

Huhtamaki Flexible Packaginng Germany vs Adapa Flexibles Denmark
Stephen McCarthy, Ph.D., Volume 2 on 02/28/2024

1 UNITED STATES PATENT AND TRADEMARK OFFICE
2 BEFORE THE PATENT TRIAL AND APPEAL BOARD
3
4 HUHTAMAKI FLEXIBLE)
5 PACKAGING GERMANY GMBH &)
6 CO. KG,)
7)
8 Petitioner,) CASE NO.
9) PGR2023-00008
10 vs.)
11)
12 ADAPA FLEXIBLES DENMARK) U.S. Patent No.
13 SLAGELSE A/S,) 11,260,624 B2
14)
15 Patent Owner.)
16)
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21)
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14 REMOTE DEPOSITION OF:
15 STEPHEN MCCARTHY, Ph.D.
16 Taken on behalf of the Petitioner
17 Volume 2
18 February 28, 2024
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1	I N D E X				
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3	THE WITNESS: STEPHEN McCARTHY, Ph.D.				
4	EXAMINATION BY MR. KILGORE			5	4
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8	INDEX OF EXHIBITS				
9	Exhibits	Description	Page/Line		
10	None.				
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1 The deposition of STEPHEN
2 McCARTHY, Ph.D., was taken by counsel
3 for the Petitioner, on February 28,
4 2024, commencing at 10:00 a.m., via
5 remote proceedings, for all purposes
6 under the Tennessee Rules of Civil
7 Procedure.

8 The formalities as to notice,
9 caption, certificate, et cetera, are not
10 waived. All objections, except as to
11 the form of the questions, are reserved
12 to the hearing.

13 It is agreed that Carissa L.
14 Boone, being a Notary Public and Court
15 Reporter, may swear the witness, and
16 that the reading and signing of the
17 completed deposition by the witness are
18 not waived.

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* * *

1 STEPHEN MCCARTHY, Ph.D.,
2 having been first duly sworn, was examined and
3 testified as follows:

4 EXAMINATION

5 BY MR. KILGORE:

6 Q. All right, Dr. McCarthy. Thank
7 you for being here today. My name is Mark
8 Kilgore. I'll be the one taking your deposition.

9 This is your second deposition in
10 this case; is that correct?

11 A. That is correct.

12 Q. And so just so we're all on the
13 same page, I'd like to go over some of the ground
14 rules with you, even though you may already know
15 them.

16 We are taking your deposition
17 virtually today. But it will work much the same
18 way as if we were all in the same room together.
19 I'm going to ask you a question, and then you can
20 provide your response.

21 Our court reporter here will be
22 taking down what we say. So as per usual, we
23 should refrain from talking over each other.

24 Is that okay?

25 A. Yes. I'm -- I'm having

1 difficulty on my computer. It --

2 Q. Sure. Can you hear me okay? Is
3 the volume okay?

4 A. I can hear you. Yeah.

5 Q. Okay.

6 A. I just can't see you. Probably
7 because I'm -- maybe it's this.

8 MR. GETZOFF: Oh, go to -- yeah,
9 click that one.

10 Mark, say something so we can see
11 if it....

12 MR. KILGORE: Yeah, can you hear
13 me? Can you guys hear me?

14 MR. GETZOFF: Yeah, it's just his
15 Gallery view. Let me -- let me see.
16 Go -- go to Gallery.

17 THE WITNESS: There it is. Okay.

18 MR. GETZOFF: Now go to Speaker.

19 THE WITNESS: Huh?

20 (Discussion off the record.)

21 BY MR. KILGORE:

22 Q. All right. You good?

23 A. Yes.

24 Q. All right. So if you'll -- if
25 you will let me ask my complete question, then

1 I'll let you provide your response, and I'll let
2 you finish your response before going on to my
3 next question.

4 Does that sound reasonable with
5 you?

6 A. It does.

7 Q. All right. I will ask when
8 answering, please provide a -- a verbal answer.
9 Head nods or nonverbal cues are difficult for our
10 court reporter to take down.

11 Also, saying things like "huh-uh"
12 or "uh-huh" are also difficult, so verbal answers
13 are always much appreciated, okay?

14 A. Okay.

15 Q. If I ask you a question that you
16 don't understand or -- if I ask you a question
17 that you don't understand or was poorly worded on
18 my part, please ask me to clarify the question.
19 If you don't understand what I'm asking, I'll try
20 to find a better way to ask it or I'll try to
21 understand what our problem is with our
22 communication, okay?

23 A. Okay.

24 Q. If at any time you need a break,
25 please let me or your attorney know. I'll plan on

1 us taking a -- a break about every hour. But if
2 you need one sooner than that, you're more than
3 welcome to do that, so please don't hesitate to
4 ask, okay?

5 A. Okay.

6 Q. I will ask that if -- if we need
7 to take a break and there's a question pending,
8 please answer that question before we go on the
9 break, all right?

10 A. Okay.

11 Q. So are you prepared today to give
12 complete, accurate, and truthful answers here?

13 A. Yes.

14 Q. All right. Are you taking any
15 medications today or anything that would prevent
16 you from understanding my questions or giving
17 complete answers?

18 A. No.

19 Q. All right. And as we've already
20 kind of done, if there's any technical difficult
21 -- difficulties at any point, just let me know;
22 we'll get that issue sorted out. Whether we can
23 do it on the record or off the record, we'll get
24 that figured out, all right?

25 A. Yeah. It would be nicer if I was

1 able to see you on my screen. But I don't -- you
2 know....

3 MR. GETZOFF: Yeah, let's go off
4 the record for a second.

5 MR. KILGORE: Sure.

6 (Discussion off the record.)

7 MR. KILGORE: All right. Great.

8 BY MR. KILGORE:

9 Q. All right. So, Dr. McCarthy,
10 since we are taking this deposition virtually --
11 I -- I believe you're located in Denver, Colorado
12 at your counsel's law office.

13 Is that correct?

14 A. That is correct.

15 Q. Okay. And are there -- I see Tim
16 is in the room with you. Who -- who all is in the
17 room with you there?

18 A. Tim and Steve.

19 Q. All right.

20 MR. GETZOFF: Steve Avena.

21 THE WITNESS: Yeah.

22 BY MR. KILGORE:

23 Q. Gotcha. Do you have anything
24 with you where you're seated, any notes or
25 documents?

1 A. Yes.

2 Q. What do you have?

3 A. I have a copy of my second
4 declaration.

5 Q. Okay. Are there any notes or
6 highlighting on that document, or is it just a
7 clean document?

8 A. Just a clean document.

9 Q. All right. And do you have any
10 notes or documents up on your screen?

11 A. No. Okay.

12 Q. All right. Great. Thank you for
13 all of that.

14 So, Dr. McCarthy, my
15 understanding is that you've prepared both a -- a
16 first original expert declaration and also a
17 second declaration so far in this case.

18 Is that correct?

19 A. I believe so.

20 Q. Okay. And, Dr. McCarthy, how
21 much -- how much time did you spend preparing for
22 this deposition today? And you can give me just
23 a -- an estimate based on hours, minutes, however
24 long.

25 A. So, you know, that's sort of an

1 open-ended question. Let me just tell you that I
2 arrived in Denver Monday night and spent the good
3 part of yesterday preparing --

4 Q. Okay.

5 A. -- for this deposition. And then
6 -- and that -- that's basically the heavy time
7 that I prep- -- prepared for this, yeah.

8 Q. So more than eight hours?

9 A. About eight hours.

10 Q. Okay. In your preparation, did
11 you review the '624 patent that is at issue in
12 this case?

13 A. I believe so.

14 Q. Okay. And did you -- did you
15 read the entire patent in the last couple days
16 that you've been preparing?

17 A. I'm not sure if I've read the
18 entire patent.

19 Q. Okay. But you have reviewed it
20 in -- in your preparations?

21 A. Parts of it.

22 Q. All right. Did you review Patent
23 Owner's Revised Motion to Amend?

24 A. In?

25 Q. In your -- in your preparation.

1 A. I don't believe so.

2 Q. Okay. And have you reviewed your
3 second expert declaration in your preparation?

4 A. I believe so.

5 Q. Okay. How about your first
6 expert declaration, did you review that at all?

7 A. No.

8 Q. Did you review the Board's
9 Preliminary Guidance at all in your preparation?

10 A. In -- we're talking still about
11 yesterday?

12 Q. Yesterday, Monday, yeah, in your
13 preparation for this --

14 A. Yeah.

15 Q. -- particular deposition. Yes.

16 A. I don't believe so.

17 Q. Okay. What about -- what about
18 the Petitioner's Opposition to the Motion to
19 Amend, did you review that in your preparation?

20 A. Possibly.

21 Q. Okay. What about the Riis prior
22 art patent, did you review that?

23 A. I don't believe so.

24 Q. Okay. What about the Holzmuller
25 prior art patent, did you review that in your

1 preparation?

2 A. I believe so.

3 Q. All right. How about the Tohara
4 patent, did you review that in your preparation?

5 A. I believe so.

6 Q. Okay. And then what about the
7 Rivers patent, did you review that in your
8 preparation?

9 A. I believe so.

10 Q. Okay. And so are you prepared to
11 answer questions on some of these documents today?

12 A. Specifically as it pertains to my
13 second declaration.

14 Q. Okay. Great.

15 MR. KILGORE: So, Megan, if you
16 could, let's pull up Exhibit 2016.

17 BY MR. KILGORE:

18 Q. Which, Dr. McCarthy, I think you
19 have in front of you, is your second declaration
20 that was filed by your counsel. And,
21 Dr. McCarthy, I'd like for you to go to the last
22 page of that document, which is page 70. Let me
23 know -- let me know when you're there.

24 A. Yeah, I'm there.

25 Q. Okay. And it says there at the

1 bottom: "Executed on this 16th day of January,
2 2024," and then is signed.

3 Is that your signature?

4 A. Yes, it is.

5 Q. Okay. And so can you confirm for
6 me that this is your second declaration or what
7 you have in front of you is your second
8 declaration?

9 A. It appears so.

10 Q. Okay. Are there any corrections
11 you would like to make to your second -- second
12 declaration at this time?

13 A. I don't believe so.

14 Q. Okay. So then, Dr. McCarthy,
15 let's go to page 3, and specifically the first
16 paragraph, which is paragraph 5. So you can let
17 me know when you're there. Page 3, paragraph 5.

18 A. Page 3 of page III.

19 Q. So page --

20 A. Okay. Yep, there it is.

21 Q. Number -- No. 3, yeah.

22 A. Yeah.

23 Q. Okay. And at the top of that,
24 there should be paragraph 5.

25 A. Yes.

1 Q. All right. And the last sentence
2 of that paragraph says, quote: "I am familiar
3 with technology described in the '624 patent as of
4 its earliest possible priority date, December
5 29th, 2015," end quote.

6 Did I read that correctly?

7 A. What do you mean, "end quote"?

8 Q. Sorry, I just -- I was quoting
9 from your -- from your testimony, so I just wanted
10 it to be clear when I was ending the quote from
11 your testimony.

12 A. That's what it appears.

13 Q. Okay. So in your analysis of the
14 prior art, you applied a priority date of December
15 29th, 2015 for the '624 patent.

16 Is that correct?

17 A. That is correct.

18 Q. All right. And so, Dr. McCarthy,
19 let's now go to page 23.

20 A. (Witness complies.)

21 Q. So numeral 23 at the bottom. And
22 at the top of that page, there should be a heading
23 that is Roman Numeral VIII, and then it should say
24 "Summary of the Asserted References."

25 Let me know if you see that.

1 A. Yes.

2 Q. Okay. And so based on this
3 Section VIII of your declaration, is it your
4 understanding that the original Petition was based
5 on obviousness of the combination of prior art
6 with Riis, Wypych, and Tatarka?

7 And I'll point you specifically
8 to your first sentence there of paragraph 63.

9 A. Could you repeat the question?

10 Q. Sure.

11 So based on this section -- and
12 specifically looking at paragraph 63 -- is it your
13 understanding that the original Petition was based
14 on obviousness of the combination of Reese,
15 Wypych, and Tatarka?

16 A. I believe what it says is that
17 the Petitioner identified three prior art
18 references for forming the basis of obvious --
19 obviousness, if that is what you're alluding to.

20 There's something on my screen.
21 I don't -- can't identify. I just --

22 MR. GETZOFF: Just X out here.

23 Yeah.

24 THE EXHIBIT TECH: Do you need a
25 portion zoomed up a bit?

1 MR. GETZOFF: No. It's -- he's
2 getting a popup from a different program
3 on his laptop.

4 THE EXHIBIT TECH: Oh.

5 MR. GETZOFF: I think we're good.

6 THE EXHIBIT TECH: Okay.

7 BY MR. KILGORE:

8 Q. So my question was in the
9 original Petition, the obviousness challenge was
10 based on a combination of Riis, Wypych, and
11 Tatarka. And I just wanted to confirm that that
12 was your understanding.

13 A. And I believe what I said was
14 that you identified those references to form your
15 basis for your obviousness challenges.

16 Q. Okay. So that's a yes, that's
17 your understanding, those three references, Riis
18 Wypych and Tatarka?

19 A. Again, that's what it says that
20 your basis -- in this 63.

21 Q. Uh-huh. And so I'm just -- just
22 trying to confirm that that is your understanding.
23 I understand that you're understanding that that's
24 what it says, but I'm also asking is that your
25 understanding as well?

1 A. You're asking me what your
2 challenge was?

3 Q. Yes. I'm asking you to confirm
4 if it is your understanding that the original
5 Petition included three references: -- Riis,
6 Wypych, and Tatarka -- and those were used in an
7 obviousness challenge.

8 Is that your understanding?

9 A. I believe so.

10 Q. All right. Great. Thank you.

11 And so then in the Petitioner's
12 opposition to the Motion to Amend, additional
13 prior art references were added, and those
14 included Tohara, Holzmuller, and Rivers.

15 And is that your understanding as
16 well?

17 A. I believe so.

18 Q. All right. Great.

19 And so for this -- for your
20 second declaration here that we're reviewing, did
21 you consider the combination of these references
22 in forming your opinion that you've provided in
23 this second declaration?

24 A. Possibly.

25 Q. Okay. Is it possible you

1 considered other combinations?

2 A. I'm not sure which combinations
3 you're referring to.

4 Q. I'm just meaning generally are
5 these the -- so there's six references, right,
6 that are now being used in various obviousness
7 combinations. And I'm just asking generally, are
8 these the ones that you've reviewed and considered
9 in forming your opinions?

10 A. I believe so.

11 Q. Okay. Great.

12 So let's go to page 58, if we
13 can, of your expert report. Let me know when you
14 make it there. This will be numeral 58 at the
15 bottom of page.

16 Have you made it there yet?

17 A. Yep.

18 Q. Great. And on that page, there
19 is a heading in bold that is labeled or identified
20 with a number 2.

21 Do you see that?

22 A. I see that.

23 Q. Okay. And so under that Heading
24 2, there is paragraph 144, and then if you flip
25 over to the next page, there's paragraph 145, and

1 then finally going to the next page, there's
2 paragraph 160 [sic].

3 So do you agree with me that
4 under that par- -- under that Heading 2, you have
5 three paragraphs, 144, 145, and 146?

6 A. I believe you said "160."

7 Q. Oh, you're right. I'm sorry for
8 that. Yes. That was page -- I was looking at
9 page 60. So there should be, under Heading 2,
10 three paragraphs: 144, 145, and 146.

11 Is that correct?

12 A. I believe so.

13 Q. All right. So let's take a look
14 specifically at paragraph 146. And the first
15 sentence, could you read that first sentence out
16 loud for me? It starts with: "Indeed."

17 A. Okay. "Indeed, in light of my
18 thorough review of the Holzmuller reference, it is
19 my opinion that Holzmuller provides no meaningful
20 guidance to a POSITA on the selection of
21 materials, layer thicknesses thereof, or the
22 combination/selection of both."

23 Q. Great. Thank you for that.

24 So you say there in that sentence
25 that Holzmuller provides no meaningful guidance on

1 the selection of materials, layer thicknesses or
2 combination/selection of both.

3 And so if we look at preceding
4 paragraphs 144 and 145, is this where you're
5 discussing the different materials and thicknesses
6 that are discussed by Holzmuller?

7 A. (Witness reviews document.)

8 That appears so.

9 Q. Okay. If we specifically look at
10 paragraph 145, you say that with the different
11 combinations of materials and thicknesses
12 described by Holzmuller, there are over 100,000
13 possibilities.

14 Do you see that?

15 A. Yes.

16 Q. Okay. And is -- is that --
17 that's an accurate representation of -- if what
18 you're -- what I'm summarizing here for
19 paragraph 145?

20 A. That it -- it's at least that,
21 yes.

22 Q. Yeah. Okay. I think you --
23 specifically, you recite: 100,800
24 material/thickness combinations right there in the
25 middle of the paragraph.

1 A. Yes, that's what it says.

2 Q. Okay. And so in this section
3 where you're looking at the enablement of
4 Holzmuller, you were analyzing only Holzmuller,
5 correct, just that one piece of prior art?

6 MR. GETZOFF: Objection to form.

7 THE WITNESS: Yeah, I'm not --
8 I'm not sure what -- what do you mean,
9 "only Holzmuller"?

10 BY MR. KILGORE:

11 Q. So in this section, you did an
12 analysis on whether Holzmuller enables a -- a
13 POSITA to make a modified film.

14 Is that correct?

15 A. Yeah. So it has a listing of
16 materials, and then it includes combinations of
17 those materials, you know, mixtures of those
18 materials.

19 Q. Uh-huh.

20 A. And so you could then go from,
21 like, different percentages of one to some
22 percentages of the other, and you have then, you
23 know, the 63 material option combinations times
24 the 1600 possible thickness combinations gives you
25 the 100,800. But there are even more than those.

1 Q. Right. So in your analysis that
2 you just sort of went through quickly right there,
3 you were basing that only on Holzmuller. Is that
4 your understanding?

5 A. That's what I was primarily
6 basing it on.

7 Q. Okay. Is there anything else you
8 were basing it on? You said "primarily"?

9 A. I'm not sure what -- I mean, my
10 experience.

11 Q. Okay. No other -- no other prior
12 art? So -- so Holzmuller and your experience.

13 But you weren't -- you weren't
14 analyzing any other piece of prior art at this
15 point -- is that correct -- in these three
16 paragraphs?

17 A. I don't believe so.

18 Q. Okay, great.

19 And so still staying in this
20 Section 14- -- paragraphs 144, 145, and 146, did
21 you do this analysis based on any particular
22 priority date of -- of the prior art?

23 MR. GETZOFF: Objection to form.

24 THE WITNESS: Could you repeat
25 the question?

1 BY MR. KILGORE:

2 Q. Sure.

3 When you did this analysis for
4 Holzmuller, was that based on any particular
5 priority date?

6 Actually, let me start -- let me
7 start with a more basic question just to make sure
8 we're all on the same page.

9 We talked about the priority date
10 earlier, right, where I asked you about the
11 priority date of the '624 patent. You're familiar
12 with what a priority date is; is that correct?

13 A. That is correct.

14 Q. Okay. So when you did your
15 analysis with Holzmuller, was that based on any
16 particular priority date?

17 A. I don't -- I don't think that
18 matters.

19 Q. Okay.

20 A. But, you know, I would have used
21 the -- probably the same priority date.

22 Q. When you say "the same priority
23 date," what do you mean? Which priority date is
24 that?

25 A. The priority date for the '624

1 patent.

2 Q. Okay. And do you recall if you
3 analyzed whether Riis was enabling prior art like
4 you did for Holzmuller?

5 A. Possibly.

6 Q. Okay. Would that be in your
7 second declaration?

8 A. No, that would be in the first.

9 Q. All right. And what about
10 Wypych, do you recall if you analyzed that as
11 being -- that prior art reference as being
12 enabled?

13 A. Possibly.

14 Q. Okay. And where would that one
15 be?

16 A. My first.

17 Q. All right. So, Dr. McCarthy,
18 let's now turn one page. Flip over to page 61,
19 and there we should see paragraph 148. Let me
20 know when you're there, when you see it.

21 A. Yep, I'm here.

22 Q. Okay. The second sentence of
23 paragraph 148 reads, quote: "Regardless, as
24 detailed above, I have identified evidence of
25 criticality of the claim ranges," end quote.

1 Did I read that correctly?

2 A. I believe so.

3 Q. So there you say "Regardless, as
4 detailed above...." Can you -- can you point me
5 to the part of your declaration here -- your
6 second declaration, you were talking about as to
7 what is "detailed above"? I'd just like some
8 clarification as to which section you're talking
9 about.

10 A. So it says Exhibit 1001 at
11 2:63 67. So do you want me to go to those
12 exhibits?

13 Q. Is that what you're referring to
14 when you say: "As detailed above, I have
15 identified evidence of criticality" and then you
16 have a list of citations?

17 A. Yeah.

18 Q. So that's what you're referring
19 to "as detailed above," and then Exhibits 1001 and
20 2014?

21 A. Yeah.

22 Q. Okay. No. We don't have to go
23 to those at that point. So there's nothing
24 previously or prior to this sentence or to this
25 paragraph in your second declaration, that you're

1 referring to?

2 A. No.

3 MR. GETZOFF: Objection to form.

4 BY MR. KILGORE:

5 Q. Okay.

6 A. I don't believe so.

7 Q. Okay. So in the citation that
8 you just mentioned, right where we see: "See
9 Exhibit 1001, Exhibit 2014," I'll offer to you
10 that Exhibit 1001 is the '624 patent.

11 Does that sound right to you?

12 A. Let me see. I believe.

13 Q. Okay. And then Exhibit 2014 is
14 your first declaration. Does that sound right?

15 A. I'm not sure on that one. I
16 don't have that one listed.

17 Q. Okay. I think we'll stipulate
18 that that is -- I can -- I can confirm for you
19 that that is your second [sic] declaration --
20 excuse me, I misspoke, your first declaration.
21 Exhibit 2014 is your first declaration.

22 So in this citation after -- at
23 the end of paragraph 148, you do not cite any
24 other documents here; is that correct?

25 A. I don't believe so.

1 Q. Okay. And in this paragraph,
2 you're talking about criticality of the claimed
3 ranges; is that correct?

4 A. That is correct.

5 Q. So are there any citations to
6 criticality of the amended '624 claims, that you
7 are aware of, that are not listed here in your
8 second declaration?

9 A. Could you repeat that?

10 Q. Sure.

11 Are there any citations to
12 criticality of the amended '624 claims, that you
13 are aware of, that are not listed here in
14 paragraph 148 of your second declaration?

15 A. Possibly.

16 Q. Okay. Where would those -- where
17 would those be located?

18 A. I don't know. You just said is
19 it -- is it -- is it possible?

20 Q. Well, I didn't -- I didn't say --

21 A. Okay.

22 Q. -- if it was possible. I just
23 asked if there are any citations --

24 A. Oh.

25 Q. -- other than the ones that are

1 -- that you've -- that you've listed here.

2 A. It doesn't appear like there are.

3 Q. Okay. So for Exhibit 1001, which
4 is the '624 patent, are there any other portions
5 of the specification that also evidence
6 criticality of the claims, that are not included
7 in this citation?

8 MR. GETZOFF: Objection to form.

9 THE WITNESS: Can I look at it?

10 BY MR. KILGORE:

11 Q. Absolutely.

12 A. Okay.

13 Q. Do you have a copy with you, or
14 would you like Megan to bring up the exhibit?

15 MR. GETZOFF: We don't have a
16 copy of the '624. Well --

17 MR. KILGORE: Megan, can you
18 drop --

19 MR. GETZOFF: No, we have a copy
20 of the '624.

21 MR. KILGORE: Okay.

22 BY MR. KILGORE:

23 Q. Dr. McCarthy, as you're reviewing
24 that, if there are any notes or highlights, would
25 you let me know?

1 THE EXHIBIT TECH: Which one do
2 you need pulled up?

3 MR. KILGORE: Exhibit 1001. It
4 should be the '624 patent.

5 THE WITNESS: So the question is:
6 Are there any additional --

7 BY MR. KILGORE:

8 Q. Yes. So in your citation at
9 paragraph 148, you cite column 2, line 63 to 67;
10 and column 6, lines 1 to 13, and 24 to 28. And
11 the question was: Are there any additional
12 citations in the '624 patent specification, other
13 than the ones that you provided in your
14 declaration?

15 A. I believe that at column 3, lines
16 1, 2, and 3.

17 Q. Okay. Any others?

18 A. You want me to keep looking?

19 Q. Please.

20 A. Oh, okay. (Witness reviews
21 document.)

22 I believe in column 6, lines 18
23 to 20 -- 17 to 20.

24 Q. Okay. Anything else?

25 A. You want me to keep looking?

1 **Q. Please do.**

2 A. Okay. (Witness reviews
3 document.)

4 So in column 6 at line 17, the --
5 I believe it should be the melting point of the
6 tie layer differs from the glass transition
7 temperature of the COC.

8 I think that was just a
9 misunderstanding where they confused glass
10 transition temperature -- because the COC does not
11 have a melting point, so it would be easy to use
12 the TG as the melting point. But if that was
13 corrected, that would be a criticality, I think.

14 **Q. Okay. So -- so you think that**
15 **that was a mistake, a mistake in the specification**
16 **with what they were referring to there?**

17 A. I think it was a -- yeah, just
18 a -- a misuse of the term melting point --

19 **Q. Okay.**

20 A. -- in glass transition type of
21 temperature.

22 **Q. Okay. Noted.**

23 A. Yeah. I mean, because where
24 there's no melting point, then the TG is the point
25 at which you need to get above to create a polymer

1 melt.

2 Q. Okay.

3 A. Yeah.

4 Q. All right. Are there any other
5 portions of the '624 specification that evidence
6 criticality of the claimed ranges?

7 Ultimately, I'm looking for all
8 of the support that you relied upon. So that --
9 that's what we're trying to get at with this
10 question.

11 So if there -- if there are more
12 portions of the specification, could you tell me
13 where these are?

14 A. Okay. So anything that I think
15 is unexpected.

16 Q. How does unexpectedness tie to
17 criticality?

18 A. Well, an unexpected result in
19 that it's something where you might -- which --
20 which is, I think, a lot of -- a lot of reasons
21 for patents is that something that's surprising.

22 Q. Okay.

23 A. The critical- -- you know,
24 critical.

25 Q. Okay. So how did you determine

1 whether something was -- whether the loading
2 ranges of the tie layer were critical?

3 A. Are you asking me for basis
4 within the patent for that?

5 Q. Correct.

6 A. Okay.

7 Q. You've already provided some
8 citations in paragraph 148. You've added some
9 more here in this deposition today. And I'm just
10 wondering what others you may have omitted from
11 your declaration, such as the ones you're adding
12 today.

13 So are there any -- are there any
14 more citations?

15 MR. GETZOFF: I'll object to the
16 form.

17 You can answer.

18 THE WITNESS: Yeah. I thought
19 you were asking -- you know, those --
20 you know, I listed the ones that I've
21 relied upon. There may be others that
22 are critical, and that's sort of what
23 I'm trying to fill in with.

24 BY MR. KILGORE:

25 Q. Yeah, that's --

1 A. I haven't omitted them.

2 Q. Yeah, that's exactly -- that's
3 exactly what I'm asking --

4 A. Okay.

5 Q. -- is for you to fill in any
6 remaining citations, yeah.

7 A. Okay.

8 Q. Yeah.

9 A. (Witness reviews document.)
10 You know, there's -- there's one
11 possible criticality in column 3, lines 4 to 15.

12 Q. Okay.

13 A. That looks like all I can find
14 right now.

15 Q. Okay. Great. Thank you. I
16 appreciate you taking the time to -- to look
17 through that.

18 A. No problem.

19 Q. So earlier when we were talking,
20 you mentioned that criticality is based on an --
21 on an unexpected result. Was that correct?

22 A. I believe that that could be one
23 way of interpreting it.

24 Q. Okay. What would be another way?

25 A. Is that something that's in my

1 report?

2 Q. I couldn't tell you.

3 MR. GETZOFF: Objection. Outside
4 the scope of his report. And objection
5 to form and foundation.

6 BY MR. KILGORE:

7 Q. So, Dr. McCarthy, I -- I -- I
8 asked you -- you talked about unexpected results,
9 and you said that was one way you could view it.
10 So I was just asking what -- what are the other
11 ways that --

12 A. Yeah, and I --

13 Q. -- you said --

14 A. -- was --

15 Q. -- you said one way.

16 MR. GETZOFF: Same objections.

17 BY MR. KILGORE:

18 Q. Okay.

19 A. Yeah, and I was going to go
20 through my report to see if there were other ways
21 that I've stated in my report.

22 Q. Sitting here, are you aware of
23 other ways?

24 A. I believe there are other ways,
25 but I just can't recall them right now.

1 Q. Sure. Okay. Well, I don't think
2 we'll have to get into those other ways.

3 So what is the unexpected result
4 that you referred to of the claimed loading
5 ranges?

6 A. Is that in my second declaration?

7 Q. If you need to look for it, you
8 can. I'm just asking you -- you said that there's
9 an unexpected result, so I was just asking you
10 what is the unexpected result of the claimed
11 loading range?

12 MR. GETZOFF: Objection, outside
13 the scope of his report.

14 BY MR. KILGORE:

15 Q. Did you identify what the
16 unexpected result of the claimed loading range is?

17 A. Is it something that's in my
18 report?

19 Q. You'll have to tell me.

20 A. Okay.

21 MR. GETZOFF: Objection, outside
22 the scope of his report, and outside the
23 scope of this deposition.

24 THE WITNESS: (Witness reviews
25 document.) Yeah, I don't believe it's

1 within my report.

2 MR. KILGORE: So it's a -- we're
3 coming right up on an hour, so why don't
4 we take a break at this point, if that
5 works for everybody?

6 THE WITNESS: That works great.

7 MR. GETZOFF: Five or ten?

8 MR. KILGORE: We'll do ten.

9 (Brief recess observed.)

10 BY MR. KILGORE:

11 Q. So, Dr. McCarthy, let's now turn
12 -- we're still in -- let's go to Exhibit 2016,
13 which is your second declaration, and let's go to
14 page 37. So that'll be numeral 37 at the bottom
15 of the page.

16 Let me know when you're there.
17 You should see substitute claim 14.

18 A. Am I supposed to wait for it to
19 come up on the screen?

20 Q. Yes, Megan should be getting it
21 for us.

22 A. Okay.

23 Q. Perfect. There it is.

24 So at the bottom of page 37,
25 there's the last claim -- paragraph of claim 14.

1 It says: The tie layer compromises a first layer
2 and a second layer and wherein the tie layer for
3 each of the first layer of the tie layer and the
4 second layer of the tie layer has a loading in the
5 range of 7 to 20 grams per meter squared -- I'd
6 like to ask you a couple of questions, clarifying
7 questions on this section, okay?

8 A. Okay.

9 Q. So is it your understanding that
10 this claim allows the first layer of the tie layer
11 to be 20 grams per meter squared and the second
12 layer of the tie layer to have a ran- -- a loading
13 of 20 grams per meter squared?

14 A. So this claim has basically two
15 different forms. And so if -- where the -- each
16 of the first layer and second layer of the tie
17 layer has a loading of 7 to 20, it would allow it
18 -- that -- that would be the maximum where each of
19 them would have 20 grams per meter squared.

20 Q. Okay. So that -- so if both of
21 them were 20 grams per meter squared, that would
22 be a total of 40 grams per meter squared?

23 A. I believe so.

24 Q. Okay. And so, Dr. McCarthy, can
25 you remind me what the function of the tie layer

1 is?

2 A. So the -- the function of the tie
3 layer is to, you know, adhere one material or
4 component to another component, and where the
5 primary purpose of that layer is the tie layer
6 being to adhere those -- those layers together.
7 And there could be -- it could be defined by the
8 patent specification as being a tie layer and
9 could be -- have other attributes to it, such as
10 multifunctionality, which is what we -- gives
11 the -- the tie layer.

12 Q. Okay. So if a -- so according to
13 claim 14, if you made a film and it had a tie
14 layer of 20 grams per meter squared, and you had
15 another film, according to claim 14, that had a
16 tie layer that was 25 grams per meter squared,
17 otherwise being the same films, would the tie
18 layer that's 25 grams per meter squared function
19 the same as one that is 20 grams per meter
20 squared, based on what you just told me?

21 MR. GETZOFF: Objection to form.

22 THE WITNESS: So you're -- you're
23 saying that the -- one of the films has
24 a tie layer of 25 grams per meter
25 squared, so it's outside of the scope of

1 claim 14?

2 BY MR. KILGORE:

3 Q. Yes, sir, that's correct.

4 And I -- that the -- the
5 follow-up question to that was would the tie
6 layers of each film function the same?

7 MR. GETZOFF: Can I ask you to
8 quick -- to clarify, Mark? So the tie
9 layer in 14 has two layers. Are you --
10 are you referring to the two layers
11 together?

12 MR. KILGORE: So I just -- just
13 the tie layer could have one layer or
14 two layers. I'm just saying that the --
15 a tie layer that has 20 grams per meter
16 squared in one film and 25 grams per
17 meter squared in the second film.

18 MR. GETZOFF: So are we not
19 talking about claim 14, then? You're
20 just talking generally?

21 MR. KILGORE: We are -- we are
22 talking about films made according to
23 claim 14, so they would have a first
24 layer and second -- and a second layer
25 in the tie layer.

1 MR. GETZOFF: Okay.

2 MR. KILGORE: But the total
3 amount -- the total loading range of the
4 tie layer, including the first and
5 second tie layers -- or including the
6 first and second layers, one would be 20
7 and one would be 25.

8 I may now have made it less
9 clear.

10 MR. GETZOFF: No, that -- I think
11 you changed --

12 MR. KILGORE: Yeah.

13 MR. GETZOFF: -- I think you
14 changed it.

15 BY MR. KILGORE:

16 Q. Dr. McCarthy -- I guess, Dr.
17 McCarthy, are you following the -- the -- the
18 question here?

19 A. So it's something where they both
20 have two layers; one is like ten and ten, and one
21 is like ten and 15?

22 Q. Sure. That -- that would work.

23 A. Okay. And so they would both
24 fall within that -- that second part of claim 14?

25 Q. Uh-huh. Sure.

1 A. Yeah.

2 Q. So would they function the same?

3 And when I say "they," I'm -- let -- let me be

4 clear -- I'm referring to the tie layers. Would

5 the tie layers function the same?

6 A. I don't know.

7 Q. Okay.

8 A. That requires speculation.

9 Q. Okay. All right. Well, Dr.
10 McCarthy, we don't have any further questions for
11 you.

12 A. Okay.

13 Q. That will be it.

14 MR. KILGORE: Any redirect?

15 MR. GETZOFF: Let's go off the
16 record.

17 MR. KILGORE: Sure.

18 (Brief recess observed.)

19 MR. GETZOFF: We have no
20 cross-examination -- or no redirect, I
21 should say.

22 MR. KILGORE: Okay.

23 And, Carissa, we will read and
24 sign.

25 THE COURT REPORTER: Okay. Is

1 anyone going to order the transcript?

2 MR. KILGORE: Yes.

3 MR. GETZOFF: Yes.

4 MR. KILGORE: And we asked for it
5 to be expedited. We were asking for a
6 48-hour turnaround, by Friday.

7 THE COURT REPORTER: I don't
8 think that'll be a problem. It was
9 fairly short.

10 FURTHER DEPONENT SAITH NOT.

11 (Proceedings concluded at
12 11:43 a.m.)

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1 REPORTER'S CERTIFICATE

2 I certify that the witness in the
3 foregoing deposition, STEPHEN MCCARTHY, PH.D.,
4 was by me duly sworn to testify in the within
5 entitled cause; that the said deposition was
6 taken at the time and place therein named; that
7 the testimony of said witness was reported by me,
8 a Shorthand Reporter and Notary Public of the
9 State of Tennessee authorized to administer oaths
10 and affirmations, and said testimony, Pages 5
11 through 43 thereafter transcribed into
12 typewriting.

13 I further certify that I am not of counsel
14 or attorney for either or any of the parties to
15 said deposition, nor in any way interested in the
16 outcome of the cause named in said deposition.

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

19

20

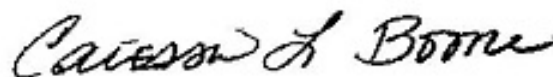
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1 E R R A T A

2
3 I, STEPHEN MCCARTHY, Ph.D., having read
4 the foregoing transcript, Pages 5 through 43 do
5 hereby certify said testimony is a true and
6 accurate transcript, with the following changes
7 (if any):

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