

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

PICTIVA DISPLAYS, INTERNATIONAL) CAUSE NO. 2:23-CV-495-JRG
LTD., et al., ()
Plaintiffs, ()
vs. ()
SAMSUNG ELECTRONICS CO., LTD., ()
et al., () MARSHALL, TEXAS
Defendants. () FEBRUARY 4, 2025
9:00 A.M.

MARKMAN HEARING

BEFORE THE HONORABLE RODNEY GILSTRAP
UNITED STATES CHIEF DISTRICT JUDGE

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08:33:15 1 THE COURT: Be seated, please.

08:51:07 2 All right. This is the time set for claim construction
3 in a pending patent dispute. This is Pictiva Displays
4 International, et al., versus Samsung Electronics Company, et
09:08:27 5 al. This is Civil Case No. 2:23-CV-495.

6 The Court will ask for announcements at this time.

7 What says the Plaintiff Pictiva?

8 MS. TRUELOVE: Good morning, Your Honor. Jennifer
9 Truelove for Plaintiff Pictiva. With me today I have
10 Mr. Jason Sheasby, Ms. Rebecca Carson, and Ms. Annita Zhong.
11 And we are prepared to proceed. Thank you, Your Honor.

12 THE COURT: All right. Thank you.

13 What's the announcement from the Defendants?

09:08:59 14 MS. SMITH: Good morning Your Honor Melissa Smith on
15 behalf of Samsung. I'm joined by Mr. Sean Pak, Mr. Lance
16 Yang, Ms. Melissa Baily, and Your Honor, we also have a few
17 client representatives visiting from Korea today in the
18 gallery.

19 THE COURT: Would you like to introduce those,
20 Ms. Smith?

21 MS. SMITH: They are not associated with the
22 specific parties to this case, so I'd just like to introduce
23 them as representatives of Samsung.

24 THE COURT: All right. Thank you.

25 MS. SMITH: And we're ready to proceed, Your Honor.

09:09:26 1 THE COURT: Thank you.

2 Counsel, there are six patents at issue, and you've asked

3 the Court to construe almost 30 disputed terms. As is the

4 Court's typical practice, I've provided a three-hour period of

09:09:57 5 time to hear arguments on claim construction. I've asked you

6 to prioritize your disputes so that if that amount of time is

7 not adequate to hear argument on all of these disputed claim

8 terms, that the Court will have heard your arguments on what

9 you consider to be the most important terms, and I can then

10 rule on the remaining unargued terms based on the briefing and

11 the papers.

09:10:28 12 Almost 30 terms is way beyond the normal load for a claim

13 construction hearing in this court before me. But that's why

14 I've asked you to prioritize them, and that's why we're going

15 to take them up in the order you've submitted by email last

16 night. And we will go as fast and as far as your argument

17 will allow us, and anything we don't reach I'll decide on the

18 papers.

09:10:56 19 All right. With that, let's jump right in and we'll

20 start with 'upon said devices' -- excuse me. Make sure I've

21 got the right list. Yes--'upon said devices' and 'upon said

22 mask and said plurality of devices' from the '389 Patent.

23 And let me hear argument from the Plaintiff first,

24 followed by argument from the Defendants.

25 MR. SHEASBY: May it please the Court. Jason

09:11:29 1 Sheasby for the Plaintiffs, Your Honor.

2 THE COURT: Please go ahead, Mr. Sheasby.

3 MR. SHEASBY: I'd also like to note that the general
4 counsel of Pictiva is attending the hearing, Mr. Paul Riley,
5 just so the record is clear.

6 THE COURT: All right.

7 MR. SHEASBY: The central issue is whether
8 'upon' means directly upon. And in my mind the primary
9 evidence I'd like to point to is first the testimony of their
10 own expert who reviewed the intrinsic record that says
11 "selective depositing at least one planarization layer would
12 involve instances in which there are multiple planarization
13 layers." And the reason why that matters is this patent is an
14 improvement on ways of creating PLMs [sic]. And when you
15 create a PLM, you have multiple different planarization layers
16 that are put in a stacked fashion on the substrate, the
17 barrier layer.

18 And there was some suggestion that because this structure
19 is in the prior art, it's irrelevant to the patent
20 specification, Your Honor. And I would point out that if
21 you look at the '389 Patent at 4:8 through 25 and 4:44 through
22 47, it makes clear that this patent is, in fact, taking
23 PLMs and improving other aspects of it. The aspects of
24 proving -- that it's improving on have nothing to do with the
25 fact that you do a cake layer structure in which there is

1 multiple layers of planarization on the substrate.

2 There is an intrinsic evidence argument that they make in
09:13:26 3 which they said, Well, when you have -- the word for when it's
4 stacked on top of but not directly touching is the
5 word 'over', and they try to make a difference between -- a
6 distinction between the word 'over' and 'upon'.

7 If I could have slide 16, Dr. Zhong.

8 That actually is inconsistent with the specification.

9 So the specification--this is at figure 2--and at column
09:13:56 10 1:63, going over on to column 2 talks about a glass sheet 200.
11 Then it talks about a thin film encapsulation step over the
12 entire glass sheet. Now, remember, counsel said -- opposing
13 counsel says that 'over' is the phrase you use when you don't
14 require 'directly upon'. But that 'over the glass sheet'
09:14:24 15 means that that thin film encapsulation layer will actually be
16 in contact with the glass sheet. It will be directly on that
17 glass sheet. So the idea that 'over' versus 'upon', that
18 those language --that that language distinction drives a
19 concept of 'directly on' versus 'not directly on' is
20 inconsistent with the patent specification.

21 There's another portion of the patent specification I'd
22 like to point you to, which is --

23 THE COURT: Let me stop you for a question,
24 Mr. Sheasby. Is there anything in the intrinsic record that
09:14:59 25 you're aware of that gives the Court guidance on what 'upon'

1 means, or is this strictly extrinsic situation?

2 MR. SHEASBY: No, this is all intrinsic, Your Honor.

3 THE COURT: It's all intrinsic.

4 MR. SHEASBY: Yes.

5 THE COURT: Second question. What's your best take
6 on the argument that there has been disclaimer here?

7 MR. SHEASBY: I'm happy -- should I -- I can go
8 directly to that, or I can show you the one last piece of
9 intrinsic evidence. What would you prefer?

10 THE COURT: If you want to show me one last piece
11 and then move onto that, that's fine.

09:15:28 12 MR. SHEASBY: Sure. So this is the last piece of
13 intrinsic evidence, Your Honor. It talks about a substrate
14 has been formed upon its surface of OLED devices. So 'upon'
15 -- you see that it's directly on -- it's directly on the
16 substrate. And then if you go down, it talks about the fact
17 that you deposit additional layers on top of that. The OLED
18 devices are both the orange plus the blue, and so the blue is
09:16:00 19 obviously not directly on the substrate.

20 That was the only other place of intrinsic evidence I was
21 going to show you.

22 If I could have slide 8.

23 Slide 8 is the prosecution record, and what the examiner
24 did is he identified the devices that are, quote, "upon the
25 substrate, as required by the claims, as the devices in figure

09:16:25 1 2 of a reference." And what those figure 2 -- devices 2 are
2 is they're barrier ribs.

3 And I can actually show you those barrier ribs. Those
4 are the green barrier ribs that you see right there. And the
5 point of distinction that we made was the barrier ribs are not
6 devices. There was no discussion about whether the barrier
7 ribs were directly or indirectly touching the underlying
8 substrate. In fact, the barrier ribs directly touch the
09:17:00 9 substrate. It was not because of whether there was a gap
10 between them or something between them that they were not the
11 barrier -- that they didn't meet the claims; it had to do with
12 whether they were, in fact, the device.

13 The devices as we described it, if you look at slide 9,
14 is the electrode and the fluorescent layer. And what we said
15 is that the electrode and the fluorescent layer are the
09:17:27 16 devices, and that the barrier layer is not. So there was
17 simply no disclaimer whatsoever of this -- the distinction
18 between 'directly on' versus 'indirectly on' was not the basis
19 of any point of discussion or disclaimer.

20 There is some theoretical argument that was made in which
21 there was a discussion of shrinkage and somehow that
09:17:59 22 theoretical shrinkage would support a concept of a layer being
23 directly versus indirectly on the device. That's just created
24 out of thin air by the expert. There's no discussion of that
25 in the specification whatsoever.

1 So the key point to keep in mind is that the disclaimer
2 was the disclaimer of the device; the barrier ribs not being
3 the device. It had nothing to do with 'upon' versus meaning
4 directly in contact -- directly in contact with the substrate.

09:18:29 5 THE COURT: Let me ask you this. I gather that it's
6 your position that 'upon' does not -- is not limited and
7 should not be limited to 'directly on', and it seems to me
8 that 'upon' shouldn't probably be limited to something that
9 involves the act of touching.

09:18:58 10 Let me give you a hypothetical example. If you've got a
11 three-layer cake that sits on a cake stand, the bottom layer
12 is upon the cake stand, but the second and the top layer are
13 also upon the cake stand even though they don't touch the cake
14 stand.

15 What worries me is your construction of 'directly or
16 indirectly'. I'm not sure that 'indirectly' in that scenario
17 would be limited to the first and second layers of the cake
09:19:28 18 sitting upon the third layer sitting on the cake stand. You
19 might have a top layer that's five feet above the cake stand
20 and you might argue that that's indirectly.

21 So while I'm not convinced that the limitations of the
22 Defendants' proposed construction are completely applicable,
23 your alternative including 'indirectly' seems to me to open up
24 another can of worms completely.

25 So tell me what you mean by 'indirectly on' something.

09:19:59 1 MR. SHEASBY: I mean the PML structure that we just
2 see here.

3 THE COURT: Well, is that the only -- and, you know,
4 that figure 1, the prior art from the patent, I know it's not
5 that, but that gives the same concept as the layers of the
6 cake, in my mind.

7 MR. SHEASBY: Yeah. Our purpose of 'indirectly' was
8 to reflect the --

09:20:29 9 THE COURT: I guess I'm saying, I know what you want
10 it to mean, but I don't know that it doesn't mean a lot more
11 than you want it to mean to say 'indirectly on'. Are there
12 some bounds or parameters on 'indirectly'?

13 MR. SHEASBY: I guess we could say plain and
14 ordinary meaning encompassing a PML structure.

09:20:59 15 THE COURT: All right. So I guess the takeaway
16 from these comments are I'm not completely satisfied with
17 what either of you are proposing here as a construction.

18 MR. SHEASBY: Maybe I can let my brother argue and
19 then I can come back up to see if I can craft some language
20 that would better satisfy Your Honor. But I agree with --

21 THE COURT: I mean, the common usage of 'upon' does
22 not require, as I can see it, a connection. On December 21st
23 I might well say, The Christmas holidays are upon us. It
24 doesn't mean we're in the Christmas holidays, but they're
25 close by.

1 MR. SHEASBY: Right.

09:21:29 2 THE COURT: And close by is a whole lot different
3 than indirectly touching or indirectly upon. Now, to me
4 'indirectly upon' is an open-ended kind of alternative.

5 MR. SHEASBY: I will also say that the claim gives
6 some constraints about this. It's -- the -- it's the
7 planarization layers that are selectively deposited upon the
09:21:58 8 devices, so it's not unbounded, Your Honor. It can't be some
9 random layer five feet above because that wouldn't be a
10 planarization layer. And so in some senses the claim is
11 itself -- the limitation is boxed in by the other constraints
12 around it.

13 We're also -- I was going to tell you -- I was going to
14 announce to the Court next that we're going to -- we -- we're
15 going agree to Samsung -- Samsung proposed a revised version
09:22:31 16 of 'planarization' last night. The Court -- or two nights
17 ago. The Court's not -- The Court I think may be aware of it
18 but it hasn't received briefing on it. We're going to -- we
19 can agree to their construction of 'planarization layer'. So
20 with their agreed construction of 'planarization layer', it
21 does constrain what 'upon the devices' will say.

22 THE COURT: All right. Well, let me hear some
23 argument from Samsung, and then we'll see where we are.

09:22:58 24 Mr. Pak, what's your position on all of this?

25 MR. PAK: Thank you, Your Honor.

1 Your Honor, may I hand up some slides, or would you --

2 THE COURT: You may.

3 MR. PAK: Thank you. You may have them.

4 THE COURT: I have a set. I didn't know which side
5 you were talking about.

6 MR. PAK: Thank you, Your Honor.

7 So, first of all, let's start with the description of the
8 invention itself, Your Honor. And if you turn to slide 5 in
09:23:27 9 my presentation, what's important to understand about the
10 invention, Your Honor, is that you have this layer called the
11 barrier layer. It's typically made out of metal, and that is
12 the thing that provides the encapsulation of the underlying
13 OLED device from moisture or air.

14 But the point of this technique is to make that layer as
15 thin as possible. So you can imagine it's putting down an
16 aluminum foil type of encapsulation, so any type of defect in
17 the surface right beneath it could either puncture that
09:23:58 18 barrier layer or cause defects to occur, which would
19 compromise the ability of the encapsulation.

20 So we see here in slide 7, Your Honor, the structure that
21 you're trying to encapsulate is the 104 device--that's the
22 OLED device, the planarization is 106, and it has this
23 ability, as Plaintiffs' counsel has now agreed upon the
24 construction of 'planarization layer' to do two things. One
09:24:27 25 is a smoothing out the contour of that underlying device, and

1 also it's masking any potential defects from traveling up the
2 stack.

3 So Your Honor asked about the intrinsic record support
4 for the word 'upon', and we see that directly in slide 9 where
5 what you're trying to do with the 'upon' language in the
6 patent is to make sure that the surface that you're putting
7 down the barrier layer -- the surface that you're directly
09:24:57 8 touching the barrier layer has the qualities of the
9 planarization that we talked about. It's flat or smooth, and
10 it hides the defects from below. Otherwise, as you can see in
11 figure 5 description and in column 1, line 56 through 62, you
12 can have these dirt particles that could puncture these
13 barrier layers.

14 So it is very important, Your Honor, in the invention
15 that you look at the immediate surface below because we're
16 not -- as Your Honor -- using Your Honor's cake example, we're
09:25:27 17 not interested in how many layers up the case; we're looking
18 at when you're putting down the barrier layer, are you putting
19 it directly upon the planarization layer, because that's where
20 the defects can occur, that's where; you want the contours to
21 be smoothed out.

22 So that's a key aspect of the invention. I think that is
23 getting lost with some of the arguments from the other side.

24 So if you turn to the next slide, Mr. Yang.

25 So we see that here described in the prior art. The high

09:25:56 1 points of the underlying substrate are replicated in these
2 barrier layers, and that's seriously limits the ultimate
3 barrier performance of the films.

4 And I think what we -- as Your Honor always does in claim
5 construction, we begin with the claim language. If you look
6 at the claim language 34, Your Honor, the patentee used two
7 different words--one which is 'upon', and specifically to talk
8 about depositing the planarization layer upon the said
9 devices, and then you have 'over', which is a different
09:26:28 10 concept that's a concept that is broader, it does not exclude
11 the possibility of directly touching, but 'over' is something
12 that is placed above it. So the patentee clearly knew how to
13 use different words--'upon', which means directly touch, and
14 'over', which is somewhere above but not necessarily touching
15 the underlying layer.

16 THE COURT: Yeah. I'm still skeptical that 'upon'
17 has to mean actually touching.

18 MR. PAK: Yes, Your Honor.

19 THE COURT: To me that's a limitation of the use of
09:26:59 20 the word that, yes, it would include something that may be
21 touching, but it doesn't necessarily have to be touching.

22 MR. PAK: Yes.

23 THE COURT: And that's not consistent with what
24 you're proposing, so I want you to convince me that --

25 MR. PAK: Yes, Your Honor. Let me try to do that.

1 THE COURT: -- I should change my thought here.

2 MR. PAK: Yes, Your Honor.

3 So let me start with the intrinsic record that Your Honor
4 asked about. This is what happened during prosecution.

5 So what we see here is the -- there was an office action
09:27:27 6 where the patent examiner rejected the claims that talked
7 about putting this planarization layer upon the OLED devices,
8 and the language at that time was 'upon'. And you can see in
9 figure 1B to the left, what's highlighted in green is the
10 planarization layer, the photo resist layer in the prior art
11 *Fujii* reference. What is the device is the electrode 9 that's
09:27:55 12 yellow, as well as what are these labeled as R, G, B, or
13 florescent paste. So together the electrode with these R, G,
14 B florescent pastes make up an OLED device. And that patentee
15 acknowledge that those were the devices.

16 Next to each of these devices you will see highlighted in
17 red what are called barriers or barrier ribs. These are the
18 No. 2. So you can see that 4, the planarization layer, as
09:28:26 19 depicted in figure 1B is touching both the barrier ribs as
20 well as the R, G, B fluorescent ribs, the materials. But in
21 the patent -- in the *Fujii* patent it describes the fluorescent
22 paste as something that is heated and will be shrunken in
23 volume. And so as that shrinks in volume, you end up with the
24 structure shown in the bottom where the R, G, B fluorescent
09:28:56 25 paste is no longer touching the planarization layer 4, and it

1 is the barrier ribs that are actually supporting and directly
2 touching the planarization layer.

3 And this is the reason why in the response to the office
4 action the patentee made the following statements. In *Fujii*
5 the photo resist is deposited on barrier ribs No. 2. Barrier
6 ribs are not devices. The electrode 9 and fluorescent
7 substance 3 together may comprise a device. However, the
09:29:25 8 barrier ribs are not devices. Since the photo resist 4 is
9 deposited on the barrier ribs 2, *Fujii* does not disclose,
10 quote, "depositing at least one planarization layer upon said
11 devices."

12 So that's very clear what they did. They said 'upon' has
13 meaning; 'upon' is directly touching; what is directly
14 touching the planarization layer No. 4 are these ribs -- these
15 barrier ribs, not the devices after the shrinkage.

09:29:57 16 THE COURT: I'm not sure that's not more informative
17 of what 'depositing' means than it is what 'upon' means.

18 MR. PAK: The language, Your Honor, says "depositing
19 at least one planarization layer upon said devices." If you
20 were to take the Plaintiffs' construction of 'upon' as just
21 simply being over the top of the device, then there is no way
22 that they could have used this argument to get around the
23 prior art because you can see that planarization layer 4 is
09:30:28 24 residing over or deposited over both the barrier ribs as well
25 as what's acknowledged as being the OLED devices.

1 The only way this argument makes sense, as they said
2 here, is that the barrier ribs are not devices; it is the
3 barrier ribs that are touching or supporting the photo resist
4 layer 4, which is identified as the planarization layer.

5 So in the intrinsic record, every time you see the word
6 'upon', it's talking about directly touching, and then they
09:30:57 7 use the word 'upon' in the context of this intrinsic record to
8 distinguish prior art where the photo resist or the
9 planarization layer was deposited upon the barrier ribs but
10 not directly touching the underlying device. And that's why,
11 Your Honor, we believe that the intrinsic record supports --
12 I know Your Honor believes that 'upon' could have other
13 meaning, but in the context of this claim language, in this
14 particular deposition step, this is the only basis for which
09:31:26 15 they were able to distinguish the prior art. And if you were
16 to adopt the Plaintiffs' construction at this point where
17 'upon' is the same as 'over', then there's no way to
18 distinguish *Fujii*, and it would be inconsistent with the
19 intrinsic record arguments.

20 And Your Honor, just to -- if we go to slide 13 as well,
21 Your Honor.

09:31:55 22 So, again, if you look at the claim language, you have
23 two different steps--"selectively depositing at least one
24 planarization layer upon said devices"--that's where the word
25 'upon' shows up--and then there's another selecting --

1 selectively depositing step where you put the barrier layer
2 over the said planarization layer, and that does not use the
3 word 'upon'. So both the patentee's disparate usage of the
4 word 'upon' versus 'over', and then their reliance upon the
09:32:27 5 'upon' language during prosecution to obtain allowance, Your
6 Honor, supports our position here that 'upon' should be given
7 the meaning that is different than 'over'.

8 And I think Your Honor acknowledged some of the issues
9 with this idea of 'indirectly' as proposed by the Plaintiff,
10 that if you allow 'upon' to just simply mean 'over', number
11 one, it's very difficult to figure out where in the stack
12 would you be looking at, and it runs right into the prior art
13 that we just talked about; but also it would be inconsistent
09:33:00 14 with the patentee's usage of two different terms to talk about
15 two distinct steps of the selected deposition process.

16 THE COURT: Plaintiffs' counsel told me just a few
17 minutes ago that they had decided to agree to your modified
18 proposed construction of 'planarization layer', and he seemed
19 to imply that that should somehow modify your -- mitigate your
09:33:27 20 concerns about how to construe 'upon said devices'. Do you
21 see any mitigation regarding your concerns about 'upon' that
22 would be brought to bear by Plaintiff agreeing to your
23 modified construction on 'planarization layer'?

24 MR. PAK: No, Your Honor, because what we're
25 talking -- what he was talking about is the entire stack, the

09:33:57 1 PML layer stack, but as you can see in the claim language, it
2 treats one of those layers, the planarization layer,
3 differently than the barrier layer. The planarization layer,
4 according to the claims, is deposited upon the OLED device,
5 whereas the barrier layers are placed somewhere above or over
6 the planarization layers.

7 So we're really talking about the internal layering of
8 the cake, if you will; not where the cake sits. And that's
9 very important for the reasons we talked about--that you
10 really want this encapsulation technique to work, which means
09:34:27 11 that you want the planarization layer directly upon the OLED
12 device to smooth out the contour --

13 THE COURT: Yeah. I understand the function --

14 MR. PAK: Yeah. Yes, sir.

15 THE COURT: -- of planarization layer.

16 MR. PAK: Thank you, Your Honor.

17 THE COURT: And we will get into that -- even though
18 there seems to be some agreement, we'll get into that when we
19 touch the next term.

20 MR. PAK: One last point, Your Honor. Counsel
21 showed you some testimony from the expert about having the
22 possibility of multiple planarization layers as part of this
23 stack, and I want to point out in figure 6C what our expert
09:34:58 24 was talking about, which is clearly depicted in the figures of
25 the patents, is that in the embodiments of the patents it's

1 desirable to actually have multiple planarization layers
2 side-by-side encapsulating each of the OLED devices.

3 So here in figure 6E you see that you have the OLED
4 device green to the left, but you have two more, and then what
5 you want to do is create planarization layers, each of which
6 is encompassing or encapsulating each of these OLED devices.

09:35:28 7 So the fact you have a possibility of a plurality of
8 planarization layers does not negate the use of the word
9 'upon', because, as shown in this embodiment, each time you
10 put the planarization layer down, you're putting it directly
11 upon or directly touching the OLED device. That's the benefit
12 of the invention. So we think that argument misses the point
13 in terms of treating 'upon' differently, Your Honor, than the
14 word 'over'. And that's really our position.

09:35:54 15 And I haven't heard yet any convincing way to distinguish
16 the prior art other than 'upon' having a meaning that is
17 directly touching. That's the *Fujii* reference, Your Honor.
18 And I do think this was directly about the language, as you
19 see here, *Fujii* does not disclose depositing at least one
20 planarization layer upon said devices. So that was the
21 argument that was made to distinguish *Fujii*.

22 THE COURT: I understand that and --

23 MR. PAK: Yes.

09:36:26 24 THE COURT: -- I will tell you I think that that
25 prior argument regarding the prior art is informative. I have

1 my doubts about whether it rises all the way to disclaimer.

2 MR. PAK: Yes, Your Honor.

3 And we -- we're not necessarily arguing for disclaimer,
4 Your Honor; what we're saying is that the word 'over' and the
5 word 'upon' has been treated differently in the intrinsic
6 record. And as Your Honor can understand, 'upon' could have
7 the meaning of requiring directly touching, and in this
8 context we believe that the intrinsic record supports that, we
09:36:56 9 think the prosecution history informs us under *Phillips*, and
10 even if it were not a disclaimer, that it's consistent with
11 the rest of the usage of the word.

12 THE COURT: All right. Thank you, Mr. Pak.

13 MR. PAK: Thank you, Your Honor.

14 THE COURT: Follow-up, Mr. Sheasby?

15 MR. SHEASBY: Yes; just a couple of issues.

16 If I could have the elmo, Madam Courtroom Deputy.

17 So first I'll point out, in the prosecution history this
18 figure that they drew in the bottom doesn't exist. They
09:37:27 19 modified it. But if that's actually what was being talked
20 about as a planarization layer upon the devices, it's actually
21 not directly upon because there's gaps between each of the
22 devices. So even if that theoretical made-up figure was what
23 was being discussed, it still wouldn't support their narrow
24 construction of 'upon'. That's my first point.

25 The second point is --

1 If I could have the slides now, back to the slides. If I
2 could go to slide 6.

09:38:02 3 Counsel said something very important, which is I do
4 think the planarization layer 'upon'--this is talking about
5 the planarization layer--constrains the meaning. The patent
6 contemplates that there will be multiple planarization layers
7 to stop the defects from running through, and so it's because
8 the 'upon' is constrained to layers that are planarization
9 layers, that it is not -- you're talking about five feet
09:38:30 10 above. Five feet above, that layer would not perform a
11 planarization function, and, therefore, would not be able to
12 satisfy the claim language.

13 You asked me for a better construction because of your
14 concerns regarding 'indirect', and I think I found it, which
15 is when I look at the patent specification, it describes "thin
16 film encapsulation is typically described as polymer
09:38:57 17 multi-layer comprising alternate and repeating layers of an
18 organic, usually an acrylate or the like, and a barrier
19 layer." And so that's -- and just for the record, that's at
20 column 1, lines 19 through 23. What that leads me to
21 conclude, and I think it is fair, is --

22 If we go back to slide 4. Slide 4.

09:39:33 23 If "the planarization layer upon said devices," 'upon' I
24 think can properly mean that it is within the stack of the
25 polymer multi-layer -- polymer multi-layer structure. That

1 would constrain it because it would have to be within the
2 polymer multi-layer structure and also constrain it because it
3 would have to be a planarization layer.

09:39:58 4 I will just point out two more things, which is the idea
5 that there's any meaningful distinction between 'over' and
6 'upon' in the patent.

7 If you go to slide 17.

8 If you look at this, they describe 308 as being over the
9 OLED devices. And you see that it's correctly in contact with
10 the OLED devices because the blue is part of the OLED device
11 and that it also describes it as upon.

12 And if you go to slide 18.

13 I actually think the distinction between 'over' and
09:40:29 14 'upon' is 'over' is talking about the horizontal spread and
15 that it's spreading over the entire area, and that's why they
16 use the word 'over'. You can see that in column 2, lines 5
17 through 8; column 2, lines 21 through 23; column 3, line 65
18 through 67; and column 4, lines 19 through 21.

19 And so I would suggest that there is a distinction
20 between 'over' and 'upon'. It's not direct or indirect; it's
09:40:56 21 about the horizontal spread of the material.

22 And going back to slide 6.

23 This is the most important thing. Counsel came up and
24 said the purpose of planarization layers is to stop defects.
25 Well, in this patent planarization layers, other than those

1 that are directly upon the device, stop defects, and so
2 anything in the PML stack that serves the function of a
09:41:26 3 planarization layer should properly be considered upon that
4 structure.

5 THE COURT: I mean, but this is prior art; this is
6 not the patented functionality.

7 MR. SHEASBY: No, it is. It is. It's taking this
8 and adding additional encapsulation around it. This is just
9 the first starting point of the limitation.

10 THE COURT: All right. I see your point.

11 MR. SHEASBY: Yeah.

12 THE COURT: Anything else?

13 MR. SHEASBY: It's an improvement patent.

14 THE COURT: Mr. Pak, you seem anxious to add
15 something.

16 MR. PAK: Yes, Your Honor.

09:41:59 17 THE COURT: Please do.

18 MR. PAK: So I think counsel just made my point,
19 Your Honor. If we turn to slide 21 of my presentation, that's
20 exactly my point, Your Honor. If 'upon' means directly
21 touching, when the R, G, B fluorescent pastes are shrunk
22 because they're subject to the heat treatment, they're not
23 directly touching, and, therefore, the planarization layer
09:42:27 24 No. 4 is not upon the devices, which is precisely what the
25 patentee argued.

1 And as to whether this concept of the fluorescent paste
2 being subject to heat, you see that on slide 20. This is
3 directly from the *Fujii* reference itself, so this is not some
4 type of hypothetical expert analysis.

5 If we turn to slide 20.

6 THE COURT: Go back one, if you will.

7 MR. PAK: Yes; sorry.

8 THE COURT: Opposing counsel called this modified 1B
9 a made up slide.

10 MR. PAK: Yes.

11 THE COURT: Is it made up?

12 MR. PAK: It is made up in the sense that it
09:42:59 13 illustrates the point that I'm about to point out from *Fujii*.
14 It doesn't show in figure 1B the separation between the R, G,
15 and B, between that and the planarization layer, but it is
16 what is being argued on the right-hand side when the patentee
17 argued that the photo resist 4 is deposited on the barrier
18 ribs 2 and that the barrier ribs 2 are not the devices because
09:43:27 19 the devices are the R, G, B fluorescent pastes. The only way
20 that makes sense is to take into account what happens to the
21 R, G, B pastes when they're subject to heat. And that's on
22 slide 20, Your Honor.

23 And there's no dispute here -- we put in an expert
24 declaration. They did not. There's no dispute that *Fujii*
25 teaches at column 4, line 26 through 35, that the fluorescent

09:43:59 1 pastes are dried so as to remove a solvent contained in an
2 organic binder thereof.

3 So this was part of the intrinsic record that was before
4 the Patent Office. This is what the applicant used to argue
5 that because there is shrinkage to remove the solvent, R, G, B
6 would no longer be directly touching the photo resist or the
7 planarization layer. And then they pointed to these barrier
8 ribs as the things that are directly touching, and that's why
9 they made the argument that they made, Your Honor.

10 So we think that this is fully consistent, and I think
11 counsel made my point.

09:44:29 12 On this PML layer stack, we begin and end with the claim
13 language, Your Honor. The claims only talk about at least one
14 planarization layer in claim 34. So you can have infringement
15 of claim 1 with just one barrier layer and one photo resist
16 layer. So however we construe the word 'upon', it has to give
17 meaning within the context of that claim scope, which doesn't
18 include any subsequent layers of photo resist and barriers.
19 You could do that, but that's optional.

09:44:57 20 So to try to solve this indefiniteness problem that
21 they're introducing by putting in some type of PML layer
22 structure would be inconsistent, Your Honor, with the claim
23 language, which only requires you to do two things--selectively
24 deposit a planarization layer upon OLED devices, which is
25 directly touching those devices, and then you selectively

1 deposit at least one barrier layer over the planarization
2 layer where you could have some separation of intervening
3 layers.

09:45:27 4 So we think, Your Honor, that that's the right starting
5 point. We start with the claim language, one layer at a time,
6 and that's all that's required. And again, I don't see how
7 Plaintiffs' construction of 'upon' as 'indirectly over' could
8 ever be reconciled with the intrinsic record regarding *Fujii*.

9 Thank you, Your Honor.

10 THE COURT: Let's do this, counsel. Let's move on
11 to --

12 MR. PAK: Yes.

13 THE COURT: -- 'planarization layer'--

14 MR. PAK: Okay.

15 THE COURT: -- And even though there's been an
16 announcement of some agreement here, I want to be clear on
09:45:57 17 what the agreement is. And I also think that a discussion of
18 'planarization layer' may help the Court with regard to this
19 'upon' issue that we've just argued.

20 This is your proposed modified construction as of last
21 night, Mr. Pak. Why don't you tell me exactly what that is,
22 and I'll get Mr. Sheasby to confirm that that's what they're
23 agreeing to.

24 MR. PAK: Thank you, Your Honor.

09:46:27 25 So if we turn to slide 28, this is what we propose as

1 modified where I believe we have agreement now.

2 "'Planarization layer' means a layer of material that
3 planarizes such that the propagation of defects from one layer
4 to another layer is interrupted and the topography of the
5 underlying layer is not reproduced." That language, Your
6 Honor, comes from the actual intrinsic record, which I can
7 walk you through, but basically the idea here is that this
09:46:58 8 planarization layer has two functions. One is that --

9 THE COURT: So you'll still keeping the phrase about
10 the topography is not reproduced?

11 MR. PAK: Yes, Your Honor.

12 THE COURT: That wasn't dropped in the modification?

13 MR. PAK: I do not believe it was.

14 THE COURT: Okay.

15 MR. PAK: So the planarization layer, Your Honor,
16 performs two functions. One is, to the extent that you have a
17 defect in the underlying layer, for example, there might be a
18 dust particle in the OLED device, that dust particle does not
19 get propagated up towards the upper layers. And then also you
09:47:30 20 are not reproducing the underlying topography, which is
21 another way of saying you're smoothing out the contours of the
22 underlying device structure.

23 So that language comes, Your Honor, from -- if you turn
24 to slide 29. This is from the '389 Patent, line -- column 4,
25 lines 33 to 41. "The planar structure on which to deposit a

09:47:59 1 barrier layer and to substantially cover the point defects,
2 e.g., dirt particles," and then it goes on to say that you
3 want to "deposit this material in sufficient quantity such
4 that any such layer is no longer conformal to the point
5 defect." So it's basically this idea that you are masking or
6 not reproducing the topography of the underlying layer.

7 So that's the primary basis, Your Honor. And we have
8 other intrinsic support for that, but that's the idea here
09:48:30 9 that the planarization layer --

10 THE COURT: Let me ask some questions.

11 MR. PAK: Yes.

12 THE COURT: I understand the concept that if the
13 substrate, the base layer, has irregularities in it or upon
14 it, that the planarization layer is added to, if not prevent,
09:48:55 15 at least minimize the effect of those irregularities. Here's
16 -- and this may in the real world not ever happen. I don't
17 know. But let's say the substrate base area doesn't have any
18 irregularities, then is what above it no longer a
19 planarization layer because it doesn't interrupt defects? I
09:49:23 20 mean, the way you've got this defined, it only results in
21 there being a planarization area if there are defects.

22 MR. PAK: I see, Your Honor.

23 THE COURT: I assume there's at least a possibility
24 there could be no defects.

25 The other problem I have or question I have is if there

09:49:57 1 are defects, then those defects are -- on this -- per this
2 construction, they are interrupted and not reproduced. That
3 seems to say to me that they are completely mitigated; that
4 they are completely overcome. And I can see in the real world
5 the possibility that there are defects on the base that if you
6 measured them on some kind of a scale measured a 10, and then
7 after you put the planarization area on there was still the
8 effect of maybe a 1 or a 2, and they have been substantially
9 reduced but not completely obliterated. This seems to say "is
09:50:29 10 interrupted and is not reproduced," it's almost absolute as if
11 there's a complete negation of defects. Those are my concerns
12 with the construction that you've got.

13 MR. PAK: Thank you, Your Honor. So let me see if I
14 can address Your Honor construction concerns.

15 First is, I think we can modify 'is interrupted'. That
16 language does appear in the prosecution history. That's where
17 we got that. But I take your point, Your Honor, that there
18 could be ideal situations where you don't have an underlying
19 defect and the planarization layer still acts as a
09:51:00 20 planarization layer. So I believe that we can modify that to
21 be 'can be interrupted'.

22 The second point, Your Honor, is about a different issue.
23 So there are these defects, for example, the dust particles
24 and so on that might exist on the OLED device, but the other
25 really important aspect of the planarization layer is that --

1 if you remember, Your Honor, the OLED device is a structure
2 that protrudes from the surface of the substrate.

3 THE COURT: Right.

09:51:27 4 MR. PAK: So if I'm putting down a thin barrier
5 layer like an a aluminum foil to try to cover that, what it
6 does is it creates creases around that and that can cause
7 breakage in that foil. So what you want to do is actually
8 -- this second piece is about smoothing out the contour of
9 that underlying topography over the OLED device. Regardless
10 of whether there's a defect or not, you want a smooth, flatter
11 surface. And so there I think we can maintain this idea that
12 it's -- it is not reproduced.

09:51:57 13 So turning to slide 15, this is figure 3 from the patent.
14 You can see the green is the OLED device. Even without the
15 defects or dust particles, you can see that if you try to put
16 a thin metal barrier layer that follows this contour, it will
17 create these sharp edges in the barrier layer which could lead
18 to defects or cracks in that barrier layer. So --

09:52:27 19 THE COURT: But that's not the topography of the
20 base 300; that's the topography of the organic -- of the
21 organic layer --

22 MR. PAK: That's right, Your Honor.

23 THE COURT: -- you are putting on. So the foil
24 creates the creases. It's not what the foil sits upon --

25 MR. PAK: Actually it's the -- when you put down the

1 foil and you're putting the foil down, let's say -- imagine
2 you put a foil down over a box that's sitting on a flat
3 table --

4 THE COURT: Right.

5 MR. PAK: So the --

6 THE COURT: But that's the contour of the OLED --

7 MR. PAK: OLED device.

8 THE COURT: -- that's not the contour of the base
9 underneath --

10 MR. PAK: Correct, Your Honor.

11 THE COURT: -- the OLED.

12 MR. PAK: Correct, Your Honor.

13 So as far as the -- this language is concerned, when it
09:52:58 14 talks about the topography of the underlying layer it would
15 include the combination of this flat table or 300 substrate
16 combined with the protruding OLED devices, because that's the
17 layer that you are now trying to shield using the
18 planarization layer and then the barrier layer.

19 So this language, which again comes from the intrinsic
20 record, is talking about not reproducing the underlying
21 topography, which in the case of the planarization layer would
09:53:26 22 be the combination of substrate 300 plus the OLED device 302.

23 THE COURT: See, that's a different understanding of
24 'underlying layer' to me. To me 'underlying layer' was the
25 300, not the 300 and the 304.

1 MR. PAK: What if we said -- again, that language
2 comes from the intrinsic record, but --

3 THE COURT: And the purpose here is --

4 MR. PAK: Yes.

5 THE COURT: -- if the purpose here is to -- let's go
6 back to the picture.

7 MR. PAK: Yes.

09:53:57 8 THE COURT: The purpose here is to mitigate the
9 irregularities in the substrate 300, not irregularities that
10 are created by the application of the 304.

11 MR. PAK: It's both, Your Honor. So to the extent
12 that you have irregularities either in the 300 or through the
13 OLED device structure and maybe there is dust particles that
14 were created, you want to shield that from being propagated
15 up. But the other important function of the planarization
16 layer is before you put down the thin barrier layer, which is
09:54:28 17 usually metallic, you want to have a relatively flat or a
18 smooth surface to do that. So this is -- you can imagine this
19 almost like a foam-like material. That's why it's called
20 organic.

21 THE COURT: Yeah. And I'm not trying to say that my
22 engineering knowledge is better; I'm trying to say --

23 MR. PAK: Yes.

24 THE COURT: -- does this language fairly encapsulate
25 the engineering concepts that you're telling me about.

1 MR. PAK: Yes. And we took the language from the
2 intrinsic record, but I think we can make some modifications,
09:54:56 3 Your Honor, to try to better reflect the engineering
4 principles.

5 So one modification I would suggest is defects from one
6 layer to another layer can be interrupted and the topography
7 of the underlying layer and/or structures is not reproduced,
8 because that's really what we're trying to achieve with the --

9 THE COURT: Okay. Let me ask this question.

10 MR. PAK: Yes.

11 THE COURT: I mentioned in an earlier discussion
12 that -- the irregularities of the underlying layer, and we
09:55:29 13 won't necessarily say that's just 300 or --

14 MR. PAK: Right.

15 THE COURT: -- it's what's above 300. But those
16 irregularities might be valued on some system at a 10 and then
17 after the application of the planarization layer, the effect
18 of that mitigates those down from a 10 to a 2, but there's
19 still some level of irregularity, being the 2 in that example.

09:55:56 20 Does the language "the topography of the underlying layer
21 is not reproduced," does that mean completely mitigated, or
22 does that mean -- would that encompass in your mind a 10 to a
23 2, because 10 is the underlying level of irregularity and now
24 the improved but still not perfect layer with the
25 planarization application is a 2 instead of a 10 in that

09:56:27 1 example? Does that cause -- is there some concern that 'is
2 not reproduced' means a complete cancellation of any and all
3 irregularities from the underlying layer? That's a question
4 I'd like your thoughts on.

5 MR. PAK: Yes, Your Honor. I see these two
6 functions as being related but distinct.

7 THE COURT: Okay.

8 MR. PAK: So the first is about the defects. And so
9 Your Honor's questions about whether it's mitigation from 10
10 to 2 or 10 to 3, that's about whether you have propagation of
09:56:57 11 defects from one layer to another and whether that can be
12 interrupted in some way.

13 The second function is about smoothing out the underlying
14 contour of what's there. And that -- even in situations where
15 you have no defects, you could have OLED devices that protrude
16 from the surface, and when you try to put a barrier layer on
17 top of that OLED structure now you're folding -- you're
18 creating folds and creases in that barrier layer.

19 So the second function is about smoothing out the surface
09:57:28 20 before you put down the barrier layer. So there I do think
21 it's appropriate to maintain 'is not reproduced' because the
22 whole point of the planarization layer from that standpoint is
23 to flatten out the surface contour.

24 THE COURT: Is that really necessary? Because if
25 the defects are interrupted, then almost by definition the

1 topography under the -- of the underlying area is not able to
2 be reproduced.

09:57:59 3 MR. PAK: Yes. We do believe from an engineering
4 standpoint it is important. Because if you remember, the
5 barrier layer is actually protecting the underlying OLED
6 device from moisture and air, so even if there are no defects
7 underneath that layer, if there are cracks that form or
8 creases that form that over time causes air or moisture to
9 seep into the OLED device, you have an issue. And that's the
10 reason why this technique that the patentee was trying to
11 improve upon requires a planarization layer that smoothes out
12 the surface before you put down the barrier layer so that the
09:58:30 13 bar layer can be thin but it's being put down in a flat
14 fashion so it doesn't have creases and cracks because it
15 doesn't have to follow the contour of the OLED device
16 underneath it.

17 THE COURT: And I understand that.

18 MR. PAK: Yes.

19 THE COURT: I understand that the barrier layer sits
20 on top of the planarization layer.

21 MR. PAK: Yes.

22 THE COURT: And if the planarization layer is flat
23 and regular, then the barrier layer gives adequate protection
09:59:00 24 to what's below it. I understand that. I'm just -- I'm not
25 sure that 'the topography of the underlying area is not

09:59:26 1 reproduced' is actually necessary if you say that the defects
2 are interrupted. And I don't know how -- if you do say 'the
3 topography of the underlying layer is not reproduced', how
4 that necessarily protects you from what may come in from
5 above, vis-a-vis a crease or crack or anything else.

09:59:56 6 MR. PAK: So when you don't reproduce the topography
7 of the underlying layer, for example, here we see a much
8 flatter smoother contour with the planarization layer, so when
9 you put the metal layer on top of that, it doesn't have the
10 sharp creases and cracks, so it's much less likely that the
11 barrier layer itself will have defects and cause air or
12 moisture to seep through.

10:00:33 13 So to us, Your Honor, these -- both of these functions
14 were highlighted during prosecution to distinguish over just
15 putting barrier layers on top of each other, for example, and
16 that's because these two functions--shielding defects from
17 traveling upwards and then providing a substantially smoother
18 surface--are both important aspects of the planarization
19 layer, and that's the reason why we proposed the language,
20 Your Honor.

21 And just to be -- and counsel --

22 THE COURT: Is there a clear record in the
23 specification talking about not producing the underlying --

24 MR. PAK: Yes, Your Honor.

25 THE COURT: -- topography? I mean, there is clear

1 language I'm aware of talking about preventing or interrupting
2 the defects.

3 MR. PAK: Yes. So if we turn to slide 31, Your
4 Honor. So this was in the intrinsic record in the form of the
10:00:59 5 prosecution history amendment.

6 THE COURT: But I'm talking about the specification.

7 MR. PAK: The specification itself? Other than the
8 pictures that we have and it talks about the --

9 THE COURT: There's no verbiage in the
10 specification.

11 MR. PAK: There's no verbiage -- the verbiage comes
12 from here where it says, "Metals and copper in particular that
13 are evaporated onto a layer do not cover up the imperfections
14 of the underlying layer but, rather, the metals reproduce the
15 topography of the underlying layer." So --

16 THE COURT: I'm familiar with that from the
17 prosecution history. I was referencing the --

18 MR. PAK: Yes. We don't --

19 THE COURT: -- language --

10:01:29 20 MR. PAK: We don't have great language from the
21 patent specification, unfortunately.

22 THE COURT: And I'm happy to go back and forth with
23 you, Mr. Pak --

24 MR. PAK: Yeah.

25 THE COURT: -- you and I are going to need to talk

1 one at a time --

2 MR. PAK: Of course.

3 THE COURT: -- or I'm going to have a confused
4 record and I don't want that.

5 Mr. Sheasby, do you want TO weigh in on this
6 'planarization layer'? I'm sure you didn't sit there and
7 listen to our lengthy discussion and have no reaction at all.

8 MR. SHEASBY: No, Your Honor. I'm happy to do so.

10:01:58 9 So first let me start backwards.

10 If I could have slide 21.

11 So the purpose of a planarization layer, as their expert
12 admits, is to make a surface planar or flatter. It's not
13 absolute and a hundred percent, and so there's just no
14 perfection possible because the -- if you just go down to a
15 smaller level of magnification on an SEM or TEM analysis, you
10:02:29 16 will see some defects, you will see some topography influence,
17 you will see some -- it's actually why they stack multiple
18 planarization layers--to get it as close as possible to a
19 completely smooth.

20 And so we did not read their proposed construction as
21 requiring either the absolute non-reproduction or the absolute
22 interruption of defects --

23 THE COURT: Okay.

24 MR. SHEASBY: -- and that's why we're going to agree
10:02:57 25 to it. That was our purpose for it. But I did --

1 THE COURT: Maybe I'm reading in concerns that
2 neither of the parties have.

3 MR. SHEASBY: I don't think so, just because from a
4 -- I don't think -- that's not going to be a nub of a dispute
5 as to whether their planarization layers are performing that
6 function. So that's I think why both parties didn't raise a
7 concern about that. In chemistry there's -- in -- there's
8 just no such thing as absolute. It's just impossible.

9 But I do think that this discussion of what a
10 planarization layer does informs the previous term. And I --
11 with your permission, I'd like you to make the connection that
12 I said I thought existed.

13 THE COURT: Okay.

14 MR. SHEASBY: Okay. So if you look at this figure,
15 this figure creates this waviness, and they talked about that
16 waviness being something that is potential to crack and a
17 potential to itself need to be planarized and made flat to
18 protect it, but that's only the first layer of the cake in
19 this patent. If you go now back to my slides, and if you go
20 to slide 6, what the patent talks about --

21 And actually before I go to slide 6, I'm going to go one
22 other place, which is to slide 4.

23 The patent talks about at least one planarization layer
24 upon the device. And so the single device, single device
25 could have multiple planarization layers upon it. That makes

1 it impossible for 'upon' to be 'directly upon', because if
2 'upon' meant 'directly contacting', there could be only one
10:04:58 3 planarization layer. But it's at least one, which means there
4 can be more than one. Now, why was that language used? That
5 language was used for a very particular reason, and it was
6 used for column --

7 If we can go to slide 6.

8 It was used because the PML structure is not just one
9 planarization layer. Here is the device, and then we put
10 down -- you see 108 and you see -- you see 108, you see 110,
10:05:27 11 and 112b. That 108 layer, if you go to column 1, lines 37 to
12 46--and I'll put that up on the elmo, Your Honor--is another
13 thing that is encompassed by the PML structure. It's called a
14 barrier layer. And the barrier layer "comprises a sputtered
15 metal oxide or dielectric layer. The barrier layer provides a
10:05:58 16 necessary and environmental isolation from the corrosive
17 effects of oxygen and moisture." And so that sputtered layer
18 itself has defects potentially; has a topography associated
19 with it.

20 And so, in addition to having that -- after you put down
21 that barrier layer, which there's no dispute --

22 If we go back to the slides now, slide 6.

23 If we go back to this, the reason why all these
10:06:30 24 planarization layers exist, at least one on the device but
25 more than one, and the reason why our construction actually is

1 constrained -- our construction of 'upon' is constrained is
2 because the layer has to be able to perform a function of
3 reducing a defect or topography from what is below it. And
4 the barrier layers perpetuate that topography problem, that
10:06:59 5 potential for a defect. And so that's why the patent
6 contemplates more than one layer upon the device.

7 Going to slide --

8 THE COURT: More than one layer of what?

9 MR. SHEASBY: One planarization layer of the device.

10 Going to slide 4.

11 That's why it's at least one but it can be more than one
12 upon the said devices.

13 THE COURT: Can be one, can be more than one --

14 MR. SHEASBY: More than one; a one-layer cake --

15 THE COURT: It can be both ways --

16 MR. SHEASBY: -- a three-layer cake.

10:07:30 17 THE COURT: Same rule with Mr. Pak --

18 MR. SHEASBY: Yes.

19 THE COURT: We're going to have to talk one at a
20 time. Can be one layer; can be more than one layer.

21 MR. SHEASBY: Three-layer cake.

22 And I want to explain to you it's not some arbitrary
23 structure in the polymer -- what is described as the thin film
24 polymerization multi-layer structure that we're improving
25 upon; its's contemplating that with multiple planarization

1 layers to handle the defects caused by the barrier layers
2 below it.

10:07:56

3 THE COURT: All right.

4 All right, counsel. Let's move on. Next up I have
5 'selectively depositing'. Plaintiff is proposing plain and
6 ordinary meaning, which it then goes on to define or describe,
7 and Defendants have their own proposed definition.

8 Let me hear from Plaintiff first.

10:08:30

9 MR. SHEASBY: Slide 28, Dr. Zhong.

10 THE COURT: Let me ask you this to begin with,
11 Mr. Sheasby. Why is Defendants' construction, which includes
12 'such that no additional processing must be performed for
13 removing unwanted material', why is that anything other than
14 importing a limitation?

10:08:59

15 MR. SHEASBY: It's nothing other than importing a
16 limitation. It's also physically impossible.

17 If we can go to slide 30. Go to slide 30.

18 The patent actually contemplates that additional steps
19 will be removed after selective deposition, including
20 organic --

21 THE COURT: If that phrase were removed from
22 Defendants' proposed construction, would you have any problem
23 with it? Which would leave you with 'depositing material in
24 only desired areas'.

10:09:29

25 MR. SHEASBY: It actually has the same problem

1 because it doesn't -- the problem is you don't -- you're never
2 perfect; you can never deposit only in desired areas; you're
3 always going to have some leakage or always need some
4 clean-up. That's the problem, Your Honor. And that's -- you
5 can see that in figure 4A and 4B, column 6, line 6 through 17.
6 You can also see that in the mask we use. So we --

7 THE COURT: So you have a problem with the 'such
8 that' clause and you have a problem with 'only'.
10:09:59

9 MR. SHEASBY: Yes.

10 THE COURT: Okay.

11 MR. SHEASBY: Desired -- 'depositing materials in
12 desired areas' we don't have a problem with, but it's the
13 'only' that creates it, because it's inconsistent with the
14 specification that I just showed you. It's also inconsistent
15 with the masking system that we use.

16 So we propose using a shadow mask structure. This is on
10:10:29 17 slide 35 at column 6, line 66, through 7, line 3. And in the
18 record shadow masks of necessity--this is at Exhibit 41 at 5
19 to our briefing--there's always going to be bleeding. And so,
20 once again, this is -- the construction yields something that
21 is just impossible. You're never not going to have bleeding,
22 you're never not going to have to remove unwanted device -- a
10:10:56 23 structure, which is exactly what we contemplate doing in the
24 specification, which is removing unwanted material after you
25 deposited it. That's the problem that we have.

1 THE COURT: All right. Let me hear from Samsung in
2 response, please.

3 MR. PAK: Thank you, Your Honor.

4 So turning to my presentation, slide 34, I think, again,
5 we begin with the claim language.

10:11:28 6 THE COURT: Where is the justification for 'only' in
7 your construction?

8 MR. PAK: Yes, Your Honor, so --

9 THE COURT: There's no perfection this side of
10 heaven, unless you're talking about my grandchildren.

11 MR. PAK: It comes from the -- so it comes from the
12 patent itself, Your Honor, talking about the particular
13 embodiments where selective deposition occurs.

14 So if you turn to -- so, first of all, on this slide you
15 can see that slide 20 -- claim 25 uses the word 'depositing'
16 and then adds the step of removing. It does not use the word
10:11:59 17 'selectively depositing'. 'Selective depositing' is used in
18 claim 34.

19 And to answer Your Honor's question, if you'll turn to
20 slide 36. So here it specifically talks about this prior art
21 PML technique where it says, "at a minimum, additional
22 processing must be performed for the removal of the PML
23 structure over these areas." So this is one of the key
24 drawbacks that the claimed invention was seeking to improve
10:12:29 25 upon with PML techniques; that prior techniques were known for

1 PML, but PML techniques known at the time, one of the
2 drawbacks was that you would have to go back and remove
3 unwanted areas where you had materials being deposited.

4 And then on slide 37, column 7, line 1 through 16,
5 "selected encapsulation--which is selected deposition that we
6 are talking about--"has the advantage of being self-aligned
7 and requires only one processing step."

10:13:00 8 So Your Honor, in the patent specification it
9 specifically teaches that it was known at that time to do a
10 selective encapsulation or selective deposition step that was
11 self-aligned and it was one step. There was no need to go be
12 back and remove anything that's unnecessary.

13 So Your Honor, I think both of these concepts are
14 related. If Your Honor doesn't want to include the language
15 about not having additional processing, we think that's part
10:13:29 16 of what is actually being captured here with the word
17 'selective', in that 'selective' you are putting it down in
18 only the desired areas and, therefore, there's no need to go
19 back and remove materials that were deposited in other areas;
20 otherwise, we wouldn't have any meaning to the word
21 'selective'.

22 We have other claims that just talk about depositing
23 materials and then going back and removing them. This
24 particular set of claims that they chose to assert has
25 selective deposition. 'Selectively' is an adverb. So what

10:13:59 1 does it mean to selectively deposit? Selectively deposit
2 means that you're only putting it down in the areas where you
3 want it and then there's no need for you to go back and do
4 additional processing to remove materials.

5 THE COURT: I understand --

6 MR. PAK: Yes.

7 THE COURT: -- but again, you can't put it down in a
8 desired area and have every atom stay within the parameters of
10:14:28 9 that desired area. There is no perfection.

10 MR. PAK: Sure.

11 THE COURT: Now, even if it doesn't require
12 subsequent removal --

13 MR. PAK: Sure.

14 THE COURT: -- it's the 'only desired areas', the
15 absoluteness of it that gives me concern.

16 MR. PAK: I understand, Your Honor. And maybe --
17 I think it's sort of similar to what we talked about before.
18 We're not requiring absolute precision in these kinds of
19 constructions. Our understanding is that if you don't go back
20 in a manufacturing process to remove unwanted areas where
10:14:59 21 materials have been deposited, then that's within your
22 tolerance range. So how we would know whether it's desired or
23 not is did you go back and perform additional steps to etch
24 away things.

25 So I think that's really what's being captured here is

1 that -- it's a one-step process, and to the extent that you
2 happen to overspray or have some leakage, if the process is
3 set up so you're not going back and doing etching or other
4 removal steps, that means that's within the tolerance range.
10:15:27 5 That gives guidance to those skilled in the art that this is a
6 one-step process and it's a selective deposition process.

7 THE COURT: So that to me admits that there is some
8 tolerance, which causes me to have the continued concern with
9 'only'. Someone's going to say, Well, it may be within your
10 tolerance, but it's not only in the desired area.

11 MR. PAK: That's right, Your Honor. And that's why
12 we included that additional language 'such that no additional
13 processing must be performed' so you don't need to go back and
10:15:59 14 remove things. So that builds in this idea that there could
15 be some initial tolerance in how you lay down the materials,
16 as long as the process engineers have determined that you
17 don't need to go back, there is no necessary step to go back
18 and etch away things. And that's why it's not just an
19 imported restriction; I think it gives meaning to the word
20 'desired areas', that those skilled in the art would
21 understand what it means to have some tolerance. That was our
10:16:26 22 effort, Your Honor, to make that -- and that's consistent with
23 the intrinsic support that I showed Your Honor about --

24 THE COURT: So inclusion of the word 'only' and
25 inclusion of 'such that no additional processing must be

1 performed' is your version of belt and suspenders?

2 MR. PAK: It's to try to give meaning to the word
3 'selective', because we -- otherwise it's very difficult to
4 know what 'selective' means.

5 THE COURT: All right.

6 MR. PAK: Thank you, Your Honor.

7 THE COURT: Thank you.

8 Do you have anything else before we move on, Mr. Sheasby?

9 MR. SHEASBY: I do. This is actually a significant
10 issue for us, Your Honor, so I did want to spend a bit more
11 time on it.

12 THE COURT: Go ahead, then.

13 MR. SHEASBY: So if I could have the slides to begin
14 with.

15 There was some suggestion that this process of the
16 barrier layer is selectively deposited and then unwanted
17 organic layer is removed. This is not the prior art; this is
18 the claim. He's saying 'selective depositing' doesn't allow
19 for the removal of unwanted material afterwards. It's
20 expressly in the specification at column 6, lines 6 through 17
21 that selective deposition will result in having to remove
22 unwanted material. It is the exact opposite of what the
23 specification teaches for selective depositing.

24 Next issue. If you go to column 7, we contemplate two
25 techniques for selective depositing. We contemplate a shadow

1 mask and an ink jet. Now, both of those have a common
2 consensus, a common thread, which is that they're targeting a
3 location in which to deposit material. But that doesn't mean
4 they're perfect.

5 And, for example, organic layer may be selectively
10:18:24 6 deposited by a shadow mask or by ink jet or other screen
7 printing techniques. Those are the examples we give, and all
8 of them are targeted, but they're not targeted to -- they
9 don't go to only that location, nor are they successful. And
10 the reason why we know they're not successful is we know that
11 shadow masking is an example of selective deposition. We know
12 that from column 7, lines 1 through 12.

13 And then if we go to the slides now, and -- scroll
10:18:59 14 forward to the shadow masking slides Ms. Zhong. I think it's
15 38. Go back one.

16 Shadow masking is not perfect because it bleeds
17 underneath. And so we reject 'only' and we also -- because
18 it's never perfect, and we reject 'subsequent processing
19 steps', because invariably there is unwanted material that has
20 to be removed. But we agree a targeted limitation is
21 appropriate for 'selective'. Thank you, Your Honor.

10:19:28 22 THE COURT: All right.

23 MR. PAK: If I could --

24 THE COURT: You can, Mr. Pak. You know, we've got
25 the time we've got, and you-all can use it however you want

1 to. When it runs out, it runs out.

2 MR. PAK: Thank you, Your Honor.

3 THE COURT: What else have you got to add on this?

4 MR. PAK: Your Honor, just pointing out on slide 39
5 of our presentation that there are descriptions of the
6 embodiments in which you deposit and then you remove. Those
7 are in the unasserted claims. And then there are embodiments
10:19:59 8 in the patent that talk about selective deposition that is
9 uniformly described in the patent itself as a one-step
10 process.

11 So again, if Your Honor has an issue with the word
12 'only', we can take that out, but the idea here is you want to
13 put it down once so that it's in the desired areas so that you
14 don't need to go back and take additional steps to remove
15 material. That's what's meant by 'selective'. And to not
16 capture that essential distinction is to not give the word
10:20:29 17 'selective' any meaning because we have other claims that are
18 not being asserted where 'selective' is not used, and is
19 specifically resigned to removing unwanted materials. So
20 they're both embodiments in the patent. This particular set
21 of claims cover the selective deposition process, Your Honor.
22 Thank you.

23 THE COURT: All right. Let's move on, counsel.
24 Next let's turn to the argument on the order of steps with
10:20:57 25 regard to 'depositing at least one planarization area upon

1 said mask and said plurality of devices as well as removing
2 said mask from said substrate'.

3 MR. PAK: Your Honor, I think for this term both
4 parties have agreed that we will rest on the papers.

5 THE COURT: Okay. Is that true, Mr. Sheasby?

6 MR. SHEASBY: Yes, Your Honor.

10:21:18 7 THE COURT: Okay. Then let's go to 'an organic
8 layer sequence which emits an electromagnetic radiation having
9 a first wavelength spectrum during operation'. This brings us
10 to the '547 Patent, claim 1.

11 MR. YANG: Your Honor, Lance Yang for Defendants.

12 We've reached what we believe is an agreement on this
13 term.

14 THE COURT: Okay.

15 MR. YANG: But I just want to put it in the record
16 so it's clear.

17 THE COURT: I want you to put it on the record.

18 MR. YANG: Yes, Your Honor.

19 So give me a second to turn to that.

10:21:59 20 So if you -- if I can get the slides to 56 -- or -- yeah.
21 54 is fine.

22 All right. So, Your Honor, I believe the parties largely
23 agree to Defendants' proposed constructions. There was some
10:22:28 24 concern that the entire wavelength spectrum language was a
25 little too ideal. There may be imperfections where the entire

1 wavelength spectrums may have a tail-end or noise that's not
2 meant to be encompassed here. So the language -- let me just
3 read it in. We've added the word 'substantially' in front of
4 the 'first wavelength spectrum', so it reads, emits an
5 electromagnetic radiation having a first wavelength spectrum
10:22:58 6 during operation. That phrase means emits an electromagnetic
7 radiation with a first wavelength spectrum which corresponds
8 to substantially the entire wavelength spectrum of the
9 electromagnetic radiation emitted by the organic layer
10 sequence during operation where the substantially entire
11 wavelength that's being emitted from the organic layer
10:23:23 12 sequence refers to the entire wavelength except for the noise
13 at the tail-end of the wavelength spectrum.

14 THE COURT: Boy, you've added a bunch.

15 MR. YANG: I did for the clarification, but all in
16 hopes of reaching compromise, Your Honor.

17 THE COURT: Okay. So what you have proposed, at
18 least your last and most current proposal that I have in front
19 of me, says, "an organic layer sequence comprising an active
20 layer and electrodes which emits an electromagnetic radiation
10:23:59 21 with a first wavelength spectrum which corresponds to," and
22 then you're inserting the word 'substantially' "the entire
23 wavelength spectrum of the electromagnetic radiation emitted
24 by the organic layer sequence during operation."

25 That does not encapsulate the entirety of your agreement?

1 You've added language at the end of this to further clarify
2 it? Is that right?

3 MR. YANG: Yes.

10:24:27 4 Let me take a step back, Your Honor, because I believe
5 the construction you're reading was the Defendants'
6 construction that we had originally in the joint claim
7 construction statement. We then modified that construction to
8 remove some of the disputes the parties had.

9 THE COURT: Well, the problem is --

10 MR. YANG: And then we --

11 THE COURT: -- when you modify it the night before
12 claim construction and I've prepared, you've moved the goal
13 post on me. And so I'm trying to focus on what I've actually
14 prepared on.

15 MR. YANG: I understand, Your Honor. Apologies for
16 that. This is part of the --

17 THE COURT: Well, it's not relegated to your side of
10:24:58 18 the aisle here. Plaintiffs have done some of the same things.
19 But these last minute changes are -- well, they're somewhat of
20 a challenge when that's not what I based my preparation on.

21 MR. YANG: I understand. So let me explain the
22 change here.

23 So the -- originally the construction that we had had a
24 definition for 'organic layer sequence' that included the
25 active layer or the active region and the electrodes. We've

10:25:26 1 dropped that part of the construction, so now 'organic layer
2 sequence' just gets its plain and ordinary meaning. So the
3 question then becomes what is 'a first wavelength spectrum'.
4 And the parties have agreed that that has to be substantially
5 the entire wavelength spectrum being emitted from the organic
6 layer sequence.

7 THE COURT: So you're suggesting to me that the
8 parties have reached an agreement as to a new definition or
9 construction of 'a first wavelength spectrum'.

10 MR. YANG: That's right.

11 THE COURT: Okay. If you would, read into the
10:25:59 12 record the totality of what you understand the agreed
13 construction of 'a first wavelength spectrum' is, and then
14 I'll query Plaintiffs' counsel if that comports with their
15 understanding and agreement.

16 MR. YANG: Yes, Your Honor.

17 So the term should be construed as "an organic layer
18 sequence which emits an electromagnetic radiation with the
19 first wavelength spectrum which corresponds to substantially
10:26:25 20 the entire wavelength spectrum of the electromagnetic
21 radiation emitted by the organic layer sequence during
22 operation." And the 'substantially the entire wavelength
23 spectrum' is meant to capture the entire wavelength spectrum
24 from the organic layer sequence except for the tail-end of
25 that spectrum which includes some noise.

1 THE COURT: All right. Let me ask for Plaintiff to
2 respond to that and indicate whether that comports with your
3 understanding and agreement. If it doesn't, then we'll work
4 through any differences; if it does, we'll move on.

5 MR. SHEASBY: So everything except the last
6 sentence. That was never -- that last sentence that he
7 referred to was not what we agreed to.

8 Can I -- may I approach the counsel table?

9 THE COURT: Yes, you may.

10 So for absolute clarity, Mr. Sheasby, let's have you
11 state what you understand the agreement is, and then we can
12 clearly identify what the differential is.

13 MR. SHEASBY: Sure. So the definition of
14 'wavelength spectrum' is "a wavelength spectrum that
15 corresponds to substantially all wavelength spectrum of the
16 electromagnetic radiation emitted by the organic layer
17 sequence during operation." And we included the word
18 'substantially' because, once again, there is imperfections.
19 One of those imperfections is, as counsel correctly pointed,
20 at the end, but there could be other imperfections as well.
21 And we had never agreed to that additional sentence that was
22 read in. And there's no support for that additional sentence
23 anywhere in the specification. In fact, the specification
24 simply says --

25 It's about 16, if we go to line 16 -- slide 16, please.

10:28:30 1 It just speaks about a first spectrum having spectral
2 components and the relative intensities thereof, and there
3 were concerns about if there's modifications of intensities,
4 that would be another reason why the -- that would be the
5 substantial -- 'substantial' language would need to be used.

6 THE COURT: Mr. Yang, let me hear from you. We've
10:28:58 7 identified where the difference is. How do you view that and
8 how critical is that to us salvaging some agreement here?

9 MR. YANG: Well, Your Honor, I do think we can get
10 to some agreement. I'm a little surprised. I actually -- the
11 'tail-end noise' language I had read was language that they
12 had mentioned as one of the issues with why it couldn't be the
13 entire wavelength spectrum.

14 I do think that we're close. We agree, I think the
10:29:29 15 parties, that it has to be the entire wavelength emitted by
16 the organic layer sequence. The only thing we're trying to
17 figure out now, Your Honor, is to address Plaintiffs' concern
18 that while there are imperfections--right?--well, in a
19 wavelength distribution, the imperfections we're talking about
20 are at the tail-end.

21 If you can turn to slide -- what's a good one for this?
10:29:54 22 All right. Slide 58. Oh, yes.

23 So, Your Honor --

24 THE COURT: I don't find 'the noise at the tail-end
25 of the wavelength spectrum' in any of the materials, including

1 the ones that came in last night. Is that a last-minute
2 add-on on your part?

3 MR. YANG: That was an add-on by our discussions we
4 had this morning right before Your Honor came in just to see
5 if we could resolve the dispute. They agreed during the
6 discussions this morning that the first wavelength spectrum
10:30:26 7 has to be the entire wavelength emitted by the organic layer
8 sequence. Plaintiffs' counsel had a concern that 'entire' was
9 too strict because there could -- there is -- you know,
10 according to them at least, wavelength spectrums can go on
11 forever, or at least a very, very long period of wavelength,
12 so they wanted to cut off the sort of noise at the end, which
13 is how they framed it to us. So that's why I read that in.

14 But we're happy to just use the entire wavelength
15 spectrum, but we don't like the word 'substantially' because
10:30:57 16 we think that adds indefiniteness to the claim that doesn't
17 really need to be there and shouldn't be there based on the
18 intrinsic evidence. And I can show you that, Your Honor, and
19 I can show you where I get the entire language, because they
20 used the same language during the IPR when they described
21 their own invention. So the entire language we're using isn't
22 out of thin air.

23 THE COURT: Well --

24 MR. SHEASBY: Your Honor --

25 THE COURT: -- I'm trying to see if there is a

10:31:29 1 consensus here that can be salvaged or if I just need to say
2 you-all are in different positions and I need to impose what I
3 think the right construction is.

4 If you have something to add, Mr. Sheasby, go ahead.

5 And Mr. Yang, you don't have to sit down. Maybe we'll
6 have you both up there to see if we can get this nailed down.

7 MR. SHEASBY: They've agreed to remove the reference
8 to electrodes. We understand exactly what they're trying to
9 say regarding 'substantially' being limited to the ends. We
10 have some concern about that, but in the interest of time we
11 will accept their entire sentence that they read into the
10:32:00 12 record.

13 THE COURT: Okay. So you're going to accept this
14 'noise at the tail-end' sentence that was read in?

15 MR. SHEASBY: Yes, Your Honor.

16 THE COURT: Then for one final time while you're
17 standing at the podium, Mr. Yang, read the entirety of the
18 construction as you understand it, and then hopefully
19 Mr. Sheasby will be able to say he agrees to that.

20 MR. YANG: Yes, Your Honor. Give me a moment to
21 turn it back.

22 All right. So --

23 THE COURT: We want to have it exactly right.

24 MR. YANG: Yes, Your Honor.

10:32:29 25 THE COURT: Go ahead.

1 MR. YANG: So this term should be construed as "an
2 organic layer sequence which emits an electromagnetic
3 radiation with a first wavelength spectrum which corresponds
4 to substantially the entire wavelength spectrum of the
5 electromagnetic radiation emitted by the organic layer
6 sequence during operation where substantially the entire
10:32:57 7 wavelength spectrum refers to the entire wavelength spectrum
8 emitted from the organic layer sequence except for the noise
9 at the tail-end of the spectrum."

10 THE COURT: You agree to that, Mr. Sheasby?

11 MR. SHEASBY: Plaintiff confirms, Your Honor.

12 THE COURT: That will be the construction, then,
13 based on the parties' agreement.

14 All right. Before we go on to the next term, let's take
10:33:28 15 about a five-minute recess, and I'll be back as soon as
16 possible and we'll go on to 'the filter layer is transparent
17 to the electromagnetic radiation', et cetera, from the '547
18 Patent.

19 Court stands in recess.

10:49:55 20 (Brief recess.)

21 THE COURT: Be seated, please.

10:55:55 22 All right. Let's continue the claim construction
10:55:59 23 hearing, and let's turn to 'the filter layer is transparent',
24 et cetera, from the '547 Patent.

25 Counsel, I know that you have basically set up argument

1 on this term more or less by itself, but in reading the
10:56:27 2 briefing, your arguments about 'partially opaque', also from
3 claim 1 of the '547, seem to me to help inform what is
4 transparent and transparent helps inform what is partially
5 opaque. So I would not oppose some argument on both of these,
6 even though you've signaled in your email that you want to
7 argue the 'transparent' term but not the 'partially opaque'
8 term simultaneously.

10:56:57 9 So with that -- both of you gentlemen are at the podium.

10 MR. YANG: We are, Your Honor.

11 THE COURT: Do you have an agreement that I don't
12 know about.

13 MR. SHEASBY: Yes, Your Honor. We cut a deal at the
14 break.

15 THE COURT: Okay. I should have looked up sooner.

16 MR. YANG: But Your Honor is correct, and we've cut
17 a deal on both of those terms.

18 THE COURT: Tell me what your deal is.

19 MR. YANG: So on 'the filter layer is transparent'
20 phrase, we've agreed that that term means --

21 THE COURT: And for the Federal Circuit, it's not
10:57:24 22 'deal'; it an informed agreement resolving a previously valid
23 dispute. Correct?

24 MR. YANG: That's right, Your Honor.

25 MR. SHEASBY: And I don't want to -- the word was

1 not intentional. There was a serious colloquy. It was not
2 a --

3 THE COURT: I know. Sometimes colloquialisms find
4 their way into the process.

5 Tell me what your understanding between you is as to an
6 agreed-upon construction for these terms.

7 MR. YANG: So 'the filter layer is transparent to
8 the electrical' -- sorry. Let me start over again.

10:58:00 9 "'Transparent to an electromagnetic radiation having the first
10 wavelength spectrum' means permitting an electromagnetic
11 radiation having the first wavelength spectrum to pass through
12 in a substantially unimpeded manner and substantially without
13 alteration to its spectral components."

14 THE COURT: Is that agreeable to the Plaintiff?

15 MR. SHEASBY: It is, Your Honor.

16 THE COURT: What's the understanding between the
10:58:27 17 parties on 'partially opaque'?

18 MR. YANG: 'Partially opaque', Defendants have
19 agreed to adopt Plaintiffs' construction, which was "'at least
20 partially opaque to an electromagnetic radiation' means at
21 least partially block an electromagnetic radiation."

22 THE COURT: Is that also your understanding,
23 Mr. Sheasby?

24 MR. SHEASBY: It is, Your Honor.

25 THE COURT: Okay.

1 MR. YANG: And there was one last term the parties
2 had proposed to argue in the email last night, Your Honor,
3 which was the indefiniteness term, and we've agreed to both
4 rest on the papers for that term, so we can move on --

5 THE COURT: That's on the encapsulation of one
6 disposed upstream and disposed downstream?

7 MR. YANG: That's right, Your Honor.

8 MR. SHEASBY: Yes, Your Honor.

9 THE COURT: Okay. I'll note that the parties have
10 agreed for the Court to resolve that on the briefing.

11 That brings us to 'metal complex' from the '223 Patent.

12 Let me hear from the Plaintiff.

10:59:29 13 MS. CARSON: May it please the Court.

14 The first term at issue for the '223 Patent is 'metal
15 complex', and I think the parties are in agreement on a couple
16 of issues here. One is that 'metal complex' has a plain and
17 ordinary meaning that would be understood to a person of skill
18 in the art, and the second is that 'metal oxides' should be
19 excluded from the scope of 'metal complex'.

10:59:59 20 THE COURT: Let me interrupt you, counsel.

21 MS. CARSON: Sure.

22 THE COURT: It seems to me from the briefing, unless
23 you-all have moved forward without me being caught up with
24 you, but it seems to me the approach at defining 'metal
25 complex' has really been that you define 'metal oxide' and say

11:00:26 1 everything that is not a metal oxide is a metal complex.
2 First of all, is that accurate or is there more to it than
3 that? And if it is accurate, is the entirety of the world
4 either a metal complex or a metal oxide? Because if 'metal
5 complex' is anything but metal oxide and there are more
6 choices out there, then that to me seems problematic. So can
7 you respond to those questions?

8 MS. CARSON: Sure. So I think I would frame it a
11:00:57 9 little bit differently. I think the issue is that Samsung
10 contends that the -- there is a disclaimer in the prosecution
11 history of --

12 THE COURT: Don't both sides disagree there was some
13 disclaimer? You may not agree on the scope of the disclaimer,
14 but you both agree there is some of it there.

15 MS. CARSON: Correct. And so Plaintiffs' position
16 is that the disclaimer really did two metal oxides, and
17 Samsung's contention is that the disclaimer extends beyond
11:01:28 18 the plain and ordinary meaning of 'metal oxides' and extends
19 to any compound that has metal atoms and oxygen atoms
20 regardless of whether the compound contains other types of
21 fragments such as carbon or other types of atoms or ions.

22 And so I think -- maybe to start just to put this in
23 context, I think it's important to note that the primary
11:01:56 24 example of 'metal complex' that's disclosed in the patent in
25 the specification is this metal complex by Cotton. It's a

1 rhodium complex. And if we look at that complex in detail, we
2 see that it does indeed contain oxygen. So this is a diagram
3 of it. It contains metal atoms, which are the rhodium atoms
4 in red; it contains oxygen, which are the blue atoms; and then
5 it also contains other types of components, such as carbon and
11:02:27 6 fluorine. And so our position is that this type of compound
7 that contains metal, oxygen, and other types of compounds was
8 not disclaimed in the prosecution history.

9 And Samsung actually agrees that this is a metal complex.
10 So this is a portion of their IPR petition where they
11 submitted to the Patent Office that this Cotton complex is
12 indeed a metal complex. This -- they used this in their
11:02:58 13 petition. And, in fact, you see the notations by Samsung on
14 the side include that it contains oxygen.

15 So if we look at the actual language of the relevant
16 portion of the prosecution history, we have it up on the
17 screen here, and the applicant was distinguishing *Ikeda*. And
18 if we look at this portion of *Ikeda*, *Ikeda* disclosed metal
19 oxides, the use of metal oxides. So metal oxides are binary
11:03:30 20 compounds that consist just of metal and oxygen atoms.

21 And so if we look at all the examples from *Ikeda*, all of
22 these are just metal and oxygen; they don't contain other
23 types of atoms or other types of material in the compound.

24 And if we look at the particular statement that Samsung
25 relies on to try to extend this to other types of compounds,

1 ones that just include oxygen and metal regardless of what
11:03:58 2 else they contain, we see the statement here at the bottom, "a
3 person of ordinary skill in the art understands that a metal
4 oxide is a compound composed of one or more metal atoms and
5 one or more oxygen atoms."

6 And I think there's two important things to note about
7 this which gives us a clue and makes clear that while the
8 applicant was disclaiming metal oxides, it was not disclaiming
9 all compounds that contain oxygen. And the first thing is
11:04:29 10 that the language used is 'composed of' as opposed
11 to 'comprising'. And so 'composed of' suggests a closed set,
12 so that's the first part of it. And then the second part of
13 it is that it's specifically referring to what a person of
14 ordinary skill in the art would understand to be a metal
15 oxide.

16 And even Plaintiffs' -- even Samsung's own expert agrees
17 that, as a general matter, a metal oxide is a binary compound
11:04:57 18 composed of oxygen and another metal chemical element. And so
19 by binary, it means it just has those two elements.

20 So, in other words, this statement was not intended by
21 the applicant to change the ordinary meaning of 'metal
22 oxide' or to disclaim something besides what is commonly known
23 as a metal oxide. And this is also confirmed just by other
11:05:26 24 extrinsic evidence. Exhibit 14 from the record we see,
25 generally, oxides are known to be just a chemical combination

1 of oxygen and one other element.

2 THE COURT: All right. Anything further?

3 MS. CARSON: Not unless Your Honor has any
4 questions.

5 THE COURT: Not at this juncture.

6 Let me hear from Defendants, please.

7 MS. CARSON: Thank you, Your Honor.

8 MS. BAILY: May it please the Court. Melissa Baily
11:05:59 9 for the Defendants.

10 THE COURT: Please proceed, Ms. Baily.

11 MS. BAILY: So as Your Honor indicated, the dispute
12 here is about the scope of the disclaimer. The parties agree
13 that there was a disclaimer and the dispute is regarding the
14 scope of that.

15 And with respect to Defendants' proposed construction, we
16 can look at the disclaimer. My colleague on the other side
17 put it on the screen before. And, as she mentioned, the
11:06:26 18 applicant was distinguishing a prior art reference *Ikeda* from
19 the applicant's claimed invention, and distinguished it by
20 saying that a metal complex is not a metal oxide, and then
21 defined what that term meant in the context of the prior art
22 and the prosecution history.

23 THE COURT: So to return to my earlier question, is
24 the world comprised of wholly metal complex and metal oxides
25 so that if you define 'metal complex' as anything that is not

11:06:59 1 'metal oxide', you don't have other choices floating around
2 out there?

3 MS. BAILY: So I think that's right. I think
4 there's a plain and ordinary meaning of 'metal complex', and
5 so I think there's a plain and ordinary meaning of that term.
6 The issue was that there was a disclaimer, and so we need to
7 determine what is left out of the plain and ordinary meaning
8 of 'metal complex'.

9 THE COURT: But you don't have any problem with a
11:07:26 10 construction that really doesn't define 'metal complex'; it
11 just says 'metal complex' is anything that's not 'metal
12 oxide'.

13 MS. BAILY: That's right, because we think there's a
14 plain and ordinary meaning, and we wouldn't even be having this
15 debate except and but for the disclaimer.

16 THE COURT: All right. Go ahead.

17 MS. BAILY: Thank you, Your Honor.

18 And so all that the Defendants have done in their
19 proposed construction is literally and verbatim import the
20 disclaimer into the proposed construction, again only because
11:07:57 21 'metal complex' has a plain and ordinary meaning, but there
22 was this disclaimer, and so all we have done is import the
23 language, the definitional language of the disclaimer into the
24 construction word for word.

25 Now, the issue is --

1 THE COURT: Tell me, if you will, as concisely as
2 you can what you view the scope of the disclaimer to be.

3 MS. BAILY: The scope of the disclaimer is
4 'compounds composed of one or more metal atoms and one or more
11:08:29 5 oxygen atoms', and I think the dispute becomes -- I heard my
6 colleague on the other side say that 'composed of' is a closed
7 group, but that's actually not the case, as revealed by the
8 case law Pictiva cites. "'Composed of' is open to unlisted
9 ingredients that do not materially affect the basic and novel
10 properties of the invention." And so that's the meaning of
11 'composed of'.

11:08:59 12 Now, we don't go there in our disclaimer; we just use the
13 words 'composed of'; but that is what those words mean under
14 the law. And what Pictiva wants to do is ignore that part and
15 construe the disclaimer as entirely closed, and because of
16 that they want to rewrite the disclaimer, and they did it in
17 the brief. In their brief they want to rewrite the disclaimer
18 to be instead of "a compound composed of one or more metal
11:09:27 19 atoms and one or more oxygen atoms," they want to say that a
20 metal oxide is a compound consisting only of metal and oxygen
21 atoms. And so they have taken what is not a closed group and
22 made it into a closed group for purposes of the disclaimer.
23 And that's what we disagree with. We just want to use the
24 very same words of the disclaimer in the prosecution history.

25 THE COURT: Is there an argument for lexicography

1 here?

11:09:59 2 MS. BAILY: Well, yes, because what -- in the
3 prosecution history what the applicant did was say, Okay,
4 we're disclaiming 'metal oxides', and for purposes of that
5 disclaimer we are defining it with the word 'is'. So you can
6 see that here in the disclaimer itself, and we are defining
7 it, "a metal oxide, for purposes of this disclaimer, is a
11:10:25 8 compound composed of one more or metal atoms and one or more
9 oxygen atoms." And so we've literally verbatim taken that
10 definition, the definition of the disclaimer, and put it into
11 the construction, and we don't see why the jury should have
12 anything other than the words that the applicant used for its
13 own disclaimer.

14 THE COURT: All right. What else?

15 MS. BAILY: I mean, that gets -- just in the
16 interest of time, I think that gets to the heart of the issue.

17 THE COURT: Okay. Do you have anything further,
18 Ms. Carson?

11:10:58 19 MS. CARSON: Just briefly, Your Honor.

20 So, Your Honor, I think the issue is that using 'composed
21 of' in the construction doesn't resolve the dispute between
22 the parties. The dispute between the parties is whether a
23 metal oxide contains more than just oxygen and metal. And I
24 think if you look at the full context --

11:11:28 25 If I could have slide 10.

1 Samsung is focusing solely on the second half of the
2 sentence, but it must be read in context that it starts with
3 "a person of ordinary skill in the art understands that a
4 metal oxide is a compound composed of one or more metal atoms
5 and one or more oxygen atoms." So it was clear here that the
6 applicant was not trying to change the definition of 'metal
7 oxide'; it was referring to the plain and ordinary meaning as
8 one of skill in the art would understand a metal oxide.

9 And the parties are in agreement that the plain and
10 ordinary meaning or how a person of skill in the art, as we
11 can see from Samsung's own expert Dr. Schubert, he admitted
12 that generally one would understand a metal oxide to just
13 include oxygen and a metal element.

14 And so I think the issue is that in order to resolve the
15 dispute, we just want to make clear that a metal oxide doesn't
16 expand to other compounds that include other types of elements
17 because those would not be understood to be a metal oxide and
18 don't fit within this. We think it's clear from the language
19 that 'composed of' in this instance does indicate a closed
20 set.

21 THE COURT: So really, rather than asking the Court
22 to construe 'metal complex', it sounds like you're asking me
23 to construe 'metal oxide'.

24 MS. CARSON: Well, Your Honor, we weren't asking to
25 construe anything related to this, but in response to Samsung

11:12:59 1 proposing it for construction, we don't object to excluding
2 'metal oxides', so long as 'metal oxides' is limited to what
3 'metal oxides' actually is and what the plain and ordinary
4 meaning is and what the applicant said it was, which is just
5 metal atoms and oxygen atoms; not compounds that contain other
6 types of elements and would not ordinarily be considered a
7 metal oxide and were not disclosed in *Ikeda*.

11:13:27 8 THE COURT: All right. Anything further?

9 MS. CARSON: No, Your Honor.

10 THE COURT: Ms. Baily, why don't you give me your
11 take on whether 'metal oxide' is limited to that binary choice
12 that I've seen on the screen between metal and oxygen.

13 MS. BAILY: It is not, and it's only because the
14 applicant said it was not. So the applicant said in the
15 prosecution history in the context of distinguishing *Ikeda*, in
16 that context, "a person of ordinary skill in the art
11:13:57 17 understands that a metal oxide is a compound composed of one
18 or more metal atoms and one or more oxygen atoms." The
19 applicant defined the term 'metal oxide' for purposes of the
20 disclaimer, and they should be held to that definition, which
21 is what the prosecuting attorneys understood they were
22 arguing, what the examiner heard, and what the public was
23 apprised of.

24 And everybody understood what 'composed of' means.

11:14:24 25 'Composed of' is not binary, closed set; 'composed of' is open

1 to other ingredients under certain conditions. That's the
2 stated disclaimer, and we think that disclaimer should apply.

3 THE COURT: Okay.

4 MS. BAILY: Thank you.

5 THE COURT: Thank you.

6 All right. Let's move onto the next disputed term, which
7 is 'wherein the organic compound coordinates to the metal
8 complex due to the joint vaporization.' This is dependent
11:14:57 9 claim 2 from the '223 Patent.

10 Let me hear from Plaintiff first.

11 So is the fight here whether 'due to' requires a timing
12 issue of coming after and that's where the fight is, as you
13 understand it, counsel.

14 DR. ZHONG: No. They -- I understand that Samsung
11:15:29 15 submitted modified construction for this term as well, and the
16 dispute right now is whether 'due to' means attributable
17 directly or it can means attributable directly or
18 indirectly --

19 THE COURT: Okay.

20 DR. ZHONG: -- as we proposed.

21 I think the specification actually gives pretty clear
22 guidance as to what 'due to' means. And I am on slide 85 and
11:15:57 23 referring to '223 disclosure in column 11, lines 17 to 35, in
24 particular line 17 to 23.

25 So what the patent really teaches is that the joint

1 vaporization of the metal complex with the organic compound
2 will result in interactions so that the compounds coordinate
3 to each other. That's what 'due to' means. The coordination
4 is due to the joint vaporization because the joint
11:16:30 5 vaporization causes the two compounds to have interactions,
6 and, therefore, they coordinate to each other.

7 Whether this -- so it doesn't really restricted to -- the
8 causation to be direct. The way you look at it is that the
9 joint vaporization is a necessary condition, but there may be
10 other conditions that must also be fulfilled in order for the
11:16:59 11 coordination to happen. So it's a necessary but may be
12 insufficient condition. And -- but the coordination -- there
13 is some causation issue between the coordination and
14 vaporization.

11:17:12 15 And can I have slide No. 15, please? No; slide
16 No. 19--1-9.

17 Okay. And so I'm also showing here the disclosure from
11:17:55 18 column 13, lines 57 to 60, which is the excerpt -- the second
19 excerpt. And here is an example where the coordination is due
20 to joint vaporization, but the causation may be indirect. And
21 what happens is during -- after joint vaporization, the
22 molecule will impinge on the surface where a film is going to
23 be formed. And as a molecule impinge on the surface, they're
11:18:26 24 flexible so that to an extent the coordination sites meet each
25 other and the corresponding energy is released, and then

1 coordination occurs. So there is some --

2 THE COURT: Counsel, what do you mean by 'indirect
3 causation'?

4 DR. ZHONG: 'Indirect' means there may be some
5 intervening events that happens. It's -- some other
6 conditions needs to be also to be met.

7 THE COURT: So if three things cause the effect, is
8 that indirect -- are each of those causes an indirect
11:18:58 9 causation, or does indirect causation have some spatial
10 intermediary between the cause and the effect?

11 DR. ZHONG: So both of that. So I view that if
12 you have multiple reasons -- like it's -- if it's a necessary
13 insufficient, then that may be indirect causation. And if
14 there are some other events that happens, for example, in the
15 example in column 13, lines 57 to 60, after joint
11:19:28 16 vaporization, the molecule is actually condensing on the
17 surface, and in that process there may be some reorganization
18 of the molecules and then they coordinate. But this is not
19 going to happen without a joint vaporization to bring them
20 together in order for that coordination to happen.

21 So there may be some intervening events that facilitate
22 this final coordination, but the joint vaporization is a
11:19:58 23 necessary condition, for example, to bring the molecules
24 together in order for that coordination to happen.

25 THE COURT: Okay. Why don't you continue with your

1 argument.

2 DR. ZHONG: I think that's the gist of our argument.
3 And we -- I think both parties agree that there is -- has to
4 be a causation; it's just that how direct or indirect that
5 causation needs to be.

11:20:24 6 And whether -- the concern really is what you mean by,
7 like, attributable directly to something, to that, and I think
8 it's a jury question as to whether there is a causation
9 between the joint vaporization to the final coordination.
10 It's a jury question whether the causation is approximate
11 enough for there to be a 'due to' joint vaporization.

12 And with that, unless Your Honor has additional
13 questions --

11:20:59 14 THE COURT: Not at this point, counsel. Thank you.
15 Let me hear from the Defendant.

16 MS. BAILY: So, Your Honor, our problem is with the
17 word 'indirectly' -- 'or indirectly' in the Plaintiffs'
18 proposed construction, and I think the argument by my friend
19 on the other side highlights why we have a problem with 'or
20 indirectly'.

11:21:28 21 First of all, because my friend on the other side has
22 conceded that the intrinsic evidence shows that it's the joint
23 vaporization that causes the interactions, that causes the
24 coordination. So that was said.

25 Also what was said is that the coordination is not going

1 to happen without joint vaporization. There is one causation;
11:21:57 2 it's the joint vaporization. The coordination is due to one
3 thing--the joint vaporization--and that means that it is
4 directly attributable to the joint vaporization, and expanding
5 that into 'indirectly attributable' I think makes room for
6 vagueness and indefiniteness and confusion when there's
7 no -- it's not necessary.

8 And so that really is the issue. 'Due to' is direct
11:22:29 9 causation. We all agree that the joint vaporization causes
10 the coordination, that the coordination is not going to happen
11 without the joint vaporization; it's due to the joint
12 vaporization, one causation, it's directly attributable.

13 THE COURT: Let me ask you this. If you look at
14 column 13, line 44, the paragraph that was on one of the
11:22:57 15 Plaintiffs' slides beginning, "However, there's also the
16 possibility that the metal complex and the organic compound
17 meet each other first on the surface to be coded or when they
18 impinge on the surface and the organic compound coordinates to
19 the metal complex whereupon electron conducting layer is
20 formed." Are you contending that that somehow would not be
21 due to joint vaporization?

11:23:27 22 MS. BAILY: No. What I'm contending is that the
23 coordination, as my friend on the other side said, it's still
24 due to the joint vaporization. So this is talking about where
25 the molecules are, but as my friend on the other side said,

1 this is still due to -- the coordination is still due to the
2 fact that there was joint vaporization. It's directly due to
3 that.

4 And so the 'directly' includes this language that you
5 just read from the specification. It would include that
11:24:00 6 circumstance because the interactions are still directly
7 caused by the joint vaporization. This is just talking about
8 where it is happening, the location in the manufacturing
9 process where this is happening, like the physical location
10 where the molecules are. But the coordination is still due to
11 joint vaporization directly; it's not due to anything else.

11:24:27 12 THE COURT: Okay. Do you have column 13 in front of
13 you?

14 MS. BAILY: I don't, Your Honor, I apologize, but I
15 can get it. I have the other side's slide, or should I grab
16 the patent?

17 THE COURT: Well, at line 34 in column 13, it says,
18 "In a further method variant, the organic compound coordinates
11:24:54 19 to the metal complex due to joint vaporization." It seems to
20 me, part of Plaintiffs' argument expresses a concern that that
21 language would exclude what happens at column 13, line 44 and
22 following that I just read to you. Do you believe that the
23 description of this further method variant at line 34 and
24 following directly impacts or potentially excludes what's
11:25:29 25 described beginning at line 44?

1 MS. BAILY: So I have the column in front of me and
2 I understand the question. Can you just tell me the line
3 numbers of the first part that you read?

4 THE COURT: The first part begins at line 34. Look
5 at 34 and then look at 44. Does what happens at 34 and is
6 described there, would it include or would it exclude what's
11:25:54 7 described beginning at line 44?

8 MS. BAILY: This is still coordination happening
9 directly due to joint vaporization.

10 THE COURT: Okay. So it doesn't exclude. Is that
11 right?

12 MS. BAILY: That's correct.

13 THE COURT: Okay. Then that's an answer to my
14 question.

15 MS. BAILY: Yes. This is just talking about the
16 geographic location of where the coordination is happening,
17 but it is due to directly the joint vaporization.

11:26:28 18 THE COURT: All right. Anything else on this,
19 Ms. Baily?

20 MS. BAILY: I don't think so, Your Honor.

21 THE COURT: Okay. Thank you.

22 Anything else from Plaintiff?

23 DR. ZHONG: Nothing on this term.

24 THE COURT: All right. Then let's focus on the
25 'coordinate' word again from the '223 Patent. Plaintiff tells

11:26:54 1 me it's plain and ordinary meaning, which is "has bonding
2 interaction," and Defendant says "forms a dative bond with."

3 Plaintiff, why don't you tell me why your understanding
4 of plain and ordinary meaning is correct and why Defendants'
5 proposed construction is not preferable.

6 DR. ZHONG: Okay. So let me start with Plaintiffs'
7 -- the Defendants' construction. Defendants' construction I
11:27:26 8 think excludes preferred embodiment. Dative bond is only one
9 of the disclosed coordination mode. Another mode called the
10 pi bonding that's expressly disclosed in the patent, their
11 construction would exclude that. As a chemist when I look at
12 that, it's just incomplete.

13 And when we say it's coordinate when you have bonding
14 interactions. It's really talking about the molecular
15 orbitals of the metal is interacting with the molecular
11:27:59 16 orbitals of the organic compound.

17 THE COURT: So is this an expert opinion as a Ph.D.
18 chemist, or is this what a person of ordinary skill in the art
19 would understand?

20 DR. ZHONG: That's what a person of ordinary skill
21 in the art would understand.

22 And let's go to slide No. 84.

11:28:30 23 So slide 84 is an excerpt from the specification, column
24 3, lines 53 to 67. And what I would like to point out is
25 there are two distinct types of bonds coordination modes

1 that's disclosed here. There may be other ones, but the
2 patent express disclose two. One is the pi electron. It's
3 coordination to the pi electron. And the other one is what
11:28:59 4 the Defendants having focused on, which is directly via the
5 heteroatom.

6 So as an illustration, I showed on it the right-hand
7 side a pi coordination. It's not a data bond because pi
8 electrons come from not one atom but multiple atoms, and I can
9 show you Samsung's own illustration after this. And the data
10 bond is, for example, when you coordinate so the nitrogen, and
11 that is through the pair of electrons, long pairs of electrons
11:29:30 12 through the nitrogen.

13 And Can I have slide No. 8, please?

14 So this is actually a drawing by Samsung itself in the
15 IPR, and I want to draw Your Honor's attention as to the
11:30:00 16 bonding interactions they're showing on the right-hand side.

17 So there is a rhodium, which is the red dot at the top,
18 and then you see that there is a kind of a triangle where the
19 rhodium emanates to the two carbons C5 and C7. So that's the
20 interaction, the pi interaction. So it's no longer it's a two
21 atom interaction; it's -- in this particular case it's a three
11:30:30 22 atom interaction.

23 And the electrons that's being shared or donated, or
24 however you want to say it, it's not coming from just one
25 atom, as Defendants' construction is proposing; it comes from

1 one electron coming from each of the -- the two carbons.

2 That's why we don't believe their construction that the data
3 bonds are the modified -- the chemical bond interactions is
11:31:00 4 accurately depicting what this patent -- this preferred
5 embodiment is encompassing.

6 THE COURT: Why don't you comment on the Defendants'
7 alternative construction --

8 DR. ZHONG: That's the alternative construction.

9 THE COURT: Okay.

10 DR. ZHONG: So can I have slide 22. Maybe I can
11:31:28 11 explain that.

12 So alternative construction is, again, requiring the
13 chemical bond to be between two atoms. And as I have shown
14 in the slide No. 8, the chemical bond is formed in that case
15 amongst three atoms. And the pair -- the electrons is not
16 supplied by one of the two atoms; it's supplied by multiple
17 carbons.

11:31:59 18 And if I can show slide 26 as well.

19 So slide 26 is, again, showing the difference between the
20 pi bonding versus what they call the data bond. So the figure
21 1.15, that's a pi bonding. Again, the interaction is not
22 between two atoms; it's a metal atom and between the oxygen
11:32:24 23 and the carbon, which is a pi bond formed from the oxygen and
24 carbon.

25 And the data bond is -- a structure on the right is 1.16,

1 and in that case it is a bond -- there is like the electron
2 sharing between the metal and the oxygen atoms. And I think
3 in this case the electrons are donated by the oxygen.

4 But the problem with the construction is they're
5 excluding preferred embodiment that's expressly disclosed in
11:32:57 6 the patent itself, in addition to other types of bonding
7 interactions that's possible that a person of ordinary skill
8 in the art would understand.

9 And unless Your Honor have other questions, I will rest.

10 THE COURT: I don't think so. Thank you, counsel.

11 Ms. Baily, what's your take on this?

12 MS. BAILY: Yes, Your Honor.

11:33:30 13 I think the problem with Plaintiffs' construction is that
14 the Plaintiffs have proposed any kind of bonding interaction,
15 and it is very clearly not the case that 'coordinates' means
16 any possible bonding interaction. I apologize. I left my
17 clicker. Can I just --

18 THE COURT: Go ahead and get it; sure.

19 MS. BAILY: And so the Plaintiffs' construction,
11:33:56 20 which expands the meaning of 'coordinates' to any kind of
21 bonding interaction is too broad. The claims do not use the
22 word 'bonding'; they use the term 'coordinates' which
23 specifies a particular kind of interaction, a particular kind
24 of bonding.

25 Now, I know that this is extrinsic evidence, but I do

1 want to say that in chemistry there is a specific meaning to a
11:34:27 2 coordinate bond that is well-understood, and so that is why we
3 have cited to Your Honor many dictionary definitions that
4 confirm that a coordinate bond is a specific kind of bond,
5 number one; and it's one in which one atom provides both
6 shared electrons. And so countless dictionaries include that
7 definition because that is the plain and ordinary meaning of
11:34:56 8 'coordinate' or 'coordinate bond' in chemistry.

9 The dictionaries also indicate that a dative bond is a
10 synonym. That's why we reverted to using those words. But
11 perhaps, you know, the additional clarity for the jury where
12 we're talking about the definition of a dative bond or a
13 coordinate bond, which is where both electrons are shared from
14 one atom to another, perhaps that would be helpful.

15 THE COURT: Is that what led you to offer this
16 late-breaking alternative construction?

11:35:28 17 MS. BAILY: Well, yes, just because, as we were
18 preparing for the argument, in looking at the construction, a
19 dative bond is something that a jury might not be familiar
20 with. A dative bond is a synonym for 'coordinates'. They
21 both mean the same thing. And we did point it out--all our
22 dictionary definitions are in the record--both of those terms
23 mean a chemical bond between two atoms. And the key is that
24 there is a shared pair of electrons that forms the bond and
11:35:58 25 that they're supplied by one of the two atoms.

1 And so I think, even without getting lost in the details
2 of the specifics of the electrons, the critical piece of
3 information is that the bond is a specific type of bond; it is
4 not any kind of bond. And it's very clear from the
5 specification, including what my friend on the other side put
6 up, that it's a specific kind of bond. And I can show you the
11:36:26 7 intrinsic evidence.

8 So in the patent, the patent talks about the benefits of
9 the overlap of the electron orbitals. Not all bonding
10 provides this kind of overlap. And so the specification
11 teaches that by virtue of the coordination and the associated
12 overlap of the orbitals from the coordination, this is how the
13 additional electrons can be transferred and how we get the
11:36:58 14 benefits of the claimed invention.

15 Now even more clearly in the intrinsic evidence, here it
16 says, "Due to the mostly free electron pair"--right?--this is
17 because in a coordinate bond a pair of electrons is donated by
18 one atom. "Due to the mostly free electronic pair, nitrogen
19 has very good coordination properties." This is not talking
20 about any kind of bond; this is talking about the results of a
21 coordinate bond.

11:37:29 22 And there is more intrinsic evidence that ties the
23 benefits of the claimed invention to coordination; not to any
24 kind of bonding, but to coordination.

25 And we also have Pictiva's position in the EU which

1 agrees with Samsung's position here. In the EU, Pictiva has
2 taken the position that "a compound is coordinated to the
3 metal complex by joint evaporation if it binds to a metal
11:38:00 4 complex via a coordinative bond;" not any kind of bond, a
5 coordinative bond, because the term 'coordinated' is used.

6 And it goes on to talk about "the orbitals of the organic
7 compound can interact with the orbitals of the central atom of
8 the metal complex and form one or more coordinated bonds."
9 It's not talking about any bond; it's coordinative bonds.

10 And so we really feel strongly that there needs to be a
11 construction that makes clear that it is not any kind of bond.
11:38:30 12 The term 'bond' was not used in the claim; the term
13 'coordinates' was used in the claim.

14 THE COURT: All right. Anything further from
15 Plaintiff on this?

16 DR. ZHONG: Yes.

17 So Ms. Baily focused on the three electrons. One thing
11:38:57 18 we have to bear in mind, extrinsic evidence cannot undermine
19 the intrinsic evidence.

20 So I'm bringing back slide No. 84, column 3, lines 53 to
21 67. It states here it is the -- for the examples they gave,
22 it is not only able to coordinate to a metal complex via the
23 aromatic system, pi electrons. Then they also mention there
11:39:28 24 is a further coordination mode which is directly via the
25 heteroatom, which is through the three electrons that

1 Ms. Baily has been talking about.

2 So again, the Defendants' construction is trying to
3 exclude disclosed preferred embodiment. Pi electron
4 coordination, that's not through three electrons. That's --
5 no chemist would consider that to be the same as data bonds.

11:39:56 6 I understand Ms. Baily's concern to say there is any kind
7 of bonding, and I don't really understand what she means by
8 'any kind of bonding'. We seem to agree that if there is
9 molecular orbital interactions between the metal and the
10 organic compound, there is coordination, and that's what
11 bonding means. That's the plain and ordinary meaning of
12 'bonding interactions', and that's what 'coordination' means.

11:40:25 13 We do object to their construction because it's clearly
14 excluding the preferred embodiment.

15 Regarding --

16 Can I also have slide No. 30?

17 Regarding Pictiva's position in EU, the coordinative
18 bond -- the meaning of the coordinated bond is really in the
19 second half of the sentence, which is "so that the orbitals of
11:40:58 20 the organic compound can interact with the orbitals of the
21 central atom of the metal complex." It does not say it has to
22 be the three electron of the organic compound that's
23 interacting with the metal complex. Pi electron interaction
24 is one of them. Sigma bond interaction is another one of
25 them. All it requires to say the molecular orbital of the

1 organic compound, it can interact with orbitals in the metal
2 complex, and that's bonding interactions.

11:41:29

3 That's all I have to say.

4 THE COURT: All right. Thank you, counsel.

5 Last time, Ms. Baily.

6 MS. BAILY: Yes, Your Honor; just one comment.

11:41:57

7 So, you know, we think it's clear that the plain and
8 ordinary meaning of 'coordinative bond' in chemistry -- of
9 'coordinate' is a coordinative bond. If Pictiva is saying
10 that pi bonding is also included, then we would be open to
11 including that in the construction as well, but the point here
12 is it is not any kind of bond, and that is made very clear
13 from the specification. And so if Pictiva's position is that
14 it's dative bonding and pi bonding, then that's fine, but the
15 word 'bond' is not in the claim language and any kind of bond
16 is not what we're talking about here. So I just wanted to add
17 that clarification.

18 THE COURT: I understand your position. Thank you.

11:42:26

19 All right. Let's go on to 'chain-like structure' and
20 'network like structure' from claim 12 of the '223.

21 Let me hear from Plaintiff on this first.

22 DR. ZHONG: Both sides have agreed to rest the term
23 on the paper. And I think that's the end of the '223 terms
24 that we would be arguing today. The rest of them will be
25 resting on the paper.

1 MS. BAILY: That's right. That's correct, Your
2 Honor.

3 THE COURT: Make sure I understand what I just
4 heard. Are you telling me that the parties are suggesting
11:42:59 5 that the Court take up all the remaining disputed terms on the
6 papers?

7 DR. ZHONG: For the '223 Patent.

8 MS. BAILY: Just for the '223 Patent.

9 DR. ZHONG: So we can move on to the '164 for the
10 'matrix' term.

11:43:30 11 THE COURT: Well, I may have some questions about
12 the remaining claims in the '223, but at this point let's go
13 forward with the '164 Patent and the disputes there. And
14 we'll start with 'matrix' and 'matrix material'.

15 Go ahead, Ms. Carson.

16 MS. CARSON: Thank you, Your Honor.

17 So I think the core dispute with respect to 'matrix
11:43:59 18 material' and 'matrix' is this attempt by Samsung to read into
19 the claims that the first, second, and third matrix materials
20 are part of the same matrix, and so I want to focus on that
21 dispute.

22 I want to start with the plain text of the claim.

11:44:25 23 Could you advance the slide?

24 So if we look at the plain text of the claim, it's clear
25 that it's directed toward the properties of the matrix

1 materials in the organic functional layers of the device, and
2 there's nothing in the claim that separately recites a matrix,
3 much less requires or specifies whether the claim device has
4 one matrix or multiple matrices. And that's a fact that's not
5 in dispute. Samsung's expert agreed to that at his
6 deposition.

7 If we take a look at the next slide, Ms. Zhong. Could I
8 have slide 49?

9 Now, the fact that the claim is directed at the
10 properties of the matrix materials as opposed to the specific
11 number of matrices or where they are located makes sense when
12 we look at the purpose of the invention, which was to use
13 different materials with different charge carrier and
14 different HOMO and LUMO properties to achieve a good ratio
15 between electrons and holes in their recombination zone to
16 improve the efficiency of the device.

17 And the patent explains that the -- this recombination
18 zone, which is where the excitons are formed to produce light
19 can be within a single layer or across layers.

20 If we take a look at slide 50.

21 This is at column 5, lines 3 to 17. And here's the
22 excerpt that specifically says that this recombination zone
23 can be distributed within one layer or over several layers.

24 And consistent with this, the patent discloses embodiments
25 with multiple matrices.

1 So if we take a look at slide 51, and here at column 4,
2 line 16 to 28, the patent is disclosing that there can be
3 multiple organic layers in the device and that each organic
4 layer can have a matrix. And, in fact, the patent discloses
5 another embodiment where the three or more matrix layers can
6 be disbursed between these different organic layers and, thus,
7 would be in different matrices in connection with the
8 description of figures 3 and 4.

9 And so I want to walk through those, if we take a look
10 first at slide 52.

11 So here we see in the top highlight in connection with
12 describing figure 3, the patent states that both the emission
13 layer 30 and also the electron transport layer 32 and the
14 whole transport layer 31 can have matrices which are composed
15 of three or more matrix materials. And so we see here then it
16 goes on to describe figure 4 in connection with this, and we
17 see the three layers the 30, 31, and 32. And the patent
18 explains that by reducing the carrier mobility in layer 30 as
19 compared to layers 31 and 32, this will allow you to
20 accomplish the goal of the invention, which is to influence
21 the recombination zone.

22 And so basically because the patent discloses embodiments
23 where there could be multiple matrices as well as where those
24 matrix -- each matrix can be in a different layer, we think
25 it's inappropriate to read into the claim that each of these

1 materials has to be part of the same matrix.

2 And then I think the other issue with respect to these
3 claims -- so Defendants have proposed a separate construction
4 for the term 'matrix', and I think just as an initial matter,
11:48:57 5 our position is that it's inappropriate to separately construe
6 that term because it doesn't appear in the claim and, thus,
7 would just inject confusion into these issues.

8 Unless Your Honor has questions about those issues, I'll
9 rest on that for now.

10 THE COURT: Well, the word 'matrix' is there, it's
11:49:23 11 just used in conjunction with 'matrix material'. But, I mean,
12 claim 1 clearly -- the independent claim clearly calls out
13 'matrix material'. Are you telling me it would be
14 inappropriate to construe the word 'matrix'?

15 MS. CARSON: Your Honor, we just don't think it's
16 necessary to separately construe the word 'matrix' because
17 that term doesn't appear, and the case law suggests that it's
18 inappropriate to sort of break terms up and construe just
19 elements of it as opposed to focusing on the actual
11:49:58 20 limitations that are in the claim. And because the claim is
21 focused on matrix materials and not on a matrix that doesn't
22 even recite a matrix, we don't think it's appropriate to apply
23 a separate construction for that term.

24 THE COURT: So really it's not the first, second, or
25 third matrix materials that you're concerned about; it's that

1 Defendants' position is they have to be part of the same
2 matrix? That's what causes you the heartburn?

3 MS. CARSON: Correct, Your Honor. The main issue we
11:50:27 4 have with their construction is just this attempt to import a
5 requirement that they all be part of the same matrix when
6 there are several preferred embodiments described throughout
7 the specification where there's multiple matrices in the same
8 device and where these different matrix materials that impact
9 the charged carrier properties and the HOMO/LUMO properties
10 are distributed amongst layers as opposed to being included in
11 one layer.

11:50:58 12 THE COURT: All right. Thank you, counsel.

13 MS. CARSON: Thank you.

14 THE COURT: Let me hear from Defendants, please.

15 Why don't you start, Ms. Baily, by responding to
16 Ms. Carson's argument that being part of the same matrix is
17 an important limitation that's otherwise not supported.

18 MS. BAILY: It's absolutely not an imported
19 limitation.

20 THE COURT: Show me where it's supported.

21 MS. BAILY: I did not see -- yes, I will. I did
11:51:26 22 not see actually any intrinsic evidence that suggests any
23 embodiment where the matrix materials are pulled from
24 different layers.

25 And so now I'll show you the intrinsic evidence that

1 supports our position, and we can start just with the
2 abstract.

3 So the abstract talks about a first electrode, at least
4 one organic functional layer, and a second electrode. "The
11:51:54 5 organic functional layer, one, comprises a first, a second,
6 and a third matrix material, wherein the first matrix material
7 has a larger band gap than the second and the third matrix
8 materials." What is that referring to? That's referring to
9 these HOMO and LUMO values.

10 And so if you look at the abstract, we're talking about
11 one Organic functional layer that comprises a first, a second,
12 and a third matrix material, and then it talks about how those
11:52:27 13 materials can have different HOMO and LUMO values that would
14 affect the properties of the layer.

15 Now I'm going take you to the claim language--claim 1,
16 "an electronic device comprising a substrate, a first
17 electrode, at least one organic functional layer, wherein the
11:52:56 18 at least one organic functional layer has at least a first
19 matrix material, a second matrix material, and a third matrix
20 material." The one organic functional layer has the three
21 matrix materials.

22 Now, can there be more than one organic functional layer?
23 Sure. But for that layer to fall within this claim, it has to
24 have a first matrix material, a second matrix material, and a
25 third matrix material.

11:53:29 1 And now I'm going to show you Pictiva's own tech tutorial
2 which says exactly the same thing. So this is from Pictiva.
3 They submitted it in this case. This is their technical
4 tutorial. This is slide 50, and at the bottom was the
5 narration that was over this slide. This is Pictiva's slide.
6 It says, "Yes, it is possible for there to be several organic
11:53:56 7 functional layers. Each"--each--"of these layers can have a
8 matrix which has at least a first, a second, and a third
9 matrix materials." Each layer can have a matrix. That matrix
10 has three matrix materials.

11 THE COURT: That's from column 4, line 24 in the
12 spec.

13 MS. BAILY: Yes. That's right. And the narration
14 over it by Pictiva says, "multiple organic functional layers,
15 each of which can have a matrix," and the patent explains that
11:54:28 16 the matrix materials can be selected similarly or differently
17 in all layers, but each of the layers has a matrix which has a
18 first, a second, and a third matrix material.

19 And we have additional intrinsic evidence. So I think in
20 column 3, for example, "the matrix which has at least three
11:54:58 21 matrix materials;" column 8, the compilation of the first,
22 second, and third matrix material for the matrix."

23 The whole point of the invention is to have a matrix with
24 three materials, and you can vary the properties of the three
25 materials relative to each other to gain different properties.

1 Here again, column 2, "the matrix, which is composed of
11:55:25 2 the three matrix materials;" column 6, "matrices which are
3 composed of three or more matrix materials."

4 There is nothing at all in the specification that
5 indicates that the three matrix materials of claim 1 can be
6 found in different layers; nothing.

7 THE COURT: What's your support for the idea that
8 'matrix' in isolation should be construed?

9 MS. BAILY: Well, it's used in the claims.

10 THE COURT: In conjunction with 'material'. It's
11:55:59 11 not otherwise used, is it?

12 MS. BAILY: It is not, but it's an important concept
13 in the patent because it's -- as we've seen in all of this
14 intrinsic evidence, the three matrix materials are defined
15 relative to the matrix.

16 THE COURT: Well, you know, this process is not
17 important concepts in the patent construction --

18 MS. BAILY: I understand.

19 THE COURT: -- it's claim construction.

20 MS. BAILY: I understand, Your Honor. The three
21 matrix materials -- the 'matrix' in the word 'matrix
11:56:25 22 materials' informs the construction of 'matrix materials' as
23 well "each matrix materials within the same matrix." That's
24 why there's a first, second, and third.

25 But I think the key here is that--and I won't belabor it;

1 the intrinsic evidence only supports--the whole purpose of the
2 invention is that there are three matrix materials in one
3 matrix, and that you can vary the properties of those
4 materials relative to each other to obtain benefits; the
5 benefits that are set out in the patent.

6 THE COURT: All right. I understand.

11:56:59 7 Do you have anything else, Ms. Carson?

8 MS. CARSON: Yes, Your Honor.

9 THE COURT: Okay. Tell me why these cites in the
10 specification, particularly column 4, line 24, aren't pretty
11 much determinative of this issue.

12 MS. CARSON: Yeah.

13 Your Honor, so we don't dispute that there are
14 embodiments disclosed in the patent where there is a -- one
15 matrix that has the three matrix materials within it, but our
16 contention is that the patent -- or the invention is not
11:57:29 17 limited to that embodiment because there are embodiments where
18 the matrix materials are disbursed in different layers.

19 And if we go to -- if we can go to slide 47 to start
20 with.

21 I want to first --

22 THE COURT: Before you do that, can you show me
23 other embodiments in the specification where it's other than
24 the three matrix materials within the same matrix?

25 MS. CARSON: Sure. So if we look at slide 52,

1 please.

11:57:58 2 So this was the figure 4 embodiment that I went over
3 previously, and we can see here that there's three layers,
4 layer 30, layer 31, and layer 32. And so the purpose of the
5 invention, as we talked about, is to influence the
6 recombination zone, and the way that that's done is by using
7 matrix materials with different properties to do that.

11:58:29 8 And in this embodiment, it says that we can see with a --
9 "one can see that with a reduction of the absolute value of
10 the charge carrier mobility in the emission layer"--so that's
11 talking about one matrix material; you use that material to
12 reduce the charge carrier mobility--"in comparison to the
13 whole transport layer in 31"--so that's a different layer, and
14 that material that would be compared to it or have a
15 comparatively different charge carrier mobility would be in a
11:58:58 16 different layer--"and the electron transport layer 32"--so,
17 once again, a different layer--"the recombination zone is
18 shifted from the borders of the emission layer to the middle."

19 And so when we read this in combination with the line
20 just above that says, "Both the emission layer 30 and also the
21 electron transport layer 32 and the whole transport layer 31
22 can have matrices which are composed of three or more matrix
23 materials," it's clear from this that they're talking about
11:59:28 24 the collective layers can have the three materials.

25 And so we don't dispute that there are other embodiments

1 where the matrix materials are included in a single layer and
2 perhaps a single matrix, but it's clear that throughout the
3 patent they're contemplating that there could be multiple
4 matrices in an embodiment.

5 And I think it's important to go back to the language of
6 claim 1, which --

7 Could I have slide 47. Thank you.

8 If we look at the language of the claim, it's not
11:59:59 9 reciting a single organic functional layer; it's referring to
10 at least one organic functional layer. So this claim is
11 intended to cover embodiments where there is either one
12 organic layer or multiple organic layers. And the specific
13 limitation where it's calling out that there's three matrix
14 materials states, "wherein the at least one organic functional
15 layer has at least a first matrix material, a second matrix
12:00:26 16 material, and a third matrix material," which the plain
17 language would suggest that if there's one layer, those would
18 be part of the matrix in that layer, but if there are two
19 layers, there's no limitation here that those materials need
20 to be part of the same matrix in a single layer.

21 And so I think by claiming it in a manner that covers
22 multiple organic functional layers, in that possibility it's
23 claiming both embodiments in the specification, not the one
12:00:58 24 that's limited to where there's one matrix with the three
25 matrix materials in the single matrix.

1 THE COURT: All right.

2 MS. BAILY: Your Honor, if I could just quickly
3 address the two examples that my friend on the other side said
4 disclose embodiments with matrix materials across different
5 layers.

6 THE COURT: That's fine, Ms. Baily. Go ahead and do
7 that.

8 If I could stick with the Pictiva presentation and have
12:01:25 9 slide 51. Is it possible to have the Pictiva -- thank you so
10 much. Slide 51. Thank you.

11 So this is one of the examples. We've already covered
12 this. This does not disclose matrix materials interspersed
13 among different layers; this says it's possible for there to
14 be several organic functional layers, and then it says each of
12:01:58 15 these layers can have a matrix, and then it says that each
16 matrix has at least a first, a second, and a third matrix
17 material. That's the white language that wasn't highlighted.

18 So it's very clear that each organic functional layer can
19 have a matrix which has at least a first, a second, and a
20 third matrix material. So this language supports Defendants'
21 construction that each of the layers, if it's going to be a
12:02:28 22 claimed organic functional layer, has to have a first, a
23 second, and a third matrix material.

24 And then if we go to slide 51.

25 This is the only other example provided. Nothing here

1 suggests that the matrix materials are interspersed amongst
2 different layers at all. This just says that there can be
3 three layers, that each of those layers can have matrices, and
4 that those matrices, each of them are composed of three or
5 more matrix materials. There is just not an embodiment in the
6 specification that has the matrix materials located in
7 anything but the claimed organic functional layer.

8 THE COURT: Do you have any problem with the matrix
9 materials not being limited to first, second, or third? I
10 mean, the language you just quoted me says "at least a first,
11 second, and third matrix material" --

12 MS. BAILY: There have to be at least the first,
13 second, and third.

14 THE COURT: But that doesn't prohibit there being
15 beyond a first, second, and third. Correct?

16 MS. BAILY: That's correct.

17 THE COURT: Okay. Anything else?

18 MS. BAILY: No, Your Honor.

19 THE COURT: All right. Counsel, we're about out of
20 time, but I wanted particularly to hear argument on this
21 'charge carrier mobility' term, and I'd like at least a few
22 minutes from both sides on that before we bring this process
23 of oral argument on the claim construction issues to a close.

24 I'd like to start with the Defendants, and tell me why
25 they believe their indefiniteness argument holds water. Then

1 I'll hear from Plaintiff.

12:04:34 2 Why is this indefinite, Ms. Baily, considering that we've
3 got a clear and convincing burden here?

4 MS. BAILY: I understand that, Your Honor.

5 The argument that we've made is that the claim language
6 says that the first matrix material has a charge carrier
7 mobility, and what we've established, although it's through
12:04:59 8 extrinsic evidence, is that there are a lot of factors that
9 determine the charge carrier mobility. It isn't intrinsic to
10 a material, and so we listed some of those factors. And all
11 of those things affect carrier mobility and would affect the
12 values you can get for it.

13 THE COURT: All right. Anything else?

14 MS. BAILY: No, Your Honor. I just -- I'm cognizant
12:05:29 15 of the time. I mean, that's our argument on this. We were
16 going to rest on the papers on this argument.

17 THE COURT: I know, but in preparing for today, it
18 seemed to me I could benefit from some oral argument on that,
19 so we'll take as much time as we need --

20 MS. BAILY: Of course. Of course.

21 THE COURT: -- for me to get your oral argument.

22 MS. BAILY: Yes. And I have on the screen the
23 extrinsic evidence that we cited with respect to the various
24 factors that play a role into the measurement of carrier --
25 charge carrier mobility in context, establishing that it's not

12:05:58 1 intrinsic to a material itself.

2 THE COURT: So as succinctly as you can, what makes
3 this indefinite, in your view?

4 MS. BAILY: The claim is directed to a material that
5 has a charge carrier mobility, but a material does not have in
12:06:25 6 isolation intrinsic to it a charge carrier mobility. So that
7 variable, a charge carrier mobility, is not intrinsic to the
8 claimed material. And so the charge carrier mobility depends
9 on things external to the material and, because of that, the
10 way this is claimed as a first matrix material that just in
11 the abstract has a charge carrier mobility, it's indefinite
12 because a material doesn't intrinsically have that.

12:07:00 13 THE COURT: Okay. All right.

14 Now, Mr. Sheasby, what's Plaintiffs' view?

15 MR. SHEASBY: Your Honor, I was actually asking
16 for permission to spend literally three minutes on two other
17 terms other than the ones you asked about.

18 THE COURT: Let's finish this term and then I'll
19 come back to your request.

20 MR. SHEASBY: Thank you, Your Honor.

21 THE COURT: If you're going to speak for Plaintiff
22 on this, Ms. Carson, let me hear you.

23 MS. CARSON: Yes, Your Honor. Thank you.

24 So --

25 THE COURT: Why is it not indefinite?

1 MS. CARSON: So 'charge carrier mobility' is not
12:07:28 2 indefinite for a number of reasons; one being that one of
3 skill in the art would understand the meaning of 'charge
4 carrier mobility'. And, in fact, Samsung's expert admitted
5 that there is an understood meaning of it. The claims simply
6 require -- and we can see his testimony on here, Exhibit 7,
7 lines 116:12 to 17, and then there also are some extrinsic
8 definitions that we submitted that define 'electron mobility'
12:07:58 9 and 'HOMO mobility', which is part of how 'charge carrier
10 mobility' would be measured.

11 The point here is that the claim is comparing the charge
12 carrier mobility of two materials. And given that one of
13 skill in the art would understand what 'charge carrier
14 mobility' means, they certainly would be able to measure it.
15 The patent, in fact --

16 If we go to slide 69.

12:08:26 17 -- provides a formula that can be used to determine
18 mobility. And so the patent discloses that one of skill in
19 the art would know that this formula could be used to measure
20 the mobility and then compare the mobility of two samples.

21 And, in fact, when I deposed Dr. Schubert, if we look at
22 slide 71, he acknowledged that in his prior work he actually
23 had compared the charge carrier mobility of two different
12:08:57 24 types of materials, in this instance amorphous and
25 polycrystalline silicon, and was able to determine that one of

1 them had higher mobility. And so this directly contradicts
2 Samsung's argument that you cannot measure or compare charge
3 carrier mobility and that it's not a property of the
4 materials.

5 We also have submitted extrinsic evidence -- I won't put
6 it up on the screen because we'd have to seal the courtroom,
12:09:27 7 but just for Your Honor's benefit, slide 72 contains internal
8 Samsung documentation where they're actually measuring the
9 mobility of the materials used in the accused products, and it
10 shows each of the materials and their mobility.

11 So this concept that Samsung's trying to advance that
12 it's indefinite because you can't measure the mobility of the
13 material is directly contradicted by its own expert's prior
14 work as well as it's internal documentation where it's
12:09:55 15 actually measuring and putting a numeric value by the
16 mobility.

17 THE COURT: All right.

18 MS. CARSON: Thank you, Your Honor.

19 THE COURT: Ms. Baily, if I were not to be persuaded
20 that this rises to the level of indefiniteness, what proposed
21 construction would you give me besides what the Plaintiffs
22 offered? Or would you say that if it's not indefinite, the
23 Plaintiffs' construction is fine?

24 MS. BAILY: Let me look at that. Can I have one
25 minute on -- to respond to the arguments, or do you prefer

1 me --

2 THE COURT: No, go ahead.

3 (Pause in proceedings.)

12:10:28 4 MS. BAILY: So I just want to make very clear that
5 'charge carrier mobility' is a term that people understand,
6 that's not our argument. My friend on the other side showed a
7 formula. Now, that formula takes into account all kinds of
8 things outside of the material itself. It takes into account
9 temperature differentials, other variables, which is exactly
10 why the way that it's claimed here as an intrinsic property of
12:10:57 11 a first matrix material doesn't make any sense.

12 Similarly, the way Samsung measures charge carrier
13 mobility, as my friend said, is in the context of the accused
14 devices. That is something different than selecting a
15 material that has some sort of intrinsic charge carrier
16 mobility. That is not understood. That is not the way this
17 term is understood.

18 Now let me --

19 THE COURT: Well, if their construction is not
20 right, tell me what the right construction should be.

12:11:44 21 Just for future reference, when you come to the Court
22 and argue that the term is indefinite and you don't offer an
23 alternative construction if the Court's not persuaded on your
12:11:55 24 indefiniteness term, that to me indicates, then, the
25 Plaintiffs' proposed construction must be right if it's not

1 indefinite.

2 MS. BAILY: Well, I would disagree for this reason.

3 THE COURT: That's what your briefing indicates,
4 because you didn't come forward with your own alternative
5 construction.

6 If you have an alternative construction I want to hear
7 it.

8 MS. BAILY: I understand that.

9 I think Plaintiffs' proposed construction is the plain
10 and ordinary meaning of this term. The problem is that that
11 plain and ordinary meaning, it's not intrinsic to the
12 material, and so in the context of the claim it's indefinite,
13 but that is the abstract meaning of 'charge carrier mobility'.
14 The problem is, is that you can only measure it in conjunction
15 with other materials, other variables, and devices themselves.
16 And so this Plaintiffs' construction is the abstract meaning
17 of 'charge carrier mobility'. The problem is the way it's
18 used in the claim language.

12:12:59 19 But I don't have -- because of the fundamental problem
20 with this, saying that the charge carrier mobility is
21 intrinsic to the material, I don't have an a alternative
22 construction to fix that.

23 THE COURT: All right. Thank you.

24 I know what you're going to ask, Mr. Sheasby, but go
25 ahead and ask it.

1 MR. SHEASBY: May I have three minutes, Your Honor?

2 THE COURT: For what purpose?

3 MR. SHEASBY: To briefly discuss two terms we

12:13:30 4 haven't been able to have any argument on at all.

5 THE COURT: And which terms are those?

6 MR. SHEASBY: 'Applied in a structured fashion' and
7 'passive electronic component'.

12:14:00 8 THE COURT: 'Applied in a structured fashion', and
9 what's the other one?

10 MR. SHEASBY: 'Passive electronic component'.

11 THE COURT: I'll give you two minutes on each one,
12 and I'll give Samsung two minutes on each one.

13 Let's start with 'applied in a structured fashion'.

14 MR. SHEASBY: Thank you for your indulgence Your
15 Honor.

16 So if we go to the slide that's shown -- actually I'm
12:14:29 17 going to go with the elmo. It will be faster.

18 So the issue that we have is there is certainly a
19 discussion in this patent specification about the difference
20 between 'applied in a structured fashion' and not
21 photolithographic methods generally.

22 THE COURT: And not what?

23 MR. SHEASBY: Photolithographic methods generally,
24 but a particular type of photolithographic method which is a
25 planar photolithographic method.

12:14:58 1 And so if you go to column 1:66 through 2:4, this
2 describes what 'applied in a structured fashion' means, and
3 that should properly be used -- it's definitional, and so
4 there should be no debate about what the proper construction
5 is.

6 Now, they say that this definition should include
12:15:28 7 'photolithography', but if you look at the portion of the
8 specification that they point to, which is at column 2, lines
9 5 through 14, it refers to 'photolithography that results in a
10 planar application'. So we certainly understand that a
11 structured fashion is -- that 'applied in a structured
12 fashion' is different from planar -- photolithography that
13 results in planar application, but there is not in the
12:15:56 14 specification as saying you can't use photolithography at all
15 because, in fact, it's possible to use photolithography to
16 achieve a structured fashion.

17 The absence of the word 'planar' from the, quote,
18 'photolithographic method' takes the exclusion too far.

19 That's it, Your Honor.

20 THE COURT: All right. Two minutes from Samsung.

21 MR. PAK: Thank you, Your Honor.

12:16:29 22 If you turn to slide 185, I think this crystallizes the
23 dispute now of our presentation.

24 So Your Honor, the 'in structured fashion' is modifying
25 the application applied in a structured fashion. It's not

1 describing the net result of what happens when you have all
2 the processing; this means that you are applying this
3 particular layer in a structured fashion.

12:16:55 4 And as counsel pointed out, and as now reflected in their
5 construction, there is a lexicography of what that means, and
6 that starts in column 1, line 66, through 2:4, which is the
7 yellow highlighted section that I've identified here, and the
8 only ask that we have is that a person of ordinary skill in
9 the art would not stop at column 2, line 4; they would
10 continue to read on to understand what was the specialized
11 definition of applying these layers in a structured fashion.

12:17:27 12 And it goes on to say, "This is in contrast to planar
13 application of the corresponding layers"--which means that
14 you're just putting down the layer in a flat uniform
15 fashion--"and then you subsequently structure the layers, as
16 is the case, for example, in a photolithographic method."

17 So what was happening here is the patentee was saying
18 it's -- what I mean by 'applying in a structured fashion' is
19 that I'm applying the structure as I form the layers; not
12:17:59 20 laying it down flat and going back and restructuring the
21 layers, for example, using masks and photolithography.

22 That is what -- all we're asking for, Your Honor, and
23 that was what was in our original construction, but we're
24 happy to just take that language, continue it from column 66
25 to line -- column 2, line 7, which lays out the lexicography

1 in its entirety.

2 THE COURT: Column 1, line 66.

3 MR. PAK: That's right, Your Honor--column 1, line
4 66, to column 2, line 7.

12:18:30 5 What counsel is recommending is that we stop at line 4 of
6 column 2, but it's clear that the lexicography continues to
7 the next sentence when it says, "This is in contrast to planar
8 application of the corresponding layers and subsequent
9 structuring of the layers, as is the case, for example, in a
10 photolithographic method."

11 THE COURT: All right.

12 MR. PAK: Thank you, Your Honor.

13 THE COURT: Thank you, counsel.

12:19:00 14 All right. Two minutes on 'passive electronic
15 component', Mr. Sheasby.

16 MR. SHEASBY: Thank you, Your Honor.

17 So the issue is that Samsung is claiming that a passive
18 electronic component cannot be an optoelectronic component.
19 That's the rub of the dispute in their proposed construction,
20 and that's entirely inconsistent with the specification.

12:19:28 21 If you go to column 4, lines 35 through 45, it makes
22 clear -- it makes clear that an optoelectronic assembly can
23 include a passive electronic component. And it makes clear
24 again at column 8, lines 29 through 52, that an optoelectronic
25 component can comprise passive components. And so that's

1 column 8, lines 29 through 52. So it would be entirely
2 inconsistent with the specification to say optoelectronic
3 structure can't include or be a passive component.

4 Thank you, Your Honor.

12:19:56

5 THE COURT: What's Samsung's position?

6 MR. YANG: Thank you, Your Honor. Lance Yang for
7 Samsung.

8 THE COURT: Go ahead.

9 MR. YANG: So I'll be brief here, Your Honor. But
10 just to be clear, I want to put on the elmo here the language
11 that we're dealing with.

12:20:25

12 All right. So there are three terms at issue. There is
13 'optoelectronic assembly', and then within the assembly, that
14 comprises a passive electronic component and an optoelectronic
15 component. Now, there is no embodiment in the spec that says
16 the optoelectronic component can include the passive
17 electronic component. The passages that you just saw from
18 Plaintiffs' counsel was referring to the optical electronic
19 assembly.

12:20:56

20 Now, there's no dispute, from us at least, that
21 optoelectronic assembly can certainly include a passive
22 component. Right? That's not what we're arguing. The issue
23 here is whether or not the optoelectronic component can
24 include the passive electronic -- passive electronic
25 component. And there's no embodiment where that's the case.

1 And the claims themselves, the way they lay it out, treat
2 them as different things. And, in fact, the passive
3 electronic component and the optoelectronic component can
4 actually be connected in the claims through other structures,
5 so they're treated as different structures.

6 Now, if you look at Plaintiffs's construction they
12:21:27 7 acknowledge that the passive component is not an active
8 component. We agree with that. And it's odd that they're now
9 excluding from that active component definition
10 'optoelectronic component'. Because if you actually look at
11 the definition of an optoelectronic component --

12 And if you can turn to slide 180.

13 So an optoelectronic component either converts optical
12:21:57 14 electricity -- optical energy into electrical energy, or it
15 convert electrical energy back into optical energy. That's
16 what an optoelectronic component is. Right?

17 THE COURT: Finish up, Mr. Yang.

18 MR. YANG: Will do.

19 That's an active component. So the idea that you would
20 somehow exclude 'active components' but have a carve-out and
21 not exclude 'optoelectronic components' is inconsistent in
22 itself, and that's what Plaintiffs are trying to assert here,
23 Your Honor.

24 THE COURT: All right. Thank you.

25 MR. YANG: Your Honor -- sorry. Before -- just one

12:22:28 1 more -- I will note that after the briefs were filed that
2 there were some statements made by the PTAB and the Plaintiff
3 in IPR that we intend to submit supplemental authority on. I
4 was going to address it here at the hearing, but I know we
5 don't have time so I won't do that now, but just to give you a
6 heads up, Your Honor.

7 THE COURT: All right. Thank you.

8 All right, counsel. That completes argument on these
9 many disputed claim terms. I appreciate your arguments and
10 we'll take those into consideration along with your briefing.
12:22:58 11 With regard -- as I've noted, with regard to the claim terms
12 that time would not allow you to argue orally and with regard
13 to those that you've agreed should be taken up on the
14 briefing, the Court will give you guidance to the best of its
15 ability based on the papers before it.

16 That completes claim construction in this matter. I
17 would hope to get you some guidance in written form as soon as
18 possible.

12:23:31 19 But that completes claim construction before the Court
20 today. Unless there's something further, we stand in recess.
21 And you're excused.

22 (End of hearing.)
23
24
25

1 I HEREBY CERTIFY THAT THE FOREGOING IS A
2 CORRECT TRANSCRIPT FROM THE RECORD OF
3 PROCEEDINGS IN THE ABOVE-ENTITLED MATTER.
4 I FURTHER CERTIFY THAT THE TRANSCRIPT FEES
5 FORMAT COMPLY WITH THOSE PRESCRIBED BY THE
6 COURT AND THE JUDICIAL CONFERENCE OF THE
7 UNITED STATES.

8
9 S/Shawn McRoberts

02/06/2025

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