

1 UNITED STATES DISTRICT COURT
2 EASTERN DISTRICT OF TEXAS
3 MARSHALL DIVISION

3 DSS TECHNOLOGY
4 MANAGEMENT, INC.

DOCKET 2:14CV199

5 VS.

MARCH 3, 2015

6 TAIWAN SEMICONDUCTOR
7 MANUFACTURING COMPANY,
8 LTD., ET AL

9:00 A.M.

MARSHALL, TEXAS

9 VOLUME 1 OF 1, PAGES 1 THROUGH 96

10 REPORTER'S TRANSCRIPT OF CLAIM CONSTRUCTION HEARING

11 BEFORE THE HONORABLE ROY S. PAYNE
12 UNITED STATES MAGISTRATE JUDGE

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TSMC v. DSS

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1 (OPEN COURT, ALL PARTIES PRESENT.)

2 THE COURT: Good morning. For the record,
3 we're here for the claim construction hearing in *DSS*
4 *Technology versus Taiwan Semiconductor, et al*, which is
5 Case Number 2:14-199 on our docket.

6 Would counsel state their appearances for the
7 record?

8 MR. DAVIS: Good morning, your Honor. Bo
9 Davis on behalf of the plaintiff. We have today
10 Mr. Christian Hurt --

11 MR. HURT: Good morning, your Honor.

12 MR. DAVIS: -- Kirk Voss, Andrew Wright, Derek
13 Gilliland, and Ed Chin. We're ready to proceed.

14 THE COURT: All right. Thank you, Mr. Davis.

15 MS. HENRY: Good morning, your Honor. Claire
16 Henry on behalf of Defendant Taiwan Semiconductor. Along
17 with me today is David Harper, Scott Cuning, Stephanie
18 Sivinski. And our client representative, Michael Shen,
19 is here from Taiwan.

20 THE COURT: All right. Thank you, Ms. Henry.

21 MR. JONES: Your Honor, on behalf of Samsung,
22 Mike Jones. Presenting for Samsung will be Mr. Jason
23 Bobrow -- Jared Bobrow. Excuse me. I apologize,
24 Mr. Bobrow -- and Mr. Jason Lang.

25 MR. LANG: Good morning.

1 MR. JONES: Also here representing Samsung,
2 Mr. Sangmin Lee; and he is from Samsung itself. And
3 behind him is Mr. Christopher Marando, and he also
4 represents Samsung.

5 THE COURT: All right. Thank you, Mr. Jones.

6 MR. McCABE: Good morning, your Honor.
7 William McCabe from Ropes & Gray representing NEC
8 Corporation of America; and with me is Jenna Gillingham.

9 THE COURT: All right. Thank you, Mr. McCabe.
10 Very well. I will state for the record also
11 that earlier this morning we distributed preliminary
12 constructions. The purpose of distributing those before
13 the argument is to let both sides know where we are with
14 the constructions based on the initial review of the
15 briefs and the record.

16 The preliminary constructions are designed to
17 allow both sides to focus their arguments where they
18 think they are most important and to focus on those areas
19 where they think the court has gone wrong. I do
20 naturally reserve the right to, and occasionally do,
21 revise these preliminary constructions based on the
22 arguments that are received; so, I hope that you will
23 take them in that spirit.

24 I'd also like to hear the arguments on a
25 term-by-term basis, but we can approach the terms in

1 whatever order counsel think will be most helpful in this
2 case. I know the briefing was not in complete agreement
3 as far as how the terms should be addressed. But if you
4 have an idea about the most effective way to address it,
5 I want to give you the freedom to address it in that
6 fashion.

7 Mr. Davis, have counsel come to any agreements
8 on the best way to approach that?

9 MR. DAVIS: Yes, your Honor. We have
10 agreement on how to proceed with the terms today.

11 THE COURT: All right. Then go ahead.

12 MR. HURT: Good morning, your Honor.

13 Christian Hurt on behalf of the Plaintiff DSS.

14 We had talked to counsel before about just
15 going from the first term down to the bottom because we
16 think that would probably be the most effective, and
17 there is a limited number of disputes and limited number
18 of terms.

19 The first term is the "patterning the imaging
20 layer" term. We can accept the court's preliminary
21 construction. The issue with the patterning really
22 relates to some of the terms later in the chart, namely,
23 the "first/second patterned layer having a first/second
24 feature." But as the court has construed "patterning the
25 first/second imaging layer," we can live with the court's

1 preliminary construction. Unless the court wants to have
2 any additional argument on it, I'll sit down and let the
3 defendants address that first term.

4 THE COURT: All right, Mr. Hurt. That's fine.

5 MR. BOBROW: Good morning, your Honor. Jared
6 Bobrow for Samsung.

7 And with respect to the first term,
8 "patterning the first/second imaging layer," we're also
9 fine accepting the court's construction. Thank you.

10 THE COURT: All right. Thank you, Mr. Bobrow.

11 MR. HURT: Good morning, your Honor.
12 Christian Hurt again.

13 Moving to the second term, we are also fine
14 with the court's construction. There is one issue I
15 wanted to seek some clarification on; and that is, the
16 preliminary construction says "a layer containing the
17 portions and spaces of the first/second imaging layer
18 that remain after the first/second patterning step."

19 The clarification I wanted to seek was that
20 the layer containing the portion and spaces of the first
21 and second -- or the first/second imaging layer that
22 remain after the patterning step, that that layer can
23 actually be a layer that is separate from the imaging
24 layer. As long as that is the court's construction and
25 understanding, the plaintiff can live with that

1 construction of the term. If not, I can go into sort of
2 why our position, we think, is right and what the claims
3 say on that particular claim construction issue.

4 THE COURT: All right. Well, why don't we
5 find out if there is a dispute with that; and --

6 MR. HURT: Sure.

7 THE COURT: -- then I'll let you address it.

8 MR. BOBROW: Your Honor, Jared Bobrow for
9 Samsung.

10 Yes, there is a dispute about that. I think
11 that the court's preliminary certainly makes clear that
12 the layer that we're discussing there are the portions
13 and spaces of the first and second imaging layer, of the
14 imaging layer. And the defendants' position here is that
15 that pattern needs to be the imaging layer and not
16 another layer. So, it appears that there is a dispute
17 and that the parties should address this term.

18 THE COURT: Okay. Why don't you go ahead,
19 since you're up there, and address it and then I'll let
20 Mr. Hurt speak and you can respond if necessary.

21 MR. BOBROW: Thank you, your Honor.

22 And would you please turn to Slide 40?

23 And does your Honor have a copy of both sides'
24 presentation materials available? I don't know whether
25 those have been handed out, but I'm happy to do so at

1 this time.

2 THE COURT: I have a copy of the plaintiff's I
3 see here. I don't know that I've yet received a copy of
4 the defendants'.

5 MR. BOBROW: Apologies, your Honor. If
6 Mr. Jones may approach the bench and distribute those
7 copies.

8 THE COURT: You may.

9 MR. BOBROW: Thank you.

10 Thank you, your Honor. So, with respect to
11 the term, the "first patterned layer" and also the
12 "second patterned layer," those terms and the parties'
13 positions are outlined in pages 40 and 41 of our slide
14 deck.

15 And the court's interpretation -- I'll start
16 by saying that the defendants are fine to accept
17 your Honor's preliminary construction. We have no
18 objection to it. And the reason that we have no
19 objection to it is the reason that I started with, is
20 that in our view this construction makes crystal-clear
21 that what we're talking about here with respect to a
22 first patterned layer or a second patterned layer is the
23 imaging layer that has been patterned.

24 In other words, the claim says that you start
25 by patterning an imaging layer to form the first or the

1 second patterned layer. And I think that the court's
2 construction makes clear that the patterning that has
3 been performed previously forms the patterned layer and
4 that is of the imaging layer. So, you perform a process,
5 patterning, on the imaging layer; and that creates the
6 pattern.

7 And as a result of that, the defendants'
8 position is that indeed what we're talking about there is
9 the imaging layer after it has been patterned and not
10 some other layer that is later processed, later
11 developed, later etched, later fabricated downstream of
12 that process. So, indeed I think the court's preliminary
13 construction got it exactly right, that it's limited to
14 the imaging layer.

15 And we can start with Slide 43, if we may, by
16 simply focusing on the claim language which shows that
17 indeed this is the natural, plain reading of the claim
18 language. You pattern the first imaging layer "to form a
19 first patterned layer having a first feature," and you do
20 the same with the second. So, the language makes clear
21 that that's exactly what you're doing.

22 And I think as well if we look at the
23 specification, there is no doubt that that's completely
24 consistent and supports exactly the court's claim
25 construction, that what we're doing is forming a

1 patterned layer; namely, the image layering is patterned
2 and not some other layer.

3 If we turn to Slide 45, you can see at the
4 beginning that the claim language corresponds directly to
5 what's depicted in the specification. And we start with
6 that "patterning the first imaging layer in accordance
7 with a first pattern." Figure 2 of the patent and the
8 text show -- and we've outlined it in a red box there --
9 what's going on. Essentially that patterning -- and
10 there is no dispute, and the court's construction
11 supports this -- that what you're doing in that step is
12 you are exposing that imaging layer to radiation; and
13 then after you've exposed it to that radiation, then you
14 develop it. And that patterning step consists of
15 exposing and developing, exposing and developing; and
16 when you do that, what the patent shows and what the
17 claim then says is that exposure and development then
18 form the first patterned layer.

19 And that first patterned layer is essentially
20 what remains of the imaging layer after you've done the
21 patterning step, after you exposed it to radiation, after
22 it's been developed. This is what's left. And the
23 patent shows that imaging layer -- and that's 232.
24 That's what remains from layer 220, which is the imaging
25 layer. And what remains after the patterning is a

1 portion of the imaging layer.

2 Now, the patent never shows anything happening
3 to any other layer. Nothing ever happens to layer 210,
4 this underlying layer. Nothing ever happens to the
5 substrate, layer 200. Those layers as described in the
6 patent, they are never shown as a result of patterning,
7 the patterning of the imaging layer, to change.

8 And that's true also with the second patterned
9 layer. And once again the patent claims and the
10 specification shows that you do the patterning step,
11 which everyone seems to agree is exposing and developing
12 the light-sensitive imaging layer -- you do that, and you
13 do that to form a second patterned layer.

14 And once again, the second patterned layer are
15 these red chunks -- I'll call them -- red portions; and
16 those are the portions of that second imaging layer that
17 remain after the patterning. So, they are of the imaging
18 layer. They are not of some other layer; they are of the
19 imaging layer. And that's what remains of that imaging
20 layer, and you do that to form that second patterned
21 layer.

22 So, there it is from the specification. It
23 says all that is shown -- and once again with the second
24 patterned layer, there is never a description of
25 somehow -- that that patterning of the imaging layer does

1 something else to some other layer, say layer 210 which
2 is under the imaging layer. And I submit that that's in
3 part because when you're talking about the patterning
4 steps and you're talking about exposing and radiating and
5 developing, those are the words of things that you do to
6 the photosensitive imaging layer. They are not things
7 that you do to the underlying layer, and they could
8 indeed have no effect on the underlying layer because
9 those are the steps that are designed to deal with and
10 operate on the imaging layer.

11 Further in the specification, if we look at
12 the text of it, it once again makes clear what we're
13 talking about. These are the remaining portions of the
14 imaging layer, and that's what the first patterned layer
15 is. Once again, looking at Column 4 of the patent, it
16 talks about the imaging layer 220 and you develop it and
17 you eradiate it and what remains -- "and thus remains to
18 form" the first patterned layer. So, that's what
19 remains.

20 The language is the same with respect to the
21 second patterned layer. You eradiate it, you develop it,
22 "and thus remains" those essentially features or portions
23 of that imaging layer to form the second patterned layer.

24 So, the construction that DSS has proposed
25 made clear that what they are trying to do is to broaden

1 this term and have it extend to something that the patent
2 never discusses, that you can do some sort of operation
3 on the imaging layer, do your patterning on the imaging
4 layer.

5 But they are trying to say that that indeed
6 can be read so broadly as to say that it covers the
7 translation or conveyance of the pattern into some other
8 layer, into some underlying layer. And once again I
9 think there are several keys here. The first is that
10 exposure and development are treatments that you make to
11 an imaging layer and not to other layers. That's Point
12 Number 1.

13 And Point Number 2 is that the patent never
14 talks about the underlying layer as a patterned layer.
15 This layer 210, which is under the photoresist, is called
16 an "underlying layer" consistently throughout the patent.
17 It's not called a "patterned layer." The only layer
18 that's called a "patterned layer" by those words of the
19 claim is this layer 220 after the patterning operation
20 has been performed, and this layer 210 is never
21 so-called. And indeed the patent says that you have this
22 underlying layer, but you don't even need it. It's not
23 even relevant to the invention.

24 So, the specification discusses and
25 distinguishes the first patterned layer from this

1 underlying layer 210 calling them different things,
2 giving them different numbers, always calling them out as
3 being different.

4 And that's also true when you talk about the
5 single patterned layer that results at the end of this
6 process. Again, the single patterned layer is shown in
7 Column 12, also talking about that patterned layer as
8 being different from the underlying layer. So, that's
9 the vernacular of the patent. The patterned layer is the
10 thing that results from patterning the imaging layer.
11 It's the remaining portions of the imaging layers. And
12 the underlying layer is the thing that is underneath that
13 patterned layer.

14 The other problem I think with the
15 construction that DSS is advocating here is that it could
16 be read to be a construction that actually excludes the
17 preferred embodiment because what they are proposing here
18 is to say that the first patterned layer is a layer; and
19 then they say that it contains a pattern defined by the
20 first imaging layer, "defined by" it. And the patent
21 tends to talk about a definition or having a layer
22 defined by something when that layer is a mask for an
23 underlying layer, where you are trying to take that
24 pattern of a mask and then translate it into another
25 layer.

1 And, so, when it says, "a layer containing the
2 pattern defined by...the second imaging layer that
3 remains," they are essentially saying that the remaining
4 parts of the imaging layer can't be the patterned layer.
5 They're saying that it can't be because it's the thing
6 that creates the pattern in this other layer.

7 And that's clearly inconsistent with the
8 preferred embodiment. The only embodiment shown in the
9 patent, preferred and exclusive, is the embodiment where
10 the patterning forms the pattern in the imaging layer.
11 There are portions that remain, and that's what is called
12 the "patterned layer."

13 And, so, what we really have here is -- and I
14 think this is shown in the brief -- is that DSS is trying
15 to take this concept of patterning the imaging layer to
16 form this patterned layer and they are essentially trying
17 to say that it can cover everything downstream and, so,
18 they insert words in their brief that reflect that.

19 They talk about "patterning an imaging layer
20 to subsequently form a patterned layer," "to then form
21 the patterned layer." That's not what the claim says.
22 The claim says that you do the patterning of the imaging
23 layer to form the patterned layer, and we submit that the
24 court's construction as presented in its preliminary
25 ruling this morning accurately reflects that.

1 And the last point that I would make, your
2 Honor, there was an argument in the briefs where the
3 plaintiff was relying on the *Becton Dickinson* case
4 essentially saying, well, gee, because there is an
5 imaging layer that is referred to in the claim and
6 because there is a patterned layer that is referred to in
7 the claim, those things -- the fact that there are words
8 there of that type suggest that they must be different.

9 And that's simply not the case because the
10 *Becton* case was really about an invention that talked
11 about very discrete, very separate elements. It was a
12 mechanical structure and there were four things that were
13 listed separately and the court said, "Well, you've
14 listed them separately. They appear to be separate; and,
15 so, we'll treat them in that fashion."

16 But that's not how this claim is constructed.
17 What's going on in this claim is that you have a
18 patterning step that is being performed on the imaging
19 layer to form the patterned layer. So, you're taking
20 this process; and you are operating on a layer to form
21 this other layer. So, they are inextricably connected.
22 They are not separate elements as they were in the *Becton*
23 case.

24 And that's all we have at this time, your
25 Honor. Thank you.

1 THE COURT: All right. Thank you, Mr. Bobrow.

2 MR. HURT: Good morning, your Honor.

3 Christian Hurt again for DSS.

4 I agree with the defendants that the claim
5 language is patterning an imaging layer to form a
6 patterned layer. But what the defendants are trying to
7 do is limit that construction to require that the imaging
8 layer and the patterned layer are the same material, the
9 same layer.

10 But if you actually look at the claims, the
11 claims claim two separate layers, an imaging layer and
12 then a patterned layer. They don't claim a patterned
13 imaging layer, as the defendants loaded up their brief
14 with. They instead claim forming -- "patterning the
15 first imaging layer...to form a first patterned layer."

16 And also, in addition, there are multiple
17 layers in the claim, a first imaging layer, a first
18 patterned layer, a second imaging layer, a second
19 patterned layer. If all of these elements were
20 physically the same place and space, there would be no
21 need to have the first imaging layer, the second imaging
22 layer, the first patterned layer, the second patterned
23 layer.

24 THE COURT: Is there anything in the
25 specification that you can point to in which the

1 patterned layer is anything other than a portion of the
2 imaging layer?

3 MR. HURT: So, in the preferred embodiment
4 Mr. Bobrow is correct that the patterned layer is what
5 remains of the imaging layer. However, in the
6 specification there is a disclosure that the layers
7 mentioned can include multiple layers; and there is
8 disclosure of -- that the imaging layer -- the second
9 imaging layer can be on top of the first patterned layer,
10 which indicates that they don't all have to be physically
11 the same material and space.

12 And the claims -- if you look at the actual
13 claim language, it's broader than that one preferred
14 embodiment. The claim language says -- it doesn't say
15 "patterned imaging layer." It says "to form a patterned
16 layer." Under the *Becton* case, under the *Gaus* case,
17 under a number of Federal Circuit cases, when claims use
18 different elements, here different layers, there is a
19 strong presumption that it includes where those are not
20 the same element.

21 And Mr. Bobrow is incorrect about our
22 construction excluding the preferred embodiment because a
23 patterned imaging layer, which is what they want to
24 narrow the claims to, would be a layer that's defined by
25 the pattern -- is defined by the pattern that is applied

1 to the imaging layer.

2 And I think the court's construction actually
3 captures this because it rejected the defendants' overly
4 narrow construction. Contrary to what Mr. Bobrow said,
5 the court's construction was not that the first patterned
6 layer is the portions and spaces of the imaging layer
7 that remain. The construction is a layer that contains
8 the portions and spaces of the imaging layer.

9 Underlying layers -- by doing additional steps
10 or by doing other things, that pattern that has the
11 spaces and portions is contained in a patterned layer.
12 It does not necessarily have to be the material of the
13 patterned imaging layer.

14 And, your Honor, this construction for them,
15 they put it in their tech tutorial; and it is all over
16 their briefs. This is a pure noninfringement position of
17 where they are trying to point to in their process, what
18 they call the "imaging layer" and the "patterned layer"
19 even though under their own tutorial, the same pattern
20 propagates throughout; and, so, that's where this is sort
21 of driving it.

22 And, you know, I believe that if we were in a
23 situation where things were reversed, the defendants
24 would be up here arguing the *Becton* case and the *Gaus*
25 case saying that the two layers have to be different

1 layers and can't include the same layer.

2 So, we're fine with the court's construction.
3 It's not what the defendants say it is. The claims
4 clearly list out two separate layers, an imaging layer
5 and a first patterned layer -- or and a patterned layer.
6 There is no patterned imaging layer that gives rise to
7 the presumption that they can be different materials.
8 Nothing in the specification or the prosecution history
9 clearly departs from that presumption.

10 There is also claim differentiation argument
11 as well. So, claim 4 and claim 5 of the patent
12 specifically mention the type of patterning that the
13 defendants -- a type of pattern that defendants are
14 seeking to inject into the claims. Namely, at claim 4
15 and claim 5, the patterning steps result "such that the
16 exposed portion dissolves to form the first patterned
17 layer."

18 This is the instance that Mr. Bobrow was
19 walking through where the imaging layer and the patterned
20 layer are actually the same material. But if claim 4 and
21 claim 5, as narrow dependent claims, cover that
22 situation, then claim 1 which does not have that
23 limitation necessarily does not.

24 And under the *Edwards* case and a number of
25 cases on claim differentiation, there has to be some type

1 of clear disclaimer, clear import in the spec to overcome
2 that claim differentiation presumption. There is nothing
3 in the spec.

4 THE COURT: Well, are you saying that the only
5 difference between 1 and 4 and 5 is that it is shown to
6 be the same layer?

7 MR. HURT: Yes, your Honor, based on the way
8 that the court has construed "patterning." "Patterning"
9 already includes the exposing and developing steps. The
10 only construction of the -- the only words that are
11 missing substantively from the court's construction of
12 "patterning" are the "such that" clauses at the end of
13 claims 4 and 5.

14 So, the court construed "patterning." The
15 parties largely agreed that patterning requires exposing
16 and developing. And claims 4 and 5 require exposing and
17 then developing, but then have this additional "such
18 that" clause. And the "such that" clause is not in the
19 "patterning" construction; and as a result, claims 4 and
20 5 include a limitation, "such that the exposed portion
21 dissolves to form the patterned layer," that's not in
22 claim 1.

23 And we're not talking about a continuation
24 five chains down where the inventor is trying to
25 recapture something that's, you know, been clearly

1 disclaimed in the spec or the prosecution history. This
2 is in the claims of this application.

3 And I think the court's construction grasps
4 this by saying it is "a layer containing the portions"
5 and not, as the defendants wanted, the portions and
6 spaces themselves.

7 So, unless the court has any questions, we'll
8 rest on that term.

9 THE COURT: So, Mr. Hurt, what you're saying
10 is that you understand "a layer containing" to mean that
11 it can be a different layer than the imaging layer?

12 MR. HURT: Yes, your Honor. It's a layer that
13 contains the portions of the pattern that remain after
14 the first imaging step. And that can be the imaging
15 layer that was patterned, or that can be a separate
16 layer. The defendants' construction was limited to --
17 they read "a layer containing" out of your Honor's
18 construction.

19 THE COURT: Well, the construction is "a layer
20 containing the portions...of the imaging layer."

21 MR. HURT: Correct.

22 THE COURT: And you're saying that it can be a
23 different layer than the imaging layer but contain those
24 portions?

25 MR. HURT: That's correct. So, through -- it

1 can be a different layer than the imaging layer because
2 that pattern that is created on the imaging layer is a
3 pattern that is in what the defendants call -- what they
4 call an "underlying layer."

5 But essentially it's -- a layer in the -- in
6 the semiconductor contains that pattern that is patterned
7 off the -- patterned using the -- patterned -- I'm
8 sorry -- the patterned imaging layer; so, the portions
9 and spaces continue to be propagated through -- or can
10 propagate through.

11 THE COURT: You would be reading this as "a
12 layer containing the pattern of the portions and spaces"?
13 Is that the way you're interpreting it?

14 MR. HURT: No, your Honor. I'm reading it as
15 "a layer containing the portions and spaces." I just --
16 I read it as the "layer containing" does not necessarily
17 mean that the layer is the portions and spaces of the
18 second imaging layer that remain, that that is what the
19 patterned layer must be.

20 THE COURT: I can see where "spaces" could be
21 understood to be a layer -- another layer below having
22 the same spaces. But how would "portions" -- how would a
23 layer that contains the portions of the imaging layer not
24 be the imaging layer?

25 MR. HURT: Because the layer that's underneath

1 the imaging layer contains the portions and spaces of the
2 imaging layer after the imaging layer -- it actually
3 contains those portions and spaces in the next -- under
4 the defendants' product when the etched step is done.

5 But under the patent it could be using other
6 processes, that the portions of the imaging layer that
7 remain after exposure to radiation, those portions are
8 actually then in other layers as the process goes on.
9 And the defendants are -- I mean, that pattern is formed
10 using the patterning; and the defendants are limiting it
11 to the actual material when the claims don't require that
12 limitation.

13 THE COURT: All right. I think I understand
14 your argument. Thank you.

15 MR. HURT: Sure.

16 MR. BOBROW: Your Honor, may I briefly
17 respond?

18 THE COURT: Yes, you may, Mr. Bobrow.

19 MR. BOBROW: So, your Honor, looking once
20 again at the text of your Honor's preliminary
21 construction, the plaintiff's reading of this
22 construction simply makes no sense and is not the natural
23 reading of the construction in any way because of the
24 possessive. Your Honor construed this to mean "a layer
25 containing the portions and spaces of the imaging layer."

1 Now, that is the possessive. You are talking about the
2 imaging layer and portions of that layer.

3 If the imaging layer is then used as a mask in
4 some fashion to do a subsequent processing step -- for
5 example, to etch an underlying layer -- you might
6 transfer a pattern; but the pattern that is in that other
7 layer, those are not portions of the imaging layer. They
8 might be portions of the underlying layer, but they're
9 not portions of the imaging layer. And that's why the
10 court's construction, we submit, makes crystal-clear that
11 what we're talking about and what that means is you're
12 talking about "portions and spaces of the imaging layer";
13 and that's why we think it's consistent with the
14 defendants' original construction.

15 THE COURT: What do you say to the claim
16 differentiation argument based on claims 4 and 5?

17 MR. BOBROW: Let me ask -- let's turn to
18 Slide 37, please; and perhaps we can address it that way.

19 So, as Mr. Hurt argued, he is saying that
20 essentially there is a claim differentiation argument
21 because claims 4 and 5 discuss the exposing and
22 patterning steps. But what DSS doesn't recognize and the
23 reason there is, in fact, no differentiation here is
24 because claims 4 and 5 are limited to the situation where
25 the imaging and patterning that you're doing is with

1 respect to positive photoresist.

2 So, there are -- typically in the field there
3 are a couple of ways that you can treat the imaging layer
4 and -- the composition of the imaging layer being
5 treated. One is to use so-called "positive resist," and
6 another way is to use so-called "negative resist."

7 And when you use positive resist, you expose
8 the material to radiation; and then when you do the
9 development, it's the exposed parts, the parts that
10 you've irradiated, that get dissolved, that go away. So,
11 that's what happens when you use the positive imaging
12 layer.

13 When you use the negative, it's the opposite.
14 You irradiate certain portions, but those portions are the
15 ones that remain. The developer gets rid of the
16 unexposed portions.

17 So, that's the difference between positive and
18 negative; and what claims 4 and 5 discuss are the
19 positive version of the imaging material. That's the
20 light-sensitive material that's being discussed here
21 because, as you can see in claim 4 and in claim 5, what's
22 being discussed is the dissolution of the exposed
23 portions to form a second patterned layer. So, all
24 claims 4 and 5 are saying is use the positive flavor of
25 the imaging layer. We're not going to cover by claims 4

1 and 5 the negative flavor of the imaging layer.

2 Mr. Hurt also discussed the notion that -- you
3 asked the question of is there anything in the
4 specification where the patterned layer is referred to as
5 anything other than that, other than the imaging layer;
6 and I didn't hear a citation because I think there is
7 none. As we submitted, every place in the patent that
8 talks about and uses those words, "patterned layer," it's
9 talking about the imaging layer after that patterning has
10 been performed on the imaging layer.

11 And if you're going to do something to a layer
12 underneath, the patent talks about doing etching. It
13 doesn't talk about that in terms of doing -- developing.
14 It doesn't talk about it in terms of exposure. And, so,
15 what Mr. Hurt is trying to do is say that somehow we
16 should capture in this patterning, which both sides have
17 agreed is dealing with exposing and developing -- somehow
18 we should capture something else, like etching into an
19 underlying layer and capturing that within the claim.
20 That is not within the claim, and we think that the
21 court's construction accurately captures that. Thank
22 you.

23 MR. HURT: Very briefly, your Honor.

24 THE COURT: All right, Mr. Hurt.

25 MR. HURT: Two very quick points. First,

1 Mr. Bobrow mentioned that claims 4 and 5 are limited to
2 the situation where positive photoresist is used. But
3 then that would read claims 2 and 3 out of the patent,
4 which are limited to when positive photoresist is used;
5 and it expressly says that. So, claims 4 and 5 have to
6 be different; and that means that the patterning has to
7 be different.

8 On the where in the specification is there a
9 disclosure that supports our construction, I did not give
10 a citation. That is right. But that's not because I
11 made it up. That's just because I forgot to give a
12 citation. In the Background of the Invention, Column 1,
13 lines 23 to 25, it says, "The photoresist is then
14 developed to form a patterned photoresist layer." That's
15 what the defendants called the "patterned layer." But
16 then if you keep reading, "over the underlying to be
17 patterned"; and that's what we submit is the patterned
18 layer.

19 There is also a portion in the
20 specification -- Column 5, 62 to 63 -- where the imaging
21 layer for the second imaging layer is above the first
22 patterned layer, which indicates that the layers do not
23 need to all be the same layer.

24 Thank you, your Honor.

25 THE COURT: All right. So, next we'll address

1 the first pattern, second pattern, and feature distinct.

2 MR. VOSS: Craig Voss for Plaintiff DSS.

3 Your Honor, pretty simple. The crux of it is
4 -- it looks like the court in its preliminary
5 construction has adopted the defendants' proposed
6 construction. DSS -- the removal of "geometric pattern"
7 -- the word "geometric" DSS is okay with.

8 The distinction that DSS contends needs to be
9 in the construction is that the first pattern and second
10 pattern must be different patterns, and that's due to the
11 fact that they are labeled "first pattern" and "second
12 pattern." And while it is true that the ordinal numbers
13 "first" and "second" usually relate to instances of the
14 same element, if the patterns were the same, the claim
15 language would read "first pattern" and "said first
16 pattern" not "first pattern" and "second pattern."

17 Every instance of the mask disclosure in the
18 '084 specification, when it describes the first mask and
19 second mask in relating to those figures, shows a
20 different pattern for the first mask and second pattern,
21 which would create different patterned layers. And
22 that's true for figures 2 and 4, 7 and 9, and 13 and 15.
23 Every instance of a first pattern and second pattern are
24 showing different patterns.

25 THE COURT: So, you're saying that the claim

1 should be limited to the embodiments shown?

2 MR. VOSS: I'm saying that the first pattern
3 is different from the second pattern.

4 THE COURT: Just because in the different
5 figures it is shown that way?

6 MR. VOSS: Yes, your Honor.

7 THE COURT: All right. Is there anything in
8 the language itself that indicates that they have to be
9 different patterns?

10 MR. VOSS: Just the fact that they are labeled
11 "first pattern" and "second pattern" differently.

12 THE COURT: Well -- all right.

13 MR. HARPER: Your Honor, David Harper for the
14 defendants.

15 We, of course, agree with the court's
16 construction and don't believe that the claim language
17 supports a different pattern at all.

18 As cited in our briefing, the claim language
19 does not require that the first and second patterns be
20 different. The case authority is clear on this -- and
21 we've cited these authorities in our briefing -- that
22 "The use of the terms of 'first' and 'second' is a common
23 patent-law convention to distinguish between repeated
24 instances of an element or a limitation."

25 And in the patent itself in other places,

1 "first" and "second" is used to refer to just another
2 occurrence of the same limitation. So, for example,
3 there is no dispute that the same photoresist material
4 could be used in the first and second imaging layers.
5 So, "first" and "second" is used this way throughout the
6 patent.

7 The specification also doesn't support that
8 this would be a second pattern or a different pattern.
9 The specification points out multiple times "any suitable
10 pattern" can be used. Nowhere does the specification say
11 that there has to be two different patterns.

12 THE COURT: Do you agree that all of the
13 embodiments show different patterns?

14 MR. HARPER: No, not necessarily, your Honor.
15 I think that this slide here demonstrates that there is a
16 mask, and I think the specification describing these
17 figures talks about a first and second mask. But this
18 mask could just be shifted horizontally. It's in the
19 same way when saying "first" and "second," just using the
20 second instance of potentially the same mask, just
21 shifted in some way.

22 So, for example, in our briefing we show this
23 figure where the same mask is being used. The circle
24 represents where the wafer is on the mask. And by simply
25 moving the mask, you can create different features.

1 Also, your Honor, in a co-pending application,
2 the patentee knew exactly how to claim different patterns
3 if they wanted to. They actually tried to do that in a
4 related application. This is all cited in our briefing
5 and contained at Exhibit F to our brief. But they
6 actually asked for a second pattern different from the
7 first pattern and the examiner rejected it and said it
8 was not supported actually by the specification. And
9 what's clear from this process is that everyone
10 understood that the same pattern would be included, would
11 definitely be included.

12 And as we cited in our briefing, the
13 *Microsoft v. Multi-Tech* case tells us that this
14 prosecution history is certainly relevant.

15 Finally, I would point out that in this
16 Institution Decision in the IPR filed on this patent, the
17 PTAB considered this exact same argument and also agreed
18 with the court that the second pattern is not necessarily
19 different and referred to the specification exactly.

20 And the PTAB is applying, in that Institution
21 Decision, the same claim construction standard that the
22 court is using -- it's applying the *Phillips* standard --
23 because this is an expired patent. It expired in
24 December. And, so, it is using the exact same standard
25 that the court is using. Thank you, your Honor.

1 THE COURT: All right.

2 MR. VOSS: Brief response, your Honor?

3 THE COURT: All right.

4 MR. VOSS: So, a couple things I'd like to
5 point out. First of all, the '223 patent prosecution
6 history, it's of less relevance because it's a different
7 patent. However, the rejection was actually -- well,
8 the patentee attempted to reverse the rejection because
9 the specification actually does teach two different
10 patterns. Like I pointed out when I first stepped up
11 here, that figures 2 and 4, 7 and 9, and 13 and 15
12 disclose separate patterns. So, that's not necessarily
13 -- the examiner's statement in the '223 patent shouldn't
14 control. And it's oftentimes that patentees claim
15 similar inventions in continuations and divisionals; and,
16 so, that patent was just an express recitation of what is
17 implicit by the first and second pattern found in the
18 '084 patent.

19 THE COURT: Mr. Voss, wouldn't you agree,
20 though, there is a big difference between the possibility
21 that it can be a different pattern and the requirement
22 that it be a different pattern?

23 MR. VOSS: I think there is a difference
24 there, yes. But when you look at the specification
25 language, where it says "any suitable pattern" may be

1 used, that "suitable" -- DSS views that "suitable" as
2 being different from the first pattern. A suitable
3 pattern is not the first pattern or second pattern.
4 Because the claim language says "first" and "second," the
5 pattern must be different.

6 THE COURT: We get "first" and "second" all
7 the time for elements that are the same. Why does the
8 use of "first" and "second" require that it be different?
9 I mean, obviously it is a patterned -- I mean --

10 MR. VOSS: It's a separate instance.

11 THE COURT: It's a separate element. But to
12 require that it be different would be like requiring that
13 the material used for the imaging layer be different
14 because one is first and one is second, wouldn't it?

15 MR. VOSS: I don't think so, your Honor. I
16 think that the language "first pattern" and "second
17 pattern" means that they need to be different patterns.

18 THE COURT: Okay.

19 MR. VOSS: And one point on the *Beneficial*
20 *versus Black Dot* case that defendants cited. If you look
21 at the actual proposed construction there, it was a
22 "first user" and "second user." And the plaintiff
23 suggested in its claim construction that the first user
24 be separate, a different user than the second user; and
25 Judge Ward accepted that definition. Thank you.

1 THE COURT: And I understand that there are
2 times when it does need -- to make sense, it needs to be
3 a different thing. But a pattern is, it seems to me,
4 distinguishable from an item, an object. But in any
5 event, I understand your argument.

6 MR. VOSS: Okay.

7 THE COURT: I appreciate it.

8 MR. VOSS: Thank you, your Honor.

9 MR. HARPER: Nothing further from me, your
10 Honor.

11 THE COURT: All right.

12 MR. VOSS: So we can move to "a second feature
13 distinct from the first feature."

14 THE COURT: Yes.

15 MR. VOSS: DSS can agree to the court's
16 preliminary construction; so, if defendants want to
17 address it...

18 THE COURT: All right.

19 MR. CUNNING: Good morning, your Honor.

20 Stephanie, can you give me Slide 127?

21 We do still have an issue with the court's
22 preliminary construction, and that is that -- the court
23 has substituted "distinct" for "distinguishable." In our
24 view, as said, "distinct" means "distinguishable"; and we
25 would agree that, you know, but for the prosecution

1 history, "distinct" could be understood in its plain and
2 ordinary to be distinguishable, discernible, some
3 difference.

4 But the applicants expressly argued during
5 prosecution to overcome an obviousness rejection over an
6 IBM Technical Disclosure; and they pointed to features A,
7 C, D and E that we have up here on the screen. Those
8 features are distinguishable. They are formed from
9 different layers. They are openings of different widths.
10 Feature A is formed from layer 2. Feature C is formed
11 from layer 6. Feature D is formed with reference to both
12 layers 2 and 6.

13 So, there are multiple ways in which the court
14 or in which someone of ordinary skill reading the IBM
15 Technical Disclosure could distinguish between the
16 features A, C, D and E; but the applicant argued that
17 these were non-distinct features.

18 Whatever "distinct" means, it can't mean
19 "distinguishable." Otherwise, you cannot square what the
20 applicant argued to overcome the rejection of the IBM
21 Technical Disclosure with the fact that these features
22 are distinguishable.

23 And if this construction were to stand, it
24 presents invalidity problems for the '084 patent. The
25 construction that the defendants had urged was in some

1 ways a claim-saving construction. If this construction
2 stands -- and, you know, we intend to move to amend our
3 invalidity contentions based on the court's construction
4 and argue that the '084 patent is invalid over the IBM
5 Technical Disclosure. So, it must mean something less
6 than distinguishable based on these arguments. And then,
7 you know, we contend that that something less than
8 distinguishable was not overlapping.

9 The specific argument that the applicant made
10 to distinguish over Disclosure 1 was that Disclosure 1
11 forms overlapping openings A, C, D and E. They went on
12 to say, "Thus, Disclosure 1 teaches away from amended
13 claim 1, because openings A, C, D and E are overlapping
14 non-distinct features."

15 Now, I realize that the crux of this dispute
16 is that plaintiffs want to read that as overlapping and
17 non-distinct, that these are two separate things; but
18 that's not what the applicant argued. This paragraph --
19 they don't point to any other distinguishing
20 characteristic of those features.

21 In the examiner's obviousness rejection, the
22 examiner had characterized the openings A, C, D and E as
23 coincident. They used a different language,
24 "overlapping"; but they bought into the examiner's
25 characterization. And this was addressed in the *Biogen*

1 case that we cited in our brief. That's at 713 F.3d at
2 1096. There the court was dealing with a rejection for
3 an antibody where the applicant had a non-enabling
4 disclosure. The applicant said, "Well, you know, I have
5 taught at least these portions of this antibody."

6 Later they tried to argue that because they
7 had dependent claims that were broader than the portions
8 that they argued to the Patent Office, that under the
9 doctrine of claim differentiation, their earlier
10 independent claim couldn't be limited to what they had
11 urged to overcome the rejection.

12 And some of the arguments centered around some
13 slight differences in language that they had used versus
14 the language of the examiner, and the court rejected that
15 and said there is a public notice function to the
16 prosecution history. And the applicant is, you know, on
17 some notice that it's their obligation to challenge the
18 characterization of the examiner and make it clear what
19 was actually prosecuted.

20 THE COURT: Would you agree that this is not
21 clear, that whether that means overlapping and
22 non-distinct or the reading that you're proposing is --
23 it doesn't appear to me to be completely clear.

24 MR. CUNNING: I think that when the applicant
25 stated that these features are overlapping openings and

1 that's the only objection that they raised and then say,
2 "Thus, Disclosure 1 teaches away from claim 1" -- I mean,
3 that sentence follows from the sentence prior. "Thus,
4 the disclosure teaches away from claim 1" and "because
5 openings A, C, D and E are overlapping non-distinct
6 features." I think it is clear that what they are
7 arguing is that "overlapping" and "non-distinct" are used
8 interchangeably there.

9 And we also said that it can't mean
10 "distinguishable." That's -- those are distinguishable
11 features. So, for them to say that they are non-distinct
12 doesn't square with the court's preliminary claim
13 construction.

14 THE COURT: All right.

15 MR. CUNNING: I'll yield the rest of the time
16 to plaintiffs and reserve some for rebuttal.

17 THE COURT: All right.

18 MR. VOSS: All right. So, for this term, your
19 Honor, we agree that this doesn't -- well, DSS contends
20 that this disclosure in the prosecution history doesn't
21 amount to a clear disavowal, that this is not clearly
22 delineating what "distinct" means.

23 And for support of that, there's a very strong
24 claim differentiation argument from what issued as
25 claim 12 with regard to the "method of claim 1, where the

1 first and second features do not overlap." So, the
2 defendants are trying to take a prosecution history
3 disclaimer that is not clear and make it clear in view of
4 dependent claim 12. That's just improper.

5 Further, you can see from on Disclosure 1 that
6 A, C and D -- A, C and E on that left side, they are
7 distinguishable. They do have different geometries, from
8 the top-down, which is what plaintiff proposed as its
9 construction. Plaintiff's view is that the court's
10 construction is consistent with the prosecution history;
11 and it is basically that simple, that it's a claim
12 differentiation argument and that the prosecution history
13 does not rise to a clear disavowal of claim scope.

14 THE COURT: All right. Any response?

15 MR. CUNNING: Yes, your Honor.

16 Just briefly with respect to the claim
17 differentiation argument, we've cited several cases that
18 that is a presumption only. It's not an absolute
19 doctrine of claim construction. And the Federal Circuit
20 has held on multiple occasions that prosecution history
21 disclaimer will trump a claim differentiation argument
22 and that the applicant -- again it goes to the notice
23 function and what -- people are entitled to rely on
24 arguments made during prosecution. They cannot argue
25 that a disclosure is not sufficient to render the patent

1 invalid, arguing that it teaches overlapping features and
2 then turn around and through the, you know, artifice of
3 adding a dependent claim capture back everything that
4 they just surrendered during prosecution.

5 Both the *Biogen* case -- again we direct the
6 court to that case -- and the *Fenner* case talk about --
7 the *Fenner* case is a case that we did not cite in our
8 briefing but was recently issued from the Federal
9 Circuit. The cite -- excuse me one...

10 THE COURT: All of that is premised upon it
11 being a clear disavowal in the prosecution history,
12 right?

13 MR. CUNNING: Well, yes; but, again, I would
14 say that if "distinct" and "overlapping" do not mean the
15 same thing, there is still a problem with
16 "distinguishable." I mean, plaintiff stood up here and
17 admitted that those features are distinguishable. So, to
18 then argue that those features are non-distinct makes no
19 sense. You cannot square that with the court's claim
20 construction.

21 So, it must mean something less than
22 "distinguishable." "Distinct" and "distinguishable"
23 can't be squared together. And I didn't hear, you know,
24 they propose to square the arguments made in the
25 prosecution history with the court's construction of

1 "distinguishable" features.

2 THE COURT: All right.

3 MR. CUNNING: Thank you, your Honor.

4 THE COURT: Thank you.

5 MR. HURT: Good morning, your Honor.

6 Christian Hurt again for DSS.

7 I want to talk about "stabilizing the first
8 patterned layer." We can live with the court's
9 construction. A little bit of a background on where this
10 has been a little bit of a moving issue. We proposed
11 about a week ago the exact construction the court here
12 has proposed, which was the PTAB's construction. We let
13 the defendants know that we could live with that.

14 They got back to us and wanted to construe the
15 word "render" in that construction. It's another
16 non-infringement play. They want to construe a
17 construction of "render" to mean "change or alter the
18 properties of the first patterned layer." We think that
19 is improper for a number of reasons.

20 First is we're construing a construction.
21 We're already in the land of where we're getting removed
22 from the claims themselves. Ultimately whether their
23 process that we call "stabilizing" renders -- meets the
24 "rendering" language in the claim construction, that's
25 the ultimate infringement question. That's a fact

1 question. That's a summary judgment question. That's a
2 jury question. That's not a claim construction dispute.
3 And they'll get up here and argue why they think it is,
4 but they are not going to point to you to any part of the
5 patent that defines "renders" as "changing or altering
6 the properties of."

7 So, the claim term, if you look at it, is
8 actually "stabilizing the first patterned layer." That's
9 what we're talking about. And as I just mentioned under
10 the *Edwards* case and others, the Federal Circuit has
11 repeatedly said that ordinarily courts do not construe
12 words that aren't in claims.

13 "Render" is not in the claims, and the
14 defendants never proposed this "changing the properties
15 of" limitation as part of their proposed construction for
16 "stabilizing." We only sort of ferreted this out when we
17 had the back-and-forth about the PTAB's construction
18 because initially the dispute was the disjunctive versus
19 the conjunctive and what the stabilized material can
20 withstand and not this sort of separate issue about what
21 it means to render a material.

22 So -- next slide.

23 And this is an interesting thing because we're
24 actually using what the defendants have used in their IPR
25 petitions to support our construction. The patent

1 expressly says in Column 4, "Any suitable stabilization
2 technique may be used." It doesn't say "one that changes
3 or alters the properties of the material." There is
4 nothing in there that has that limitation.

5 All that the different embodiments show is
6 that the stabilization renders the material "able to
7 withstand subsequent lithographic processing steps."
8 There is nothing that says that the rendering requires a
9 transformation that changes or alters the properties.
10 Indeed, the ordinary term meaning of "rendering" is much
11 more akin to "results in" or "makes"; and here they're
12 trying to limit it to a specific type of process. There
13 is nothing in the patent that warrants that.

14 Unless the court has any questions, I'll sit
15 down and let the defendants respond; and then I'll have
16 probably a brief response to their argument. Thank you.

17 THE COURT: All right, Mr. Hurt. Thank you.

18 MR. HARPER: Thank you, your Honor. David
19 Harper again for the defendants.

20 The construction that the court has proposed
21 is the same construction, we understand, from the PTAB's
22 Institution Decision. And what we would like to point
23 out is in PTAB's construction, they construed the words
24 "stabilize" or "stabilizing"; and this construction is
25 "stabilizing the first patterned layer."

1 And as the court has already heard this
2 morning, there's a great dispute, a chasm, between us
3 about which layers are we talking about and what's being
4 operated on in this patent. And, so, what's very
5 important for this construction is that the words -- if
6 we're going to construe the term "stabilizing the first
7 patterned layer," which is what the parties agreed to
8 construe and submitted, we need the words "first
9 patterned layer" in this construction because we are very
10 concerned that DSS is going to argue using either the
11 word "render" or using the word "material," that we're
12 talking about some different layer. And that is
13 absolutely not what this patent talks about, and it's not
14 what we understand the court to be construing in its
15 preliminary ruling.

16 Their initial construction -- you can see from
17 their initial construction which we have on the slide, on
18 85, that they get into this whole issue of subjecting --
19 there they talk about "the first imaging layer to a
20 process that when completed."

21 So, they're trying to move into lower layers
22 and getting away from the patterned imaging layer; and,
23 so, that's why it's so important in this construction to
24 have the words "first patterned layer."

25 This again, the Slide 86, shows what PTAB's

1 construction was. Again they construed "stabilizing,"
2 not "stabilizing the first patterned layer."

3 It's true that because of the concern of this
4 issue about which layer we're talking about, we are
5 concerned that DSS was going to either use the word
6 "material" or use the word "render" in the construction
7 from PTAB to try to get at these lower layers and it
8 wouldn't be clear. And, so, that's why we brought up
9 the issue about "render" which means "cause to be or
10 become." And, so, a modified PTAB construction at a
11 minimum would have the words "first patterned layer" in
12 two places.

13 "Performing any process on the first patterned
14 layer that alters the properties of the first patterned
15 layer so that it is able to withstand subsequent
16 lithographic processing steps." At a minimum, it would
17 say -- even if we don't use the concept of "render," this
18 definition of "render" -- "performing any process on the
19 first patterned layer that renders the first patterned
20 layer" -- or "rendering the first patterned layer so that
21 it is able to withstand subsequent lithographic
22 processing steps." It needs to be clear where the
23 stabilization is taking place, your Honor.

24 THE COURT: Why does the construction need
25 that reference to the "first patterned layer" after

1 performing any process? In other words, isn't the
2 crucial thing whether the process stabilizes or renders
3 the first patterned layer able to withstand the
4 subsequent steps?

5 MR. HARPER: Well, it is true that --
6 certainly the words "first patterned layer" need to be in
7 this construction if we're construing the term "stabilize
8 the first patterned layer." But clearly the patent talks
9 about this, your Honor.

10 "Render," first of all, is talked about in the
11 specification -- this is Slide 88 -- where "rendering"
12 means altering the properties of something. This is not
13 talking about the first patterned layer with this
14 language at Column 5, 24 through 32.

15 But very specifically, Column 5 at 12 through
16 22 talks about where the stabilization process is taking
17 place. It is taking place on this first patterned layer.
18 It says, "Stabilizing positive photoresist for first
19 patterned layer serves to neutralize photoactive
20 compounds in the photoresist of the first patterned
21 layer." So, the process of stabilization is taking
22 place, is operating on that layer. So, that is why we
23 think that the words "first patterned layer" actually
24 should be in two places in the construction to make it
25 clear that that is where the operation of stabilization

1 is taking place.

2 It also says further in the specification, at
3 Column 6, 51 through 63, that because the stabilization
4 step allows this first patterned layer to withstand
5 subsequent lithographic processing, it can withstand
6 development.

7 So, at the end of Column -- at 6, 51 through
8 63, it talks about, "As first patterned layer 232 has
9 been stabilized, first patterned layer 232 is relatively
10 insoluble." So, it's talking about this concept of
11 that's the layer that's being changed, that's being
12 transformed. It's having a process operated on it, not
13 somewhere else, not some unknown other place. It's
14 happening there on that particular layer.

15 THE COURT: Well, would that suggest that the
16 process can't operate on anything else at the same time?

17 MR. HARPER: Not necessarily, your Honor,
18 but -- not at lower levels -- not lower layers. It is
19 definitely operating on that layer. And, so, that's why
20 "first patterned layer" absolutely needs to be in this
21 construction and, we would submit, in two different
22 places.

23 And the issue is that DSS continues to focus
24 on these underlying layers; and their original
25 construction says that, that they want to get to these

1 underlying layers. And Mr. Bobrow already went through
2 these slides to talk about how the operations of the
3 patent are all talking -- are all operating on layer 220
4 which leads to this feature which then is stabilized as
5 reflected in the figures of the patent.

6 And Figure 1 also talks about stabilizing the
7 first patterned layer.

8 Anyway, DSS continues to focus on this; and
9 I'd like to show the court, if we would move to -- let's
10 get the slides.

11 I think these figures help illustrate what DSS
12 is talking about and why it's so important to have this
13 language in the construction. DSS's construction
14 originally is looking at some later layer. And, of
15 course, the figures reflect the operations at layer 220
16 leading to a feature that stabilized 232, the remaining
17 portions of this imaging layer.

18 But their construction of "stabilizing" would
19 appear like this; and, of course, this figure is not in
20 the patent. It shows what would be the stabilized
21 feature, feature 232; and they want to use an etching
22 process, which etching is never talked about as part of
23 stabilization. It's a different technology. We're not
24 talking about using acids in this patent, those sorts of
25 things. We're talking about operations on a photoresist

1 or an imaging layer in photolithography.

2 But they want to talk about stabilizing as
3 resulting in this lower layer where there is an etching
4 process, and there is nothing in the patent that talks
5 about that kind of a process. Again, stabilizing is
6 never described as etching.

7 But in their own tutorial, they show this; and
8 this is why it's so important to us that "first patterned
9 layer" needs to be construed. You see that as you go
10 through the patent, you have a photoresist -- again their
11 tutorial. A photoresist is applied, and then there is a
12 mask and exposing to radiation and development.

13 And then they include etching, which is never
14 talked about as part of this step in the patent, to get
15 to this underlying layer

16 And then what do they reflect is
17 stabilization? That first patterned layer completely
18 goes away. The remaining imaging layer that has been
19 patterned goes away to get to an underlying layer, the
20 hard mask. That's what they want a construction to mean
21 for "stabilizing," which is absolutely not what the
22 patent talks about and it's why, at a minimum, "first
23 patterned layer" needs to be included in this
24 construction. We would submit that it should be included
25 in two different places, both at the beginning and in the

1 middle of the construction as indicated to the court.

2 Thank you.

3 THE COURT: All right. Thank you, Mr. Harper.

4 MR. HURT: Your Honor, I'd like to actually go
5 back to what the patent says. And you're exactly right.
6 The term is "stabilizing the first patterned layer." The
7 defendants in this case are trying to put in this layers
8 issue, and you saw it in Mr. Harper's presentation.
9 They're trying to reinject this layers question in the
10 "stabilizing." But the claim language already requires
11 stabilizing the first patterned layer, and the PTAB did
12 not construe "stabilizing" in the Abstract. The only
13 time "stabilizing" is in the claim is in step (c),
14 "stabilizing the first patterned layer"; and we think the
15 PTAB's construction is absolutely right. The portions of
16 the specification that Mr. Harper pointed to for
17 "rendering," none of those limit the term "rendering" to
18 a changing or altering of properties.

19 THE COURT: Well, let's talk about the
20 "material" in the construction that the PTAB developed
21 and that I have proposed here preliminarily. Where that
22 construction refers to "renders a material," do you agree
23 that the material is the first patterned layer?

24 MR. HURT: I do. Under the claim it is
25 "stabilizing the first patterned layer"; and the material

1 that is stabilized -- the patent talks about stabilized
2 as "able to withstand subsequent lithographic processing
3 steps." What is able to withstand subsequent
4 lithographic processing steps is the first patterned
5 layer.

6 Now, there is this dispute about is the first
7 patterned layer limited to the portions of the imaging
8 layer or not, which I think is a separate question. And
9 that's what the defendants are trying to load into this
10 construction as well with Mr. Harper walking through our
11 technology tutorial and kind of driving home their LELE
12 noninfringement argument.

13 But I agree that the material referred to is
14 the first patterned layer, and the first patterned layer
15 is in the claims. I don't think we have to, you know,
16 repopulate it in the actual jury charge, given that it is
17 also a separately construed term.

18 THE COURT: Well, I do understand his point
19 that if we are construing the whole phrase and we don't
20 use "first patterned layer," then that could be
21 problematic; so, I --

22 MR. HURT: I mean, your Honor, the
23 plaintiff -- we would be fine with if instead of the
24 phrase "stabilizing the first patterned layer," the
25 PTAB's construction of "stabilizing" is used and the

1 "first patterned layer" portion is not in the court's
2 construction since it's a separate term.

3 THE COURT: Okay. And I understand that
4 there is a dispute about that, the meaning of "first
5 patterned layer"; and that's something we'll have to
6 address.

7 MR. HURT: Right. And I won't go through our
8 slides on that issue again, your Honor; but obviously I
9 just wanted to flag that dispute.

10 The real dispute here is the "rendering"
11 issue, and I didn't see anything in the patent that
12 defines "rendering" the way they want to define it.

13 THE COURT: Okay. Thank you, Mr. Hurt.

14 MR. HARPER: Your Honor, very briefly.
15 Certainly stabilizing is not etching. It's not removing.
16 It's stabilizing. And the patent talks about
17 "stabilizing the first patterned layer" and that's why we
18 believe that the term "first patterned layer" should be
19 in the construed term two times to make it clear. But
20 certainly at a minimum your Honor is correct that where
21 the "material" is if we are construing this phrase, it
22 needs to say "first patterned layer" there.

23 Certainly we can argue about what "first
24 patterned layer" means. That's another argument that's
25 being made. But to be clear, we need that term in this

1 construction. We would proffer that it should be two
2 places. Certainly, as the court understands, the words
3 "a material" should at a minimum be replaced with "first
4 patterned layer." Thank you, your Honor.

5 THE COURT: That you, Mr. Harper.

6 MR. VOSS: Your Honor, for "the second
7 patterned layer and the first patterned layer form a
8 single patterned layer," Plaintiff DSS can agree to the
9 court's construction of plain and ordinary meaning.

10 THE COURT: All right.

11 MR. BOBROW: Your Honor, Jared Bobrow again
12 for Samsung.

13 With respect to "the second patterned layer
14 and first patterned layer forming a single patterned
15 layer," the court's preliminary construction is "plain
16 meaning"; and the concern we have with that construction,
17 your Honor, is that the parties when they set forth their
18 alternative constructions made, I think, crystal-clear
19 that they have a disagreement about what this term means.
20 And we're concerned that this dispute is simply going to
21 arise later and that we'll be back in front of your Honor
22 seeking clarification, seeking a construction of this
23 term, because the parties appear to have a meaningful
24 dispute about what the term means.

25 Certainly for the defendants we believe that

1 the language, "the second patterned layer and the first
2 patterned layer forming a single patterned layer," is
3 indeed clear. There is no question that it is clear
4 language and we think that the proposal that Samsung has
5 provided makes that clear and I'll explain why in context
6 in just a minute.

7 DSS's construction, though, shows that the
8 parties have a material difference and dispute over what
9 that plain meaning is because they are saying that the
10 "single patterned layer" means a "single layer, even if
11 the patterned features are from more than one imaging
12 layer."

13 And the dispute in principle appears to be
14 that under DSS's construction, you could have this single
15 patterned layer within the meaning of the claim and that
16 implicitly or explicitly from their construction and
17 understanding, that single patterned layer could be from
18 simply one layer because they are saying even if it's
19 from more than one layer; so, that implies that it could
20 be from one layer or from more than one layer.

21 We dispute that, and we think that the patent
22 is fundamentally inconsistent with that. And that's the
23 crux of the dispute that I think we have with the
24 plaintiff over what the ordinary meaning of this phrase
25 is, and that's really what drove the construction that

1 Samsung provided.

2 And let me explain, because we submit that the
3 patent is very clear that that single patterned layer
4 comes from what remains of the first patterned layer
5 after you do the patterning and stabilization and what
6 remains of the second imaging layer after you do the
7 patterning that is called out of the claim.

8 THE COURT: Is your concern that something has
9 to remain from the first patterned layer? Is that what
10 you're getting at or what?

11 MR. BOBROW: That is part of it, your Honor.

12 The claim, we submit, makes clear that that
13 single patterned layer comes from the stabilized first
14 patterned layer and what remains of the second patterned
15 layer; that is, after you've done the patterning on the
16 second imaging layer, you've got the second patterned
17 layer.

18 And let me just, if I might, just have the
19 claim up and just walk through the claim a bit to explain
20 why we think that there have to be those two layers that
21 make up the single patterned layer.

22 So, we start in step (a) with the formation of
23 the imaging layer. That layer is then subjected to
24 patterning, and we've been through those terms. We've
25 also been through the "stabilization" term.

1 But the point is that you have some chunk of
2 that first patterned layer which has been stabilized, and
3 the point of that stabilization is so that it remains --
4 and there seems to be no dispute about this -- so that it
5 remains and can withstand the subsequent lithographic
6 processing because in steps (d) and (e), you are then
7 performing another round of lithographic processing. You
8 are now performing processing on the second imaging
9 layer, and you want that stabilized first patterned layer
10 to remain. That's what the patent talks about
11 repeatedly, over and over again, is what this patent is
12 about is making sure that that stabilized first patterned
13 layer remains.

14 So, now we have the formation of the second
15 patterned layer through the patterning of the imaging
16 layer. And what you then have is a "wherein" clause.
17 You have a "wherein" clause after you form that second
18 patterned layer, wherein. Now, this is really the key
19 part of it. We're now talking about the second
20 patterned layer. What is that referring to? That's
21 referring to the second patterned layer that you just
22 formed. That's an already formed layer. And when we're
23 talking about the first patterned layer, that's not just
24 any layer; that's the layer that was formed and
25 stabilized up above.

1 And, so, what the patent is saying is I've got
2 these two layers that exist. I've got the first
3 patterned layer, the second patterned layer. Those
4 exist. Wherein -- so, what does that all mean? Wherein?
5 It means that you've got the second patterned layer and
6 the first patterned layer forming that single patterned
7 layer.

8 So, from this we submit that the single
9 patterned layer when the patent is talking about -- and
10 the claim language that we're construing is this entire
11 phrase, "the second patterned layer and the first
12 patterned layer form a single patterned layer." What
13 that's talking about is that those two layers that have
14 been patterned form that single patterned layer.

15 The dispute then, your Honor, is that when
16 you go to DSS's construction, what they seem to suggest
17 is the plain and ordinary meaning is that you could
18 actually do this -- you have a single layer of patterned
19 features, but that could be from more than one imaging
20 layer; or it could be, implicitly then, from a single
21 imaging layer. And the claim language itself and the
22 specification make clear that that single patterned layer
23 results from the patterning of the first imaging layer,
24 its stabilization; and then you've got that second
25 patterned layer.

1 The argument that I think DSS has made is
2 that, well, this phrase "single patterned layer," those
3 three words were construed at the Patent Office and there
4 was testimony at the Patent Office about what that means
5 and indeed those three words -- a construction was
6 offered with this quoted material, what DSS has offered.

7 But what the parties have asked the court to
8 do is not simply to construe those three words, "single
9 patterned layer," in isolation where indeed this is a
10 reasonable construction of those three words. What we've
11 asked the court to do is construe "single patterned
12 layer" in the context of the claim and in the context of
13 the phrase that includes the words "the second patterned
14 layer and the first patterned layer form a single
15 patterned layer."

16 And, so, the construction then of the "single
17 patterned layer," those three words alone, is simply not
18 sufficient. But it does suggest the parties have a
19 dispute about what that single patterned layer is, and
20 that's simply why we've asked the court to offer an
21 express construction rather than leaving the parties to
22 fight about what this term means down the road, perhaps
23 in the context of some later motion or other proceeding
24 before this court. Thank you.

25 THE COURT: All right.

1 MR. VOSS: Your Honor, DSS again agrees that
2 the court's construction of plain and ordinary should
3 control. TSMC proposed the exact construction for
4 "single patterned layer." Yes, it is true that the claim
5 language that the defendants seek to construe contains
6 "the first patterned layer and second patterned layer
7 form a single patterned layer," which is different from
8 the phrase that TSMC provided in their IPR petition. But
9 the language preceding that phrase in the claim language
10 doesn't need construction because it is clear on its face
11 that the first patterned layer and second patterned layer
12 form the single patterned layer.

13 Now, there is obviously a dispute on what
14 constitutes the first patterned layer and second
15 patterned layer that we've been over a lot today; but the
16 defendants have nowhere pointed to where the word "form"
17 needs to be construed such that the ordinary meaning
18 doesn't control. There is no limitation in the
19 specification that says "to form" must mean "remains
20 with." Because there is no disclosure of that nature,
21 the ordinary meaning should control.

22 THE COURT: But do you -- all right.

23 MR. BOBROW: Your Honor, the issue that again
24 I think we have, it's a bit akin to the issue that was
25 just argued on "stabilization" because if you take a look

1 at what DSS thinks the plain and ordinary meaning is,
2 it's saying it refers to a single layer of patterned
3 features, not saying where that pattern is from or
4 whether it's the first patterned layer or the second
5 patterned layer, even if the patterned features are from
6 more than one imaging layer.

7 Again, that's not what we're construing here.
8 The parties have asked the court to construe "the second
9 patterned layer and the first patterned layer form a
10 single patterned layer." And, so, the concern again that
11 we have is that there could be uncertainty or ambiguity
12 down the road about what we're exactly talking about,
13 which features, which layers, and which patterns.

14 And we think that by adopting the proposal
15 that Samsung has made would make crystal-clear which
16 patterned layers are under discussion and what is being
17 formed and what patterned layers are there; whereas, the
18 DSS view of it is quite -- is much more abstract and
19 generalized and not specific to the context of the claim
20 term that is being disputed here. And that's our
21 concern.

22 But with the Samsung construction when you
23 have in there "the second patterned layer and the first
24 patterned layer," it makes it clear what we're talking
25 about. When you have the DSS construction, it's talking

1 about, you know, one imaging layer. It's talking about
2 patterned features. Again, we don't know what those are
3 because they are not tied to the entire phrase that is
4 under construction.

5 THE COURT: Your proposed construction just
6 adds -- basically adds in the word "remains"?

7 MR. McCABE: Yes, your Honor. In a sense
8 that's right. It's saying that we have these layers that
9 have been formed after patterning and stabilization.
10 Those are the patterned layers. And what the patent says
11 quite repeatedly in the specification is -- and it even
12 uses that phrase, "what remains." It's talking about how
13 you have those layers and you've done the patterning and
14 now we're seeing what's left.

15 What's left at the end of the day, after
16 you've done all of that patterning and stabilization, is
17 you've got that first patterned layer and you've got the
18 second patterned layer. And then the claim says
19 "wherein" those things form the second patterned layer.
20 So, indeed, it's the -- the first patterned layer remains
21 with the second patterned layer, and that's what forms
22 that single patterned layer.

23 THE COURT: And you think that the word
24 "remains" needs to be in there in order to exclude a
25 situation where there is nothing remaining of the first

1 patterned layer or what -- I'm just trying to get at
2 what -- how that improves on the claim language itself.

3 MR. BOBROW: So, I think the way that it
4 improves on it is that what it's doing is making clear
5 that I have patterned this first patterned layer and I've
6 stabilized it. And I think the notion of what remains is
7 keyed off of the stabilizing step because the point of
8 the patent is you want all that stuff from the first
9 patterned layer to remain. That's the goal of the
10 patent, and that's what is specifically claimed. I
11 stabilize it so that it can withstand the subsequent
12 processing.

13 And, so, we think that the language "the first
14 patterned layer remains with the second patterned layer"
15 tells you that I have that layer that I have formed and I
16 have taken additional steps to ensure that it's going to
17 survive. And that's what this language is designed to
18 capture. I've ensured it survives. It is there. I do
19 my second patterning step. That remains. And the clause
20 is "wherein" I've got that remaining stuff. That makes
21 up the single patterned layer.

22 THE COURT: So, are you trying to ensure,
23 then, that the stabilizing step occurs before the step in
24 (e) that we're addressing here?

25 MR. BOBROW: Well, indeed it will occur before

1 the step in (e); and that's clearly what is claimed in
2 the patent. And also what is taught in the patent is
3 that the stabilizing of the first patterned layer takes
4 place before you do the patterning of the second imaging
5 layer to form the second pattern because the entire
6 concern of the patent is that you have that first
7 patterned layer; and the fear is that if you don't
8 stabilize it, then when you deposit and pattern that
9 second imaging layer, it's going to go away, that
10 something is going to happen to it that's going to either
11 damage it or remove it or take portions of it away. And
12 that's what the patent tries to avoid by doing an extra
13 step in a semiconductor process which, of course, adds
14 cost and adds complexity. But the point is you want to
15 take that extra step to make sure that that first
16 patterned layer survives.

17 THE COURT: And is that what you believe that
18 your proposed construction ensures, is that the first
19 patterned layer has already been stabilized?

20 MR. BOBROW: The first patterned layer has
21 been stabilized and it survives, yes. The first
22 patterned layer has been stabilized and survives. And
23 then you have that subsequent patterning step, and that
24 forms that second patterned layer. And it's the
25 combination of those two things that then makes up that

1 single patterned layer because those are the two things
2 that have survived this processing. Those are the things
3 that exist, and then they make up that single patterned
4 layer.

5 THE COURT: All right.

6 MR. BOBROW: All right. Thank you.

7 THE COURT: Thank you, Mr. Bobrow.

8 MR. VOSS: Just a quick response to
9 defendants. I think it's clear from the argument on this
10 term that what's really being argued is what is the
11 patterned layer again. We're just rereading that.

12 Stabilization, the fact that the first
13 patterned layer and second patterned layer form the
14 single patterned layer, that's already in the claim
15 language. Defendants are just trying to construe "form"
16 as "remains with." That's inconsistent with the fact
17 that the first patterned layer can include features and
18 spaces. And, frankly, there is no disclaimer on what
19 "form" means in the patent to make it be restricted to
20 the "remains with" language.

21 THE COURT: Okay. Thank you.

22 MR. HURT: Your Honor, Christian Hurt again
23 for DSS.

24 On the last term we obviously agree with the
25 court's resolution. The defendants haven't proved that

1 term indefinite. So, I'll let the defendants address
2 that term first; and I'll respond.

3 THE COURT: All right.

4 MR. LANG: Good morning, your Honor.

5 THE COURT: Good morning, Mr. Lang.

6 MR. LANG: The claim term at issue here is
7 "wherein the first and second features which are formed
8 relatively closer to one another than is possible through
9 a single exposure to radiation." And the language I want
10 to focus on that's the real problem here today is
11 "possible through a single exposure to radiation." What
12 is possible?

13 And this language directly defines the scope
14 of the claim. As you've seen this figure a lot today,
15 the first feature and the second feature, by this claim
16 language, must be closer together "than is possible
17 through a single exposure to radiation." If it's closer,
18 it meets the claim language. That's part of it. If it's
19 outside, then it falls outside the claim scope.

20 So, under *Nautilus* what is possible must be
21 defined with reasonable certainty. Now, what is possible
22 in this context, your Honor, depends on a host of
23 factors. Dr. Blanchard had testified to not only does it
24 depend on the equipment but what technique is used, the
25 type of radiation and then, even outside of the

1 equipment, the process such as the photoresist used.

2 And, your Honor, at this point I would like
3 to, if I may, proffer some additional testimony from
4 plaintiff's expert. This testimony was included in the
5 4-3. We notified the defendants on Sunday that we
6 wanted to present some of that testimony. I have copies
7 of that if I can approach the bench and present it to the
8 court.

9 THE COURT: All right. Is there any
10 objection?

11 MR. HURT: No, your Honor. I mean, they could
12 have put this in their brief. They didn't. But they can
13 obviously --

14 Do you have a copy for us?

15 MR. LANG: Yes.

16 THE COURT: All right. Then you may hand it
17 up to the clerk.

18 MR. LANG: Your Honor, I'll point out in that
19 slide one quote from Dr. Mack's article that I just
20 handed you. The article is from Dr. Mack, which is
21 plaintiff's expert, a 2004 article. And what's key about
22 this is this article, of course, was before this
23 litigation. And before this litigation plaintiff's
24 expert, Dr. Mack, agreed with Dr. Blanchard. In this
25 article he described, "The resolution limit of optical

1 lithography is not a simple function."

2 And I'd like to now provide some detail on why
3 Dr. Mack describes that it is not a simple function.

4 Oh, your Honor, I'd like to, you know, offer
5 the testimony and exhibit that I just handed you into the
6 record.

7 THE COURT: All right. You can. What I'll
8 ask you to do is to e-file it, but that will be fine.

9 MR. LANG: Okay. Thank you, your Honor.

10 So, turn back to Dr. Mack's statement that
11 "The resolution limit of optical lithography is not a
12 simple function." He later in his article describes why,
13 and I'll start that explanation with actually a slide
14 from plaintiff's tech tutorial that today -- they didn't
15 have an opportunity to present today. But I have a
16 feeling that plaintiffs will address this; so, I'll put
17 this up on the Elmo.

18 All right. Your Honor, in the plaintiff's
19 reply brief, for the first time, you heard a lot about a
20 brick wall; and they described what is possible is a
21 brick wall. And now what the plaintiffs have said is
22 there is this equation that explains what the brick wall
23 is, what's possible. And this is Slide 9 of their
24 presentation.

25 And in that equation they say what is possible

1 is this equation K_1 over the wavelength of the tool over
2 the aperture. And K_1 is what I want to focus on. That
3 is, in part, what defines what is possible.

4 Now turning back to Dr. Mack's article --
5 well, your Honor, I'll read this in. This is following
6 Dr. Mack's statement that the resolution is not a simple
7 function. He goes on to explain this equation and this K
8 value and states, (reading) K depends on the details of
9 the imaging process. Ultimately K can be as low as .5
10 but only with tremendous effort. Values of .8 to 1 are
11 more typical today.

12 So, your Honor, we're not talking about the
13 case where it's approximately, substantially. We're
14 talking about a value that can double. What is possible,
15 by plaintiff's expert's own testimony, with a lot of
16 work, can double or can be cut in half.

17 And turning back to Dr. Mack's testimony, he
18 detailed all of these factors that affect what is
19 possible. On the right there you see the tool, the
20 wavelength of that tool. But it's not just a system.
21 You have the lithography process, the type of feature,
22 and then in the more grand rule on the left these
23 techniques, how you apply the illumination, the
24 properties of the mask. You've heard a lot about the
25 mask today. Likewise, with the photoresist, not only

1 the photoresist type but how it's deposited, how it's
2 baked, and then the specific parameters within this
3 process.

4 Now, the experts agree there is no question of
5 fact. All of these factors affect what is possible.
6 This is a classic case, your Honor, under *Halliburton*,
7 where the claim limitation, the claim scope here, depends
8 on a wide variety of factors. And making an infringement
9 determination requires looking at all of these
10 circumstances, and the outcome is going to differ
11 depending on all these different circumstances. And in
12 that case a construction of the term is likely to be
13 indefinite.

14 THE COURT: Isn't it true that any system that
15 is used will have a maximum closeness that can be
16 achieved?

17 MR. LANG: That's the problem. It's who is
18 using the system and what is possible. As Dr. Mack
19 testified -- and I'll get into this --

20 THE COURT: But my question is: Whatever
21 system is being used, it will have a limit, right?

22 MR. LANG: Your Honor, I'll make two points on
23 that.

24 THE COURT: Okay.

25 MR. LANG: One is there may be some

1 theoretical "pie in the sky" limit, but that's not what's
2 possible to a person using the system. And the claim
3 language says what is possible. That's my second point
4 is that the claim language says what is possible.

5 And as Dr. Mack's article explained, it could
6 vary. It could double, actually, with a lot of work.

7 THE COURT: You can change the system in order
8 to get different results. But I thought that even your
9 expert testified that one of ordinary skill would
10 understand that this is talking about the limits of
11 whatever system is being used.

12 MR. LANG: That's right, your Honor. Here is
13 the key point. He had said in his declaration that maybe
14 this -- or this limitation refers back to the system of
15 the patterning steps. But that doesn't solve the problem
16 because you can take -- for two big reasons. You can
17 take that given system and you can tweak it, you can
18 modify it, and you can get a better resolution. And then
19 the second point is the system aside, there is the
20 process that you're using, the type of photoresist, the
21 type of mask, the type of feature that you're printing.
22 So, there are really two problems, the optimization of
23 the system and then, secondly, the process.

24 And the problem -- the real problem here is
25 the specification never describes how you gauge what is

1 possible. In fact, it recognizes that many factors
2 affect what is possible. It identities -- the one
3 passing reference is it states the resolution "may
4 depend" -- "may" -- "on the lens." So, it really
5 expressly recognizes that many factors are going to
6 affect this.

7 Now, the file history, likewise, doesn't
8 provide the criteria or the factors to gauge what is
9 possible. The plaintiffs have cited portions of the file
10 history; but, if anything, it adds confusion because the
11 file history is referring to the reference, the sizes of
12 images that you're printing, not how close those features
13 can be together. And, importantly, nothing -- no part of
14 that file history describes what "what is possible"
15 means.

16 THE COURT: You know, it seems to me that this
17 method is designed to be used with lots of different --
18 techniques? I don't know what the term is I'm looking
19 for but -- and that whatever the limits are of those
20 techniques, this method is designed to improve upon that.

21 MR. LANG: Yes, your Honor. We agree with
22 that. The problem is that what is the limits. We're not
23 arguing that the system -- or the claim is limited to a
24 particular type of system. What we're arguing is the
25 claim language "what is possible" is indefinite. If the

1 claim said a "theoretical limit" or something like that,
2 then it might be a different story

3 And, you know, interestingly -- I'll just flip
4 to, you know, what is possible for a given system. It
5 really becomes subjective. If you look at Dr. Mack's
6 opening declaration, he states what is able or what is
7 possible is in the context of a manufacturing
8 environment. But then he testified what is possible in
9 a laboratory is different than a manufacturing
10 environment.

11 Now, the theoretical limits might be the same;
12 but that's not what's claimed. Dr. Mack also testified
13 that engineers can tweak and optimize a system to make
14 possible even closer features.

15 So, we're stuck with this claim language "what
16 is possible" and it becomes a moving target and it is
17 subjective depending on who is using the system. And
18 when you have subjective terms, which this clearly is
19 given Dr. Mack's testimony, you have to have a standard
20 in the specification or the file history to say how you
21 gauge or how you figure out what is possible. It's not
22 in the specification. It's not in the file history.

23 And just to kind of put an exclamation point
24 on it, what we're left with, your Honor, is what is
25 possible in life is not too different than a lithography

1 system. As the famous quote attributed to President
2 Roosevelt, "With self-discipline most anything is
3 possible," that's essentially what Dr. Mack, plaintiff's
4 expert, said. With a lot of work, you could double that
5 K factor. You could cut it in half. So, all of a
6 sudden what is possible is not varying by a couple
7 percent but varying or being cut in half. Thank you,
8 your Honor.

9 THE COURT: All right. Thank you, Mr. Lang.

10 MR. HURT: Good morning, your Honor.

11 Christian Hurt again for Plaintiff DSS.

12 This issue has been a bit of a moving target
13 when this morning for the first time one of Dr. Mack's
14 papers was relied on, other testimony from his
15 deposition, none of which made it into their response
16 brief, all of which could have.

17 Initially the defendants argued that this was
18 a term of degree because their expert said so, and then
19 they walked away from that in their brief. This court
20 has held before that terms like "closer," "relatively
21 closer," you can actually decide -- you can actually
22 determine objectively if something is closer to each
23 other than not; and the defendants' expert in this
24 lawsuit agreed with that at his deposition.

25 This isn't a subjective term. This isn't a

1 question of what I think is possible versus what
2 your Honor thinks is possible. This is a question of
3 what is possible with the machine. And the defendants'
4 expert in this case agreed that the construction of that
5 term was using the system, do you beat the resolution for
6 the features that you're making. And I asked him -- and
7 so here it is on the slide. "It is my opinion that one
8 of ordinary skill would understand that" this clause
9 "means that the features must be a distance apart that is
10 smaller than the resolution distance of a system that is
11 being used to perform the patterning steps." That's from
12 the defendants' expert.

13 Now, I asked him and asked Dr. Mack for every
14 machine they have ever worked on, what's the resolution
15 limit of that machine; and they gave me an answer,
16 250 microns, 500 microns, 1 micron, 800 nanometers. The
17 ones they didn't give me an answer were -- the answer was
18 never "I don't know because it's so complicated" or
19 "because it's subjective." The answer was "I don't know
20 because I don't remember."

21 And if you look at Dr. Mack's article that
22 they are relying on now, it says that the exposure limit
23 is not a simple function. That doesn't mean it's
24 unknown, doesn't mean that someone couldn't figure it
25 out.

1 And then his declaration is completely
2 consistent with that. He said, "For a given imaging
3 tool" -- and it sounded like the defendants have now
4 conceded. This was the main point of their response
5 brief. You don't know which tools you're using. But
6 Mr. Lang -- I think I heard him say that what is possible
7 is linked to the patterning steps.

8 Dr. Mack explained, "For a given imaging tool"
9 the single exposure limit is "well known and easily
10 discernable."

11 I asked him about that at his deposition. I
12 said, "Do you agree with that statement?"

13 He said, "Yes."

14 And do you agree with that statement when you
15 are looking for the single-exposure resolution limit
16 between two features?

17 "Yes."

18 Is that correct for every imaging tool ever
19 used from '94?

20 "Yes."

21 From 2008?

22 "Yes."

23 Today?

24 "Yes."

25 That is undisputed. There is nothing in the

1 record that indicates that these limits cannot be
2 measured. The measurements are complicated, yes; but
3 nothing says they can't be measured.

4 We'll go to the next slide.

5 The prosecution history supports this view.
6 In it there wasn't just a recitation of a term by the
7 examiner in the claims. There was actually a
8 back-and-forth on this exact claim term. So, the
9 patentee added it during prosecution to distinguish what
10 was called "IBM Reference Number 2." And in that
11 reference there was a disclosure of using a
12 high-resolution tool, the E-beam tool, for one part of a
13 chip and an optical write tool, which was a
14 low-resolution, from another part.

15 And the examiner said -- this is from our
16 opening brief. And the examiner first said that this met
17 the "relatively closer" limitation. And then the
18 patentee explained no, it doesn't because one section of
19 the chip uses 250 micron images, one section uses 500,
20 but nowhere are you getting better than 250. And the
21 examiner agreed with that and allowed the claims.

22 Nowhere in that back-and-forth was there any
23 indication or discussion that resolution limits can't be
24 measured, are unknown, are subjective. The defendant has
25 never made that allegation in their briefs until today

1 about the K factor and things like that.

2 But even if that's true, those numbers can be
3 determined; and the record bears that out. I mean, every
4 time I asked both Dr. Blanchard and Dr. Mack, "What was
5 the resolution of that system you worked on at MIT," "It
6 was 10 microns." These are things that people of skill
7 in the art know.

8 And, you know, because Mr. Lang can put up an
9 article that says, well, there's a lot of factors
10 involved, the record bears out that those of ordinary
11 skill in the art know what those factors are; and
12 Dr. Mack explained how this limitation is met. For a
13 given system, what's the highest resolution lithography
14 tool for a single exposure? Everyone knows what that is
15 for a given system, a given processor. Do you beat it or
16 not? And, so, I agree with the court's view that this
17 term has failed to be proved indefinite.

18 I would like to maybe make one very brief
19 point about where we are procedurally. The defendants
20 are seeking essentially summary judgment on this. Under
21 the Supreme Court's recent *Nautilus* decision and the *Teva*
22 decision, indefiniteness has underlying factual
23 components. We've laid out all of the underlying factual
24 disputes.

25 Defendants actually have two invalidity

1 experts. They have Dr. Blanchard and Dr. Smith. They
2 opted not to use Dr. Smith for this. His declaration in
3 the IPR actually conflicts with Dr. Blanchard's
4 declaration. Everyone disagrees on what the level of
5 ordinary skill in the art is. The experts seem to
6 disagree about what the specification teaches. There
7 is a disagreement over what the prosecution would teach
8 one of ordinary skill in the art. Under *Nautilus* these
9 are all fact questions, and there has been no showing
10 that there has been genuine issue of material fact on
11 that.

12 The last point is post-*Nautilus* the Federal
13 Circuit in the *DDR* case to determine indefiniteness took
14 a full view of the record in the case. What did the
15 infringement experts say? What did the invalidity
16 experts say? They took trial testimony for the Federal
17 Circuit to say, "Look, you haven't shown that this term
18 is not reasonably clear. Even your invalidity expert
19 knows what it means. The infringement experts know what
20 it means, non-infringement expert."

21 We're not at that stage; and, so, should the
22 court go off of its tentative, I think the court should,
23 you know, not resolve this issue at the summary judgment
24 stage. They certainly haven't put enough evidence in the
25 record to show there is no genuine issue of material

1 fact.

2 THE COURT: All right. Thank you, Mr. Hurt.

3 MR. HURT: Sure.

4 MR. LANG: Your Honor, a brief response?

5 THE COURT: All right, Mr. Lang. I'll give
6 you the last word.

7 MR. LANG: Thank you, your Honor.

8 Your Honor, we've heard a lot about a system,
9 but two points on that. This is a method claim; so,
10 somebody has to be performing the method. And that's
11 important because the testimony we heard from plaintiff's
12 own expert, what is possible to somebody in a research
13 lab is different than what is possible to somebody in a
14 manufacturing environment.

15 And we've heard a lot from the plaintiff's
16 counsel about the resolution of a machine, but both
17 experts agree and Dr. Mack agrees that it's not just a
18 system but it's the process that matters. That K that we
19 talked about, that varies from .5 to 1 based on the
20 process. That's separate from the machine. So, this
21 isn't a case where approximately, about, we're talking a
22 couple percent. We're talking about a value that can
23 literally double.

24 The last point, your Honor, there is no
25 dispute of fact. We've essentially just relied on what

1 the experts have agreed on and plaintiff's own expert,
2 Dr. Mack. Thank you, your Honor.

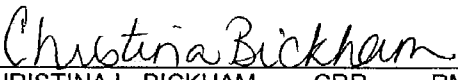
3 THE COURT: All right. Thank you, Mr. Lang.

4 I appreciate your arguments and I understand
5 that the additional material that was offered on this
6 point will be e-filed and I will get a ruling out as soon
7 as possible. So, thank you; and we're adjourned.

8 (Proceedings concluded, 10:55 a.m.)

9 COURT REPORTER'S CERTIFICATION

10 I HEREBY CERTIFY THAT ON THIS DATE, MARCH 5,
11 2015, THE FOREGOING IS A CORRECT TRANSCRIPT FROM THE
12 RECORD OF PROCEEDINGS.

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14 CHRISTINA L. BICKHAM, CRR, RMR

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<p>'084 [4] - 31:18, 35:18, 38:24, 39:4 '223 [2] - 35:5, 35:13 '94 [1] - 78:19 'first' [1] - 32:22 'second' [1] - 32:22</p>	<p>44 [1] - 4:9 45 [1] - 12:3</p>	<p>added [1] - 79:9 adding [1] - 43:3 addition [1] - 19:16 additional [6] - 8:2, 21:9, 23:17, 65:16, 69:3, 83:5 address [12] - 7:4, 7:5, 8:3, 9:7, 9:17, 9:19, 27:18, 30:25, 37:17, 55:6, 68:1, 70:16 addressed [2] - 7:3, 39:25 addressing [1] - 65:24 adds [5] - 64:6, 66:13, 66:14, 74:10 adjourned [1] - 83:7 admitted [1] - 43:17 adopted [1] - 31:5 adopting [1] - 63:14 advocating [1] - 16:15 affect [4] - 71:18, 72:5, 74:2, 74:6 ago [1] - 44:11 agree [19] - 13:11, 19:4, 32:15, 33:12, 35:19, 37:15, 37:25, 40:20, 41:19, 53:22, 54:13, 56:8, 67:24, 72:4, 74:21, 78:12, 78:14, 80:16, 82:17 agreed [9] - 23:15, 29:17, 34:17, 47:7, 69:24, 76:24, 77:4, 79:21, 83:1 agreement [2] - 7:2, 7:10 agreements [1] - 7:7 agrees [2] - 62:1, 82:17 ahead [2] - 7:11, 9:18 akin [2] - 46:11, 62:24 al [1] - 5:4 ALL [1] - 5:1 allegation [1] - 79:25 allow [1] - 6:17 allowed [1] - 79:21 allows [1] - 50:4 alone [1] - 61:17 alter [1] - 44:17 altering [3] - 45:5, 49:12, 53:18 alternative [1] - 56:18 alters [3] - 46:3, 46:9, 48:14 ambiguity [1] - 63:11 amend [1] - 39:2 amended [1] - 39:12 America [1] - 6:8 amount [1] - 41:21 AND [2] - 4:10, 4:11 Andrew [1] - 5:12 ANOTHER [1] - 4:12 answer [4] - 77:15, 77:17, 77:19 antibody [2] - 40:3, 40:5 anyway [1] - 51:8 apart [1] - 77:9 aperture [1] - 71:2 apologies [1] - 10:5 apologize [1] - 5:23 appear [4] - 18:14, 40:23, 51:19, 56:23 appearances [1] - 5:6 applicant [9] - 38:16, 38:20, 39:9, 39:18, 40:3, 40:4, 40:16, 40:24, 42:22 applicants [1] - 38:4</p>
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