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Transcript of Dr. Scott Phillips

Date: May 21, 2026

Case: Multi-Color Corporation -v- Brook & Whittle Limited (PTAB)

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Multi-Color 1048

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

MULTI-COLOR CORPORATION	)	
	)	
Petitioner,	)	PGR2025-00025
	)	Patent No. 11,961,422
v.	)	
	)	
BROOK & WHITTLE LIMITED	)	
	)	
Patent Owner.	)	

DEPOSITION OF DR. SCOTT PHILLIPS

May 21, 2026 8:04 a.m.

Location: Kirkland & Ellis, LLP
95 South State Street
Salt Lake City, Utah

Reported by:
HEIDI HUNTER, RPR, CSR
Job No.: 630991

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13
14
15 ALSO PRESENT:

16 (None)
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E X H I B I T S

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1 P R O C E E D I N G S

2 Whereupon,

3 DR. SCOTT PHILLIPS,

4 having been sworn to testify to the truth, the whole
5 truth, and nothing but the truth, was examined and
6 testified under oath as follows:

7 EXAMINATION

8 BY MR. SCHATZ:

9 Q Could you state your name for the record.

10 A Scott Phillips.

11 Q Dr. Phillips, do you understand that you're
12 here today as a witness on behalf of patent owner
13 Brook & Whittle?

14 A I do.

15 Q Okay. And you have offered a declaration in
16 this matter on behalf of Brook & Whittle?

17 A I have.

18 Q Okay. I'm going to ask you questions about
19 your opinions and that's the purpose of the deposition
20 today. Okay?

21 A Okay.

22 Q Have you ever had your deposition taken

1 before?

2 A One time.

3 Q Do you feel like you have an understanding
4 of how the deposition will go?

5 A I have a vague memory of that time but if
6 you'd like to walk through, that's fine.

7 Q The only thing I would recommend is let's
8 not talk over each other, so I'll ask my question --
9 and a lot of times lawyers' questions are very
10 precise. So pause and make sure I'm done with my
11 question and then go ahead and provide an answer,
12 okay?

13 A Okay.

14 Q And then the only other thing is verbal
15 responses are needed for the court reporter to be able
16 to pick up your response.

17 A I understand.

18 Q Okay. Great.

19 (EXHIBIT 1002 WAS INTRODUCED.)

20 Q I'm going to go ahead and pass to you the
21 first exhibit we're going to use today, which is
22 Exhibit 1002.

1 A Thank you.

2 Q Dr. Phillips, Exhibit 1002 is the
3 prosecution history of the '422 patent application,
4 okay?

5 A Okay.

6 Q And what you have before you is a small
7 excerpt of that prosecution history. The entire
8 prosecution history is over 400 pages long, and
9 frankly, I didn't want to bring the entire thing with
10 me and I certainly didn't want to bring three copies
11 of it with me.

12 But I'm going to be referring only to things
13 that are part of this excerpt.

14 A Okay.

15 Q However, I want to assure you that if you
16 feel the need to review other portions of the
17 prosecution history, we can make that available to you
18 electronically, okay?

19 A Okay.

20 Q All right. I just don't want you to feel
21 like I'm only showing you portions, and you don't have
22 an opportunity to review the entire thing, okay?

1 A Okay.

2 Q All right. So in connection with your
3 declaration in this matter, I take it you have
4 reviewed the prosecution history for the application
5 that issued as the '422 patent?

6 A I have.

7 Q Okay. Then I want to draw your attention to
8 a page in the lower right-hand corner that has the
9 number 336.

10 A Okay.

11 Q And again, just to give some context, and we
12 just started the deposition so I want to ease into
13 this for you. But this page 336 that we're referring
14 to is part of a response that the applicant made to a
15 rejection posed by the patent office. And one of the
16 subject matters is the Mitchell reference.

17 Is this refreshing your recollection?

18 A Yes.

19 Q Okay, very good. So I didn't want to catch
20 you off guard. Okay.

21 In the third paragraph on page 336, the
22 applicant is responding to the office action and the

1 rejection based on Mitchell, and argues, quote, "The
2 shrink labels taught by Mitchell 879 are not made of
3 PET and would not be recyclable with a PET container.
4 Labels made of other materials, including
5 polypropylene, polyethylene, and paper are considered
6 contaminants in a PET recycling stream, and need to be
7 removed for the PET container to be recycled."

8 Do you see that?

9 A I do.

10 Q Okay. I want to ask some questions about
11 the comment labels made of other materials. If a
12 label -- does a person of skill in the art understand
13 that if a label is made of materials that are
14 considered to be contaminants, examples of which are
15 polypropylene, polyethylene, or paper, the label is
16 not recyclable as claimed in the '422 patent, correct?

17 A The label would be a contaminant in the
18 recycling stream according to the '422 patent.

19 Q And for that reason, then, that label
20 containing contaminants would not be recyclable as the
21 term is used in the claims of the '422 patent,
22 correct?

1 MR. DIRKS: Objection; form.

2 THE WITNESS: Can you repeat the question
3 again, please?

4 BY MR. SCHATZ:

5 Q Sure. No problem at all. So if the label
6 contains contaminants, and I gave some examples of
7 what those contaminants are, the label is not
8 recyclable as that term is used in the '422 patent
9 claims, correct?

10 MR. DIRKS: Objection to form. Outside the
11 scope.

12 THE WITNESS: It would -- so whether
13 something is a contaminant would be dictated by
14 whether it can be removed or not during the recycling
15 process.

16 BY MR. SCHATZ:

17 Q I see. So if a label is made of a
18 contaminant, but that contaminant can be removed, then
19 it could be recyclable as that term is used in the
20 claims of the '422 patent?

21 MR. DIRKS: Objection to form.

22 THE WITNESS: I mean, in this case, I guess

1 I don't have enough details of what the label is. I
2 would need to see more details on that matter.

3 BY MR. SCHATZ:

4 Q Okay. I'm only speaking of the label film
5 for the time being. And I think that's
6 self-explanatory in the context of the statement
7 labels made of other materials, including
8 polypropylene, polyethylene and paper, okay? So for
9 now I'm only speaking about the film of the label.

10 A Okay.

11 Q All right. If the film of the label
12 contains contaminants, is the label recyclable, as
13 that term is used in the claims of the '422 patent?

14 MR. DIRKS: Objection to form; outside the
15 scope.

16 THE WITNESS: In that case, the label would
17 normally be separated from the container and therefore
18 would not be recycled with the container.

19 BY MR. SCHATZ:

20 Q Okay. Are you aware of labels that
21 incorporate both PET and the other materials
22 referenced in page 336, for example, polypropylene?

1 A There's a variety of labels that are
2 combinations of materials.

3 Q And are examples of those labels
4 combinations of films incorporating PET and
5 polypropylene?

6 A I'm sorry. Could you repeat that again?

7 Q Sure. You said that there were a variety of
8 labels, and I wanted to know, are you aware of labels
9 that incorporate both PET and polypropylene?

10 MR. DIRKS: Objection to form; outside the
11 scope.

12 THE WITNESS: Well, again, there's a variety
13 of labels. In this case I particularly focused on the
14 Gatorade label and the analysis of that. So I'd be
15 happy to analyze other labels, but...

16 BY MR. SCHATZ:

17 Q I'm just asking about your knowledge as a
18 proclaimed expert in this area. Are you aware of
19 labels where the film consists of both PET and
20 polypropylene?

21 MR. DIRKS: Objection; outside the scope.

22 THE WITNESS: At the moment I cannot think

1 of a label that has those two components.

2 BY MR. SCHATZ:

3 Q Okay. Can you think of a label that has
4 both PET and polyethylene?

5 MR. DIRKS: Objection; outside the scope.

6 THE WITNESS: Again, my focus was on the
7 Gatorade label and the -- and whether how it fit with
8 the context of the '422 patent. At the moment I
9 cannot think of the label.

10 BY MR. SCHATZ:

11 Q Okay. You can't think of a label that
12 incorporates both PET and polyethylene?

13 A Correct.

14 Q Okay. And can you think of a label that
15 incorporates both PET and paper?

16 MR. DIRKS: Objection; outside the scope.

17 THE WITNESS: At the moment, nothing is
18 coming to mind.

19 BY MR. SCHATZ:

20 Q Okay. So in your experience, you're
21 familiar with only the labels where the film is made
22 entirely of PET; is that correct?

1 MR. DIRKS: Objection; form; outside the
2 scope.

3 THE WITNESS: No, that's not what I said.
4 BY MR. SCHATZ:

5 Q Good point. I think I understand where
6 you're going.

7 You're not aware of any labels that
8 incorporate PET and other materials that would be
9 considered contaminants to the recycling process?

10 MR. DIRKS: Objection; form.

11 THE WITNESS: At the moment, going back to
12 your questions, can I think of a label, and the answer
13 is at the moment I cannot think of a label. That does
14 not mean that I'm not aware of them.

15 BY MR. SCHATZ:

16 Q As we sit here today you are not?

17 A As we sit here today I cannot think of an
18 example.

19 Q Okay. I take it that do you not have an
20 opinion whether a label that incorporates both PET and
21 one of the recited contaminants is or is not
22 recyclable as that term is used in the claims of the

1 '422 patent?

2 MR. DIRKS: Objection; outside the scope.

3 THE WITNESS: Well, I would have to see the
4 data for such a label to be able to analyze whether it
5 fits within the claims of the patent or not.

6 BY MR. SCHATZ:

7 Q So is it your opinion, then, a label that
8 incorporates both PET and one or more of the listed
9 contaminants on page 336 could be recyclable as that
10 term is used in the claims of the '422 patent?

11 MR. DIRKS: Objection to form; outside the
12 scope.

13 THE WITNESS: Again, it would depend on the
14 test results through the process of can it be
15 recycled.

16 BY MR. SCHATZ:

17 Q What test results would it depend upon?

18 A So the '422 patent points, as examples of
19 tests that can be performed, are the APR methods. So
20 an example is the APR CG2 protocol. There are other
21 examples as well a person of ordinary skill in the art
22 would refer to.

1 In these example protocols, there's very
2 clear objective measures of whether an article could
3 go through the recycling process and be reclaimed.

4 Q Okay. You mentioned the CG-02 protocol of
5 an example of a test that could be employed to
6 determine whether a label incorporating PET and a
7 contaminant would be recyclable as that term is used
8 in the '422 patent, correct?

9 A CG-02, yes.

10 Q And then you mentioned there are other
11 tests?

12 A Correct.

13 Q What are those other tests?

14 A So there's other APR protocols that people
15 of ordinary skill in the art typically look to. And
16 so an example would be -- let's see if I can remember,
17 PET-B-02, I believe.

18 There's a really nice resource document
19 that's -- I think it's RES-LBL. I think that one is
20 number two as well.

21 These different documents tend to refer to
22 one another, and then there's a series of protocols

1 that they refer to that are specific for each test.

2 Q Okay.

3 And I didn't -- we'll probably talk about
4 each of these tests in particular. So my question
5 really wasn't -- I'm not trying to challenge you on
6 remembering the exact nomenclature, because we'll get
7 to that and I'll present that to you.

8 But so you've mentioned -- and again, the
9 numbering might not be exactly correct, but the APR
10 PET CG-02, the PET-B-02, and the RESL-BL2?

11 A Correct.

12 Q And my understanding is your opinion is that
13 a person of skill in the art would use those tests to
14 determine if a label is recyclable as that term is
15 used in the claims of the '422 patent, correct?

16 A Correct.

17 Q Okay. And if any of those tests -- I should
18 say it better. If one of those tests is met, does
19 that mean that the label is recyclable as that term is
20 used in the claims of the '422 patent?

21 MR. DIRKS: Objection to form.

22 THE WITNESS: No, I think that's too broad

1 of a swath to draw there. So one of the -- one of the
2 early tests is whether the material will be separated
3 from a PET stream, and if the material is separated
4 from the PET stream, then it is not recycled.

5 BY MR. SCHATZ:

6 Q When you say material will be separated,
7 what do you mean by that?

8 A Could you maybe phrase the question a
9 different way?

10 Q Yeah. You know, we'll come back to that,
11 and I'll ask a better question. Your comment was
12 proper.

13 Assume for the moment that the label is made
14 of PET and it is not separated from the container
15 during the recycling process.

16 A Uh-huh.

17 Q Then you mentioned three tests that would be
18 undertaken to determine whether a label is recyclable
19 as that term is used in the '422 patent, correct?

20 MR. DIRKS: Objection to form.

21 THE WITNESS: I gave three examples. There
22 are other tests, other protocols within APR.

1 BY MR. SCHATZ:

2 Q Okay. And that's exactly what I wanted to
3 get it to. What are those other tests? You mentioned
4 three. What are the others?

5 A Well, so -- I don't have them all memorized,
6 that's why they're there is to be able to refer to.

7 Q And if you can -- like I said, I'm not
8 testing you on the actual nomenclature. We'll
9 probably get to those, but if you can just describe
10 what those tests are, then we'll probably refer to
11 them later.

12 A Sure. So there's tests early in the process
13 that are things like a NIR IR test for separation.
14 There's other separation tests, magnetic separation
15 tests. There's shredding typically, and often tests
16 associated with the shredding process. There's
17 caustic wash and tests associated with the material
18 that comes from the caustic wash. There's an
19 extrusion process to make pellets, and there's tests
20 associated with not only the extrusion process, but
21 also on the pellets.

22 I'm giving you a chance to catch up.

1 Q Yeah. Thank you.

2 A Then there's a taking of the pellets.

3 Q Witnesses are usually not this
4 accommodating. Thank you very much.

5 A I'm used to watching students take notes.
6 Finally, taking the pellets in injection
7 molding to generate what's called a plaque, which is a
8 test sample from the material. And then there's
9 tests, objective tests, for those plaques as well as
10 every step along the way.

11 Q Okay. That was a lengthy list, and I
12 realize you might have others in mind, but that's good
13 enough for now for our discussion.

14 I guess my question is: Do all of these
15 tests have to be passed in order for a label to be
16 determined recyclable as that term is used in the
17 claims in the '422 patent?

18 A Well, it's really dependent. The answer is
19 that it will depend on the results of each test,
20 meaning, as an example, if the label is separated out
21 from the PET stream, then that label is no longer in
22 the PET recycling stream and is not recycled as PET.

1 Now, farther down, so if it makes it through
2 the initial separation steps, then there are objective
3 measures of the quality of that recycled material that
4 would determine whether it is considered recycled
5 material or not.

6 Q And I guess what -- which one of these tests
7 or combination of them must be met in order for a
8 label to be deemed recyclable as that term is used in
9 the '422 patent?

10 MR. DIRKS: Objection to form.

11 THE WITNESS: Sorry. Would you mind
12 repeating, once again.

13 BY MR. SCHATZ:

14 Q Yeah. No problem at all. Any time you need
15 me to repeat a question, you're quick to ask, and
16 that's perfect. Feel free to do that.

17 Assuming the label is not separated from the
18 container, then you mentioned a number of tests and
19 evaluations that can be undertaken, right?

20 A Uh-huh.

21 Q And I guess my question is: Which of those
22 tests have to be met for a label to be deemed

1 recyclable as that term is used in the claims of the
2 '422 patent?

3 MR. DIRKS: Objection to form.

4 THE WITNESS: Well, so the highest level of
5 recycled material is when the material meets the
6 specifications defined by APR. The material can still
7 be considered a recyclable resin if it doesn't meet
8 that highest standard. And there it's dependent on
9 industry standards that a person of ordinary skill on
10 the art would know and be able to evaluate.

11 BY MR. SCHATZ:

12 Q You mentioned the highest level. Were you
13 referring to the quality of the PET that's in the
14 label?

15 A Maybe I should correct my phrasing there a
16 little bit and answer your question.

17 So the APR methods and the criteria they
18 have is for high-quality, high-purity recycled
19 material. The highest level would be recycled
20 material that has absolutely no impurities. The APR
21 method is -- accepts a certain level of impurity.

22 Q What level of impurities does the APR

1 specifications allow for?

2 A Well again, that comes back to the
3 experimental results. So each experiment, then
4 there's objective criteria that gets recorded and you
5 evaluate based on those results.

6 Q Okay. What if some of the objective
7 criteria of some of the tests are met but objective
8 criteria for some of the other tests are not met?

9 MR. DIRKS: Objection to form.

10 THE WITNESS: Correct. In that case, then,
11 it could be considered a recyclable material depending
12 on other industry standards. So it would be a
13 lower-quality recycled material.

14 BY MR. SCHATZ:

15 Q Okay. So if some of the APR tests are not
16 met, then I understand it's not meeting the highest
17 level or no impurities as considered by the APR
18 specifications, right?

19 MR. DIRKS: Objection to form.

20 BY MR. SCHATZ:

21 Q So in the context of where some of the APR
22 tests are met but some are not, there are some

1 impurities. And you said in that case labels can
2 still be deemed recyclable as that term is used in the
3 claims in the '422 patent depending upon standards
4 known by a person of skill in the art, correct?

5 A Correct.

6 Q What are those standards known by a person
7 of skill in the art?

8 A And that's dictated by downstream
9 manufacturers of what material they would be willing
10 to use.

11 Q I see. I take it -- Give me an example of
12 one of those downstream manufacturers.

13 MR. DIRKS: Objection; outside the scope.

14 BY MR. SCHATZ:

15 Q It's not a label manufacturer?

16 A I mean, there's many manufacturers using
17 recycled material. So it's here -- sorry, your
18 question is too broad to answer.

19 Q Yeah, I'm sorry. I'm trying to understand
20 who those downstream manufacturers are.

21 A It's the people who would use the
22 recycled -- recycled PET in this case.

1 Q Oh, for example, a company that takes the
2 recycled PET and makes a different product out of it;
3 is that right?

4 A Correct.

5 Q That's an example?

6 A Correct.

7 Q You knew that because that's part of your --
8 you have a business that is in that field, right?

9 A Which field is that?

10 Q Using recycled materials to create other
11 products.

12 A Correct.

13 Q Okay.

14 I just was trying to make sure I knew what
15 we were talking about.

16 A Yeah.

17 Q So again, these downstream manufacturers
18 that you're referring to, those are the users of the
19 recycled PET, correct?

20 A Correct.

21 Q Okay. And those downstream manufacturers, I
22 take it, have different criteria for what they could

1 use and what they won't use; is that right?

2 MR. DIRKS: Objection to form; outside the
3 scope.

4 THE WITNESS: They likely do.

5 BY MR. SCHATZ:

6 Q Okay. For example, one downstream
7 manufacturer might require a higher -- that's a wrong
8 term. I'll try to use the terms that you used. Sorry
9 about that.

10 One downstream manufacturer might require a
11 PET of very few impurities because whatever they're
12 using it for requires that, fair?

13 MR. DIRKS: Objection the form; outside the
14 scope.

15 THE WITNESS: Fair.

16 BY MR. SCHATZ:

17 Q Okay. And there might be a different
18 downstream manufacturer that doesn't require such an
19 impure PET and could accept and use PET with more
20 impurities than the other manufacturer I just
21 mentioned, correct?

22 MR. DIRKS: Objection to form; outside the

1 scope.

2 THE WITNESS: I was hoping could you
3 rephrase because I think what I heard was impure twice
4 in the question.

5 BY MR. SCHATZ:

6 Q Okay, sure. Yep. I want to make sure we're
7 on the same page here.

8 So you mentioned an example of a downstream
9 manufacturer that might require PET of few impurities
10 because that's what they require for the products
11 they're making, correct?

12 MR. DIRKS: Objection to form; outside the
13 scope.

14 THE WITNESS: Sorry. One more time.

15 BY MR. SCHATZ:

16 Q Sure. No problem at all.

17 So you have a downstream manufacturer that
18 is seeking to use PET reclaimed from a recycling
19 process, okay?

20 A Okay.

21 Q And you indicated that that downstream
22 manufacturer would dictate how pure the PET must be

1 based on the products that they're creating.

2 A Correct.

3 Q Okay. And the level of purity required by
4 that downstream manufacturer would be different for a
5 downstream manufacturer using the PET for a different
6 purpose.

7 MR. DIRKS: Objection to form; outside the
8 scope.

9 THE WITNESS: Correct, it might be.

10 BY MR. SCHATZ:

11 Q Okay. And therefore the standards required
12 by downstream manufacturers for the level of purity of
13 PET would be dependent upon the particular
14 requirements of the particular downstream
15 manufacturer, correct?

16 MR. DIRKS: Objection to form.

17 THE WITNESS: My experience has been that
18 they typically look to the objective criteria from APR
19 requiring a quite high-purity material. And so a
20 person of ordinary skill in the art targets purity
21 that's of that quality. The hypothetical scenarios
22 that we've been discussing of might somebody take a

1 lower quality is possible, I suppose, outside of the
2 scope of at least what I've analyzed in this case.

3 BY MR. SCHATZ:

4 Q Well, I'm just asking because you're an
5 expert in this area. You've got your own company that
6 uses PET reclaimed from a recycling process, right?

7 A No.

8 Q Oh, I'm sorry. I guess we'll talk about
9 that later, then. I must have misunderstood what you
10 said earlier.

11 Let's talk about the highest level of PET
12 that you mentioned, that is, there are no impurities
13 in the PET. How does a person of skill in the art
14 know if such a label is recyclable as that term is
15 used in the claims in the '422 patent?

16 A In that case, the only way to know that it's
17 of a high level of purity is to conduct the tests that
18 are outlined by APR protocols.

19 Q Okay. And again, if all of the tests that
20 you recited earlier are met, then the label is
21 recyclable, as that term is used in the claims of the
22 '422 patent, correct?

1 A Yes, that's reasonable.

2 Q And you mentioned, though, that there are
3 situations where all of those tests are not met,
4 correct?

5 A Correct.

6 Q And in the situation where all of those
7 tests are not met, then you indicated that the label
8 could still be recyclable, as that term is used in the
9 claims of the '422 patent, correct?

10 A Correct, with caveats.

11 Q Okay. Under what circumstances is a label
12 that doesn't meet some of the tests, but meets other
13 of the tests is recyclable, as that term is used in
14 the claims of the '422 patent?

15 MR. DIRKS: Objection to form.

16 THE WITNESS: Sorry. I'm trying to -- I
17 didn't quite understand the question.

18 BY MR. SCHATZ:

19 Q Sure. No problem at all.

20 We talked about the scenario where some of
21 the tests that you recited are met, but some of the
22 tests are not met. You indicated that in that

1 scenario a label may still be recyclable as that term
2 is used in the claims of the '422 patent, correct?

3 A Correct.

4 Q I'm just trying to ask you what a person of
5 skill in the art knows whether or not such a label is
6 recyclable as that term is used in the claims the '422
7 patent?

8 A Uh-huh. Once again, what a person of
9 ordinary skill in the art would look to is the test
10 results. So tests such as the APR testing to evaluate
11 whether the material, the recycled or -- I don't know
12 if I want to say it's recycled material, because it's
13 a material in process -- meets a high enough standard
14 to be used in a subsequent manufacturing process.

15 Q And what is that high enough standard that
16 you mentioned?

17 A So again, typically manufacturing companies
18 would look to the objective measures defined by the
19 APR protocols and related types of protocols. My
20 experience has been the standards are actually quite
21 high for Clear PET, meaning it cannot be colored.

22 Q Okay. So is it ultimately the manufacturing

1 companies that determine whether the label material is
2 recyclable, as that term is used in the claims in the
3 '422 patent?

4 MR. DIRKS: Objection to form.

5 THE WITNESS: Manufactures determine
6 whether -- would you mind phrasing one more time.

7 BY MR. SCHATZ:

8 Q Sure. No problem at all.

9 I really liked your point that we're
10 evaluating material that is in process. Who
11 determines whether that material is recyclable, as
12 that term is used in the claims of the '422 patent?

13 MR. DIRKS: Objection to form.

14 THE WITNESS: Who determines? Well, I guess
15 I don't know who ultimately makes that determination.
16 The recyclers themselves would conduct the tests to
17 obtain the data. And then from there, right, they
18 have material that they've put through the process and
19 then others would decide whether that is material that
20 they would wish to use.

21 BY MR. SCHATZ:

22 Q Okay. Who are the recyclers in that process

1 that you just mentioned?

2 A Oh, so that would be the reclaimers.

3 Q Okay. Thank you. I just wanted to clarify.
4 I'm familiar with the term "reclaimers," and I thought
5 that's where you were going.

6 There are different reclaimers, correct?

7 MR. DIRKS: Objection; outside the scope.

8 THE WITNESS: Sorry. That's vague.

9 BY MR. SCHATZ:

10 Q Sorry. There are multiple companies that do
11 the reclaiming process, correct?

12 MR. DIRKS: Objection; outside the scope.

13 THE WITNESS: My understanding is, yes.

14 BY MR. SCHATZ:

15 Q And those reclaimers have different test
16 procedures when evaluating label materials; correct?

17 MR. DIRKS: Objection. Outside the scope.

18 THE WITNESS: I can't answer correct or not
19 in that case. My understanding is that everybody
20 tends to refer to the APR methods as the benchmark.

21 BY MR. SCHATZ:

22 Q I guess my question is, though, there are

1 different reclaimers in the United States, correct?

2 A Correct.

3 Q And those reclaimers have different
4 processes that they undertake in connection with
5 evaluating labels, correct?

6 MR. DIRKS: Objection to scope -- objection
7 to form; outside the scope.

8 THE WITNESS: You know, honestly, I don't
9 know if they have many variations in processes.

10 I have not visited all of those sites.

11 BY MR. SCHATZ:

12 Q Okay. Then the reclaimers are the companies
13 that process the container and the labels, correct?

14 MR. DIRKS: Objection to form; outside the
15 scope.

16 THE WITNESS: I'm hesitating because
17 there's -- if I could have you rephrase one more time
18 and then I can tell you why I'm hesitating.

19 BY MR. SCHATZ:

20 Q Sure. What do the reclaimers do?

21 A So the reclaimers take material that has
22 undergone already some separation processes at a

1 material-recovery facility. And so the reclaimers
2 then take that material and continue to do processing
3 on it.

4 Q Okay. And then do the reclaimers provide
5 the results of their processes to the manufacturing
6 companies?

7 MR. DIRKS: Objection; outside the scope.

8 THE WITNESS: That I don't know.

9 BY MR. SCHATZ:

10 Q The reclaimers don't create -- or maybe they
11 do. Do the reclaimers prepare data according to the
12 tests that you recited?

13 MR. DIRKS: Objection; outside the scope.

14 THE WITNESS: Again, this is an area that I
15 simply don't know.

16 BY MR. SCHATZ:

17 Q Okay.

18 So ultimately, then, who determines whether
19 the label material is recyclable as that term is used
20 in the '422 patent?

21 A Well, I would have to speculate here. In
22 this case it's -- the test results would be available,

1 and then if people determine that those test results
2 are acceptable for additional use, then they are using
3 it.

4 Q And then in that case it would be deemed
5 recyclable, as that term is used in the claims in the
6 '422 patent?

7 MR. DIRKS: Objection to form.

8 THE WITNESS: I guess I can take a step back
9 there as well in that I think any person of ordinary
10 skill in the art could evaluate the data and say yes,
11 this is consistent with what is normally considered a
12 recyclable material.

13 BY MR. SCHATZ:

14 Q Okay. What is typically considered a
15 recyclable material according to a POSITA?

16 A Right. So again, I have to see the test
17 results, but so long as the material meets the
18 objective measures in those tests, then it would be
19 deemed recyclable material.

20 Q What if some of the objective measures are
21 met and some of the objective measures are not met?

22 A Then we go back to the discussion we've been

1 having, which is that my understanding is that most
2 people would determine that that is not a clean
3 recyclable material.

4 Q But some would?

5 A Some might. Right. So this is speculation
6 at this point.

7 Q Okay. But in that situation, if you have --
8 maybe I'll just summarize it this way: Your opinion
9 is that if some of the objective criteria are met and
10 some of the objective criteria are not met, then some
11 persons of skill in the art might determine that it is
12 recyclable, as that term is used in the '422 patent.
13 And other persons of skill in the art might have a
14 differing opinion?

15 MR. DIRKS: Objection to form.

16 BY MR. SCHATZ:

17 Q Is that correct?

18 A No.

19 Q Okay.

20 A What I'm saying is that for the material to
21 be recyclable, it has to meet all of the test
22 standards that are in -- an example is the APR

1 document. But there's still material that someone may
2 choose to use later. And whether that's the --
3 whether we call that a recyclable material or not is a
4 different question. Right now that is an impure
5 material.

6 Q And in that situation, if a manufacturing
7 company decides that it can use the material, then
8 it's recyclable as that term is used in the '422
9 patent, right?

10 MR. DIRKS: Objection to form.

11 THE WITNESS: Well, in the '422 patent the
12 label has to be recyclable with a PET container, so it
13 would have to be deemed recyclable PET. Something
14 that's impure is no longer simply recyclable PET.
15 It's a different material.

16 BY MR. SCHATZ:

17 Q So are you saying, then, that if there are
18 any impurities, then it's not recyclable, as that term
19 is used in the '422 patent?

20 A No.

21 Q Okay. Please explain.

22 A Yep. So going back again to the APR

1 methods, right, there's objective tests that has been
2 established as if you meet these tests, this is
3 considered recyclable PET material.

4 Q And what if some of those tests are met but
5 some are not?

6 A Right. Now have you a material that's not
7 recyclable PET.

8 Q And therefore it's not recyclable, as that
9 term is used in the claims of the '422 patent,
10 correct?

11 MR. DIRKS: Objection to form.

12 THE WITNESS: It does not meet the quality
13 of material that is typically deemed as recyclable PET
14 as defined by the claims of the '422 patent.

15 BY MR. SCHATZ:

16 Q Okay. So then are you saying that all of
17 the objective criteria in the tests that you mentioned
18 have to be met for a label to be determined recyclable
19 as that term is used in the '422 patent?

20 MR. DIRKS: Objection to form.

21 THE WITNESS: I'm trying to think through
22 all of the tests. What I'm saying is a person of

1 ordinary in the art would look to those tests and
2 would need to see the results of those tests, and that
3 would dictate whether it is recyclable, clean
4 recyclable PET. "Clean" meaning clean according to
5 those standards according to the '422 patent.

6 BY MR. SCHATZ:

7 Q What results would -- to a POSITA mean that
8 the label is recyclable, as that term is used in the
9 '422 patent?

10 A I don't know you what mean by "what
11 results."

12 Q Well, again, you listed numerous tests.

13 A Uh-huh.

14 Q And there are going to be results for all of
15 those tests, right?

16 A Correct.

17 Q Okay. And so you're indicating that a
18 person of skill in the art would evaluate the results
19 of all of those tests.

20 MR. DIRKS: Objection to form.

21 BY MR. SCHATZ:

22 Q And based on that evaluation, would

1 determine whether it's recyclable, as that term is
2 used in the claims of the '422 patent, correct?

3 MR. DIRKS: Objection to form.

4 THE WITNESS: I got a little distracted
5 there, if you wouldn't mind rephrasing.

6 BY MR. SCHATZ:

7 Q Sure. No problem at all.

8 You indicated that a person of skill in the
9 art would evaluate the results of the list of tests
10 that you provided to determine whether a label is
11 recyclable, as that term is used in the '422 patent,
12 correct?

13 MR. DIRKS: Objection to form.

14 THE WITNESS: Definitely a person of
15 ordinary skill in the art would look at the test
16 results to evaluate whether that material was
17 recyclable.

18 BY MR. SCHATZ:

19 Q Okay. And what is the criteria that a
20 POSITA would use to determine whether the label is
21 recyclable, as that term is used in the '422 patent?

22 A Each test result, or each test itself,

1 provides those criteria.

2 Q And again, what if some of the test criteria
3 are met and some of the test criteria are not met?

4 A Well, then, for the most part, it's -- the
5 material would be considered not a highly recycled
6 material.

7 Q When you say that, do you mean it is not
8 recyclable, as that term is used in the '422 patent?

9 A Sorry, no. I phrased that quite poorly. If
10 you wouldn't mind asking the question again.

11 Q Sure. Again, going back to our discussion,
12 a POSITA would evaluate the results of the list of
13 tests that's you provided earlier to determine whether
14 a label is recyclable, as that term is used in the
15 '422 patent?

16 MR. DIRKS: Objection. Form.

17 THE WITNESS: Correct.

18 BY MR. SCHATZ:

19 Q Okay. And I'm asking you if some of the
20 test criteria are met, but some of the test criteria
21 are not met, how does a person of skill in the art
22 determine whether it's recyclable, as that term is

1 used in the '422 patent?

2 A Well, a person of ordinary skill in the art,
3 if the test criteria are not met, would determine that
4 it is not a recyclable PET material.

5 Q As that term is used in the '422 patent?

6 A That is my understanding.

7 Q Okay. So all the test criteria have to be
8 met for a label to be deemed recyclable, as that term
9 is used in the '422 patent, correct?

10 MR. DIRKS: Objection to form.

11 THE WITNESS: I'm trying to think of other
12 scenarios where that might differ.

13 BY MR. SCHATZ:

14 Q Yeah. I want to make sure what you're
15 saying.

16 A Of course. Well, I guess what I would say
17 is the APR methods are one benchmark, one important
18 benchmark, that people typically look to to determine
19 whether a material is recyclable, in this case a PET
20 label.

21 As I've mentioned already, there are other
22 benchmarks that people can look at and do look at for

1 a lower quality recyclable material. An example could
2 be pulling from the '422 patent where, if we think
3 about the inks that might be on the label, where the
4 inks are substantially removed. And "substantially"
5 is defined within the patent.

6 Now whether those levels meet the same
7 levels of APR tests, I don't know. I haven't done
8 those experiments, so I guess I can't speak to that.

9 Q Okay. So you mentioned other benchmarks for
10 a lower quality PET, right?

11 A Correct.

12 MR. DIRKS: Objection to form.

13 BY MR. SCHATZ:

14 Q First of all, what are those other
15 benchmarks?

16 A So first I can say that I don't know those
17 values. I don't know the benchmarks. Those are
18 dictated by the manufacturers.

19 Q Okay.

20 A And a person of ordinary skill in the art
21 would know who to contact and who to find out what
22 they need.

1 Q Okay. So in the scenario where a
2 manufacturer dictates a benchmark that requires a
3 lower quality PET because their product doesn't
4 require a higher PET purity, a person of skill in the
5 art could determine that a lower purity PET would be
6 recyclable, as that term is used in the '422 patent
7 because that particular manufacturer doesn't require a
8 higher level of purity?

9 MR. DIRKS: Objection to form.

10 BY MR. SCHATZ:

11 Q Correct?

12 A That is my understanding.

13 Q Okay. But then for other scenarios where a
14 high level of purity of PET is required, for example,
15 by a different manufacturer who requires a higher
16 purity of PET because of the product that they're
17 making, a person of skill in the art could determine
18 that this lower quality PET would not be recyclable,
19 at least for that application, correct?

20 MR. DIRKS: Objection to form.

21 THE WITNESS: So I'll answer correct, but
22 add the caveat that again, it's known in the state of

1 the art that the recycled material has to be of a high
2 quality. So the discussion we're having, I would say,
3 is that the level of quality is high and, to put it in
4 qualitative terms, right, high and quite high, right.
5 So we're not talking about a big separation in terms
6 of quality.

7 BY MR. SCHATZ:

8 Q Fair enough. I'm glad you said that. So
9 there is some, you know, low level of purity of PET
10 that has to be met for it to be recyclable in terms of
11 the '422 patent?

12 A Correct.

13 Q Okay. And what level of quality is that?

14 A And so then that's typically around -- my
15 understanding is that it's typically close to what is
16 defined by the test results from an organization like
17 APR.

18 Q What other organizations would set that
19 lower level requirement?

20 A Again, now we're deviating some from what I
21 know, so let's put the caveats on that. But, you
22 know, the EPA also has test measures that's typically

1 for higher quality. Sorry, FDA, not EPA.

2 Q Any others?

3 A None that come to mind at this moment.

4 Q Okay. So the FDA also has other benchmark
5 requirements for a label to be deemed recyclable, as
6 that term is used in the '422 patent?

7 MR. DIRKS: Objection to form.

8 THE WITNESS: To have a foreign material to
9 have sufficient purity for FDA-related applications.

10 BY MR. SCHATZ:

11 Q And a person of skill in the art would be
12 aware of those benchmarks from the FDA, correct?

13 A Correct.

14 Q So a person of skill in the art would need
15 to consider the FDA benchmark to determine whether a
16 label is -- has a high enough purity to consider it to
17 be recyclable, as that term is used in the '422
18 patent?

19 MR. DIRKS: Objection to form.

20 THE WITNESS: One of the challenges I'm
21 having a little bit with these questions is that
22 you're referring to the label of high enough purity.

1 And ultimately, what we're talking about is the label
2 plus a bottle going through a recycling process and
3 the combined material, which is different than simply
4 saying does the label have a high enough purity.

5 BY MR. SCHATZ:

6 Q Well, how does a person of skill in the art
7 know if a -- well, strike that. That's okay.

8 MR. DIRKS: We have been going about an
9 hour. Is this a good time for a quick break?

10 MR. SCHATZ: It's up to you. I can keep
11 going. If the witness needs a break.

12 MR. DIRKS: Do you want a break?

13 THE WITNESS: Sure, a break sounds fine.

14 (Recess from 9:05 to 9:12.)

15 BY MR. SCHATZ:

16 Q Dr. Phillips, I want to refer you back to
17 the excerpt of Exhibit 1002 again on page 336.

18 A Okay.

19 Q Toward the bottom, just after the paragraph
20 we just got done discussing, the applicant refers to
21 the APR, indicating that the APR recommends films that
22 are compatible with PET recycling such as, right?

1 A Yes.

2 Q And you see the second option?

3 A Labeled as Number 2?

4 Q Yes.

5 A Yes.

6 Q Okay. So the applicant is arguing to the
7 patent office that, quote, "PET-based films that
8 crystallize can be recovered with the PET stream are
9 compatible with PET recycling"; correct?

10 A Can I have a moment to read it for a second?

11 Q Sure. Take your time.

12 A Okay. Sorry. Could you repeat your
13 question again.

14 Q I actually had not asked it yet.

15 A Oh, okay.

16 Q I was just referring to that area of the
17 document.

18 So the applicant is suggesting to the PTO
19 that PET-based films that crystalized and can be
20 recovered with the PET stream are compatible with PET
21 recycling, correct?

22 A That is what it says.

1 Q Okay. What is a PET-based film?

2 MR. DIRKS: Objection; outside the scope.

3 THE WITNESS: I'm not sure what you're
4 asking me.

5 BY MR. SCHATZ:

6 Q If a film is PET based, does that mean it is
7 entirely PET?

8 MR. DIRKS: Objection; form; outside the
9 scope.

10 THE WITNESS: Well, the '422 patent actually
11 defines or lists a variety of polymers that fall
12 within the scope for the film.

13 BY MR. SCHATZ:

14 Q Well, claim 1 of the '422 patent recites in
15 part, quote: "A heat shrink film comprising
16 polyethylene terephthalate, paren, PET," close paren.

17 Do you understand what "comprising" means?

18 A I do.

19 Q Okay. That is, it includes PET but may
20 include other materials, right?

21 A Correct.

22 Q Okay. What does a POSITA understand from

1 this comment in the prosecution history regarding
2 PET-based films?

3 MR. DIRKS: Objection; outside the scope.

4 THE WITNESS: Well, my read on this is that
5 a PET-based film is one that has PET within it.

6 BY MR. SCHATZ:

7 Q And it can have other materials in it?

8 MR. DIRKS: Objection; outside the scope.

9 THE WITNESS: Perhaps, perhaps not. It's
10 vague on that notion.

11 BY MR. SCHATZ:

12 Q Okay. And I'm asking what a person of skill
13 in the art understands the phrase "PET-based film"
14 means.

15 A Uh-huh.

16 Q So what does a person of skill in the art
17 understand that to mean?

18 MR. DIRKS: Objection; out the scope.

19 THE WITNESS: Well, I look at that and say
20 that the film would be primarily the polymer PET, but
21 not necessarily exclusively.

22

1 BY MR. SCHATZ:

2 Q Okay. And when you say "primarily PET," is
3 there an amount of PET that is required?

4 A No. I couldn't put a number on it.

5 Q Okay. And a person of skill in the art
6 couldn't put a number on it either?

7 MR. DIRKS: Objection to form.

8 THE WITNESS: I can't speak for everyone
9 else. I can tell you within my experience, give you
10 that answer.

11 BY MR. SCHATZ:

12 Q The two options that were being mentioned in
13 the prosecution history, those are from the APR
14 document, that's the APR resource document, correct?

15 A This is supported by the resource document,
16 yes, that is what I read here.

17 (EXHIBIT 1009 WAS INTRODUCED.)

18 BY MR. SCHATZ:

19 Q And that resource document is actually in
20 the prosecution history. But just in case you would
21 prefer to refer to it, here is Exhibit 1009.

22 A Thank you.

1 Q I don't know if we're going to have to refer
2 to it, but I just want to give that to you just so you
3 have it.

4 MR. DIRKS: Just one second, Counsel.

5 MR. SCHATZ: You good?

6 MR. DIRKS: Yes.

7 BY MR. SCHATZ:

8 Q Again, back to Exhibit 1002, there's a
9 reference to, one period, Films that float in water
10 and that can be separated from PET that sinks in
11 water.

12 Do you see that?

13 A I do.

14 Q Okay. Does a person of skill in the art
15 understand that films that float in water and that can
16 be separated from PET that sinks in water are not
17 recyclable, as that term is used in the '422 patent?

18 A Sorry, part of my hesitation is I want to
19 make sure we're putting it in context. So "films"
20 meaning labels, right?

21 Q Yes, I think the film is referring just to
22 the label film.

1 A So films that float in water and can be
2 separated from PET that sinks in water. And then
3 please remind your question again.

4 Q Does a person of ordinary skill in the art
5 understand that such a label is not recyclable, as
6 that term is used in the claims of the '422 patent?

7 A Well, in the '422 patent and the claims in
8 the '422 patent, the label has to be recyclable with
9 the PET container. So according to one, if the film
10 floats and is separated from the PET, then it would
11 not be recyclable with the PET container.

12 Q Okay. And this is all a reference to the
13 APR resource document, which is actually found in the
14 prosecution history that we're looking at, starting at
15 page 323.

16 A This is the same resource document that you
17 have handed us?

18 Q I believe so, yes. In other words, the
19 applicant not only referred to the APR resource
20 document, but also included it in the paperwork that
21 was submitted to the patent office, okay?

22 A Okay, right.

1 Q What does a POSITA understand by the fact
2 that the applicant referred to the APR resource
3 document as part of the prosecution history?

4 MR. DIRKS: Objection to form; outside the
5 scope.

6 BY MR. SCHATZ:

7 Q And I can be a little bit more detailed
8 about that. In terms of what is required for a shrink
9 label to be recyclable, as that term is used in the
10 '422 patent, what does a person of skill in the art
11 understand from the reference to the APR in the
12 prosecution history?

13 MR. DIRKS: Objection to form.

14 THE WITNESS: I'm trying to make sure I
15 understand the question. It sounds like what you're
16 asking me is what I think they meant by including it.

17 BY MR. SCHATZ:

18 Q Thank you for clarifying. So a person of
19 skill in the art is reviewing the prosecution history
20 and sees that the applicant referred to the APR
21 resource document. What is the POSITA's takeaway from
22 that fact?

1 MR. DIRKS: Objection to form; outside the
2 scope.

3 THE WITNESS: Well, give me a moment to scan
4 through this one second.

5 It's challenging to answer because there's,
6 of course, many, many takeaways that a person could
7 have from looking at this document and its inclusion.
8 At the very highest level, I would say that -- I would
9 speculate, I guess is the better phrase, that the
10 applicant is indicating that the APR methods are
11 important criteria for whether the label is recyclable
12 with the container.

13 BY MR. SCHATZ:

14 Q In other words, a person of skill in the art
15 could take from the reference to the APR resource
16 document that determining whether a label is
17 recyclable, as that term is used in the '422 patent,
18 should take into consideration the APR resource
19 document?

20 MR. DIRKS: Objection to form; asked and
21 answered.

22 THE WITNESS: Yeah, I think by having it

1 included and then by referencing it, then, yeah,
2 clearly -- before I finish, would you repeat again. I
3 actually lost track of which part your question ended
4 on.

5 BY MR. SCHATZ:

6 Q Sure. No problem at all. I was, frankly,
7 just confirming what you said, which is -- so I just
8 wanted to make sure we have the understanding correct.

9 My understanding is that a POSITA could take
10 away from the fact that the applicant referred to the
11 APR resource document as an indication that the APR
12 resource document should be at least considered when
13 evaluating whether a label is recyclable, as that term
14 is used in the '422 patent, correct?

15 A I would agree with that.

16 Q Okay. Could a POSITA take away from the
17 reference to the APR resource document that the
18 criteria set forth in the APR resource document must,
19 in fact, be met for a label to be recyclable, as that
20 term is used in the '422 patent?

21 MR. DIRKS: Objection; form.

22 THE WITNESS: My understanding on this

1 prosecution history is that they were referring
2 specifically to this one section that you read.

3 Right? So number one and two, using that point and
4 calling out that point specifically.

5 BY MR. SCHATZ:

6 Q Okay. So a person of skill in the art could
7 take away from the applicant's reference to the APR
8 resource document that the only thing that needs to be
9 considered are these two points being made on page
10 336?

11 MR. DIRKS: Objection to form; asked and
12 answered.

13 THE WITNESS: The context is not clear to me
14 for the question.

15 BY MR. SCHATZ:

16 Q Let me try again, okay? So the applicant is
17 quoting just a portion of the APR resource document.

18 A Correct.

19 Q So a person of skill in the art reviewing
20 the prosecution history could take away from that
21 reference that the only thing that needs to be
22 considered in the APR resource document is the excerpt

1 found in the prosecution history when evaluating
2 whether a label is recyclable, as that term is used in
3 the '422 patent, correct?

4 MR. DIRKS: Objection to form; asked and
5 answered.

6 THE WITNESS: No. I think that would be
7 foolish for a person to take only that portion. As I
8 look at this document, there are -- sorry, the
9 document being not the APR document, but the response,
10 is specifically highlighting a portion of the APR
11 document, I think a person of ordinary skill in the
12 art would refer to all of the relevant APR documents,
13 and they are referenced and called out within the '422
14 patent.

15 BY MR. SCHATZ:

16 Q Okay. Fair enough. So your opinion is that
17 a person of skill in the art would understand from the
18 reference to the APR resource document that the
19 entirety of the APR resource document needs to be
20 considered to determine whether a label is recyclable,
21 as that term is used in the '422 patent?

22 MR. DIRKS: Objection to form; asked and

1 answered.

2 BY MR. SCHATZ:

3 Q Correct?

4 A So again, in the specific portion that we
5 were reading, they were highlighting just that one
6 section to make a point, is my read on it.

7 Now, more broadly, a person of ordinary
8 skill in the art would look all of the relevant
9 resource documents.

10 Q When you say "all of the relevant resource
11 documents," what do you mean by that?

12 A Yeah, that was vague. Ones that are called
13 out specifically within the specification of the '422
14 patent and ones that are obviously -- that are
15 referenced by that particular document as well.

16 Q And so all of those documents would have to
17 be evaluated to determine whether a label is
18 recyclable, as that term is used in the '422 patent?

19 MR. DIRKS: Objection; mischaracterizes the
20 testimony.

21 BY MR. SCHATZ:

22 Q If I'm mischaracterizing the testimony, by

1 all means, I'm not trying to do that. I'm just trying
2 to provide clarity, so...

3 A Could you repeat what you said, then,
4 please.

5 Q Sure, okay. The applicant referred to the
6 APR resource document in the prosecution history that
7 we're referring to, correct?

8 A Correct.

9 Q Okay. And I also will note that on the next
10 page, 337, there's actually another reference to the
11 APR resource document in the indented portion.

12 And so the applicant is referring to the APR
13 resource document and a couple of different portions
14 of it, correct?

15 A I haven't seen the second one yet.

16 Q Are you on page 337?

17 A I am.

18 Q There's an indented portion.

19 A Okay.

20 Q And you see just under the indented portion,
21 it says, "See APR document page 2"?

22 A Is that the page two of the results

1 document?

2 Q It's page two of the resource document, yes.

3 A The resource document, okay.

4 Q So I was just trying -- I didn't want you to
5 be confused that only a specific section of the
6 resource document was being referred to, as we
7 discussed on page 336. There were other references to
8 it.

9 A Okay.

10 Q Okay. So a person of skill in the art
11 reviewing the prosecution history understands that the
12 applicant referred to the APR resource document,
13 correct?

14 A Correct.

15 Q Okay. And what is an applicant's -- I'm
16 sorry. What is a person of skill in the art's
17 takeaway from that reference in terms of whether a
18 label is recyclable, as that term is used in the '422
19 patent?

20 MR. DIRKS: Objection to form; outside the
21 scope.

22 THE WITNESS: So broadly, this is a document

1 that should be referred to when evaluating whether a
2 label can be recycled -- whether a PET label could be
3 recycled with a PET container.

4 BY MR. SCHATZ:

5 Q Okay. Could a person of skill in the art
6 also understand from this reference to the API
7 resource document -- I should say references, plural,
8 to the APR resource document -- that the APR resource
9 document must be complied with in order for a label to
10 be determined recyclable, as that term is used in the
11 '422 patent.

12 MR. DIRKS: Objection to form; asked and
13 answered.

14 THE WITNESS: So again, there are there
15 other APR documents besides simply this resource
16 document that we've discussed, and a person of
17 ordinary skill in the art would be referring to all of
18 those documents because they give very specific
19 procedures for how to conduct the tests to determine
20 whether it's recyclable.

21 BY MR. SCHATZ:

22 Q Yeah. And I understand that. You said that

1 earlier. I'm just referring to what is a person of
2 skill in the art's take away from the reference to the
3 APR resource document in the prosecution history?

4 MR. DIRKS: Objection to form; asked and
5 answered.

6 THE WITNESS: Again, that it's a document
7 that should be referred to.

8 BY MR. SCHATZ:

9 Q Okay. When determining whether a label is
10 recyclable, as that term is used in the '422 patent,
11 correct?

12 A As a portion of the effort to determine,
13 yes.

14 Q Very good. Thank you for clarifying that.

15 Could a person of skill in the art also take
16 away from the reference to the APR resource document
17 that not only must the APR resource document be
18 considered, but it has to be complied with for a label
19 to be determined recyclable, as that term is used in
20 the claims of the '422 patent?

21 MR. DIRKS: Objection to form; asked and
22 answered.

1 THE WITNESS: Well, I would have to --
2 before answering that, I would want to read the entire
3 resource document. I don't have it memorized, so I
4 would like to see what else is in there.

5 BY MR. SCHATZ:

6 Q Okay. So right now you don't know the
7 answer to my question?

8 MR. DIRKS: Objection to form.

9 THE WITNESS: Right now I am not willing to
10 answer the question without reading the document.

11 BY MR. SCHATZ:

12 Q Okay. Fair enough.

13 Again, back to the statement on page 336 of
14 Exhibit 1002, quote: "APR recommends films that are
15 compatible with PET recycling, such as," right? And
16 it gives the two options.

17 A Correct.

18 Q Does a person of ordinary skill in the art
19 understand that if either of the two options are met,
20 then the label can be recognized by the APR as
21 achieving APR critical guidance?

22 MR. DIRKS: Objection to form;

1 mischaracterizes the document.

2 THE WITNESS: Your question is based on
3 these -- I'm trying to understand, right? So based on
4 these two points, would a person recognize that if it
5 met one of the points, that the film would receive APR
6 recommendation? Is that what you're --

7 BY MR. SCHATZ:

8 Q Well, I think maybe I need to ask some
9 preliminary questions.

10 You understand that the APR can issue
11 critical guidance approval for a label and a
12 container, correct?

13 A Correct.

14 Q Okay. And I want to make sure we get this
15 terminology right. If I say "APR critical guidance
16 approval," does that make sense to you?

17 A Sorry, I'm trying to think of -- they have a
18 different name for it, I believe, but...

19 Q I think it's actually "APR critical guidance
20 recognition."

21 A "Recognition" is -- that sounds more
22 appropriate, yes.

1 Q Okay. Let's use that terminology, then.
2 You understand that the APR sometimes, if appropriate,
3 issues APR critical guidance recognition to various
4 articles, correct?

5 A No. I'm stuck on terminology.

6 To me, "critical guidance" is guidance to
7 the community. "Recognition" is that somebody has a
8 label or some article has gone through review with APR
9 and been recognized.

10 Q We're on the same page there.

11 A Good.

12 Q When I use the term "recognition," "APR
13 critical guidance recognition," I'm meaning that it
14 has gone through the APR process and been approved.

15 A Yeah.

16 Q Okay? So we have that down.

17 Then again on page 336, the applicant
18 writes, "The APR recommends films that are compatible
19 with PET recycling, such as," and it gives the two
20 options, right?

21 A Correct.

22 Q Okay. If either of those two options are

1 met, can a label be recognized as meeting APR critical
2 guidance? That is, can a label obtain APR critical
3 guidance recognition?

4 MR. DIRKS: Objection; form.

5 THE WITNESS: No.

6 BY MR. SCHATZ:

7 Q Why not?

8 A Because data has to be provided with
9 submissions to the APR for evaluation.

10 Q Okay. So can a film that floats in water
11 and that can be separated from PET that sinks in water
12 receive APR critical guidance recognition?

13 MR. DIRKS: Objection to form.

14 THE WITNESS: I guess I don't know the
15 context now. So that's outside the context of the
16 '422 patent. So are we talking about a different
17 hypothetical scenario or...

18 BY MR. SCHATZ:

19 Q Yeah. I'm talking about a film that floats
20 in water and that can be separated from PET that sinks
21 in water.

22 I understand that patent owners taking the

1 position that that is a label that is not recyclable,
2 as that term is used in the '422 patent.

3 A Okay.

4 Q My question is different. Can such a label
5 obtain APR critical guidance recognition?

6 MR. DIRKS: Objection to form.

7 THE WITNESS: I suppose it's possible, but
8 again, they would have to go through a series of tests
9 and submit that information to the APR.

10 BY MR. SCHATZ:

11 Q Okay. On the next page of Exhibit 1002, and
12 in the lower right-hand corner we're talking about
13 page 337 --

14 A Okay.

15 Q -- there's a reference at the very top to
16 Mitchell and a comment that the film includes a core
17 that includes titanium dioxide.

18 Do you see that?

19 A Give me a second to read this, please.

20 Q Yeah, please do. And read all the way
21 through the indented paragraph and then the next
22 paragraph after that. It is a paragraph that ends in

1 the phrase "during the recycling process." It's about
2 halfway down.

3 A Okay.

4 Q Take your time.

5 MR. DIRKS: If you need to read additional
6 material for context, you can do that as well.

7 THE WITNESS: Thank you.

8 MR. DIRKS: Thanks, Steven.

9 THE WITNESS: Okay, thank you.

10 BY MR. SCHATZ:

11 Q Thank you. In the second sentence from the
12 top, the applicant states, quote: "When titanium
13 dioxide or other similar pigments are incorporated
14 into the polymer layer, which in Mitchell 879 are
15 additionally sandwiched between the skin layers, the
16 label becomes unrecyclable," close quote.

17 Do you see that?

18 A I do see that. Sorry, I'm looking for the
19 quotes, but I don't see the quotes.

20 Q Oh. When I say "quote," that's me quoting
21 the document.

22 A Okay. Thank you.

1 Q I'm not quoting the quotes.

2 A Gotcha.

3 Q Did you see that portion?

4 A I did, thank you.

5 Q Okay. I take it a person of skill in the
6 art would understand from that argument that a film
7 that has a core polymer layer that includes titanium
8 dioxide is not recyclable, correct?

9 MR. DIRKS: Objection to form.

10 THE WITNESS: I guess, could I get
11 clarification on what you mean by "not recyclable"?

12 BY MR. SCHATZ:

13 Q Well, the applicant states that such a label
14 becomes unrecyclable. So my question to you is: Does
15 a person of skill in the art understand that a film
16 that has a core polymer layer that includes titanium
17 dioxide is not recyclable?

18 A Yeah. So the part where I'm getting hung up
19 a little bit is for the '422 patent, right, where it's
20 clear PET that's being recycled as the label, the
21 statement that a polymer film that has embedded within
22 it titanium dioxide will not be clear PET, and is

1 therefore not recyclable according to the terms of the
2 '422 patent. That makes sense.

3 Q Okay.

4 A The part where I'm hung up is that the a
5 colored PET article, so label, right, like if it's
6 colored because of titanium dioxide in it, that can be
7 recycled in a separate scenario.

8 Q Okay. So --

9 A That's why I meant specification of what you
10 meant by "recycled."

11 Q Thank you. So what a POSITA takes away is
12 that a film that has a core polymer layer that
13 includes titanium dioxide is not recyclable, as that
14 term is used in the '422 patent.

15 A Not recyclable with the container, correct.

16 Q Okay. But Titanium -- I'm sorry -- a film
17 that has a core polymer layer that includes titanium
18 dioxide can be recycled?

19 MR. DIRKS: Objection to form.

20 THE WITNESS: Or -- yeah. I mean, we're
21 heading off in a different direction and different
22 process.

1 But so it cannot be recycled with --
2 sorry -- with the article with the bottle. It would
3 have to be separated from the bottle for that PET
4 that's pre-colored white to be recycled by itself.

5 BY MR. SCHATZ:

6 Q I see. So a film that has a core polymer
7 layer that includes titanium dioxide can be recycled.
8 It would just have to be separated first from the
9 container.

10 A And be recycled as white PET.

11 Q So a film that has a core polymer layer that
12 includes titanium dioxide that is recycled as white
13 PET, can such a label that is, in fact, recycled meet
14 and obtain APR critical guidance recognition?

15 A Highly unlikely.

16 Q But it can?

17 MR. DIRKS: Objection to form.

18 THE WITNESS: It does not meet either of the
19 two, the one or two scenario, that we looked at on the
20 previous page.

21 BY MR. SCHATZ:

22 Q Such a film would not satisfy item number 1?

1 A Let me refer to that, please.

2 MR. DIRKS: Objection to the form; outside
3 the scope.

4 THE WITNESS: It would not satisfy item
5 number 1.

6 BY MR. SCHATZ:

7 Q Why not?

8 A It would not float.

9 Q There's no film that has a core polymer
10 layer that includes titanium dioxide that could
11 meet -- that could float?

12 MR. DIRKS: Objection; outside the scope.

13 THE WITNESS: Sorry. Phrase the question
14 again, please.

15 BY MR. SCHATZ:

16 Q Sure. There's no film that has a core
17 polymer layer that includes titanium dioxide that can
18 float in water?

19 A That's not what I said.

20 Q Okay. What did you say, then?

21 A Well, we were referring to PET, I believe.
22 Or maybe I was mistaken in this. Ah, it did not refer

1 to PET; I was mistaken.

2 Q Okay. Thank you for engaging in that
3 dialogue, and I appreciate you really diving in.

4 So a film that has a core polymer layer that
5 includes titanium dioxide could float in water, and
6 therefore meet item number 1 on page 336?

7 MR. DIRKS: Objection; outside the scope.

8 THE WITNESS: Again, it would depend on the
9 details, the details of the polymer that makes the
10 film.

11 BY MR. SCHATZ:

12 Q But it could --

13 MR. DIRKS: Objection; outside the scope.

14 BY MR. SCHATZ:

15 Q -- float in water?

16 MR. DIRKS: Sorry. Objection; outside the
17 scope of Dr. Phillips' report.

18 THE WITNESS: In principle.

19 BY MR. SCHATZ:

20 Q And therefore, a film that has a core
21 polymer layer that includes titanium dioxide could
22 obtain APR critical guidance recognition, correct?

1 MR. DIRKS: Objection; form; outside the
2 scope of Dr. Phillips' report.

3 THE WITNESS: There was a large leap. So
4 that even if it meets number 1 does not mean it's
5 necessarily going to receive the critical guidance
6 recognition.

7 BY MR. SCHATZ:

8 Q Yeah. I'm not saying it's a must happen.
9 But it could?

10 A It might, depending on the data.

11 Q Okay. So I don't think I got an answer to
12 my question.

13 If either of the two options on page 336 are
14 met, then such a label can meet APR critical guidance
15 recognition, correct?

16 MR. DIRKS: Objection to form; outside the
17 scope.

18 THE WITNESS: I feel like I've kind of
19 answered this, but let me try again. Which is that
20 there are many other tests beyond just item number 1
21 and number 2 that would be necessary to be conducted
22 before evaluation for critical guidance recognition.

1 BY MR. SCHATZ:

2 Q Completely understand. I guess what I'm
3 saying is that a label that meets either 1 or 2 could,
4 if the data supports it, obtain APR critical guidance
5 recognition?

6 MR. DIRKS: Objection to form; outside the
7 scope; asked and answered.

8 THE WITNESS: Perhaps. I'd have to see the
9 data to be able to truly evaluate that.

10 BY MR. SCHATZ:

11 Q If the data were sufficient, then either two
12 options could obtain APR critical guidance
13 recognition?

14 MR. DIRKS: Objection; outside the scope;
15 form.

16 THE WITNESS: I'm hesitating on the
17 answering because there's simply so many steps in
18 between of what needs to be accomplished and the
19 experiments that need to be run for me to feel
20 comfortable saying yes or no.

21 BY MR. SCHATZ:

22 Q Maybe the thing to ask is: If item number 1

1 is met and item number 2 is not met, that doesn't
2 exclude a label from obtaining APR critical guidance
3 recognition, correct?

4 MR. DIRKS: Objection to form; outside the
5 scope.

6 THE WITNESS: Correct.

7 BY MR. SCHATZ:

8 Q Okay. Page 337. And now I'm focused in on
9 the indented portion and there's a little bit that is
10 in bold.

11 Do you see that?

12 A I do.

13 Q Okay. The beginning of the indented portion
14 states, quote: "An important consideration for inks
15 of shrink" -- I'm sorry, let me see that again. I
16 thought I misquoted it.

17 Quote: "An important consideration for inks
18 on shrink-sleeve labels is that the ink not
19 contaminate or discolor PET flake when mixed in hot
20 caustic wash water used in the recycling process."

21 Do you see that?

22 A I do.

1 Q Okay. What is the PET flake being referred
2 to?

3 A It has to depend on the context, right? So
4 in this case, in a normal recycling process, the PET
5 flake would be everything that has been shredded and
6 turned into flake.

7 Q When you say "everything," what are you
8 referring to?

9 A So again, there's multiple steps, separation
10 steps, in the process leading up to a caustic wash --
11 leading up to shredding and then the caustic wash.
12 And so the material that has passed through those
13 separation steps are predominantly PET with some
14 contaminants.

15 Q What's the PET from?

16 MR. DIRKS: Objection to form.

17 BY MR. SCHATZ:

18 Q Is it from the container?

19 A It could be; it also could be from the
20 label.

21 Q Okay. Does a POSITA take away from this
22 portion of the prosecution history that if the inks on

1 the label do not contaminate or discolor PET flake
2 during a hot caustic wash, then the label is
3 recyclable, as that term is used in the '422 patent
4 claims?

5 MR. DIRKS: Objection to form; outside the
6 scope.

7 THE WITNESS: I'm sorry. Your question was
8 whether the label is recyclable?

9 BY MR. SCHATZ:

10 Q Yes.

11 MR. DIRKS: Objection to form; outside the
12 scope.

13 THE WITNESS: If you wouldn't mind, just
14 repeat the question again.

15 BY MR. SCHATZ:

16 A Sure. I like my question so much, I'm going
17 to have the court reporter read it back.

18 (Question read back as requested.)

19 MR. DIRKS: Object to form; asked and
20 answered.

21 THE WITNESS: No.

22

1 BY MR. SCHATZ:

2 Q Why not?

3 A Because the ink on the PET could have not
4 washed off, but that does not mean that that PET can
5 be continued in the recycling process.

6 Q Okay. If all the ink is washed off the
7 label and that ink does not contaminate or discolor
8 PET flake during a hot caustic wash, is the label
9 recyclable, as used in the '422 patent claims?

10 A In your hypothetical -- and I missed this; I
11 apologize -- are you referring to a PET label or just
12 a label in general?

13 Q Good question. We can limit this scenario
14 to a PET label.

15 A Okay. And I don't want to make you read it
16 again, but I'm going to ask for the question again.

17 Q Sure. Again, assuming the label is PET
18 film, if the inks completely wash off the film, and
19 those inks do not contaminate or discolor PET flake
20 during a hot caustic wash, is the label recyclable, as
21 that term is used in the '422 patent claims?

22 MR. DIRKS: Objection to form.

1 THE WITNESS: So there are -- there are a
2 variety of other experiments that need to be run to
3 consider whether it's recyclable, and again, those are
4 defined and outlined in the APR documents.

5 BY MR. SCHATZ:

6 Q Okay. So whether the inks contaminate or
7 discolor the PET flake is a consideration that a
8 person of skill in the art would undertake when
9 determining whether the label is recyclable, as that
10 term is used in the '422 patent claims?

11 A Yes.

12 Q Okay. But if the ink does not color or
13 contaminate the PET flake, that by itself is not
14 sufficient to determine that the label is recyclable,
15 as that term is used in the '422 patent, correct?

16 MR. DIRKS: Objection to form.

17 THE WITNESS: Correct.

18 BY MR. SCHATZ:

19 Q What other considerations need to be taken
20 into account?

21 A We kind of walked through these in the
22 beginning. There's a variety of tests through the

1 process, right? So I guess we've already now skipped
2 through the separation steps, right, the NIR IR
3 separation steps.

4 Q And maybe just to streamline things, a
5 person of skill in the art would take into account all
6 the other tests that you recited at the beginning of
7 our time?

8 A Correct.

9 Q And the results of those tests?

10 A Correct.

11 Q Okay. I hope that streamlines things a
12 little bit.

13 A Yes.

14 Q Okay. So you have, you know, a POSITA
15 evaluating contamination or discoloration of the PET
16 flake, and then you have a POSITA evaluating the
17 results of all the tests that you recited at the
18 beginning of our session. What's the most important
19 consideration to a POSITA when determining whether a
20 label is recyclable, as that term is used in the '422
21 patent?

22 MR. DIRKS: Objection to form.

1 THE WITNESS: Honestly, that's not something
2 that I could answer. I mean, I can't answer what
3 would be most important to a particular person.

4 BY MR. SCHATZ:

5 Q So a person of skill in the art, depending
6 on the application of the resulting reclaimed
7 material, might consider the issue of contamination or
8 discoloration of PET flake during a hot caustic wash
9 more important than one of the other considerations
10 that you mentioned, correct?

11 MR. DIRKS: Objection to form;
12 mischaracterizes the testimony.

13 THE WITNESS: Again, there's a number of
14 important tests, all of which impact the overall
15 quality of the material. It's challenging to say
16 which one is most important, and it's not something I
17 could do at this time without seeing what the results
18 are, and honestly, what somebody wanted to do with the
19 material.

20 BY MR. SCHATZ:

21 Q Okay.

22 What's the difference to a person of skill

1 in the art between contamination and discoloration of
2 the PET flake?

3 MR. DIRKS: Objection to form; outside the
4 scope.

5 THE WITNESS: What's the differences between
6 contamination and discoloration; is that your
7 question?

8 BY MR. SCHATZ:

9 Q Uh-huh. Yes. I'm not following my own
10 instruction to have verbal responses. Yes.

11 A Well, discoloration is a form of
12 contamination. Contamination would be the broader
13 category.

14 Q Okay. What level of contamination of the
15 PET flake, when mixed in a hot caustic wash water,
16 deems a label not recyclable, as that term is used in
17 the '422 patent?

18 A So there -- I'm going to phrase this, as the
19 question doesn't make sense, and I don't mean that
20 poorly.

21 What I mean by that is the material is
22 tested after the wash, and there's objective tests for

1 looking at the flakes after the wash. So it's not
2 during the wash that it would be evaluated. The wash
3 water itself is also evaluated.

4 Q Okay. So the wash water is evaluated,
5 right?

6 A Correct.

7 Q And, quote: "An important consideration for
8 inks on shrink-sleeve labels is that the ink not
9 contaminate or discolor PET flake when mixed in hot
10 caustic water used in the recycling process."

11 Do you see that?

12 A I do.

13 Q Okay. But I guess my question is, then, the
14 contamination of the PET flake is an important
15 consideration when determining whether a label is
16 recyclable, as that term is used in the '422 patent,
17 right?

18 A Correct.

19 Q Okay. And again, how does a person of skill
20 in the art determine how much contamination is allowed
21 for a label to still be determined to be recyclable,
22 as that term is used in the '422 patent?

1 A All right, so it has to go through these
2 tests. There's a test specifically for measuring
3 level of contamination.

4 Q There's a test for measuring the amount of
5 contamination of PET flake when it's mixed in the hot
6 caustic water?

7 A No, after the wash.

8 Q Okay. Well, this statement says: "An
9 important consideration for inks on shrink-sleeve
10 labels is that the ink not contaminate or discolor PET
11 flake when mixed in a hot caustic water used in the
12 recycling process." Okay?

13 A Correct.

14 Q So after the caustic wash but before any
15 other processing, what level of contamination is
16 acceptable for a label to still be deemed recyclable,
17 as that term is used in the '422 patent?

18 MR. DIRKS: Objection to form;
19 mischaracterizes the document.

20 THE WITNESS: So in this case, the statement
21 is saying that the ink not contaminate the flake
22 during the wash. And then at that point, the flakes

1 are collected. The flakes are evaluated according to
2 a procedure from APR, and there's several objective
3 measures for looking at the color and other features
4 of those flakes. And you asked before any other
5 processing, so I'm referring just to that portion.

6 The evaluation doesn't end there. That's
7 just one step of the evaluation.

8 BY MR. SCHATZ:

9 Q I see. Okay. But your opinion is that
10 there is an objective measure of discoloration -- I'm
11 sorry. We were using the term "contamination." I
12 don't want to change the language.

13 Your opinion is that there is an objective
14 measure of the amount of contamination after the
15 caustic wash but before any other processing for a
16 person of skill in the art to determine whether a
17 label can still be deemed recyclable, as that term is
18 used in the '422 patent?

19 MR. DIRKS: Objection to form; asked and
20 answered.

21 THE WITNESS: The conclusion of whether that
22 label is recyclable cannot be reached yet just based

1 on that data. Right? The additional experiments and
2 tests need to be run.

3 BY MR. SCHATZ:

4 Q Okay. Is there a level of contamination
5 after the caustic wash, but before any other
6 processing, whereby a label is no longer potentially
7 recyclable, as that term is used in the '422 patent?

8 A You know, honestly, I'd have to refer back
9 to the APR procedure on that. I don't recall what
10 their numbers were. So we could certainly look at
11 that --

12 Q Okay.

13 A -- to help answer that question.

14 Q And we may do that later.

15 In any event, the amount of contamination of
16 the PET flake after the caustic wash but before any
17 other processing is an important consideration for
18 determining whether or a label is recyclable, as that
19 term is used in '422 patent?

20 A Yes.

21 THE WITNESS: I don't know who to ask this
22 question to. I guess I'm not allowed to talk to you,

1 right? I was going to ask about lunch. I'm getting
2 hungry.

3 MR. DIRKS: It's been an hour. Why don't we
4 take a five-minute break we can get a little snack. I
5 think lunch is going to be here, like, noon.

6 (Recess.)

7 BY MR. SCHATZ:

8 Q Dr. Phillips, I think we were on page 337 of
9 Exhibit 1002.

10 A Okay.

11 Q In the third paragraph from the bottom, the
12 applicant makes a comment distinguishing from
13 Mitchell, Quote: "In contrast, the present
14 application teaches that the inks and pigments used in
15 the recyclable shrink label may be removed by washing,
16 leaving behind a label that can be recycled with the
17 article."

18 Do you see that?

19 A I do.

20 Q Okay. Would a POSITA understand from this
21 statement that if the inks and pigments used in the
22 label may be removed by washing, then it is

1 recyclable, as that term is used in the '422 patent?

2 MR. DIRKS: Objection to form.

3 THE WITNESS: I'm feeling badly asking you
4 to repeat things so many times, but if you wouldn't
5 mind.

6 BY MR. SCHATZ:

7 Q Don't feel badly. That's okay. We want to
8 make sure we get this clear.

9 Does a person of skill in the art understand
10 from applicant's statement that I just read, that is,
11 if the inks and pigment -- I'm sorry. I know I should
12 rephrase.

13 Okay. Does a POSITA understand from the
14 statement that I read, that if inks and pigments used
15 in a label may be removed by washing, then it is
16 recyclable, as that term is used in the '422 patent?

17 MR. DIRKS: Objection to form.

18 THE WITNESS: No.

19 BY MR. SCHATZ:

20 Q Why not?

21 A Just because they may be removed doesn't
22 mean they will be removed.

1 Q Okay. If the inks and pigments used in a
2 label are removed by washing, then does a person of
3 skill in the art understand that the label is
4 recyclable, as that term is used in the '422 patent
5 claims?

6 MR. DIRKS: Objection to form.

7 THE WITNESS: Again, there's many other
8 tests that are necessary to determine whether the
9 label would be recyclable, that being one of them.

10 BY MR. SCHATZ:

11 Q Okay. So the removal of inks during a
12 caustic wash is a consideration whether a label is
13 recyclable, as that term is used in the '422 patent,
14 correct?

15 A It is a necessary feature.

16 Q I see. So, but if the inks and pigments are
17 removed during the caustic wash, that is not
18 sufficient by itself for it to be deemed recyclable,
19 as that term is used in the '422 Patent?

20 MR. DIRKS: Objection to form; asked and
21 answered.

22 THE WITNESS: It is not sufficient for -- to

1 determine that it's recyclable.

2 BY MR. SCHATZ:

3 Q But it is a requirement?

4 MR. DIRKS: Objection to form; asked and
5 answered.

6 THE WITNESS: Without removing the inks, the
7 material would be contaminated.

8 BY MR. SCHATZ:

9 Q Would it be contaminated to the extent that
10 the label could not be deemed recyclable in terms of
11 the '422 Patent?

12 MR. DIRKS: Objection to form.

13 THE WITNESS: Again, that would have to go
14 back to the tests and the objective criteria
15 associated with the tests.

16 BY MR. SCHATZ:

17 Q Okay. Is there an objective test as to how
18 much ink and pigment must be removed from the label
19 for the label to be potentially recyclable, as that
20 term is used in the '422 patent?

21 MR. DIRKS: Objection to form.

22 THE WITNESS: The tests don't measure -- as

1 I'm understanding your question, it sounds to me like
2 you're asking me is there a certain quantity of ink on
3 a label that has to be removed.

4 BY MR. SCHATZ:

5 Q Yes, that's what I'm asking.

6 A And that's not what the tests measure. All
7 right, the tests measures the consequence of the
8 mixture after the fact and look at, like, quantitative
9 features of the material after the washing step.

10 Q Okay. So just to confirm, then, some inks
11 or pigments can remain on a label after a caustic wash
12 bath, and the label could still be recyclable, as that
13 term is used in the '422 patent, correct?

14 A In practice, examples that I've seen that --
15 typically, no. Ink needs to be washed off completely.

16 Q But that's not -- there's no criteria, I
17 thought, for how much ink needs to be washed off.

18 A Right. So I'm trying to think of how to
19 phrase this. I guess we could look at, for discussion
20 points, to two scenarios. No ink is washed off, then
21 it's not going pass the other tests. All right.
22 There will be too much contamination.

1 If all of the ink is washed off within
2 reason, then there may be a chance that it passes
3 through the other tests.

4 For the '422 patent, my understanding is
5 that it also includes the terminology of substantially
6 removing the ink and gives certain percentages
7 associated with that.

8 Q Okay.

9 A As a guidance.

10 Q Is it your opinion that a person of skill in
11 the art reviewing the '422 patent would understand
12 that a label that does not meet the requirement of
13 substantially removing the inks or pigments cannot be
14 recyclable, as that term is used in the '422 patent?

15 MR. DIRKS: Objection to form.

16 THE WITNESS: As I'm hearing the question,
17 it sounds like a hypothetical scenario. So without
18 data, without information to be able to evaluate it,
19 it's hard for me to respond to that.

20 BY MR. SCHATZ:

21 Q Okay. Well, if a label does not meet the
22 requirement of having inks and pigments substantially

1 removed, cannot in any circumstance be recyclable, as
2 that term is used in the '422 patent?

3 MR. DIRKS: Objection to form.

4 THE WITNESS: I guess I didn't hear what the
5 question was there.

6 BY MR. SCHATZ:

7 Q Sure. I'll rephrase, and you might be
8 right. Maybe there wasn't one.

9 If a label, when undergoing a caustic wash,
10 does not have substantially all the inks and pigments
11 removed, is that label precluded from being
12 recyclable, as that term is used in the '422 patent?

13 MR. DIRKS: Objection to form.

14 THE WITNESS: Well, I would say that, you
15 know, a person of ordinary skill in the art would
16 still refer to the tests and conduct the tests, and so
17 the determination of is it recyclable requires
18 experimentation and following those tests, and then
19 based on those results, would be able to draw the
20 determination.

21 BY MR. SCHATZ:

22 Q Okay. So then a label that doesn't --

1 sorry. A label that goes through a caustic wash and
2 doesn't achieve substantial removal of the inks and
3 pigments could still be recyclable, as that term is
4 used in the '422 patent, but it would be dependent
5 upon the other tests that you mentioned earlier?

6 MR. DIRKS: Objection to form.

7 THE WITNESS: Could be, though, right,
8 there's also experience that comes into play there for
9 a person of ordinary skill in the art, and based on
10 other examples of labels that have gone through the
11 process. And so if a label has very little, if any,
12 ink removed, it typically will not pass any of the
13 other tests.

14 BY MR. SCHATZ:

15 Q Okay. Can a label be recyclable, as that
16 term is used in the '422 patent, if it doesn't obtain
17 APR critical guidance recognition?

18 MR. DIRKS: Objection to form.

19 THE WITNESS: Obtaining the recognition is a
20 different process. It's a process of an organization
21 submitting testing and documentation to APR for the
22 specific purpose of receiving the recognition that's

1 independent of whether the material is recyclable or
2 not.

3 BY MR. SCHATZ:

4 Q Okay. Recyclable in terms of the '422
5 patent?

6 A Correct.

7 Q Okay. So in other words, a label does not
8 have to have obtained APR critical guidance
9 recognition to be recyclable, as that term is used in
10 the '422 patent?

11 A Correct.

12 Q If a label does achieve APR critical
13 guidance recognition, is that sufficient for it to be
14 recyclable, as that term is used in the '422 patent?

15 A Again, it depends on the details of what the
16 recognition was for. So to answer that, I would have
17 to see the experimental details, and again, what the
18 recognition is referencing. There's a variety of
19 recognitions that APR gives.

20 Q Oh, what are the different types of
21 recognitions?

22 A Oh, they --

1 Q In terms of labels.

2 A How long do you have?

3 Just to give you one example, which is a
4 base film that is crystallizable PET.

5 Q The APR issues recognition for a base film
6 that is crystallizable PET?

7 A There have been, yes. And this is all
8 available on the APR website.

9 Q What other APR recognition is available
10 relating to labels?

11 A Oh, quite a few. My inclination would be to
12 refer to the website, and we could go through a list
13 if you'd like.

14 Q So then is there an APR critical guidance
15 recognition that a person of skill in the art would
16 understand as deeming a label recyclable, as that term
17 is used in the '422 patent?

18 A The APR, when they give the recognition, it
19 is for a specific formulation of a label. And they
20 also give recognition for just films, as the example
21 that I gave you.

22 So again, it -- I'm not quite sure what the

1 question there was, but to answer it with any
2 confidence, I would need to actually see the details
3 of what was recognized.

4 Q Okay. What about -- is there an APR
5 recognition relating to satisfying PET-CG-02?

6 MR. DIRKS: Objection to form.

7 THE WITNESS: Again, the recognition is from
8 information that a company submits to APR for their
9 particular material or product.

10 BY MR. SCHATZ:

11 Q Does the APR issue recognition that a
12 particular label has met PET-CG-02?

13 A That I don't recall. I'd have to look at
14 the list.

15 Q Okay. Is it your opinion that if a label
16 meets PET-CG-02, that is sufficient by itself to be
17 recyclable, as that term is used in the '422 patent?

18 A No, because there are other APR documents as
19 guidance for testing for the recyclability of labels
20 with PET containers.

21 Q In Exhibit 1002 at page 325 in the
22 third-to-last paragraph, can you read that, and I'll

1 ask you a few questions.

2 There's a reference to shrink labels and
3 inks that meet the criteria of APR critical guidance
4 or benchmark tests.

5 Do you see that?

6 A I do.

7 Q And such labels, along with the innovations
8 listed above, quote: "Clearly move the industry
9 forward and are encouraged," close quote.

10 And again, the applicant for the '422 patent
11 referenced this document in the prosecution history,
12 right?

13 A Correct.

14 Q Okay. Does a POSITA understand that, quote,
15 "Shrink labels and inks that meet the criteria for APR
16 critical guidance or benchmark tests are recyclable,"
17 as that term is used in '422 patent based on the
18 inclusion of this in the prosecution history?

19 MR. DIRKS: Objection to form.

20 THE WITNESS: If you wouldn't mind repeating
21 that last part particularly.

22

1 BY MR. SCHATZ:

2 Q Sure. Just as the context, the applicant
3 for the patent included this reference to this
4 document during the prosecution history while trying
5 to get the patent, right?

6 A Correct.

7 Q Okay. And the document that applicant
8 referred to includes a statement, quote, "Shrink
9 labels and inks that meet the criteria of APR critical
10 guidance or benchmark tests, along with the
11 innovations listed above, clearly move the industry
12 forward and are encouraged."

13 Does a person of skill in the art understand
14 from applicant's reference to this resource document
15 that shrink labels and inks that meet the criteria of
16 APR critical guidance or benchmark tests are
17 recyclable, as that term is used in the '422 patent?

18 MR. DIRKS: Objection to form.

19 THE WITNESS: Not alone, no. There's -- as
20 I said, there's a variety of APR recommended tests
21 that are specific for evaluating whether it's
22 recyclable. My read on this is that it's giving a

1 history and indicating sort of the state of the art of
2 the field at the time, and encouraging innovation.
3 But that does not mean that it meets the recyclability
4 requirements that are put forth in '422.

5 BY MR. SCHATZ:

6 Q What are the referenced benchmark tests?

7 MR. DIRKS: Objection to form; outside the
8 scope.

9 THE WITNESS: If critical guidance or
10 referenced or benchmark tests, my interpretation,
11 which is all that I can offer at this point, is that
12 those are the APR documents that we've discussed
13 already.

14 BY MR. SCHATZ:

15 Q On the next page, 326, there's a reference
16 to shrink-sleeve film label converters.

17 A I see it.

18 Q Do you see that, quote: "These are member
19 companies and those that supply finished printed
20 labels that have employed APR's critical guidance
21 protocol for clear PET articles with labels and
22 closures, PET-CG-02, to demonstrate that their printed

1 labels are compatible with PET recycling, or can
2 supply labels using APR recognized unprinted labels."

3 Does a POSITA understand from this comment
4 that to be recyclable, as that term is used in the
5 '422 patent, a label must comply with PET-CG-02?

6 MR. DIRKS: Objection to form.

7 THE WITNESS: Again, to that document plus
8 the tests and the other resource documents from APR.

9 BY MR. SCHATZ:

10 Q Okay. So a person of skill in the art
11 doesn't understand that meeting PET-CG-02 is
12 sufficient by itself for a label to be deemed
13 recyclable, as that term is used in the '422 patent?

14 A Right. There are other tests delineated in
15 the other documents, with specificity in the other
16 documents.

17 Q On page 327, there's a reference to a model
18 specification.

19 A Okay.

20 Q Do you see that?

21 A I do.

22 Q Okay. Does a POSITA understand that this

1 model specification must be complied with for a label
2 to be recyclable, as that term is used in the '422
3 patent?

4 MR. DIRKS: Objection to form.

5 THE WITNESS: May I have a moment to read
6 through?

7 BY MR. SCHATZ:

8 Q You can, yeah, please do. Read through the
9 entire model specification.

10 A I'm sorry. Repeat the question.

11 Q Absolutely. Thank you for taking the time
12 to review that.

13 Does a person of skill in the art understand
14 that the model specification must be complied with in
15 order for a label to be deemed recyclable, as that
16 term is used in the '422 patent?

17 MR. DIRKS: Objection to form.

18 THE WITNESS: So I would say that this is a
19 guidance document, a guidance table, with decision
20 trees based on how the label performs in the recycling
21 process, and so it helps to guide a person of ordinary
22 skill in the art.

1 BY MR. SCHATZ:

2 Q So it's not that the model specification
3 must be complied with in order to be recyclable, as
4 that term is used in the '422 patent; rather, it just
5 provides -- it's an important consideration?

6 A And in part it's indicating many of the test
7 and testing documents that we've already discussed.

8 Q Yeah. And so I want to make sure I got an
9 answer to my question. It was inherent in your
10 response, but I want to make sure I got it.

11 The model specification doesn't have to be
12 complied with in order for a label to be deemed
13 recyclable, as that term is used in the '422 patent,
14 but it is an important consideration?

15 A It provides guidance on how to meet the
16 criteria.

17 Q Okay. And by providing guidance, it's not
18 required, but it's an important consideration?

19 A This, among the other APR documents, would
20 be the ones that a person of ordinary skill in the art
21 would look to to perform the tests.

22 Q Okay. In item number 1, there's a reference

1 to a guidance table describing the most important
2 characteristics that must be demonstrated for the
3 labeled container to provide a preferred level of
4 performance with negligible impact on the quality and
5 productivity of PET recycling.

6 What is a negligible impact to a person of
7 skill in the art?

8 MR. DIRKS: Objection; form.

9 THE WITNESS: It's pretty subjective. I
10 honestly don't know that I can answer that with much
11 confidence.

12 BY MR. SCHATZ:

13 Q In item number 3 it says, quote: "Alternate
14 next best steps that can be taken should the preferred
15 level not yet be possible."

16 What is the preferred level to a person of
17 skill in the art?

18 MR. DIRKS: Objection to form.

19 THE WITNESS: Well, the way I'm reading this
20 is that some of the test documents, such as Sort-B-01,
21 as indicated at the first line of the table, meets the
22 APR's preferred criteria at that time or at least

1 allows an evaluation of whether a sample would meet
2 the preferred criteria.

3 BY MR. SCHATZ:

4 Q Well, maybe I'll try to streamline this.
5 The preferred criteria, or the preferred level, is the
6 table at the bottom of page 327 and the top of
7 page 328, correct?

8 A I'm looking at the -- yes.

9 Q Okay. And item number 3 states that
10 alternate next best steps that can be taken should the
11 preferred level not yet be possible.

12 What are the next best steps that can be
13 taken according to a POSITA's understanding?

14 MR. DIRKS: Objection to form.

15 THE WITNESS: I mean, that's such a
16 case-by-case basis. There's no -- a person of
17 ordinary skill in the art isn't going to know just
18 simply the next best steps.

19 There are a couple of notations here in the
20 table that said if this, then that, which is, again, a
21 decision tree type of a scenario.

22

1 BY MR. SCHATZ:

2 Q Okay. But a person of skill in the art is
3 not going to know next best steps unless they're
4 looking at a particular label.

5 A Or a particular document and procedure that
6 outlines what the next best steps are.

7 Q Must a shrink-sleeve label be deemed APR
8 preferred to be recyclable, as that term is used in
9 the '422 patent?

10 MR. DIRKS: Objection to form.

11 THE WITNESS: No, I think that's
12 unnecessary. What's necessary is meeting the criteria
13 of the specific test.

14 BY MR. SCHATZ:

15 Q The list of tests that you mentioned at the
16 beginning of our session?

17 A Yes.

18 Q On the top of page 328 in the table there's
19 a performance element: "Impact of printed ink and
20 label film on recycling."

21 Do you see that?

22 A I do.

1 Q And then there are two referenced tests,
2 PET-CG-02 or PET-B-02. Do you see that?

3 A I do.

4 Q Okay. I think you already answered this,
5 but meeting PET-CG-02 is not by itself sufficient to
6 consider a label to be recyclable, as that term is
7 used in the '422 patent, correct?

8 MR. DIRKS: Objection to form.

9 THE WITNESS: Within the CG-02 criteria,
10 that includes some test that's are necessary to meet,
11 but not all of them.

12 BY MR. SCHATZ:

13 Q Okay. So there are tests other than PET- --

14 No, actually, I should say it better.

15 "Other than" is the wrong term.

16 There are tests in addition to PET-CG-02
17 that have to be met in order for a label to be deemed
18 recyclable, as that term is used in the '422 patent?

19 MR. DIRKS: Objection to form; asked and
20 answered.

21 THE WITNESS: I would phrase it differently
22 in that a person of ordinary skill in the art would

1 conduct these tests to evaluate whether the label was
2 recyclable, and so, sort of to answer your question,
3 so PET-CG-02 has tests within it. PET-B-02 has a
4 different test within it that needs to be met.

5 BY MR. SCHATZ:

6 Q To be recyclable under the terms of the '422
7 patent?

8 A As guidance to determine whether the label
9 is recyclable.

10 Q Okay. So again, assume for the moment that
11 PET-CG-02 and all the tests referenced in PET-CG-02
12 are met, that by itself is not sufficient for a label
13 to be recyclable, as used in the terms of the '422
14 patent?

15 MR. DIRKS: Objection to form.

16 THE WITNESS: The second test that they show
17 here, the PET-B-02, looks specifically at the --
18 whether color remains on the material. And so that's
19 a necessary component.

20 BY MR. SCHATZ:

21 Q In addition to PET-CG-02?

22 A Correct.

1 Q Okay. Must one consider the impact on, say,
2 the quality and productivity of PET recycling in order
3 to determine if a label is recyclable, as that term is
4 used in the '422 patent?

5 MR. DIRKS: Objection to form.

6 THE WITNESS: Honestly, I'm not quite sure
7 what you're asking.

8 BY MR. SCHATZ:

9 Q Okay. I'll try to be more clear.

10 A given label design will impact whether it
11 can be recycled, reclaimed, right?

12 MR. DIRKS: Objection to form.

13 THE WITNESS: Okay.

14 BY MR. SCHATZ:

15 Q And the design of a label could detract from
16 the ability of the PET flake to be reclaimed, correct?

17 A I suppose.

18 Q I mean, isn't that right? Depending on the
19 label design, it could have a negative impact on
20 whether or not the PET flake could be reclaimed,
21 correct?

22 A Yes. Sorry. I'm being, or given, a vague

1 response. Just without details, it's -- I tend to
2 evaluate things based on details, and without the
3 details, I feel more on the vague side of things.

4 Q Okay. Does the determination of whether a
5 label is recyclable, as that term is used in the '422
6 patent claims, based on the impact on the PET
7 recycling process?

8 A I guess I don't know what that means.

9 Q Okay. A given label design might prevent
10 PET container flake from being reclaimed, correct?

11 MR. DIRKS: Objection to form.

12 THE WITNESS: PET flake from being
13 reclaimed, yes.

14 BY MR. SCHATZ:

15 Q Okay. So the label design could have a
16 negative impact on the reclaiming process, right?

17 A I'm differentiating process from whether it
18 can be reclaimed, so it would have an impact on its
19 ability to be reclaimed, not necessarily on the
20 process by which it goes through for the reclaiming.

21 Q Okay. Good, good. I'm glad you said that.
22 That's very helpful.

1 So whether a label is recyclable, as that
2 term is used in the '422 patent claims, a POSITA must
3 consider the impact on what can be reclaimed in terms
4 of PET flake, correct?

5 MR. DIRKS: Objection to form.

6 THE WITNESS: Sorry. If you can repeat one
7 more time.

8 BY MR. SCHATZ:

9 Q Sure, sure. I'm asking a question how a
10 POSITA knows whether a label is recyclable or not, as
11 that term is used in the '422 patent claims. In order
12 to make that determination, does a POSITA consider the
13 impact the label has on the ability of PET flake to be
14 reclaimed?

15 A Well, that -- that consideration would
16 become evident in the testing process that's defined
17 by APR.

18 Q Let me ask this, then: Does it have to be
19 shown that a label meets all of these APR test
20 criteria to be deemed recyclable, as that term is used
21 in the '422 patent claims?

22 A Well, the claims didn't define that, so I

1 guess I cannot say that. I think these are good
2 guidance documents for determining whether a label is
3 recyclable.

4 Q Okay. What determines whether a label is
5 recyclable, than, as that term is used in the claims
6 in the '422 patent?

7 A So again, they point directly to, say, in
8 general, the APR documents. So I guess where I'm
9 drawing the line is: I can't say hard and fast that
10 it has to meet the APR guidelines, right? Instead,
11 the '422 patent is saying these are methods that one
12 would look at and tests that one would look at to see
13 if it's recyclable.

14 Q So the evaluation of all of these tests that
15 you listed is a consideration for a person of skill in
16 the art to determine whether a label is recyclable, as
17 used in the '422 patent claims?

18 A Yes.

19 Q Okay. Can a label be deemed recyclable, as
20 the term is used in the '422 patent claims, if the APR
21 tests that you listed are not undertaken?

22 MR. DIRKS: Objection to form.

1 THE WITNESS: I don't know how someone would
2 reach that conclusion.

3 BY MR. SCHATZ:

4 Q So the APR tests have to be undertaken for a
5 person of skill in the art to determine that a label
6 is recyclable, as that term is used in the '422 patent
7 claims?

8 MR. DIRKS: Objection; mischaracterizes the
9 testimony.

10 THE WITNESS: The APR tests are -- trying to
11 get the right word -- recognized in the field as
12 useful guidance. There are certainly other tests that
13 could be run that are similar. So it's not an
14 absolute, but tests must be run to be able to
15 determine that it's recyclable or not.

16 BY MR. SCHATZ:

17 Q Okay. If the APR tests are not run, what
18 other tests can be run to determine whether a label is
19 recyclable, as that term is used in the '422 patent?

20 A Tests that would be quite similar to what
21 APR has listed. These are tests that are determined
22 by the field as -- so the APR tests have been

1 determined by the field as being appropriate tests.
2 Different companies have their own modifications,
3 slight modifications, that they can also run and then
4 compare that with the APR testing results.

5 Q Okay. So it's not a requirement that the
6 APR tests be run to determine whether a label is
7 recyclable because, for example, different companies
8 might have their own tests?

9 A And I think perhaps the best way to answer
10 this question is we could look at the '422 rather than
11 me trying to remember exactly the terms that it says.
12 I'd be happy to, if you have it available. I don't
13 have it.

14 Q Yeah. Oh, we'll look at it.

15 But you indicated that companies have their
16 own tests, and those can be used to determine whether
17 a label is recyclable, as that term is used in the
18 '422 patent, correct?

19 A No. What I'm saying is that companies have,
20 many times, their own internal tests. I cannot say
21 that those internal tests will define whether a label
22 is recyclable according to '422. I haven't seen the

1 tests. I wouldn't know.

2 Q Okay. Well, I asked whether the APR tests
3 have to be evaluated to determine whether a label is
4 recyclable, as the used in the claims of the '422
5 patent, and you said no, that there are other tests
6 that can be employed for determining whether a label
7 is recyclable.

8 A Uh-huh.

9 Q What are those other tests?

10 A So again, this is where I would prefer to
11 refer to the patent, the '422 patent.

12 Q Okay. We'll look at that, then. Here's
13 Exhibit 101.

14 A Thank you.

15 Q Have had you a chance to look at the '422
16 patent?

17 A Yeah, appreciate it.

18 Q Okay. So what other tests aside from the
19 list of APR tests that you provided at the beginning
20 of our session, can a POSITA employ to determine
21 whether a label is recyclable, as that term is used in
22 the claims of the '422 patent?

1 A Right. So I guess just didn't want to
2 misquote or misstate things from the '422 patent. So
3 if we look at, I guess, column 11, line 32, I can read
4 it quickly.

5 Q Well, I want your opinion as a person of
6 skill in the art. What tests can be applied to
7 determine whether a label is recyclable above and
8 beyond the APR tests that you mentioned earlier?

9 A Let me read a short section, and then I'll
10 continue with the -- as part of the answer.

11 Q Okay.

12 A Well, which is, here it says: "According to
13 the embodiment, the labels of the present disclosure
14 can meet certain industry standards, including, for
15 example, the Association for Plastic Recyclers
16 critical guidance," and so forth.

17 So as a person of ordinary skill in the art,
18 there's a recognition that the APR tests are certainly
19 the -- I don't want to say gold standard, but the
20 go-to test methods for doing the evaluation.

21 Having said that, there's a recognition that
22 companies have their own internal procedures for

1 certain portions of the APR tests. So MCC, as an
2 example, has its own wash procedure that's based on
3 the APR test. They've even referenced the APR test.

4 So when I say there's other test methods
5 that are out there, it's ones that are specific to a
6 company that's based on APR protocols.

7 Q Okay. So these other companies tests, and
8 you mentioned Multi-Color as one example, could be
9 evaluated by a person of skill in the art to determine
10 whether or not a label is recyclable, as that term is
11 used in the '422 patent claims, correct?

12 A As one of many tests, yes.

13 Q What are the other tests that a person of
14 skill in the art could rely upon to determine whether
15 a label is recyclable, as that term is used in the
16 '422 patent?

17 A Which comes back to the standard APR test
18 that we've been discussing.

19 Q Okay. So then you have the APR tests
20 evaluation, and then you have specific companies and
21 their internal tests. Are there any other tests that
22 can be used by a person of skill in the art to

1 determine whether a label is recyclable, as that term
2 is used in the '422 patent?

3 A To my knowledge, this is -- and from my
4 perspective, the APR tests are what I would go to.

5 Q Okay. I'll draw your attention to column 2,
6 line 45.

7 A Is this the '422?

8 Q Yeah. Your request for that was perfect.

9 A Okay. You're welcome.

10 Q Line 45, quote -- just a second. Let me
11 find my reference here. Oh, yes.

12 And more specifically column 2, you know. I
13 want you to read starting at line 45 through 56.

14 A Okay. Not out loud?

15 Q No. Just, correct. Just so you can be
16 prepared to answer my question.

17 The last sentence of that section reads,
18 quote: "The wash article may be clear and not be
19 stained by the light-blocking component or other
20 pigments or inks," close quote.

21 How much of the inks and pigments must be
22 removed for the label to be recyclable pursuant to the

1 claim terms of the '422 patent?

2 A So again, this is one that the answer to it
3 would require testing and obtain the results of those
4 tests.

5 Q And when you say "the results of those
6 tests," one example would be the results of the APR
7 tests that you mentioned at the beginning of our
8 session?

9 A Correct. And in particular, probably the
10 PET-B-02, I believe.

11 Q But that wouldn't be sufficient by itself,
12 correct?

13 MR. DIRKS: Objection to form.

14 THE WITNESS: To answer the question that
15 you asked me, which is would it be clear and not
16 stained, that's the test for that portion.

17 BY MR. SCHATZ:

18 Q Okay. But meeting that test is not
19 sufficient by itself for a label to be deemed
20 recyclable per the terms of the '422 patent, correct?

21 A That's my understanding.

22 Q If a person of skill in the art is

1 evaluating a label and no inks remain after a caustic
2 wash, the label still might not be recyclable, as that
3 term is used in the '422 patent, correct?

4 A I think I missed a detail from the beginning
5 of that question that is important, if you wouldn't
6 mind rephrasing it or saying it again, please.

7 Q Sure. I'll say it this way: If a PET label
8 undertakes a caustic wash and no inks remain, a person
9 of skill in the art may conclude that the label is
10 still not recyclable, as that term is used in the '422
11 patent, correct?

12 A May I have a moment?

13 Q Sure.

14 A Yes, that's correct.

15 Q And why is that, correct?

16 A Because there's a number of other tests that
17 should be performed.

18 Q And a person of skill in the art would
19 understand that from reviewing the '422 patent?

20 A And knowing the APR documents.

21 Q In column 11 starting on line 32 the '422
22 patent provides, quote: "According to an embodiment,

1 the labels of the present disclosure can meet certain
2 industry standards, including, for example" -- then it
3 lists the PET-CG-02, "which can be considered as
4 certifying the film is fully recyclable with the
5 container or bottle."

6 What are the certain industry standards
7 referenced there to a person of ordinary skill in the
8 art?

9 A My interpretation of that is that those are
10 the APR tests and protocols that we've been
11 referencing.

12 Q Could a POSITA disagree with your
13 interpretation that that might be referring to
14 different industry standards?

15 MR. DIRKS: Objection to form.

16 THE WITNESS: I don't know what another
17 person would think.

18 BY MR. SCHATZ:

19 Q Are there any other industry standards that
20 a person of skill in the art might consider being
21 referenced other than the APR tests that you
22 mentioned?

1 A The guiding principles, the dominants ones,
2 are APR, and that's what people in the field would
3 look to.

4 Q So there's no others that a person of skill
5 in the art could consider being referenced by the
6 phrase "certain industry standards"?

7 MR. DIRKS: Objection to form;
8 mischaracterizes the testimony.

9 THE WITNESS: There are other standards.
10 What I'm saying is that a person of ordinary skill in
11 the art would be looking to APR, where it's a
12 generally recognized set of standards as opposed to
13 more individual type standards within different
14 companies and different industries.

15 BY MR. SCHATZ:

16 Q So what individual standards are you
17 referring to that could be considered certain industry
18 standards?

19 A There's none that I can think of to draw
20 out, other than certain companies will have
21 specifications for the quality of material that
22 they're willing to use in, say, in a manufacturing

1 process for determining whether it is recyclable.
2 Again, everyone -- not everyone, but a person of
3 ordinary skill in the art would be looking towards the
4 industry recognized standards that are APR.

5 Q Okay. If in the individual company that
6 you're referring to, is that manufacturer?

7 A A manufacturer, yes.

8 Q Okay. And if an individual manufacturing
9 company can use the reclaimed material for its
10 specific purpose, is the label deemed recyclable per
11 the terms of the '422 patent?

12 MR. DIRKS: Objection; form.

13 THE WITNESS: It's hard for me to answer
14 without actually seeing the details.

15 BY MR. SCHATZ:

16 Q Okay. So a person of skill in the art could
17 conclude that a label that meets an individual
18 manufacturing company's requirements for making its
19 particular product. A person of skill in the art
20 could consider that to be recyclable pursuant to the
21 terms of the '422 patent?

22 A Again, without seeing the details of the

1 test results, it's hard for me to come to a conclusion
2 on that.

3 Q Well, you have an individual company that is
4 manufacturing a product based on reclaimed label
5 material, and we'll just generally say that the
6 reclaimed material is not of the highest purity, but
7 it is sufficient for the individual company to make
8 its product. Okay?

9 A Uh-huh.

10 Q Could a person of skill in the art consider
11 that label then recyclable pursuant to the claim terms
12 of the '422 patent?

13 MR. DIRKS: Objection; incomplete
14 hypothetical.

15 THE WITNESS: Yeah. Again, it's so far from
16 what I've analyzed in this case, it's hard for me to
17 say. What I can offer is that, from my experience,
18 the purity that manufacturers require is typically
19 very similar to the purity that is required through
20 the APR methods.

21 BY MR. SCHATZ:

22 Q Okay. What if the individual manufacturing

1 company uses reclaimed material, and the material is
2 relatively high in purity but there's no data pursuant
3 to APR testing, could a POSITA consider such a label
4 recyclable per the terms of the '422 patent?

5 MR. DIRKS: Objection; incomplete
6 hypothetical.

7 THE WITNESS: I guess I have no way to
8 answer that question. Yeah. Sorry there's not enough
9 information for me to draw a conclusion there.

10 BY MR. SCHATZ:

11 Q Is the APR test data a requirement in that
12 scenario for a label to be deemed recyclable under the
13 terms of the '422 patent?

14 A Test data that is following methods that are
15 either the same or very similar to the APR or what
16 people would look for to determine whether the
17 recycled material was of a quality they would wish to
18 use.

19 Q Is required for a label to be deemed
20 recyclable under the terms of the '422 patent?

21 A Was that a question?

22 Q Yeah.

1 A Sorry. Didn't sound like one. Can you
2 rephrase that again?

3 Q Sure. APR data is a requirement for a label
4 to be deemed a recyclable under the terms of the '422
5 patent, correct?

6 MR. DIRKS: Objection to form.

7 THE WITNESS: Testing, following APR
8 protocols, and the results of those testing is the
9 information that people would look at to determine
10 whether the label is recyclable.

11 BY MR. SCHATZ:

12 Q So that testing and the data is a
13 requirement --

14 MR. DIRKS: Objection to form.

15 BY MR. SCHATZ:

16 Q -- to be deemed recyclable under the terms
17 of the '422 patent?

18 MR. DIRKS: Objection to form.

19 THE WITNESS: May I double check?

20 BY MR. SCHATZ:

21 Q You can look at the patent, sure.
22 Ready?

1 A Yeah.

2 So my interpretation, or my understanding,
3 is that testing is required to meet the terms of --
4 testing of the label is required to meet the terms of
5 the patent.

6 Q Okay. And when you say "testing," you are
7 referring to the list of tests that you mentioned at
8 the beginning of our session?

9 A Correct.

10 Q Okay. Back to the patent, column 11. The
11 section we just reviewed ends with: "Which can be
12 considered as certifying that the film is fully
13 recyclable with the container or bottle."

14 When is a label less than fully recyclable?

15 A I'm sorry. Which --

16 Q On the column 11.

17 A Uh-huh.

18 Q Just to give you the full reference, is
19 lines 32 through 38.

20 A Thirty-two through 38. And your question is
21 what, again?

22 Well, the reference is: "Certifying that

1 the film is fully recyclable." When is a label less
2 than fully recyclable?

3 MR. DIRKS: Counsel, if you're asking him a
4 question about his opinion, you can point him to his
5 report as well, to speed things up, I think.

6 MR. SCHATZ: Thank you.

7 THE WITNESS: So your question is: When is
8 a --

9 BY MR. SCHATZ:

10 Q When is a label less than fully recyclable?

11 A Well, these terms are used broadly, meaning
12 to mean the same thing, so "recyclable," "fully
13 recyclable."

14 Q So in your opinion, a person of skill in the
15 art interprets "fully recyclable" to be the same as
16 "recyclable," as that term is used in the claims of
17 the '422 patent?

18 MR. DIRKS: Counsel, again, if you're going
19 to ask him questions about his opinion, you can point
20 him to his declaration and the sections.

21 MR. SCHATZ: Thank you, thank you.

22 THE WITNESS: Can you point me to those

1 sections?

2 BY MR. SCHATZ:

3 Q I'm going to ask you, as a person of skill
4 in the art, whether -- well, you just testified that
5 in the context of the '422 patent, the reference to
6 "fully recyclable" and "recyclable" are used
7 interchangeably.

8 MR. DIRKS: Objection; mischaracterizes the
9 testimony, and honestly, Counsel, it's inappropriate.

10 BY MR. SCHATZ:

11 Q If I mischaracterized what you said, please
12 tell me.

13 I'll just ask you: Yes or no, did you just
14 say that the terms "fully recyclable" and
15 "recyclable," as used in the '422 patent, are
16 interchangeable according to a person of skill in the
17 art?

18 A Well, I do recall writing about that in my
19 report. I would like to refer to that.

20 Q Okay. Do you know where that is in your
21 report?

22 A I don't, but I can find it.

1 Q Okay. Why don't you go ahead and do that.

2 A Okay.

3 Q And just for the record, the witness is
4 looking at Exhibit 2013.

5 A Sorry. I'm not trying to be slow. It's
6 hard to find. Found it.

7 Q Did you?

8 A Yeah.

9 Q Okay, great. Where are you referring to?

10 A Thank you for being patient.

11 It is page 177 of my report. It is
12 paragraph 273.

13 Q Okay. And when is a label less than fully
14 recyclable?

15 A As I explained here, if it's fully
16 recyclable, then the label resins are fully reclaimed.
17 If it's recyclable, it does not necessarily mean that
18 they are fully reclaimed. I also point out that this
19 is common language within this field, as used by
20 Dr. Deible and Dr. Bushman.

21 Q Okay. So when you say "fully recyclable"
22 means fully reclaimed, are you meaning that all of the

1 label is reclaimed?

2 A No.

3 Q What does a person of skill in the art
4 understand "fully recyclable" to be?

5 A So in this case, we would be referring to --
6 can we put it in the context of a PET label?

7 Q Yes.

8 A Okay. In that case, it is reclaiming the
9 PET label -- sorry, reclaiming the PET from the label
10 where the label has other components on it, being able
11 to reclaim the PET material from that label.

12 Q Okay. Then when is a label merely
13 recyclable and not fully recyclable?

14 A Again, this is terms that shouldn't bring
15 confusion to a person of ordinary skill in the art.
16 So "recyclable" could be when you can reclaim all of
17 the material. "Recyclable" could also be where you
18 lose some of it in the process, but it is still
19 recyclable.

20 Q And how much of the material can you lose
21 for the label to still be deemed "recyclable," as that
22 term is used in the '422 patent?

1 MR. DIRKS: Objection to form.

2 THE WITNESS: There's no number on that.
3 That's not something I can answer.

4 MR. DIRKS: I don't want to mess up your
5 flow, but if it's a good stopping point -- it's
6 noon -- but I think lunch is here.

7 MR. SCHATZ: Great. Give me -- let me try
8 to get through this. I'll slog through this portion.
9 But I will not take too long. If it goes too long,
10 we'll call it for lunch.

11 BY MR. SCHATZ:

12 Q The excerpt from the patent that we were
13 just looking at column 11 indicates that the labels of
14 the present disclosure can meet certain industry
15 standards, including -- and there's a reference to
16 PET-CG-02, which can be considered as certifying the
17 film as fully recyclable, right?

18 A Right what?

19 Q Did I read that correctly?

20 A I believe so.

21 Q So according to the specification, to a
22 person of skill in the art, if a label meets

1 PET-CG-02, the label is fully recyclable, correct?

2 A That's what it says.

3 Q Okay. Can a label not meet PET-CG-02 and
4 still be recyclable, that is, not fully recyclable but
5 still recyclable, as the term was used in the '422
6 patent claims?

7 MR. DIRKS: Objection to form.

8 THE WITNESS: Again, I see those terms as
9 being quite interchangeable.

10 BY MR. SCHATZ:

11 Q And on what basis do you deem those terms to
12 be interchangeable?

13 A Because they're used commonly within the
14 field as "fully recyclable" and "recyclable" being
15 similar concepts.

16 Q Any other basis for your conclusion that
17 "fully recyclable" and "recyclable" are
18 interchangeable?

19 A No.

20 Q Okay. So I'm sorry, then. Can a label be
21 recyclable, as opposed to fully recyclable, if it
22 doesn't meet PET-CG-02, according to a person of skill

1 in the art?

2 MR. DIRKS: Objection to form.

3 THE WITNESS: I'm sorry. Repeat it again.

4 BY MR. SCHATZ:

5 Q Sure. According to a person skill in the
6 art, can a label be deemed recyclable, which is less
7 than fully recyclable, but still not meet PET-CG-02?

8 MR. DIRKS: Objection to form.

9 THE WITNESS: No. I consider them to be the
10 same thing.

11 BY MR. SCHATZ:

12 Q Next there is a reference to Sort-B-01 and
13 Sort-B-03, correct?

14 A Can I see that?

15 Q Okay. And that reference indicates that in
16 some embodiments, the labels of the present disclosure
17 are recyclable, according to those two documents that
18 I referenced, or both.

19 Do you see that?

20 A Sorry. Which part?

21 Q Column 11, starting at line 38.

22 A Uh-huh.

1 Q "In some embodiments, the labels of the
2 present disclosure are recyclable according to" -- it
3 references Sort-B-01 and then Sort-B-03 or both.

4 Do you see that?

5 A I do.

6 Q Do both Sort-B-01 and Sort-B-03 have to be
7 met in order for a label to be recyclable, as that
8 term is used by a person of skill in the art? I'm
9 sorry. As that term is used in the '422 patent.

10 A These are referring to some of the test
11 methods that we had discussed earlier, and that
12 there's a sequence of test methods driven by or guided
13 by APR, and the test methods are different stages of
14 the recycling process that need to be met for a label
15 to be recyclable.

16 Q I'm a little confused by your response
17 because from Line 38 through 44 it states: "In some
18 embodiments the labels of the present disclosure are
19 recyclable according to" and then it lists the two
20 Sort procedures, "or both."

21 Is a label that meets Sort-B-01 recyclable,
22 as that term is used in the claims of the '422 patent?

1 A Yeah. I can understand where you're coming
2 from. As a person of ordinary skill in the art, the
3 way that I read this paragraph and understand this is
4 that the PET-CG-02 is the guiding document, is the
5 guiding method, and then the rest of these sections
6 are simply provided as clarification for what's within
7 PET-CG-02, as putting more in laymen's terms of how
8 you would proceed to determine whether an article or
9 label with an article is recyclable.

10 Q So meeting Sort-B-01 or Sort-B-03 is not
11 sufficient for a label to be deemed recyclable, as
12 that term is used in the '422 patent; that's your
13 opinion?

14 A My opinion, my understanding, is that it's
15 one step of several that has to be met.

16 Q Column 6 of the '422 patent, direct your
17 attention to line 62.

18 A Okay.

19 Q Quote: "Generally clear crystallizable
20 heat-shrink films, e.g., PET shrink films, are
21 considered recyclable if no inks are retained on the
22 film after a caustic wash cycle typically used in a

1 PET cleaning process."

2 Do you see that?

3 A I do.

4 Q To be recyclable per the terms, claim terms,
5 of the '422 patent, must no inks be retained on the
6 label film?

7 A So I'll answer it a little bit longer
8 winded, I guess, than the direct question you're
9 asking, which is: My interpretation of this phrase,
10 this sentence, is that, again, it's falling under the
11 guidance of the APR documents, the GC-2, and helping
12 to clarify what is meant among those tests that need
13 to be run. And so among those tests is that typically
14 no ink should remain on those films. "No" is
15 subjective. The APR tests are very objective.

16 Q I'm sorry. Could you explain to me what is
17 subjective about no inks being retained on the label
18 film?

19 A To me it's subjective if it doesn't have a
20 number associated with it; whereas, the APR tests have
21 specific measures that you can take.

22 Q So whether there are no inks retained on a

1 label film after a caustic wash is subjective,
2 according to a person of skill in the art?

3 MR. DIRKS: Objection; form.

4 THE WITNESS: I can change the phrasing,
5 which is that this is helping to clarify to a reader
6 of the '422 patent that the ink should be removed.
7 And then of course there's the APR documents that give
8 specific tests to verify how much of the inks have
9 been removed.

10 BY MR. SCHATZ:

11 Q Okay. But whether there are no inks
12 retained on the label film, that's a subjective
13 analysis?

14 MR. DIRKS: Object to the form. Objection;
15 form.

16 THE WITNESS: I'd like to remove the phrase
17 "subjective" from my answer and go with -- you know,
18 backtrack on that and say that's a wrong word choice.
19 Go with the second answer that I gave you.

20 BY MR. SCHATZ:

21 Q Okay. Well, the statement says that
22 heat-shrink films are considered recyclable if no inks

1 are retained on the film after a caustic wash cycle.

2 A Uh-huh.

3 Q Does a person of ordinary skill in the art
4 understand that to be recyclable, no inks can be
5 retained on the label film after the caustic wash?

6 A Yeah. So my answer is that a person of
7 ordinary skill in the art knows that there are these
8 tests from APR that specifically test for that
9 property.

10 Q Okay. So are you saying that a person of
11 skill in the art interprets this part of the '422
12 patent specification to mean that a label that has
13 some inks remaining on it after a caustic wash can
14 still be recyclable, as that term is used in the '422
15 patent?

16 A No, I think this is clarifying in that
17 pointing out that basically most or all of the ink
18 needs to be removed during the caustic wash. That
19 property is tested using the APR documents.

20 Q And where do you get the comment that a
21 person of skill in the art understands this provision
22 to allow for most but not all of the inks to be -- I'm

1 sorry. Let me clarify that.

2 You clarified the amount of ink left on the
3 film. So I wanted to dive into that just a little
4 bit.

5 A Uh-huh.

6 Q What is your basis for a person of skill in
7 the art understanding this part of the specification
8 to suggest that some inks can be retained on the label
9 and still be recyclable, as that term is used in the
10 '422 patent claims?

11 A So I can clarify. I don't recall saying
12 that some inks. I may have said that. The way I read
13 that, again, is in reference to the previous section
14 that we looked at, which is using PET-CG-2 as the
15 guiding principles, the guiding documents for how to
16 do the tests, and the subsequent statements are
17 helping to clarify what the difference tests entail,
18 right, what kinds of thing you're measuring, referring
19 to the APR documents that have the very specific
20 tests.

21 This one is telling me, as a person of
22 ordinary skill in the art, that if you do a wash test

1 and there is ink remaining, then that's a concern. If
2 there's no ink remaining, we still have to do the
3 test, but that it looks like it might be headed in the
4 direction of being a recyclable label.

5 Q If no inks remain, it's headed toward the
6 direction of being recyclable per the '422 patent,
7 correct? That's your opinion?

8 A That is my opinion, yes.

9 Q Okay. And in the scenario where there is
10 some inks being retained on the film after the caustic
11 wash, that label can, in your opinion, still be
12 recyclable, as that term is used in the '422 patent
13 claims, correct?

14 A No, I did not say that.

15 Q Okay. So then am I correct in saying that
16 if there are some inks retained on the film after the
17 caustic wash, then it cannot be recyclable, as that
18 term is used in the '422 patent?

19 MR. DIRKS: Objection; form.

20 THE WITNESS: I did not say that.

21 BY MR. SCHATZ:

22 Q Okay. So then if no inks are retained on

1 the film after the caustic wash, the label could be
2 recyclable, as that term is used in the '422 patent
3 claims, correct?

4 MR. DIRKS: Objection; asked and answered.

5 THE WITNESS: It might be, following the
6 other tests as well.

7 BY MR. SCHATZ:

8 Q Very good. And then if there is some inks
9 being retained on the film after the caustic wash, in
10 that scenario the label could also be recyclable, as
11 that term is used in the '422 patent claims, correct?

12 MR. DIRKS: Objection; asked and answered.

13 THE WITNESS: Tests would have to be
14 performed to see whether those inks are impacting the
15 quality of the material.

16 BY MR. SCHATZ:

17 Q And if the inks are not impacting the
18 quality of the material, then that label could be
19 deemed recyclable under the terms of the '422 patent,
20 correct?

21 A Assuming all of the other tests are
22 consistent with a recyclable label as well.

1 Q Okay. And what is the extent of the impact
2 on the quality of the material that must be had to
3 render a label that still has some links retained on
4 it not recyclable under the terms of the '422 patent?

5 MR. DIRKS: Objection; asked and answered.

6 THE WITNESS: I didn't understand the
7 question. I'm sorry.

8 BY MR. SCHATZ:

9 Q Sure. You said that in the scenario where
10 inks are retained on the film after the caustic wash,
11 one would have to consider the impact on the quality
12 of the material in order to determine if it's
13 recyclable, correct?

14 A Uh-huh.

15 MR. DIRKS: Objection; asked and answered.

16 BY MR. SCHATZ:

17 Q Correct?

18 A I did say that, yeah.

19 Q Okay. And I'm trying to ascertain what
20 level of impact on the quality of the material makes
21 such a label no longer recyclable, as that term is
22 used in the claims of the '422 patent.

1 A Yeah. It's hard to answer this question
2 without actually having the data. So as a
3 hypothetical, that's a challenging one to answer.

4 I can say that the APR methods have very
5 clear tests that would be followed to see if any
6 retained ink is impacting the color, creating
7 inclusions, creating haze on the resulting material.

8 Q So in other words, a person of skill in the
9 art would evaluate the results of all the tests that
10 you recited at the beginning of our session in order
11 to determine if there is an impact on the quality of
12 the material such that the label is no longer
13 recyclable, as that term is used in the claims of the
14 '422 patent?

15 A What I would say is that a person of
16 ordinary skill in the art, depending on the results of
17 each step, would have the experience to be able to
18 say, Okay this result in not going to move forward.
19 It's insufficient here. It's not going to result in a
20 good recyclable film moving forward with the other
21 tests.

22 Q Okay. And as a person of skill in the art

1 evaluates the data from all that test, could one
2 person of skill in the art consider the impact merely
3 negligible such that the label would be deemed
4 recyclable and a different person of skill in the art
5 determine that the results show that the impact is
6 significant and therefore no longer recyclable?

7 MR. DIRKS: Objection to form; incomplete
8 hypothetical.

9 THE WITNESS: The tests are quantitative, so
10 you would not have different types of evaluation based
11 on that.

12 MR. SCHATZ: Okay. Great. Why don't we
13 take our break.

14 (Recess.)

15 (EXHIBIT 1027 WAS INTRODUCED.)

16 BY MR. SCHATZ:

17 Q Dr. Phillips, I'm going to pass to you
18 what's been marked as Exhibit 1027.

19 A Thank you.

20 Q This is the PET-CG-02 that we discussed
21 earlier today. Are you familiar with this document?

22 A I am.

1 Q Okay. In the third paragraph, there's a
2 comment about data developed by an independent
3 third-party laboratory following this protocol.

4 A I see it.

5 Q Tell me about how that works.

6 MR. DIRKS: Objection to form; outside the
7 scope.

8 THE WITNESS: I'm also not certain what your
9 question was.

10 BY MR. SCHATZ:

11 Q Is it fair to say that when consideration of
12 a label and its recyclability is being undertaken,
13 they will have a third-party lab generate data
14 relating to the label?

15 A I've seen examples of that, yes.

16 Q Tell me about the examples you've seen.

17 A What would you like to know?

18 Q Just generally what happens.

19 MR. DIRKS: Objection to form.

20 THE WITNESS: More specifically.

21 BY MR. SCHATZ:

22 Q Okay. I'll give some more detail.

1 So there's a company that has a label that
2 wants to be evaluated for APR critical guidance
3 recognition, hire a laboratory to undertake tests on
4 the label?

5 MR. DIRKS: Objection to form; outside the
6 scope.

7 THE WITNESS: In this area I have actually
8 very little experience. What I can tell you a little
9 bit that I've seen is that there are labs that offer
10 certain tests, and then a company can explore running
11 a test with one of those outside laboratories.

12 BY MR. SCHATZ:

13 Q Okay. You mentioned you have little
14 experience in this area. What were you referring to?

15 A Contracting out to hire somebody to run
16 tests that are independent.

17 Q Okay. You just have never been involved in
18 retaining a third-party laboratory to undertake tests
19 for potential APR consideration?

20 A Correct.

21 Q Okay. Are you familiar with the procedures
22 undertaken by third-party laboratories?

1 MR. DIRKS: Objection to form; outside the
2 scope.

3 THE WITNESS: It would depend on the
4 laboratory. So no.

5 BY MR. SCHATZ:

6 Q Okay. So the actual procedures employed
7 when generating data relating to a label, for example,
8 is dependent upon the processes of that particular
9 laboratory, right?

10 MR. DIRKS: Objection to form.

11 THE WITNESS: Again, not having looked at
12 any of this, I really dop know.

13 BY MR. SCHATZ:

14 Q Okay. In any event, is it your
15 understanding that data is generated -- and again, I'm
16 talking about the example relating to a label -- and
17 that data is then submitted to the APR?

18 A Well, I guess I don't have an understanding
19 of how that transfer of information occurs. I
20 probably shouldn't even try to speculate how it
21 occurs. I don't know.

22 Q Okay. You've never been in a situation

1 where you or you have knowledge of a situation where
2 data is somehow communicated to the APR for
3 evaluation?

4 A I have not.

5 Q Okay. Do you understand how the APR reviews
6 data relating to a label?

7 A Can you be more specific in what you mean?

8 Q Well, there are situations where the APR
9 will review data relating to a label as part of an
10 evaluation whether APR critical guidance recognition
11 is going to be granted, correct?

12 A That's my understanding.

13 Q Okay. Do you understand how the APR goes
14 about that process of evaluating that data?

15 A I do not.

16 Q Have you ever served on an APR review
17 committee?

18 A I have not.

19 Q Do you have any knowledge about how the APR
20 goes about deciding whether APR critical guidance
21 recognition is going to be issued?

22 A No, I have no knowledge of that.

1 Q Do you have an understanding that there is a
2 panel of individuals that make up such an APR review
3 committee that evaluates whether APR critical guidance
4 recognition is going to be issued?

5 MR. DIRKS: Objection to form; asked and
6 answered.

7 THE WITNESS: Only tangentially in that
8 reading the documents on the APR website where APR
9 recognition has been received, sometimes there's
10 notations of a panel that has looked at the submitted
11 information.

12 BY MR. SCHATZ:

13 Q Okay.

14 A I don't understand how they do it or who's
15 on it.

16 BY MR. SCHATZ:

17 Q That's the scope of your experience in that
18 just looking at the APR website?

19 A Correct.

20 Q Okay.

21 So you've never had experience where you've
22 interacted with a laboratory routine to evaluate a

1 label?

2 (Coalification by the reporter.)

3 BY MR. SCHATZ:

4 Q Can I just restate my question.

5 You've never been involved in reviewing the
6 work of a laboratory hired to evaluate a label,
7 correct?

8 A Do you mean from the APR side or just in
9 general?

10 Q Let's say, I was really limited to the
11 laboratory retained for purposes of submitting data to
12 the APR.

13 A Uh-huh. The only examples that I've
14 reviewed are for the Gatorade label.

15 Q Okay.

16 A Sorry. It wasn't even for the Gatorade
17 label. It was for the ink system, the Dearborn Ink
18 System.

19 Q Okay. So you've never retained a laboratory
20 in order to conduct evaluation of a label for purposes
21 of APR consideration?

22 A No.

1 Q Okay. And then it makes sense, you've never
2 reviewed the processes undertaken by such a
3 laboratory?

4 MR. DIRKS: Objection to form.

5 THE WITNESS: I have not.

6 BY MR. SCHATZ:

7 Q Referring to Exhibit 1027, page 4, in the
8 table at the bottom of page 4, there is a portion that
9 states required values. Do you see that?

10 A I do.

11 Q And underneath required values, there's a
12 cell that refers to labels for PET-wash-water
13 evaluation, PET-S-01. Do you see that?

14 A I do.

15 Q Does a person of ordinary skill in the art
16 understand that the PET-S-01 test must be met for a
17 label to be determined recyclable, as that term is
18 used in the '442 patent?

19 MR. DIRKS: Objection to form.

20 THE WITNESS: No, I wouldn't go that far. I
21 would say that the wash-water test is one of many
22 tests. It's an accumulation of data for evaluating

1 whether a label would meet the recycling requirements.

2 BY MR. SCHATZ:

3 Q Okay. Does the wash-water test have to be
4 undertaken as part of those tests --

5 MR. DIRKS: Objection to form.

6 BY MR. SCHATZ:

7 Q -- for a label to be recyclable, as that
8 term is used in the '442 patent?

9 MR. DIRKS: Objection to form.

10 THE WITNESS: May I look at something really
11 quickly?

12 BY MR. SCHATZ:

13 Q You can.

14 A Well, I would say that I just referred to
15 the '422 patent, and that it did not specifically call
16 out this test as one that was required.

17 Q For a label to obtain APR guidance
18 recognition, does a person of skill in the art
19 understand that this PET-S-01 test must be undertaken?

20 A I can give you my perspective on it, which
21 is that it's an important test to perform to make sure
22 that the wash water is not being contaminated.

1 Q And does a person of skill in the art
2 understand that the PET-S-01 test is a required test,
3 a prerequisite for getting APR guidance recognition?

4 MR. DIRKS: Objection to form.

5 THE WITNESS: Actually, I don't know what is
6 required on the APR recognition submission form, so I
7 guess I can't answer that.

8 BY MR. SCHATZ:

9 Q Okay. You indicated that the wash-water
10 test, regardless of whether it must be done, is an
11 important test to evaluate whether the wash water has
12 contamination, correct?

13 A Correct.

14 Q Okay. Why is that important to a person of
15 skill in the art?

16 A If the wash water is being contaminated,
17 then that causes or can cause ink transfer to other
18 PET flakes, clear PET flakes in the mixture. It also
19 can lead to high expenses for the recyclers or the
20 reclaimers.

21 Q What level of contamination of wash water
22 would a person of skill in the art would -- let me

1 rephrase.

2 What level of contamination of the wash
3 water would cause a person of skill in the art to
4 determine that a label is not recyclable, as that term
5 is used in the '422 patent?

6 MR. DIRKS: Objection to form; outside the
7 scope.

8 THE WITNESS: Honestly, I do not know the
9 answer to that. I have not looked at the wash-water
10 test in much detail.

11 BY MR. SCHATZ:

12 Q You mentioned that contamination of the wash
13 water could result in higher expenses for the
14 reclaimers?

15 A That's my understanding, yes.

16 Q And how would contaminated wash water cause
17 more expense for the reclaimers?

18 MR. DIRKS: Objection to form; outside the
19 scope.

20 THE WITNESS: My understanding in that
21 process is that the reclaimers would then have to
22 discard that wash water and create a new batch that's

1 no longer contaminated.

2 BY MR. SCHATZ:

3 Q In doing so, in discarding a batch, would
4 the reclaimer be discarding the PET as well?

5 A Now we're beyond what I know.

6 Q Under the required values table, there's a
7 reference to PET flake clumping evaluation, PET-S-08.

8 A Okay.

9 Q Must the required values -- let me say it
10 this way; I'll say it better.

11 Does a POSITA understand that the required
12 values for the PET-S-08 test need to be met for a
13 label to be deemed recyclable, as that term is used in
14 the '422 patent?

15 MR. DIRKS: Objection to form.

16 THE WITNESS: Are you referring to a PET
17 label?

18 BY MR. SCHATZ:

19 Q Yes, I am.

20 A Again, this is one of the tests that I would
21 deem as being important to conduct for a recycling to
22 determine whether a label was recyclable.

1 Q The PET-S-08 test and its results would be
2 an important consideration, but it is a required
3 consideration for a person of skill in the art to
4 determine a label to be recyclable or not?

5 MR. DIRKS: Objection; asked and answered.

6 THE WITNESS: I guess I can't speak to the
7 requirement. I can only refer to what's in the '422
8 specifications, which refer to this entire document.
9 I believe that's this -- let me make sure I'm
10 referring to the right document. PET-CG-02, as the
11 types of tests that are -- let me make sure I use the
12 right terms, whether it's necessary or --

13 So here it says that the labels of the
14 present disclosure can meet certain industry
15 standards, and then I'll paraphrase, including
16 PET-CG-02.

17 BY MR. SCHATZ:

18 Q Does a person of ordinary skill in the art
19 understand that portion of the '422 patent which is at
20 column 11 require that PET-S-08 not only be undertaken
21 but met for a label to be recyclable, as that term is
22 used in the '422 patent claims?

1 MR. DIRKS: Objection to form; asked and
2 answered.

3 THE WITNESS: The label is that they cannot
4 that they must meet these standards. My
5 interpretation is that following the guidance of
6 PET-CG-02 is the protocol that one would follow to
7 measure whether a label is recyclable under the terms.
8 BY MR. SCHATZ:

9 Q Yeah, I understand that's your position.
10 Does the POSITA's understanding regarding following
11 PET-CG-02 cause a person of skill in the art to
12 understand that PET-S-08 must also be undertaken for a
13 label to be deemed recyclable?

14 MR. DIRKS: Objection to form; asked and
15 answered.

16 THE WITNESS: I guess I can answer it in a
17 different way in that if the prior tests fail, this
18 test is not necessary.

19 BY MR. SCHATZ:

20 Q Good point. What if the prior tests, as you
21 generically referred them to, are passed?

22 MR. DIRKS: Objection to form.

1 THE WITNESS: Then my interpretation, again,
2 is that following the procedures within this document
3 is the types of tests that are necessary.

4 BY MR. SCHATZ:

5 Q So according to you, a person of skill in
6 the art understands that the test PET-S-08 is a
7 required test that has to be undertaken for a label to
8 be deemed recyclable, as that term is used in the '422
9 patent?

10 A As a scientist, I hate yes-or-no answers.

11 Well, I guess the answer or my response to
12 that is that the claims aren't limited to any
13 particular embodiment, and then I can answer it on
14 what I would do as a person of ordinary skill in the
15 art, which is that I would gather all of the
16 information that I could gather.

17 Q Is your answer you don't know?

18 MR. DIRKS: Objection. Counsel, please.

19 That's not necessary. Mischaracterizes the testimony.

20 THE WITNESS: No, I gave you my answer.

21 BY MR. SCHATZ:

22 Q Okay. We'll just -- yeah, I'll accept that.

1 Here's Exhibit 1030.

2 (EXHIBIT 1030 WAS INTRODUCED.)

3 A Thank you.

4 Q Dr. Phillips, this is the wash-water
5 evaluation, PET-S-01.

6 But going back to Exhibit 1027, page 4, you
7 see that under the wash-water evaluation report, the
8 APR guideline -- I'm sorry, the APR guidance preferred
9 values states, quote: "Observe and report only
10 no-guidance values."

11 Do you see that?

12 A I do.

13 Q And then back to Exhibit 1030. Does a
14 POSITA understand that there are no APR guidance
15 values of how much inks and pigments are removed from
16 a label by washing, correct?

17 MR. DIRKS: Objection to form.

18 THE WITNESS: I'm sorry. I didn't
19 understand the question.

20 BY MR. SCHATZ:

21 Q Okay. Does a person of skill in the art
22 understand that there's no criteria relating to how

1 much of the inks and pigments are removed by washing?

2 Correct?

3 MR. DIRKS: Objection to form.

4 THE WITNESS: And you're referring to

5 PET-S-01 in this question; is that --

6 BY MR. SCHATZ:

7 Q Correct.

8 A Correct.

9 Q Back to Exhibit 1027, on page 3, at the very
10 top there are some reference documents that PET-GC-02
11 is referring to.

12 A Yes.

13 Q Okay.

14 And one of those is PET-P-00?

15 A Yes.

16 Q Must PET -- say it better.

17 Does a person of ordinary skill in the art
18 understand that PET-P-00 must be taken into account
19 when evaluating whether a label is recyclable, as that
20 term is used in the claims of the '422 patent?

21 MR. DIRKS: Objection to form.

22 THE WITNESS: Do you have that document?

1 BY MR. SCHATZ:

2 Q I do. Yeah, I'm going to give it to you
3 right now. It's Exhibit 1028.

4 (EXHIBIT 1028 WAS INTRODUCED.)

5 A Thank you.

6 Q Sure.

7 A So to answer your question, this is a
8 guidance document on how to prepare PET samples where
9 the methods go beyond -- there's preparation methods
10 that are beyond what is necessary for some of the
11 tests that are in the GC-2 document. So a person of
12 ordinary skill in the art would refer to some of these
13 procedures, but not necessarily all of them.

14 Q Okay. On page 5 of Exhibit 1028, there's a
15 discussion about preparation of PET articles for
16 evaluation. Do you see that?

17 A I do.

18 Q And the third set of bullet points on page 5
19 provide that as an example, one might test a specific
20 label, correct?

21 A I see that.

22 Q And would that be one way that a person of

1 skill in the art would understand that a PET article
2 for evaluation can be prepared?

3 A I got a little confused there. If you
4 wouldn't mind repeating that again.

5 Q Sure. No problem. Again, this is a page
6 referring to the preparation of PET articles for
7 evaluation, right?

8 A Correct.

9 Q This is for evaluation of whether a label is
10 recyclable, correct?

11 A Yes.

12 Q Okay. So a person of skill in the art
13 understands that one way to prepare a PET article for
14 evaluation to determine whether a label is recyclable
15 is to test a specific label with specific inks,
16 et cetera, correct?

17 A I agree.

18 Q Okay. And another option for a POSITA is to
19 test a generic label that is printed with several
20 represented ink colors that represents a range of
21 label graphics that might be used, correct?

22 A That's what it says.

1 Q Is that correct? Is that your
2 understanding, a POSITA understands that testing a
3 generic label is one example of preparing a PET
4 article for evaluation to determine whether it's
5 recyclable?

6 A Yes, but there are important details
7 associated with that.

8 Q Okay. And what are those details?

9 A Well, from the perspective of a person of
10 ordinary skill in the art, I would say that if you're
11 going to test a generic label, it indicates several
12 representative ink colors, but those should be
13 selected from the inks that are majority on the label
14 that's being tested, if not all of the inks that are
15 being tested.

16 (EXHIBIT 1010 WAS INTRODUCED.)

17 Q I'll show you Exhibit 1010.

18 A Thank you.

19 Q Sure.

20 This is Sort-B-01, right?

21 A Correct.

22 Q Okay. And in the last full paragraph, the

1 second sentence states, quote: "Good results in this
2 screening test indicate that a plastic article has the
3 potential to be sorted well in production conditions,"
4 close quote.

5 What does a POSITA understand to be good
6 results?

7 MR. DIRKS: Objection to form.

8 THE WITNESS: Honestly, I don't have an
9 opinion on this one. That's a topic that I do not
10 know much about.

11 BY MR. SCHATZ:

12 Q Okay. And that should streamline things.

13 The next sentence talks about poor results.
14 I'm assuming you don't have an opinion regarding what
15 constitutes poor results?

16 A I do not.

17 Q You don't have an opinion whether there is a
18 standard by which a person of skill in the art can
19 determine whether results are good or poor?

20 A Not for NIR IR sorting.

21 Q At the bottom of page 2 there is a mention
22 of a flow diagram, which is actually at the top of

1 page 3.

2 A Okay.

3 Q Do you have any opinions regarding how a
4 person of skill in the art would apply this flow
5 diagram?

6 A Unfortunately, no.

7 Q You don't have an opinion as to whether
8 there are standards by which the flow diagram is to be
9 followed?

10 MR. DIRKS: Object to the form.

11 THE WITNESS: I'm simply not familiar enough
12 with this technique.

13 (EXHIBIT 1001 WAS INTRODUCED.)

14 BY MR. SCHATZ:

15 Q Okay. I'm going to refer you back to the
16 '422 patent, which is Exhibit 1001. And I want to
17 look at the claims of the patent, Dr. Phillips.

18 You're a named inventor on several patents,
19 right?

20 A That's correct.

21 Q As a part of that, do you understand the
22 concept of an independent claim?

1 A Partially.

2 MR. DIRKS: Objection to form.

3 BY MR. SCHATZ:

4 Q Then "partially" is probably your answer if
5 I ask you: Do you know what a dependent claim means?

6 MR. DIRKS: Objection to form.

7 THE WITNESS: I think I do.

8 BY MR. SCHATZ:

9 Q Okay. A dependent claim is a claim that
10 refers back to a claim before it, and to fall within
11 the scope of a dependent claim, not only does the
12 limitation of the dependent claim have to be present,
13 but the limitations of the independent claim have to
14 be present as well. Do you have that understanding?

15 A Yes.

16 Q Okay. So with regard to claim 3 for
17 example, which is a claim that depends from claim 1,
18 correct?

19 A Correct.

20 Q Okay. Claim 3 requires a high-opacity layer
21 comprising a white pigment and also requires a
22 light-blocking layer because it depends from claim 1,

1 correct?

2 A Correct.

3 Q In connection with claim 3, what does a
4 person of skill in the art understand constitutes the
5 shrink label material?

6 A Could you repeat that one more time, please.

7 Q Sure. Again, claim 3 is what I'm referring
8 to. What does a person of skill in the art understand
9 constitutes the shrink label material in the context
10 of claim 3?

11 MR. DIRKS: Objection to form.

12 THE WITNESS: Part of what I'm struggling
13 with is that it refers to a recyclable shrink label,
14 not a shrink material, so I'm not sure what you're
15 asking me about, if it's the material or the label
16 from claim 1.

17 BY MR. SCHATZ:

18 Q That's a good point.

19 In the context of claim 3, you have the
20 label film, correct?

21 MR. DIRKS: Objection to form.

22

1 BY MR. SCHATZ:

2 Q Which we know must exist because of claim 1.

3 A A heat-shrink film, yes.

4 Q Right. So what is the shrink label
5 material, according to a person of skill in the art's
6 understanding of claim 3?

7 MR. DIRKS: Objection to form.

8 THE WITNESS: So for the shrink label
9 material, at the beginning -- so the recyclable shrink
10 label at the start of claim 3, is the heat-shrink film
11 of PET that has a first and a second surface opposite
12 the first surface with a defined thickness, which I
13 can tell you those numbers.

14 It also has a light-blocking layer that's
15 adjacent to the first surface, and that light-blocking
16 layer has a light-blocking component that blocks a
17 certain amount of light -- again, I can tell you those
18 numbers -- as well as the particle size of the
19 light-blocking component.

20 There's a list of options for what that
21 light-blocking component could be. And then there's
22 the description that it could be recyclable with a PET

1 container.

2 BY MR. SCHATZ:

3 Q In the context of claim 3, the shrink label
4 material includes at least the high-opacity layer, the
5 light-blocking layer, and the film, correct?

6 A Yes. Maybe I misunderstood your question.
7 I thought you were asking me what was the film prior
8 to thinking about the high-opacity layer.

9 Q Yeah. I can ask you again.
10 So I'm just trying to understand the
11 different parts of the label. You have the film,
12 right?

13 A Correct.

14 Q Okay. And then in the context of claim 3,
15 you have the high-opacity layer in addition to the
16 light-blocking layer and the film found in claim 1,
17 right?

18 A Correct.

19 Q Okay. So the shrink label material is the
20 high-opacity layer, the light-blocking layer, and the
21 shrink film, correct?

22 MR. DIRKS: Objection to form.

1 THE WITNESS: I would agree with that
2 statement if we were at the conclusion of the sentence
3 of claim 3. If we're referring to the recyclable
4 shrink label of claim 1, that's only what's in
5 claim 1.

6 BY MR. SCHATZ:

7 Q Yeah. I'm talking about the entirety of
8 claim 3.

9 A Okay.

10 Q So the shrink label material is the
11 high-opacity layer comprising a white pigment, the
12 light-blocking layer, and the heat-shrink film
13 comprising PET?

14 MR. DIRKS: Objection to form;
15 mischaracterizes the document.

16 THE WITNESS: There's also first surface and
17 second surface, and of course, the details. But if
18 we're looking at just the materials without adding the
19 details, which I think is perhaps what you're doing.

20 BY MR. SCHATZ:

21 Q Yeah. I understand that the film has to
22 have a first and a second surface and there has to be

1 a particular thickness. I understand the
2 light-blocking layer has a lot of requirements added
3 to it.

4 I'm just referring to what is the shrink
5 label material, and that would be, with respect to
6 claim 3, the high-opacity layer comprising a white
7 pigment, a light-blocking layer, and a heat-shrink
8 film comprising PET?

9 A Okay.

10 Q Is that correct?

11 MR. DIRKS: Objection to form.

12 THE WITNESS: Correct.

13 BY MR. SCHATZ:

14 Q You already have in front of you your expert
15 declaration?

16 A I do.

17 Q Draw your attention to paragraph 11. In
18 connection with your work with Avery Dennison
19 Corporation, that was limited to pressure-sensitive
20 adhesive for recyclable labels?

21 MR. DIRKS: I'm just going to caution the
22 witness if there's any sort of confidentiality

1 agreements in place, you need to abide by those. But
2 if there's -- there's ways you can answer that
3 question.

4 BY MR. SCHATZ:

5 Q Yeah. We don't want to have you violate
6 some confidentiality agreement that you have. I'm
7 going to be asking very generic questions.

8 A Okay.

9 Q Nothing specific whatsoever.

10 A Yeah.

11 Q You state, though, that you did work on
12 pressure-sensitive adhesives for recyclable labels,
13 correct?

14 A Correct.

15 Q Okay. Did you work on the adhesives for the
16 labels or would you characterize your work as working
17 on the adhesives and the labels?

18 A Let me walk the line a little bit here. Did
19 a variety of things. So we developed new adhesives,
20 we developed -- well, I should add we developed new
21 pressure-sensitive adhesives that could be turned off
22 in caustic washes. We developed ways of making the

1 liners for pressure-sensitive adhesive labels. The
2 liners are PET. Developed ways of making those
3 recyclable through the caustic wash processes in a
4 recycling stream.

5 So I should probably leave it at that.

6 Q Okay. You did not work on heat-shrink
7 labels in collaboration with Avery Dennison?

8 A All of the labels were just linear labels,
9 nothing that was a heat shrink.

10 Q When you say a "linear label," what are you
11 referring to?

12 A Just a PET -- linear PET sheet.

13 Q There's no layers to that?

14 A Oh, no, no. We made layers of the systems.
15 Sorry. I was confusing there. We did not use
16 heat-shrink labels. I'm completely drawing a blank
17 now on heat-shrink tubes.

18 Q Okay. You didn't do any work relating to
19 ink systems for labels?

20 MR. DIRKS: Objection to form.

21 THE WITNESS: No. No, not particularly.

22 Sleeves. That was what I was looking for,

1 not tubes.

2 BY MR. SCHATZ:

3 Q The pressure-sensitive adhesives that you
4 worked on didn't involve any opacity layer, I take it.

5 A They did not.

6 Q And they didn't incorporate a light-blocking
7 layer, I take it.

8 A Not in the same context as what we're
9 dealing with here.

10 Q Did you actually work on the designs of
11 pressure-sensitive adhesives for recyclable labels for
12 the purpose of meeting APR guidelines?

13 A Couple parts to the answer. It was very
14 exploratory work. So developing new polymers.
15 Thinking about APR guidelines is more in the product
16 side, product development side. We had not gotten
17 there yet.

18 Having said that, we were aware of the
19 caustic wash conditions, and we conducted tests
20 following exactly what APR recommends for testing for
21 a caustic wash procedure.

22 Q Okay. Did you actually finish the design of

1 a pressure-sensitive adhesive for recyclable labels
2 that was submitted to the APR?

3 A My side was on the academic side. So if
4 there was anything submitted, I was not involved in it
5 and that would have been on the Avery Dennison side.

6 Q Okay. I draw your attention to
7 paragraph 46. You state that you understand that
8 patent owner's construction --

9 A I went to page 46.

10 Q Sorry.

11 A That was my mistake.

12 Q Paragraph 46.

13 A Okay.

14 Q You acknowledge that patent owner has
15 submitted a proposed claim construction for the term
16 "recyclable," right?

17 A I do.

18 Q And you identify what that proposed
19 construction is, right?

20 A Correct.

21 Q And then in paragraph 49 you state your
22 opinion that you believe that the prosecution history

1 is consistent with patent owner's proposed
2 construction, right?

3 A Correct.

4 Q Is it your opinion that patent owner's
5 proposed construction for the claim term "recyclable,"
6 which is, and I'll quote, "capable of being recycled
7 without removing the label from a container before or
8 during the recycling process" is what a person of
9 ordinary skill in the art would understand
10 "recyclable" to mean as that term is used in the '422
11 patent claims?

12 A I heard everything. What's the question?
13 Is it a yes-or-no?

14 Q It's a yes-or-no question. And I just am
15 asking: Is it your opinion that what patent owner's
16 proposed construction is is what a person of ordinary
17 skill in the art would understand the term
18 "recyclable" to mean, that is, as "recyclable" is used
19 in the claims of the '422 patent?

20 A Yes.

21 Q In paragraph 50, you discuss an example of a
22 recyclable label according to patent owner's proposed

1 construction, right? Correct?

2 A Correct.

3 Q That is, one example of such a label is
4 labels that include inks that wash off, such that the
5 underlying polymer resin can be reclaimed in the
6 recycling process, correct?

7 A Correct.

8 Q And you're referring to the patent
9 column 20, 16 through 20, for that conclusion, right?

10 A Yes, that's what's written here.

11 Q How much of the inks must wash off so that
12 the underlying polymer resin can be reclaimed?

13 MR. DIRKS: Objection to form; incomplete
14 hypothetical.

15 THE WITNESS: So in any new instance, I
16 would simply refer to the APR guidelines for testing
17 that matter.

18 BY MR. SCHATZ:

19 Q So the evaluation is not simply based on the
20 amount of inks that can wash off, but rather, the APR
21 test that you recited earlier today have to be
22 evaluated as well?

1 MR. DIRKS: Objection to form;
2 mischaracterizes the testimony.

3 THE WITNESS: My opinion is that no
4 conclusion can be drawn on whether a label attached to
5 an article is recyclable unless the tests are run.

6 BY MR. SCHATZ:

7 Q The APR tests that we talked about earlier?

8 A Correct.

9 Q Okay. So again, merely evaluating the
10 amount of inks that wash off is not sufficient?

11 MR. DIRKS: Objection to form;
12 mischaracterizes the testimony and the document.

13 THE WITNESS: With the exception, which I
14 have mentioned earlier, that in many cases where, if
15 you do the wash test and it's clear the ink is simply
16 not washing off, the experience says that's not going
17 to proceed forward.

18 BY MR. SCHATZ:

19 Q Okay. If some inks wash off, evaluating
20 that alone is not sufficient to determine whether a
21 label is recyclable, as used in the '422 patent?

22 MR. DIRKS: Objection to form;

1 mischaracterizes the testimony.

2 THE WITNESS: Again, this is where no person
3 of ordinary skill in the art would have the experience
4 to be able to have a gauge of -- not an absolute
5 gauge, But if basically nothing is washing off, that's
6 clear that that's not going to pass. At some point in
7 the middle, then, it just has to be tested.

8 BY MR. SCHATZ:

9 Q Okay. And when does a person of skill in
10 the art know when not enough ink is washed off, that
11 it doesn't need to even go through the APR testing
12 evaluation?

13 MR. DIRKS: Objection; asked and answered.

14 THE WITNESS: It depends on the person and
15 their experience.

16 BY MR. SCHATZ:

17 Q Okay. Paragraph 51, you are describing one
18 embodiment covered by the '422 patent; is that right?

19 A Okay.

20 Q You are of the opinion that the APR critical
21 guidance documents explain that labels are recyclable
22 if they can, and then you provide some examples,

1 right?

2 I'm at the top of page 27.

3 A Thank you.

4 Q It's a long paragraph.

5 So I guess a couple of different questions
6 here.

7 You acknowledge that according to the APR
8 critical guidance documents, labels are recyclable
9 if -- and one example is: They can enter the
10 recycling stream without losing the entire article,
11 label, and container in the recycling process, right?

12 A Correct.

13 Q Okay. What if the label enters the
14 recycling stream and loses some of the article, the
15 label, and the container in the recycling process?

16 MR. DIRKS: Objection to form.

17 BY MR. SCHATZ:

18 Q Is it still recyclable pursuant to the '422
19 patent claims?

20 MR. DIRKS: Objection to form.

21 THE WITNESS: I hate to ask to repeat it
22 again, but if you wouldn't mind.

1 BY MR. SCHATZ:

2 Q Sure, no problem. You're acknowledging that
3 the APR critical guidance documents explain that
4 labels are recyclable in certain situations, right?

5 A (Nods head).

6 Q The first one is what I'm asking about. The
7 situation where the -- I'm sorry. The first example
8 where the labels enter the recycling stream without
9 losing the entire article in the recycling process.

10 So if the entire article is not lost in the
11 recycling process, it is recyclable per the '422
12 patent, correct?

13 MR. DIRKS: Objection to form;
14 mischaracterizes the document.

15 THE WITNESS: It means that it can move on
16 to the next step.

17 BY MR. SCHATZ:

18 Q Oh, I see. Okay. Meaning there would be
19 other evaluations that have to be taken place?

20 A Correct.

21 Q Okay. What if some of -- well, maybe I'm
22 misunderstanding your statement. If some portions of

1 the entire article are lost, can the label still be
2 deemed recyclable per the terms in the '422 patent?

3 MR. DIRKS: Objection to form.

4 THE WITNESS: The part I'm struggling with
5 is a scenario where some of the article would be lost.

6 BY MR. SCHATZ:

7 Q That's where I'm struggling too.

8 A Yeah. I don't normally see that kind of
9 scenario.

10 Q Well, your statement where the labels enter
11 the recycling stream without losing the entire
12 article --

13 A Uh-huh.

14 Q -- I understand that be that as long as you
15 don't lose the entire article, it can still move on to
16 the next step and possibly be recyclable per the '422
17 patent. Is that what you're stating here?

18 A Correct.

19 Q Okay. And then in part number 2, according
20 to APR critical guidance documents, labels are
21 recyclable if the label can be removed from the
22 recycling stream without staining the remaining flake

1 slash wash water, correct?

2 A Correct.

3 MR. DIRKS: Objection to form.

4 BY MR. SCHATZ:

5 Q Okay. What if the label can be removed from
6 the recycling stream without staining the remaining
7 flake, but it does stain the wash water? Can it be
8 recyclable per the '422 patent?

9 MR. DIRKS: Objection to the extent you're
10 mischaracterizing this document, or this paragraph in
11 this document.

12 THE WITNESS: The part that you're reading
13 from, number 2, is the APR critical guidance documents
14 language where they're defining that if a label can be
15 removed and doesn't stain, meaning the ink stays on
16 the label, so that's a separate type of label than
17 what is covered in the '422.

18 BY MR. SCHATZ:

19 Q Oh, I see. I'm sorry. So you're reciting
20 what the APR critical guidance document explains as a
21 label that is recyclable?

22 A Correct.

1 Q I see. In paragraph 91 you comment on some
2 caustic wash testing done by Dr. Rietman, correct?

3 A I want to verify that's what I'm looking at.
4 Yes.

5 Q And you state that, quote: "The images
6 showed that the Gatorade label flake retained
7 significant if not all amounts of ink after the
8 caustic wash testing."

9 What quantification does a POSITA assign to
10 your term "significant"?

11 MR. DIRKS: Objection to form.

12 BY MR. SCHATZ:

13 Q Yeah, that was a really bad question. I
14 should rephrase that.

15 You used the term "significant amounts of
16 ink." What objective criteria did you use to identify
17 the label as retaining significant amounts of ink?

18 MR. DIRKS: Objection; form.

19 THE WITNESS: In this case it's a
20 qualitative evaluation comparing the figure on
21 page 47, so where we have a close-up view of the
22 pieces before and after washing.

1 BY MR. SCHATZ:

2 Q Okay.

3 A Being able to track the text and the shapes
4 on the labels from one picture to the other.

5 Q Okay. So that was your viewing of the
6 images on page 47?

7 A Correct.

8 Q Paragraph 104, you are commenting on
9 Dr. Deible's pre-shrinking procedure?

10 A Correct.

11 Q You state that "the specific methodology he,
12 Dr. Deible, used for his testing may have also have
13 substantially biased the results he allegedly
14 obtained," close quote.

15 Do you see that? It's in paragraph 104.

16 A Yes.

17 Q You didn't undertake any testing to
18 determine whether Dr. Deible's methodology did, in
19 fact, bias the results, correct?

20 A You mean myself?

21 Q That's my question.

22 A No, I did not.

1 Q Okay. So you're not offering an affirmative
2 opinion that the methodology employed by Dr. Deible
3 for pre-shrinking did in fact bias the results?

4 A No, it's raising a substantial concern.

5 Q Okay. Yeah. And then a similar comment
6 about paragraph 105, where you state: "The
7 pre-shrinking procedure may have a significant effect
8 on the ink integrity on the film."

9 You did not undertake any testing regarding
10 whether Dr. Deible's pre-shrinking procedure actually
11 had an effect on the ink integrity, correct?

12 A I did not.

13 Q Okay. You're not offering an affirmative
14 opinion that the methodology employed by Dr. Deible
15 for pre-shrinking did, in fact, have an effect on the
16 ink integrity, correct?

17 A I am not.

18 Q And similar to paragraph 106, you state,
19 quote: "The amount of shrinking can impact the
20 integrity of the ink adhesion to the label flake."
21 You did not undertake your own testing regarding
22 whether the amount of pre-shrinking actually impacted

1 the integrity of the ink adhesion?

2 A I did not.

3 Q So you're not offering an affirmative
4 opinion that the amount of shrinking undertaken by
5 Dr. Deible did, in fact, impact the integrity of the
6 ink adhesion?

7 A I am not.

8 (Recess from 2:35 to 2:39.)

9 BY MR. SCHATZ:

10 Q Dr. Phillips, I'm going draw your attention
11 to paragraph 129.

12 A Still in my report?

13 Q Yes.

14 A Okay.

15 Q And I'll just summarize for you, but between
16 paragraphs 129 and 133, you discuss whether the
17 Gatorade label incorporates layers, correct?

18 A Correct.

19 Q Okay. And, for example, in paragraph 130,
20 you state that neither Dr. Deible nor partitioner
21 identify any discrete layers or provide any analysis
22 to show that the Gatorade label is comprised of

1 discrete layers as opposed to a single ink layer
2 composed of various adjacent regions.

3 Do you see that?

4 A I do.

5 Q Okay. So in a scenario where a deposit of
6 material on a label is adjacent to another deposit of
7 material, that is not two separate layers in your
8 opinion, correct?

9 A Correct.

10 Q Okay. Because there's no overlap, correct?
11 But for what you describe as trapping?

12 A So no, I wouldn't say that what you've
13 described is my definition of "layers" in this
14 context.

15 Q Okay. Could you provide that for me, then?

16 A Sure. For the '422 patent, the layers that
17 are described there are functional layers. My reading
18 of it is that they are functional layers, not broken
19 down into necessarily specifics of whether there's
20 more than one thing on top of one another within each
21 functional layer.

22 My descriptions here relate more to that

1 Dr. Deible never identified those functional layers.

2 Q I think maybe we're talking about two
3 different things, so let me try to clarify.

4 I understand you have taken the position
5 that Dr. Deible didn't identify, for example, what is
6 a first layer and a second layer.

7 A Correct.

8 Q Okay. I'm talking about your comment, for
9 example, in paragraph 130, that Dr. Deible and
10 petitioner did not identify any discrete layers as
11 opposed to a single ink layer composed of various
12 adjacent regions of different colors.

13 And maybe a better paragraph to look at is
14 paragraph 132 where you explain that the silver
15 portion of the label is not present in other regions,
16 even though there is a slight overlap. Right?

17 A Correct.

18 Q So my understanding is that your opinion is
19 the required high-opacity layer, for example, is not
20 present in the Gatorade label because that
21 high-opacity merely abuts up against another deposit
22 of material.

1 MR. DIRKS: Objection to form;
2 mischaracterizes the document.

3 THE WITNESS: No, that is not my opinion.
4 BY MR. SCHATZ:

5 Q Okay. Then please explain why the Gatorade
6 label doesn't incorporate a high-opacity layer?

7 A Well, I guess I can start with the
8 petitioner and Dr. Deible. Deible?

9 Q Deible.

10 A Deible. Never demonstrated that it does
11 have a high-opacity label or layer.

12 Q I'm focusing in on your comments about
13 trapping.

14 A Okay.

15 Q My understanding is that an overlap
16 resulting from trapping is an intentional slight
17 overlap of inks from one region to the next to avoid
18 any gaps in color. Is that fair?

19 A That's correct.

20 Q Okay. And so my understanding is that to
21 have a layer, you can't have a deposit of material
22 that merely abuts up against a deposit of a different

1 material.

2 A The part I'm struggling with here is the
3 trapping discussion is pointing out how different inks
4 are layered -- not layered -- are printed next to one
5 another. But the struggle I'm having is that then
6 you're also asking me to explain, I think, what I
7 really mean by what's a layer in the system --

8 Q Okay.

9 A -- and to explain why there's not a
10 high-opacity layer. And so those are separate topics
11 to me.

12 Q Okay. And yeah, I think that's where our
13 confusion is.

14 If there is a deposit of indicia, and that
15 deposit of indicia is merely adjacent to a deposit of
16 high-opacity material, in that scenario is there an
17 indicia layer?

18 A Well, I would need additional information,
19 actually, to be able to answer that question.

20 Q What information would you need?

21 A For example, measurements to see if it is
22 high-opacity or not.

1 Q I'm only referring to is it a layer.

2 A Uh-huh.

3 Q Assume for the moment that a deposit of
4 high-opacity material is laid down. It is adjacent to
5 but not overlapping indicia. In that scenario, is
6 there a high-opacity layer and an indicia layer?

7 MR. DIRKS: Objection to form; incomplete
8 hypothetical.

9 THE WITNESS: Again, I would need more
10 information, and I guess in this case it's not my job
11 to evaluate that.

12 In the sense that if what you're referring
13 to as a high-opacity layer is an ink that is part of
14 the indicia, then maybe that's just an indicia layer.
15 So I'm working on an absence of information to be able
16 to answer that question.

17 BY MR. SCHATZ:

18 Q What's the definition of "layer" as that is
19 used in claim 1 of the '422 patent when it refers to a
20 light-blocking layer?

21 A Well, it's in the specifications as well as
22 the figures that the patent makes clear that the

1 layers are functional layers. One is an indicia
2 layer, one is an opacity layer, one is a
3 light-blocking layer, so defined by the function.

4 Q Okay. So in my scenario where I have a
5 deposit of high-opacity material, and its function is
6 to result in opacity, and then that is adjacent to but
7 not overlapping a deposit of material that serves the
8 function of indicia, in that scenario where they do
9 not overlap, do I have a high-opacity layer and an
10 indicia layer?

11 A So my other understanding of -- based on the
12 figures in the patent, that those layers are placed on
13 top of one another and are specified relative to the
14 first surface and the second surface of the PET film.

15 Q So I understand your answer to be that in my
16 hypothetical there are not layers because they don't
17 overlap, correct?

18 MR. DIRKS: Objection to form.

19 THE WITNESS: In your hypothetical, what I
20 observed is one, what I would interpret it as a single
21 layer.

22

1 BY MR. SCHATZ:

2 Q Because they're adjacent to each other, not
3 overlapping?

4 A Correct.

5 Q You didn't undertake any ICP analysis,
6 correct?

7 A I did not.

8 Q In Paragraph 208 and 209, you offer some
9 opinions regarding patent owner's product, correct?

10 A Paragraphs 208 and 209 --

11 Q Yes.

12 A -- is under the category Industry Praise?

13 Q Yes.

14 A Okay.

15 Q You make some comments about patent owner's
16 product, correct?

17 A Correct.

18 Q What is patent owner's product?

19 A They block out the GreenLabel BlockOut.

20 Q Okay. That's the only patent-owner product
21 you're referring to?

22 A My memory at the time is yes, GreenLabel

1 BlockOut.

2 Q Okay. I'll be able to clarify that with the
3 following question: Did you do any testing with
4 respect to a physical sample of the Brook & Whittle
5 GreenLabel BlockOut product?

6 A I did not.

7 Q Did you do any testing with respect to a
8 physical sample of any Brook & Whittle product?

9 A I didn't do any testing.

10 Q So the answer is correct, you did not?

11 A Correct.

12 Q Okay. I assume, then, you did not do a
13 comparison between any Brook & Whittle product and the
14 claims of the '422 patent, correct?

15 MR. DIRKS: Objection to form;
16 mischaracterizes testimony and document.

17 THE WITNESS: I did not test their product.

18 BY MR. SCHATZ:

19 Q Did you ever evaluate whether a
20 Brook & Whittle product falls within the scope of '422
21 patent claims?

22 A I did not.

1 Q Did you analyze a physical sample of a
2 Nestl? product?

3 A I did not.

4 Q Did you analyze any product of Fuji?

5 A I did not.

6 Q I take it, then, you did not compare any
7 product of Nestl? to the claims of the '422 patent?

8 MR. DIRKS: Objection to form.

9 THE WITNESS: I did not.

10 BY MR. SCHATZ:

11 Q And you didn't do a comparison of any Fuji
12 product relative to the claims of the '422 patent?

13 A I did not.

14 Q You didn't determine whether the Nestl?
15 product, or any Nestl? product, falls within the scope
16 of the claims Of the '422 patent?

17 A I did not.

18 Q And you did not do an analysis whether any
19 Fuji product falls within the scope of the claims of
20 the '422 patent?

21 A I did not.

22 MR. SCHATZ: Dr. Phillips, thank you very

1 much for your time. I appreciate it.

2 MR. DIRKS: Let's go off the record.

3 (Recess from 2:55 to 3:07.)

4 EXAMINATION

5 BY MR. DIRKS:

6 Q Mr. Phillips, thank you again for being here
7 today. I'm going to ask you a few questions on
8 redirect here.

9 There was a lot of discussion in
10 cross-examination about the types of testings required
11 to determine whether or not a particular label is
12 recyclable under the '422 patent. Do you recall that?

13 A I do.

14 Q And you referred back to the '422 patent
15 itself, Exhibit 1001, several times. Do you recall
16 that?

17 A I do.

18 Q Okay. And specifically you referred to
19 column 11 of the '422 patent, correct?

20 A Correct.

21 Q I want to you look at that now, column 11,
22 and specifically starting at line 32.

1 A Okay.

2 Q Now, reviewing column 11 starting at line 32
3 of the '422 patent, is it your opinion that the
4 PET-CG-2 guidance document can be used as a guide for
5 a person of ordinary skill in the art to refer to in
6 order to determine whether a particular label is
7 recyclable?

8 A My read on this and my interpretation is
9 that that would be the first place to look.

10 Q Okay. Are there other ways that a person of
11 ordinary skill in the art could determine whether a
12 particular label is recyclable under the '422 patent?

13 A There already other APR documents that would
14 be useful. We're looking at separation steps and so
15 forth for whether a label in an article was
16 recyclable.

17 Q And besides the APR guidance documents
18 specifically, are there other ways that a person of
19 ordinary skill in the art reviewing the '422 patent
20 would understand how to determine whether a label is
21 recyclable under the '422 patent?

22 A Within the patent within the language

1 there's some additional descriptions that, from my
2 perspective, are building largely from the APR
3 guidance, and those descriptions help to clarify what
4 kinds of tests, what kinds of measurements would need
5 to be run.

6 Q We also discussed the actual PET-CG-2
7 document. That was Exhibit 1027. Do you recall that?

8 A I do.

9 Q I'd like to you refer to that document as
10 well, specifically page 7 of Exhibit 1027.

11 Are you familiar with this appendix?

12 A I am.

13 Q And this is a flow chart of testing that can
14 be done with respect to labels for PET containers,
15 right?

16 A Correct.

17 Q And in your opinion, would a person of
18 ordinary skill in the art looking at this flow chart
19 have an understanding of the different types of tests
20 that could be run on a PET label with a PET container?

21 A Yes.

22 Q And are you generally familiar with what

1 these tests show or what the results would be from
2 these tests on a particular label?

3 A General familiarity, I haven't necessarily
4 run all of them myself. I have certainly read them
5 and thought about them, what they mean.

6 Q And looking at the flow chart on page 7 of
7 Exhibit 1027, would a person of ordinary skill in the
8 art be required to perform every one of these tests in
9 every scenario in order to determine whether a label
10 was recyclable under the '422 patent?

11 A I don't think so.

12 Q We talked a little bit about Exhibit 1010 as
13 well. That was that sortation document, Sort-B1. Do
14 you recall that?

15 A I do.

16 Q Okay. I'd like to direct you to the fourth
17 paragraph on this page, the one starting, "The sorting
18 potential." Do you see that?

19 A I do.

20 Q And is that page 1 of the Exhibit 1010?

21 And so the fourth paragraph starts here:

22 "The sorting potential tests are intended to identify

1 specific design features that may cause an entire
2 package to be lost in the recycling process."

3 Do you see that?

4 A I do.

5 Q Do you have an understanding of what that
6 sentence is referring to?

7 A I do.

8 Q Can you explain what that sentence is
9 referring to?

10 A Yeah. So it's basically saying that during
11 the standard sort process, that if the material is
12 lost, then of course it's not going to be in the
13 recycling stream.

14 Q Could you elaborate just a little bit more.
15 What does it mean to be lost?

16 A So, yeah, fair enough. If the material is
17 separated from, say, like a PET article, all right, if
18 it's a PET recycling stream, and the material is
19 separated into a different -- let's call it a bucket
20 for now, then the bucket that normal PET containers go
21 into, then it is separated from the recycling stream
22 for PET.

1 Q So under this guidance, a person of ordinary
2 skill in the art would understand that the test is to
3 determine whether a particular feature of the label
4 might cause the entire label and article, meaning the
5 container, to be removed from the recycling stream
6 entirely?

7 MR. SCHATZ: Object to form.

8 THE WITNESS: That's correct.

9 BY MR. DIRKS:

10 Q And if a label and a container are entirely
11 removed from the recycling stream, do you have an
12 opinion about whether or not that label could be
13 recycled with the container?

14 A If it is removed from the recycling stream,
15 it is typically discarded and not recycled.

16 Q Okay. We also talked a little bit about
17 good results and poor results. Do you remember that?

18 A Vaguely.

19 Q Okay. And this is in the, I believe, sixth
20 paragraph down.

21 A Okay.

22 Q Where it says, "Good results in the

1 screening test indicate that a plastic article has the
2 potential to be sorted well in production conditions."

3 Do you see that?

4 A I do.

5 Q "And poor results indicate that improvement
6 in plastic product design is desirable to promote
7 recovery."

8 Do you see that?

9 A I do.

10 Q So if an article is entirely removed from
11 the recycling stream because of a feature on a label,
12 would that be a good result or a poor result?

13 A Well, that would be poor.

14 Q And similarly, if it is able to sort of get
15 through the sortation process and continue into the
16 recycling stream, would that be a good result or a
17 poor result?

18 A That would be good.

19 Q Okay. Do you have an opinion as to whether
20 a person of ordinary skill in the art would know
21 whether this sortation document, this guidance
22 document, Sort-B-1, would be required in every single

1 circumstance?

2 A I do have an opinion on it.

3 Q Okay. What is that opinion?

4 A I think it's PET-CG-2 that indicates --

5 Q We can turn to that.

6 A Okay. Let me see if I can find it.

7 Q Just to speed things along, if you look at
8 page 3, this might be where you're looking.

9 A The qualification portion at the bottom?
10 Correct.

11 Q Okay. So looking at page 3 of Exhibit 1027,
12 how does that inform your opinion as to whether the
13 sortation guidance documents, for example, Sort-B-1,
14 would be required in every circumstance?

15 A In this case, it's indicating that if
16 there's metal links or other features that would block
17 the NIR IR sorting step, the other sorting steps are
18 not necessary for testing to see whether it's
19 compatible with recycling.

20 Q Okay. So a person of ordinary skill in the
21 art would have an understanding of what types of
22 labels would potentially need to be evaluated under

1 sortation guidance documents.

2 A Correct.

3 Q Okay. We talked a lot about the APR
4 critical values recognition. Not necessarily the
5 guidance document, but the actual recognition.

6 Do you recall that?

7 A I do.

8 Q Okay. Is it your understanding that a
9 critical guidance recommendation from APR would be
10 required to meet the claims of the '422 patent?

11 MR. SCHATZ: Object to form.

12 THE WITNESS: No.

13 BY MR. DIRKS:

14 Q Do you have an understanding as to if a
15 manufacturer submits an application to the APR for APR
16 critical guidance recognition, what the result of that
17 application would be? That's a poor question. Let me
18 rephrase my question.

19 Let's take a step back. So do you have an
20 understanding that a manufacturer can submit an
21 application for APR critical guidance recognition?

22 A I do, that they can, but they are not

1 required.

2 Q Okay. And if a manufacturer were to submit
3 an application for APR critical guidance recognition,
4 what are the potential results of that application
5 from the APR?

6 A By "results" do you mean how would the APR
7 respond to them or --

8 Q Correct, yes.

9 A Not having had experience with that, I don't
10 know how the APR would respond to an application.

11 Q Understood. My question is a little bit
12 confusing. I apologize.

13 Is it your understanding that the APR might
14 grant an APR critical guidance recognition to a
15 company who applied for it?

16 A Yes, that happens.

17 Q Is it also your understanding that the APR
18 might deny an application for APR critical guidance
19 recognition?

20 A That also happens.

21 Q Sorry. I didn't mean to cut you off.

22 So it's your understanding, then, that there

1 is a sort of binary decision from the APR?

2 A With the caveat of, again, not having done
3 it, I don't know if there's any feedback and revision
4 steps involved in it. But at the end of the day, my
5 understanding is there's a yes-or-no response.

6 Q And if a label manufacturer received APR
7 critical guidance recognition for a particular label,
8 would a person of ordinary skill have an understanding
9 as to whether that means that that particular label is
10 recyclable under the '422 patent?

11 A Sorry. Could you repeat the question.

12 Q Sure. If a label manufacturer were to
13 receive APR critical guidance recognition for a
14 particular label, would a person of ordinary skill in
15 the art have an understanding as to whether or not
16 that means that particular label is recyclable under
17 the '422 patent?

18 A Maybe I still don't remember everything that
19 was in your question, but within the recognition, they
20 specify what it's for. So if the recognition is
21 specifying a label that is recyclable, then a person
22 of ordinary skill in the art would recognize that that

1 label is recyclable.

2 Q Under the terms of the '422 patent?

3 A Under the terms of the '422 patent.

4 Q Okay. You were also asked a few questions
5 about whether you analyzed any Brook & Whittle product
6 in order to determine whether it falls within the
7 scope of the '422 patent. Do you remember that?

8 A I do.

9 Q Okay. And when you were answering those
10 questions, were you thinking about anything beyond
11 actual physical testing of a product?

12 A Oh, I was only thinking about either holding
13 the product or if I had data associated with the
14 product.

15 Q Okay.

16 A Which it had neither.

17 Q Okay. You have your report in front of you.
18 Can you turn to paragraph 209 of that report, please.

19 A Paragraph 209.

20 Q Paragraph 209, yes. And here you say -- and
21 you may need to refer back to 208 for context. But
22 here you say: "In my opinion, the achievement of

1 Brook & Whittle's GreenLabel BlockOut is commensurate
2 with the invention of the '422 patent."

3 Do you see that?

4 A I do.

5 Q Okay. So having read that, does that
6 refresh your recollection as to whether you performed
7 any analysis as to whether the Brook & Whittle product
8 falls within the scope of the '422 patent? Let me
9 actually rephrase that.

10 Having read paragraph 209 of your report,
11 does that refresh your recollection as to whether you
12 performed any analysis as to whether the
13 Brook & Whittle GreenLabel BlockOut product falls
14 within the scope of the '422 patent?

15 A So in the documents that I read, indicated
16 that the GreenLabel BlockOut label was created from
17 the '422 patent.

18 Q And when you say "created from the '422
19 patent," do you mean would fall within the scope of
20 the '422 patent?

21 A Would fall within the scope, was developed
22 based on that invention.

1 Q Okay.

2 A But I did not analyze the product itself
3 relative to the claims of the invention.

4 MR. DIRKS: I have no further questions.
5 Thank you very much.

6 MR. SCHATZ: Nothing for me.

7 (Whereupon, the deposition was
8 concluded at 3:24 p.m. this
9 date.)

10 * * * * *

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CERTIFICATE OF REPORTER

STATE OF UTAH)
) SS:
COUNTY OF SALT LAKE)

I, Heidi Hunter, a duly commissioned and licensed court reporter, State of Utah, do hereby certify: That I reported the taking of the deposition of the witness, Dr. Scott Phillips, commencing on Thursday, May 21, 2026, at 8:04 a.m.;

That prior to being examined, the witness was, by me, duly sworn to testify to the truth. That I thereafter transcribed my said shorthand notes into typewriting and that the typewritten Transcript of said deposition is a complete, true, and accurate transcription of said shorthand notes.

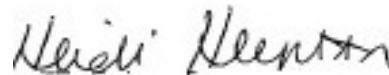
I further certify that I am in no way related to any of the parties, nor am I in any way interested in the outcome thereof.

() Review and signature was requested.

() Review and signature was waived.

(X) Review and signature was not requested.

IN WITNESS THEREOF, I have hereunto set my hand in my office in the County of Salt Lake, State of Utah, this 28th day of May, 2026.



Heidi Hunter, CSR, RPR

1 CERTIFICATE OF DEPONENT

Case: Multi-Color v. Brook & Whittle

2 Reported by: Heidi Hunter, RPR, CCR

Date Taken: May 21, 2026

3 WITNESS CERTIFICATE

4 I, Dr. Scott Phillip, HEREBY DECLARE:

5 That I am the witness in the foregoing
6 transcript; that I have read the transcript and know
7 the contents thereof; that with these corrections, I
have noted this transcript truly and accurately
reflects my testimony.

8 PAGE-LINE CHANGE-CORRECTION REASON

9 _____
10 _____
11 _____
12 _____
13 _____
14 _____
15 _____

16 I, Dr. Scott Phillip, deponent herein, do
17 hereby certify and declare, under penalty of perjury
18 within the foregoing transcription to be true and
correct. Hereby affix my signature to said
deposition.

19 _____
DATE Dr. Scott Phillip

20 Subscribed and sworn to before me this
21 _____ day of _____, 2026.

22 _____
Notary Public

A			
abide	absence	acknowledge	adjacent
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