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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

COMMSCOPE TECHNOLOGIES LLC.

Petitioner

v.

BELDEN INC.

Patent Owner

Case No. IPR2023-01061, IPR2023-01062

U.S. Patent No. 9,991,030

REMOTE VIDEOTAPED DEPOSITION OF KENNETH CORNELISON

Volume II

July 17, 2024

9:00 a.m. (Central Time)

Reported by: Eileen Mulvenna, CSR/RMR/CRR/RDR

DIGITAL EVIDENCE GROUP

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1
2 REMOTE VIDEOTAPED DEPOSITION of
3 KENNETH CORNELISON, expert witness on behalf of
4 Petitioner in the above-titled action, held on ,
5 Wednesday, July 17, 2024, commencing at
6 approximately 9:00 a.m. (Central Time), before
7 Eileen Mulvenna, CSR/RMR/CRR/RDR, Certified
8 Shorthand Reporter, Registered Merit Reporter,
9 Certified Realtime Reporter, Registered Diplomate
10 Reporter, and Notary Public of the State of New
11 York.

1

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1 THE VIDEOGRAPHER: Okay. We are now
2 on the record.

3 My name is Henry Marte, videographer
4 with Digital Evidence Group.

5 Today's date is July 17, 2024. And
6 the time is 9:00 a.m.

7 This deposition is being held in the
8 matter of CommScope Technologies LLC versus
9 Belden, Inc.

10 The deponent today is Kenneth
11 Cornelison.

12 All parties to this deposition are
13 appearing remotely and have agreed to the
14 witness being sworn in remotely.

15 Counsel, please identify themselves
16 for the record, after which the court
17 reporter will administer the oath to the
18 witness.

19 THE WITNESS: I am Kenneth Cornelison.

20 MR. BULLARD: And I am William Bullard
21 from the Carlson Caspers law firm
22 representing the witness and CommScope, the

1 petitioner.

2 MR. SULLIVAN: This is Denis Sullivan
3 of Barclay Damon in Syracuse, New York,
4 representing the patent owner, Belden,
5 Incorporated.

6 (Witness sworn.)

7 MR. SULLIVAN: Before we get started,
8 I just wanted to note for the court reporter
9 this is a -- this is a second deposition in
10 this case. And, if possible, I was hoping to
11 have the page numbering continue from the
12 prior deposition, which was taken on
13 March 1st, 2024. And that transcript ended
14 on page 175.

15 THE REPORTER: I can do that.

16 KENNETH CORNELISON,

17 having been duly sworn by Eileen Mulvenna,
18 a Notary Public of the State of New York,
19 was examined and testified as follows:

20 EXAMINATION

21 BY MR. SULLIVAN:

22 Q. Good morning, Mr. Cornelison.

1 A. And good morning, Denis.

2 Q. Do you understand that your testimony
3 today is under oath as it was in your prior
4 deposition?

5 A. Yes, I do.

6 Q. And do you understand that your
7 testimony today is under oath as it would be in a
8 courtroom?

9 A. Yes, I do.

10 Q. Are you aware that under the rules for
11 inter parties reviews, once you begin your testimony
12 today and until the conclusion of my questioning,
13 your counsel cannot consult or confer with you
14 regarding the substance of your testimony except for
15 the purpose of conferring on whether to assert a
16 privilege?

17 A. Yes, I do understand that.

18 Q. Is there any reason why you cannot
19 give honest, complete, and truthful testimony today?

20 A. There is not.

21 Q. I had sent a box of hard copy
22 exhibits, exhibits that had already been marked in

1 this proceeding. I think Attorney Bremer had that
2 box.

3 Do you have access to those documents?

4 A. I do. They are sitting here beside
5 me, still bound by the rubber band.

6 Q. Okay.

7 MR. SULLIVAN: And for the benefit of
8 Mr. Marte, the deposition exhibits today will
9 all be -- or should all be marked already,
10 and I should have -- you should have had
11 those uploaded, and they each have -- the
12 file names each have the proceeding number
13 and then a four-digit exhibit number. I'll
14 be referring to the four-digit exhibit
15 number.

16 If you could go ahead and introduce
17 Exhibit 1059.

18 (Exhibit 1059, Previously marked.)

19 BY MR. SULLIVAN:

20 Q. And, Mr. Cornelison, if you can find
21 Exhibit 1059. It is the Expert Declaration of
22 Kenneth Cornelison in Support of Petitioner Reply.

1 A. I do have that document in front of
2 me.

3 MR. SULLIVAN: I'll also introduce
4 Exhibit 1010, which is the Cook patent,
5 U.S. Patent No. 9,363,935.

6 (Exhibit 1010, Previously marked.)

7 THE WITNESS: I have that one, as
8 well.

9 BY MR. SULLIVAN:

10 Q. If you could turn in your declaration,
11 which is Exhibit 1059, to paragraph 349.

12 A. I see that.

13 Q. In paragraph 349, about halfway down
14 that paragraph, you cite and you block quote a
15 portion of Cook Exhibit 1010 at Column 6, line 50,
16 to Column 7, line 15.

17 Do you see that?

18 A. Yes, I do.

19 Q. If you could turn in Cook, which is
20 Exhibit 1010, to Column 6, line 50.

21 A. Yes, I see it.

22 Q. I'm going to read starting at line 50.

1 It says as -- Cook says, "As explained in greater
2 detail below, a wide variety of suitable materials
3 may be utilized to form a shield, such as shield
4 120. In certain embodiments, a relatively
5 continuous shield may be formed from electrically
6 conductive material, such as a metallic foil" -- and
7 it gives some examples -- "a braided metallic
8 material, et cetera."

9 Do you see that?

10 A. Yes, I do.

11 Q. Then the next sentence says, "In other
12 embodiments, a discontinuous shield may be utilized
13 in a shield layer. A discontinuous shield may
14 include a plurality of patches or sections of
15 electrically conductive material."

16 Do you see that?

17 A. Yes, I do.

18 Q. In that second example of a
19 discontinuous shield, do you agree that Cook
20 specifically refers to the use of patches or
21 sections of electrically conductive material?

22 Do you agree?

1 MR. BULLARD: I'm going to object to
2 the form of the question.

3 THE WITNESS: I'm looking at my
4 declaration here briefly.

5 (Document review.)

6 THE WITNESS: Thank you for letting me
7 look there a minute or two. If you could
8 just repeat the question, because I think
9 it's about patch and patches.

10 THE REPORTER: Do you want me to read
11 it, Denis?

12 THE WITNESS: Please.

13 MR. BULLARD: Sorry, I think that was
14 a question to Denis, the attorney.

15 THE WITNESS: The question to Denis
16 was --

17 BY MR. SULLIVAN:

18 Q. Just, Mr. Cornelison, I'm going to
19 repeat -- I'm going to repeat the question.

20 A. Thank you, I appreciate that.

21 Q. The question was: In the example of a
22 discontinuous shield in that portion of Cook that I

1 just read, Cook specifically refers to the use of
2 patches of electrically conductive material;
3 correct?

4 A. Yes, he does, for the discontinuous
5 shield.

6 Q. What is your understanding of "a
7 patch" or "patches" of electrically conductive
8 material, as used in Cook?

9 MR. BULLARD: I'm going to object to
10 the form of the question.

11 THE WITNESS: I think to answer your
12 question, Cook himself describes a patch as a
13 section of electrically conductive material.

14 BY MR. SULLIVAN:

15 Q. Do you understand it to be, that
16 the -- is that a typical or normal understanding of
17 what a patch of electrically conductive material is?

18 A. I would agree with that. It's a
19 section of electrically conductive material.

20 Q. Turn ahead in Cook to Column 22 at
21 line 62, bottom of Column 22.

22 Let me know when you're there.

1 A. Yes, I see that.

2 Q. So I'll read it into the record.

3 At 22, line 62, it starts, "As
4 desired, patches of electrically conductive material
5 incorporated into a separated, a separated segment,
6 or a shield layer may have a wide variety of
7 different shapes and/or orientations. Figures 8A
8 through 8D illustrate example configurations for
9 electrically conductive material or patches that may
10 be utilized in various embodiments."

11 Do you see that?

12 A. Yes, I do.

13 Q. So that paragraph is referring to all
14 of the Figures 8A through 8D as illustrating example
15 configurations for electrically conductive material
16 or patches; correct?

17 A. Yes, he is talking about Figures 8A to
18 8D. And he also describes, in the line not yet
19 highlighted, configurations for electrically
20 conductive material or patches that may be utilized
21 in various embodiments.

22 So I see him to be talking about 8A --

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1 as you said, he's talking about a combination, in
2 one instance, talking about 8A through 8D.

3 Q. Well, with Cook, Figures 8A through 8D
4 that are all shown on the same peak, which is --

5 MR. BULLARD: Sorry -- I'm sorry,
6 Denis, just to jump in, your audio is cutting
7 out a little bit.

8 MR. SULLIVAN: Is anyone else
9 experiencing that?

10 THE REPORTER: Yes.

11 MR. SULLIVAN: Okay.

12 THE VIDEOGRAPHER: It sounds okay
13 right now with what you just said. So
14 maybe --

15 MR. SULLIVAN: I did have something on
16 my laptop, some papers. So that may have --
17 does this sound okay now?

18 THE VIDEOGRAPHER: It does, a lot. A
19 lot better.

20 BY MR. SULLIVAN:

21 Q. So if we could go to Cook, in the
22 figures, Figure 8A through 8D, which is sheet 9 of

1 11 in the figures.

2 Do you have that, Mr. Cornelison?

3 A. Yes, I see that on the screen.

4 Q. Do you agree that the convention used
5 in those figures, the hashed or darker lines, those
6 represent patches of conductive material?

7 A. Well, I would answer in the way that
8 8A, 8B, and 8C have multiple patches, where
9 Figure 8D shows a singular patch.

10 Q. But, for example, in Figure 8A, what's
11 marked as 805, 810, 815, 820, each of those are
12 patches of conductive material; correct?

13 A. That is correct.

14 Q. And in Figure 8B, although they're not
15 separately labeled, it shows five patches of
16 conductive material; correct?

17 A. Presuming you said 8B, as in 8 Baker,
18 yes.

19 Q. Similarly, for Figure 8C, Cook shows
20 four separate conductive patches; correct?

21 A. I agree with that.

22 Q. And your testimony is that Figure 8D

1 shows a single patch of conductive material;

2 correct?

3 A. That is correct.

4 Q. If you go in your declaration to
5 paragraph 358.

6 Paragraph 358, you're making a
7 reference. You say, "By contrast" -- I'll note that
8 the previous paragraph is discussing Figures 8A
9 through 8C.

10 But in figure -- excuse me. In
11 paragraph 358, you say, "By contrast, Figure 8D
12 includes a singular patch running along a
13 longitudinal length."

14 Then you quote a portion of Cook that
15 says, "Figure 8D...may include a relatively
16 continuous patch of electrically conductive material
17 running along a longitudinal length of separator
18 840."

19 Do you see that?

20 A. Yes, I do.

21 Q. And you can also refer to Cook itself
22 where you quote it, but Cook is referring to a

1 continuous patch -- excuse me, a relatively
2 continuous patch of electrically conductive material
3 running along a longitudinal length of separator.
4 And I'm emphasizing the use of the word "a" for
5 longitudinal length.

6 What is your understanding of a
7 longitudinal length of the separator? Is that -- is
8 there a particular length? Is it a portion of the
9 length? What is your understanding, if any?

10 A. It would be running along,
11 essentially, the axis of the cable, along the
12 direction of the cable. So he's describing the
13 patch that runs along the length or longitudinal
14 direction of the cable.

15 Q. But that language doesn't specify --
16 for example, if the cable was a certain length, a
17 hundred meters, that disclosure that the conductive
18 material runs along a longitudinal length, it
19 doesn't specify how much of that length would be an
20 electrically conductive material patch; correct?

21 MR. BULLARD: I'm going to object to
22 the form of the question.

1 THE WITNESS: Well, Cook's -- in 358,
2 Cook uses those words. He also does
3 distinctly distinguish 8A through 8C with 8D.
4 So he also uses the word "discontinuous" for
5 those three, but not for 8D. So I do see 8D
6 somewhat different than -- or, actually,
7 quite a bit different than 8A through 8C.

8 And then he goes on -- in my
9 paragraph 358, he goes on to talk about a
10 single electrically conductive or metallic
11 patch may form a relatively continuous shield
12 along a length of a shield layer or a
13 separator segment.

14 So Cook is telling me that the segment
15 is electrically conductive, and it continues
16 along the length of the barrier tape.
17 Separator, I should say. Separator. Or
18 very -- I'm sorry, separator, but he also
19 uses this for the barrier tape, as well,
20 the -- for 8B.

21 BY MR. SULLIVAN:

22 Q. My question was that Cook's disclosure

1 that Figure 8D may include a relatively continuous
2 patch of electrically conductive material running
3 along a longitudinal length of the separator, that
4 doesn't specify how much of the length or how long
5 the relatively continuous patch of electrically
6 conductive material is; correct?

7 MR. BULLARD: I'm going to repeat my
8 objection to form.

9 THE WITNESS: I talk about,
10 essentially, along the length, to answer your
11 question, Denis, I believe in 354 and 355,
12 which I believe to be responsive to your
13 question. And there I was talking about the
14 electrically conductive patch, which in
15 itself is continuous.

16 And I also describe that when I look
17 at Cook in the text, I cite here in
18 paragraph 355, I see Cook's description of
19 "relatively continuous" as being a type of
20 continuous.

21 So I see a distinction between either
22 "continuous" or "relatively continuous" and

1 "discontinuous." So certainly I think Cook
2 would show that the 8B is not discontinuous
3 and, therefore, extend along the length of
4 cable and length of the barrier tape.

5 BY MR. SULLIVAN:

6 Q. If you can go back to the figures,
7 Figures 8A through 8D, in Cook.

8 Each of those figures on the left and
9 right side of those tapes or separators, they show a
10 break mark. Is that how you would refer to it in
11 engineering drawing language, the break?

12 A. Yes, I would agree with that.

13 Q. What does that break symbolize to a
14 person of ordinary skill in the art?

15 A. It would mean -- to me, it would tend
16 to mean -- or would mean that the pattern, say, of
17 805, 810, 815, 820, does continue.

18 Q. And so --

19 A. More patches than what's shown.

20 Q. So by showing those break marks on the
21 left and right-hand side of the separator or the
22 tape, that implies this is just a -- this is just a

1 portion of the length of the entire tape; correct?

2 MR. BULLARD: I'm going to object to
3 the form of the question.

4 THE WITNESS: Denis, I was thinking a
5 little bit more than listening. If you could
6 repeat the question, I would appreciate it.

7 BY MR. SULLIVAN:

8 Q. Sure.

9 Still focusing on the break symbols --

10 A. Okay.

11 Q. -- in Figures 8A and -- through 8D,
12 that would tell a person of ordinary skill in the
13 art that these figures are not showing the entire
14 length of the tape, but only a representative
15 portion of the tape; correct?

16 MR. BULLARD: And I'm going to repeat
17 my objection to form.

18 THE WITNESS: I think it would be
19 presumed that the tape would tend to extend
20 and pattern would tend to repeat beyond the
21 break point.

22

1 BY MR. SULLIVAN:

2 Q. Let's go to paragraph 355 of your
3 declaration. If we can go there for a moment.

4 And in particular, you made reference
5 to Cook describing Figures 8A through 8C as
6 discontinuous. I'm going to read into the record
7 your portion of paragraph 355.

8 It says, "Cook only describes
9 Figures 8A through 8C as discontinuous: 'A few
10 non-limiting examples of patch patterns may be
11 utilized in a discontinuous shield are described in
12 greater detail below with reference to Figures 8A
13 through 8C'."

14 Do you see that?

15 A. Yes, I do see that.

16 Q. So that -- that quote from Cook is
17 describing examples of patch patterns; correct?

18 MR. BULLARD: I'm sorry, Denis. Can
19 you repeat the question for me?

20 MR. SULLIVAN: Sure.

21 BY MR. SULLIVAN:

22 Q. The quote from Cook, which is at

1 Column 8, lines 6 through 9, which I just read into
2 the record, that is identifying a few nonlimiting
3 examples of patch patterns; correct?

4 MR. BULLARD: I'm going to object to
5 the form of the question.

6 THE WITNESS: Well, the patch
7 patterns -- the patches have a pattern as
8 shown as 8A through 8C, but 8C and -- 8A to
9 8C also distinctly include multiple patches
10 and showing a pattern of multiple patches,
11 unlike 8D that is a single patch and,
12 therefore, would not really have a pattern.

13 BY MR. SULLIVAN:

14 Q. I want to clarify one point. In that
15 paragraph, you're citing to Column 8, lines 6
16 through 9, but I think it's supposed to be Column 7.

17 So if we could just go to Cook, which
18 is Exhibit 1010, and go to Column 7. At the top --
19 the top paragraph, I want to focus on lines 6
20 through 9.

21 I just want to confirm what you were
22 intending to cite was Column 7, 6 through 9;

1 correct?

2 A. That would correct. It is Column 7
3 that I cited.

4 Q. If you can go back to your
5 declaration. If we can go to paragraph 353 of your
6 declaration.

7 A. Okay. I'm looking at it here on the
8 screen.

9 Q. At the beginning of that paragraph,
10 you say, "Contrary to Dr. Eldering's argument, the
11 conductive material in Figure 8D is plainly
12 continuous."

13 Do you see that?

14 A. Yes, I do.

15 Q. And then beneath the figures, you say,
16 "The conductive material (840) in Figure 8D has no
17 discontinuities or gaps (825) like the conductive
18 material (805, 830, 835) in other Figures 8A through
19 8C."

20 You see that?

21 A. Yes, I do see that.

22 Q. And then further ahead in your

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1 declaration, if we go to paragraph 360, the
2 beginning of that paragraph, you say, "The issue in
3 '030 claim 1, however, is whether the conductive
4 material in the barrier tape of '030 is continuous."

5 Do you see that?

6 A. Yes, I do.

7 Q. And then you repeat the claim
8 language. It says, "The claim states: 'barrier tape
9 comprising a continuous conductive material.'"

10 Do you see that?

11 A. Yes, I do.

12 Q. So in this section of your
13 declaration, your second declaration, you're trying
14 to determine whether Cook discloses a continuous
15 conductive material; correct?

16 And, in particular, Figure 8D;
17 correct?

18 A. Well, I'd say in paragraph 360 -- let
19 me look at this again.

20 (Document review.)

21 THE WITNESS: So when I look at
22 Figure 8D, as I stated in my declaration in

1 paragraph 360, I say that Cook does show a
2 conductive material being continuous, a
3 single patch.

4 Regarding the end points, the break
5 points, that we talked about previously,
6 since a single patch does not have any
7 pattern, that would be a repeat.

8 We do address -- I do address that the
9 dielectric end that's depicted in 8D may not
10 necessarily be there in other parts of Cook.
11 So I see Cook describing an electrically
12 continuous separate barrier.

13 BY MR. SULLIVAN:

14 Q. If we can turn ahead to your second
15 declaration, paragraph 362. And if we could go to
16 the top of page 13. It's about the second or third
17 sentence in that paragraph.

18 You state, "A POSITA would understand
19 that the ordinary meaning of 'continuous conductive
20 material' simply means that the conductive material
21 has no discontinuities."

22 Do you see that?

1 A. Yes, I do.

2 Q. And then in paragraph 363, which is
3 just below that, you say that "The conductive
4 material (840) in Figure 8D is both physically and
5 electrically continuous. There are no physical
6 discontinuities in the conductive material. There
7 are no -- there are also no electrical
8 discontinuities in the conductive material."

9 Do you see that?

10 A. Yes, I do.

11 Q. What do you mean by the conductive
12 material 840 is physically continuous?

13 A. I explain that in paragraph 354 in my
14 declaration.

15 Q. 354 doesn't say anything about
16 physically continuous. I'm asking you, what do you
17 mean by "physically continuous"?

18 MR. BULLARD: I'm going to object to
19 the form of that question.

20 THE WITNESS: Well, I have to -- I say
21 that -- I read 354, my words, and the picture
22 showing that there is metallic or conductive

1 material that's shown, like in 8B. And when
2 I look at Figure 8B, I see the highlighted
3 part in 8B being both electrically and
4 physically continuous.

5 BY MR. SULLIVAN:

6 Q. And I'm asking you, what do you mean
7 by "physically continuous"? And then I'm going to
8 ask you, what do you mean by "electrically
9 continuous"?

10 So you clearly specified two different
11 terms there. So I want to understand what you meant
12 by "physically continuous."

13 MR. BULLARD: And just to pause, I'm
14 going to object to the form of the question,
15 if that was a question.

16 BY MR. SULLIVAN:

17 Q. Mr. Cornelison, in paragraph 363 of
18 your declaration, you indicate that the conductive
19 material 840 in Figure 8D is physically continuous.

20 What did you mean by that?

21 A. For physically continuous, I look at
22 Cook who describes a singular patch. He does not

1 describe any physical breaks in the material and
2 depicts 8B as a single patch element.

3 So when I look at 8B -- excuse me --
4 I'm not seeing anything in 8B that depicts or would
5 suggest there's some kind of physical gap or
6 physical break in the patch as shown in 8B.

7 Q. Similarly, in paragraph 363 of your
8 second declaration, you state that the conductive
9 material 840 in Figure 8D is electrically
10 continuous.

11 What did you mean by that?

12 A. Taken from the -- my view that it is
13 physically continuous, Cook also discloses that it
14 is an electrically conductive material. So now I
15 have a physically conductive -- physically
16 continuous segment of electrically conductive
17 material, and then that would lead me to say that it
18 would be electrically continuous.

19 Q. If we can go back to the figures in
20 Cook, Figures 8A through 8D. And specifically I
21 would like to focus on Figure 8A.

22 Do you have that, Mr. Cornelison?

1 A. Yes, I see that.

2 Q. And if it's possible, if you could
3 also keep your finger on that sheet and look at
4 Column 23 of Cook where Cook describes Figure 8 at
5 the top of Column 23.

6 I'll read it. Starting at line 2,
7 Cook says, "Any number of rectangular patches of
8 electrically conductive material, such as patches
9 805, 810, 815, 820, may be formed on a dielectric
10 material 825."

11 Do you see that?

12 A. Yes, I do.

13 Q. It goes on to say, "As desired in
14 various embodiments, the patches 805 through 820 may
15 include any desired lengths (for example,
16 approximately 2 meters et cetera), and any desired
17 gap or separation distance may be provided between
18 adjacent patches."

19 Do you see that?

20 A. Yes, I do.

21 Q. And then it concludes by saying, "In
22 certain embodiments, the patches may be formed in

1 accordance with a repeating pattern having a
2 definite step or period."

3 Do you see that?

4 A. Yes, I do.

5 Q. So looking at Figure 8A, 805 is by
6 itself an electrically conductive patch; correct?

7 A. Cook describes the rectangular patch
8 of electrically conductive material. Yeah, it's
9 electrically conductive.

10 Q. So 805 is itself an electrically --
11 excuse me.

12 805 in Figure 8A of Cook is itself a
13 patch of electrically conductive material; correct?

14 A. Yes, that is correct.

15 Q. And the same is true of 810. 810 is
16 by itself a patch of electrically conductive
17 material; correct?

18 A. Yes.

19 Q. And the same would be true of what's
20 marked as 815 and 820 in Figure 8A; correct?

21 A. Yes, that's what Cook describes in
22 Column 23.

1 Q. So I just want to focus on patch 805.

2 That is the patch of electrically conductive
3 material 805 shown in Figure 8A. Okay?

4 A. Okay.

5 Q. Is patch 805 in Cook, does it have any
6 discontinuities?

7 MR. BULLARD: And I'm going to object
8 to the form of the question and also outside
9 the scope of proper deposition based on the
10 scope of his report.

11 MR. SULLIVAN: I'll rephrase the
12 question. And we'll disagree on the scope
13 issue.

14 BY MR. SULLIVAN:

15 Q. We're focusing on electrical -- excuse
16 me, start again.

17 Focusing on patch 805 in Figure 8A of
18 Cook, do you agree that patch 805 has no
19 discontinuities?

20 MR. BULLARD: And I want to just
21 repeat my same objection as outside the scope
22 of his report.

1 THE WITNESS: I'm trying to answer
2 your question and be responsive, and that is
3 805 is described by Cook himself as
4 electrically conductive material. But to me,
5 someone skilled in the art, the real
6 distinction in Figure 8A is that it includes
7 multiple patches with deliberate gaps,
8 discontinuities, between the patches.

9 So 805 could be considered a singular
10 patch, but in context of the embodiment and
11 what he's talking about there, it's a series
12 of patches that are not electrically
13 connected with each other, and Cook terms
14 that discontinuous.

15 BY MR. SULLIVAN:

16 Q. But you agree with me that patch 805
17 is itself continuous; correct?

18 MR. BULLARD: And I'm going to object
19 to the form of the question.

20 MR. SULLIVAN: I'll rephrase.

21 BY MR. SULLIVAN:

22 Q. Is patch 805 shown in Figure 8A of

1 Cook, is that continuous conductive material as used
2 in Claim 1 of the '030 patent?

3 MR. BULLARD: And I'm going to repeat
4 my earlier objection, outside the scope.

5 THE WITNESS: I think I would have to
6 review that, because I have offered an
7 opinion and considered 8A as an assembly of
8 tape and conductive elements, as Cook shows.
9 But whether that would read upon the claim,
10 I've not really studied that at all. I mean,
11 whether a particular patch would read on the
12 claim, I have not studied that.

13 MR. SULLIVAN: If we could show all
14 the figures, Figures 8A through 8D, on sheet
15 9 of Cook.

16 BY MR. SULLIVAN:

17 Q. Do you have that in front of you?

18 A. Yes, I do.

19 Q. You testified earlier and in your
20 declaration on paragraph 363, you said that
21 conductive material 840 in Figure 8D is both
22 physically and electrically continuous.

1 Do you recall that?

2 A. Yes, I do.

3 Q. Do you still agree with that?

4 A. Yes, I do.

5 Q. Looking at Figure 8A and, in
6 particular, patch 805, which is shown with the same
7 hatch lines as item 840, do you agree that the
8 conductive material in 805 in Figure 8A is both
9 physically and electrically continuous?

10 MR. BULLARD: I'm going to repeat my
11 same objection.

12 THE WITNESS: Well, comparing
13 Figures 8A as an assembly or a description of
14 a barrier, one thing that strikes me, Denis,
15 is that the -- because the tape itself is --
16 the tape structure as shown is discontinuous,
17 there is no particular expectation
18 requirement or whatever that each segment
19 would necessarily be continuous.

20 So I think it's an indefinite kind of
21 answer that that's going to be continuous,
22 because at the point of 8A and through 8C is

1 that the art as shown is discontinuous. And
2 that is in contrast to Figure 8D, where it is
3 continuous and shown that way and described
4 as continuous.

5 BY MR. SULLIVAN:

6 Q. Is it your testimony that the
7 depiction of the patch 805 in Figure 8A, using those
8 hatch lines that are the same as the hatch lines in
9 Figure 8D, that could represent a patch of
10 electrically conductive material that is
11 discontinuous?

12 MR. BULLARD: Object to form of the
13 question and scope.

14 THE WITNESS: I've just not -- I've
15 not really studied or decided or provided an
16 opinion about each individual patch in
17 Figures 8A through 8C. They all have the
18 common characteristic of being described as
19 discontinuous.

20 Where 8D is different is it's actually
21 described as continuous, which would tend --
22 not tend, would indicate that patch 840 is

1 indeed, as I stated, physically and
2 electrically continuous, because Cook says it
3 is a continuous version of the tape. And
4 Cook does not make that distinction for 8A
5 through 8C, as far as being electrically
6 continuous.

7 BY MR. SULLIVAN:

8 Q. So you do not have an opinion whether
9 a POSITA, in looking at Figure 8A, would understand
10 that patch 805 of electrically conductive material
11 is -- that that material is physically and
12 electrically continuous; correct?

13 MR. BULLARD: I just -- same
14 objection.

15 THE WITNESS: I have not yet formed an
16 opinion about 805 or 810 or the others,
17 whether each one is electrically continuous.
18 And I stated a reason for that and that is
19 it's not the tape, but Figure 8A is intended
20 to be discontinuous.

21 And I don't see Cook putting any
22 limitation necessarily on the patches he's

1 talking about. He does say it's electrically
2 conductive material. That's true. Whether
3 it was continuous, I just haven't looked at
4 that particular facet.

5 BY MR. SULLIVAN:

6 Q. If you go to Exhibit 1001, which is
7 the '030 patent, and go to the last page and focus
8 on Claim 1.

9 And in particular, in the last
10 paragraph of Claim 1, the first two lines, it says,
11 a multi-layer conductive barrier tape comprising a
12 conductive -- excuse me, a continuous conductive
13 material.

14 Do you have that?

15 A. I see it on the screen. I'm still
16 digging around in this stack to find '030.

17 Q. Sure, so it's Exhibit 1001.

18 (Exhibit 1001, Previously marked.)

19 THE WITNESS: I found the reference
20 and opening to the claim.

21 Okay. I have the patent now in front
22 of me.

1 BY MR. SULLIVAN:

2 Q. So if we go back to your declaration
3 in paragraph 360, which we looked at a few minutes
4 ago, the beginning of that paragraph on page 11, you
5 say, "The issue in '030 claim 1, however, is whether
6 the conductive material in the barrier of '030 is
7 continuous. The claim states: 'Barrier tape
8 comprising a continuous conductive material.'
9 Figure 8D plainly shows the conductive material is
10 continuous."

11 Do you see that?

12 A. Yes, I do.

13 Q. So you were able to render an opinion
14 that the conductive material shown in Figure 8D, you
15 were able to render an opinion that that material is
16 continuous; correct?

17 A. That is correct, and by virtue of Cook
18 describing it as conductive. I forget the phrase
19 that he used, but he talks about this to be not
20 discontinuous or continuous, and so that
21 distinguishes A through C from 8D.

22 Q. Looking at the claim language, which

1 you have in front of you, and we looked extensively
2 at Figure 8A and particularly we focused on patch
3 805, sitting here today, you do not have an opinion
4 one way or the other whether patch 805 of
5 electrically conductive material would be a
6 continuous conductive material, as recited in
7 Claim 1 of the '030 patent?

8 MR. BULLARD: And, again, same
9 objections to form and scope.

10 THE WITNESS: Going back to Cook and
11 his Figures 8A through 8D, Cook describes
12 those pictures as discontinuous. So what I
13 read here in this claim is -- contain
14 continuous conductive material, et cetera.

15 To me, Cook 8A through 8C would tend
16 to read on something deliberately
17 discontinuous. As far as dealing with this
18 particular question, is 805 a continuous
19 thing, first of all, I don't exactly know.
20 Cook did not teach that specifically. And so
21 I really don't know how -- don't know how to
22 answer the question, does that read on this

1 claim or not at this point.

2 What I did do was, on 8D, highlight
3 what Cook was saying about being continuous,
4 which is part of the characteristic of
5 tape -- 8D, showing 840.

6 BY MR. SULLIVAN:

7 Q. You have referenced a few times that
8 Cook specifically identifies Figures 8A through 8C
9 as discontinuous.

10 MR. SULLIVAN: Can we go back to Cook,
11 which is Exhibit 1010, and specifically the
12 top of Column 7.

13 BY MR. SULLIVAN:

14 Q. And we looked at this before in
15 relation to your declaration where you had cited
16 Column -- you had cited Column 8, but we determined
17 it's Column 7, line 6 through 9.

18 And it says, "A few non-limiting
19 examples of patch patterns that may be utilized in a
20 discontinuous shield are described in greater detail
21 below with reference to Figures 8A through 8C."

22 Do you see that?

1 A. Yes, I see that.

2 Q. So Cook is referring to Figures 8A
3 through 8C as showing a discontinuous shield. It's
4 not referring to whether the patches themselves are
5 discontinuous; correct?

6 MR. BULLARD: Same objections, form,
7 outside the scope.

8 THE WITNESS: I'm thinking about your
9 questions and my answers I've already
10 provided about the view of 8A through 8C, but
11 I have not really formed an opinion about the
12 specifics of 805, 810, or the similar patches
13 on a discontinuous tape.

14 MR. SULLIVAN: We've been going for
15 about an hour. So we can take a ten-minute
16 break, if that works.

17 THE WITNESS: Okay.

18 MR. BULLARD: Yeah, it works for me.

19 THE VIDEOGRAPHER: The time is
20 10:04 a.m. Off the record.

21 (Recess from the record.)

22 THE VIDEOGRAPHER: The time is

1 10:16 a.m. Back on the record.

2 BY MR. SULLIVAN:

3 Q. If you could find your CV, which was
4 marked as Exhibit 1007 in this proceeding.

5 (Exhibit 1007, Previously marked.)

6 THE WITNESS: Okay, I have it in front
7 of me, as well.

8 BY MR. SULLIVAN:

9 Q. If you could go to the second page
10 where you list various patents as the inventor or
11 coinventor.

12 You'll see there's a number of patents
13 in the 2012 through 2015 time frame that have the
14 title, "Communication cable with improved crosstalk
15 attenuation."

16 Do you see that?

17 A. I do see that.

18 Q. And if we could intro- -- if you could
19 also find Exhibit 1057, which is a copy of a U.S.
20 Patent application publication.

21 (Exhibit 1057, Previously marked.)

22 MR. SULLIVAN: I'll read the number

1 into the record. It's Publication No.
2 U.S. 2012/0222883 A1, published September 6,
3 2012, with a title, "Communication Cable with
4 Improved Crosstalk Attenuation."

5 THE WITNESS: Just to --

6 BY MR. SULLIVAN:

7 Q. Do you have a copy of Exhibit 1057 in
8 front of you?

9 A. Yes, I do.

10 Q. So if you look in the top left portion
11 where it lists the inventors, do you see you listed
12 there as one of the inventors?

13 A. Yes.

14 Q. Do you recall being an inventor on --
15 this is one of several patents with the same title,
16 but do you recall being an inventor on these
17 patents?

18 A. Yes, I do recall being an inventor.

19 Q. What was your role in these -- in the
20 invention -- well, let me take a step back.

21 There's a number of different patents
22 with the same title. This is a published

1 application. I'll represent to you that it
2 eventually issued as an '866 patent.

3 But what was your role in this project
4 for General Cable Technologies that led to these
5 patents?

6 A. So my role included -- let's see.

7 But then if you'll notice, the
8 inventors are from General Cable, as well as
9 Panduit. And in this particular patent, Panduit
10 took the role of working with the barrier tape. And
11 then, for instance, in Claim 1, they talk about lay
12 lengths of the twisted pairs and lengths of the
13 segments within the parallelogram-shape conductive
14 segments in Claim 1 there.

15 So I was working with how the cable
16 pairs, and I was involved in the cable part. So I
17 was working with twisted pairs and cabling,
18 et cetera, and how those twisted pairs reacted with
19 the tape to provide the performance improving alien
20 crosstalk.

21 Q. If you look at the abstract of -- I'm
22 going to refer to this as the 883 publication.

1 Would you understand that?

2 A. Yes, I do.

3 MR. BULLARD: And I'm sorry, I don't
4 want to interrupt your questions, Denis, but
5 can you clarify, is this exhibit actually
6 cited anywhere in the witness' declaration
7 that's the subject of this deposition?

8 MR. SULLIVAN: It's cited in the
9 petitioner reply.

10 MR. BULLARD: Right. So I understood
11 this, per the rules, the subject of the
12 deposition is his reply declaration. So I
13 guess I'll just note for the record that we
14 think this is outside the scope of the
15 deposition, unless I missed something. I was
16 trying to check in the background. I don't
17 see it cited or discussed in any level of
18 detail in his actual declaration.

19 MR. SULLIVAN: That's quite an
20 objection, but you are correct.

21 MR. BULLARD: Well, and sorry, I just
22 wanted to make sure I didn't have a

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1 misunderstanding, because I don't want to
2 have long objections. So if I'm wrong,
3 that's where I want to give you a chance to
4 say, William, you're wrong. You know, you
5 missed it. It's over here.

6 BY MR. SULLIVAN:

7 Q. Okay. If we look at the abstract of
8 the '883 publication, the lead inventor is Nordin.
9 So I'll either refer to it as the "'883 publication"
10 or "Nordin."

11 Do you understand that?

12 THE WITNESS: Yes, I do.

13 BY MR. SULLIVAN:

14 Q. The abstract refers to the barrier
15 tape, and it says, "The barrier tape is provided
16 with one or more barrier layers of discontinuous
17 conductive segments."

18 Do you see that?

19 A. Not yet.

20 Q. In the abstract on the first page.

21 A. Okay, I'm there. I do see the
22 abstract.

1 Q. Do you see the abstract refers to
2 discontinuous conductive segments? Do you see that?

3 A. Yes, I do.

4 Q. If we turn ahead to paragraph 22 of
5 the Nordin '883 publication.

6 Do you have that in front of you?

7 A. Yes, I do.

8 Q. Once again, it refers to discontinuous
9 conductive segments. It says, "A high-performing
10 application of a barrier tape of discontinuous
11 conductive segments is to use one or more conductive
12 barrier layers to increase the cable-to-cable
13 crosstalk attenuation."

14 Do you see that?

15 A. Yes, I see that.

16 Q. And then the next paragraph,
17 paragraph 23, refers to Figure 4. And about two or
18 three lines down in paragraph 23, it says, "Each
19 barrier layer includes a substrate 50 and conductive
20 segments 34 or 38."

21 Do you see that?

22 A. Yes, I do.

1 Q. And then it says, "The substrate 50 is
2 an insulative material," and it gives a dimension.

3 Do you see that?

4 A. Yes, I do.

5 Q. An insulative material, that would be
6 a dielectric; correct?

7 A. That would be correct.

8 Q. So if we could look at Figure 4 of the
9 Nordin '883 publication. And we just looked at the
10 text that referred to 34 and 38 as conductive
11 segments.

12 Do you have Figure 4 in front of you?

13 A. Yes, I do.

14 Q. Do you agree that Figure 4 of Nordin
15 '883, which you're a named inventor of, that shows
16 discontinuous conductive segments 34 and 38?

17 MR. BULLARD: And pause. So, Denis,
18 we're going to strenuously object to this
19 entire line of questioning as improper and
20 outside the scope of the report.

21 BY MR. SULLIVAN:

22 Q. You can answer the question.

1 A. Well, you pointed me to Column -- or
2 paragraph 23, which describes Figure 4. And I'm
3 looking at Figure 4. So at this point I just -- I
4 see the description, and I see the figure, as you've
5 pointed out to me.

6 Q. You agree that Figure 4 shows that --
7 shows discontinuous conductive segments 34 and 38?

8 MR. BULLARD: Same objection, again.

9 THE WITNESS: I see the patent. I see
10 the descriptions. We could go down and read
11 the text and et cetera. What I've not really
12 had -- what I have not had a chance to do is
13 consider this in the context of the case at
14 hand and other prior art and, again, the
15 dispute here.

16 So we can read it. I can say yes, it
17 reads what it reads. But as far as any
18 context to it, I'm really not prepared to do
19 that. I've not seen this yet in the context
20 of this matter.

21 BY MR. SULLIVAN:

22 Q. We can transition to a new topic. If

1 we could go back to your declaration, which is --
2 your second declaration, which is Exhibit 1059. And
3 go to page 16, starting at paragraph 367, you
4 discuss the Glew reference, G-L-E-W.

5 If we could pull up Exhibit 1008. So
6 if you could find the copy of Glew, which is
7 Exhibit 1008.

8 (Exhibit 1008, Previously marked.)

9 THE WITNESS: That would be -- just to
10 clarify here, it would -- yeah, I have it.
11 Yeah. I did not see the 1008 in the bottom
12 corner. So, yeah, it's 1008.

13 BY MR. SULLIVAN:

14 Q. And if we could turn ahead to
15 Figure 13C in Glew.

16 Do you have that in front of you?

17 A. Yes, I do.

18 Q. We're going to look back at your
19 declaration now, which references Figure 13C, but I
20 just wanted to make sure you had access to 13C
21 because it's not shown in your second declaration.

22 So if we go back to the declaration,

1 paragraph 368.

2 A. Okay.

3 Q. In the middle of that paragraph, you
4 said, "I explained that a POSITA would find it
5 obvious to make Glew's disclosed layers flush with
6 each other, including having Glew's metal layer
7 extend to the longitudinally-extending side edges of
8 the dielectric layers in Figure 13C."

9 Do you see that?

10 A. Yes, I do.

11 Q. So Figure 13C, as shown in Glew, it
12 has dielectric layer 137, dielectric layer 135, and
13 then it has the metal layer 133 between those two
14 dielectric layers; correct?

15 A. That is correct.

16 Q. And each of those three layers, as
17 shown in Figure 13 of Glew, each of those layers has
18 a different width; correct.

19 A. The Figure 13C is as it shows and
20 depicts the tape. Although, I still stand my
21 opinion as someone skilled in the art that this
22 would have been obvious to someone to actually make

1 the tape using a slit technology. And so I think
2 that's still -- I would still have the opinion that
3 would be a process.

4 Also, in the declaration,
5 paragraph 369, the subject about slitting which
6 relates to the various -- the widths of the various
7 layers, I did state that would take extra effort,
8 require some customization, and would not be a
9 standard type of process of making the tape.

10 So I go on within 369 to explain
11 efficiency of sizing the tape, such as Glew
12 discloses, from wide sheets of material, et cetera.

13 Q. The slitting technique that you refer
14 to, that slitting technique would produce a tape,
15 which you indicate in paragraph 368, where the
16 layers would be flush with each other; correct?

17 A. That is correct.

18 Q. So what's shown in Figure 13C, the
19 layers are not flush with each other; correct?

20 A. The drawing shows them not flush, that
21 is correct.

22 Q. So if you were to -- if a POSITA were

1 to look at Figure 13C and determine how 13C would be
2 manufactured, a POSITA would understand that a
3 technique other than slitting would have been used
4 to produce a tape with the configuration of
5 Figure 13C; correct?

6 MR. BULLARD: Object to the form of
7 the question.

8 THE WITNESS: What I see as someone
9 skilled in the art is that such tapes were
10 known to be slit. I also describe, which I
11 list in paragraph 369, that require -- that
12 such a process to make a tape like Glew shows
13 would require some customization, and it
14 would not be typical for this application.

15 I do go on in this declaration to
16 refer to another patent, Exhibit 1049, that
17 describes it's usual to fabricate the inner
18 jacket made of sandwich tape. I'm not going
19 to read it to you, but it talks about the
20 desired width for economy and fabrication.
21 So slitting is a known advantage.

22 I also would like to briefly point to

1 Figures 10A, 10F, and a couple of others,
2 where Glew was saying that the --

3 BY MR. SULLIVAN:

4 Q. You're not answering my question
5 anymore.

6 A. I --

7 Q. Is this -- what you're about to say,
8 is this in your declaration anywhere, 10A and 10F?

9 A. No, I do not mention that in the
10 declaration.

11 Q. Okay. Well, you're not answering my
12 question, and now you're going way beyond your
13 declaration. So --

14 A. Okay, so --

15 Q. I would move to strike.

16 A. Okay.

17 MR. BULLARD: Can we just pause and
18 return to just standard question and answer.
19 It seems like there's some arguing going on.

20 MR. SULLIVAN: Sure, I'll ask
21 questions and he'll answer them, but he's
22 gone way beyond -- I'm not even sure he

1 answered my question, but he certainly wasn't
2 answering it there.

3 BY MR. SULLIVAN:

4 Q. You pointed to Exhibit 1049. Can we
5 look at Exhibit 1049?

6 A. Is 1049 in your package?

7 Q. It is.

8 Do you have that in front of you?

9 A. Not yet. The one that we talked about
10 where it mentions the slitting?

11 MR. BULLARD: Yeah, sorry, what number
12 are you looking for? I'm just helping the
13 witness page through the stack.

14 THE VIDEOGRAPHER: Exhibit 1049.

15 MR. SULLIVAN: 1049. It's the
16 '541 patent.

17 (Exhibit 1049, Previously marked.)

18 MR. SULLIVAN: If it's not in there,
19 we can do it on the screen.

20 THE WITNESS: Got it.

21 MR. BULLARD: We got it.

22 THE WITNESS: I have the patent now in

1 front of me. Thank you.

2 BY MR. SULLIVAN:

3 Q. Now, looking at Exhibit 1049, which is
4 U.S. Patent No. 3,206,541. The inventor is
5 Jachimowicz, J-A-C-H-I-M-O-W-I-C-Z.

6 Do you recognize this '541 patent?

7 A. Yes, I do.

8 Q. Now, you referenced this document in
9 your earlier answer. And I think, in particular,
10 your declaration refers to Column 4 at about
11 line 43.

12 It says, "It is usual to fabricate the
13 inner jacket made of sandwich tape from wide sheets
14 of material which are then slit to the desired width
15 for economy of fabrication. In such construction,
16 the edges of the foil are exposed."

17 Do you see that?

18 A. Yes, I do.

19 Q. Now, that slitting technique, that
20 would result in the metal layer and the dielectric
21 layers being flush with each other, the edges being
22 flush with each other; correct?

1 A. Yes, that is the way I understand it.

2 Q. And because they're -- those edges are
3 flush with each other, that's why the edges of the
4 foil are exposed, correct?

5 A. Yes, that would be the reason.

6 Q. So if you're going to use slitting for
7 these barrier tapes that have a dielectric -- metal
8 dielectric construction, you're only going to use
9 slitting if you're willing to accept that the edges
10 will be flush with each other and the metal edge
11 will be exposed; correct?

12 MR. BULLARD: Object to the form of
13 the question.

14 THE WITNESS: I think I can answer the
15 question. I just -- if you could repeat it
16 please, I would appreciate that, just so I
17 have it clear in my head.

18 BY MR. SULLIVAN:

19 Q. If you were to use slitting for
20 barrier tape that had the three-layer construction
21 of a dielectric layer, a metal layer, and a
22 dielectric layer, you would only use slitting if it

1 was acceptable that the edges would be flush and the
2 metal edge would be exposed?

3 MR. BULLARD: Same objection.

4 THE WITNESS: I'm not sure about the
5 only, but certainly I would agree that
6 slitting would typically have the edges of
7 the layers in a tape concurrent or the same
8 width.

9 BY MR. SULLIVAN:

10 Q. Can you go back to your declaration?
11 If we could move ahead to paragraph 379.

12 If you can also locate the Kroushl,
13 K-R-O-U-S-H-L, patents, which is Exhibit 2007.

14 (Exhibit 2007, Previously marked.)

15 THE WITNESS: I see that. I have it
16 with me now.

17 BY MR. SULLIVAN:

18 Q. So in paragraph 379 of your
19 declaration, you indicate that "Kroushl discloses 'a
20 novel construction and manner for making' a
21 'discontinuous shield tape' that 'overcomes the
22 drawbacks' of prior art discontinuous shield tapes

1 and their associated methods of manufacture."

2 Do you see that?

3 A. Yes, I do.

4 Q. Okay. And then you say, "Glew,
5 however, discloses a continuous shield tape."

6 Do you see that?

7 A. Yes, I do.

8 Q. Then you say, "Kroushl's disclosures
9 relating to discontinuous shield tape would not be
10 relevant to a POSITA in view of Glew."

11 Do you see that?

12 A. Yes, I do.

13 Q. So is it your opinion that a POSITA
14 that was concerned with providing a continuous
15 shield tape wouldn't look to prior art disclosures
16 of discontinuous shield tapes?

17 MR. BULLARD: Object to the form of
18 the question.

19 THE WITNESS: I cannot -- that seems
20 to be a hypothetical or conjecture question.

21 I don't know what a POSITA might do and their
22 particular need to look at prior art.

1 What I do say here, that -- I say -- I
2 say what I say in the declaration where
3 Kroushl is talking about discontinuous tape.
4 Whether or not someone will look to a
5 discontinuous tape or continuous, I do not
6 know. Depends on the situation.

7 BY MR. SULLIVAN:

8 Q. Are you changing your testimony from
9 paragraph 379 where you said a POSITA considering
10 Glew's continuous shield tapes would not be
11 motivated to look to Kroushl's statements about
12 discontinuous shield tapes and methods of
13 manufacturing? Is that still your opinion?

14 A. No, the paragraph is my opinion. I'm
15 not changing my opinion.

16 Q. Why would a person not be motivated to
17 look -- why would a person of ordinary skill in the
18 art, considering Glew's continuous shield tapes, not
19 be motivated to look at Kroushl's disclosure?
20 Simply because it's a discontinuous shield tape in
21 Kroushl?

22 A. I continue in paragraph 379 on down

1 farther that's not highlighted in yellow yet, and I
2 think the -- I think the answer to your question is
3 there in paragraph 379 and --

4 Q. You agree that the -- sorry.

5 A. Go ahead.

6 Q. Do you agree that the design of a
7 continuous shield tape is different than a design of
8 a discontinuous shield tape?

9 A. Something would need to be different
10 between a continuous and a discontinuous tape to
11 make it either continuous or discontinuous. So
12 design, whatever context you have there in mind, but
13 I do believe there would be some kind of a
14 difference either that results in a discontinuous
15 tape or results in a continuous tape.

16 Q. In this paragraph, you seem to be
17 emphasizing that the differences between those two
18 tapes are significant enough that a POSITA
19 considering a continuous tape wouldn't necessarily
20 look towards designs of discontinuous tapes;
21 correct?

22 MR. BULLARD: Object to the form of

1 the question.

2 THE WITNESS: Kroushl in particular
3 discloses a manufacturing process to try to
4 address the problem that's created by forming
5 discontinuous separate segments. So because
6 Kroushl's art is really focused on the
7 manufacturing method dealing with
8 discontinuous segments, that would not
9 necessarily be -- as I say, not be relevant
10 to a POSITA in view of Glew, which is a
11 continuous barrier.

12 BY MR. SULLIVAN:

13 Q. If you could turn ahead to
14 paragraph 380 of your declaration. And
15 specifically, it's a long paragraph, I'm looking at
16 the bottom half of paragraph -- excuse me, of
17 page 28, which is --

18 A. Okay.

19 Q. -- the latter part of paragraph 380.

20 And on the screen it's about three or
21 four lines down. It says, "The reason Kroushl
22 discloses for having polyester layers wider than the

1 aluminum layer is not relevant to a POSITA
2 considering Glew. Glew does not disclose a
3 discontinuous shield tape."

4 Do you see that?

5 A. Yes, I do.

6 Q. If we go to Kroushl. If we go to
7 paragraph 28 of Kroushl, which is Exhibit 2007, it
8 references these metallic-free zones, 14A and 14B.
9 Those are shown -- if you look at figure -- if you
10 look at Figures 1 through 3A, 14A, and 14B, those
11 are the edges of the dielectric layer that are wider
12 than the metal layer; correct?

13 A. That is correct.

14 Q. And in paragraph 28, Kroushl says,
15 "Another advantage of metallic free zones 14a and
16 14b is that they can help prevent the unintentional
17 shorting of adjacent metallic segments 16 when the
18 tape is applied around the cable core."

19 Do you see that?

20 A. Yes, I do.

21 Q. It says, "For example, if" -- and I'm
22 looking at paragraph 28.

1 "For example, if discontinuous
2 metallic segments extended all the way to the edge
3 of a tape, when that tape is applied to a cable core
4 at an angle (spiral racked as with typical shielding
5 tape), there is the possibility that the edges of
6 such metal segments may intermittently touch,
7 despite being longitudinal discontinuous, creating
8 electrical continuity due to tape edge curling or
9 deformation during manufacturing or later
10 installation."

11 Do you see that?

12 A. Yes, I do.

13 Q. So Kroushl is teaching that -- at
14 least in this disclosure, that having a continuous
15 metallic shield would be undesirable; correct?

16 A. I see paragraph 28 teaching that the
17 objective of the tape that Kroushl describes is to
18 be discontinuous. And he's talking about such that
19 when wrapped -- let's see.

20 When the tape is applied around the
21 core, for example, if the discontinuous segments
22 extend all the way to the edge of a tape, he goes on

1 in his words in paragraph 28, that he's making --
2 he's trying to make sure that the segments of the
3 tape remains discontinuous.

4 So since his intention is
5 discontinuous, he's trying to avoid continuous. He
6 hasn't really said -- so I don't read in this
7 paragraph 28 Kroushl saying continuous is a
8 disadvantage. What he's saying is that he doesn't
9 want an intentionally discontinuous shield becoming
10 continuous.

11 Q. You agree that Kroushl is
12 intentionally trying to provide a discontinuous
13 shield layer?

14 A. I look in the abstract where Kroushl
15 is describing the overall properties of his art
16 here, and he is saying he wants a discontinuous
17 shielding tape.

18 Q. And one of the advantages of these
19 metal free zones 14A and 14B in paragraph 28 that we
20 just looked at is to make sure that the shield
21 remains discontinuous; correct?

22 A. Kroushl describes that in paragraph 28

1 that we looked at before. He describes what he's
2 trying to avoid in that paragraph.

3 Q. And he describes that as providing an
4 advantage; correct?

5 MR. BULLARD: Object to form of the
6 question.

7 THE WITNESS: I'm looking at
8 paragraph 28 at this point, and I don't see
9 advantage, disadvantage. I just see him
10 talking about desiring a discontinuous tape
11 and performing a design that prevents it from
12 becoming unintentionally continuous.

13 BY MR. SULLIVAN:

14 Q. Go to paragraph 9 of Kroushl, which is
15 in the "Background" section.

16 Do you have that?

17 A. Yes, I do.

18 Q. Paragraph 9 says, "In the prior art,
19 there have been proposals to mitigate the above
20 effect by providing a discontinuous shielding tape
21 having periodic breaks in the shield."

22 Do you see that?

1 A. Yes, I do.

2 Q. It says, "This design makes sure that
3 any signals that travel in the shield do not extend
4 continuously from one end to the other end of the
5 cable, obviating the need to grounding the shield."

6 Do you see that?

7 A. Yes, I do.

8 Q. So is -- so Kroushl is describing an
9 advantage of having a discontinuous shield; correct?

10 A. Kroushl is indeed, in paragraphs --
11 and I'll go on and to talk about paragraph 8 and 9.
12 He talks about cost. He talks about safety
13 regulations, et cetera. And so with those concerns
14 that Kroushl raises, from Kroushl's point of view,
15 then a discontinuous tape from Kroushl's point of
16 view could be argued to be an advantage.

17 Q. If you go back to your declaration,
18 paragraph 381.

19 And in paragraph 381, you reference
20 the NEPTAPE issue. And if we could call -- if you
21 could also find Exhibit 2008, which is a NEPTAPE
22 data sheet.

1 A. Yes.

2 (Exhibit 2008, Previously marked.)

3 BY MR. SULLIVAN:

4 Q. And this is Exhibit 2008, if you have
5 that.

6 A. Yes, I do. I'm lucky on this one.

7 Q. Okay. If we go back to your
8 declaration at paragraph 381.

9 In the middle of that paragraph, you
10 say, "None of the materials Dr. Eldering provided
11 indicate that 'Foil Free' feature is essential to
12 NEPTAPE; for example, NEPTCO (the maker of NEPTAPE)
13 sold other versions of NEPTAPE that did not include
14 this feature and had exposed edges or surfaces."

15 Do you see that?

16 A. Yes, I do.

17 Q. So what did you mean by "None of the
18 materials Dr. Eldering provided indicate that the
19 'Foil Free' feature is essential to NEPTAPE"?

20 What did you mean by that?

21 A. Well, what I am saying here in this
22 paragraph, that NEPTAPE had 11 -- F1141 and other

1 tapes that did not have a foil free edge. I know
2 from experience that other tapes made by NEPTCO and
3 other makers would have concurrent edges because
4 they were tended to be slit.

5 So, therefore, F1141 is not an
6 essential feature for NEPTAPE products that some
7 people don't -- some of those products just don't
8 have that feature.

9 Q. The feature you're referring to is
10 the --

11 THE REPORTER: You're breaking up,
12 Denis.

13 MR. SULLIVAN: Sorry.

14 BY MR. SULLIVAN:

15 Q. The feature that you're referring to
16 is foil free edges; correct?

17 A. That is correct.

18 Q. If you could also locate Exhibit 2009.
19 (Exhibit 2009, Previously marked.)

20 BY MR. SULLIVAN:

21 Q. You reference the NEPTAPE F1141. Just
22 for completeness, that NEPTAPE F1141, that's an

1 example of a foil free edge tape; correct?

2 A. Yes, it is. Its outline says such in
3 the construction and the description on the
4 Exhibit 2009 page.

5 Q. If we go back to Exhibit 2008, which
6 is the data sheet, the NEPTAPE data sheet.

7 In the "Construction" section, it
8 says, "Foil free edge tapes offer a film/film/foil
9 construction with a wider, thicker top film layer
10 which overlaps the foil, providing non-conductive
11 foil free edges."

12 Do you see that?

13 A. Yes, I do.

14 Q. And then if we go further down into
15 the General Features or Benefits, it says, "Foil
16 free edge film provides isolation between pairs,
17 preventing shield to shield shorts and eliminating
18 the need for a polyester overwrap."

19 Do you see that?

20 A. I do see that.

21 Q. So this NEPTAPE foil free edge, the
22 fact that it's a foil free edge is described as

1 providing an advantage that would prevent shield to
2 shield shorts; correct?

3 MR. BULLARD: Object to the form of
4 the question.

5 THE WITNESS: I've lost the question,
6 Denis. I am reading the yellow highlight,
7 and I agree with the statement that it would
8 be a proposed feature benefit by NEPTCO
9 regarding F1411 tape.

10 BY MR. SULLIVAN:

11 Q. And if we go back to the data sheet,
12 which was Exhibit 2009.

13 This is the data sheet for the NEPTAPE
14 F1141 foil free edge shielding tape. The
15 construction at the top shows the two dielectric
16 layers and the metal layer -- they all have a
17 different width; correct?

18 A. I don't agree with that statement.

19 Q. Why not?

20 A. In the table on 2009, I think you're
21 talking about the paragraph called "Construction,"
22 like you have highlighted?

1 Q. Yes.

2 A. The numbers there are the tape
3 thickness. So 0.92 ml or 23 micron -- the term
4 "wide" does not describe the width of the film.
5 That's just connotating that's the wider layer
6 within the sandwich. And so the numbers are
7 reflecting the product thickness -- or the layer
8 thicknesses and not the widths.

9 Q. Okay.

10 MR. SULLIVAN: We've been going for
11 about an hour. So let's take a break. I
12 know it's a little -- we'll go off the
13 record.

14 THE VIDEOGRAPHER: The time is
15 11:13 a.m. Off the record.

16 (Recess from the record.)

17 THE VIDEOGRAPHER: All right. The
18 time is 11:36 a.m. Back on the record.

19 BY MR. SULLIVAN:

20 Q. If you could turn to your declaration,
21 page 30. And I'm referring to your second
22 declaration, page 30, starting at paragraph 383,

1 where you discuss Roberts.

2 And if we could also find

3 Exhibit 1009, which is the Roberts patent.

4 (Exhibit 1009, Previously marked.)

5 Q. Do you have Roberts, Mr. Cornelison?

6 A. I have Roberts in front of me.

7 Q. I'd like to turn to paragraph 385 of
8 your declaration?

9 MR. SULLIVAN: And if we could keep
10 Roberts open, as well, on the screen.

11 BY MR. SULLIVAN:

12 Q. In paragraph 385, you cite to a
13 portion of Edwards at Column 4, lines 15 to 23. So
14 if you could look at that portion of Roberts. I'm
15 going to read into the record that Column 4,
16 lines 15 to 23.

17 Roberts says, Longitudinally
18 subscribing [sic] the tape (17) is a corrugated
19 metal armor tape shown at (18). This metal armor,
20 having a thickness greater than a foil, (18), is a
21 tapelike strip that has been longitudinally folded
22 or wrapped around the plastic tape. This particular

1 piece of armor in a sense is -- in a sense an
2 electrical, as well as a mechanical, shield and it
3 can have a plastic, such as polyethylene, firmly
4 adhered to one or more surfaces thereof (as read).

5 Do you see that?

6 A. Yes, I do.

7 Q. And that's what you quote in
8 paragraph 385; right?

9 A. Yes, it is.

10 Q. Now, that language in Column 4 that I
11 just read and that you quote, it refers for the
12 armor -- the metal armor, that can have a plastic
13 firmly adhered to one or more surfaces thereof.

14 It's referring -- the "thereof" is
15 referring to the armor having certain surfaces;
16 correct?

17 A. So when you say "armor," you're
18 talking about Element 18 in Roberts?

19 Q. Well, I'm looking at your
20 paragraph 385.

21 A. Okay.

22 Q. And you say, "Roberts's express

1 teaching that armor 18 itself can have plastic on
2 'one or more' surfaces..." So I want to make sure
3 we're talking about the same surfaces.

4 So are we talking -- are you referring
5 to the surfaces of the armor in your paragraph?

6 A. Yes, I am. Yeah, the surface of the
7 armor, Element 18, as Roberts discloses.

8 Q. Now, one or more surfaces can have
9 plastic firmly adhered to them. The armor would
10 have a top and a bottom surface; correct?

11 A. Yes, it would.

12 Q. The armor would also have sides;
13 correct? A left side and a right side?

14 A. Yes, it would.

15 Q. And those left and right sides would
16 also be surfaces; correct?

17 A. Yes, they would.

18 Q. So the disclosure in Column 4 that
19 refers to the armor, that it can have a plastic such
20 as polyethylene firmly adhered to either one or more
21 surfaces thereof, that includes the possibility that
22 the armor would have plastic on only one surface;

1 correct?

2 A. As stated in Column 4, either one or
3 more surfaces. So one would be possible, and more
4 than one certainly possible, as well.

5 Q. If we look at the figures, Figures 5
6 through 8, which is on sheet 4 of the Roberts
7 patents.

8 These figures, Figures 5 through 8,
9 these are figures of possibilities for the metal
10 foil 15; correct?

11 A. That is described in Column 2 of
12 Roberts, where he says, "Figure 5 is a
13 cross-sectional view of a metal foil coated on both
14 sides with plastic, used to shield one group of
15 electrical conductors from the other."

16 Q. Those examples, Figures 5, 6, 7, and
17 8, those are examples of a metal foil; correct?

18 A. I think I just read to you that that's
19 what Roberts says it is.

20 Q. Sorry, I was only clarifying because
21 you were specifically referring to Figure 5, but I'm
22 asking you about all four, Figure 5, 6, 7, and 8.

1 And in Column 2, those are all
2 examples of metal foils; correct?

3 A. It does apply to 5 through 8.

4 Q. Looking at those figures in Figure 5,
5 the plastic covering is applied to the top and
6 bottom surfaces of the foil; correct?

7 A. That is correct.

8 Q. In Figure 6 of Roberts, there's no
9 plastic covering applied to any surface of the foil;
10 correct?

11 A. That is correct.

12 Q. In Figure 7 of Roberts, the plastic
13 covering is applied to only one surface of the foil;
14 correct?

15 A. That is correct.

16 Q. And, finally, in Figure 8, the plastic
17 covering is applied to all of the surfaces of the
18 metal foil; correct?

19 A. That is correct.

20 Q. If we could go to Roberts, Column 3,
21 starting at line 52 and going to the bottom.
22 There's a long paragraph there. I think you address

1 this in your -- we'll go to your declaration.

2 If you go to your declaration at
3 paragraph 377.

4 A. You're breaking up there a bit, Denis.

5 Q. Sorry. If you go to your declaration
6 at paragraph 377.

7 A. Yes.

8 Q. You cite a portion of this paragraph
9 towards the last line, 3 -- Column 3, lines 56
10 through 62.

11 Do you see that?

12 A. Yes, I do see that.

13 Q. So this section of Roberts, starting
14 at Column 3, line 52, going to the bottom of that
15 column, it's talking about a potential disadvantage
16 of having a foil that was only coated on its two
17 major surfaces, top and bottom surfaces, that it
18 would leave an exposed edge of the foil; correct?

19 MR. BULLARD: I'm going to object to
20 the form of the question.

21 THE WITNESS: Denis, I lost track of
22 the exact wording of the question. I think

1 the answer is basically there in Column 3
2 that we're looking at. But if you could
3 repeat the question, I would appreciate that.

4 BY MR. SULLIVAN:

5 Q. Sure.

6 This section of Roberts, starting at
7 Column 3, line 52 and going to the bottom of that
8 column, it's discussing a potential disadvantage of
9 having a foil that was only coated on its two major
10 surfaces, top and bottom, that would leave an
11 exposed edge of the foil; correct?

12 A. That is correct.

13 Q. And one of the solutions proposed to
14 address that problem is to have a shield that --
15 where the foil was completely surrounded on all
16 sides by plastic; correct? At the beginning of that
17 paragraph?

18 A. Yes, that's one of the solutions he
19 proposes.

20 Q. And another solution, towards the end
21 of the paragraph, is to use a polyethylene
22 greaselike material; correct?

1 A. Yes.

2 Q. I want to go to --

3 A. Before we leave that paragraph and
4 that section we're talking about in Roberts, he also
5 does say that when considering a cable of many miles
6 in length, the amount of exposed conductive metal
7 becomes significant.

8 So he is talking about a construction
9 within Roberts that would be known to be a very long
10 cable. And that would affect the significance of
11 such an edge.

12 Q. If we turn ahead in Roberts to
13 Column 4, starting at line 68, and going onto
14 Column 5, line 15, there's a discussion of Figure 9.

15 Do you have that in front of you?

16 A. Yes, I do.

17 Q. If you could read that yourself. I
18 won't read it all into the record. So I'm talking
19 about the discussion of Figure 9, starting at
20 Column 4/68 through Column 5/15.

21 (Document review.)

22 THE WITNESS: Yeah, I've looked

1 through Column 5.

2 BY MR. SULLIVAN:

3 Q. In that discussion of Figure 9, the --

4 and we can look --

5 MR. SULLIVAN: If we can look at

6 Figure 9.

7 BY MR. SULLIVAN:

8 Q. Figure 9 is using a metal foil 15 that
9 has plastic layers on the top and bottom of the
10 foil; correct?

11 A. Yes, I would agree with that Figure 9,
12 yes.

13 Q. And in that configuration of the foil,
14 the edge or edges of the foil are exposed; correct?

15 A. Yes, they are.

16 Q. And in that section of Roberts that we
17 read, the potential problem that's identified is
18 that if there are pinholes in the insulation of the
19 conductors 14 or 16 or even in the shield 15, that
20 might create issues; correct?

21 MR. BULLARD: I'm going to object to
22 the form of the question.

1 BY MR. SULLIVAN:

2 Q. I'll read that portion of Roberts into
3 the record. I'm looking at Column 4, line 75.

4 It says, "It is quite obvious that
5 pinholes in the electrical insulation of the
6 insulated electrical conductors (14) or (16), or the
7 shield (15), would allow unwanted electrical energy
8 to reach exposed portions (edges) of the aluminum
9 foil shield, through the edges (20) or pinholes in
10 the plastic coating. From an electrical standpoint,
11 it is desirable to avoid this."

12 Do you see that?

13 A. Yes, I do.

14 Q. So the exposed edges of the shield 15
15 could become a problem if there were pinholes in the
16 insulation of the electrical conductors 14 and 16;
17 correct?

18 A. Well, Roberts -- in the context of a
19 Roberts cable construction, he is voicing a concern
20 about an edge within the cable. And he is talking
21 about the separator in this case, as well, and
22 talking about ways to mitigate such an issue or

1 problem that may be caused by an edge.

2 So Roberts is doing that, but it is in
3 the context of a Roberts-type cable, the one he
4 describes. So other type cables are out there, and
5 you have mentioned in my declaration some examples
6 that disclose that such an edge or surfaces are not
7 a concern.

8 So I see what Roberts says. I
9 understand what he's saying. I understand it to be
10 in context of a Roberts-type construction, but I
11 don't necessarily think that's -- converts over or
12 speaks to other types of cable constructions that
13 are actually designed to be -- they have a lot of
14 conductive material in the proximity of electric
15 insulated conductors.

16 Q. Focusing on Roberts, the problem
17 arises when -- well, let me ask the question.

18 Do you know what these pinholes are or
19 how they are caused in the insulation of the
20 electrical conductors?

21 A. I do not know specifically what
22 Roberts is talking about. In my experience, I am

1 familiar with pinholes that can occur for various
2 processing reasons, mechanical reasons. But I don't
3 know specifically what he might be talking about
4 causes within Roberts. He just says they're
5 pinholes.

6 Q. A POSITA would understand that in
7 Roberts, you could have pinholes in insulation in
8 the cable; correct?

9 A. Well, a POSITA might understand that
10 it may be possible. And Roberts does say he's
11 concerned about that, and the pinholes, and he
12 describes that there in Column 5.

13 Q. If we could look at Figures 1 through
14 3 of Roberts.

15 Do you have that in front of you,
16 Mr. Cornelison?

17 A. I do.

18 Q. So I'm looking at the specification
19 which describes Figures 1, 2, and 3. Figure 1 is
20 described as one embodiment. Figure 2 is described
21 as another embodiment similar to Figure 1. And then
22 Figure 3 is an additional cutaway of one of the

1 embodiments.

2 So these are some different
3 embodiments shown in Figures 1 through 3, according
4 to the spec. But each of them identify the metal
5 foil 15, as well as the metal armor 18.

6 Do you see that?

7 A. The answer, I think, is yes. I see 15
8 on Figure 1. I see 15 on Figure 2. And I was
9 looking for 15 on Figure 3, and I'm probably just
10 not seeing it at this point. But I see C, D, and E,
11 but I believe you're talking about the same,
12 essentially, component, which is shield 15.

13 Q. And in each of those figures, the
14 metal armor shield -- the metal armor 18 is shown as
15 a different type of tape than the metal foil 15;
16 correct?

17 MR. BULLARD: Object to form of the
18 question.

19 THE WITNESS: Well, Denis, what I'm
20 doing is -- I believe I actually had some
21 discussion about that in my declaration. So
22 I'm trying to find that section.

1 So your question was: Is 18 a
2 different type than 15, as I recollect?

3 And I would not say that it's a
4 different type. But Roberts does describe
5 the metal armor 18, and he does distinguish
6 it in that it has a thickness greater than
7 foil.

8 That's not necessarily a different
9 type to me. It's still a conductive material
10 in a tape applied over a core. And Roberts
11 does disclose it can have the coating on one
12 or more surfaces.

13 BY MR. SULLIVAN:

14 Q. Just looking at Figures 1 through 3,
15 the metal armor is shown differently than the metal
16 foil 15; correct?

17 In other words, if you were making
18 this product, you'd have to order a different tape
19 for the armor than you would for the metal foil, as
20 shown in Figures 1 through 3, the way it's shown?

21 MR. BULLARD: I'm going to object to
22 form of the question.

1 THE WITNESS: Roberts discloses that
2 the armor is thicker than -- the thickness
3 is -- the thickness is greater than a foil.
4 So, again, I don't see that as different
5 type. What you see in Figures 1, 2, and 3 is
6 the existence of the foils or the armor, as
7 Roberts describes.

8 So I'm not quite sure -- understand
9 why you say it's different. Because we have
10 a tape 18 and formed around a cable and a
11 tape 15 formed around parts of a cable. And
12 Roberts does say that one is thicker than the
13 other.

14 BY MR. SULLIVAN:

15 Q. Just looking at the figures, don't --
16 doesn't the metal armor 18, doesn't it look
17 different than that metal foil 15? Are you saying
18 they're the same except for thickness?

19 MR. BULLARD: Object to the form of
20 the question.

21 THE WITNESS: What I see is that the
22 material used in the cable is described by

1 Roberts. The key difference would be the
2 thickness. And that would be the -- so the
3 description of the material actually
4 purchased to use in the cable would be
5 thicker for the armor than the field.

6 BY MR. SULLIVAN:

7 Q. It's your testimony that that's the
8 only difference?

9 A. For the material acquired by the cable
10 maker, as far as I know, yes.

11 I'll go look at some more things here,
12 but the -- Roberts discloses that -- they're both
13 functionally folded. Roberts does disclose -- and
14 I'm looking at my declaration and where I quote a
15 section of Roberts on paragraph 385.

16 Roberts does disclose that the metal
17 is corrugated, and that is a property of -- the
18 corrugation property of the manufacturing process,
19 not of the actual tape, as they would be required to
20 make a cable.

21 MR. SULLIVAN: I don't have any
22 further questions.

1 MR. BULLARD: Okay. Let's take a
2 short break. I'll think about it and come
3 back.

4 Thanks, Denis, for managing a tight
5 deposition.

6 THE VIDEOGRAPHER: Okay. Stand by.
7 The time is 12:10 p.m. Off the
8 record.

9 (Recess from the record.)

10 THE VIDEOGRAPHER: The time is
11 12:21 p.m. Back on the record.

12 EXAMINATION

13 BY MR. BULLARD:

14 Q. Do you recall being asked about
15 Roberts teaching that armor 18 can have plastic on,
16 quote, one or more surfaces?

17 A. Yes, I do recall that.

18 Q. Okay. Can you look at your
19 declaration, Exhibit 1059?

20 Could you look at paragraph 385, which
21 is on bolded page 32. And that's 32 in the bottom
22 left.

1 A. I am there.

2 Q. Do you see the sentence after the
3 block quote at the top that says, "Roberts's express
4 teaching that armor 18 itself can have plastic on
5 'one or more' surface [sic] plainly means the armor
6 itself can have two layers of plastic (one on the
7 top and one on the bottom)."

8 A. Yes, I see that.

9 Q. Is that your opinion?

10 A. That is my opinion and -- yes, it is
11 my opinion.

12 Q. So do you agree or disagree that the
13 statement "one or more" includes within its
14 disclosure having plastic on two layers, one on the
15 top and one on the bottom?

16 A. Yes, I do see the statement of one or
17 more, including two layers, which is consistent with
18 my declaration here on this page.

19 Q. So do you agree or disagree that
20 Roberts' teaching of one or more includes disclosing
21 having plastic on two layers of the armor, one on
22 the top and one on the bottom?

1 A. I do agree with that.

2 Q. Okay. And then do you recall being
3 asked some questions for Roberts regarding potential
4 for exposed side edges?

5 A. Yes, I do.

6 Q. Could you turn to your paragraph 395
7 on page 39? And that, again, is the bolded page
8 number at the bottom left.

9 A. I am there.

10 Q. Do you see the annotation with red
11 arrows, yellow, and green?

12 A. Yes, I do.

13 MR. BULLARD: Sorry, Denis, did you
14 say something?

15 MR. SULLIVAN: Yes, I tried. Can you
16 hear me?

17 MR. BULLARD: I can now. I just
18 wanted to make sure you're getting heard, if
19 you're trying to say something.

20 MR. SULLIVAN: Yeah, objection to
21 form, scope of redirect.

22 MR. BULLARD: Okay.

1 BY MR. BULLARD:

2 Q. What is the component annotated in
3 green?

4 MR. SULLIVAN: Objection to form,
5 scope of redirect.

6 THE WITNESS: Well, I say in
7 paragraph 395, in the embodiment of Figure 17
8 of Roberts, which we're looking at here in my
9 declaration, it says, plastics tape 17, which
10 is colored green.

11 BY MR. BULLARD:

12 Q. If the armor 18 -- strike that.

13 Okay. In the example where armor 18
14 has plastic firmly adhered on the top and bottom,
15 would that armor have any exposed side edges to the
16 electrical conductors in the center of the cable?

17 MR. SULLIVAN: Objection to form,
18 scope of redirect.

19 THE WITNESS: Well, in my declaration,
20 I talk about the plastic tape that exists
21 there. And in this case, in Figure 17 that
22 Roberts discloses, then the edges, the

1 surfaces, of Element 18, if it was coated on
2 top and bottom only, would not be exposed to
3 the conductors by virtue of the presence of
4 the tape 17.

5 MR. BULLARD: Okay. I don't have any
6 further questions.

7 THE WITNESS: Are we all done?

8 MR. SULLIVAN: I just have some
9 follow-up.

10 EXAMINATION

11 BY MR. SULLIVAN:

12 Q. If we could go back to paragraph 395
13 of the declaration, which showed that figure we were
14 just looking at with the green tape.

15 A. Yes.

16 Q. What is that plastic tape 17, what is
17 that made of?

18 A. What I have here, it says plastic,
19 which I would see as a dielectric material, but I
20 can certainly look from Roberts and look further if
21 we need to.

22 Q. I can point you to Column 4 of

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1 Roberts, and it refers to -- at about line 15 or so,
2 it refers to a polyethylene tera- --
3 T-E-R-A-P-T-H-A-L-A-T-E. And then in parentheses,
4 it says, Mylar tape --

5 A. Yes.

6 Q. -- shown at 17.

7 Do you see that?

8 A. Yes.

9 Q. That's an insulator?

10 A. Yes, polyethylene terapthalate is a
11 type of plastic, and the trade name is Mylar. And
12 it's often used in the industry. And it is a
13 plastic dielectric material.

14 Q. We talked earlier about pinholes, that
15 Roberts discusses pinholes; correct? Do you recall
16 that?

17 A. Yes, I do.

18 Q. In fact, let's go to Column 5 in
19 Roberts.

20 At the top of Column 5, which we
21 looked at earlier, it talks about pinholes. And it
22 says -- it's toward the end of the sentence --

1 actually, sorry. We'll start at the bottom of
2 Column 4, line 75.

3 It says, "It is quite obvious that
4 pinholes in the electrical insulation of the
5 insulated electrical conductors (14) or (16), or the
6 shield (15), would allow unwanted electrical energy
7 to reach exposed portions (edges) of the aluminum
8 foil shield, through the edges (20) or pinholes in
9 its plastic coating."

10 Do you see that?

11 A. Yes, I do.

12 Q. The pinholes in the plastic coating,
13 that's referring to the pinholes in the plastic
14 coating of the shield 15; correct?

15 MR. BULLARD: Object to the form of
16 the question.

17 THE WITNESS: I'm looking, Denis.
18 Just give me a second.

19 Yes, the pinholes, I believe, in
20 Column 4 and 5 are talking about potential
21 pinholes in the shield 15.

22

1 BY MR. SULLIVAN:

2 Q. Go to Column 3 of Roberts. If you go
3 to about line 44. I'll read it into the record.

4 It says, It is quite obvious that when
5 a metal foil, coated on only one side, is employed,
6 that the bundle of electrical conductors in nearest
7 proximity therewith is not protected by a dielectric
8 from the electrical conductors, other than that
9 dielectric used as the insulation on the electrical
10 conductors themselves. Thus, there is in this
11 instance a preference for the aluminum foil shield,
12 coated on both sides with the polyethylene
13 T-E-R-A-P-T-H-A-L-A-T-E (Mylar) dielectric.

14 Do you see that?

15 A. Yes, I do.

16 Q. So Roberts discloses that the plastic
17 coating on the foil could be Mylar; correct?

18 A. Polyethylene teraphthalate, Mylar, yes.

19 Q. And it also discloses in this section
20 of Roberts at Column 5 that we just looked at, that
21 that Mylar could have pinholes; correct?

22 MR. BULLARD: I'm going to object to

1 the form of the question, and also outside
2 the scope of my redirect.

3 BY MR. SULLIVAN:

4 Q. I'm specifically referring to
5 Column 5, lines 4 through 5, that says, "pinholes in
6 its plastic coating."

7 The question is: Roberts discloses
8 that the Mylar coating of the foil could have
9 pinholes; correct?

10 MR. BULLARD: Same objection.

11 THE WITNESS: You are pointing out the
12 Mylar -- the tape and the coating -- plastic
13 coating. And, yes, I believe Roberts is
14 talking about there could be pinholes in the
15 Mylar-coated shield.

16 But one of the things I did mention
17 before today and certainly in my declaration
18 is that Roberts is expressing concern about a
19 cable design that is like Roberts, with the
20 conductors as disclosed and the construction
21 as disclosed.

22 And these concerns, certainly Roberts

1 expresses them and has them, but they are not
2 necessarily universal in all types of cable
3 construction and designs.

4 MR. SULLIVAN: I have no further
5 questions.

6 MR. BULLARD: I guess I'll ask a
7 follow-up question.

8 EXAMINATION

9 BY MR. BULLARD:

10 Q. Do you recall when I asked you about
11 the plastic tape that separates the armor 18 from
12 the electrical conductors?

13 A. Yes. Yes, I do remember that. Thank
14 you.

15 Q. And can you turn your attention back
16 to paragraph 395?

17 A. I'm looking at 395.

18 Q. Do you see where you say, "plastic
19 tape 17 (green) blocks the entire armor 18 (yellow)
20 including its edges (red arrows) from the electrical
21 conductors in the center of the cable (the many
22 little circles)"?

1 A. Yes, I see that.

2 Q. And do you see that there's also a
3 further white space between the yellow armor and the
4 green tape?

5 MR. SULLIVAN: Objection to form,
6 beyond the scope.

7 THE WITNESS: Yes.

8 BY MR. BULLARD:

9 Q. What do you understand that white
10 space to be?

11 MR. SULLIVAN: Objection to form,
12 beyond the scope.

13 THE WITNESS: In this case, it is
14 clear to me that the green -- the green
15 represents a layer within the cable, and then
16 surrounding that is the yellow layer of the
17 armor 18. And --

18 BY MR. BULLARD:

19 Q. You would -- I'll withdraw that
20 question and -- do you recall when opposing counsel
21 asked you some questions about pinpricks?

22 MR. SULLIVAN: Objection to form.

1 THE WITNESS: Actually, I don't
2 remember pinpricks. It may have been said.
3 Maybe I heard "pinholes" instead of
4 "pinpricks" that was actually stated. I
5 don't remember pinpricks, specifically.

6 BY MR. BULLARD:

7 Q. Sure.

8 Focusing on the yellow armor in your
9 annotation in paragraph 395, would adding plastic to
10 the top and bottom surface of that decrease or
11 increase the amount of exposed conductive material?

12 MR. SULLIVAN: Objection to form,
13 beyond the scope.

14 THE WITNESS: We're talking about the
15 yellow layer?

16 BY MR. BULLARD:

17 Q. Correct. Let me ask it this way.

18 If you compared one version of the
19 cable in your annotation where the armor has the
20 plastic tape 17 separating it to another version
21 that has the plastic tape separating it and, in
22 addition to that, now has plastic on the bottom

1 surface and the top surface of the armor. So you
2 have a total now of three plastic coatings, plastic
3 on the top, plastic on the bottom, and then the
4 plastic tape 17.

5 Would the addition of plastic on the
6 top and bottom make the amount of exposed metal
7 worse in any way?

8 MR. SULLIVAN: Objection to form.

9 THE WITNESS: What I see is the --
10 well, to answer your question as far as
11 exposure to the conductors with the tape with
12 the, say, coated layer 18, it's difficult to
13 say what would be more insulative or more
14 protected, because it's hard to decide how
15 much protection is coming from 17 and how
16 much protection would be coming from the
17 dielectric layer on tape 18.

18 BY MR. BULLARD:

19 Q. Let me ask you a different question.
20 I'm not asking you to assess which one is more.

21 My question is just would adding
22 plastic coating to the yellow armor, would that in

1 any way reduce the dielectric protection of the
2 armor?

3 A. It would not --

4 MR. SULLIVAN: Objection --

5 THE WITNESS: I don't think it would
6 reduce protection from the armor by having
7 the plastic coating, essentially, adjacent to
8 the green layer of plastic.

9 MR. BULLARD: I don't have any further
10 questions.

11 MR. SULLIVAN: I have a few.

12 EXAMINATION

13 BY MR. SULLIVAN:

14 Q. If we could go back to paragraph 395
15 again and that diagram.

16 Do you recall that Mr. Bullard just
17 asked you questions about whether adding plastic
18 layers to the top and bottom of the metal armor
19 would -- well, do you recall his questions about
20 adding metal -- adding plastic to the top and both
21 of the metal armor?

22 A. I remember questioning he asked about

1 the top and bottom coating on the armor 18, yes, he
2 asked about that.

3 Q. And your answer was adding that --
4 those plastic layers to the armor, you said, I don't
5 think it would reduce protection from the armor by
6 having the plastic coating, essentially, adjacent to
7 the green layer plastic.

8 Do you recall that?

9 A. Yes, I do.

10 Q. So following up on that, if the metal
11 armor was not only coated on the top and the bottom
12 surfaces with plastic, but if that metal armor was
13 surrounded on all surfaces by plastic, would that
14 represent a further improvement to try and reduce
15 the exposed metal?

16 MR. BULLARD: Are you -- are you done?

17 MR. SULLIVAN: (Nods head.)

18 MR. BULLARD: Okay. Object to the
19 form of the question.

20 THE WITNESS: Well, the discussion
21 here about 18, layer 17, is somewhat
22 conjecture to me. What Roberts is disclosing

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1 is a concern about shield 15. And now we're
2 talking about layer 18 with the green tape.

3 So the concerns that Eldering
4 expresses really are not mentioned as a
5 concern for the shield. It's the -- I mean,
6 for the -- for layer 18. His concerns are
7 about shield 15.

8 MR. SULLIVAN: I don't have any
9 further questions.

10 MR. BULLARD: Okay. Me, neither.

11 THE VIDEOGRAPHER: Okay. With that,
12 I'm going to get us off the record.

13 This marks the end of today's
14 deposition. The time is 12:44 p.m.

15 (Off the record at 12:44 p.m.)
16
17
18
19
20
21
22

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ss:

2 COUNTY OF WESTCHESTER)

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That prior to being examined, the witness
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whole truth, and nothing but the truth.

8 That I thereafter transcribed my said
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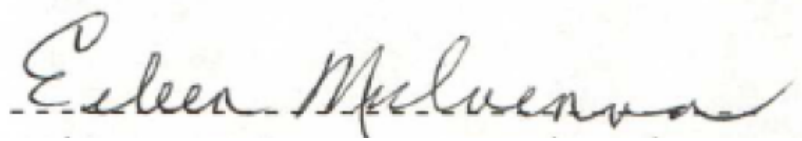
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