do hereby acknowledge that I have read
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11 Page No. Line No. Change
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