

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON AT SEATTLE

EKO BRANDS, LLC,	)	
	)	
Plaintiff,	)	CASE NO. C15-522-JPD
	)	
v.	)	SEATTLE, WASHINGTON
	)	June 6 & 7, 2018
ADRIAN RIVERA MAYNEZ	)	
ENTERPRISES, INC.;	)	TRIAL TESTIMONY OF
and ADRIAN RIVERA,	)	LAURENS HOWLE
	)	
Defendants.	)	
	)	

VERBATIM REPORT OF PROCEEDINGS
BEFORE THE HONORABLE JAMES P. DONAHUE
UNITED STATES MAGISTRATE JUDGE

APPEARANCES:

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1 June 6, 2018

4:15 p.m.

2 PROCEEDINGS

3 MR. LOWE: All right. At this time, Your Honor, I'd
4 like to call Dr. Laurens Howle, please.

5 THE COURT: Dr. Howle, will you step forward, please?
6 LAURENS HOWLE, HAVING BEEN FIRST DULY SWORN,
7 TESTIFIED AS FOLLOWS:

8 THE COURT: Dr. Howle, come on back here, and take a
9 seat. Help yourself to a glass of water. When you're seated
10 and comfortable, my first question to you will be to state
11 your name and to spell your last name for the court reporter.

12 THE WITNESS: My name is Laurens Edward Howle,
13 H-o-w-l-e.

14 THE COURT: Mr. Lowe, you may begin direct
15 examination.

16 MR. LOWE: Thank you, Your Honor.

17 DIRECT EXAMINATION

18 BY MR. LOWE:

19 Q Good afternoon, Mr. Howle.

20 A Good afternoon.

21 Q Thank you for your patience this week.

22 What is your profession?

23 A I'm a mechanical engineering professor at Duke University.
24 I'm also -- I'm sorry -- an associate professor of mechanical
25 engineering at Duke University; also an associate professor

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1 of radiology at the Duke University Medical Center, as well
2 as an associate professor of marine science and conservation
3 at the Duke University marine lab.

4 Q Can you please provide the jury with some background of
5 your relevant technical training and education?

6 A Sure.

7 I have BSE, a master's, and Ph.D. degrees all in
8 mechanical engineering and materials science, and all from
9 Duke University. In addition, I worked at K Products, which
10 is a manufacturing company that makes physical therapy
11 equipment, supportive equipment for handicapped children,
12 from approximately '83 to '89. And at K Products, I was the
13 vice president of manufacturing and the plant manager, so I
14 was in charge of all phases of the manufacturing process; in
15 raw materials sourcing and scheduling; inventory,
16 maintenance, line balancing; human resources. I had 20 to 30
17 direct reports; and as well as physical maintenance of the
18 plant.

19 Q After K, what did you do?

20 A In about '93, I went back to Duke University, and I began
21 a position as an assistant professor of mechanical engineer
22 and materials science.

23 And then in 2000, I was tenured and promoted to associate
24 professor of mechanical engineering and materials science,
25 and I still hold that position today.

1 Q So in addition to your work at Duke, you ran BellQuant as
2 a consultant?

3 A That's right. I've been a consulting mechanical engineer.
4 I am a licensed professional engineer. I've been consulting
5 for, roughly, 20 years. And in 2008, I started BellQuant
6 Engineering, which is a North Carolina licensed and based
7 engineering consulting firm.

8 Q And have you received any awards in academia or otherwise?

9 A Yes. In about 2012, I was elevated to fellow of
10 mechanical engineering and materials science. Also, in 2011,
11 a new-product award was given at the MCEE show in Montreal
12 for a product I developed. And in 2009, I was a finalist for
13 the INDEX Design Award, and INDEX Design is a Danish
14 nonprofit that, really, is the world's leading design award.

15 Q Now, Dr. Howle, do you have prior experience specifically
16 in the area of coffee filter products at issue in this case?

17 A Yes, quite a bit of experience, really, since 2014, when I
18 was first engaged by Solofill. And what you've heard is the
19 ITC proceeding. That's the ITC '929 action that many people
20 have talked about. I worked with Solofill in that. I also,
21 in, I think it was 2015, was engaged any Eko Brands and
22 Espresso Supply for the case that we're sitting on today.

23 I was also retained again by Eko Brands for an action
24 that's ongoing in the Central District of California.

25 So I have quite a bit of experience using the capsules

1 that are at question in this trial today.

2 Q And, Dr. Howle, do you have specific experience in testing
3 and evaluating reusable coffee cartridges, filters, and the
4 like?

5 A Quite a bit. I've set up a laboratory as a result of my
6 various court cases. I measure extraction strength using
7 refractometry according to the guidelines set forth by the
8 SCAA, which is the Specialty Coffee Association of America.
9 They set forth guidelines for measuring extractions so you
10 can tell if coffee is under-extracted, ideal, or
11 over-extracted.

12 I've also set up thyration tests, where you can measure
13 concentration of trimethylxanthine, which is commonly known
14 as caffeine. Right?

15 So quite a bit of experience. I've done hundreds of tests
16 with all the units at issue in this case, many other units
17 not available or not discussed in this case. I've read all
18 of the prior art in this case, and much other prior art;
19 dozens of papers from the scientific peer-reviewed literature
20 from journals like the *Journal of Food Science*, *Journal of*
21 *Food Safety*, and others.

22 Q Dr. Howle, are you being compensated for your efforts in
23 this case?

24 A Yes, I am.

25 Q And is your compensation dependent upon your opinions or

1 the outcome of this case?

2 A It is not.

3 MR. LOWE: At this point, Your Honor, we offer
4 Dr. Howle as an expert in the area of coffee filter products
5 and the obviousness of the Rivera '320 Patent.

6 THE COURT: Any objection?

7 MR. KUNDU: No objection, Your Honor.

8 THE COURT: Once again, ladies and gentlemen of the
9 jury, what that means is that Dr. Howle is able to give an
10 opinion and is designated as an expert by virtue of his
11 education, his background, and his training, and that, as I
12 said, permits him to offer opinions.

13 Q (By Mr. Lowe) Because it's relevant to the analysis we're
14 going to go through here, I'd like to refer you back to the
15 ITC proceeding that you were involved in. And you're
16 familiar with that?

17 A Yes.

18 Q And with respect -- I'd like to focus you. At issue in
19 this case, as you know, are two claims, Claim 8 and Claim 19
20 of the ARM '320 patent, with respect to whether they're
21 invalid as obvious, and that necessarily implicates Claim 5
22 and Claim 18, which are independent claims. You recall that?

23 A Yes, I recall.

24 Q Okay.

25 So in the ITC proceeding, did the ITC reach any

1 conclusion as to the validity of independent Claim 5 or
2 independent Claim 18?

3 A They actually ruled that those are invalid claims.

4 Q And can you be more specific about the reasons why the ITC
5 ruled those two claims to be invalid?

6 A They found that they were anticipated by various prior art
7 references.

8 Q And is there any other reason why they found that they
9 were invalid?

10 A For lack of written description.

11 Q And do you know if that ITC decision was appealed to the
12 Federal Circuit?

13 A I believe it was, yes.

14 Q And do you know the outcome of the Federal Circuit's
15 review of that decision?

16 A They came to the same conclusions.

17 Q With respect to Claim 5 and 18?

18 A Yes, correct.

19 Q Okay.

20 Now, I think, for the benefit of the jury, at this
21 point I'd like to ask you to explain the standard of
22 obviousness that you applied in this case, and I think we
23 have some demonstrative slides that will assist you. This
24 isn't supposed to be a memory test.

25 But can you please explain to the jury what standards

1 you applied as you performed the analysis you're going to
2 describe to them?

3 A Sure.

4 So a patent is invalid if the differences between the
5 claimed subject matter and the prior art are such that the
6 claimed subject matter, as a whole, would have been obvious,
7 at the time the invention was made, to a person of ordinary
8 skill in the art.

9 Q Dr. Howle, let me interrupt you at this point.

10 MR. LOWE: For these demonstrative slides, we ask to
11 publish them to the jury.

12 THE COURT: Any objection?

13 MR. KUNDU: We haven't seen copies of the slides.

14 MR. LOWE: I thought we provided them. We're happy
15 to do that, Your Honor. They're demonstrative slides.

16 THE COURT: Please show them, and then you can take a
17 look, and let me know if you have any objections.

18 MR. LOWE: Your Honor, given that we're about to
19 break, what I may suggest is, I'll finish this small section
20 before we publish, and then we'll do it offline before
21 tomorrow.

22 THE COURT: One more time?

23 MR. LOWE: Sorry.

24 Because we're getting close to the end of the day, if
25 you'd like, I'll finish this section without publication.

1 THE COURT: That would be the best thing to do.
2 Let's take it off the ELM0, if you will.

3 MR. LOWE: Is it okay for the witness to have his own
4 slides? We won't publish them to the jury yet.

5 THE COURT: Do you have any problem with that?

6 MR. KUNDU: No objection.

7 Q (By Mr. Lowe) Dr. Howle, in this analysis of determining
8 obviousness, what is required for you to -- for a person to
9 evaluate?

10 A Sure.

11 There are four different things that need to be
12 considered. First is the scope and the content of the prior
13 art; second is the differences, if any, between the claimed
14 invention and the prior art; third is the level of ordinary
15 skill in the art; and fourth is whether the differences are
16 such that the claimed invention, as a whole, would have been
17 obvious to one of ordinary skill in the art at the time the
18 invention was made.

19 Q And with respect to this notion of a level of ordinary
20 skill in the art, do you have any understanding of what that
21 is to be applied in this case?

22 A Yes. I understand that the parties have agreed upon that.

23 Q And can you explain to the jury what that is?

24 A Sure.

25 It's a person having education and training in

1 engineering and food science. This person would have a
2 background in the design of mechanical and hydraulic
3 systems/machines, understanding of materials from the
4 perspective of food safety, as well as mechanical properties
5 and manufacturability, and the understanding of the nuances
6 of the extraction of flavor, caffeine, and color from
7 brewable materials, such as coffee or tea.

8 One example of such a person would be somebody trained as
9 a design engineer or engineering designer. The knowledge of
10 brewable materials would typically be found in a person
11 trained in beverage product development or food science.
12 Industry experience of five years or more in the detailed
13 design and development of beverage brewing and dispensing
14 machines would be equivalent to the formal education
15 described here.

16 Q And, Dr. Howle, did you consider the question of
17 obviousness from the perspective of a person of ordinary
18 skill in the art, as you've just explained and has been
19 agreed by the parties?

20 MR. KUNDU: Your Honor, I'm going to object; outside
21 the scope.

22 THE COURT: Outside the scope of? The objection is
23 overruled.

24 MR. KUNDU: Well, Your Honor, may I explain? It's
25 based on the level of -- of ordinary skill in the art.

1 THE COURT: Your objection is not clear to me. I
2 guess I do need some explanation.

3 MR. KUNDU: The level of ordinary skill in the art
4 applied in Dr. Howle's expert report is different than the
5 level of ordinary skill in the art that the parties have
6 stipulated to; substantively different.

7 THE COURT: The witness has --

8 MR. KUNDU: So, Your Honor, the opinions he submitted
9 during this case applies to a different level of ordinary
10 skill, which percolates throughout the obviousness analysis.

11 MR. LOWE: If I may, Your Honor?

12 I disagree completely. He applied the level of ordinary
13 skill. Even though the parties agreed to this, this is the
14 same perspective that he's applied throughout his analysis
15 that he'll present to the jury. He just testified to that.

16 MR. KUNDU: Your Honor, I can read it to you. I have
17 the level of ordinary skill he applied in his expert report.
18 It's completely different.

19 THE COURT: What is the stipulation in the -- what is
20 the agreed jury instruction say compared to what you just
21 have?

22 MR. LOWE: It's identical.

23 MR. KUNDU: And I can -- what he had in his report is
24 completely different.

25 THE COURT: If he is using his report, then you can

1 cross-examine him on the report. And you can
2 cross-examine -- use that as a basis of cross-examining him,
3 to the extent that these differences make any difference.

4 So to that extent, the objection is overruled. You can go
5 ahead.

6 MR. LOWE: Thank you, Your Honor.

7 Q (By Mr. Lowe) And then, Dr. Howle, what other legal
8 standards did you apply in this case as you performed your
9 analysis?

10 A All right. I understand that a combination of old,
11 familiar elements, according to known methods, is likely to
12 be obvious when it does no more than yield predictable
13 results. Additionally, predictable variations of a work from
14 one field are likely to be obvious, even if the variation is
15 in another field.

16 Where a technique has been used to improve a device, use
17 of the same technique to improve the similar devices is
18 likely obvious. If there existed at the time of the
19 invention a known problem for which there was an obvious
20 solution, a patent claim encompassing that solution is
21 invalid.

22 Inquiry is not limited to just the prior art references
23 being applied but includes the knowledge and understanding of
24 one of ordinary skill.

25 Q Now, and finally, is there anything else that you applied

1 to the standards in this case?

2 A I also applied a ruling by the U.S. Supreme Court.

3 When a work is available in one field of endeavor,
4 design incentives and other market forces can prompt
5 variations of it, either in the same field or a different
6 one.

7 To determine whether there was an apparent reason to
8 combine the known elements in a fashion claimed by the patent
9 at issue, look to interrelated teachings of multiple patents,
10 the effect of demands of known -- I'm sorry -- the effects of
11 demands known to the design community or those present in the
12 marketplace, background knowledge possessed by a person
13 having ordinary skill in the art.

14 MR. LOWE: Your Honor, this may be a good breaking
15 point.

16 THE COURT: This seems likewise a great time for a
17 break. We've got the predicate for tomorrow's discussion set
18 up. So, ladies and gentlemen of the jury, I'm going to
19 dismiss you today. I'll again remind you of the need not to
20 talk about the case and not to do any independent research on
21 this matter.

22 I will also ask that you make sure that you be in at 8:45
23 in the morning so that you can sort of relax a little bit,
24 but then we can start promptly at 9:00. And with that,
25 you'll be dismissed for the evening, and I thank you.

1 June 7, 2018

9:02 a.m.

2 PROCEEDINGS

3 THE FOLLOWING PROCEEDINGS WERE HELD
4 IN THE PRESENCE OF THE JURY:

5 THE COURT: Good morning, ladies and gentlemen.
6 Please be seated.

7 Dr. Howle, I'll ask you to step forward, please, and
8 resume your place in the witness chair.

9 Okay. Mr. Lowe, you may resume. Dr. Howle, I'll remind
10 you you're still under oath.

11 MR. LOWE: Thank you, Your Honor.

12 LAURENS HOWLE, HAVING BEEN PREVIOUSLY SWORN,
13 TESTIFIED AS FOLLOWS:

14 DIRECT EXAMINATION continued

15 BY MR. LOWE:

16 Q Good morning, Dr. Howle. I'll try to refresh where we
17 were when we ended yesterday.

18 We had just got done talking about the standard to
19 applied in obviousness. Do you recall that?

20 A I do recall that.

21 Q Okay.

22 At this point, we've had a chance to share the
23 presentation slides.

24 MR. LOWE: And, Your Honor, at this point, we'd ask
25 to be able to publish those for purpose of this testimony.

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1 THE COURT: Any objection?

2 MR. KUNDU: Your Honor, some objections to the extent
3 that there's argument on slides.

4 THE COURT: That -- this is -- the slides themselves
5 are simply a device for allowing the jury to better
6 understand the witness's testimony. The objection will be
7 overruled. This will not be going in to the jury.

8 Q (By Mr. Lowe) If I could direct your attention to Slide
9 1, then, please, and we'll publish it for the jury.

10 All right. Dr. Howle, you set forth the factors in
11 the determination of obviousness. Have certain of these
12 factors already been agreed to by the parties in this case?

13 A Yes, they have. The scope and content of the prior art,
14 and also the level of ordinary skill.

15 Q Now, you outlined yesterday the level of ordinary skill to
16 be applied; is that correct?

17 A I did.

18 Q Was the level of ordinary skill in the art that you
19 identified in your report different in any material way from
20 the level of skill in the art agreed to by the parties in
21 this case, as you described it yesterday?

22 A They are not different in any material way.

23 Q Is the analysis that you performed in your report and the
24 conclusions that you've reached the same as what you've set
25 forth in your expert report and what you will testify about

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1 today?

2 A Yes.

3 Q All right.

4 Now, you indicated that the parties have agreed to the
5 scope and content of the prior art.

6 First, can you explain for the jury what "prior art"
7 means?

8 A It can be the references of, for example, of other patents
9 or information that would have been known to a person of
10 ordinary skill at the time the invention was made.

11 Q And directing you to Slide 5, please.

12 Can you please summarize the agreed relevant prior art
13 in this case?

14 And, again, as we've discussed, we can refer to just
15 the last three digits of the various patents.

16 A Absolutely.

17 So we're going to restrict prior art to Nordskog '775
18 [sic], Beaulieu '315, the admitted prior art to Mr. Rivera's
19 '320 Patent, Sweeney '989, Sylvan '189. And Sylvan is
20 incorporated into, actually, Beaulieu.

21 Q And is Sylvan also incorporated into the ARM '320 Patent?

22 A Yes, it is.

23 Q Okay.

24 And have you evaluated these prior art references from
25 the perspective of a person of ordinary skill in the art as

1 has been agreed by the parties?

2 A I have.

3 Q So what does that leave for your analysis for obviousness?

4 A So now we need only consider whether there are any
5 substantial or any differences between the invention and the
6 prior art.

7 Also, we need to look at if a person of ordinary skill
8 would have found those differences to be obvious at the time
9 the invention was made.

10 Q Now, can you describe the claims that are at issue in this
11 case, Claims 8 and 19 of the Rivera '320 Patent?

12 A Sure.

13 So Claims 5 and 18 are independent claims. Claim 8
14 depends from Claim 5, and Claim 19 depends from Claim 18, and
15 both of those dependent claims only add reusability to the
16 previous depending claims.

17 Q With reference to Slide 6, can you please provide an
18 overview of the technology of ARM or Mr. Rivera's '320 Patent
19 at issue?

20 A Sure.

21 As indicated, that's Figure 3A from the Rivera '320
22 Patent, and this is a device that's directed to a pod adapter
23 assembly for use in a single-serve beverage brewer. The pod
24 includes a filter material that accepts a brewer material, a
25 cover that sealingly engages, the cover has an opening, and

1 the pod adapter assembly is configured so that an outlet
2 probe does not puncture the filter of the pod.

3 Q Now, you indicated that Claims 8 and 19 add just the
4 element of reusability.

5 In the context of these claims and the technology we're
6 talking about, what does "reusable" mean?

7 A Well, it means it can be used more than once without being
8 disposed. In fact, that's really the basis of reusability:
9 Not to be disposed after a single use.

10 Q Now, did the court issue a claim construction order in
11 this case?

12 A Yes, it did.

13 Q And how, if at all, did you utilize that in your analysis?

14 A I applied the court's construed claims to my analysis.

15 Q And direct your attention to Slide 7.

16 Is this the definition provided by the court with
17 respect to the language of the claims that were relevant for
18 your analysis?

19 A It is, and this is what I applied.

20 Q And is it important to apply the terms, as defined by the
21 court, in your analysis?

22 A Absolutely.

23 Q And why is that?

24 A Because as a point of law, these are how the terms are to
25 be interpreted.

1 Q Now, were you present on Monday for the testimony of ARM's
2 technical expert, Mr. Phillips?

3 A Yes, I was.

4 Q Did you hear his testimony regarding whether or not he
5 applied the claim terms as set forth by the court -- all of
6 the claim terms as set forth by the court in his obviousness
7 analysis?

8 A I'm sorry?

9 Q Did you hear his testimony regarding whether or not he
10 applied the court's construction of the claim terms, for all
11 of them, in his obviousness analysis?

12 A I heard him apply some claim terms that were inconsistent
13 with these claims.

14 Q And is there any impact -- if someone applies claim terms
15 that are not those approved by the court in their analysis,
16 can it impact their conclusion?

17 A It can lead them to a wrong conclusion, actually.

18 Q Now, regarding the obviousness of Claims 8 and 19, we'll
19 start with an overview. What have you concluded?

20 A I found that both of those claims are obvious. For
21 example, they're obvious over Nordskog '772 by itself.
22 They're obvious over the combination of Nordskog '772 with
23 Sweeney '989, Beaulieu '315, Nordskog '772, Beaulieu '315,
24 Sweeney '989; also the admitted prior art in Rivera's '320
25 Patent, the Sylvan '189, Nordskog '772; also obvious over

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1 Rivera '320, the Sylvan '198, plus Sweeney '989.

2 Q That's a mouthful. But what we'll do, then, over the next
3 few minutes is, we'll go through each one of those so you can
4 explain how you reached that conclusion.

5 Now, next slide, please.

6 Now, this right here is to assist the jury, which, as
7 the court indicated at the outset of the testimony, will be
8 provided with verdict forms, which lay out the elements of
9 particular claims, whether it's independent Claim 5 or
10 independent Claim 18.

11 And then you recall what the court said; that only
12 certain bolded features are disputed. Is that your
13 understanding?

14 A Yes, that's my understanding.

15 Q So then in your analysis or your testimony today, will you
16 focus just on those elements which are still disputed?

17 A That's correct.

18 Q All right. Let's start with the Nordskog '772 Patent
19 regarding Claim 5 of the Rivera '320 Patent.

20 Can you first, please, explain, generally, the
21 invention of the Nordskog patent?

22 A Certainly.

23 It's a patent directed to a reusable container with a
24 prior art coffee maker. It's designed to be used in that
25 prior art coffee maker to replace the can that previously

1 would have been used in that prior art coffee maker. So it
2 replaces that single-use coffee can with a reusable
3 container. The device is inserted into the prior art
4 apparatus, so you don't need the single-use coffee can. And
5 it's has a reusable container, and it's figured not to be
6 perforated by the lower knives.

7 Q And did you compare the Nordskog '772 Patent, what was
8 disclosed there, with the disputed elements of independent
9 Claim 5 of ARM's '320 Patent?

10 A I did.

11 Q And what did you conclude?

12 A I concluded that all of the elements -- the disputed
13 elements are present in the Nordskog '772 patent.

14 Q All right. So let's go through each of those elements as
15 efficiently as we can.

16 Next screen, please. Next slide.

17 All right. The first disputed element was a brewing
18 chamber. Can you explain why you believe that was disclosed
19 in Nordskog?

20 A Well, certainly.

21 I applied the court's construction for that, and the
22 court's construction includes an open-top or an open-bottom
23 container, and it does not need to be fully enclosed. So
24 there's a brewing chamber, and that's going to be the space
25 between 48 and 50, when those are in a closed configuration.

1 This is shown in an open configuration.

2 Q Is that what I've circled, generally?

3 A That's correct.

4 Q All right. Now let's go to the next figure, please, or
5 the next element.

6 A container disclosed within the brewing chamber, and
7 how is that shown?

8 A That's shown by the combination of the parts 26 and 2, the
9 reusable container 10, and that's put in the brewing chamber,
10 which, as I mentioned, was the cover 48 and the base 50.

11 Q Okay. And let's go to the next disputed element, the
12 bottom surface of the brewing chamber.

13 Next slide, please.

14 Can you explain how that element is disclosed in
15 Nordskog?

16 A Certainly.

17 The bottom part of the brewing chamber is going to be
18 at the lower edge of 20, as well as the recessed area of 22,
19 and that's positioned a certain distance above the bottom
20 surface, which is indicated as 50.

21 Q Does that accurately depict my markings, what you
22 described?

23 A Let's see.

24 Q If you can make out the yellow markings.

25 A Yeah, I can make out the yellow markings, but that's not

1 quite it.

2 Q Okay.

3 A So the portion 22 is correct, but then when it reaches
4 near 20, it needs to go horizontal and then up.

5 Q Like this?

6 A Yes, correct.

7 Q Okay. There you go.

8 And you're saying that's separate from this part?

9 A Correct.

10 Q Okay.

11 All right. So let's move to the next disputed element,
12 which is a container is adapted to accept fluid through the
13 opening.

14 A Okay. So this discloses a reusable container 10, as we
15 talked about. So the openings could be read on this patent
16 as the apertures 38, which are indicated by the red-circled
17 component, and they provide a corresponding outflow through
18 the holes 28.

19 Q Okay.

20 And the other verbiage that you have on this -- on
21 these slides, where it says, for example, "id at 4, colon, 59
22 through 66," what is that referring to?

23 A That's referring to the Nordskog patent. So if you want
24 more information, you can refer to this by Column No. 4, for
25 example, lines 59 through 66.

1 Q So if we go through each of these elements that you found
2 were disclosed in the prior art, you're pointing in these
3 slides to both figures and textual parts of the prior art
4 that describe the feature?

5 A That is correct.

6 Q Okay.

7 Let's move now to the next disputed element, which is
8 an inlet port adapted to provide the input fluid to the
9 container.

10 A Uh-huh, and that's indicated by 56, which I've circled in
11 red in that case, and it provides inlet fluid to the
12 container, which 10 generally includes the entirety of that
13 container.

14 Q Now, you heard -- do you recall Mr. Phillips' testimony,
15 that he believed Nordskog didn't contain or disclose a
16 container because there was open space?

17 A Yes, I recall that.

18 Q And do you disagree with that?

19 A I disagree with that because his opinion was contrary to
20 the claims that are ordered in this case.

21 Q When you say "the claims that are ordered," are you
22 talking about the claim construction that the court issued?

23 A Correct, claim construction.

24 Q Now let's go to the next element, please, a needle-like
25 structure disposed below the base.

1 A Uh-huh. So that's indicated by the knives 49. And the
2 important thing to realize here is that a needle, its
3 function is to puncture the lower portion of a can, in this
4 case. This is designed to get around that.

5 So the common use for a needle, which we've been required
6 to use here, could be a sewing needle, it could be a suture
7 needle. A Space Needle, I won't say that. But, anyway, it
8 needs to puncture a container and allow for the outflow of
9 fluid. It doesn't necessarily need to convey the fluid
10 itself.

11 Q So do you recall Mr. Phillips' testimony regarding his
12 opinion that a needle needed to be hollow?

13 A I recall that, yes.

14 Q Do you agree with that?

15 A I disagree with that.

16 Q And why is that?

17 A Because it's not used in the common term -- in the common
18 sense. Also --

19 Q Sorry. Go ahead.

20 A Also, if you look at the needle that's in the Keurig unit
21 itself, it's not a hollow cylinder, as he indicated.

22 Q And did you see anything in your review and adherence to
23 the court's claim construction order where it required that a
24 needle had to be hollow?

25 A I did not see that.

1 Q Okay. Let's go to the next and final element, the tip of
2 the needle-like structure does not penetrate the exterior
3 surface of the base.

4 A Okay. So, here, the knives 48, that's the needle-like
5 structure, does not penetrate the exterior base -- portion of
6 the base. And as it was circled before, that would include
7 22, down to 20, and then up. So you'll see there is
8 clearance between the tips of the components 49 and 22.

9 Q And so you're talking about the tips here compared to this
10 bottom of the base?

11 A Correct. And you'll notice that it clearly does not
12 penetrate or puncture that structure.

13 Q All right.

14 Your next slide. Can you, then, summarize your opinion
15 about whether or not Nordskog discloses to a person of
16 ordinary skill in the art all the disputed elements from
17 Claim 5 of the ARM '320 patent?

18 A Certainly.

19 Sp these are the disputed portions of the claims from
20 Nordskog '772. It contains a brewing chamber. It has a
21 container disposed within a brewing chamber. It has at least
22 a portion of the base that is disposed a predetermined
23 distance above a bottom surface of a brewing chamber, as I
24 showed. The container is adapted to accept an input of fluid
25 through the opening; the inlet port adapted to provide an

1 input fluid into the container; a needle-like structure
2 disclosed below the base; and, importantly, the tip of the
3 needle-like structure does not penetrate the exterior surface
4 of the base.

5 Q So the next screen, with respect to the special verdict
6 form, would it be your conclusion that the "yes" box should
7 be checked with respect to each of those elements because
8 they are found in Nordskog?

9 A That's, indeed, my conclusion.

10 Q All right. Let's turn now to the Nordskog patent with
11 respect to independent Claim 18 and the disputed elements
12 there.

13 What did you find when you reviewed Nordskog about
14 whether or not it disclosed each of the elements that are
15 disputed?

16 A I found that, like the previous, like Claim 5, Claim 18
17 also had all of those -- I'm sorry -- Nordskog had all of the
18 elements disclosed in Claim 18.

19 Q Now, this will be a bit redundant because -- or tedious
20 because -- is it the case that a lot of the elements that are
21 in Claim 18 are disclosed by the same features in the prior
22 art; for example, Nordskog?

23 A Yes.

24 Q Okay. We'll try to go through as quickly as possible,
25 then, the next slide, please. Let's talk about the first

1 disputed term, whether Nordskog discloses a container
2 positionable within the brewing chamber.

3 A Certainly. So the container is 10, as we indicated
4 before --

5 THE COURT: Can you slow down a little bit?

6 THE WITNESS: Oh, yes, sir. I'm sorry, Your Honor.

7 A So the container is positional within the brewing chamber.
8 That's indicated by 10, which is the container. And the
9 brewing chamber, as I indicated, is the combination of 48
10 plus 50 when those are in a closed configuration.

11 Q (By Mr. Lowe) In this area that I've circled?

12 A That's correct.

13 Q All right. The next disputed element is a brewing
14 chamber, but is that -- have you just described that?

15 A I have described that, indeed.

16 Q And, again, the brewing chamber is this area right here?

17 A Yes.

18 Q That's what you -- okay.

19 The next disputed element is that there has to be an
20 exterior surface configured to avoid contact with the
21 needle-like structure. Did you find that?

22 A Like the other one, yes, needle 49 configured to avoid,
23 which would be 22.

24 Q And the next element that is disputed. You said to avoid
25 contact with a needle-like structure. That was the next

1 element?

2 A Yes. Indeed, that's there, like Claim 5.

3 Q And the last disputed element here is, wherein the
4 container is adapted to accept fluid from the inlet port
5 through the opening. Now, you already described that, I
6 believe, but refresh the jury's recollection.

7 A Correct.

8 So inlet port, we're looking to 40 and 38.

9 Q And is it common in a coffee brewer that there would be an
10 inlet and an outlet port?

11 A Yes, it would be.

12 Q And why is that?

13 A Because otherwise the fluid would accumulate in the
14 vessel, and you wouldn't be able to get it out.

15 Q All right. So go to the next screen.

16 Your conclusion with respect to the '772 Patent and
17 whether it discloses to a person of ordinary skill in the art
18 all the elements that were disputed from Claim 18, and
19 they're in front of the jury there, but did you find that
20 each of those four disputed elements were present?

21 A Yes, as demonstrated, I did.

22 Q And then with respect to the verdict form, is it your
23 conclusion, then, that each of the disputed terms that are
24 shown right there should be checked "yes" because they're
25 present?

1 A That is my conclusion.

2 Q All right. Now let's move to a different piece of prior
3 art, which is the Beaulieu.

4 Now, there's been an ongoing debate this week about how
5 to pronounce that prior art. I understand you did some
6 research, and it is *Bull-you*?

7 A I did extensive research by Googling it on the Internet,
8 and it is *Bull-you*.

9 Q All right. I will do my best.

10 Now let's turn to the Beaulieu '315 Patent. Now, can
11 you first explain, with reference to Slide 31, generally, the
12 invention of the Beaulieu patent?

13 A Certainly.

14 That's directed toward a brewing cartridge that's for
15 use in a reusable coffee maker. You can see there that it
16 has what I'm going to call a "K-Cup" later on, so I'll go
17 ahead and point that out now. It's placed in the cup-shaped
18 brewing chamber, and then closed. The upper and lower probes
19 pierce the top and the bottom of the cartridge to allow fluid
20 to flow through. It contains a brewing material, which this
21 court has construed to mean any material that makes a
22 beverage when hot water is added. And after the brewing
23 cycle, it's removed from a brewing chamber.

24 Q Now, you previously indicated that the ITC had concluded
25 that all the elements of the Claim 5 patent were disclosed in

1 the Beaulieu prior art; is that right?

2 A That's correct.

3 Q Now, how did the -- let's turn to the next slide, please.

4 So is it your understanding, then, that the
5 International Trade Commission has already reviewed whether
6 or not this particular prior art, the Beaulieu reference, in
7 fact, disclosed each of these disputed features where there
8 is a "yes" checked?

9 A That is correct. And my understanding is that it was
10 their basis for invalidating Claim 5 of the ARM '320 Patent.

11 Q Now, even though the International Trade Commission came
12 to that conclusion, did you perform an independent analysis
13 to ascertain whether or not you agreed with that conclusion?

14 A Most definitely.

15 Q All right. So then you compared the Beaulieu '315 Patent
16 with independent Claim 5 of ARM's '320 Patent, correct?

17 A Correct.

18 Q All right. And what did you find?

19 A I found that each of those indicated disputed elements
20 were present in the Beaulieu patent.

21 Q That's go through that, please.

22 All right. The first disputed term was whether or not
23 the Beaulieu '315 Patent disclosed a cover.

24 A That's correct, and that's shown by -- annotated by a "C"
25 circled in red.

1 Q And the next disputed term was "at least a portion of the
2 base is disposed a predetermined distance above the bottom
3 surface of the brewing chamber," and did you find that?

4 A I did.

5 Q Can you explain that, please?

6 A Certainly.

7 In reading this onto the Beaulieu patent -- reading
8 '320 onto the Beaulieu patent, we've -- let's see. We've
9 indicated that it sealingly engages with a top edge, denoted
10 as the "T." At least one sidewall. That's indicated by
11 "SW." The covering, "C," including an opening, "O," which is
12 present after this cartridge is punctured.

13 Q All right. Let's go to the next disputed element.
14 "Wherein the cover" -- let's see. We already talked about
15 that. "Wherein the cover is adapted to accept input fluid
16 through the opening, and to provide a corresponding outflow
17 of fluid through the passageway." Did you find that?

18 A I did find that, and that's indicated here. Punctured
19 cartridge 50 is adapted to accept the input fluid through the
20 opening, "O," that we previously identified.

21 Q And the next element is "a needle-like structure disposed
22 below the base." Did you find that present?

23 A I did. So in reading this '320 Patent onto the Beaulieu
24 device, we can indicate the base as "B" and the needle as
25 "84" -- the piercing member as "84."

1 Q And, finally, did you find the element wherein the
2 predetermined distance is selected such that a tip of the
3 needle-like structure does not penetrate the exterior surface
4 of the base?

5 A Indeed, and that's indicated by "D," which shows that
6 predetermined distance, as indicated. And the exterior
7 surface as "E," "echo," and the base, "B."

8 Q All right. And your summary, then, is shown on the next
9 slide?

10 A That is correct.

11 Q And did you conclude that the Beaulieu '315 Patent
12 discloses to a person of ordinary skill in the art each of
13 the disputed elements from Claim 5 of the Rivera '320 Patent?

14 A I did.

15 Q And is that also further confirmed by the conclusion of
16 the International Trade Commission?

17 A Yes, indeed.

18 Q Then with respect to the verdict form shown on the next
19 slide, would you agree that, in your opinion, it would be
20 proper to mark "yes" where indicated for each disputed term?

21 A Yes, I agree with that.

22 Q All right. Let's go to -- still talking about the
23 Beaulieu '315 Patent. Now let's shift gears back to Claim
24 18, which is the other independent claim.

25 And, again, you've talked about some of what's found in

1 the Beaulieu, so we'll try to be as efficient as possible.

2 Now the next screen, please.

3 Now, is it also the case that the International Trade
4 Commission reviewed the Claim 18 to determine whether or not
5 the Beaulieu '315 Patent also had all of the elements?

6 A They did review that, and as indicated here, one of them,
7 they found, was not present.

8 Q And that was a container configured to replace the brewing
9 cartridge?

10 A That's correct.

11 Q But the International Trade Commission found each of the
12 other elements to be present in Beaulieu?

13 A That is correct.

14 Q All right. Next slide, please.

15 Now, again, despite the fact of the ITC's conclusion,
16 did you perform an independent analysis to ascertain whether,
17 in your opinion, the Beaulieu '315 disclosed all of the
18 disputed features?

19 A Yes, I went back and further analyzed that.

20 Q All right.

21 So with respect to the one element that the ITC found
22 was not present, "a container configured to replace the
23 brewing cartridge," did you agree with the International
24 Trade Commission?

25 A I had some differences with that, which is why I went back

1 and reanalyzed that.

2 Q And what was your conclusion?

3 A That it could be configured to replace a brewing cartridge
4 if it were used more than once, for example. But even if
5 that weakness is present, when we come back and combine that
6 with other prior art references, we can replace that
7 argument, that they were not convinced by, by another one
8 that will lead us to the same conclusion.

9 Q So we just got done talking about Nordskog.

10 A Yes.

11 Q And, in Nordskog, was there a dispute about whether
12 Nordskog disclosed a container configured to replace the
13 brewing cartridge?

14 A There was no dispute. Mr. Phillips and I both agree on
15 that point.

16 Q And so, then, even if, as the ITC found, this first
17 element of Claim 18 was not found or disclosed in Beaulieu,
18 you would have just taken that element from Nordskog and
19 applied it here?

20 A I would have simply replaced that element with what's
21 here, and come up with a replaceable brewing cartridge.

22 Q All right. Let's go to the next disputed element, which
23 is "a base having an interior surface and an exterior
24 surface, and configured to avoid contact with the needle-like
25 structure." Did you find that disclosed in the Beaulieu '315

1 Patent?

2 A I did find that. And as indicated, we have the receptacle
3 denoted by "R." It has a base, and I previously noted that
4 as "B"; an interior surface, which is the inside, indicated
5 by "I"; and an exterior surface, indicated by "E." And,
6 clearly, as the figure shows, it's configured to avoid the
7 needle-like piercing No. 48 -- 84. Sorry.

8 Q And then the next element was, "wherein the cover is
9 adapted to sealingly engage with the top edge of the at least
10 one sidewall, the cover, included an opening." Now, I think
11 with respect to Claim 5 --

12 THE COURT: Can you slow down, Mr. Lowe?

13 MR. LOWE: Sorry.

14 Q (By Mr. Lowe) I believe that you already described how
15 this feature was shown in the Beaulieu '315 Patent; is that
16 right?

17 A That is correct.

18 Q And is that, then, repeated on this current slide?

19 A It is, yes.

20 Q And then the final element that was disputed --

21 A Uh-huh.

22 Q -- "wherein the container is adapted to accept input, the
23 input fluid from the inlet port through the opening, and to
24 provide a corresponding outflow of fluid through the
25 passageway."

1 And did you agree with the ITC that that was also
2 present in the Beaulieu '315 Patent?

3 A I did, and I've indicated that here as well. You see the
4 puncture cartridge 50. It accepts the input fluid from the
5 inlet port probe, which is 126, through the opening that
6 we've previously shown as "0," and it goes through the
7 passageway, which is a pourable filter material shown by "P."

8 Q Now, then, going to the next screen, please.

9 Did Mr. Phillips, in his testimony, address elements 1
10 and 4?

11 A I do not recall him addressing those elements.

12 Q So based on the testimony or lack of testimony by
13 Mr. Phillips, are those elements still in dispute in this
14 case?

15 A He did not address that, so I assume they are no longer in
16 dispute.

17 Q All right. And go to the next screen.

18 So is it your opinion, then, that, with respect to the
19 Verdict Form Question 6, that the Beaulieu '315 Patent
20 discloses to a person of ordinary skill in the art all of the
21 elements, either separately or, if necessary, combined with
22 Nordskog with respect to the first element?

23 A This is a summary of my conclusions, so, yes.

24 Q Okay.

25 All right. Let's move on now to the third prior art

1 reference, and that is what's been disclosed as the Rivera
2 '320 Patent prior art.

3 Now, can you explain to the jury why, if we're talking
4 about the Rivera or the ARM '320 Patent prior art, we're
5 discussing this Sylvan '189 Patent?

6 A Right. So this is actually indicated in the Rivera '320
7 patent as prior art, so it would have been known, obviously,
8 to the inventor of the '320 Patent, Mr. Rivera, and it's
9 incorporated into that as showing -- giving a reference point
10 from which their invention takes over.

11 Q So, then, not to -- to try to avoid confusion, when we're
12 talking about the prior art disclosed in the '320 Patent for
13 this purpose, we're referring to the Sylvan '189 Patent?

14 A That's correct.

15 Q Okay.

16 Can you describe the prior art in the '320 Patent,
17 which is, in fact, the Sylvan '189 Patent?

18 A Certainly.

19 That's directed to a beverage filter cartridge for use
20 in a single-serve brewer, such as a Keurig. It contains a
21 pierceable cover where the inlet probe goes to provide fluid
22 flow in, and it contains a brewing material, and I've already
23 mentioned the court's construed claim on that element; and
24 that the K-Cup that you saw Ms. Sommers use in the Keurig is
25 an example of the embodiment of that patent. Oh, I'm sorry.

1 That's not quite correct. It practices that patent.

2 Q Let's go to the next screen, please.

3 So with respect to the '320 prior art, did you evaluate
4 the disputed terms that are shown here to ascertain whether
5 or not the prior art disclosed within the '320 Patent, the
6 Sylvan '189 Patent in particular, disclosed each of the
7 disputed elements?

8 A I did.

9 Q Okay. Let's go through that, please.

10 Now, the first disputed term is that "at least a
11 portion of the base is disposed a predetermined distance
12 above the bottom surface of the brewing chamber." Did you
13 find that element?

14 A Yes, and I've also indicated that here. So the base is
15 indicated by "B"; the predetermined distance is annotated by
16 "D," delta; and the bottom surface is by -- unfortunately,
17 that's "BS."

18 Q All right. Let's move to the next term, next element.

19 Did you find the element, "wherein the container is
20 adapted to sealingly engage with a top edge of the at least
21 one sidewall, the cover including an opening"?

22 A Yes, I did.

23 So here you can see the top shell, 14; the top edge,
24 "T," tango; at least one sidewall, "SW"; covering the top of
25 the shell, 14, as already indicated; and the opening by "O."

1 Q And the next element is, "a needle-like structure
2 disclosed below the base." Did you find that present?

3 A I did find that present, and I'd like to just deviate a
4 little bit and talk about obviousness here.

5 This is above most of the needle. It could be clearly
6 placed above the entirety of the needle, and there would also
7 be an economic incentive to do so.

8 In order to make this filter, this kind of cone --
9 truncated cone shape, we need to take some super seal filter
10 material, roll it around, seal it along the longitude, pinch
11 the bottom, seal that, and then staple it into the device.

12 So an easier way to do that would be to stamp it in the
13 shape of, say, a cupcake paper. No seams there, except when
14 you staple it, it will pleat the sides; put it in there. And
15 because of the increased volume efficiency, it would be above
16 the top surface of that needle.

17 And, in fact, in the K-Cups today, that's exactly what you
18 find there. And there is approximately one centimeter
19 between the top of that needle-like structure and the bottom
20 of the filter. But that is so obvious, it's, actually,
21 practiced today.

22 Q And then the last element, Dr. Howle, is, "wherein the
23 predetermined distance is selected such that a tip of the
24 needle-like structure does not penetrate the exterior surface
25 of the base," and did you find that element present in the

1 '320 prior art?

2 A I did.

3 So you can see the predetermined distance by "delta";
4 the bottom needle 22; and it does not penetrate the exterior
5 surface, as "echo" here, of the base umbrella.

6 Q Next slide, please.

7 Your conclusion with respect to whether or not the
8 admitted prior art, or the prior art disclosed in the ARM or
9 Rivera '320 Patent, discloses to a person of ordinary skill
10 in the art the following elements of Claim 5. Did you find
11 that to be the case?

12 A I did find that, yes.

13 Q And then with respect to the verdict form that will be
14 presented to the jury, is this your conclusion?

15 A That was the result of my analysis, yes.

16 Q All right. Let's turn now to the prior art disclosed in
17 the Rivera '320 Patent, but with respect to Claim 18, which
18 is the other independent claim.

19 Did you compare the '320 prior art with independent
20 Claim 18?

21 A I did, yes.

22 Q Now, let's go through each one of those, as we have
23 before. Next screen, please.

24 The first element is, "a container configured to
25 replace the brewing cartridge." And did you find that in the

1 '320 prior art?

2 A Yes. That's indicated by brewing cartridge 12, and it's
3 configured to go inside the brewing chamber, which is element
4 10, and it holds a brewing material, which is indicated by
5 16.

6 Q Now, as we talked about with the Beaulieu '315 Patent on
7 this particular element of Claim 18, to the extent that that
8 particular element may not be fully disclosed in the '320
9 prior art, is there other prior art that we've discussed here
10 today that you can look to to fill that element?

11 A Nordskog '772 would fill that. Also, there's one upcoming
12 that we have not yet discussed.

13 Q All right.

14 The next element is, "a base having an interior surface
15 and an exterior surface and configured to avoid contact with
16 the needle-like structure." And did you find that that
17 disputed the term was present in the '320 Patent prior art?

18 A Indeed. So the receptacle, as indicated by "R"; the base,
19 "B"; the interior and exterior surface are shown as "I" and
20 "E"; and the bottom needle there is 22.

21 Q And the next element is, "wherein the cover is adapted to
22 sealingly engage with a top edge of the at least one
23 sidewall, the cover including an opening." Did you find that
24 disputed element present in the '320 prior art?

25 A That is present. So we see the top shell, 14, which is

1 the cover; the top edge, "T," tango; the at least one
2 sidewall as indicated by "SW"; and the top cover 14 is
3 already indicated. The opening is annotated by "0."

4 Q And, finally, the last element that's disputed, "wherein
5 the container is adapted to accept the input fluid from the
6 inlet port through the opening, and to provide a
7 corresponding outflow of fluid through the passageway." Did
8 you find that present?

9 A Yes, I did.

10 So input port 20; opening "0"; beverage-brewing
11 material 12; and as with one of the others, the passageway is
12 the pour, indicated at "P."

13 Q And then what is your conclusion, then, with respect to
14 whether the '320 prior art discloses, either singly or in
15 combination, as you said, with Nordskog, all of the elements
16 of Claim 18?

17 A I've concluded that they're all present.

18 Q And with respect to the verdict form that will be
19 presented to the jury, do you agree with this conclusion?

20 A Yes, that's my analysis.

21 Q All right. So just to give some context, Dr. Howle, we've
22 now gone through and matched up those three prior art
23 references to each of the independent Claims 5 and 18; is
24 that right?

25 A That's correct.

1 Q All right.

2 So now we're going to focus on Claims 8 and 19, which
3 are the claims that are at issue here that include all of
4 those limitations.

5 Now, remind the jury what additional element was added
6 in both Claims 8 and 19 to all the elements we've just
7 discussed.

8 A Okay.

9 Those two dependent claims are virtually identical.
10 They simply add reusability for the claims from which they
11 depend.

12 Q So, then, as part of your analysis, did you review the
13 prior art to -- the admitted prior art to ascertain whether
14 any of those prior art references disclosed a reusable
15 feature for a container?

16 A Indeed, yes.

17 Q And did you find whether any of those prior art
18 references, in fact, disclose that reusable feature?

19 A Yes.

20 Q And what are those references?

21 A Nordskog '772 and Sweeney '989.

22 Q All right. Can we please refer to the Nordskog '772
23 Patent?

24 Can you please explain to the jury how the Nordskog
25 '772 Patent discloses a reusable element as required by Claim

1 8 and 19?

2 A Certainly.

3 It's indicated by the cartridge there, 10. And, in
4 fact, the title of this patent is, "Reusable coffee-maker
5 container," so, clearly, that's reusable.

6 Q And, again, refreshing your mind back to Mr. Phillips'
7 testimony. Do you recall during his testimony when he
8 admitted that the Nordskog '772 patent, in fact, discloses a
9 reusable container?

10 A He and I agree on that point.

11 Q The next slide.

12 Then with respect to the verdict question that asks
13 whether or not the jury finds Nordskog discloses to a person
14 of ordinary skill the element of reusability, does this meet
15 your conclusion?

16 A It does, yes.

17 Q All right. You also referred to a Sweeney '989 Patent as
18 having a reusable -- disclosing reusability.

19 Can you please first describe for the jury, because it
20 is the first time we've discussed the Sweeney '989 Patent,
21 generally what it refers to?

22 A Right. So this could be used in a Keurig machine, for
23 example, and it's used to make single-serving coffee
24 portions. It's directed toward a reusable filter cartridge.
25 It contains a brewing medium, and it allows an outflow of

1 beverage medium after it's brewed. And the lid is removably
2 securable to the housing, and the filter is permeable to
3 accept flow, which exits via that outlet port.

4 Q Now, can you please explain, with reference to the next
5 few slides, how the Sweeney '989 Patent describes a reusable
6 feature in a coffee-brewer situation?

7 A Right.

8 Again, like the previous reference, this is a reusable
9 beverage filter cartridge, so clearly it's reusable. That's
10 in the title, and also that's discussed throughout the
11 specification.

12 Q And the next slide, please.

13 Did Mr. Phillips disagree that the Sweeney '989
14 disclosed a reusable element?

15 A He did not disagree, no.

16 Q So does this slide accurately indicate your conclusion
17 that Sweeney discloses to a person of ordinary skill in the
18 art the reusable element?

19 A Yes, it does.

20 Q Now, after you performed an analysis of matching up the
21 elements disclosed in the various prior art to the claim
22 elements, what did you do next?

23 A Then I set about to see if various combinations could be
24 used to satisfy those various disputed claims.

25 Q Now, if you recall back at the beginning, I think you said

1 that one of the issues for the jury to decide is whether a
2 person of ordinary skill in the art -- whether it would be
3 obvious for them, or there would be some motivation or reason
4 to combine the references we've talked about. How did you
5 evaluate that question?

6 A Well, they all work in the same market space, so there
7 would have been motivation for a person of ordinary skill to
8 know what their competitors are doing. This is common
9 practice in industry, and, apparently, now in politics also.
10 So they would combine these.

11 So all of the prior art patents relate to cartridges in
12 the same industry, so they would have been known.
13 Reusability is something that's common throughout industry,
14 for economics and waste production. And then ARM's '320
15 Patent also mentions a variety of reusable materials, like
16 plastics, metals. So clearly, those are made to be
17 structurally viable so they can be reused many times.

18 Q Did the Nordskog and the Sweeney prior art patents
19 describe advantages of reusability?

20 A Waste production, cost savings, yes.

21 Q Based on your review of the prior art, did they provide
22 any reason why you might want to combine those prior art
23 references to combine reusability?

24 A I'm sorry. Repeat that. I'm sorry.

25 Q Yes.

1 In your review of the prior art, did you find any other
2 references within them that would provide some reason or
3 motivation to combine the references?

4 A There are various combinations, of all of the five prior
5 art references that were restricted in this case, that will
6 do that, yes.

7 Q You have in your slide, "making a product reusable is a
8 common technique." Can you explain that, please?

9 A Certainly.

10 As I mentioned, it's common so that you can reduce
11 waste and you can have cost savings, certainly.

12 Q Now, did you find, in your review of the prior art, were
13 any of the inventors common between them?

14 A Indeed. In fact, this is fairly interesting. If you look
15 at Beaulieu '315, two of his co-inventors are John Sylvan
16 from the Sylvan Light line, and also Robert Sweeney from the
17 Sweeney '989, and so they're both co-inventors with Roderick
18 Beaulieu.

19 Q Now, does the fact that there is co-inventors on several
20 of these prior art references impact your reasoning for why
21 it would be obvious to combine them?

22 A There can be, actually, no dispute that these individuals
23 or these products would have been known to one another.

24 Q And did you -- when you were present for Mr. Phillips'
25 testimony, did you hear Mr. Phillips provide any reason why

1 these prior art references would not be available to be
2 combined within the coffee industry?

3 A I did not hear an argument to that point.

4 Q Next slide, please.

5 So, then, we discussed this at the beginning, but does
6 this slide accurately reflect your conclusion with regard to
7 the obvious combination of the various prior art references?

8 A Indeed, this is my conclusion, yes.

9 Q Now, as you're aware, Dr. Howle, Mr. Phillips has
10 disagreed with your ultimate conclusion here.

11 A Yes.

12 Q Can you offer any reasons as to why you disagree with
13 Mr. Phillips?

14 A Absolutely.

15 First of all, he uses his own claim construction for
16 some of the terms, whereas I adopted the court's
17 construction.

18 Q And do you disagree with how he evaluated certain of the
19 prior art references?

20 A I think he misunderstands some of those prior art
21 references. With respect to him, right?

22 Q Now, then, the jury will be asked -- the next slide,
23 please.

24 The jury will be asked whether a person of ordinary
25 skill would have reason to combine the Nordskog reference

1 with either the Beaulieu or the prior art disclosed. What is
2 your conclusion with regard to that?

3 A They're in the same space, so certainly those could be
4 combined. So Nordskog, for example, gives you a reusable
5 container, and that can be incorporated into Beaulieu, which
6 gives you single-service coffee cartridge, so those could be
7 easily combined.

8 Q So do you agree with the "yes" marked in both of those on
9 Question 10?

10 A Correct, yes.

11 Q And then, finally, with respect to the Sweeney patent,
12 which provides reusability --

13 A Uh-huh.

14 Q -- do you -- is it your opinion that a person of ordinary
15 skill in the art would have a reason to combine the
16 reusability element of Sweeney with either Nordskog or
17 Beaulieu or the prior art disclosed in the patent to arrive
18 at the Claims 8 and 19?

19 A Yes, either one of those -- either of those three would
20 work.

21 MR. LOWE: Your Honor, no further questions at this
22 time.

23 THE COURT: Mr. Kundu, you may begin when you're
24 ready.

25 MR. KUNDU: Thank you, Your Honor.

CROSS-EXAMINATION

BY MR. KUNDU:

Q Good morning, Dr. Howle.

A Good morning, Mr. Kundu.

Q First I want to ask you, when is obviousness measured from?

A When is obviousness measured from? Obviousness is measured from?

Q So is there a date and time when you consider the obviousness inquiry?

A Yes, at the time the invention was made, yes.

Q And when was that in this case?

A In this case, the ARM '320 patent obviousness would have been 2007, I believe.

Q And, Dr. Howle, I believe you testified on your direct yesterday that your experience with beverage capsules and Keurig machines is in connection with your experience serving as an expert witness for Eko Brands and Solofill; isn't that correct?

A And one other, yes.

Q Who is the other?

A That would be Creative Concepts. And my experience is not just limited to that.

Q Okay.

And when did you start serving as an expert witness?

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1 A About 2014.

2 Q Okay.

3 A On this type of case.

4 Q Now, before being an expert witness for Eko Brands and
5 Solofill and Creative Concepts, did you have any professional
6 experience in the design or development of coffee machines?

7 A No.

8 Q Did you have any experience, before serving as an expert
9 witness, in beverage dispensing?

10 A Yes.

11 Q And what's that experience?

12 A Well, fluid dispensing, so --

13 Q I asked you, sir, about beverage dispensing.

14 A Okay.

15 No.

16 Q Did you have any professional experience or training in
17 food science before you were serving as an expert witness?

18 A No. Like Mr. Phillips, I do not have a degree in that.

19 Q And, sir, before serving as an expert witness for Eko
20 Brands, Solofill, Creative Concepts, did you work for any
21 company that developed coffee machines?

22 A No.

23 Q And, in fact, before serving as an expert witness, it's
24 true that you knew very little about Keurig machines; isn't
25 that correct?

1 A That's correct.

2 Q And you testified today, just now, that you believe that
3 the lower needle in a Keurig machine is not hollow; isn't
4 that correct?

5 A That's not quite accurate. It's not a hollow cylinder.

6 Q Okay.

7 Is the lower needle on the Keurig machine hollow, or
8 not?

9 A A portion of it is; a portion is solid. So I cannot
10 answer that question yes or no.

11 Q So you didn't mean to suggest to the jury that the lower
12 needle was not hollow?

13 A Portions are hollow; portions are solid.

14 Q Okay.

15 Now, is it fair to say, Dr. Howle, that you don't have
16 industry experience of five years or more in the detail,
17 design, and development of beverage-brewing and dispensing
18 machines?

19 A I do not have that, no.

20 Q And at the time of the invention, as you say, in 2007, you
21 weren't a person of ordinary skill in the art; isn't that
22 right?

23 A Well, as the art pertains to heat transport fluid
24 mechanics, other things that are needed to understand devices
25 like this, I have more than 30 years of experience in that.

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1 Q Sir, as you testified, the level of ordinary skill in the
2 art has been agreed to in this case, right?

3 A That is correct.

4 Q Okay.

5 So considering that level of ordinary skill in the art,
6 were you a person of ordinary skill in the art in 2007?

7 A I would not have met the food science portion of that.

8 Q And you wouldn't have met the industry experience of five
9 years or more in the detailed design and development of
10 beverage-brewing and dispensing machines; isn't that right?

11 A That cannot be disputed. It's true.

12 Q Now, you testified about the decision made by the
13 International Trade Commission. Do you recall that?

14 A I do recall that, yes.

15 Q Okay.

16 And just to be clear, you were involved in that case;
17 isn't that right?

18 A I was involved in that case.

19 Q And you were the expert providing opinions on invalidity
20 in that case?

21 A Yes, that's true.

22 Q So to be clear, Claim 5 was found to be anticipated by
23 Beaulieu; is that right?

24 A Correct, Claims 5 and 6, but 6 is not disputed here.

25 Q And Claim 18 was not found to be anticipated by Beaulieu?

1 A That's correct.

2 Q Okay.

3 And the International Trade Commission did not find
4 that Nordskog anticipated any claim; isn't that right?

5 A That's correct, yes.

6 Q And in the ITC, it was your opinion that Nordskog
7 invalidated claims of the -- of my client's '320 Patent?

8 A I believe that's true, yes.

9 Q Now, is it fair to say that there's portions of the ITC
10 decision that you agree with and that you don't agree with;
11 isn't that right?

12 A I think I just testified to one such occasion, yes.

13 Q Okay.

14 Do you understand that the ITC did not find Claims 8
15 and 19 invalid?

16 A Well, in fact, they did find -- let's see. They did not
17 rule on those, no.

18 As I recall, ARM, actually, withdrew those from
19 consideration before the trial -- or at some point, so they
20 did not make an official ruling on that. It is my belief
21 that had they been --

22 Q Thank you, sir.

23 A -- put through --

24 Q Thank you, sir.

25 A Okay.

1 MR. KUNDU: Your Honor, I have a copy of the ITC
2 decision. If I may approach the witness with it to refresh
3 his recollection?

4 THE COURT: You may. Actually, you may give it to
5 Mr. Farrell.

6 MR. KUNDU: Thank you, Your Honor.

7 THE COURT: You should initially ask questions to see
8 if it will refresh his recollection, but in the event it
9 does, then we have the copy in front of him.

10 THE WITNESS: And I do.

11 Q (By Mr. Kundu) Isn't it true, Dr. Howle, that the ITC
12 said, "We do not find Claims 8 and 19 invalid"; isn't that
13 correct?

14 A It does say that. Well -- that's correct, yes.

15 Q Okay.

16 It doesn't say that, We do not find Claims 8 and 19
17 invalid because ARM withdrew them; isn't that correct?

18 A That's correct, nor does it say that they find them valid.

19 Q Excuse me?

20 A Nor does it say that they find those claims valid.

21 Q Right. But claims are presumed valid, aren't they, until
22 determined to be invalid?

23 A I've been told that's true, yes.

24 Q Okay.

25 So then it's true, also, when they found that Claims 8

1 and 19 were not invalid, they, in fact, were presuming their
2 validity; isn't that right?

3 A I assume so, yes.

4 Q I'd like to turn to Nordskog and ask you some questions
5 about your testimony. I just want to be clear.

6 The coffee machine in Nordskog is not a Keurig machine;
7 is that right?

8 A That is correct, yes.

9 Q Okay.

10 And what is the device in Nordskog?

11 A It was a device that was designed to use in the aircraft
12 industry, and what they would do is put a coffee can in there
13 and brew coffee through that, and then dispose the can.

14 Q And you believe that, in Nordskog, the brewing chamber is
15 the space between cover 48 and the base 50; isn't that right?

16 A I have testified to that, yes.

17 Q Just during your -- if you could clarify for me, because
18 during your testimony -- I think I'm the only one that can't
19 use this camera. Okay. I've got Slide 23 --

20 A Uh-huh.

21 Q And I believe during your testimony, when you were talking
22 about the brewing chamber in Nordskog, counsel for Eko Brands
23 drew a circle like this on the screen. Do you recall that?

24 A Yes, I recall that.

25 Q Okay. So I just want to be clear.

1 So that circle includes that container 10, the cover
2 48, and the base 50, right?

3 A No, it does not include the base 50.

4 Q Oh. Maybe I didn't draw a big enough circle. The
5 intention was to include the base 50, the cover 48, and the
6 container 10.

7 A Incorrect.

8 Q Why is that incorrect?

9 A Because 50 and 48 are the brewing chamber. The brewing
10 container would be indicated by "10."

11 Q Okay.

12 And the brewing chamber does not include container 10;
13 isn't that right?

14 A That is not part of the brewing chamber.

15 Q Okay.

16 So, really, just to be clear for the jury, the circle
17 should have been like this and like this, right?

18 A Yes, in the closed configuration, that's right.

19 Q And in the closed configuration, what's between the cover
20 and the base 50 is just space, right?

21 A Well, when it's set up to brew, it's the brewing
22 cartridge, but between those two by itself, there is space.

23 Q And so you're saying that space is the brewing chamber?

24 A I'm saying that my claim construction is consistent with
25 the way things have been ruled in this case.

1 Q Sir, I asked you, are you saying that the space between
2 these two parallel plates is a brewing chamber?

3 A Which is consistent with the ruling, so, yes.

4 Q So if I put my hands like this, is that a brewing chamber?

5 A You're not configured to make single-serve coffee, so, no.
6 Or maybe you are.

7 Q Okay.

8 Now, I'm want to ask you -- so you talked about the
9 container. What are the components of the container in
10 Nordskog '772?

11 A 10.

12 Q And part of 10 is an under cup 14?

13 A Correct.

14 Q And a strainer 12?

15 A You'd have to show me the figure to be able to confirm
16 that. I don't remember that off memory -- out of memory.

17 Q Okay.

18 So it's going to be, you said, container 10?

19 A Right.

20 Q Under cup 14 and strainer 12, right?

21 A All right. So my understanding is that 14, the under cup,
22 as you call it, and the strainer 12 combine to get 10.

23 Q Okay.

24 And then it also includes this handle 44, right?

25 A That handle 44 is, indeed, there.

1 Q Okay.

2 So you're saying -- we're obviously going to dispute
3 about the parallel plates and whether my hands form a brewing
4 chamber. But it's fair to say that the container, as you
5 call it, is going to be the handle 44, the under cup 14, and
6 the strainer 12, right?

7 A Forty-four is not necessary, but it's there, and it still
8 meets the limitation of this construed claims of this court.

9 Q Forty-four is expressly defined as part of the container,
10 isn't it?

11 A Okay. All right. That's fine.

12 Q Isn't that true?

13 A That's true.

14 Q Okay.

15 And so one of the claim elements is "a container
16 disposed within a brewing chamber"; isn't that right?

17 A That's right.

18 Q All right.

19 So if the brewing chamber is the cover 48 and the base
20 50, the container is not within the brewing chamber, is that
21 right, because the handle 44 is sticking out?

22 A The handle 44 is, indeed, sticking out. But on pages 9
23 and 10 of the claims order, we are told that the brewing
24 cartridge can -- or the brewing container can include open
25 space. It can have an open top and closed bottom, and it

1 can, indeed, have an open space.

2 Q And so you're saying the claim construction order allows
3 for a container to be outside of the brewing chamber but then
4 still be defined within it; is that what you're saying?

5 A You seem to be wanting the handle to be outside, so I'm
6 saying that's consistent, yes.

7 Q Okay.

8 And then I believe part of your testimony was that the
9 knives of Nordskog --

10 A Yes --

11 Q -- constitute the needle-like structure?

12 A Uh-huh.

13 Q Is that right?

14 A That's correct.

15 Q Okay.

16 And -- but it's true -- we can disagree on the impact
17 of it, but it's true, for the jury, that the knives aren't
18 hollow and then don't provide for the outflow of beverage; is
19 that right?

20 A Yes.

21 Q Okay.

22 And you've reviewed the '320 Patent, I'm sure, many
23 times?

24 A Correct, yes.

25 Q Okay.

1 And is there any part of that patent that talks about a
2 needle-like structure that isn't hollow?

3 A No. In fact, it does not address hollow at all. It
4 simply says "a needle-like structure."

5 Q And you don't think it talks about carrying fluid out?

6 A All correct, yes.

7 Q So when you carry fluid out, it's going to be hollow,
8 right?

9 A In that case, yes, right.

10 Q Now let's move on to the Beaulieu reference, and thank you
11 for figuring out the pronunciation.

12 Beaulieu, I believe you testified, talks about K-Cup;
13 is that right?

14 A Correct, yes.

15 Q Okay.

16 And the K-Cup was disclosed to the Patent Office when
17 they were examining Mr. Rivera's '320 Patent; isn't that
18 right?

19 A It was, yes.

20 Q And Claims 8 and 19 were allowed by the Patent Office,
21 even though they knew about the K-Cup; isn't that right?

22 A That's right.

23 Q Okay.

24 Now, just to be clear, in a K-Cup, the upper needle of
25 a Keurig machine and the bottom needle of the Keurig machine

1 puncture the K-Cup?

2 A They do.

3 Q And that's how you inject fluid into the K-Cup, and then
4 the bottom needle gets it out?

5 A Correct.

6 Q And then in Mr. Rivera's patent, the upper and lower
7 needles are specifically -- the reusable capsule is
8 specifically designed to avoid contact with the upper and
9 lower needle; isn't that right?

10 A That's right, yes.

11 Q Okay.

12 But you still believe the K-Cup invalidates
13 Mr. Rivera's patent?

14 A The K-Cup by itself, no.

15 I'm sorry. That's not correct. So...

16 Q Well, I believe you answered my question.

17 A Well, all right.

18 Q Now, you went through several slides showing figures from
19 Beaulieu; is that correct? Slides like this? This is a
20 figure?

21 A Yeah, that's a figure, correct.

22 Q Okay.

23 And you know that Beaulieu talks about -- Beaulieu --
24 the text of Beaulieu doesn't specifically get into the
25 internal structures of a K-Cup; isn't that right?

1 A That's correct.

2 Q But it references another patent that you talk about,
3 Sylvan?

4 A Sylvan '189.

5 Q And Sylvan '189 shows the internal structure of a K-Cup?

6 A Yes, it does.

7 Q Okay.

8 I believe you testified that Figure 1 of Mr. Rivera's
9 patent shows a K-Cup. That's a figure from Sylvan; isn't
10 that right?

11 A Yes.

12 Q Okay.

13 But in the 70 slides you had besides that one, did you
14 have any figures from Sylvan to show the jury during your
15 direct testimony?

16 A Just that one.

17 Q So let's take a look at Sylvan, which is Exhibit 53.

18 Sir, do you have Exhibit 53 in front of you?

19 A I see that, yes.

20 Q Okay.

21 Now, just for some context, when you were talking about
22 Mr. Rivera's Figure 1, that's a lot like Figure 4 of Sylvan;
23 isn't that right?

24 A Well, with many added features; for example, 50 and 48 are
25 not present in Figure 1 of Mr. Rivera's '320 Patent.

1 Q Which figures of Sylvan did you say looks like Figure 1 of
2 Mr. Rivera's patent?

3 A Well, the interior portion of Figure 4 does look like
4 Mr. Rivera's patent.

5 Q And we can agree the top and bottom of the K-Cup gets
6 punctured?

7 A Yes.

8 Q But what you're saying is, in Claims 8 and 19, there is a
9 receptacle element that has several features, and that
10 receptacle is the filter inside the K-Cup; isn't that right?

11 A Yes, it can be read onto this device that way.

12 Q And the receptacle has a base and a sidewall?

13 A Right.

14 Q And both Claims 8 and 19 require that the cover sealingly
15 engage with a sidewall receptacle; isn't that correct?

16 A That is correct, yes.

17 Q So then your theory that the filter element is the
18 receptacle can't be true unless the cover seals to the filter
19 element; isn't that correct?

20 A Well, we heard Mr. Phillips testify that there are two
21 configurations of this particular patent; one where the
22 filter --

23 Q Please answer my question.

24 THE COURT: He's answering your question.

25 A I'm trying to lay the foundation, sir.

1 So one of the two configurations that Mr. Phillips
2 discussed is where the filter paper overlaps the top lip, and
3 then the top -- the lid sealingly engages to that. So that
4 can be allowed.

5 Q (By Mr. Kundu) All right. Well, let's talk about that,
6 then.

7 A Okay.

8 Q So is that this Figure 5 here that you were talking about
9 that Mr. Phillips testified to?

10 A On the right side of Figure 5, we see that filter going up
11 so that it overlaps the top, and then the cover 16 sealingly
12 engages to that filter material; therefore, that filter
13 material, which seems to be indicated as "14," could be
14 considered a sidewall.

15 Q So I just want to be clear.

16 So you think that the filter element 14 is sealing to
17 the cover 16 in Figure 5?

18 A That's what it seems to indicate, yes.

19 Q If you could take a look at Column 3, Dr. Howle, lines 29
20 to 35.

21 So it says, "As depicted by the left-hand portion of
22 Figure 5, preferably the circular rim of the filter element
23 14 is heat sealed to the interior of the sidewall 12A of the
24 base 12 at a location 30."

25 And then it goes on to say, "Alternatively, as depicted

1 at the right-hand portion of Figure 5, the rim 26 of a filter
2 element can be heat sealed as at 32 to a portion of the lip
3 of the base 12." Do you see that?

4 A I see that, yes.

5 Q So the filter element doesn't seal to the cover 16. It
6 seals to another element, the base 12; isn't that correct?

7 A This patent indicates that, but when we read Mr. Rivera's
8 patent onto this object, we can pick out elements that
9 duplicate that.

10 Just because this patent indicates something is a base
11 does not mean that in another patent that has to be called a
12 base.

13 Q Sir, are you denying that the filter element in Sylvan
14 seals to the base, not to the cover 16?

15 A In that patent, those words are there, so I cannot
16 dispute -- for his device, the way he's labeling those terms,
17 that's true.

18 Q And it is the base that's punctured, is that right, the
19 base 12?

20 A Of his device or as I've read this onto --

21 Q The base 12 in Sylvan.

22 A In Sylvan, yes, that's punctured.

23 Q And Beaulieu specifically references Sylvan as describing
24 the internal structure of a K-Cup; isn't that correct?

25 A That's correct.

1 Q And Mr. Rivera's patent has Figure 1, and that comes from
2 Sylvan; isn't that right?

3 A That's true.

4 Q So if the jury believes that the filter element doesn't
5 seal to the cover, then your opinion on invalidity falls,
6 doesn't it?

7 A As I've read this onto the '320 Patent, my analysis holds.

8 Q If the jury believes that the filter element doesn't seal
9 to the cover, then your opinions on invalidity as to the
10 K-Cups, they fall, don't they?

11 MR. LOWE: Objection; asked and answered.

12 THE COURT: He can ask -- you can answer.

13 A Okay. Please repeat. I'm sorry.

14 Q (By Mr. Kundu) If the jury believes, as it's stated in
15 Sylvan, that the filter element seals to the base, not to the
16 cover, your invalidity opinions on the K-Cups fall, don't
17 they?

18 A I don't believe so, no.

19 Q All right. So it's true that, in your opinion, you
20 believe that the filter element seals to the cover; isn't
21 that correct?

22 A That is a configuration that's shown, so that can be one
23 of the configurations.

24 Q Okay. What's your opinion about where that filter element
25 seals?

1 A We're talking about Sylvan now, right?

2 Q Yes.

3 A Well, again, referring to Figure 5, there are two
4 configurations incorporated into that single figure. So on
5 the left side, the cover 16 adheres to the lip 40. On the
6 right side, the cover 16 adheres to what appears to be a
7 portion of 14. So that's a sidewall, so the cover is sealing
8 to a sidewall.

9 Q Sir, can you explain where, in Column 3, lines 29 to 35,
10 it says that the filter element seals to the cover?

11 A I don't believe it says that there.

12 Q Thank you.

13 A Yeah.

14 Q Now, I jumped ahead of myself a little bit, but Sylvan was
15 before the Patent Office during the examination of
16 Mr. Rivera's '320 Patent; isn't that correct?

17 A Correct, it was incorporated and discussed as ATA, yes.

18 Q And then, again, the Patent Office granted Mr. Rivera his
19 patent, even though they knew about the Sylvan patent; isn't
20 that right?

21 A Yes.

22 Q Okay.

23 Now I want to talk a little bit about Claim 18. And I
24 believe you had some testimony, but Claim 18 talks about a
25 claimed container that's configured to replace the brewing

1 cartridge; isn't that right?

2 A That's right, yes.

3 Q And a brewing cartridge refers to a K-Cup, right?

4 A Yes.

5 Q Okay.

6 And so what I was a little bit unclear of, when you're
7 saying that these K-Cups read on Mr. Rivera's Claim 8 and 19,
8 are you saying that the jury should understand the phrase
9 "claim container configured to replace a brewing cartridge"
10 should be "a K-Cup is configured to replace a K-Cup"?

11 A If it's multiple use, yes.

12 Q And where in your testimony today, in your 70 slides, did
13 you show a prior art reference from the time of the invention
14 that said people can reuse K-Cups?

15 A I did not.

16 Q Now, I want to return to -- well, before I turn to
17 Sweeney, I believe you testified that it would have been
18 obvious to have the Nordskog container be the claim container
19 that's configured to replace the K-Cup; is that correct?

20 A That's an inaccurate way of stating it.

21 Q What was it that you were saying that you would combine
22 Nordskog, which doesn't have to do with a Keurig machine,
23 with a K-Cup?

24 A We could take the reusability concept from Nordskog and
25 combine that with, for example, '320.

1 Q But the Nordskog device was from the 1970s; isn't that
2 right?

3 A 1974, yes.

4 Q And it was a way of rehydrating instant coffee?

5 A It was a way of making a brewed beverage, yes.

6 Q Sort of adapting, making a multiuse device for an
7 airplane, right?

8 A Sure. It could use the original can, or we could replace
9 it so that it's reusable.

10 Q Now let's talk about Sweeney. I just have a few
11 questions.

12 So are you aware that Sweeney was before the Patent
13 Office during the patent examination of the Rivera '320
14 Patent?

15 A Yes.

16 Q Okay.

17 And so, again, Mr. Rivera was awarded his patent, even
18 though the Patent Office knew about Sweeney; isn't that
19 right?

20 A He was, yes.

21 Q Okay.

22 And so I believe you testified earlier that Sylvan was
23 also before the Patent Office, right?

24 A Yes, it was.

25 Q So Sylvan and Sweeney were before the Patent Office, but

1 you believe that those references can be combined to
2 invalidate Mr. Rivera's Claims 8 and 19; isn't that right?

3 A I testified to that, yes.

4 Q So certainly it was available to the Patent Office --

5 A Uh-huh.

6 Q -- to make that combination to render his claims
7 unpatentable, right?

8 A I'm sorry?

9 Q It was available to the patent office to make that
10 combination, right?

11 A Yes.

12 Q And they didn't?

13 A No, they did not.

14 Q And just a few more questions, Dr. Howle.

15 When you were talking about obviousness towards the end
16 of your slide presentation, I just want to be clear.
17 Obviousness is measured from the time of the invention; isn't
18 that right?

19 A I believe that's correct, yes.

20 Q So if something is obvious today, that's not the analysis.
21 The analysis is, would it have been obvious in 2007; isn't
22 that right?

23 A That's correct, yes.

24 Q Okay. So when you were discussing reasons to combine
25 references in the last few slides, when you were talking,

1 what evidence did you show from that time frame that these
2 references could be combined?

3 A Certainly Nordskog '772, Beaulieu '315, Sweeney '989,
4 Sylvan '189.

5 Q So I believe you were listing references. My question was
6 a little bit different.

7 A Sorry?

8 Q That's fine. It was a bad question.

9 In the time frame of 2007, did you cite here any
10 industry articles, technical manuals suggesting that you
11 would be able to put these two things together?

12 A I did not cite anything like that, no.

13 MR. KUNDU: And no further questions at this time.

14 THE COURT: Any redirect?

15 MR. LOWE: Yes, Your Honor.

16 REDIRECT EXAMINATION

17 BY MR. LOWE:

18 Q Dr. Howle, you were asked, in cross-examination, whether
19 or not, as of 2007, you personally would have qualified as a
20 person of ordinary skill in the art as it has been defined in
21 this case. Do you remember that question?

22 A In that case, yes.

23 Q Yes.

24 A Right.

25 Q And you acknowledge that, as of 2007, you hadn't been a

1 food scientist -- didn't have a food science degree or five
2 years in the beverage-brewing industry as of that time,
3 correct?

4 A Correct, yes.

5 Q Right.

6 And I think you commented that neither had
7 Mr. Phillips, correct, with respect to food science?

8 A Right. He admits he does not have a degree in food
9 science.

10 Q Right.

11 But do you feel confident, given your experience and
12 expertise, to consider the obviousness question from the
13 perspective of a person of ordinary skill in the art as of
14 2007?

15 A Absolutely.

16 Q And is that what you did?

17 A I did, yes.

18 Q Now, in cross-examination, ARM's counsel repeatedly
19 referred to the K-Cup and whether or not the K-Cup
20 invalidated the Rivera '320 Patent. But are any of the prior
21 art references you considered the actual K-Cup?

22 A It is the Sylvan '189 patent, yes.

23 Q Now, the Sylvan '189 patent, is that the K-Cup, or is that
24 disclosure about the K-Cup?

25 A That is a disclosure about the K-Cup, yes.

1 Q So when you evaluated the prior art, then, you weren't
2 just looking at the individual, physical K-Cup, were you?

3 A I was looking at the patent, the patent only.

4 Q So what informed your analysis was everything that
5 was within -- all the disclosure that was within the patent?

6 A Correct.

7 Q And based on your understanding of the K-Cup, did the
8 disclosure presented in the prior art patents go well beyond
9 what you could see in just a physical K-Cup?

10 A Yes.

11 Q So you have not offered any invalidity opinions about
12 whether the physical K-Cup itself invalidates the '320 Patent
13 claims, correct?

14 A That is correct, yes.

15 Q Now I'd like to direct your attention to certain of the
16 Beaulieu slides. And it looks like we'll go with the paper
17 version at this point in time.

18 So when ARM's counsel asked you specifically about
19 whether Beaulieu showed certain features specifically related
20 to the cover or the needle, those questions were directed to
21 the physical K-Cup, were they not?

22 A Yes, they were.

23 Q Okay.

24 So, then, with respect to the Beaulieu '315 Patent,
25 when you looked at this feature about "wherein the cover is

1 adapted to sealingly engage with the top edge of the at least
2 one sidewall, the cover including an opening," were you
3 looking at the physical K-Cup, or were you looking at the
4 disclosure in the patent?

5 A Solely the patent.

6 Q And did that disclosure include both the Sylvan reference
7 as well as other things that were in the patent?

8 A Yes, it did.

9 Q And is it still your conclusion that the Beaulieu '315
10 patent discloses that feature as shown in this slide?

11 A I've changed none of my conclusions today.

12 Q And with respect to the needle-like structure, do you
13 recall ARM's counsel asking you about whether a needle
14 actually punctured the bottom of a K-Cup?

15 A Correct, yes.

16 Q And is that true?

17 A Yes.

18 Q Okay.

19 But in the Beaulieu patent, did you find disclosure
20 there, separate from the physical K-Cup, that disclosed a
21 needle-like structure that did not penetrate the base?

22 A I'm sorry?

23 Q In the Beaulieu '315 Patent, did you find disclosure
24 there, separate from a physical K-Cup, that showed a
25 needle-like structure that does not penetrate a base?

1 A No.

2 Q Maybe I wasn't clear.

3 In this patent right here, as shown in Slide 36, did
4 Beaulieu disclose a needle-like structure that did not
5 penetrate the base?

6 MR. KUNDU: Your Honor, asked and answered.

7 THE COURT: There are too many "nots."

8 MR. LOWE: All right. Sorry. Bad question.

9 THE COURT: I do not know what the question is.

10 Q (By Mr. Lowe) What I'm trying to do, Dr. Howle, is, you
11 were asked questions about the physical K-Cup --

12 A Right.

13 Q -- and how it functioned and how it operated. You've
14 testified about what's actually in the Beaulieu patent.

15 A That's right.

16 Q Right. So I'm referring you back to Slide 36 --

17 A Uh-huh.

18 Q -- what's shown there, and maybe you can restate again.

19 With respect to Slide 36, were you focused on a
20 physical K-Cup, or were you focused on the contents of what
21 was disclosed in the Beaulieu '315 Patent?

22 A The contents of what was disclosed there, yes.

23 Q And with respect to this feature, what was your conclusion
24 as shown in Slide 36?

25 MR. KUNDU: Objection, Your Honor; asked and

1 answered.

2 THE COURT: The objection is overruled.

3 A Okay. Conclusion as to what? I'm sorry.

4 Q (By Mr. Lowe) As to whether or not this element is shown
5 in the Beaulieu '315 Patent.

6 THE COURT: When you say "this element," what are you
7 referring to?

8 MR. LOWE: I'm sorry. I'm trying to avoid --

9 Q (By Mr. Lowe) So what I'm referring to, Dr. Howle,
10 whether or not, with reference to Slide 36, which you
11 previously testified to --

12 A Uh-huh.

13 Q -- whether it's your conclusion that the Beaulieu '315
14 Patent discloses the following element from Claim 5 of the
15 Rivera '320 patent: "Wherein the predetermined distance is
16 selected such that a tip of a needle-like structure does not
17 penetrate the exterior surface of the base."

18 A They do, indeed, actually disclose that. And, again, in
19 reading this reference, or reading '320 onto this reference,
20 if we have the base as shown at the bottom of the filter,
21 there is a predisclosed distance that's indicated by "D"
22 there. So -- I'm sorry, am I misunderstanding your question?

23 Q I think you've answered it. Thank you.

24 Now, you were asked, on cross-examination, several
25 times, about whether certain prior art references were before

1 the Patent Office during the prosecution of the Rivera '320
2 Patent. Do you recall that?

3 A I recall that, yes.

4 Q And you acknowledge that certain of the references, such
5 as Sweeney or Sylvan, were, in fact, present in the Patent
6 Office during that prosecution, correct?

7 A They were, yes.

8 Q Now, is it the case, in your experience, over the last
9 number of years dealing with patents, that even though the
10 Patent Office issues a patent, that, subsequently, a court or
11 an international commission will disagree with the Patent
12 Office conclusion?

13 A That is certainly the case.

14 Q And, in fact, in this case, Claims 5 and 18 of the ARM
15 patent were originally found valid by the Patent Office when
16 it issued the patent, correct?

17 A They were, yes.

18 Q And then, subsequently, is it true that the ITC reversed
19 that and found that they were invalid?

20 A Yes, they were invalidated, yes.

21 Q And also the Federal Circuit, on appeal, confirmed that
22 invalidity?

23 A They did, yes.

24 Q So is it your understanding that, even though there is a
25 presumption of validity, even though the same art is

1 involved, that, later on, judicial bodies or otherwise can
2 make a different conclusion?

3 A Certainly, yes.

4 THE COURT: Are you switching to a new topic?

5 MR. LOWE: Just a final question, I think, Your
6 Honor, then I'm done.

7 Q (By Mr. Lowe) Finally, Dr. Howle, you were asked about
8 whether you provide any evidence of combining, as of 2007,
9 these different references, correct?

10 A Right, yes.

11 Q But -- and clarify me if I'm wrong, but did I understand
12 from your other testimony that you, in fact, found, within
13 those prior art references, which predate 2007, reasons why a
14 person of skill in the art would combine them in the way
15 you've outlined?

16 A Yes, absolutely.

17 MR. LOWE: Okay. No further questions, Your Honor.

18 THE COURT: Any further recross?

19 MR. KUNDU: Just one question.

20 THE COURT: Okay.

21 RE CROSS-EXAMINATION

22 BY MR. KUNDU:

23 Q Very quickly, Dr. Howle.

24 I believe you testified that the ITC's determination of
25 anticipation of Claims 5 and 6 was affirmed by the Federal

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1 Circuit?

2 A I'm not sure about 6.

3 Q But you believe Claim 5, that anticipation ruling was
4 affirmed?

5 A I believe it was.

6 Q Isn't it true, Dr. Howle, that the Federal Circuit said,
7 "We need not and do not consider the Commission's holding
8 with respect to anticipation of Claims 5 and 6"?

9 A I would have go back and read it again. I'm not sure.

10 Q I believe it's Exhibit 96.

11 A Okay.

12 Q It's the last page of that exhibit, the last paragraph.

13 THE COURT: Ladies and gentlemen, we're going to just
14 continue this line so we can excuse Dr. Howle. So if you'll
15 hang on with me.

16 A Mr. Kundu, did you say the last page?

17 Q (By Mr. Kundu) Yes. It's the last paragraph.

18 A Okay. I'm there.

19 Q Well, last sentence.

20 It's true, isn't it, Dr. Howle, that the Federal
21 Circuit did not consider the Commission's holding with
22 respect to anticipation of Claims 5 and 6?

23 A That seems to be so.

24 Q Isn't it true that the Federal Circuit said, "We need not
25 and do not consider the Commission's holding with respect to

1 anticipation of Claims 5 and 6"?

2 A Yes, that's true. It says so.

3 MR. KUNDU: Thank you.

4 THE COURT: Anything else, Mr. Kundu?

5 MR. KUNDU: No, Your Honor.

6 THE COURT: Anything else, Mr. Lowe?

7 MR. LOWE: No, Your Honor.

8 THE COURT: Any reason why Dr. Howle cannot be
9 excused?

10 MR. LOWE: No, Your Honor.

11 MR. KUNDU: No, Your Honor.

12 THE COURT: Thank you, Dr. Howle. You're excused.

13
14 (End of requested testimony.)
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C E R T I F I C A T E

I, Nancy L. Bauer, CCR, RPR, Court Reporter for the United States District Court in the Western District of Washington at Seattle, do hereby certify that I was present in court during the foregoing matter and reported said proceedings stenographically.

I further certify that thereafter, I have caused said stenographic notes to be transcribed under my direction and that the foregoing pages are a true and accurate transcription to the best of my ability.

Dated this 6th day of September 2018.

/S/ Nancy L. Bauer

Nancy L. Bauer, CCR, RPR
Official Court Reporter