

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

OMNIVISION TECHNOLOGIES,	)	
INC.,	)	
	)	
Plaintiff,	)	C.A. No. 24-187-JLH-CJB
	)	
v.	)	
	)	
RE SECURED NETWORKS,	)	
LLC,	)	
	)	
Defendant.	)	

Monday, August 11, 2025
11:00 a.m.
Courtroom 2A

844 King Street
Wilmington, Delaware

BEFORE: THE HONORABLE CHRISTOPHER J. BURKE
United States District Court Judge

APPEARANCES:

BENESCH LAW
BY: DAVID BLUESTONE, ESQ.
BY: KATHLEEN LYNCH, ESQ.
BY: CARLTON J. HEMPHILL, ESQ.
BY: KRISTEN CRAMER, ESQ.

Counsel for the Plaintiff

1 APPEARANCES CONTINUED:

2 YOUNG, CONAWAY, STARGATT & TAYLOR, LLP
3 BY: ANNE SHEA GAZA, ESQ.
4 BY: JENNIFER SIEW, ESQ.

5 -and-

6 KASOWITZ LLP
7 BY: TIMOTHY K. GILMAN, ESQ.
8 BY: AMANDA SEWANAN, ESQ.

9 Counsel for the Defendant
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11:00:23 12 COURT CLERK: All rise. The United States
11:00:25 13 District Court for the District of Delaware is now in
11:00:27 14 session. The Honorable Christopher J. Burke presiding.

11:00:30 15 THE COURT: Please be seated, everybody. Good
11:00:32 16 morning.

11:00:34 17 All right. Welcome, everybody. I know we have
11:00:38 18 counsel here for both sides and we have our court reporter.
11:00:41 19 We thank our court reporter for her service as always.

11:00:43 20 With that, let's go on the record. And as we
11:00:45 21 do, let me just say a few things for the record. And the
11:00:47 22 first is that we're here this morning in the matter of
11:00:51 23 OmniVision Technologies, Inc., v. RE Secured Networks, LLC.
11:00:59 24 This is civil action no. 24-187-JLH-CJB here in our court.
11:01:05 25 And we're here today for a Markman hearing.

11:01:08 1 Before we go further, let me have counsel for
11:01:11 2 each side identify themselves for the record. Now, let me
11:01:15 3 just say that I'm going to try today, if I can, to use
11:01:18 4 OmniVision and RE Secured as shorthand for the parties
11:01:23 5 because this is a case where our plaintiff is our accused
11:01:26 6 infringer and our defendant is our patentee, so that will
11:01:30 7 hopefully keep things clear. But -- and I'll try not to
11:01:34 8 slip and say plaintiff when I'm really talking about the
11:01:37 9 patentee.

11:01:38 10 Okay. With all that said, let's have, beginning
11:01:41 11 with Delaware counsel for OmniVision as we get started.

11:01:45 12 MS. CRAMER: Good morning, Your Honor. Kristen
11:01:48 13 Cramer from Benesch on behalf of OmniVision. And with me
11:01:51 14 from Benesch is David Bluestone, Kathleen Lynch, and Carlton
11:01:56 15 Hemphill.

11:01:56 16 THE COURT: Okay. Great. Thank you all. We'll
11:01:58 17 do the same for counsel for RE Secured Networks, LLC.

11:02:05 18 MS. SIEW: Good morning, Your Honor. Jennifer
11:02:06 19 Siew from Young Conaway on behalf of RE Secured Networks.
11:02:08 20 With me I have Anne Gaza, also from Young Conaway, as well
11:02:12 21 as Timothy Gilman and Amanda Sewanan from Kasowitz. And Mr.
11:02:23 22 Gilman will be handling argument day.

11:02:24 23 THE COURT: All right. Counsel, just logistics.
11:02:27 24 I allocated two hours per side for argument at the parties'
11:02:32 25 request. We will keep track of time up here, but though I

11:02:36 1 predict as we get closer, I'll be trying to give you a sense
11:02:40 2 of where we stand time wise. If I think of it, I'll try to
11:02:43 3 tell you when you have about 15 minutes left.

11:02:46 4 There are six terms that we're going to argue
11:02:50 5 today. I think as a practical matter it's unlikely we'll
11:02:54 6 get to all of those, but we'll get to as many as we can.

11:02:58 7 If you have slides when you get up the first
11:03:00 8 time to argue, feel free to hand up at least two copies of
11:03:05 9 the slides to my law clerk. If you're going to be using the
11:03:08 10 screen for your slides, when you're doing that I'll be
11:03:10 11 looking up at the screen most often, so if I'm not looking
11:03:10 12 at you, it's not that I'm not listening or trying to be
11:03:14 13 disrespectful, I'm just trying to follow along up here with
11:03:18 14 what you're saying.

11:03:19 15 I will tell you that particularly as it went
11:03:23 16 along there are stretches in the briefing and the record
11:03:28 17 that for a layperson are somewhat scrupled and I'm not sure
11:03:34 18 that the briefing was super helpful in those areas, so there
11:03:38 19 may be points as to certain terms where we're going to start
11:03:43 20 at square one and say what exactly are you arguing. And in
11:03:53 21 light in part to the technology. Oh, and the other thing is
11:03:55 22 we'll take a break half way through, so at 1 o'clock. Also,
11:04:00 23 so that folks can stretch and use the restroom and also
11:04:04 24 because I have to do a short criminal matter in the
11:04:07 25 courtroom next door from 1 to 1:15, 1:20, and so we'll use

11:04:11 1 that time to take a break in the middle. I'll take care of
11:04:14 2 that and then I should be good to go for the rest of the day
11:04:18 3 to the end, which should probably be about 3, 3:30.

11:04:22 4 Okay. I think the parties agreed that the
11:04:24 5 patentee, RE Secured, is going to go first for each term.
11:04:28 6 If you have introductory comments to make certainly about
11:04:32 7 the technology of the patents, do that before you get into
11:04:35 8 term one.

11:04:35 9 So with that, unless there's anything further,
11:04:38 10 I'll turn to RE Secured's counsel to begin their
11:04:42 11 presentation. All right. Mr. Gilman.

11:04:59 12 I should also say, if it's helpful, for the
11:05:01 13 terms that relate to the first three patents, I just used
11:05:05 14 the '671 Patent as a basic guide. You may have chosen
11:05:09 15 different ones, but if that's helpful for you, I was using
11:05:12 16 that spec as a general. Okay. All right.

11:05:17 17 MR. GILMAN: Good morning, Your Honor. Timothy
11:05:19 18 Gilman from Kasowitz on behalf of RE Secured Networks. I
11:05:25 19 have a couple copies of our presentation. May I approach?

20 THE COURT: Sure. Feel free to approach.

21 Mr. Gilman, the acoustics in our courtroom
11:05:27 22 aren't great and that mic is -- sometimes it kind of droops,
11:05:31 23 so if you want to pick it up and pull it up as close to your
11:05:35 24 mouth as you can and if you make sure just to speak loudly
11:05:38 25 so our court reporter gets a good record.

11:05:41 1 MR. GILMAN: All right. Thank you, Your Honor.
11:05:47 2 So by way of brief background before jumping into the first
11:05:51 3 claim term, the Patents-in-Suit were developed by a company
11:05:57 4 called Pictos in the early 2000s. Pictos was a pioneer in
11:06:02 5 digital image sensors. In 2003 it was acquired by the
11:06:08 6 manufacturer ESS. The patent actually issued in ESS's named
11:06:09 7 based on the Pictos technology. And then they were later
11:06:13 8 assigned to RE Secured Networks, we sometimes call RESN for
11:06:19 9 the abbreviation, to license them out to the industry. The
11:06:23 10 patents have been widely licensed across the industry. I
11:06:25 11 think pretty much every major company that uses image
11:06:31 12 sensors in its products has now licensed the portfolio of
11:06:37 13 the original Pictos patents. And OVT or OmniVision is this
14 the last of the major companies to take a license to this
11:06:42 15 portfolio.

11:06:42 16 There have been on again/off again negotiations
11:06:46 17 for about ten years. They broke up. OmniVision filed the
11:06:51 18 declaratory judgement action. That's how we ended up here.

11:06:51 19 THE COURT: Any other case in which the patents
11:06:53 20 have been litigated or in which it ever got to a Markman?

11:06:59 21 MR. GILMAN: There were Markman proceedings that
11:07:01 22 never got to a decision with regards to Samsung in the ITC
11:07:05 23 proceeding, but there was never any instruction there.

11:07:09 24 THE COURT: And I was thinking of District Court
11:07:12 25 litigation. Sounds like the answer is no.

11:07:17 1 MR. GILMAN: I don't believe so.

11:07:18 2 THE COURT: Okay.

11:07:20 3 MR. GILMAN: The four patents break down into
11:07:23 4 two different groups. There are three. The first three,
11:07:25 5 the '671, the '145, and the '274 that relate to the transfer
11:07:32 6 function for the transfer gate in the CMOS sensors. And
11:07:41 7 then the fourth patent, the '651 relates to how you do the
11:07:46 8 color processing for these image sensors.

9 In general there's a little bit of a level of
11:07:56 10 detail that will be coming forward with the claim terms, but
11:07:58 11 the CMOS technology that's used for the sensor is a
11:08:05 12 solid-state technology that was a technology in the early
11:08:06 13 2000s as a way to better and more quickly generate pixels
11:08:13 14 for the digital images that you wanted to use.

11:08:18 15 Fig. 1 of the '671 or for all three of the
11:08:21 16 patents is a good overview illustration of how the CMOS
11:08:28 17 sensor works. There's a "PD," which is the photo diode at
11:08:33 18 210, so that's where light rays will actually hit that photo
11:08:36 19 diode and energize it. That's where you're collecting the
11:08:40 20 energy from the light that you're seeing. Eventually that
11:08:42 21 energy is then transferred to what's called the floating
11:08:44 22 diode, what's labeled "FD" there in Fig. 1, which is used to
11:08:49 23 basically store the measurement you're making. So you would
11:08:53 24 periodically do what's called integration or capture a lot
11:08:59 25 of energy at the photo diode and then when you're ready to

11:09:01 1 read how much light has come in, you transfer it to the
11:09:02 2 floating diffusion, the "FD." The value there at the
11:09:08 3 floating diffusion is then eventually selected by row and
11:09:13 4 column circuitry so that you can assign for each pixel where
11:09:17 5 you want to put that light dot within your two-dimensional
11:09:21 6 image. What's the row, what's the column, what are the
11:09:23 7 coordinates that that value should be assigned.

11:09:27 8 A lot of the patents deal with what's called the
11:09:30 9 transfer gate here, which is what's controlling the
11:09:34 10 interface between the light that's coming in, how much light
11:09:36 11 is energizing the photo diode and then how do you make sure
11:09:41 12 you're capturing the right amount of the photo diode in the
11:09:44 13 floating diffusion to make an accurate measurement of a
11:09:49 14 light.

11:09:50 15 The background of the patents talk about
11:09:50 16 potential advantages of this CMOS technology especially as
11:09:55 17 compared to prior art CCD technology. CCD was an approach
11:09:58 18 that was specifically made for image capture. In some ways
11:10:04 19 it worked better, but there was a lot of promise for CMOS
20 for the possible ways of doing digital imagery, even if it
11:10:10 21 was new technology, it could be faster, it could be lower
11:10:14 22 power consumption. There were problems with image quality
11:10:18 23 and there was problems of bleeding of signals through these
11:10:21 24 gates.

11:10:22 25 The four problems that were identified or four

11:10:26 1 of the problems that were identified by the Patents-in-Suit
11:10:31 2 were -- included lag, if that the photo diode that's
11:10:35 3 receiving the signal gets energized and not all that energy
11:10:39 4 gets transferred, you're both missing some of the signal for
11:10:40 5 that measurement and then you have too much signal for the
11:10:43 6 next measurement you're making.

11:10:45 7 There's dark current, which is just the
11:10:47 8 generation from the background circuitry of noise, when
11:10:49 9 you're not actually detecting light.

11:10:51 10 Leakage, which is when you're energizing that
11:10:55 11 photo diode some of that electricity goes through the gate
11:10:57 12 when you don't want it to.

11:10:59 13 And then blooming, which is a little bit
11:11:01 14 related, but if you get too much energy, too much bright
11:11:05 15 light it will overflow from the photo diode into your
11:11:09 16 measurement before you want it to and possibly contaminate
11:11:16 17 surrounding sensors too.

18 So these were all problems with doing the CMOS
19 approach that needed to be overcome so that it could compete
11:11:17 20 with the CCD, which was the dominant technology in the early
11:11:20 21 2000s.

11:11:22 22 THE COURT: Could you go back to Fig. 1. Okay.
11:11:25 23 And even more base level, is what's happening here that we
11:11:30 24 have some kind of image, which is made up of -- or light
11:11:40 25 is -- light is coming in representing an image and it's

11:11:44 1 coming into something called a photo diode, and we've got an
11:11:49 2 invention that one way or the other is trying to, like
11:11:53 3 efficiently, cost effectively reproduce that image vis-a-vis
11:12:05 4 the use of pixels downstream via this image sensor? Is that
11:12:12 5 generally what's going on?

11:12:14 6 MR. GILMAN: I believe that's correct, Your
11:12:15 7 Honor. So this is one photo diode, one pixel that's being
11:12:21 8 captured. So in the actual camera in your phone, camera in
11:12:24 9 whatever, additional camera you have, you would have maybe a
11:12:28 10 thousand of these by a thousand of these, so it would be a
11:12:31 11 grid that you're collecting at the same time. So you're
11:12:34 12 measuring the amount of light that's coming into each of
11:12:37 13 those points and using that to construct the image because
11:12:37 14 you now have a thousand by a thousand different light
11:12:39 15 measurements coming in, so you know -- in different colors
11:12:42 16 too.

11:12:42 17 THE COURT: The pixels are kind of like, and all
11:12:45 18 of them, kind of like trying to represent and reproduce what
11:12:49 19 it is that the image is vis-a-vis, you know, a tiny little
11:12:55 20 part of that image represented by a tiny pixel and there's a
11:13:00 21 lot of pixels. And definitely the level you will need to
11:13:07 22 convey to a jury. So we're trying to reproduce that in some
11:13:13 23 way. We're trying to do it in a better way, a more cost
11:13:18 24 efficient way, a more accurate way, better vision quality
11:13:25 25 than it was like before, correct?

11:13:27 1 MR. GILMAN: Correct, Your Honor. Yes. That's
11:13:28 2 a good way to summarize the technology.

11:13:30 3 THE COURT: Okay. All right. Let me let you
11:13:32 4 continue.

11:13:33 5 MR. GILMAN: And then the problems being
11:13:34 6 overcome are part of that translation of the light that's
11:13:38 7 coming in. You're looking at an image and you have that
11:13:41 8 one dot, and then how do you faithfully then report that on
11:13:44 9 the back end in your actual processing, so they can do the
11:13:48 10 reconstruction of the image eventually.

11:13:53 11 THE COURT: All right. Okay.

11:13:55 12 MR. GILMAN: The '671 Patent, the first of this
11:13:58 13 family of three, they were -- they were all filed
11:14:02 14 separately, but on the same day incorporated each other by
11:14:06 15 reference, so they're all related patents. The problem --
11:14:09 16 one of the problems it was overcoming was that in the prior
11:14:12 17 art you had this transfer gate, which was between what's
11:14:17 18 capturing the energy, capturing the light, and then getting
11:14:19 19 into the processing side, between the photo diode and the
11:14:23 20 floating diffusion. And in the art that was either on or
11:14:28 21 off. There's this gate that you either let electricity flow
11:14:32 22 or you don't, you block it. And having this on/off approach
11:14:36 23 was detrimental. And the '671 Patent, part of the invention
11:14:41 24 behind it was having what it called selectable voltage
11:14:46 25 circuitry, so that with the transfer gate, TG, it's no

11:14:49 1 longer just turning that on or off. There's no granularity
11:14:53 2 that can be applied to change some of the electrical
11:14:56 3 characteristics of what's going on.

11:14:58 4 This is one example from column 6 and is
11:15:01 5 illustrated in Fig. 5 of the blooming problem, which is that
11:15:05 6 if you get too much light coming into your photo diode, it
11:15:08 7 can overflow and then contaminate surrounding circuitry. So
11:15:12 8 one of the things the '671 Patent teaches is that when you
11:15:16 9 have this selectable voltage circuitry, you can lower the
11:15:21 10 gate a little bit, there are now a couple of different off
11:15:25 11 settings you can have. So you could lower the gate,
11:15:27 12 basically let the excess charge slide off, get rid of it
11:15:31 13 into the rest of the circuitry, and then put the gate back
11:15:32 14 up so that you're no longer overflowing the selection.

11:15:37 15 THE COURT: The transfer gate is how we get from
11:15:39 16 the stuff that comes into the diode, is that -- to the
11:15:45 17 diffusion.

11:15:45 18 MR. GILMAN: So the transfer gate, right, from
11:15:48 19 PD to FD, what's gating that is the TG or the transfer gate
11:15:54 20 and that's regulated by the selectable voltage circuitry in
11:16:00 21 the '671 Patent.

11:16:00 22 THE COURT: Okay. And on Fig. 5, which you were
11:16:03 23 depicting, are we seeing like the flip side of Fig. 1? Like
11:16:09 24 you have a diode on the right and you have the diffusion on
11:16:12 25 the left?

11:16:13 1 MR. GILMAN: Correct, Your Honor. I think
11:16:14 2 that's part of the confusion is that they're switched there,
11:16:18 3 but that's correct, exactly.

11:16:19 4 THE COURT: Okay. And the transfer gate in this
11:16:21 5 figure is depicted at 220, but more particularly in terms of
11:16:27 6 where in the remainder of the image; the entirety of it?

11:16:32 7 MR. GILMAN: So the column -- the column that
11:16:34 8 goes up and down.

11:16:35 9 THE COURT: Okay.

11:16:37 10 MR. GILMAN: That column is the gate, the
11:16:39 11 transfer gate.

11:16:40 12 THE COURT: Okay.

11:16:40 13 MR. GILMAN: And that's a representation of how
11:16:45 14 resistant it is or how high the barrier is by the height of
11:16:48 15 that gate.

11:16:48 16 THE COURT: Okay. Let me let you continue.

11:16:52 17 MR. GILMAN: The '145 Patent is a different
11:16:56 18 modification to this transfer gate. In order to try to
11:17:00 19 prevent leakage and try to prevent dark currents, what it
11:17:04 20 does is it changes the doping or the chemicals that you put
11:17:10 21 into the gate itself to make the edge of the gate more
11:17:15 22 resistant to flow. So it makes your off more off. It
11:17:19 23 blocks electronic flows from the photo diode to the floating
11:17:22 24 diffusion better than the prior art did by having an extra
11:17:25 25 implant step of what it calls p-type dopings or it's

11:17:31 1 referred to as TDBI in the preferred embodiment, which is
11:17:35 2 the transfer device Born implant, which is a type of P
11:17:42 3 doping. But the general idea is that you put a little bit
11:17:43 4 more of the p doping there and then you make that barrier
11:17:44 5 sharper and that edge sharper so it's harder for electrons
11:17:48 6 to get through when you're in the off state, which is one of
11:17:52 7 the problems with the CMOS approach as compared to the other
11:17:55 8 technologies, is that there was this leakage, there was this
11:17:58 9 dark current. And by having sharper boundary there you were
11:18:01 10 able to prevent that.

11:18:04 11 The '274 Patent is the flip side, is how do you
11:18:10 12 get an better on? How do you make sure when the gate is
11:18:15 13 turned on you get a better flow and a better emptying of all
11:18:19 14 your charge to avoid this lagging issue of some of the
11:18:19 15 charge remaining behind in the photo diode. And the way
11:18:23 16 that the '274 gets a better flow out of the photo diode into
11:18:28 17 the floating diffusion is by having the gradient within that
11:18:33 18 gate that helps encourage. Once it's on it encourages the
11:18:37 19 flow to go right to left, to go from the photo diode into
20 the floating diffusion, get out of the sensor and head into
11:18:43 21 the processing circuitry.

11:18:44 22 THE COURT: Is what you're saying, at a big
11:18:47 23 picture level, that the photo diode represents just one
11:18:50 24 pixel, one tiny piece of this image, and the light
11:18:53 25 associated with it, color? We want to get all that down

11:19:02 1 stream to the next stage, which is the diffusion. We don't
11:19:08 2 want to have problems where we don't get all of it. We
11:19:11 3 don't want to have problems where other stuff leads into it.
11:19:16 4 And the transfer gate technology is trying to help me do
11:19:20 5 that. And these patents are both talking about different
11:19:22 6 aspects of that process, combatting different problems with
11:19:27 7 that process?

11:19:27 8 MR. GILMAN: That's correct, Your Honor. So you
11:19:29 9 can imagine it in the Fig. 1 embodiment there is one photo
11:19:32 10 diode for each -- for each photo diode, there's one floating
11:19:39 11 diffusion, so there are a thousand by a thousand of these
11:19:39 12 going on each time and you want each one to faithfully get a
11:19:43 13 signal that represents what came in. And by making sure the
11:19:48 14 transfer works well and that you're only transferring what
11:19:50 15 you want and all of what you want, you get a better image,
11:19:53 16 you get better data, you get a end image coming out of the
11:19:58 17 process.

11:19:58 18 THE COURT: Okay.

11:20:01 19 MR. GILMAN: The '651 Patent is separate from
11:20:04 20 the other three, was filed I think two years earlier that
11:20:08 21 there's an overlap of the inventors, but it addresses how
11:20:11 22 you get color for each of these pixels. So each individual
11:20:18 23 pixel only gets you one color, either blue or green or red.
11:20:23 24 But when you recreate your image, you want for each pixel,
11:20:29 25 for each coordinate, each row and column you want to have

11:20:29 1 three dots, you want to have all three colors so you can
11:20:32 2 create -- if you have values for all three colors, you can
11:20:35 3 create any color of the rainbow that you need to at that dot
11:20:38 4 on your screen.

11:20:39 5 And so what the invention of the '651 Patent
11:20:42 6 included is an efficient way to use what are called A to D
11:20:47 7 converters to get four different signals coming off from
11:20:52 8 four different types of diodes. The green, the red -- and
11:20:53 9 because of the layout pattern, there are two different green
11:20:56 10 signals that come off. And then you use a color
11:21:01 11 interpolation circuit you take those values and figure out
11:21:02 12 for each pixel a red value, a blue value, and a green value.
11:21:07 13 So you can recreate the color at each dot even though
11:21:10 14 physically each dot is only measuring one color at a time.
11:21:15 15 You basically take neighbors and you average them together.
11:21:16 16 If you have blue pixel and next to it are two red, you take
11:21:19 17 the average of those and you say where that blue pixel is
11:21:22 18 I'm going to estimate this is what the red value is there
11:21:27 19 too and similar with green and you can recreate a true color
11:21:30 20 in each pixel.

11:21:30 21 THE COURT: Each pixel is only one color?

11:21:34 22 MR. GILMAN: Correct, as measured.

11:21:36 23 THE COURT: You're telling me it's something
11:21:38 24 about this invention and the way in which the pixels next to
11:21:41 25 each other work together, how we fix the problem that not

11:21:46 1 every piece of an image is just that particular one color
11:21:49 2 like green or red, that may be others?

11:21:53 3 MR. GILMAN: So the specific invention of the
11:21:56 4 '651 relates to how you use pure A to D converters to do it
11:22:01 5 more efficiently, is the bulk of what the invention gets to.
11:22:04 6 And then once you get those four signals, by sharing the A
11:22:09 7 to two converter, so you can use less power, then use those
11:22:13 8 to do the conversion to get the true color for each pixel.

11:22:19 9 THE COURT: Okay.

11:22:20 10 MR. GILMAN: So the first term in the dispute
11:22:25 11 between the parties is from the preamble, "an image sensor
11:22:31 12 integrated circuit." This is just for the first three
13 patents. It's not in the '671 Patent.

14 THE COURT: You used the Claim 1 of the '671 as
15 representative?

16 MR. GILMAN: I'd be happy to use it, Your Honor.
11:22:51 17 So the crux of the issue is whether "integrated
11:22:56 18 circuit" should be construed as "single integrated circuit."

11:22:59 19 THE COURT: Can I just ask, an integrated
11:23:02 20 circuit in this context, how does that, if at all, does it
11:23:06 21 relate to, say, the image in Fig. 1?

11:23:08 22 MR. GILMAN: So there is -- and -- so the image
11:23:23 23 of Fig. 1 shows the transfer gates and some of the modified,
11:23:28 24 where, for some of the patents, not the '671, but where
11:23:32 25 there's different change with the way the gradient works and

11:23:37 1 then there's the selectable voltage circuitry that's there
2 too. There are embodiments and there are embodiments to the
11:23:42 3 claims -- and this is jumping around. For example,
11:23:45 4 dependent Claim 5 where those are separate circuitry. So
11:23:48 5 Fig. 1, not everything needs to be done on the same circuit,
11:23:51 6 it can be broken up onto different circuits or not, doesn't
11:23:55 7 need to be on the same integrated circuit. The transfer
11:24:00 8 gate, the photo diode, and the floating diffusion go
11:24:05 9 together in terms of how the transfer works, but the other
11:24:09 10 components of Fig. 1, at set forth in the claims, don't need
11:24:12 11 to be part of that same integrated circuit.

11:24:15 12 THE COURT: Okay. So I think -- and I know
11:24:21 13 we're having -- I know the dispute over term one is the part
11:24:25 14 about the single circuit issue, but your position will be
11:24:34 15 that some portion of what's claimed in Claim 1 may be
11:24:41 16 depicted in Fig. 1, but that all of the functionality of
11:24:45 17 what's claimed about the entire circuit does not necessarily
11:24:49 18 have to be in the same physical circuit as what's depicted
11:24:55 19 in Fig. 1, is that right?

11:24:57 20 MR. GILMAN: It doesn't have to all be --

11:25:00 21 THE COURT: To put it differently -- and I'm not
11:25:02 22 trying to get you into the substance of the dispute about
11:25:05 23 term one, I'm really just trying to -- we've just been
11:25:09 24 talking about a box in Fig. 1 that has certain stuff in it,
11:25:12 25 stuff that's important to the invention. Now we're going to

11:25:16 1 talk about a concept called an integrated circuit and I want
11:25:20 2 to understand how is what we've been talking about related
11:25:23 3 to that next concept, and is the dispute, because I know
11:25:29 4 we're going to have a dispute in just a moment about whether
11:25:32 5 or not solely one circuit can be used. If one circuit were
11:25:36 6 being used, would the circuit, the entire circuit at issue
11:25:39 7 be what's in that box? Would it be more than that? Would
11:25:44 8 it be bigger? That's what I'm trying to figure out.

11:25:47 9 MR. GILMAN: So the way that Claim 1 is laid
11:25:50 10 out, basically all the elements of figure one are recited in
11:25:53 11 Claim 1, including this variable voltage circuitry or
11:25:57 12 selectable voltage circuitry, the row and select circuitry.
11:26:03 13 All of that. Claim 5 says that some of these pieces can be
11:26:07 14 on different circuits. And so there's a little bit of
11:26:12 15 tension here with, what does the preamble, an image sensor
11:26:18 16 integrated circuit mean if parts of these can be on
11:26:21 17 different circuits? And I think that there are two ways
11:26:25 18 that we were looking at that. One is that that first
11:26:28 19 sentence is a preamble. It's sort of meant to indicate that
11:26:32 20 these are solid-state devices. That's the point, that
11:26:36 21 you're now doing digital image processing in solid-state
11:26:36 22 devices. CMOS technology. That's what it means to be "an
11:26:43 23 image sensor integrated circuit" is that you're doing CMOS.
11:26:48 24 The other, I think, the baseline rule of claim
11:26:52 25 construction when you recite "a" image sensor integrated

11:26:58 1 circuit, as a baseline can be construed as one or more image
11:26:59 2 sensor integrated circuits, which harmonizes in the
11:27:03 3 embodiment of Claim 1 because the remainder of the body
11:27:05 4 could be in a single circuit or could be spread out over
11:27:07 5 multiple circuits. That's not the point of the invention.
11:27:09 6 The point of the invention is how you modify the transfer
11:27:12 7 gate and how you control the transfer gate.

11:27:15 8 THE COURT: Maybe ask it differently. Do you
11:27:17 9 agree that the entire content of Claim 1 is depicted in Fig.
11:27:22 10 1, in that embodiment in Fig. 1?

11:27:26 11 MR. GILMAN: I believe so, Your Honor, yes.

11:27:28 12 THE COURT: And that thing in Fig. 1, would that
11:27:31 13 all be one circuit? And is there anything more than to this
11:27:36 14 circuit beyond what's depicted in Fig. 1?

11:27:38 15 MR. GILMAN: Dependent Claim 5 says it's not all
11:27:41 16 on one circuit.

11:27:41 17 THE COURT: I'm just focused on Claim 1.

11:27:44 18 MR. GILMAN: Claim 1. I'm sorry. Could you
11:27:45 19 repeat your question?

11:27:46 20 THE COURT: So I think what you're saying is,
11:27:48 21 Judge, look, see all this stuff in Claim 1, see all the
11:27:52 22 things that are required to be in it, they're all depicted
11:27:54 23 their in Fig. 1. And I'm just trying to get in my head the
11:27:59 24 concept of the type of circuit that's being described, what
11:28:02 25 it physically might look like. Is Fig. 1 the -- a full

11:28:08 1 depiction in your mind of the circuit claimed in Claim 1?
11:28:12 2 Is there like more to that circuit than what's depicted
11:28:15 3 there? Like, if I'm thinking, looking at Claim 1, it's
11:28:19 4 talking about an integrated circuit. Is the integrated
11:28:25 5 circuit Fig. 1?

11:28:27 6 MR. GILMAN: So I think all of the elements that
11:28:30 7 are recited in Claim 1 are shown in Fig. 1. The selectable
11:28:34 8 voltage circuitry, I don't know as a practical matter if you
11:28:37 9 could do that on a single or a monolithic or whatever the
11:28:42 10 terminology that OmniVision is trying to use and argues for
11:28:47 11 that integrated circuitry is limited to, if you could do it
11:28:50 12 on a monolithic integrated circuit because the selectable
11:28:54 13 voltage circuitry by the very nature is going to require
11:28:57 14 some type of logic or processing that would be a different
11:29:00 15 type of circuit than just a transfer gate circuit that's
11:29:03 16 going on.

11:29:03 17 THE COURT: Aren't the parties using the chip as
11:29:07 18 a single voltage circuit sometimes?

11:29:12 19 MR. GILMAN: Sometimes. I don't know if that's
20 an actual way that the people of skill in the art would use
21 it. Sometimes it's a chip in the sense of like a system on
11:29:17 22 a chip might have multiple circuits on it. I think the
11:29:20 23 conventional use of the word "chip" would include one or
11:29:24 24 more circuits.

11:29:25 25 THE COURT: Okay. Because I was going to ask,

11:29:28 1 does it mean more than one chip. But why don't you just get
11:29:31 2 into the substantive disputes on term one.

11:29:34 3 MR. GILMAN: I think there are two aspects to
11:29:37 4 the dispute over Claim 1. Both of them ultimately are
11:29:40 5 whether the claim should be limited to having all components
11:29:43 6 on a single monolithic integrated circuit. So sort of the
11:29:49 7 two subcategories of the question between the parties is is
11:29:52 8 the preamble limiting in the first place; and two, if the
11:29:55 9 preamble is limiting, should it be read as a single that
10 would read sort of into the claims or should it be read as a
11:30:02 11 baseline as one or more integrated circuits.

11:30:06 12 The term "single" is recited in the claim.
11:30:11 13 There's no basis in the claim language itself to try to read
11:30:15 14 in the extra term single. The baseline rules and governing
11:30:21 15 case law around preambles, I know Your Honor is well
11:30:24 16 familiar with them. I believe, as Your Honor has recited in
11:30:31 17 the *Integra* decision, there's not a single litmus test for
11:30:32 18 whether the preamble is limiting or not, but there are some
11:30:35 19 guideposts. Is it the descriptive name for the invention or
11:30:38 20 is it -- and does the body of the claim recite all the
11:30:42 21 elements. And in this case the body of the claim does
11:30:45 22 recite all the elements that you need for the invention.

23 "An image sensor integrated circuit" is maybe a shorthand or
11:30:49 24 intended use of the technology.

11:30:51 25 THE COURT: So in that regard, when you say that

11:30:58 1 the body of Claim 1 recites all of the kind of necessary
11:31:03 2 elements of the invention, what do they recite all the
11:31:09 3 necessary elements of? Do they -- if I looked at each of
11:31:13 4 those elements, would I understand to myself, oh, that's an
11:31:17 5 integrated circuit? Is it something less than an integrated
11:31:22 6 circuit? Because you say -- you keep saying that in the
11:31:26 7 briefing, you know, the body of the invention. The body of
11:31:31 8 the claim recites a complete invention. What does it
11:31:34 9 recite?

11:31:34 10 MR. GILMAN: Maybe this goes back to your
11:31:36 11 earlier questions about what does Fig. 1 shows. What Claim
11:31:41 12 1 recites to all the pieces of Fig. 1. Whether or not those
11:31:45 13 are on a single integrated circuit or combined circuitry or
11:31:45 14 separate isn't important to the invention and doesn't --
11:31:49 15 isn't important for how the elements in the body of the
11:31:51 16 claim are laid out. The claim itself tells you these are
11:31:54 17 the components you need, these are how they work together in
11:31:57 18 terms of detecting the light that's coming in and then
11:32:01 19 transferring it and being controlled by the variable voltage
11:32:04 20 circuitry, which is the heart of the invention.

11:32:06 21 THE COURT: So I guess you're saying, by saying
11:32:09 22 that Claim 1 and its contents amount to the essential
11:32:13 23 elements of the invention, what you mean is they describe a
11:32:19 24 physical structure of some kind that is required to have
11:32:23 25 certain components, but that structure may be either living

11:32:33 1 on one integrated circuit or more than one?

11:32:37 2 MR. GILMAN: The claim, yes, Your Honor, I would
11:32:39 3 agree with that.

11:32:40 4 THE COURT: Okay. And in terms of -- I think
11:32:43 5 you don't dispute the other side's point that the image
11:32:52 6 sensor integrated circuit provides an antecedent basis for
11:32:58 7 some of the words in Claims 5 and 6?

11:33:00 8 MR. GILMAN: Yeah, that's correct, Your Honor.
11:33:02 9 I think as an initial matter, I don't believe we've seen any
11:33:05 10 cases that the dependent claim would be -- the preamble of a
11:33:10 11 dependent claim should be construed as limiting because the
11:33:13 12 term appears in a -- the preamble of an independent claim
11:33:17 13 should be limiting just because it appears in a dependent
11:33:20 14 claim.

11:33:20 15 THE COURT: It's the fact, first, I think it's
11:33:22 16 the case, but I could be wrong, that one of the very cases
11:33:23 17 they cite, which is the *Robotic Vision* case, I think that's
11:33:31 18 what their rulings found, didn't it?

11:33:34 19 MR. GILMAN: I might be mistaken, Your Honor.

11:33:35 20 THE COURT: I'm pretty sure in that case one of
11:33:36 21 the points Judge Williams made in determining the preamble
11:33:39 22 was limiting is that the words in Claim 1, the independent
11:33:44 23 claim, that were at issue in the preamble, were antecedent
11:33:49 24 basis for wording independent claims in that case. Maybe
11:33:51 25 it's something you all can take a look at and let me know on

11:33:55 1 rebuttal. But I'm trying to imagine a world where you would
11:34:01 2 have a set of claims where, as to dependent claims, the
11:34:06 3 preamble of the independent claim is required to provide an
11:34:13 4 antecedent basis, so therefore it makes up the essential
11:34:15 5 element of that claim, and yet not for the independent
11:34:18 6 claim? I don't even know how that makes sense. Why would
11:34:21 7 that make sense? I never heard that.

11:34:24 8 MR. GILMAN: Well, I think in the context of
11:34:25 9 Claim 5 I think is illustrative because Claim 5 shows the
11:34:29 10 interplay between the preamble of Claim 1 and what's being
11:34:32 11 further claimed in Claim 5, which is not necessary for any
11:34:35 12 of the structure that's in Claim 1. Claim 5 says the
11:34:38 13 specific arrangement that does refer back to the
11:34:41 14 antecedent -- to the preamble of the independent claim, but
11:34:46 15 that by itself doesn't mean for Claim 5 the preamble does
11:34:51 16 provide context for what Claim 5 means.

11:34:54 17 THE COURT: I mean, just looking at Claim 5, we
11:34:56 18 have to know what "an image sensor integrated circuit" is
11:35:02 19 and it's got to be a fundamental part of our invention, so
11:35:06 20 we know where this other circuitry isn't, right? The
11:35:12 21 circuitry described in dependent Claim 5, to know where it
11:35:19 22 isn't, we have to know as part of our invention that there
11:35:22 23 is a thing called "an image sensor integrated sensor" that's
11:35:26 24 a part of this, don't we?

11:35:28 25 MR. GILMAN: So I think the part of the issue

11:35:30 1 with the way that claim was laid out is that it refers back
11:35:35 2 to part of Claim 1 and says part of Claim 1 is separate from
11:35:41 3 the image sensor integrated circuit, that the control
11:35:45 4 signal, which is generated by the variable voltage circuitry
11:35:51 5 is separate from the image sensor integrated circuit. I
11:35:52 6 think the way to harmonize this is -- it can't be harmonized
11:36:01 7 with OmniVision's construction that the preamble means all
11:36:05 8 of these elements have to be in a singular, monolithic,
11:36:09 9 integrated circuit, because then Claim 5 would be
11:36:12 10 nonsensical.

11:36:13 11 THE COURT: Did you make that argument in your
11:36:15 12 brief? It's not a bad argument, which just occurred to me
11:36:19 13 as you were talking, but I think it occurred to me it wasn't
11:36:22 14 in the brief. Like I think what you're saying is as
11:36:25 15 follows: Look, Claim 5 is talking about a world where
11:36:28 16 certain functionality, i.e. a control signal, is generated
11:36:35 17 physically on circuitry that is separate from, that is not
11:36:39 18 the image sensor integrated circuit, and so independent
11:36:45 19 Claim 1 has to be broad enough to allow for a world in which
11:36:49 20 certain of the functionality occurs not on one circuit. Is
11:36:55 21 that right?

11:36:55 22 MR. GILMAN: I believe that's correct, Your
11:36:56 23 Honor.

11:36:56 24 THE COURT: Did you make that argument in your
11:36:58 25 brief?

11:36:58 1 MR. GILMAN: Well, we did refer to the case law
11:37:00 2 that "an image sensor integrated circuit" should mean one or
11:37:06 3 more image sensor integrated circuits. I don't know the
11:37:10 4 specific corollary to that was specifically called out in
11:37:12 5 the brief.

11:37:13 6 THE COURT: That's the point you were making
11:37:14 7 right now, right?

11:37:15 8 MR. GILMAN: Correct, that that Claim 5, rather
11:37:19 9 than show that the preamble should be limited to a single
11:37:23 10 integrated circuit actually confirms that it could not be
11:37:28 11 limited to a single integrated circuit.

11:37:32 12 THE COURT: But it's weird, though, because on
11:37:34 13 the one hand if I were to agree with the other side and
11:37:42 14 believe that the reference in Claim 5, "an image sensor
11:37:46 15 integrated circuit" means that the phrase image sensor
11:37:52 16 integrated circuit in the preamble of Claim 1 provides
11:37:52 17 antecedent basis for both Claim 5 and Claim 1. Because it
11:37:57 18 seems weird that it wouldn't. That would mean that the
11:38:01 19 preamble is part of the claim language. And yet, your point
11:38:07 20 about what Claim 5 is telling us -- so Claim 1 would have to
11:38:13 21 be "an," and the other side needs that to mean one circuit
11:38:19 22 that comprises a bunch of stuff. But yet Claim 5 you're
11:38:24 23 saying is suggesting that other circuitry can be utilized
11:38:30 24 that is not part of being a single integrated circuit, is
11:38:37 25 that right?

11:38:37 1 MR. GILMAN: I believe that's correct, Your
11:38:38 2 Honor. It's specifically saying that part of Claim 1 could
11:38:42 3 be on a single integrated circuit.

11:38:44 4 THE COURT: If I were to be interested in this
11:38:46 5 argument you're making now about Claim 5 means, but also
11:38:47 6 sympathetic to the other side's argument in the briefing
11:38:50 7 about how antecedent basis suggests that this preamble is
11:38:55 8 limiting, how would I reconcile those things in my head?

11:38:58 9 MR. GILMAN: Well, I think that the preamble
11:39:00 10 could be limiting in the sense that the baseline rule from
11:39:05 11 the Federal Circuit that "an" circuit, "a" circuit means one
11:39:10 12 or more circuits, and that therefore, in that context if the
11:39:14 13 preamble is limiting and this ordinary rule from the Federal
11:39:18 14 Circuit is applied, then some of these, the recited
11:39:22 15 structure could be on separate circuits, because now the
11:39:25 16 claim could have one or more integrated circuits that are
11:39:29 17 comprising the body of the claim.

11:39:30 18 THE COURT: Essentially "an image sensor
11:39:34 19 integrated circuit" has to mean potentially one or more than
11:39:37 20 one circuits?

11:39:38 21 MR. GILMAN: Correct, Your Honor.

11:39:39 22 THE COURT: That's what it would have to mean.
11:39:41 23 If it's limiting, that's what it would have to mean for your
11:39:44 24 argument about the meaning of Claim 5 to have purpose,
11:39:47 25 right?

11:39:48 1 MR. GILMAN: And I think in this regard the
11:39:51 2 cases that OmniVision cites where integrated circuit is
11:39:56 3 limited to a singular semiconductor substrate, there were
11:40:02 4 specific narrowing statements in the specification or the
11:40:05 5 prosecution history or the claims themselves that warranted
11:40:08 6 deviating from this "a" or "an" rule.

11:40:11 7 THE COURT: I agree on your apples to apples.
11:40:14 8 But I think the antecedent basis point, I don't know, did
11:40:18 9 you ever tell me your view about how you could have a world
11:40:21 10 in which an independent claim, its preamble was not limiting
11:40:25 11 as to the independent claim and yet it was limiting as to
11:40:29 12 dependent claims because the preamble provided antecedent
11:40:34 13 basis?

11:40:34 14 MR. GILMAN: Well, I think it's a question of
11:40:34 15 how you construe the dependent claim and what does that
11:40:38 16 phrase mean and does it require recourse to the preamble of
11:40:40 17 the independent claim. I don't think that there's --

11:40:42 18 THE COURT: So I think what you just said is an
11:40:45 19 argument not that the preamble would not be limiting and
11:40:48 20 that its meaning would be a part of the claim, but it would
11:40:53 21 be how you construe this, with what is -- now the preamble
11:40:55 22 is limiting. Now that we know that an image sensor
11:40:59 23 integrated circuit is part of the claimed invention, what
11:41:03 24 does that mean? That I think is a better argument, right?

11:41:05 25 MR. GILMAN: Well, I think you could -- I don't

11:41:07 1 think there's a principle reason why you couldn't construe
11:41:10 2 the term of Claim 5 by itself. What does that language of
11:41:15 3 Claim 5 mean by itself without necessarily determining
11:41:21 4 whether the preamble itself is limiting or is limiting for
11:41:25 5 purposes of Claim 5 or Claim 1, you're determining what does
11:41:29 6 the scope of Claim 5 add to Claim 1.

11:41:32 7 THE COURT: I'm not sure I'm following. I think
11:41:34 8 it's the case -- let me try that one more time. If we were
11:41:37 9 solely looking at Claim 5, I think the other side says,
11:41:40 10 Judge, that is an absolute crystal clear example of a
11:41:45 11 circumstance where language in the preamble phrase -- what
11:41:49 12 preamble phrase? The one in Claim 1 in which claim was a
11:41:52 13 part of Claim 5 provides antecedent basis for the wording in
11:41:57 14 the body of Claim 1. The image sensor integrated circuit
11:42:02 15 has to be a reference back to the thing in the patent. So
11:42:03 16 that would mean, for purposes of Claim 5, if we're using
11:42:07 17 traditional Federal Circuit preamble is limiting case law,
11:42:11 18 then "an image sensor integrated circuit" is a part of the
11:42:16 19 complete invention of Claim 5. And I'm just trying to think
11:42:23 20 of a world in which or why it would make any sense in which
11:42:26 21 that would be so. Now, of course it's so, it's so in part
11:42:31 22 because the words "image sensor integrated circuit" are in
11:42:34 23 the body, albeit in reference to talking about relative
11:42:39 24 position with something. But I'm trying to figure out a
11:42:42 25 world in which it would be so, and yet looking at Claim 1,

11:42:47 1 the words "an image sensor integrated circuit" would not be
11:42:52 2 a part of the claimed invention. How could -- in fact,
11:42:58 3 because a dependent claim incorporates every aspect of the
11:43:03 4 independent claim, how could you even have a world where the
11:43:05 5 independent claim didn't -- had a preamble that wasn't
11:43:09 6 limiting and a dependent claim had one that was?

11:43:13 7 MR. GILMAN: And this is why, Your Honor -- I
11:43:16 8 mean, in our alternative construction, that if the preamble
11:43:20 9 is limiting, the easiest way to harmonize all of the aspects
11:43:25 10 is to not read in the word "single" as OmniVision proposes
11:43:32 11 to do, because there's a way to construe and interpret and
11:43:38 12 apply the preamble than in a way that's consistent across
11:43:41 13 the independent claims too, which is in accordance with the
11:43:44 14 controlling Federal Circuit case law.

11:43:44 15 THE COURT: So I think your answer there is,
11:43:46 16 well, Judge, I'm not sure there's a reasonable way to make
11:43:50 17 that make sense, but you know what, let's just go to step
11:43:53 18 two of our argument, which is that it's limiting, but I'm
11:43:54 19 going to tell you why the definition of "an image sensor
11:43:58 20 integrated circuit" would involve utilization of multiple
11:44:03 21 circuits.

11:44:03 22 MR. GILMAN: I believe, yes, Your Honor. That's
11:44:07 23 the simpler way to harmonize what I do believe is some
11:44:08 24 tension here.

11:44:09 25 THE COURT: Okay. And just before we leave the

11:44:12 1 preamble issue, you repeatedly said in your briefing that
11:44:16 2 the preamble merely states a purpose of intended use of the
11:44:18 3 invention. What was the intended use? I think at one point
11:44:22 4 in the briefing you focused on the words "image sensor."

11:44:26 5 MR. GILMAN: These are CMOS image sensors.
11:44:28 6 They're solid-state image sensors where the photo diode is
11:44:32 7 made on an integrated circuit.

11:44:35 8 THE COURT: The thing I don't understand about
11:44:37 9 that is, but "integrated circuit," I think is maybe the key
11:44:42 10 part. It seems to me the key dispute is the physicality of
11:44:46 11 one circuit or more than one. Even if "image sensor" is the
11:44:53 12 thing that provides some purpose or intended use, why would
11:44:57 13 not "integrated circuit," the physical item, be necessarily
11:45:02 14 carried over into the -- into the invention that's required
11:45:06 15 by the claim?

11:45:08 16 MR. GILMAN: Because the remainder of the claim
11:45:10 17 sets out the actual limitations. That preamble, the "image
11:45:15 18 sensor integrated circuit" is not referenced in the body of
11:45:18 19 the claim and it's used to refer to the CMOS solid-state
11:45:22 20 sensor, the backdrop of the invention that's going on.

11:45:25 21 THE COURT: Okay. Let me let you move on to
11:45:28 22 your other key argument, which is about, I think,
11:45:31 23 essentially, right, the word "single" in their proposed
11:45:35 24 construction. Is that fair?

11:45:36 25 MR. GILMAN: That's correct, Your Honor. And I

11:45:38 1 think we bounced around a little bit between these points.

11:45:43 2 THE COURT: Can I just ask, while I'm at it.

11:45:45 3 Sorry to interrupt, but your construction, which is "an
11:45:52 4 image sensor fabricated on an integrated circuit," how does
11:45:55 5 that help me with regard to this dispute about "single?" I
11:45:58 6 mean, if I agree with, yes, single, I go with theirs. If I
11:46:05 7 disagree, no, not single, how does yours help me at all?

11:46:08 8 MR. GILMAN: Because the controlling baseline
11:46:09 9 principle of the Federal Circuit that "a" or "an" means one
11:46:10 10 or more, and so that the preamble then, "an image sensor
11:46:17 11 integrated circuit," would be one or more image sensor
11:46:21 12 integrated circuits or merged with the construction --

11:46:24 13 THE COURT: So fair to say, if we were going to
11:46:27 14 put a finer point on this, a proposed construction from you,
11:46:30 15 it would read, "an image sensor fabricated on one or more
11:46:35 16 integrated circuits?"

11:46:37 17 MR. GILMAN: Correct, Your Honor.

11:46:38 18 THE COURT: Okay. And the Federal Circuit case
11:46:41 19 law that typically treats "an" as carrying the meaning of
11:46:47 20 one or more, is that something you cited in your brief?

11:46:51 21 MR. GILMAN: This is, yes, Your Honor.

11:46:53 22 THE COURT: And where, just so I can get to it?
11:47:07 23 Because, like, for example, up here you're citing *Baldwin*
11:47:11 24 for this proposition. I'm pretty sure that's not a case
11:47:14 25 cited in the joint brief. I'm also pretty sure I read this

11:47:17 1 brief like repeatedly, not that long ago. Now, I could have
11:47:22 2 missed it, because there was a lot of words, many of them
11:47:25 3 were hard to fathom, but I'm not sure you did make this
11:47:29 4 point. And it's like a good point, but it would be the
11:47:32 5 second point in a row, if it's true --

11:47:35 6 MR. GILMAN: Your Honor, on page 29 of the joint
11:47:40 7 brief, the first full paragraph on page 29.

11:47:43 8 THE COURT: Okay.

11:47:44 9 MR. GILMAN: Which does, I guess, for some
11:47:46 10 reason *Baldwin* was not in the table of authorities, but it's
11:47:49 11 cited in the body of the brief.

11:47:52 12 THE COURT: I see that.

11:47:54 13 MR. GILMAN: That was a frantic minute.

11:47:58 14 THE COURT: All right. And the parenthetical at
11:48:02 15 least that you set out does stand for the point?

11:48:05 16 MR. GILMAN: Correct, Your Honor.

11:48:07 17 THE COURT: So tell me if this is right. You
11:48:13 18 are -- what is one piece of evidence that the phrase "an
11:48:19 19 imagine sensor integrated circuit," assuming it is, the
11:48:23 20 preamble is limiting and this is a part of the claimed
11:48:25 21 invention, what's a piece of evidence to suggest that
11:48:28 22 actually, doesn't sound like it, but it actually can refer
11:48:32 23 to more than one circuit, it's this basic proposition from
11:48:38 24 Federal Circuit case law, this including.

11:48:41 25 MR. GILMAN: I think the Fig. 1, where different

11:48:43 1 boxes are drawn around different parts of the recited
11:48:46 2 structure that appears in the body of Claim 1, and
11:48:49 3 independent Claim 5 as we discussed too, are the clearest
11:48:53 4 illustrations of embodiments where not all of it is on a
11:48:58 5 single unitary integrated circuit.

11:49:02 6 THE COURT: All right. Let me let you continue.
11:49:06 7 Boy, I mean, the *Baldwin* point, it just -- it's -- it's so
11:49:16 8 fainting. I mean, it's really on in the parenthetical. I
11:49:19 9 didn't even fully pick up on it in reading it the first
11:49:22 10 time. That and the dependent Claim 5 point, those are two
11:49:27 11 decent points, but I just feel like how come they weren't
11:49:29 12 just front and center in this briefing? You know what I
11:49:33 13 mean?

11:49:33 14 MR. GILMAN: Your Honor, it is the bulk of page
11:49:35 15 29 of the joint appendix is addressing this *Baldwin* point
11:49:39 16 and that the term "a" means one or more. I believe it was
11:49:42 17 never addressed by OmniVision in any of their briefing which
11:49:46 18 is why it might not have seemed as prominent because there
11:49:50 19 was no response to it.

11:49:51 20 THE COURT: Okay. Although part of that
11:49:55 21 paragraph says "making or comprising," doesn't it.

11:50:00 22 MR. GILMAN: I believe the two go hand in hand,
11:50:03 23 yes.

11:50:03 24 THE COURT: All right. Let me let you continue.

11:50:06 25 MR. GILMAN: I think the examples that

11:50:11 1 OmniVision had brought up, just to quickly go through them,
11:50:15 2 they had specific intrinsic support for limiting integrated
11:50:20 3 circuit to a singular structure. In *Qualcom v. Apple* this
11:50:25 4 specification specifically said, at 3, that the integrated
11:50:29 5 circuit may generally comprise a single semiconductor
11:50:36 6 substrate. *Negotiated Data Solutions* --

11:50:45 7 THE COURT: No. I understand the claim terms.
11:50:46 8 They're not on all fours for sure.

11:50:49 9 MR. GILMAN: There were explicit statements. In
11:50:52 10 *Negotiated Data Solutions* the claim term was "disposed on
11:50:54 11 the same integrated circuit." In *Freescale* the art was
11:50:58 12 specifically distinguished as not being on a single
11:51:02 13 integrated circuit. And so these are all examples of, one,
11:51:05 14 the fact that these courts looked to that type of evidence.
11:51:09 15 I think it confirms that the baseline rule of "a" integrated
11:51:13 16 circuit should be one or more integrated circuits is the
11:51:16 17 controlling principle in the abstract unless there is a very
11:51:19 18 specific disclaimer or definition or distinguishing of the
11:51:24 19 prior art that show that a singular, monolithic integrated
11:51:30 20 circuit is somehow necessary.

11:51:30 21 THE COURT: In fairness, you're right. I think
11:51:32 22 the paragraph on page 29, at least the first part of it, the
11:51:36 23 first half of it, doesn't make this point. Though it is in
11:51:41 24 your brief, the position. Again, I just think it's a good
11:51:44 25 starting point. But in any event, I know you also, you rely

11:51:54 1 in part on Dr. Carley's declaration to help support the
11:52:00 2 idea, I think, that, you know, that this reference to an
11:52:09 3 integrated circuit or what's claimed here as being part of
11:52:14 4 an integrated circuit could, in fact, have functionality or
11:52:23 5 content that's contained on more than one circuit. Is that
11:52:26 6 right?

11:52:26 7 MR. GILMAN: That's correct, Your Honor. And
11:52:28 8 Dr. Carley explains that both at the time of the invention
11:52:31 9 and before the patents, after the patents, that as a
11:52:37 10 practical matter this would not be made as a single,
11:52:40 11 monolithic, integrated circuit but that it would be built
11:52:43 12 with different components, would be the way that a person of
11:52:46 13 skill in the art would approach it, the way it's done in the
11:52:49 14 industry, both historically and today.

11:52:50 15 THE COURT: In terms of what I can ultimately
11:52:53 16 pull from his declaration, just talking about some of the
11:52:56 17 criticisms they had for it and your responses, and so I
11:53:02 18 think we're -- I think particularly we're focused on I think
11:53:08 19 it's paragraphs like 56 of his initial declaration, through
11:53:20 20 58, maybe. And I think one of the ways -- he pushes back
11:53:26 21 and he says, look, I found a Wikipedia definition of a
11:53:30 22 three-dimensional integrated circuit and that the content of
11:53:34 23 that definition talks about utilizing more than one
11:53:38 24 integrated circuit. The other side, they push back in two
11:53:42 25 ways there, I think. One way they push back is they say,

11:53:46 1 well, that's not a definition of integrated circuit, that's
11:53:48 2 a definition of something called a three-dimensional
11:53:51 3 integrated circuit and that's not what we're talking about
11:53:53 4 here. And heck, if he had used -- even if it's okay to use
11:53:57 5 Wikipedia, if he used the Wikipedia definition of just
11:54:02 6 integrated circuit that's -- you'd see that's talking about
11:54:05 7 one single circuit. And I think those are the ways they
11:54:09 8 push back, but what's your response to that?

11:54:11 9 MR. GILMAN: I think first of all the fact that
11:54:14 10 there are different types of integrated circuits and that
11:54:17 11 there's a 3D integrated circuit or a specific type of
11:54:21 12 integrated circuit, and I mean in that context I mean more
11:54:23 13 than one just as a matter of lexicography means that the
11:54:28 14 term integrated circuit itself has to include more than one,
11:54:29 15 different flavors of it.

11:54:31 16 THE COURT: Could the image sensor integrated
11:54:34 17 circuit in Claim 1 be -- include or wrap in part of a
11:54:39 18 three-dimensional integrated circuit, whatever that is.

11:54:41 19 MR. GILMAN: I don't see a reason why not, Your
11:54:44 20 Honor.

11:54:44 21 THE COURT: And I think in his supplemental
11:54:47 22 brief, I'm trying to -- or his supplemental declaration, Dr.
11:54:53 23 Carley, I forget, it's like a CCD -- there's another type of
11:54:59 24 integrated circuit that he's pointing to as an example of an
11:55:03 25 integrated circuit that utilizes more than one circuit. You

11:55:07 1 know what I'm talking about?

11:55:09 2 MR. GILMAN: I --

11:55:10 3 THE COURT: I think it involves the initials
11:55:13 4 like CC something. It's in the paragraph that's like --
11:55:17 5 that reiterates his conclusion about the three-dimensional
11:55:21 6 integrated circuit and then it starts talking about another
11:55:24 7 example. Maybe somebody has the paragraph number to figure
11:55:30 8 it out. Looks like 26 maybe of his supplemental
11:55:35 9 declaration. Oh, yeah, charge coupled device integrated
11:55:39 10 circuit, CCD integrated circuits. Like could this claim be
11:55:43 11 broad enough to incorporate that too, whatever that is?
11:55:49 12 This is on JA 74.

11:55:53 13 MR. GILMAN: So the charged couple device
11:55:56 14 integrated circuits were the ones specifically being
15 distinguished by the CMOS approach of the patents.

16 THE COURT: Oh.

11:56:02 17 MR. GILMAN: So I think that for other
11:56:03 18 limitations that are in the body that they would not be able
11:56:06 19 to fit in with the remainder of the claim of the body, but I
11:56:10 20 think that they're another example of the use of the term
11:56:12 21 integrated circuit. Your Honor is correct that that means
11:56:15 22 one or more integrated circuits as being used by people of
11:56:18 23 skill in the art at the time.

11:56:18 24 THE COURT: Right. That's right. The CCD
11:56:20 25 integrated circuit, the one being distinguished in the

11:56:23 1 background of the invention section?

11:56:24 2 MR. GILMAN: Correct, Your Honor.

11:56:25 3 THE COURT: So wouldn't that tell us that
11:56:27 4 whatever is going on with CCD integrated circuits, maybe we
11:56:31 5 don't look to that as an understanding of what the claimed
6 integrated circuit is.

11:56:33 7 MR. GILMAN: Well, the distinction between CCD
11:56:36 8 and CMOS is not based on whether it's one or one or more
11:56:40 9 integrated circuits, it's based on how the light is
11:56:43 10 transferred to the -- into the circuitry through the photo
11:56:48 11 diode. It's a different approach to capturing light that
11:56:53 12 requires more components before you get into the actual row
11:56:56 13 and column processing of it.

11:56:57 14 THE COURT: So put differently, you're saying if
11:57:00 15 the patent is disparaging CCD integrated circuits, it's
11:57:03 16 doing it for particular reasons and as to particular lack of
11:57:07 17 functionality, the problems, doesn't have anything to do
11:57:11 18 with whether or not these components could be captured on
11:57:13 19 more than one circuit?

11:57:14 20 MR. GILMAN: Correct, Your Honor.

11:57:15 21 THE COURT: Okay. And then the other question
11:57:21 22 about the -- Dr. Carley's original declaration in paragraph
11:57:27 23 58, which is on JA 610, he says, and the other side points
11:57:34 24 this out, a POSITA would never have imagined putting the
11:57:40 25 entirety of the functionality of an image sensor with the

11:57:44 1 analog and digital portions on single integrated circuit
11:57:47 2 chip. And I think what the other side does is their expert
11:57:48 3 comes back and, like, let me tell you about a thousand
11:57:51 4 examples of that in the relevant time period. And then
11:57:54 5 ultimately in the supplemental declaration Dr. Carley says,
11:57:59 6 oh, yeah, sure, some people did do it, but not everybody and
11:58:03 7 let me talk about some other examples of how people were
11:58:06 8 doing it on more than one circuit. And I guess the question
11:58:09 9 is, like, now what he says is what I meant by that sentence
11:58:14 10 was just not that the -- that no one was doing it, just that
11:58:20 11 it would be difficult or not practical or optimal. I think
11:58:23 12 the other side says, come on, that's pretty stark. Is the
11:58:27 13 the answer, you know what, that is a little unfortunate, let
11:58:29 14 me go with this. He didn't mean it that way. Facially it
11:58:31 15 does kind of read that way. But as opposed to I don't know
11:58:35 16 what you're talking about, that sentence, it doesn't say no
11:58:39 17 one would do it, you know, economical. You know what I
11:58:41 18 mean? What's your explanation as to what's going on in
11:58:44 19 paragraph three?

11:58:46 20 MR. GILMAN: Yeah. The intended import of it is
11:58:46 21 that a person of skill in the art at the time looking at
11:58:49 22 this would have thought of using multiple integrated
11:58:52 23 circuits to do it. That would have been, for many people or
11:58:56 24 many people of ordinary skill, the approach that they would
11:59:00 25 have taken. And I think that that is what was meant by Dr.

11:59:03 1 Carley saying that, is that if you went to somebody that
11:59:06 2 was -- who was, I forget what the definition of ordinary
11:59:09 3 skill is, but if you just went to somebody and said here's
11:59:11 4 what you want to do, they would immediately think of having
11:59:15 5 multiple integrated circuits.

11:59:17 6 THE COURT: I mean, put differently, if Dr.
11:59:18 7 Carley was here, he'd say, when I said a POSITA would never
11:59:22 8 have imagined putting the entirety of the functionality of
11:59:26 9 an image sensor on a single integrated circuit chip, what I
11:59:28 10 meant was, oh, sure, lots of people actually did it. They
11:59:32 11 did it all the time, but just not everybody did it, and it
11:59:37 12 may have been more economical not to do so. Because that
11:59:41 13 doesn't make sense, and I would have just preferred he said,
11:59:45 14 you know what, I messed up. And he didn't say that. He
11:59:48 15 tried to like make those word say something they don't
11:59:51 16 really say and then cause you to question them. Why not
11:59:54 17 just own up to, you know what, I've misspoken? You know
11:59:58 18 what I mean?

11:59:59 19 MR. GILMAN: So I do think there's a little bit
12:00:01 20 of disconnect between the way that you phrased it and I
12:00:04 21 believe Dr. Carley's opinion, which is that a person of
12:00:06 22 ordinary skill, there might be examples in the art and maybe
12:00:11 23 multiple examples in the art of people doing this with a
12:00:14 24 singular chip, but that's not what a person of ordinary
12:00:17 25 skill would have thought looking at this and that's not how

12:00:20 1 they would have approached the problem. I agree with Your
12:00:23 2 Honor that the phrasing of the original declaration as well
12:00:26 3 as the import is unfortunate.

12:00:28 4 THE COURT: But the distinction you're making --
12:00:30 5 am I right, the distinction you're making is, no, no, we
12:00:33 6 stand by that in the sense that a POSITA would never have
12:00:37 7 comprehended it. Maybe some non-POSITA, some regular person
12:00:40 8 might have done it, but a POSITA would never have done it.
12:00:44 9 Is that what he was saying?

12:00:44 10 MR. GILMAN: I think -- first of all, I think it
12:00:47 11 would be on the other side that there might be experts in
12:00:51 12 the field trying different techniques, but that's the
12:00:51 13 average run of the mill person, not with the average run of
12:00:52 14 the mill engineer with ordinary skill.

12:00:54 15 THE COURT: When you're talking about the
12:00:56 16 average, a POSITA, a person with very elevated skill and
12:01:00 17 knowledge, as it relates to this field, that's what he's
12:01:08 18 saying is --

12:01:11 19 MR. GILMAN: I would still say, Your Honor, that
12:01:12 20 there's not -- that there aren't -- he was incorrect in
12:01:15 21 being -- saying no singular example exists, but he stands by
12:01:19 22 his opinion that if a person, an engineer in the field saw
12:01:24 23 this that that's the way that they would approach the
12:01:27 24 problem, even if there are examples of people trying to
12:01:29 25 invent in different ways, that that's not what the baseline

12:01:33 1 approach of somebody of skill would look at this problem.

12:01:37 2 THE COURT: If I'm going to cite him
12:01:39 3 affirmatively as a piece of helpful extrinsic evidence for
12:01:42 4 you, I have to be able to believe it, and so I can't, I
12:01:47 5 can't -- and so it can't be the case that he said one thing,
12:01:52 6 then really confronted with other evidence basically
12:01:56 7 acknowledged that what he said was wrong, but then didn't
12:01:58 8 admit to what he said was wrong. So I have to be able to
12:02:01 9 see the difference. So I think his supplemental
12:02:05 10 declaration, I think we're talking about, it's like JA 70 --
12:02:11 11 looks like 702, 703 kind of thing. He says -- it's
12:02:20 12 paragraph 25. He says, "I wish to clarify that when I wrote
12:02:26 13 that, a POSITA would never have imagined putting the
12:02:30 14 entirety of the functionality," dot dot dot, "on a single
12:02:33 15 integrated chip, I meant that a POSITA would have realized
12:02:36 16 that it was not necessarily economical to integrate all the
12:02:40 17 functions on a single chip because" blah blah blah. That
12:02:44 18 doesn't sound like he's saying that a POSITA would have
12:02:47 19 thought that you could do it. It sounds like he's saying,
12:02:51 20 no, no, yeah, a POSITA would have thought he could do it and
12:02:55 21 knew you could do it and people were doing it, just wouldn't
12:02:59 22 have thought it's the most economical way, you know, not the
12:03:02 23 preferred way. I don't think he's making a distinction
12:03:05 24 between what a POSITA would know and what a non-POSITA would
12:03:08 25 know. Is he or isn't he?

12:03:11 1 MR. GILMAN: I think it's in the context of if
12:03:11 2 you think of a POSITA as somebody in the industry trying to
12:03:12 3 solve a problem, in which case he's saying how they would
12:03:16 4 have viewed it and the economics of the approach and using
12:03:19 5 established techniques would have been what they did versus
12:03:23 6 sort of the, the legal construct of a POSITA that has full
12:03:29 7 knowledge of all of the art to choose from up on the wall.

12:03:32 8 THE COURT: Because when I read paragraph 25 of
12:03:36 9 the supplemental declaration, I understand the stark issue
12:03:36 10 to be, no, look, I acknowledge that a POSITA, quote, "would
12:03:41 11 have imagined putting the entirety of the functionality on
12:03:44 12 one chip, but I meant that a POSITA would have said that
12:03:47 13 wouldn't necessarily be economical to do it." That's how I
12:03:53 14 read it, which is a different way of reading it than the way
12:03:56 15 you were just explaining, which is distinguishing between
12:03:58 16 what a POSITA would have understood versus what a non-POSITA
12:04:02 17 would have understood. Am I wrong about that?

12:04:04 18 MR. GILMAN: I think in the terms of trying to
12:04:06 19 actually solve an engineering approach, and I think that's
12:04:10 20 what harmonizes the two, that if they were trying to do the
12:04:13 21 actual problem and address something, the language would
12:04:16 22 never have imagined it's obviously incorrect, but the idea
12:04:19 23 that they would not have chosen that path because of the
12:04:23 24 economics of the approach is consistent with -- viewing a
12:04:31 25 POSITA as somebody who is actually in the field doing it as

12:04:34 1 opposed to an expert in the field thinking about what the
12:04:37 2 options are that are available.

12:04:39 3 THE COURT: Okay. Last couple questions here.
12:04:46 4 There is some -- there's a bunch of portions of the
12:04:49 5 specification, say, of the '671, that the parties talk about
12:04:52 6 in the briefing, they're talking about, you know,
12:04:57 7 utilization of, in the other side's view, a single chip, one
12:05:01 8 chip, on chip, et cetera. There's was a part of your
12:05:04 9 briefing, I think it's page 27, where you said something
12:05:07 10 like, look at most of those described circuit embodiments.
11 So I was wondering, is that a concession. Is that a
12:05:12 12 concession that there are some embodiments described in the
12:05:14 13 patents where yes, yes, they are talking about only one
12:05:19 14 chip? But our position is just that those are just
12:05:21 15 embodiments? Or is your position, no, every single time
12:05:25 16 that they point to something in the specification that they
12:05:28 17 think means one chip, we're actually saying it doesn't mean
12:05:31 18 that or it's broad enough to include more than one chip?
12:05:35 19 Which is your view?

12:05:36 20 MR. GILMAN: So, I know -- starting with maybe
12:05:40 21 walking through these in order, the main portion they rely
12:05:43 22 on, the description of relevant is not a description, it's
12:05:47 23 not an embodiment of the invention. This is talking -- this
12:05:50 24 is in column 1, lines 35 to 44, where it says the array of
12:06:00 25 pixels with the associated active circuitry on the same

12:06:06 1 chip.

12:06:06 2 THE COURT: You're talking about the, in the
12:06:07 3 discussion of the relevant. Is that prior art.

12:06:09 4 MR. GILMAN: Relevant. Yeah, I think that's the
12:06:13 5 background of the invention or that's the sort of the
12:06:16 6 backdrop of things that people were doing or one thing that
12:06:19 7 people were doing. I think it's also --

12:06:23 8 THE COURT: Should I understand relevant to be
12:06:26 9 prior art art? Does relevant talk about CCD technology or
12:06:29 10 what do you think?

12:06:30 11 MR. GILMAN: So this is also, this is a
12:06:32 12 description of what was being tried in the CMOS technology
12:06:34 13 too in terms of the relevant.

12:06:36 14 THE COURT: So maybe relevant is broad enough to
12:06:40 15 encompass both CMOS and CCD technology?

12:06:42 16 MR. GILMAN: There was some attempt to do CMOS
12:06:45 17 technology in relevant, yes.

12:06:47 18 THE COURT: Okay. I'm sorry, you want to make
12:06:48 19 the point about column 1, lines 35 to 44?

12:06:53 20 MR. GILMAN: Yeah. So this is not a description
12:06:57 21 in the patent of an embodiment of the invention itself. And
12:06:58 22 that the language, the pixels with the associated active
12:07:04 23 circuitry on the same chip, is, I think, ambiguous, because
12:07:06 24 what does associated active circuitry mean? It doesn't talk
12:07:10 25 about all the components of Fig. 1. It does not tie to all

12:07:14 1 the components of Claim 1. There are some aspects of the
12:07:18 2 active circuitry and then I think for Claim 1 it's probably
12:07:22 3 closer to -- I'm sorry, Fig. 1, the inner dashed box, where
12:07:26 4 it would all be done in CMOS or on an integrated circuit and
12:07:31 5 that could be the associated active circuitry. This is not
12:07:36 6 saying that the voltage selection circuit, everything else
12:07:39 7 is necessarily on the same single chip as the pixel itself.

12:07:43 8 THE COURT: Is what you're saying that even in
12:07:45 9 the context of describing the relevant, when that sentence
12:07:49 10 says the sensor "consists of an array of pixels, dot dot
12:07:53 11 dot, "with the associated active circuitry on the same
12:07:57 12 chip," to the extent that's referring more broadly to an
12:08:02 13 image sensor integrated circuit, it is not a concession that
12:08:06 14 all relevant components of an image sensor integrated
12:08:12 15 circuit, including the type of components that are talked
12:08:15 16 about in Claim 1, are on the same chip, it's just a
12:08:18 17 statement that certain components like those related to the
12:08:24 18 associated active circuitry that's being discussed there are
12:08:30 19 can described as being all on one chip?

12:08:33 20 MR. GILMAN: That's correct and not even in the
12:08:36 21 context of an embodiment of the invention itself.

12:08:37 22 THE COURT: And it's talking about not
12:08:40 23 invention, it's talking about, you know, what came before.
12:08:43 24 But I think you were saying, Judge, like probably what they
12:08:47 25 may have meant is when they were making a reference to

12:08:49 1 associated active circuitry, how that might line up to like
12:08:54 2 Claim 1, even though, again, they're not talking about Claim
12:08:57 3 1, maybe like a part of what's described in Claim 1 is being
12:09:02 4 on this -- on one integrated circuit might be said to be on
12:09:06 5 one chip in this description. Do you know what I mean?
12:09:09 6 Like, if you were analogizing, is there an analogy that
7 could be drawn between the words "associated active
12:09:13 8 circuitry" and any aspect of Claim 1?

12:09:14 9 MR. GILMAN: Yeah. There are a number of the
12:09:18 10 elements of Claim 1, such as the photo diode, the floating
12:09:20 11 diffusion, the transfer gate that could --

12:09:23 12 THE COURT: Are key stuff depicted in Fig. 1?

12:09:25 13 MR. GILMAN: Correct, Your Honor.

12:09:26 14 THE COURT: That's not the entirety of -- is
12:09:29 15 there something claimed in Claim 1 that's not depicted on --
12:09:32 16 I think we went through this -- on Fig. 1?

12:09:36 17 MR. GILMAN: I believe all the elements are
12:09:37 18 depicted on Fig. 1. Some of the ones are on separate boxes.

12:09:42 19 THE COURT: Okay. But in any event, you're
12:09:45 20 saying this doesn't amount to a flat statement that, hey, if
12:09:49 21 you had an image sensor integrated circuit, everything
12:09:51 22 that's a part of it would, quote, be on the same chip.
12:09:54 23 That's not what they're saying?

12:09:57 24 MR. GILMAN: Correct, Your Honor. If we're
12:09:59 25 starting from a baseline that the claims are not so limited,

12:10:02 1 I don't think you could read this as a clear and
12:10:05 2 unmistakable surrender of coverage.

12:10:07 3 THE COURT: Okay. What other points do you want
12:10:10 4 to make about the intrinsic evidence here or others?

12:10:25 5 MR. GILMAN: Your Honor, I think we've bounced
12:10:29 6 around a fair amount and we've covered all the points that I
12:10:31 7 wanted to raise, unless Your Honor has any further
12:10:31 8 questions.

12:10:32 9 THE COURT: I'll give each side a chance, if
12:10:34 10 they wish, to use it for a brief rebuttal, so why don't you
12:10:38 11 save your rebuttal for then and we can talk about it then.

12:10:44 12 MR. GILMAN: Okay. Thank you, Your Honor.

12:10:45 13 THE COURT: Okay. Thank you. Thank you, Mr.
14 Gilman.

12:10:45 15 All right. Let's hear on this first term from
12:10:53 16 OmniVision's counsel.

12:10:57 17 MR. BLUESTONE: Thank you, Your Honor. David
12:11:00 18 Bluestone on behalf of OmniVision. May approach with slide
12:11:01 19 copies?

12:11:02 20 THE COURT: You may. And by the way, counsel,
12:11:06 21 I'm being told that my criminal hearing got moved to later
12:11:10 22 in the afternoon to 2:30. We'll still take our break at 1.
12:11:16 23 And I might have to take a second break while I do that,
12:11:19 24 we're talking like 15, 20 minutes for that so, we'll just --

12:11:24 25 Ms. Ingram, are you good for the whole day or do

1 you have any stopping point?

2 COURT REPORTER: I'm good.

12:11:28 3 THE COURT: Okay. So anyway, just giving you a
12:11:31 4 heads up.

12:11:35 5 MR. BLUESTONE: Thank you, Your Honor. I'm
12:11:36 6 going to address the introductory comments by Mr. Gilman on
12:11:40 7 the background technology and then my colleague Ms. Lynch is
12:11:43 8 going to address the arguments related to preamble.

12:11:46 9 The Court's gotten into -- deep into the
12:11:49 10 discussions of the preamble, so if you want to keep the flow
12:11:51 11 and talk about the preamble argument now, she can go first,
12:11:54 12 but otherwise I'll just plan on proceeding in the order
12:11:58 13 that's been tended.

12:11:59 14 THE COURT: So you are not going to cover the
12:12:01 15 preamble issues?

16 MR. BLUESTONE: No. I'm going to do
12:12:06 17 introductory comments response and the background of the
12:12:07 18 technology. So if you'd rather Ms. Lynch go because you're
12:12:07 19 kind of in the middle of the argument section, we can switch
12:12:10 20 the order.

12:12:10 21 THE COURT: I want you to be able to make the
12:12:13 22 points you want to make. There were two grounds for term
12:12:15 23 one that are being fought about, she's going to cover both
12:12:19 24 of those substantively in terms of rebutting the other
25 side's arguments.

1 MR. BLUESTONE: Yes, Your Honor.

12:12:21 2 THE COURT: You're going to provide a general
12:12:23 3 overview of the technology?

12:12:23 4 MR. BLUESTONE: Correct, Your Honor.

12:12:23 5 THE COURT: Why don't you go ahead and do that
12:12:25 6 then let me hear from her on those kind of term one issues.

12:12:29 7 MR. BLUESTONE: Okay. Thank you, Your Honor.

12:12:31 8 Just some preparatory responses. There was some
12:12:35 9 discussion initially about the background of discussions
12:12:37 10 between the parties. OmniVision had discussions with Pictos
12:12:40 11 before this case, which was the prior owner, and had
12:12:44 12 basically gone and explained why they didn't need a license,
12:12:48 13 had fairly open discussions. It was only when these patents
12:12:51 14 were sold or transferred in some way to RESN and they
15 threatened infringement that we are here. So kind of
12:12:59 16 discussions broke off is not exactly an appropriate
12:13:01 17 representation of what happened.

12:13:02 18 Just to clarify one item for the record. The
12:13:05 19 '651 patent did have a decision in the Eastern District of
12:13:08 20 Texas. The case was *Imperium v. Apple*, 11-cv-165. And that
12:13:15 21 is docket number 209, which I believe is July 2nd, 2012. It
12:13:20 22 doesn't directly address the issues before the Court, but
12:13:22 23 the question was, have any of these patents been construed
12:13:26 24 before? Yes, the '651 to some degree.

12:13:28 25 THE COURT: Okay. Maybe could the parties, just

12:13:29 1 the jointly, at some point after hearing, just send me a
12:13:32 2 one-page letter that just says, Judge, as to -- just as a
12:13:37 3 reminder, there is one court that issued a Markman opinion
12:13:41 4 on at least one of these patents, here is the opinion, and
12:13:44 5 it does not or it does implicate any of the terms at issue
12:13:49 6 here.

12:13:50 7 MR. BLUESTONE: Okay. And additionally, there
12:13:51 8 was a hearing that actually happened in the *ITC* case that
12:13:55 9 relates to some of these terms, but not an actual ruling.
12:13:58 10 So just in case there's anything else the Court wants to
12:14:02 11 see, there is some in the record on that.

12:14:05 12 THE COURT: Okay.

12:14:05 13 MR. BLUESTONE: Okay. So starting off with the
12:14:07 14 technology, we want to give a little bit of an explanation
12:14:10 15 of what the 4T pixel is because that will provide a
12:14:15 16 framework of how this all works and what the purported new
12:14:18 17 features are. This is from slide 9 of RESN's technology
12:14:27 18 tutorial. All these elements are all old. This is
12:14:30 19 essentially the 4T pixel. All of these elements also appear
12:14:36 20 in Fig. 1 of the '651 Patent, and obviously '145 and '274 as
12:14:44 21 well. So just to briefly walk through what each of these
12:14:45 22 elements are doing. And Your Honor, feel free to interrupt
12:14:47 23 me at any time with questions about how this works.

12:14:49 24 You are correct that his first item one, which
12:14:50 25 is the photo diode, photons of light are being converted

12:14:55 1 into an electrical charge. That's in this semiconductor
12:14:58 2 region that's doped in a particular way.

12:15:00 3 Item two is what all these claims are really
12:15:02 4 focusing on, this transfer gate. I'll note that it's drawn
12:15:06 5 not really correct. It should be more of like what 4 and 5
12:15:09 6 and 6 are showing, kind of standard transistor schematic.
12:15:14 7 We don't know why it's just a line, but for clarity, that's
12:15:17 8 our opinion what it should look like, but that's kind of a
12:15:21 9 minor issue.

12:15:22 10 Three then is where -- is the floating diffusion
12:15:25 11 node. This is where the PD charge is converted to a
12:15:31 12 voltage. The benefit of this 4T pixel versus the older
12:15:35 13 ones, like a 3T pixel, is they added this transfer gate and
12:15:40 14 this floating diffusion node, because now I have the benefit
12:15:44 15 have being able to take a measurement at the floating
12:15:47 16 diffusion node before I release the charge from the photo
12:15:51 17 diode. So imagine that we have like a window pane and there
12:15:51 18 might be some dust on it. I can take a picture of that and
12:15:55 19 when I take a picture of what was going on in the window,
12:15:58 20 subtract out the dust. So it's just a noise benefit. So
12:16:01 21 the floating diffusion node is taking that charge and
12:16:05 22 converting it to a voltage.

12:16:06 23 Number four is a reset gate. This is just
12:16:09 24 clearing the charge from the floating diffusion node. As
12:16:11 25 you mentioned, Judge, there is, if not millions of these

12:16:15 1 pixels, so they got to do this process over and over and
12:16:18 2 over again, right? So the reset gate functionality is going
12:16:22 3 to happen on this pixel to reset it and chart -- I misspoke
12:16:27 4 one thing. This is type for each pixel. Each pixel is
12:16:31 5 doing this over and over again, so at one point you have to
12:16:34 6 reset the charge and take another sample.

12:16:36 7 Above that where it says cell high is just the
12:16:39 8 power supply, so it's kind of inconsequential to what we're
12:16:43 9 talking about.

12:16:43 10 Item five is a source power. I believe in a
12:16:45 11 case previously, maybe it was the *Satious* case, where you're
12:16:50 12 talking about impedance matching or something related to
12:16:53 13 that. This is essentially that. It's called a buffer. And
12:16:55 14 the buffer is going to make sure that that signal at 3, that
12:17:00 15 floating diffusion node signal, can be read by later
12:17:04 16 circuitry. So without getting into the massive details, the
12:17:07 17 floating diffusion node is tiny, tiny, tiny, like micron
12:17:10 18 size, so the capacitance levels are small. So compare that
12:17:14 19 with this bigger circuitry that has a larger capacitance.
12:17:17 20 For me to go and read it, I just need to boost up the
12:17:20 21 signal. So it's basically making a copy of it, but a larger
12:17:24 22 version of it so it can be read, and the row selector that
12:17:28 23 is now controlling what the row by row selection is.

12:17:39 24 So all those things, this is what the 4T pixel
12:17:45 25 is. This is -- I believe earlier, Your Honor, you were

12:17:47 1 asking what's this relevant art section talking about in the
12:17:50 2 background. It's generally referring to all this stuff in
12:17:53 3 yellow which is old. This is the 4T pixel. And as I
12:17:58 4 mentioned before, the slide 6 -- I'm sorry, that was slide 5
12:18:02 5 I just mentioned. On slide 6 this is just redrawing it to
12:18:05 6 show you what's going on generally. The transfer gate is
12:18:08 7 working like a switch. These other two, the reset gate and
12:18:13 8 row selector are working like a switch and the source file
12:18:14 9 is just this buffer that's boosting the signal.

12:18:19 10 So here's where the 4T pixel is in the
12:18:22 11 specification. Here's number one, the reset gate. Here's
12:18:25 12 number two, the source follower. Here's number three, the
12:18:29 13 row select transistor. And here's number four. And this is
12:18:32 14 where the claims are starting to care about things. All of
12:18:35 15 that other stuff in general, there's no modifications.

12:18:43 16 This might be a little small to see on slide 12.
12:18:47 17 The point we're trying to articulate with this is the vast
12:18:51 18 majority of what Claim 1 is is all just this 4T pixel cell.
12:18:55 19 Same thing with '145 Claim 1, bulk of this is just the old
12:18:59 20 stuff. Same thing with '274. So what we're focusing on
12:19:04 21 here for '671 is this box that's this selectable voltage
12:19:10 22 circuitry.

12:19:10 23 And I'm going to jump ahead real quick because
12:19:13 24 there's language here about control signal I think it was
12:19:17 25 asked about that it might be helpful to touch upon very

12:19:20 1 briefly. If we look at claim -- I'm at JA 43 where we're
12:19:25 2 looking at Claim 1. If you can look at the language, what
12:19:30 3 it talks about here, it's saying transfer depending on
12:19:36 4 control signal. The control signal in here is not
12:19:40 5 structure. It's a voltage that's going up and down. And
12:19:44 6 with that, I will go -- and if I'm going too fast, Your
12:19:48 7 Honor, please interrupt me. If we go to slide 57, we were
12:19:53 8 going to use this for something else.

12:19:55 9 THE COURT: Could you just go back?

10 MR. BLUESTONE: Certainly.

12:19:58 11 THE COURT: You were making some kind of point
12:19:58 12 about control signal, but I'm not sure I understood.

12:20:03 13 MR. BLUESTONE: So we were mentioning about the
12:20:03 14 control signals. I'll go back to this other figure if I
12:20:09 15 may. So I'm on slide 16. That "TG is" the transfer gate.
12:20:21 16 The way it generally is working is it's just a simple,
12:20:27 17 normal CMOS transistor functionality, in general, before the
12:20:28 18 blue highlighting here.

12:20:29 19 THE COURT: Easy for you to say.

12:20:32 20 MR. BLUESTONE: Well, the nerddom does get
12:20:35 21 absorbed and you start to love it.

12:20:37 22 If we start with that photo diode that's
12:20:39 23 collecting all this charge, that's on one half of this --
12:20:42 24 one side of this transistor.

12:20:44 25 THE COURT: The thing about it is collecting

12:20:48 1 what?

12:20:48 2 MR. BLUESTONE: Photons of light are hitting it.

12:20:51 3 THE COURT: Photons of light representing an
12:20:52 4 image or a portion of an image, is that right?

12:20:55 5 MR. BLUESTONE: I wouldn't say it's representing
12:20:56 6 a portion of an image. When we stand here and you and I are
12:20:59 7 looking at it, there's light beams that are hitting our eyes
12:21:02 8 being focused and our retinas are essentially forming this
12:21:06 9 various picture by various beams of light. It's just taking
12:21:10 10 light and reflecting it on the surface kind of like the
12:21:14 11 retina of your eye would be a surface to receive light.

12:21:14 12 THE COURT: The photo diode is taking in light?

12:21:17 13 MR. BLUESTONE: Yes.

12:21:17 14 THE COURT: And it's transforming that light
12:21:19 15 into some type of electrical signal?

12:21:24 16 MR. BLUESTONE: A photon of light, so think of a
12:21:26 17 tiny, tiny beam of light is going to hit the semiconductor
12:21:30 18 surface. That act of that energy from the wavelength of
12:21:34 19 light -- sorry if I'm getting too deep into the physics, but
12:21:34 20 that act of energy is going to release an electron and
12:21:38 21 that's the charge we're talking about. So for every tiny,
12:21:41 22 tiny bit of light hitting this tiny, tiny surface, it's
12:21:45 23 going to release a charge and that charge is essentially
12:21:47 24 proportional to what light hit it.

12:21:50 25 THE COURT: And that charge is then going to

12:21:54 1 flow through this transfer gate?

12:22:00 2 MR. BLUESTONE: Only when it's time to do so.

12:22:02 3 So I have not -- so to your image question, the image is
12:22:06 4 created by the whole array of these millions of these.

12:22:11 5 THE COURT: Right. But if that's so, isn't what
12:22:15 6 is inputted through every photo diode some tiny portion of
12:22:20 7 it?

12:22:20 8 MR. BLUESTONE: Yes.

12:22:21 9 THE COURT: Portion of an image.

12:22:23 10 MR. BLUESTONE: So if you're taking the analogy
12:22:26 11 of a pixel on a screen, each one of those is a little dot.
12:22:29 12 It's functionally the same thing except it's receiving not
12:22:33 13 producing for your eyeball, in essence.

12:22:35 14 THE COURT: And then at some point, whatever the
12:22:38 15 point is, that charge is going to make its way over to the
12:22:43 16 diffusion, but it's got to be helped in that process by this
12:22:47 17 transfer gate?

12:22:49 18 MR. BLUESTONE: I wouldn't say helped
12:22:52 19 necessarily. The generic feature is it's serving as a gate.
12:22:53 20 So there's a period of time that it needs to sit there and
12:22:57 21 integrate this charge, collect the light. When it's time, a
12:23:00 22 voltage is applied to a transfer gate. This is what I was
12:23:03 23 saying about the standard transistor operation. You
12:23:06 24 apply -- if the voltage is low generally, the switch is
12:23:10 25 open, it's as if the photo diode is sitting by itself. It's

12:23:16 1 just sitting their collecting charge. I need to apply a
12:23:19 2 voltage -- and I'll put this other page I was talking about
12:23:23 3 very briefly because this might show it better. On slide
12:23:32 4 57, this is the general timing diagram. On 58, I've
12:23:38 5 highlighted just the transfer gate. When that goes high in
12:23:42 6 that figure where I've highlighted in yellow on slide 58,
12:23:46 7 that's when the switch, proverbially, is closed, and that
12:23:50 8 charge from the photo diode is now going to go to floating
12:23:53 9 diffusion. When it is at the low TG, it's open and they're
12:23:57 10 not connected.

12:23:58 11 THE COURT: So open means not connected?

12:24:01 12 MR. BLUESTONE: Like an open switch or closed
12:24:04 13 switch. But yes, that's the way I would refer to it. Like
12:24:07 14 an open circuit that's open. There is no connection, there
12:24:10 15 is know path. I'll just say there is no path.

12:24:12 16 THE COURT: Like a bridge where the bridge is
12:24:16 17 up?

12:24:16 18 MR. BLUESTONE: Exactly. In fact, that's a
12:24:18 19 perfect analogy of what the transistor is doing. On one
12:24:22 20 side you have a path and on the other side you have a moat.
12:24:25 21 There's no way to cross. When you apply that voltage,
12:24:28 22 you're creating that pathway to go from point A to point B.

12:24:32 23 THE COURT: Okay.

12:24:33 24 MR. BLUESTONE: The point I wanted to make about
12:24:35 25 the control signal is, that's not a structure that's on the

12:24:40 1 device. It's a signal, so when we're talking about where is
12:24:43 2 the control signal being generated, it's asking about a
12:24:46 3 structure to generate this signal, but it's just a signal,
12:24:50 4 it's not actually a structure in the claim.

12:24:54 5 THE COURT: Okay.

12:24:59 6 MR. BLUESTONE: So the variable voltage
12:25:01 7 circuitry, now on slide 16, they're not saying let's invent
12:25:05 8 how a transistor works, they're not saying let's invent a
12:25:11 9 high and low signal to open and close the switch. What
12:25:14 10 they're saying is I need to determine the level of that
12:25:18 11 voltage. And that's what Mr. Gilman was showing us, some of
12:25:21 12 those figures about a gate going high and low. Adjust those
12:25:26 13 levels. Not just one high and one low. I might need that
12:25:29 14 high to go a little bit higher for whatever reason or to go
12:25:33 15 lower for whatever reason. And it's an important
12:25:37 16 distinction when we get to some later items under variable
12:25:44 17 voltage circuitry, but we'll kind of leave that for later.

12:25:51 18 I think it's a good time to pass it over so we
12:25:54 19 don't forget about the preamble, but that's generally the
12:25:57 20 background of the technology. 4T transistor is old and the
12:26:01 21 claims are trying to build on this specific CMOS 4T
12:26:04 22 structure without having to reinvent the wheel. We're
12:26:07 23 trying to bolster on some additional technology.

12:26:10 24 THE COURT: Okay.

12:26:12 25 MR. BLUESTONE: With that I'll pass it on to my

12:26:16 1 colleague.

12:26:16 2 THE COURT: Thank you.

12:26:17 3 MR. BLUESTONE: Thank you, Your Honor.

12:26:23 4 MS. LYNCH: Good afternoon Your Honor. Kathleen
12:26:25 5 Lynch on behalf of OmniVision. So I'm going to take us back
12:26:37 6 to the specific dispute regarding the preamble terms.

12:26:40 7 And if you could go to slide 23, please, Mr.
12:26:43 8 Hemphill.

12:26:44 9 So as Mr. Gilman showed, these are the disputes,
12:26:48 10 the claims and each side's proposed constructions as you
12:26:54 11 know, Your Honor.

12:26:54 12 If you could go on to slide 24, I think it's
12:26:57 13 helpful to sort of situate this debate. As Your Honor had
12:27:03 14 noted, there are some real similarities to the parties' two
12:27:07 15 constructions. So these are the items we see as disputes
12:27:10 16 that need resolution. The first is what is the meaning of
12:27:13 17 "integrated circuit?" The second is whether the preambles
12:27:16 18 are limiting. And then third, which relate to the first
12:27:22 19 one, is what is required within the integrated circuit.

12:27:29 20 If we could move to slide 25, please.

12:27:31 21 So on the screen here is just an exemplary set
12:27:34 22 of claims. We've seen these today already. This is
12:27:38 23 independent Claim 1 and dependent Claims 5 and 6 from the
12:27:43 24 '671 Patent. Claim 1, as we've discussed, contains the
12:27:46 25 disputed preamble language. And as Your Honor noted, that

12:27:50 1 is necessarily imported into dependent Claims 5 and 6. And
12:27:55 2 I will touch on the importance of the dependent claims later
12:27:59 3 unless Your Honor had questions about those now.

12:28:01 4 THE COURT: That's okay, you can just go with
12:28:04 5 your flow.

12:28:04 6 MS. LYNCH: All right. So then I will start
12:28:06 7 with the first issue for the Court to decide, which is what
12:28:09 8 is the meaning of "integrated circuit." The evidence in
12:28:12 9 this case is quite clear that "integrated circuit" means
12:28:16 10 that the circuit is made on the same wafer. If we --

12:28:21 11 THE COURT: By wafer, you use that as synonym
12:28:24 12 for chip?

12:28:26 13 MS. LYNCH: Yes. So in terms of evidence that
12:28:32 14 OmniVision has put forth, and Your Honor as seen, our
12:28:36 15 technical expert, Dr. Theuwissen, explained that a POSITA
12:28:39 16 would understand "integrated circuit" as a term of art
12:28:43 17 referring to an image sensor circuit formed on a single
12:28:47 18 semiconductor wafer, or to your point, chip. And to be
12:28:50 19 integrated, the circuit is manufactured all on the same
12:28:55 20 piece. And Dr. Theuwissen contrasted this to what's known
12:29:00 21 as a discrete circuit, which is an individual circuit that
12:29:03 22 may be wired to work with additional other circuits, but
12:29:06 23 that is not an integrated circuit, that's a set of discrete
12:29:14 24 circuits.

25 This definition is supported by the four

12:29:16 1 technical dictionaries that OmniVision put forth. And I
12:29:19 2 won't belabor this point because I think we covered it in
12:29:22 3 our briefing, but all four of these technical dictionaries
12:29:26 4 confirm that the understanding of "integrated circuit" is a
12:29:30 5 single semiconductor.

12:29:31 6 THE COURT: These are exhibits 9 and 12?

12:29:36 7 MS. LYNCH: That's correct.

12:29:39 8 So the specifications also repeatedly state that
12:29:43 9 the various components are on the same chip.

12:29:47 10 If we could go to the next slide.

12:29:49 11 On slide 27, this is the language that we've
12:29:53 12 previously looked at. But here, the background of the
12:29:57 13 invention section repeatedly addresses that this is -- the
12:30:00 14 associated active circuitry is on the same chip. And then
12:30:06 15 I'll note, Your Honor, the last sentence in this portion of
12:30:09 16 the description of the relevant art talks about the
12:30:13 17 advantages of using a CMOS and then again building on it to
12:30:19 18 save area and cost, so the idea that these inventions are
12:30:23 19 building on a CMOS with the goals of saving space and money.

12:30:26 20 THE COURT: How do I know that the reference to
12:30:28 21 "associated active circuitry" is a synonym for anything that
12:30:33 22 has to do with the image sensor integrated circuit?

12:30:40 23 MS. LYNCH: Sure.

12:30:40 24 THE COURT: As opposed to some stuff, maybe the
12:30:42 25 most important stuff, but not necessarily everything,

12:30:45 1 because that could be on another chip that's still a part of
12:30:48 2 this thing .

12:30:50 3 MS. LYNCH: Sure. And my apologies for
12:30:52 4 interrupting, Your Honor.

12:30:53 5 If we go could go back to slide 25.

12:30:56 6 So you see here that all these portions listed
12:30:59 7 in the body of the claim of what's required in the
12:31:03 8 integrated circuit. As a minimum, I'd say the row and
12:31:06 9 column circuitry, which is like the third from the bottom,
12:31:09 10 that's going to be active circuitry. I don't -- I'm not
12:31:14 11 positing that the language right there that we had up from
12:31:18 12 the relevant prior art necessarily encapsulated all of these
12:31:22 13 things. My point is that the invention discusses the
12:31:26 14 importance of keeping different portions of the circuitry on
12:31:30 15 the same chip.

12:31:31 16 THE COURT: Wouldn't another way to say what you
12:31:33 17 just said is, look, to that part of column 1, it is talking
12:31:39 18 about, probably even this might be attorney argument, but it
12:31:44 19 is probably talking about a portion of the components that
12:31:51 20 are described in something like Claim 1, but not all of
12:31:55 21 them, and is only making the point that a portion of those
12:31:58 22 components are on the same chip, it's not really talking
12:32:02 23 about all relative components of a chip like this.

12:32:07 24 MS. LYNCH: I do think that's a fair
12:32:09 25 characterization of the relevant art. My point is more that

12:32:13 1 there are multiple places in the patent that point to the
12:32:15 2 importance of the invention being on a single chip. So
12:32:19 3 that's just one place where the patent emphasizes the
12:32:22 4 benefit of structures being on chip.

12:32:24 5 THE COURT: When you say the importance of the
12:32:27 6 invention, though, I think you were acknowledging that if
12:32:29 7 the invention of Claim 1 is a circuit that has multiple
12:32:32 8 components, I think you were acknowledging at least a
12:32:35 9 portion of those components are probably being referenced by
12:32:37 10 the phraseology "associated active circuitry." Is that
12:32:43 11 right?

12:32:43 12 MS. LYNCH: I think that's right.

12:32:44 13 I'm sorry, Mr. Hemphill, if we could go back to
12:32:46 14 27.

12:32:47 15 I think that he is right. And again, this is
12:32:48 16 discussing the benefits of CMOS, so it's kind of setting the
12:32:52 17 stage, so, yes, I agree.

12:32:53 18 THE COURT: Okay. So I mean -- and again, this
12:32:55 19 is not, I think admittedly, this is talking about background
12:32:58 20 art both as to CCD and CMOS, is that right? Or this portion
12:33:03 21 is not meant to be discussing the claimed invention, is that
12:33:06 22 right?

12:33:06 23 MS. LYNCH: I believe that's right. I will say
12:33:08 24 the last full sentence there that we're discussing is about
12:33:12 25 CMOS specifically. And as you can see throughout this

12:33:17 1 column 1, the patent discusses building on CMOS technology.

12:33:23 2 THE COURT: But I guess my point is, in sum,
12:33:25 3 though, all this is really definitively saying is, hey,
12:33:28 4 look, I'm going to be talking about certain components of an
12:33:32 5 integrated circuit or a chip, and I'm going to be saying
12:33:36 6 that it's a good thing if they're all on the same chip, but
12:33:41 7 I am not necessarily saying that every component of an
12:33:45 8 integrated circuit, like, for example, maybe some of the
12:33:49 9 other components that are referenced in Claim 1, although
12:33:52 10 this is not talking about Claim 1, have to be on the same
12:33:54 11 chip. The only thing I really am saying for sure is it's
12:33:58 12 great if certain components are on the same chip. Is that
12:34:01 13 fair?

12:34:02 14 MS. LYNCH: I agree in the context of the
12:34:04 15 relative art.

12:34:04 16 THE COURT: Okay. Great. Let me let you
12:34:06 17 continue.

12:34:06 18 MS. LYNCH: If we could go to slide 28. Also in
12:34:09 19 the detailed description of the -- this is again showing the
12:34:14 20 '671 Patent. But as Your Honor noted, the '145 and '274
12:34:20 21 have similar, if not identical, disclosures. And again
12:34:23 22 talking about the importance of on chip. Two examples of
12:34:29 23 active circuitry. And then on this third example here we're
12:34:31 24 talk being on chip charge pump, just to bolster the position
12:34:36 25 that the importance of items being on chip is discussed

12:34:40 1 throughout the patent itself.

12:34:41 2 THE COURT: By on chip you're thinking of on one
12:34:45 3 chip?

12:34:45 4 MS. LYNCH: That's correct.

12:34:46 5 THE COURT: But again maybe at most what these
12:34:48 6 are saying is certain components that do certain things
12:34:54 7 relating to an integrated circuit, it's good if they're on
12:34:58 8 one chip, but not necessarily that all components of an
12:35:02 9 integrated circuit must utilize only one chip?

12:35:06 10 MS. LYNCH: So I understand based on this
12:35:09 11 language that they're calling out specific items. I do
12:35:11 12 agree with that. But I think the broader picture is that
12:35:15 13 because we're discussing an integrated circuit, it is, by
12:35:19 14 definition, a single chip.

12:35:22 15 THE COURT: That's may be a different argument
12:35:24 16 now about what integrated means necessarily. But I guess
12:35:27 17 like it's all to say that, unless I'm maybe
12:35:33 18 misunderstanding, the other side, I think, responds to these
12:35:36 19 citations to the intrinsic evidence by saying all -- these
12:35:41 20 do not say everything that is or can be a part of integrated
12:35:48 21 circuit like the kind of integrated circuit claimed in Claim
12:35:52 22 1 must be on one and only one chip. At most all they do is
12:35:56 23 say some portion of the stuff that is on an integrated
12:36:00 24 circuit, like the circuit in Claim 1, it would be great if
12:36:03 25 it's on one chip. So these perfectly leave open the

12:36:07 1 possibility that a chip or a circuit like the circuit in
12:36:10 2 Claim 1 could actually utilize more than one chip. That's
12:36:13 3 not wrong, is it?

12:36:14 4 MS. LYNCH: I think that is a fair
12:36:16 5 characterization. I do agree with that. But again, as
12:36:19 6 we're reading this in the context of the claims, because the
12:36:21 7 claims say "an integrated circuit," I think that tells us
12:36:25 8 that it's more than just a few specific items called out.

12:36:29 9 THE COURT: Okay. Let me let you continue.

12:36:32 10 MS. LYNCH: If we could go to slide 28, please.
12:36:35 11 We're there. Sorry.

12:36:36 12 Okay. If we contrast all of this evidence, so
12:36:41 13 maybe, if we go back, please, Carlton to the -- yes. Slide
12:36:48 14 26. Perfect.

12:36:49 15 So if we contrast all this evidence that
12:36:53 16 OmniVision has put forward to what RESN has put forward and
12:36:59 17 specifically Dr. Carley's testimony, that testimony is
12:37:02 18 unpersuasive, it is inconsistent, it lacks support other
12:37:08 19 than to a Wikipedia entry, as Your Honor discussed. It
12:37:11 20 relies on hindsight bias of what could have been done, what
12:37:15 21 a POSITA might have understood, and particularly reading in
12:37:20 22 technology and understanding that's just not from the
12:37:22 23 relevant time period. He also offers opinions on an image
12:37:27 24 acquisition system instead of the claimed issue, which is
12:37:31 25 the integrated circuit.

12:37:38 1 THE COURT: Do you have particular slides about
12:37:41 2 Dr. Carley or --

12:37:42 3 MS. LYNCH: No, I do not.

12:37:43 4 THE COURT: Okay. So maybe -- and I think
12:37:45 5 probably, because supplemental declaration is probably the
12:37:49 6 best place to go.

12:37:51 7 MS. LYNCH: Right.

12:37:51 8 THE COURT: Because I think there is trying to
12:37:54 9 clean up your criticism of his initial declaration. And I
12:38:07 10 think it's at --

12:38:11 11 MS. LYNCH: 702 and 703 perhaps, Your Honor?

12:38:19 12 THE COURT: Okay. Yep. Let me be sure I get
12:38:21 13 there. 703, 704 maybe.

12:38:27 14 MS. LYNCH: Okay.

12:38:28 15 THE COURT: So I mean, he says -- so I think,
12:38:33 16 you know, it's in both he posits that there are things
12:38:42 17 called three-dimensional integrated circuits that can make
12:38:46 18 use of more than one chip. And then in his supplemental
12:38:50 19 declaration he addresses CCD integrated circuits. I gather
12:38:54 20 the kind of circuits that's also being reference in part in
12:38:58 21 the column 1 section of the patent, and says, look, I'm
12:39:00 22 aware of -- and I'm talk being in the late '90s, not just
12:39:04 23 later, such circuits being utilized within four components
12:39:11 24 on more than one chip. How come that's not some evidence
12:39:17 25 that -- because you're asking for the narrower construction,

12:39:21 1 so if they can put together some evidence that suggests a
12:39:25 2 narrower construction may not be right, maybe get the
12:39:27 3 benefit of the doubt there. So how come that's not some
12:39:30 4 evidence that at least supports the other side's point?

12:39:33 5 MS. LYNCH: Sure. So I'm looking at paragraph
12:39:35 6 24 of Dr. Carley's supplemental report on JA 702, and this
12:39:40 7 is where he puts forth some examples of imaging system
12:39:45 8 architectures with functions split across -- I apologize.
12:39:50 9 I'm not addressing your question as to integrated circuit.
12:39:57 10 Okay. Apologies. So on JA 703, where Dr. Carley is saying
12:40:08 11 that -- you know what, Your Honor, to make sure I answer
12:40:11 12 your question, could you --

12:40:12 13 THE COURT: Sure. So looking at paragraph 26 in
12:40:14 14 particular, I think he's saying, look, I'm going to tell you
12:40:19 15 about a couple examples. Now he uses the phrase, in part,
12:40:24 16 "image acquisition systems" and your brief talks about that.
12:40:27 17 Maybe that's not the same thing as an image sensor
12:40:32 18 integrated circuits. But he begins by saying, "A POSITA
12:40:35 19 would have been aware of image sensor technology." Now, I
12:40:37 20 don't know, is he talking about something other than an
12:40:40 21 image sensor integrated circuit? He uses the words "image
12:40:44 22 acquisition systems," but he also is talking about
12:40:47 23 integrated circuits. In any event, assuming he is trying to
12:40:49 24 talk about this claim term we're talking about, he makes
12:40:53 25 reference to three-dimensional integrated circuits and CCD

12:40:57 1 integrated circuits that he's aware of in the 1990s that he
12:41:00 2 says make use of more than one chip for its relevant
12:41:04 3 functionality components. The other side would say, I
12:41:07 4 think, look, these are some examples of how an image sensor
12:41:11 5 integrated circuit in the relevant time period may not
12:41:14 6 necessarily have been limited to everything being on one
12:41:16 7 chip. How do you respond to that?

12:41:19 8 MS. LYNCH: It's just different technology that
12:41:22 9 he's referring to. Whatever a 3D chip is, stacking, those
12:41:27 10 are just different -- CCD, different technology. So he's
12:41:31 11 just not addressing the technology at hand.

12:41:33 12 THE COURT: And how do I know that? I mean, the
12:41:37 13 claim term, assuming the preamble is limited, is "image
12:41:41 14 sensor integrated circuit." Like, for example, how come
12:41:44 15 that term couldn't be broad enough to include the concept of
12:41:47 16 three-dimensional integrated circuit? It's just any image
12:41:54 17 sensor integrated circuit, which one example could be that,
12:41:56 18 and that is being used on more than one chip. You know,
12:41:59 19 that kind of thing.

12:42:00 20 MS. LYNCH: If I understand his position
12:42:03 21 correctly, he's referring to 3D ICs that they're
12:42:08 22 manufactured by stacking one chip on top of another. And
12:42:12 23 that's not the same as like a single semiconductor wafer,
12:42:17 24 single chip.

12:42:22 25 THE COURT: But I think that's the point. It's

12:42:25 1 not the same as a single chip, it's utilizing multiple
12:42:28 2 chips, but it's still something called an image sensor
12:42:31 3 integrated circuit. Since it's an example of that, it's not
12:42:37 4 the case that every single image sensor integrated circuit
12:42:41 5 back in the relevant time period was utilizing only one
12:42:44 6 chip, which I think is the gist of what Dr. Theuwissen is
12:42:48 7 trying to say.

12:42:49 8 MS. LYNCH: Yeah, that the -- again, Your Honor,
12:42:51 9 I think our point here is that a three-dimensional
12:42:55 10 integrated circuit -- I understand that it contains the
12:42:58 11 phrase "integrated circuit," but our position is that this
12:43:00 12 would just be a different technology.

12:43:03 13 THE COURT: And as to CCD integrated circuits,
12:43:07 14 obviously I think what's being claimed here is meant to be
12:43:10 15 an advance of that, but I think the other side might say,
12:43:13 16 sure, sure, as to particular functionality or, you know --
12:43:19 17 but if we're just talking about a general matter about what
12:43:22 18 an image sensor integrated circuit is or can be or what it
12:43:26 19 can utilize, he's saying back in the '90s, with regard to
12:43:30 20 the CCD integrated circuits, sometimes an integrated circuit
12:43:34 21 utilized more than one chip in his knowledge. Again, that's
12:43:38 22 different than what Dr. Theuwissen says, but he's
12:43:44 23 providing -- I think he's trying to to provide different
24 factual testimony that counters Dr. Theuwissen's claim that,
12:43:48 25 no, no, he would only have one chip being used with any

12:43:52 1 image sensor integrated circuit back in that time frame.

12:43:56 2 Why is that wrong?

12:43:57 3 MS. LYNCH: Well, as -- Dr. Theuwissen does
12:44:02 4 address this in his supplemental report at JA 722. He makes
12:44:06 5 a couple of points. One, I understand Your Honor seemed --
12:44:12 6 you acknowledged that Dr. Carley was talking about an image
12:44:16 7 acquisition system. So I don't want to focus too much on
12:44:19 8 that point, but Dr. Theuwissen points out that that's just
12:44:22 9 not -- that's an entire system that might include an image
12:44:26 10 sensor integrated circuit, but it may also include other
12:44:29 11 things, so that should not be relevant to this analysis.

12:44:31 12 THE COURT: So paragraph 12 of Dr. Theuwissen's
12:44:35 13 supplemental declaration is essentially him saying, look,
12:44:37 14 whatever Dr. Carley is talking about in paragraph 26, he
12:44:42 15 himself says he's describing image acquisition systems. I'm
12:44:46 16 going to tell you that's something broader than, not the
12:44:50 17 same thing as an image sensor integrated circuit.

12:44:53 18 MS. LYNCH: That's right.

12:44:54 19 THE COURT: Okay.

12:44:55 20 MS. LYNCH: So that's 12. And that paragraph 13
12:44:57 21 also addresses that and gives some examples of what else may
12:45:01 22 be in an image acquisition system. And then in paragraph
12:45:06 23 14, Dr. Theuwissen points out that this discussion of what
12:45:10 24 could have been done, what a POSITA may have understood is
12:45:15 25 both not what the claim states and relying on concept bias.

12:45:20 1 THE COURT: These paragraphs of Dr. Theuwissen's
12:45:26 2 supplemental declaration, did you guys talk about these in
12:45:34 3 your brief? You may have. I just -- it's like 12, 13, 15.
12:45:45 4 I think it would probably be in the part of the supplemental
12:45:49 5 brief that's on page 31 and on where it says integrated as
12:45:55 6 meaning. I just don't remember a part of like the briefing
12:46:07 7 where it was like, oh, right, so this is Theuwissen coming
12:46:13 8 back and explaining why this phraseology, "image acquisition
12:46:18 9 systems," is talking about a whole different thing, but
12:46:22 10 maybe you did. I don't know. I mean, it's in the record.

12:46:29 11 MS. LYNCH: I think we did, Your Honor. I'm
12:46:31 12 trying to figure out where that was.

12:46:32 13 THE COURT: Well, maybe if you want to stand up
12:46:34 14 on rebuttal.

12:46:36 15 MS. LYNCH: Okay.

12:46:37 16 THE COURT: You have a chance to look for it.

12:46:39 17 MS. LYNCH: Yeah.

12:46:39 18 THE COURT: But like, who knows, maybe Dr.
12:46:42 19 Carley, he used that phrase, but maybe in the main what he
12:46:45 20 really was talking about -- I mean, if he wants to be
12:46:48 21 talking about this claim term, I guess you're saying things
12:46:52 22 are muddy, though, because of his use of that phraseology?

12:46:56 23 MS. LYNCH: Yes.

12:46:56 24 THE COURT: Okay.

12:47:20 25 MS. LYNCH: Put up slide 25. Thank you.

12:47:23 1 So getting back to the different arguments that
12:47:27 2 the parties made and the support, I want to point out that
12:47:32 3 RESN made a last argument in its reply briefing that even if
12:47:37 4 "integrated circuit" were construed to be singular, because
12:47:41 5 the preambles end in "comprising," then in the context of
12:47:45 6 the claims, the integrated circuit could be one or more.
12:47:51 7 This ignores the issue that the preambles themselves are
12:47:55 8 limiting, which I can get into more in a moment, but
12:47:58 9 moreover, this ignores the word "integrated" in the disputed
12:48:03 10 claim language.

12:48:04 11 THE COURT: And this is, I think, the part of
12:48:06 12 the brief, am I right, that's on page 29?

12:48:09 13 MS. LYNCH: That's right.

12:48:09 14 THE COURT: That I was discussing. And I
12:48:12 15 think -- I read this and I didn't focus on the parenthetical
12:48:19 16 as to the case they were citing. I focused more on the
12:48:24 17 language that they used in their sentences. And I read this
12:48:28 18 to be like an argument about these being comprising claims
12:48:34 19 and what that might mean or might not mean. But -- and in
12:48:38 20 light of Mr. Gilman's redirection of me today, I do see how
12:48:45 21 you could read this, though, as simply saying I think
12:48:47 22 something like the following: Judge, look, fine. Assume an
12:48:51 23 image sensor integrated circuit in the preamble is limiting.
12:48:54 24 It's "an" image sensor integrated circuit, and the Federal
12:48:58 25 Circuit case law says that, kind of presumptively, "an"

12:49:02 1 means one or more than one. So that phraseology, even if
12:49:05 2 it's in, it's perfectly consistent with and encapsulates
12:49:11 3 more than one circuit, more than one chip. What's your
12:49:16 4 basic response to that?

12:49:19 5 MS. LYNCH: Sure. So I would look at the case
12:49:21 6 that counsel cited and brought up, *Baldwin*. At 1343 the
12:49:28 7 Court specifically said that the claim term that that court
12:49:32 8 was construing, *Baldwin*, they said that that term did not
12:49:36 9 carry any definitive numerosity, which integrated circuit
12:49:44 10 does, it implies one. The Court also said, at 1342 into 43,
12:49:49 11 that there is an exception to the general rule that "a" in a
12:49:54 12 comprising claims means more than one. And that exception
12:49:57 13 arises when the language of the claims themselves
12:50:03 14 necessitate such a departure.

12:50:05 15 THE COURT: And maybe -- and I'll try to throw a
12:50:08 16 ball. Another reason why I didn't, you know, in your
12:50:13 17 response, in your last portion of your brief that ends on
12:50:17 18 page 32, I think what you just said now, that kind of back
12:50:23 19 and forth, I think -- I'm not sure that's quite there,
12:50:27 20 because I think maybe -- I don't know, maybe it is. But I
12:50:32 21 think you would probably respond to a slightly different
12:50:35 22 point there, maybe because you said the other side was
12:50:39 23 making a different point. Is that right?

12:50:41 24 MS. LYNCH: Yes.

12:50:42 25 THE COURT: I think you were talking about this

12:50:43 1 comprising issue, which is what's in the text of their brief
12:50:46 2 where I think really the other side's maybe key point here
12:50:50 3 is what's in the parenthetical in the case they were citing
12:50:54 4 with evidence. Is that right?

12:50:56 5 MS. LYNCH: Yes.

12:50:57 6 THE COURT: That's your opinion about --

12:50:59 7 Do me a favor. Can you give me the cite for
12:51:03 8 both?

12:51:03 9 MS. LYNCH: Sure. It is 512 F.3d 1338.

12:51:07 10 THE COURT: Okay.

12:51:08 11 MS. LYNCH: That's *Baldwin*.

12:51:10 12 THE COURT: Okay. And in particular the pages
12:51:12 13 you wanted to direct my to?

12:51:14 14 MS. LYNCH: I was at 1343 -- well, 1342 into 43.

12:51:20 15 THE COURT: But what it sounds like what you're
12:51:23 16 doing is the following. Tell me if this is right. Judge,
12:51:27 17 yes, I acknowledge this is Federal Circuit case law.
12:51:29 18 Federal Circuit case law will tell you there is a
12:51:32 19 presumption when you see the word "an" like in the preamble
12:51:35 20 here, image sensor integrated circuit, you would presume it
12:51:40 21 could mean more than one. And so essentially what I have to
12:51:42 22 do is tell you that of course Federal Circuit case law says
12:51:46 23 that, but if there's like additional evidence that makes it
12:51:49 24 clear that it only be one, you're not bound by that
12:51:53 25 presumption in one way and I'm going to tell you why what's

12:51:56 1 going on in this case. Is that right?

12:51:58 2 MS. LYNCH: That's exactly right.

12:52:00 3 THE COURT: Okay. So it really comes -- so it's
12:52:03 4 fair to say that it's not a bad argument for them to focus
12:52:05 5 on "an" and talk about how it can encompass more than one.
12:52:10 6 It's one you might have to kind of beat back if you rebut a
12:52:13 7 presumption and what you really focus on there is the word
12:52:17 8 "integrate." Integrate means one.

12:52:20 9 MS. LYNCH: So as just like another example, if
12:52:22 10 a claim was for a single cup comprising, you know, that
12:52:26 11 presumption that the "a" and the "comprising" connotes one
12:52:31 12 or more would have to fall away to the word that tells you
12:52:34 13 the number.

12:52:35 14 THE COURT: Okay. And integrated is like
12:52:38 15 single?

12:52:38 16 MS. LYNCH: Yes.

12:52:39 17 THE COURT: What are the best places in the
12:52:40 18 record for me to know that integrated is like single and
12:52:47 19 these presumptions should be taken?

12:52:48 20 MS. LYNCH: Those dictionary definitions that I
12:52:50 21 think were -- I can get them for you. Exhibits 9 through 12
12:52:54 22 of Dr. Theuwissen's opening report.

12:52:56 23 THE COURT: Okay. Those are the best evidence
12:53:00 24 to tell me that?

12:53:02 25 MS. LYNCH: I think it's the most

12:53:03 1 straightforward, yes.

12:53:05 2 THE COURT: And then can you go back to --
12:53:09 3 because I think it's the case, and I did appreciate it, but
12:53:13 4 I think maybe the two best pieces of evidence that the other
12:53:18 5 side raised are ones that may not have been as front and
12:53:23 6 center in the briefing. But if we go back to the other
12:53:26 7 slide that's Claim 1 of the dependent claims, so the other
12:53:30 8 argument that your colleague on the other side made was,
12:53:33 9 Judge, we know that dependent Claim 5 is dependent on Claim
12:53:39 10 1, and so Claim 1, whatever it claims, has to be broad
12:53:42 11 enough to allow for it and encompass it. And I'm just doing
12:53:48 12 this on the fly, because I think this argument was only made
12:53:52 13 on the fly, but I'll have to encounter it because it is the
12:53:56 14 claim. And I think they're something like, so Claim 5, for
12:54:00 15 example, is this circuit of Claim 1 wherein the control
12:54:03 16 signal -- so they're referencing control signal and that
12:54:08 17 must be -- where is -- okay, so control signal is in like
12:54:12 18 the third limitation, is that right?

12:54:14 19 MS. LYNCH: Yes. I think it's also in the last
12:54:16 20 one with "variable voltage circuitry."

12:54:19 21 THE COURT: Okay. So the components of Claim 1
12:54:21 22 make use of or interact with, facilitate a control signal.
12:54:30 23 And the defendant is saying where the control signal is
12:54:35 24 generated on circuitry separate from the image sensor
12:54:41 25 integrated circuit. And so I think the other side is saying

12:54:48 1 that means that this circuitry in which this control signal
12:54:56 2 is generated, somehow that means that is encapsulated by and
12:55:02 3 a part of what Claim 1 is. And since it's referencing some
12:55:07 4 other physical chip, that means we win. Why is that wrong?

12:55:12 5 MS. LYNCH: So to take a step back -- and Mr.
12:55:15 6 Bluestone touched on this, but the circuitry -- or pardon
12:55:21 7 me. The control signal which is at issue in Claim 5 and
12:55:25 8 referred to in Claim 1, is not a structure. So the image
12:55:30 9 sensor is a structure, the claim body contains structures.
12:55:34 10 That signal is not a structure. So even in the claim, you
12:55:40 11 know, looking at "variable voltage circuitry," the last part
12:55:44 12 of the independent claim, it determines a control voltage of
12:55:49 13 the control signal. So the control -- maybe that's not the
12:55:53 14 clearest is instance of it. Okay. So the plurality of
12:56:03 15 transfer devices.

12:56:05 16 THE COURT: So this claimed image sensor
12:56:08 17 integrated circuit, what does it got?

18 MS. LYNCH: Yes.

12:56:10 19 THE COURT: It's got a plurality of transfer
12:56:13 20 devices. Tell us what they do in part and go ahead from
12:56:17 21 there.

12:56:17 22 MS. LYNCH: So exactly to your point, Your
12:56:20 23 Honor, this is what the transfer device did. It is not
12:56:24 24 their structure, so it really doesn't matter if whether they
12:56:27 25 get this signal is generated or is formed on the chip, off

12:56:31 1 the chip, it's not part of the structure that Claim 1 is
12:56:34 2 telling us must be on the image sensor integrated circuit.

12:56:40 3 THE COURT: Tell me if this is what you're
12:56:43 4 saying, if this is right. Claim 1 is an apparatus claim.
12:56:46 5 Claim 1 has certain required components. And but -- but a
12:56:54 6 control signal is not one of them. It's not a physical
12:56:58 7 component. It is a thing that the physical components have
12:57:03 8 some connection to in some way. Fair enough?

12:57:07 9 MS. LYNCH: That's correct. Although, I'm not
12:57:10 10 sure -- I might be incorrect here, but I don't know if
12:57:13 11 "thing" is the precise word because it's transient, but yes,
12:57:17 12 I'm following.

12:57:18 13 THE COURT: It's a word.

12:57:19 14 MS. LYNCH: Yes.

12:57:20 15 THE COURT: It's a metaphysical concept. And so
12:57:25 16 does Claim 5, does it have to -- is Claim 5 an image sensor
12:57:31 17 integrated circuit? Yes. But I think what you're saying is
12:57:36 18 the reference to circuitry separate from the image sensor
12:57:43 19 integrated circuit, i.e., the thing that would make the
12:57:46 20 think, okay, there's a separate circuit that is a part of
12:57:51 21 the image sensor integrated circuit, more than one chip,
12:57:55 22 that's not actually referring to the structure of this
12:58:00 23 circuit claimed in Claim 1.

12:58:02 24 MS. LYNCH: That's correct.

12:58:03 25 THE COURT: But of course the -- it's weird

12:58:07 1 though, because it's an apparatus claim, so dependent Claim
12:58:10 2 5 has to be adding -- has to be adding a limitation -- I
12:58:16 3 mean, if you have an apparatus claim and then you have a
12:58:19 4 dependent claim that adds a limitation to an apparatus
12:58:22 5 claim, would you be getting in trouble if you were talking
12:58:25 6 about a limitation added to an apparatus claim that itself
12:58:29 7 was not a part of the structure of the apparatus?

12:58:32 8 MS. LYNCH: I think in the structure in Claim 1,
12:58:36 9 it does -- and apologies if I'm not answering your question,
12:58:40 10 Your Honor. But it does refer to the transfer signal. So
12:58:43 11 we know from Claim 1 that a signal is coming. It's
12:58:47 12 affecting these transfer devices. It just doesn't tell us
12:58:51 13 whether that's on the chip -- where the signal is generated
12:58:55 14 from is on or off the chip.

12:58:57 15 THE COURT: I mean, Claim 5 as an additional
12:58:59 16 limitation, so to infringe it, the thing that's being talked
12:59:01 17 about there has to happen. But I think what you're saying
12:59:04 18 is the thing that's being talked about there, the additional
12:59:07 19 limitation in Claim 5, its got nothing do with the physical
12:59:10 20 structure of the claimed image sensor integrated circuit in
12:59:14 21 Claim 1. It is a -- it is a thing happening outside of
12:59:19 22 that, is that right?

12:59:21 23 MS. LYNCH: Yeah. And then six is sort of the
12:59:25 24 inverse of that.

12:59:27 25 THE COURT: Six being the circuit of Claim 1?

12:59:31 1 MS. LYNCH: Not specifically about -- sorry, I
12:59:34 2 should use more precise language. It's not about the same
12:59:36 3 signal, but it's selling you that something else can be on
12:59:39 4 the chip. So I'm not differentiating the specific control
12:59:44 5 signal, just that the patent drafter is telling you some
12:59:48 6 things are on and some things are off the integrated
12:59:50 7 circuit.

12:59:50 8 THE COURT: Okay. But I guess to wrap it up,
12:59:54 9 say we're doing infringement, we're at a trial. If we say
12:59:57 10 Claim 5 is infringed, all right, and say we -- say a
13:00:02 11 patentee has made out and explained why it is that an
13:00:06 12 accused product has each of the components of Claim 1, when
13:00:10 13 it comes to Claim 5, why it needs to show how that claim is
13:00:14 14 infringed is not going to be pointing to some separate
13:00:18 15 component of the claimed image sensor integrated circuit to
13:00:22 16 do so, it's going to be pointing to a phenomenon that occurs
13:00:27 17 out of that physical device and separate and apart from it.

13:00:31 18 MS. LYNCH: That is received on the device, yes.

13:00:32 19 THE COURT: Okay. All right. Got ya.

13:00:42 20 MS. LYNCH: Can we return to slide 25?

13:00:46 21 Okay. So addressing, Your Honor, wrapping up
13:00:55 22 the first question being more to the side of what is or
13:01:05 23 isn't an integrated circuit and moving on to whether the
13:01:09 24 preamble should be held limiting. So the preambles are
13:01:12 25 clearly intended to be limiting. The claims were

13:01:15 1 intentionally drafted with a preamble as a structural
13:01:19 2 limitation as we've discussed. And there's no rule against
13:01:23 3 using the limitation in the preamble. And the Court in
13:01:28 4 *Bicon* stated it is not unusual for this court to treat
13:01:31 5 preamble language as limiting. And that's Federal Circuit
13:01:34 6 precedent.

13:01:37 7 Without the term "integrated circuit" from the
13:01:39 8 preambles, the structure as listed in the body of the claim
13:01:43 9 is not fully claimed.

13:01:46 10 THE COURT: Can I ask, because I think that's
13:01:48 11 like the flip side of maybe what we were just discussing,
13:01:52 12 because I think one of the key points is, well, look, the
13:01:55 13 preamble of Claim 1 provides antecedent basis for Claims 5
13:01:59 14 and 6. Without the preamble being limiting, you wouldn't
13:02:03 15 have an understanding of what is the structure of the
13:02:06 16 essential invention.

13:02:08 17 MS. LYNCH: That's right.

13:02:09 18 THE COURT: But for Claim 5, at least I think we
13:02:11 19 just established, well, I guess you'd say the image sensor
13:02:17 20 integrated circuit there is being referenced as part of --
13:02:20 21 as the claimed invention, but it's being referenced in terms
13:02:24 22 of a thing that is not the thing.

13:02:27 23 MS. LYNCH: That it receives.

13:02:28 24 THE COURT: In which this control signal is
13:02:35 25 being kind of described as being utilized on or something

13:02:40 1 like that, is that right?

13:02:42 2 MS. LYNCH: That's right.

13:02:43 3 THE COURT: Okay.

13:02:47 4 MS. LYNCH: But just to take a step back, these
13:02:49 5 points in the claim in the body of the claim, they cannot
13:02:53 6 function and they don't do anything if they're not in the
13:02:56 7 image sensor integrated circuit.

13:03:00 8 If we could go to 29, please.

13:03:01 9 THE COURT: And I don't even know that the other
13:03:05 10 side disputes that. I think they just -- they agree, yes,
13:03:07 11 it has to be image sensor integrated circuit, but it just in
13:03:11 12 our world can be more than one chip.

13:03:13 13 MS. LYNCH: Yes, it just sets up to the
13:03:15 14 dependent claims.

13:03:16 15 So maybe go on the next slide, slide 30. Great.

13:03:21 16 So this is another point in the '671 Patent.

13:03:24 17 Independent Claim 1 and dependent Claim 10 and here, we're
13:03:29 18 using independent Claim 10, integrated circuit gives us a
13:03:33 19 structural reference to the lifetime specification.

13:03:36 20 Integrated circuit is also a structural location for the
13:03:40 21 ground voltage. So if we don't get the limitation from the
13:03:44 22 preamble, then dependent Claim 10 does not make any sense.

13:03:48 23 THE COURT: I mean, it really devolves to the
13:03:51 24 second preamble, right?

13:03:52 25 MS. LYNCH: The physical location.

13:03:54 1 THE COURT: I mean, the meaning of -- I mean I
13:04:00 2 think the other side will say, fine, Judge, if you think the
13:04:03 3 preamble is limiting, it's really all about whether the
13:04:07 4 image sensor integrated circuit means single.

13:04:13 5 MS. LYNCH: Okay.

13:04:14 6 THE COURT: Can I just ask you, on the -- you
13:04:17 7 were talking about the "an" or the "a" and Federal Circuit
13:04:20 8 case law involvement. And again, on page 32, the last part
13:04:24 9 of your reply brief, I don't think that's the particular
13:04:27 10 argument you were addressing. I think you were addressing
13:04:30 11 maybe a related argument about the claim being a comprising
13:04:33 12 claim. I just want to make sure I understood what you are
13:04:36 13 saying there. I'm not sure the other side, again, is making
13:04:40 14 argument, but it's the one you thought you were making.

15 MS. LYNCH: Yes.

13:04:42 16 THE COURT: Or the one I thought they were
13:04:44 17 making. What were you trying to say when you said, "Just
13:04:47 18 because integrated circuit comprises all the listed
13:04:49 19 elements, it does not mean there cannot be additional
13:04:49 20 functionalities such that those beyond integrated circuit
13:04:54 21 could occur off chip, but that does not do away with a
13:04:56 22 limiting preamble that requires that an image sensor is
13:05:00 23 within a single chip."

13:05:02 24 MS. LYNCH: So this is, I think, is referring to
13:05:04 25 Dr. Carley's opinion on page 28 and then going on to page 29

13:05:09 1 where Dr. Carley was saying that there could be different
13:05:14 2 portions of the image acquisition system. So that's what we
13:05:19 3 were addressing there.

13:05:20 4 THE COURT: Okay. Because I was just -- I was
13:05:23 5 thinking, the additional functionalities could occur off
13:05:26 6 chip, like on another chip, but they were additional
13:05:29 7 functionalities of an image sensor integrated circuit, that
13:05:33 8 would seem to help the other side.

13:05:35 9 MS. LYNCH: That wouldn't be integrated.

13:05:36 10 THE COURT: Okay. You would acknowledge it's
13:05:41 11 not like the patent ever says, hey, integrated means single
13:05:46 12 chip?

13:05:46 13 MS. LYNCH: No. And that's why I think the
13:05:48 14 plain and ordinary meaning controls.

13:05:50 15 THE COURT: Particularly the two chips.

13:05:54 16 MS. LYNCH: And POSITA's understanding, yes.

13:05:57 17 THE COURT: Which aligns with your expert's
13:05:59 18 understanding.

13:06:01 19 MS. LYNCH: Yes.

13:06:02 20 THE COURT: All right. Anything further, Ms.
13:06:05 21 Lynch.

13:06:05 22 MS. LYNCH: Your Honor, I was going to address
13:06:07 23 that the preambles don't merely state an intended use, they
13:06:10 24 go to the essential structure. But if we're agreeing that
13:06:13 25 the preamble is limiting, then I don't --

13:06:16 1 THE COURT: Well, I haven't agreed with you yet
13:06:19 2 until I make an opinion, so if you want to make another
13:06:22 3 point, I'd be happy to let you make it.

13:06:25 4 MS. LYNCH: Sure. Just briefly.

13:06:26 5 If we could go please to slide 33.

13:06:31 6 So what we understand from the briefing, from
13:06:33 7 RESN, is that they suggested that the intended use -- and
13:06:38 8 I'm in the last sentence of this first bullet -- is to serve
13:06:42 9 as an image sensor. And this intended use does not make
13:06:47 10 sense in the context of any of the claims for some of the
13:06:50 11 reasons we just discussed.

13:06:51 12 If we could advance to slide 34.

13:06:55 13 If you substitute in the intended use into these
13:06:58 14 claims, this is dependent Claims 5 and 6 of the '671 patent,
13:07:03 15 it makes no sense. And to be clear, the point is not the
13:07:07 16 specific language that RESN put forth, but rather if you
13:07:10 17 were to substitute in here a concept of an intended use, it
13:07:14 18 just does not make any sense in the context of these claims.

13:07:18 19 If you could advance to 35, please.

13:07:22 20 The same in dependent Claim 7 of the '274
13:07:28 21 patent.

13:07:28 22 If you could advance one more time to slide 36.

13:07:31 23 So I think Your Honor touched on this, but it is
13:07:36 24 our position that whether the claims are asserted or
13:07:41 25 unasserted, dependent or independent, they're going to

13:07:44 1 inform claim construction. I'm happy to answer any
13:07:47 2 questions on that, but I don't want to belabor that point.

13:07:52 3 Okay. If we could go back to slide 24, I
13:08:01 4 believe. Okay. Can you go one more, Carlton to -- okay.
13:08:13 5 That's fine.

13:08:14 6 So the final issue that we put forth for the
13:08:17 7 Court is what is required in the integrated circuit. And
13:08:21 8 just briefly, this does touch on the first question. But
13:08:26 9 RESN essentially asked the Court to construe the term as an
13:08:29 10 "image sensor circuit." And at a minimum what is recited in
13:08:34 11 the body of the claim must be on the integrated circuit.

13:08:39 12 So just to wrap up, if you could go to slide 37,
13:08:44 13 please.

13:08:45 14 This is the same set of questions with the
13:08:48 15 proposed answers from OmniVision. So the meaning of
13:08:54 16 "integrated circuit," it's very clear from the record
13:08:56 17 evidence that it's a single circuit on a single substrate.
13:09:00 18 And RESN's construction is improper for trying to read out
13:09:05 19 the phrase "integrated."

13:09:07 20 And there is -- so, and then the second question
13:09:11 21 is whether the preambles are limiting. As you mentioned,
13:09:15 22 discussed this at length with opposing counsel, but the term
13:09:20 23 "image sensor integrated circuit" gives us essential
13:09:24 24 structure for the independent claims. And then, also via
13:09:28 25 antecedent basis, via the dependent claims, it provides

13:09:32 1 essential structure for all those independent claims as
13:09:35 2 well.

13:09:35 3 And finally, what is required in the integrated
13:09:37 4 circuit is at least all the elements listed within the
13:09:40 5 claims and they must be on a single wafer.

13:09:42 6 THE COURT: On that last point, when you say at
13:09:45 7 least all the elements within the claim, maybe that goes to
13:09:50 8 the comprising issue, which is that the claim's a comprising
13:09:53 9 claim and that first line there is an acknowledgment that
13:09:59 10 perhaps non-claimed elements could be part of this claim or
13:10:05 11 could be part of an integrated circuit and they might be
13:10:10 12 located on a separate chip.

13:10:12 13 MS. LYNCH: No. My point here is that what's on
13:10:16 14 the integrated circuit, you know, if someone invents a
13:10:20 15 circuit that has all the things on the claims and adds some
13:10:22 16 additional things, that doesn't matter. Like to Dr.
13:10:27 17 Carley's point of image acquisition system, additional
13:10:31 18 components on the chip, off the chip, we don't care.

13:10:33 19 THE COURT: I guess what I'm asking is I'm
13:10:36 20 picturing the accused product and say it's an accused
13:10:39 21 product where it's a chip, and on that chip has every single
13:10:46 22 limitation in Claim 1, but that chip is also connected to a
13:10:53 23 second chip which has other components, and together, in the
13:10:59 24 real world they make up an image center integrated circuit,
13:11:06 25 this physical thing that has various components. All the

13:11:10 1 claimed components are on one chip, but it's connected to a
13:11:13 2 second chip too that has other components that are
13:11:16 3 unclaimed, wouldn't that be a world where that would tell me
13:11:19 4 that an image sensor integrated circuit can utilize more
13:11:23 5 than one chip? The functionalities might be on one, but the
13:11:27 6 image sensor integrated circuit itself, what that term
13:11:30 7 means, it could be broader.

13:11:32 8 MS. LYNCH: So, I don't agree with that, because
13:11:33 9 the term "integrated circuit" is going to tell us it's all
13:11:37 10 going to be on one. So I definitely defer to the expert for
13:11:41 11 looking at specific products, but if the functionalities are
13:11:44 12 split across multiple chips, then that's not an integrated
13:11:49 13 circuit in the meaning of the claims.

13:11:50 14 THE COURT: So it all comes back to the word
13:11:52 15 "integrated," I must understand that the undisputed evidence
13:11:55 16 or overwhelming evidence means it's one single chip that
13:11:58 17 overcomes any presumption of a/an. And to the extent the
13:12:05 18 other side puts forth any evidence, including extrinsic
13:12:09 19 evidence from their expert, you think you've sufficiently
13:12:12 20 explained it away, so I should --

21 MS. LYNCH: I do.

13:12:14 22 THE COURT: Okay. Anything further, Ms. Lynch?

13:12:17 23 MS. LYNCH: Not right now. Thank you very much.

13:12:21 24 THE COURT: Any rebuttal, Mr. Gilman, as we
13:12:25 25 finish up this term?

13:12:43 1 MR. GILMAN: Thank you, Your Honor. Your Honor,
13:12:58 2 starting just from first principles of lexicography, I don't
13:13:04 3 think it can be the case that "integrated circuit"
13:13:07 4 necessarily means to a person of skill in the art a single
13:13:11 5 wafer are a single chip, because otherwise we wouldn't have
13:13:14 6 terms like a single integrated circuit as used in the
13:13:18 7 briefing or a monolithic integrated circuit as found in the
13:13:22 8 extrinsic evidence. The fact that you need to add on the
13:13:26 9 adjective before to specify what type of integrated circuit
13:13:30 10 you're talking about in light of the term integrated circuit
13:13:35 11 itself is not necessarily so limited.

13:13:37 12 THE COURT: I know that's their proposal because
13:13:39 13 they have to try to make the claim construction issue clear.
13:13:42 14 I think it could be stronger if you could, say, look, here's
13:13:45 15 a piece off the record, look at this patent from the
13:13:47 16 relevant time period using the phrase "single integrated
13:13:50 17 circuit." You know, look at this dictionary definition of
13:13:53 18 the phrase "single integrated circuit" in this technical
13:13:57 19 dictionary. Do you have any kind of record evidence that
13:14:00 20 that word "single" is used in front of integrated circuit in
13:14:03 21 other parts of the record?

13:14:05 22 MR. GILMAN: Yes, Your Honor. I don't know if I
13:14:07 23 have a slide for it, but to briefly run through the case law
13:14:10 24 on the construction of integrated circuit. The *Qualcom v.*
13:14:16 25 *Apple* case where the specification stated at page 3, "a

13:14:20 1 single semiconductor substrate." The *Negotiated Data*
13:14:20 2 *Solutions* case where the claim term specifically is exposed
13:14:26 3 on the "same" integrated circuit. Similarly with *FreeScale*,
13:14:29 4 a "single" integrated circuit. That was in the summary of
13:14:33 5 the invention. In fact, the art uses those modifiers for
13:14:36 6 the term "integrated circuit" that further supports that the
13:14:39 7 term "integrated circuit" by itself would not be so narrowly
13:14:42 8 construed to be a single wafer.

13:14:44 9 THE COURT: But not if they were definitional.
13:14:47 10 In other words, if there was a dictionary definition, and
13:14:49 11 the other side puts forth a number of dictionary
13:14:52 12 definitions. For what? For the term "integrated circuit."
13:14:55 13 So that's a term and it's in the definition of that term
13:14:58 14 that's a single chip, it's one chip. The fact that they use
13:15:01 15 the phrase "single" definitionally to explain what
13:15:05 16 integrated circuit means, it wouldn't hurt OmniVision, it
13:15:08 17 would help, wouldn't it?

13:15:09 18 MR. GILMAN: Well, the fact that the -- I think
13:15:12 19 the monolithic integrated circuit is one of those extrinsic
13:15:16 20 sources of dictionary definitions. The fact that there are
13:15:19 21 uses of the term "integrated circuit" that do not mean a
13:15:24 22 singular wafer --

13:15:25 23 THE COURT: And 23 note 8, is -- is that citing
13:15:29 24 Dr. Carley?

13:15:30 25 MR. GILMAN: I think that's from the -- is that

13:15:32 1 from the Wikipedia page?

13:15:38 2 THE COURT: If you're okay with me -- obviously
13:15:41 3 Dr. Carley is okay with me citing Wikipedia here in support
13:15:44 4 of this issue.

13:15:46 5 MR. GILMAN: But I think that there are, just in
13:15:48 6 terms of how the term is used, that the term -- people would
13:15:53 7 not use the adjectives to modify the term "integrated
13:15:57 8 circuit." I think the flip side of that is the examples
13:15:59 9 that Dr. Carley shows where the term "integrated circuit"
13:16:05 10 means multiple chips, which is the part you were looking at
13:16:09 11 before, three-dimensional integrated circuit or CCD
13:16:13 12 integrated circuit. In both those contexts the term
13:16:16 13 integrated circuit means more than one chip.

13:16:17 14 THE COURT: They pointed to a portion to of Dr.
13:16:20 15 Carley's initial declaration, it's paragraph 55, which uses
13:16:22 16 the phraseology "an integrated circuit, or equivalently, a
13:16:27 17 semiconductor chip is" dot dot dot. I think they were
13:16:31 18 saying that's like an unintended admission that's what that
13:16:34 19 term means, "integrated circuit," a semiconductor chip. But
13:16:38 20 I guess you would say "a" could mean more than one?

13:16:42 21 MR. GILMAN: Right. An integrated circuit means
13:16:46 22 a semiconductor. I think that those two concepts go hand in
13:16:49 23 hand. So talking about integrated circuits means you're
13:16:52 24 talking about solid-state technology. I think the term
13:16:55 25 "chip" is used differently in different contexts. It's not

13:16:58 1 a very well defined term because I think chip by itself may
13:17:02 2 mean like a system on a chip there are multiple components
13:17:03 3 or multiple components that are being used on a single chip.
13:17:08 4 The wafer concept that OmniVision keeps coming back to, you
13:17:13 5 know, that -- there's no discussion of a singular wafer in
13:17:17 6 the specification or in the intrinsic record or I think even
13:17:22 7 in the extrinsic record of a singular wafer. I think
13:17:27 8 there's maybe one reference to a singular wafer, but that's
13:17:29 9 not how it's being used in the specification. There's no
13:17:32 10 indication that it's being used in that sense by the
13:17:35 11 patentee in this case.

13:17:35 12 THE COURT: And if I were to going to ask you,
13:17:38 13 Mr. Gilman, to put a finer point on it to say, Judge, they
13:17:41 14 are telling you that the word "integrated," "an image sensor
13:17:45 15 integrated circuit" means single chip and only single chip.
13:17:48 16 And if I was putting on a list the three pieces of best
13:17:52 17 evidence I have to rebut that, I want you to focus on 1, 2,
13:17:59 18 3, what would be those pieces of evidence?

13:18:01 19 MR. GILMAN: So I think the term "integrated
13:18:04 20 circuit" means solid-state. It's a defined term in the art.
13:18:10 21 I think going back to Claim 5, and to Fig. 1, is --

13:18:19 22 THE COURT: Now, their argument about Claim 5 is
13:18:25 23 that you're focusing on the phrase separate from, like, see,
13:18:32 24 that means we're focusing on a separate chip, separate from
13:18:36 25 the first chip. But they're saying, no, all that's talking

13:18:39 1 about is a place where this control signal is generated.
13:18:43 2 That's not a part of the claimed apparatus. So whatever is
13:18:49 3 separate from, they're not referring to part of the claimed
13:18:53 4 apparatus. How do you respond that?

13:18:55 5 MR. GILMAN: So we would disagree with that,
13:18:57 6 Your Honor. The last element of Claim 1 of independent
13:19:01 7 Claim 1, "variable voltage circuitry including a voltage
13:19:05 8 selector determining a control voltage of the control signal
13:19:09 9 applied to the plurality of transfer devices." And looking
13:19:14 10 at Fig. 1 for context, the control switch is coming from
13:19:18 11 that selectable voltage circuitry. It's the one determining
13:19:21 12 the control voltage to apply to the transfer gate. That's
13:19:24 13 the whole point of the invention, it's the control signal
13:19:24 14 that you're applying is going to control what flows, how
13:19:28 15 much flows through that transfer gate. And the whole point
13:19:30 16 of the invention is you select that control signal and that
13:19:33 17 voltage that you're applying with this additional inventive
13:19:37 18 aspect of variable voltage circuitry as it's called in the
13:19:42 19 claim. So what's generating the control signal is the
13:19:46 20 variable voltage circuitry.

13:19:47 21 THE COURT: So tell me if this is right. You're
13:19:50 22 saying, look, a component of the claimed "image sensor
13:19:55 23 integrated circuit" is this "variable voltage circuitry" in
13:19:59 24 the last limitation of the claim, and that variable voltage
13:20:02 25 circuitry, it, itself, that component, it does something

13:20:09 1 vis-a-vis a control voltage, it determines it. And so when
13:20:15 2 in Claim 5, because I think -- when Claim 5 talks about a
13:20:27 3 control signal that is -- I'm sorry, the variable voltage
13:20:34 4 circuitry determines the control voltage of the control
13:20:37 5 signal. And now you're saying what Claim 5 in turn talks
13:20:42 6 about a Claim 5 and how it is generated on circuitry, that's
13:20:48 7 reference back to what is happening with the control signal
13:20:52 8 in the variable voltage circuitry component.

13:20:57 9 MR. GILMAN: That the control circuitry is being
13:21:01 10 controlled -- determined in that circuit.

13:21:03 11 THE COURT: The -- but Claim 5 is talking about
13:21:06 12 where that control signal is being generated. Is the
13:21:11 13 control signal generated on the variable voltage circuitry
13:21:14 14 or some other component of Claim 1?

13:21:17 15 MR. GILMAN: Yeah, because the control signal is
13:21:19 16 the voltage that's applied to that line going from the
13:21:23 17 transfer case. That's how the control is effectuated in the
13:21:31 18 invention.

13:21:32 19 THE COURT: Maybe I could ask it a different
13:21:35 20 way. Which component of Claim 1 generates the control
13:21:39 21 signal?

13:21:42 22 MR. GILMAN: The component of Claim 1, it is the
13:21:46 23 variable voltage circuitry.

13:21:47 24 THE COURT: So that variable voltage circuitry,
13:21:52 25 which is referenced -- is a reference to what's in that box

13:21:55 1 up at Fig. 1?

13:21:57 2 MR. GILMAN: Correct. Selectable voltage
13:21:59 3 circuitry, correct.

13:21:59 4 THE COURT: And you're telling me that that
13:22:01 5 variable voltage circuitry, the reference to the "selectable
13:22:05 6 voltage circuitry" in Fig. 1, it's not only the thing that
13:22:10 7 determines the control voltage of the control signal, it's
13:22:15 8 the thing that generates the control signal in the first
13:22:18 9 place?

13:22:18 10 MR. GILMAN: So the control signal is what's
13:22:21 11 supplied, it has a voltage. So those aren't two separate
13:22:25 12 signals, the control voltage and the control signal. It is
13:22:29 13 the control signal that has the control voltage.

13:22:32 14 THE COURT: That's what I'm trying to get at,
13:22:35 15 and maybe I'm doing it in a way that's not technically
13:22:40 16 correct, but what I'm trying to get at is, my understanding
13:22:44 17 of their counter argument, to your point about the import of
13:22:49 18 dependent Claim 5, is that although dependent Claim 5
13:22:53 19 facially makes reference to circuitry separate from the
13:22:58 20 image sensor integrated circuit, I think what the defendant
13:23:02 21 is saying is just I think -- not the defendant. I think
13:23:05 22 what OmniVision is saying is I think RESN is trying to use
13:23:11 23 that phrase separate from and circuitry separate from to try
13:23:15 24 to suggest or make the point that the claimed apparatus can
13:23:19 25 implicate more than one chip. Is that fair so far? Is that

13:23:23 1 what you're trying to do?

13:23:25 2 MR. GILMAN: Correct, yes.

13:23:26 3 THE COURT: Okay. And I think so they have to
13:23:28 4 tell me why it is that whatever the record is in Claim 5 are
13:23:31 5 why they don't do that, why they don't suggest how, Judge,
13:23:35 6 you can have more than one chip here in this claimed image
13:23:38 7 sensor integrated circuit and how do they do it. I think
13:23:41 8 what Ms. Lynch was saying was, Judge, the reference there,
13:23:44 9 the reference to circuitry separate, what's it a reference
13:23:51 10 to? It's a reference to where a control signal is
13:23:54 11 generated, but the control signal is not a component of
13:23:57 12 Claim 1. And I think what Ms. Lynch was saying is, it's
13:24:01 13 generation that is being referenced and the place where that
13:24:04 14 happens itself isn't a part of the components of Claim 1.
13:24:08 15 It is some separate thing going on out there in the world.
13:24:12 16 And so then I see you coming back and if that is what she is
13:24:16 17 arguing, you're telling me it's wrong. It's wrong.
13:24:19 18 Actually, that reference to a control signal being generated
13:24:23 19 on circuitry, it's part of the component of the claim image
13:24:27 20 sensor integrated circuit. And so I'm trying to figure out,
13:24:29 21 how do I know that? How do I know that? And so what part
13:24:33 22 of the claimed "image sensor integrated circuit" generates
13:24:37 23 that control signal? Which would help tell that what's
13:24:41 24 being talked about in dependent Claim 5 is a part of what's
13:24:43 25 claimed, the structure and apparatus that's claimed in Claim

13:24:46 1 1. That's what I'm trying to figure out. Does that make
13:24:49 2 sense?

13:24:49 3 MR. GILMAN: I think I understand, Your Honor.
13:24:52 4 First off, the control signal is the reference to the
13:24:55 5 predicate element or predicate disclosure, if you want to
13:24:59 6 call it, a part of Claim 1, but it's clear the control
7 signal is coming from --

8 (Court reporter asks witness to raise his
9 voice.)

13:25:07 10 MR. GILMAN: This is why I think the context of
13:25:17 11 Fig. 1 helps here too, because it is the selectable voltage
13:25:22 12 circuitry that's applying the control signal, which adds
13:25:25 13 control voltage to the transfer gate. That's what the
13:25:26 14 invention is. That's what shown is Fig. 1. The way that
13:25:29 15 it's described in Claim 1 is that variable voltage circuitry
13:25:34 16 includes a voltage selector determining the control voltage
13:25:37 17 of the control signal applying the plurality of transfer
13:25:43 18 devices. Claim 1 is you're figuring out what voltage is
13:25:47 19 going to be that control signal. You're choosing what value
13:25:51 20 to apply to the control signal. It doesn't use the term
21 "generating." That doesn't give you the exact same term as
13:25:55 22 in Claim 5, but that's what the "determining a control
13:26:00 23 voltage of the control signal" means the control signal is
13:26:03 24 coming from the variable voltage circuitry and that's what's
13:26:07 25 shown in Fig. 1. That's what's shown throughout the

13:26:10 1 specification.

13:26:11 2 THE COURT: So the variable voltage circuitry is
13:26:15 3 the thing, the component of Claim 1 that is generating the
13:26:19 4 control signal?

13:26:20 5 MR. GILMAN: Correct, Your Honor.

13:26:21 6 THE COURT: And also determining its control
13:26:27 7 voltage?

13:26:27 8 MR. GILMAN: The voltage is an aspect of the
13:26:31 9 control signal.

13:26:32 10 THE COURT: Doesn't the control signal have to
13:26:34 11 exist for one to determine it's control voltage or no?

13:26:38 12 MR. GILMAN: The control signal is the
13:26:40 13 combination of the voltage and the timing and other
13:26:42 14 parameters that are going to be set by the voltage
13:26:45 15 circuitry. The control, you need a control voltage to
13:26:53 16 create a control signal.

13:26:55 17 THE COURT: Maybe -- the reason for my question,
13:26:58 18 when I asked you what is the single most important piece of
13:27:01 19 evidence that tells me that the word "integrated" doesn't
13:27:05 20 mean single, I think your response was Claim 5, Judge. And
13:27:09 21 I think it's the case, and maybe again I'm wrong, I don't
13:27:12 22 think this Claim 5 argument was made often in the briefing.
13:27:15 23 Maybe was it never made by you in the briefing.

13:27:19 24 MR. GILMAN: I can go back and take a look, Your
13:27:21 25 Honor.

13:27:21 1 THE COURT: Take a look and let's assume for our
13:27:24 2 purposes it was never made, like the first time it was ever
13:27:27 3 referenced was during this oral argument. So I think what
13:27:29 4 that means is the best piece of evidence to support your
13:27:32 5 position on this term is something, potentially, and I could
13:27:36 6 be wrong, that you never argued in your brief or certainly
13:27:39 7 never argued to this kind of degree, so I got to parse it
13:27:42 8 out and figure out what's he talking about. And I'm -- and
13:27:47 9 in my mind, if something about Claim 5 and what it says is
13:27:53 10 essentially telling me, Judge, the claimed "image sensor
13:27:58 11 integrated circuit" in Claim 1, it encompasses an invention
13:28:03 12 that includes the use of more than one chip, that merely
13:28:08 13 helps you. And I'm trying to figure out if that's true in
13:28:12 14 light of what we know to be their counter argument. And to
13:28:16 15 me their counter argument was, Judge, Claim 1 is about a
13:28:19 16 thing, it's got limitations, but the thing that Claim 5
13:28:22 17 talks about that's separate or happening separately, it is
13:28:25 18 way over here. This is the thing that's claimed in Claim 1
13:28:28 19 over here. This thing is a think going on way over here.
13:28:32 20 And so it's a reference to something happening separately.
13:28:36 21 It doesn't have anything to do with the claimed circuit. I
13:28:41 22 think that's what Ms. Lynch is arguing. And so I am trying
13:28:45 23 to figure out, does it -- does it -- does it have -- does it
13:28:49 24 have something to do with the claimed circuit? Is it
13:28:51 25 happening on a component of the claimed circuit? And that's

13:28:54 1 the basis for my questions. I don't know if those questions
13:28:56 2 are off base. I feel like we're not connecting, but it
13:29:00 3 seems really important. So I'm trying to figure out, like,
13:29:03 4 okay, like I see control signal, I see that word is
13:29:06 5 referenced over there in the bottom of Claim 1. How is it
13:29:09 6 referenced?/ well, the control signal, the voltage of it is
13:29:14 7 being determined by indisputably a component of this claimed
13:29:18 8 invention. Okay, but that doesn't sound exactly the same
13:29:21 9 thing as determining a control voltage of the control
13:29:24 10 signal. Doesn't sound as exactly the same thing as
13:29:27 11 generating a control signal. And I think the other side is
13:29:30 12 telling me whatever is happening to generate a control
13:29:32 13 signal, it's got nothing to do with this claimed apparatus,
13:29:36 14 so I need to turn to you to understand why is it that the
13:29:39 15 thing that's being talked about is happening separate and,
13:29:44 16 in fact, is a part of the claimed image center integrated
13:29:48 17 circuit. I'm struggling to connect with you. That's the
13:29:50 18 whole basis for what I'm asking.

13:29:53 19 Are you saying this is the single most important
13:29:55 20 piece of evidence that supports your point?

13:29:57 21 MR. GILMAN: To your point, I will address
13:29:59 22 directly the selectable voltage circuit or the variable
13:30:04 23 voltage circuitry. But I think that the principle argument
13:30:07 24 that "a" means one or more is the baseline construction that
13:30:11 25 should control absent a disclaimer or use contrary that's

13:30:14 1 clearly expressed in the specification.

13:30:16 2 THE COURT: That's a different argument. It's
13:30:19 3 the Federal Circuit presumption that "a" or "an" being one
13:30:22 4 or more.

13:30:24 5 MR. GILMAN: Yes.

13:30:24 6 THE COURT: That's my best point, right?

13:30:27 7 MR. GILMAN: Which is different than the best
13:30:29 8 evidence that we have. Because that is me proving a
13:30:32 9 negative that there's not a disclaimer.

13:30:33 10 THE COURT: That's fair. That's a legal point
13:30:36 11 not a piece of evidence.

13:30:39 12 MR. GILMAN: As I think you explored during
13:30:42 13 OmniVision's discussion of it, what they point to in the
13:30:45 14 specification for saying, well, here's a specification
15 saying all this should be on a single chip is really talking
13:30:50 16 about associated active circuitry, which I believe they
13:30:53 17 conceded is not in all the limitations, not the same as
13:30:56 18 Claim 1, that really what they point to in the specification
13:30:59 19 is not a teaching that everything that's in Claim 1 has to
13:31:03 20 be a single chip or that there's a benefit of it being on a
13:31:07 21 single chip. So I think the baseline rule that "a" means
13:31:10 22 one or more, combined with the lack of a clear disclaimer,
13:31:14 23 we see examples from the case law of what those clear
13:31:18 24 disclaimers look like or what the clear usage in the claim
13:31:19 25 of a single chip looks like. There's nothing like that

13:31:23 1 here.

13:31:24 2 So looking at the *Qualcam* case or the *Negotiated*
13:31:28 3 *Data* case, there's nothing similar here that an explicit
13:31:33 4 disclosure of a single semiconductor substrate are the same
13:31:38 5 integrated circuit. In the absence of a clear disclaimer of
13:31:43 6 specification, that should control.

13:31:45 7 THE COURT: So in sum, we have the presumption
13:31:46 8 working for us. You're not going to find in the patent
13:31:49 9 clear statement that only one chip. And the other side has
13:31:52 10 acknowledged that. They've got some dictionary definitions,
13:31:55 11 but we have some extrinsic evidence, et cetera, and they
13:32:05 12 have rebutted this presumption.

13:32:06 13 MR. GILMAN: And I think the extrinsic evidence
13:32:08 14 is equivocal at best because it show the need to introduce
13:32:10 15 extra qualifiers to specify if you're referring to a single
13:32:15 16 integrated circuit. I think it shows the use of the term
13:32:20 17 integrated circuit to mean more than one chip. The word
13:32:22 18 "integrated circuit" it is a term of art, it's not
13:32:25 19 "integrated" being a modifier. If the thing read "an
13:32:30 20 integrated image sensor circuit," that might imply that
13:32:33 21 everything had to be on one circuit, but the term
13:32:36 22 "integrated circuit" is used in the traditional sense of
13:32:38 23 being a solid-state component.

13:32:40 24 THE COURT: Because you don't think "circuit"
13:32:41 25 necessarily means chip or it could mean chip, is that right?

13:32:47 1 MR. GILMAN: The term --

13:32:49 2 THE COURT: Sometimes it's used to mean chip?

13:32:52 3 MR. GILMAN: I would say a chip is usually
13:32:54 4 broader than a circuit. I don't know if it's used
13:33:00 5 consistently in the intrinsic record one way or the other
13:33:03 6 here.

13:33:03 7 THE COURT: Okay. But I think all the things
13:33:05 8 you just said were things other than what Claim 5 tells us.

13:33:09 9 MR. GILMAN: Yeah, so Claim 5, I think that's
13:33:12 10 why, pointing back to Fig. 1 to show what's going on, the
13:33:15 11 voltage is coming from the selectable voltage circuitry.
13:33:19 12 That's where the control signal which has a voltage is
13:33:21 13 coming from. And Claim 1 says that that is what's
13:33:26 14 determining the control voltage. And yes, to be fair,
13:33:29 15 determining is different than generating, just they're two
13:33:33 16 different words, but in this sense what the Claim 1
13:33:35 17 specifies is that that is the component which includes a
13:33:40 18 voltage selector that determines what this control signal is
13:33:43 19 going to be, what the voltage of this control signal is
13:33:46 20 going to be.

13:33:47 21 THE COURT: Okay.

13:33:48 22 MR. GILMAN: And that's what's being referenced
13:33:50 23 in Claim 5. That's where the control signal is being
13:33:53 24 generated. There's nowhere else it could come from. And in
13:33:57 25 the embodiments of the specification, that's where it's

13:33:59 1 coming from, that box.

13:34:00 2 THE COURT: One other question about Claim 5.
13:34:03 3 It says that this control signal is generated on circuitry.
13:34:08 4 Okay. Where is the circuitry? Okay. It is separate from
13:34:12 5 what? "The image sensor integrated circuit." So "the image
13:34:17 6 sensor integrated circuit," that's a reference back to the
7 preamble of Claim 1. Then whatever an image sensor
13:34:20 8 integrated circuit is, whatever it's made up of, whether it
13:34:24 9 could be one chip or two, isn't what Claim 5 is saying, this
13:34:29 10 thing I'm going to talk to you about is about something
13:34:32 11 happening separate from, on a circuit, on a thing, separate
13:34:37 12 from our claimed apparatus?

13:34:39 13 MR. GILMAN: I think that the only way to
13:34:43 14 harmonize Claim 1 and Claim 5 is interpreting the image
13:34:47 15 sensor integrated circuit as one or more integrated
13:34:50 16 circuits, and then Claim 5 is expressing that there's a
13:34:54 17 separate portion or separate circuit where that variable
13:34:58 18 voltage, where that control signal is.

13:35:01 19 THE COURT: It is separate from the image sensor
13:35:04 20 integrated circuit that may have one or more chips?

13:35:06 21 MR. GILMAN: That is separate from the other
13:35:08 22 chips that comprise that, which I understand there is a
13:35:10 23 tension there. I understand, Your Honor.

13:35:12 24 THE COURT: So maybe last question. The
13:35:14 25 circuitry being referenced in Claim 5, is that circuitry a

13:35:17 1 part of the claimed "image sensor integrated circuit" in
13:35:21 2 Claim 1?

13:35:24 3 MR. GILMAN: I believe it's a reference back and
13:35:27 4 therefore that we need to harmonize that somehow with what
13:35:31 5 it means. I don't think that works if the preamble is
13:35:34 6 interpreted as being a singular wafer.

13:35:36 7 THE COURT: Okay. All right. Anything further
13:35:38 8 you wish to add, Mr. Gilman.

13:35:47 9 MR. GILMAN: I think just the final point -- and
13:35:49 10 we've covered this a little bit. The *Baldwin* reference to
13:35:54 11 definitive numerosity, I think the fact of OmniVision trying
13:35:58 12 to get out of *Baldwin* because there's *Baldwin* in exceptions,
13:36:03 13 I don't think any of them apply in this situation. It's
14 almost a tautology to say integrated circuit has to be
13:36:09 15 singular because of being singular. I think that their
13:36:11 16 examples that show that the term integrated circuit, and we
13:36:15 17 went through them initially, does not have definitive
18 numerosity to it. And there's no disclosure in the
13:36:19 19 intrinsic record that the invention should be so limited for
13:36:21 20 all the reasons that we talked about.

13:36:23 21 THE COURT: The *Baldwin* parenthetical, in your
13:36:25 22 brief, is like the key single, key jumping off point from
13:36:31 23 which your strong evidence, whether legal or factual, is
13:36:35 24 based on. Is that fair?

13:36:39 25 MR. GILMAN: Or if the preamble is limiting.

13:36:40 1 THE COURT: If it's limiting.

13:36:42 2 MR. GILMAN: Correct.

13:36:43 3 THE COURT: Okay. Anything further?

13:36:45 4 MR. GILMAN: No. I would say just facially

13:36:48 5 their proposed construction reads the term single in.

13:36:53 6 Adding in, more so the a/an portion, that it's adding in a

13:36:57 7 term that's not found in the intrinsic record of trying to

13:37:00 8 limit the claim beyond what is facially claimed.

13:37:02 9 THE COURT: Okay. All right. Thank you.

13:37:06 10 All right. Ms. Lynch, ask you if you have

13:37:09 11 anything further.

13:37:25 12 MS. LYNCH: Thank you, Your Honor. I'm putting

13:37:28 13 slide 29 on the screen for reference. But to begin, you are

13:37:33 14 correct, we agree that whatever happens to generate the

13:37:37 15 signal that's in question in Claim 5 is not part of the

13:37:42 16 claim terms and is not relevant.

13:37:43 17 THE COURT: That's happening on the circuitry

13:37:45 18 that is separate from.

13:37:48 19 MS. LYNCH: That's right.

13:37:49 20 THE COURT: And part of what the image sensor

13:37:53 21 circuit, whatever that means, which is the thing that Claim

13:37:55 22 1 talks about?

13:37:56 23 MS. LYNCH: Yes. I think it's also helpful to

13:37:59 24 take a step back. And there are -- as these claims suggest,

13:38:03 25 there are so many integrated circuits in a product and this

13:38:10 1 kind of ties into what Dr. Carley was talking about, kind of
13:38:14 2 ties into all these things that can be on the chip or off
13:38:16 3 the chip. These chips are going to go into products like a
13:38:20 4 camera that are going to have so many things that are not
13:38:23 5 claimed and a minute level of the other chips as well as
13:38:27 6 things like the lens of the camera, the flash. So it is --
13:38:31 7 the circuit claims very specific things. That doesn't mean
13:38:34 8 that the entire product is going to run off of one.

13:38:38 9 THE COURT: I guess my point there, though, was
13:38:40 10 if the term were defining as "image sensor integrated
13:38:44 11 circuit," that's the term we're defining. Whatever our
13:38:47 12 definition is for it, it's got to cover all that it can be,
13:38:50 13 you know what I mean, out there in the world. Even if
13:38:52 14 what's claimed is just a portion of what it can be, a very
13:38:55 15 important portion for purposes of this invention, the word
13:38:59 16 itself and its definition has to be broad enough and correct
13:39:02 17 enough to capture all of what it can be as understood
13:39:06 18 vis-à-vis the patent. You know what I'm saying?

13:39:08 19 MS. LYNCH: Yes.

13:39:08 20 THE COURT: So the fact that only certain things
13:39:10 21 are claimed or are really important to the invention doesn't
13:39:14 22 necessarily -- I mean, I think that may be was their
13:39:17 23 comprising point, right, which is still goes back to what's
13:39:20 24 this term mean more broadly, you know?

13:39:23 25 MS. LYNCH: Yes. So I think it's also helpful

13:39:25 1 to view the Claims 5 and 6 together, because Claim 5 is
13:39:28 2 telling us that something that's unclaimed in Claim 1 is
13:39:33 3 occurring off the circuit. And then in Claim 6 it gives us
13:39:41 4 again this structural boundary of the digital to analog
13:39:45 5 converter is on this image sensor integrated circuit, so we
13:39:49 6 can have things on the circuit, we can have things off the
13:39:53 7 circuit beyond what is in Claim 1. And I think by way of
13:39:57 8 analogy you can sort of think of Claim 1 gives us a sandbox,
13:40:02 9 the image sensor integrated circuit, and then all of those
13:40:05 10 items are in the sandbox. And to take that analogy further,
13:40:09 11 if we're saying that all these portions of the body of the
13:40:12 12 claim are say kids in the sandbox, so you've got the sandbox
13:40:16 13 and its claims, that there's going to be Tom and George and
13:40:20 14 Phil in the sandbox, then Claims 5 and 6 introduce things
13:40:25 15 like one of the children's mother's, for example, and
13:40:28 16 whether she's in the sandbox watching over them or whether
13:40:31 17 its she in the different part of the playground does not
13:40:34 18 effect what's in the sandbox. It's just not relevant to the
13:40:39 19 structure and to what makes an image sensor integrated
13:40:43 20 circuit.

13:40:45 21 THE COURT: I thought Claim 6 does add something
13:40:48 22 in the sandbox that is a part of the circuit.

13:40:52 23 MS. LYNCH: Yes. So apologies if that was
13:40:54 24 unclear. So I'm saying it's not something that's part of
13:40:58 25 Claim 1. It's giving you this extra --

13:41:03 1 THE COURT: I thought your point was that Claim
13:41:05 2 6 is providing an additional component. A component of
13:41:08 3 what? A component of the image sensor integrated circuit
13:41:11 4 that's described in Claim 1. But what Claim 5 does is talk
13:41:15 5 about an activity which is required for infringement, an
13:41:18 6 activity that's happening on a piece of circuitry that
13:41:21 7 itself is not a part of the physical image sensor integrated
13:41:26 8 circuit that's described in Claim 1, is that right?

13:41:28 9 MS. LYNCH: That's right. Yeah. So just to
13:41:35 10 make a few other small points, Your Honor. Regarding the
13:41:42 11 intrinsic evidence, we also think that the references we
13:41:45 12 refer to with on chip throughout the specification of the
13:41:49 13 patents, this describes a benefit that the patent is trying
13:41:52 14 to achieve, the value of putting something on chip. And
13:41:55 15 then when you get to the claims, we're deliberately claiming
13:42:00 16 an integrated circuit, so it's referring back to the benefit
13:42:03 17 described in the specification.

13:42:05 18 Another point is that RESN and their expert
13:42:12 19 point to Wikipedia. Again, just want to point out that that
13:42:16 20 is a general purpose dictionary, it is not contemporaneous.

13:42:22 21 THE COURT: Feel like in fairness, Dr. Carley
13:42:26 22 also references facts relating to his knowledge of the
13:42:29 23 field.

13:42:30 24 MS. LYNCH: That's correct. Just on the
13:42:31 25 dictionary point.

13:42:37 1 All right. Unless you have further questions,
13:42:39 2 that's it for me, Your Honor.

13:42:41 3 THE COURT: Thank you.

13:42:42 4 And I wanted to break for a restroom break
13:42:44 5 earlier, but I did want to try to finish this term, so let's
13:42:48 6 go ahead and make this a stopping point. Folks can stretch
13:42:51 7 their legs and do that. So RESN, RE Secured has about
13:42:56 8 31 minutes left and OmniVision has about 54 when we come
13:43:02 9 back from a ten-minute break. So let's come back and be
13:43:06 10 ready to go, start at five of 2, and we'll start with term
13:43:13 11 two. And then I will have to take a break, I think around
13:43:18 12 2:30, to deal with a criminal matter, but hopefully that
13:43:22 13 will be brief.

13:43:23 14 All right. Thanks, counsel. We'll take a short
13:43:28 15 break. The Court will stand in recess.

13:43:30 16 COURT CLERK: All rise.

13:43:41 17 (A brief recess was taken.)

13:57:49 18 COURT CLERK: All rise.

13:57:52 19 THE COURT: All right. Please be seated,
13:57:54 20 everybody.

13:57:55 21 All right. So we'll move on to term two which
13:58:04 22 is the "coupling the plurality of nodes to the row and
13:58:09 23 column circuitry" term. And with that I'll turn back to
13:58:11 24 counsel for RESN. Mr. Gilman.

13:58:18 25 MR. GILMAN: Thank you, Your Honor. We had

13:58:21 1 originally planned for you to hear more voices than just
13:58:25 2 mine, but we recently switch firms and Ms. Sewanan's first
13:58:29 3 day was on Friday.

13:58:31 4 THE COURT: Makes sense. Okay.

13:58:34 5 MR. GILMAN: I'll try to move a little more
13:58:38 6 expeditiously through the second term. I think it is
13:58:40 7 relatively straightforward. The term --

13:58:42 8 THE COURT: Easy for you to say. Okay.

13:58:46 9 MR. GILMAN: The claim term is "coupling the
13:58:49 10 plurality of nodes to the row and column circuitry." So
13:58:52 11 this is where once you have the measurement for the pixel,
13:58:55 12 you want to eventually assign it to a coordinate, to a row
13:58:58 13 and column, so you know where in the image it belongs.

13:59:02 14 THE COURT: So we've got a pixel.

13:59:05 15 MR. GILMAN: Right.

13:59:05 16 THE COURT: And tell me again, what does
13:59:08 17 "coupling the plurality of nodes to the row and column
13:59:11 18 circuitry" have to do with all we've been talking about
13:59:14 19 before? Why are we coupling anything to anything?

13:59:16 20 MR. GILMAN: So this is the back end of the
13:59:18 21 process. This isn't actually part of the inventive aspects
13:59:23 22 of the patent that are at issue, but this puts them in the
13:59:26 23 context of what happens next. That once you are able to
13:59:29 24 efficiently transfer the measurement you've made to the
13:59:33 25 photo diode, you want to get it into the actual image

13:59:37 1 processing circuitry so you know how to create an image.

13:59:40 2 THE COURT: Let's start turning this electrical
13:59:44 3 impulse into, along with all the other stuff we've
13:59:51 4 collected, into an image?

13:59:53 5 MR. GILMAN: Correct, Your Honor.

13:59:54 6 THE COURT: Okay.

13:59:55 7 MR. GILMAN: So there's a physical location
13:59:57 8 where the pixel is measuring and you want to associate that
9 read it at the right time so you know where in the row
14:00:01 10 circuitry and the column circuitry that the coordinates of
14:00:04 11 that pixel is measured corresponds to a certain coordinate
14:00:06 12 in the image.

14:00:07 13 THE COURT: Okay.

14:00:10 14 MR. GILMAN: The construction of the dispute
14:00:12 15 between the parties appears to be whether the term "row and
14:00:16 16 column circuitry," as it's used in the claims, requires a
14:00:19 17 separate row circuitry and separate column circuitry and
14:00:23 18 also whether it requires -- the coupling requires separate
14:00:27 19 coupling to row circuit and separate coupling of the node to
14:00:31 20 column circuitry. We think it's --

14:00:33 21 THE COURT: Can you back. Now, this is our
14:00:36 22 fault. Normally when we get a joint claim construction
14:00:39 23 chart that has a box that says either plain and ordinary
14:00:45 24 meaning or needs no construction, we would immediately enter
14:00:49 25 an order saying please, for God's sake, whatever you do, do

14:00:53 1 not get to the briefing stage and do not come to argument
14:00:57 2 without words that say what you think this term means. We
14:01:02 3 didn't do that, that's my mistake. But I am telling, both
14:01:07 4 for outside counsel and defendants with Delaware counsel,
14:01:11 5 because I'm pretty sure this is uniform in our court, and
14:01:15 6 I'm also pretty sure -- and I'm just going to ask you a lot
14:01:17 7 of question, but this could get you in a lot of trouble.
14:01:20 8 You can't come in with nothing, with no quotes in that box,
14:01:24 9 because what happens is going to be what happened here in
14:01:27 10 this briefing. What happened in the briefing is you guys
14:01:30 11 didn't say in your opening briefing what the heck you think
14:01:33 12 it means and it was strange. And they said that in their
14:01:37 13 answering briefing. They were actually right. What happens
14:01:39 14 is the patentee, it tells me why the limitation of the
14:01:42 15 accused infringer isn't right, but it never clearly tells me
14:01:47 16 what it thinks the term means. Even by the end of your next
14:01:52 17 brief, I wasn't totally sure.

14:01:54 18 So I think the first question for you is, I need
14:01:57 19 words in that box, under your guys' name. What are the
14:02:02 20 words that I'm going to put in there? What does this term
14:02:05 21 mean? You had to expect this question was coming.

14:02:10 22 MR. GILMAN: I mean, I can articulate what the
14:02:13 23 construction of the dispute seems to be. I don't think --
14:02:16 24 the row and column circuitry is what assigns -- what
14:02:20 25 translates what's being measured to the right place in the

14:02:24 1 image. I don't think there's a dispute about that. I think
14:02:27 2 the dispute between the parties is when it's row and column
14:02:31 3 circuitry, those have to be separate circuits there and has
14:02:35 4 to be separate coupling to each of them.

14:02:37 5 THE COURT: We encountered this with the first
14:02:41 6 term, right, when we got down to the nub of what was really
14:02:45 7 disputed, which was their addition of the word "single," we
14:02:45 8 realized that your construction didn't have words in it that
14:02:46 9 really got to that concept. I had to put them there, right,
14:02:50 10 one or more. Here we don't have any words at all. So
14:02:55 11 like -- I mean, let's work on it. I mean, their proposal is
14:03:04 12 "coupling the plurality of nodes to row circuitry and column
14:03:09 13 circuitry, not row or column circuitry." And what are the
14:03:14 14 records that you would use in your proposal that would
14:03:17 15 clearly articulate the counterpoint, what is allowed that
14:03:22 16 they say isn't allowed. Do you know what I mean?

14:03:26 17 MR. GILMAN: Yes, Your Honor. So what is
14:03:29 18 allowed -- and maybe it's easiest to show this in the
14:03:35 19 context of a figure, so we can talk about what it is. That
14:03:40 20 the coupling to row and column circuit can be what's shown
14:03:44 21 in Fig. 1, that preferred embodiment, of a connection to row
14:03:49 22 circuitry that then connects to column circuitry. It
14:03:53 23 doesn't have to be a direct distinct coupling to row
14:03:56 24 circuitry and a direct distinct coupling to column
14:03:59 25 circuitry.

14:04:00 1 THE COURT: So I guess that begs the question
14:04:06 2 back to the construction box. Is your construction
14:04:12 3 "coupling the plurality of nodes to row circuitry or column
14:04:18 4 circuitry?" Or "coupling the plurality of nodes to row
14:04:23 5 circuitry and/or column circuitry?" Or is your
14:04:28 6 construction, no, actually I think we could say "coupling of
14:04:32 7 plurality of nodes to row circuitry and column circuitry,"
14:04:36 8 but what we would have to do is to make it clear we mean
14:04:39 9 direct or indirect coupling. And that could be. It's not
14:04:43 10 clear. Went through the whole briefing without being clear.

14:04:45 11 So again, I'm just going to tell you, please,
14:04:47 12 please, in any other Markman hearing in this court, never
14:04:51 13 have this box be empty. Judges hate it, because they think
14:04:54 14 people are trying to hide the ball. That's what they think
14:04:56 15 is happening. That's what they think is happening, right.
14:04:58 16 That's what the other side thinks is happening, that they
14:05:02 17 said was happening in a briefing. And it was happening
14:05:05 18 really in a way. That doesn't tell me what you really mean.
14:05:05 19 And it makes for a bad argument, because -- so what is the
14:05:09 20 answer? What is the construction? You know the dispute.
14:05:12 21 You know everything that's been argued. What is it? What's
14:05:14 22 the construction?

14:05:15 23 MR. GILMAN: Honestly, Your Honor, we aren't
14:05:18 24 sure what they're trying to distinguish. Column circuitry
14:05:22 25 that's connected to the output of the image array. So

14:05:26 1 they're trying, we understand at best, that they're trying
14:05:29 2 to say "coupled to row and column circuitry" has to mean
14:05:33 3 something different than what they're doing otherwise why
14:05:37 4 are we talking here. So the best we can understand is that
14:05:40 5 they think there has to be a separate direct coupling to
14:05:44 6 each of these.

14:05:45 7 THE COURT: I think at one point in their
14:05:47 8 briefing, didn't they say that they don't think that at the
14:05:51 9 very end? Didn't they say that they would allow for
14:05:53 10 indirect coupling? If that's right, and we could take a
14:05:58 11 look at it, but if near the end of their briefing they said
14:06:02 12 that, and of course you read it, so let's say they mean --
14:06:06 13 by "coupling" they mean direct or indirect coupling, okay?
14:06:12 14 If that's true, would a correct construction be directly or
14:06:20 15 indirectly coupling the plurality of nodes to row circuitry
14:06:27 16 and column circuitry?

14:06:29 17 MR. GILMAN: I believe, yeah. I believe that
14:06:31 18 that's --

14:06:32 19 THE COURT: You think you would be okay with
14:06:34 20 that?

14:06:35 21 MR. GILMAN: Yes.

14:06:36 22 THE COURT: Okay. Well, I don't know -- well,
14:06:41 23 maybe what we're going to end up doing is having a fight
14:06:44 24 about "plurality of nodes." Let me just pause for a second.
14:06:48 25 Let me pause your time and ask the defendant, not looking

14:06:52 1 for a ton of argument, but to the other side, if a
14:06:56 2 construction was "directly or indirectly coupling a
14:07:00 3 plurality of nodes to row circuitry and column circuit," is
14:07:04 4 that a construction that OmniVision could live with that
14:07:08 5 makes this correct? Mr. Bluestone.

14:07:13 6 MR. BLUESTONE: I wouldn't go so far to say
14:07:16 7 direct and indirect because there's a slippery slope problem
14:07:19 8 we haven't briefed coupling. I'm aware of the Court's prior
14:07:22 9 decision. I believe it was in a mechanical case where you
14:07:24 10 said I believe it could be direct or indirect connection
14:07:29 11 between the two. That would be fine. But we have to kind
14:07:33 12 of get to the point of what we're talking about in the
14:07:36 13 electrical context.

14:07:37 14 So to take a quick step back, the issue that was
14:07:40 15 briefed is a row and column circuitry, two separate things,
14:07:44 16 or can they satisfy the claim by connecting it to one. If
14:07:48 17 opposing counsel is saying we are okay with the fact that
14:07:51 18 the coupling has to be with two things, row circuitry or
14:07:55 19 column circuitry, we're done with the issues that have been
14:07:58 20 briefed before the Court.

14:07:59 21 The question that would be remaining is what do
14:08:01 22 we mean by "coupling" now, which has not be briefed. I can
14:08:06 23 elucidate what I think the answer should be to that
14:08:08 24 question, but that's not what was briefed before the Court.

14:08:10 25 THE COURT: Okay. I guess, though, one of the

14:08:13 1 challenges would be that I think the reason why they may be
14:08:19 2 willing to acknowledge that the end of that construction
14:08:21 3 could appropriately be row circuitry or column circuitry is
14:08:26 4 only to the extent that it is clear that additionally the
14:08:32 5 coupling that is called for in the claim would be -- could
14:08:37 6 be direct or indirect. And if that wasn't the case or you
14:08:39 7 weren't going to argue that, going to argue some kind of
14:08:43 8 offshoot of that and they don't know what that is, they
14:08:45 9 might not want to agree right now that row circuitry and
14:08:49 10 column circuitry is okay. What I think that would mean is,
14:08:53 11 this is devolving potentially -- at a minimum what it would
14:08:56 12 mean is to resolve this claim term you would have to have
14:08:59 13 engagement over coupling as well, which I think admittedly
14:09:03 14 did not really happen here.

14:09:05 15 MR. BLUESTONE: Probably, Your Honor, but I
14:09:06 16 think the short answer to your point is that indirect is
14:09:10 17 just again what do they mean by that. I think it is clear
14:09:14 18 from the claim language what it does call for. There's a
14:09:17 19 plurality of signal devices. They are the things that are
14:09:21 20 coupling and what they're coupling is between that node and
14:09:23 21 the row and column circuitry. So the issue that we would
14:09:27 22 have in this front would be to say what coupling in general
14:09:31 23 is saying, one side is going to have an influence on the
14:09:34 24 other by way of --

14:09:36 25 THE COURT: Okay. Mr. Bluestone --

1 MR. BLUESTONE: Yeah. We didn't brief that, so
2 maybe I should stop.

14:09:38 3 THE COURT: I was asking for just an
14:09:40 4 acknowledgment of what the issues are and you're talking
14:09:44 5 about -- you're talking about argument.

14:09:47 6 MR. BLUESTONE: Sorry.

14:09:48 7 THE COURT: All right. Well, let me let you sit
14:09:50 8 down and I'll --

14:09:51 9 MR. BLUESTONE: But to briefly raise this. If
14:09:54 10 opposing counsel is saying row and column circuitry are two
14:10:00 11 things, we're in agreement.

14:10:02 12 THE COURT: But you're not going to get that
14:10:04 13 agreement today. I think what you're trying to do is get me
14:10:07 14 to say you know what, that's decided, it's row circuitry and
14:10:11 15 column circuitry. That would be unfair to them because the
14:10:15 16 other side won't make that concession unless they know what
14:10:18 17 the coupling dispute, how that's going to come out, right?

14:10:22 18 MR. BLUESTONE: Understood.

14:10:23 19 THE COURT: So I think we'd be left in a world
14:10:25 20 where we couldn't resolve this claim term because
14:10:29 21 holistically to know how to resolve it and whether or not we
14:10:32 22 had a difference of opinion, we'd have to address a concept
14:10:34 23 that we didn't address in the briefing. Does that seem
14:10:37 24 right to you, Mr. Bluestone?

14:10:38 25 MR. BLUESTONE: Yes. Understood.

14:10:40 1 THE COURT: Does that seem right to you, Mr.
14:10:43 2 Gilman?

14:10:43 3 MR. GILMAN: That's correct, Your Honor.

14:10:44 4 THE COURT: And I appreciate counsel helping me
14:10:46 5 work through it. So I swear there was a point in the
14:10:55 6 briefing OmniVision said, no, it could be direct or
14:10:58 7 indirect.

14:10:59 8 MR. BLUESTONE: Yes, right.

14:11:00 9 THE COURT: But you think there's some other
14:11:02 10 nuance there that might be problematic?

14:11:05 11 MR. BLUESTONE: Yeah. I mean, being a paid
14:11:08 12 pessimist, I understand there could be a problem.

14:11:08 13 THE COURT: That's helpful. Thank you, Mr.
14:11:10 14 Bluestone.

15 MR. BLUESTONE: Thank you, Your Honor.

14:11:11 16 THE COURT: Mr. Gilman, let me just say, I'm
14:11:13 17 going to consider the dispute as to the second term here not
14:11:26 18 to be ripe. That is the term "coupling a plurality of nodes
14:11:31 19 to the row and column circuitry," because although in the
14:11:35 20 briefing the aspect of that phrase that's captured by "the
14:11:41 21 row and column circuitry" was definitely briefed and
14:11:46 22 engaged, there were disputes that were engaged in, but they
14:11:49 23 really were almost uniformly and totally about is there a
14:11:55 24 called row and column circuitry or does anybody really
14:11:59 25 dispute there are two separate things, one is row circuitry

14:12:02 1 and one is column circuitry? If that's true, what does that
14:12:05 2 mean? And there was not much if any focus on the phrase
14:12:09 3 "coupling," and particularly whether coupling could be
14:12:12 4 direct or indirect. And if it can, what does that mean in
14:12:17 5 terms of whether the coupling must be to both row and column
14:12:21 6 circuitry? And so I both couldn't resolve the term now, and
14:12:25 7 it wouldn't be fair to on either side, so I'm going to
14:12:28 8 consider the full dispute about this term not ripe. And
14:12:32 9 we'll issue an order afterwards that will give the parties
14:12:34 10 guidance about the next stage in which if this still is
14:12:38 11 disputed, the parties should continue to meet and confer
14:12:40 12 about it because it's possible you might be able to resolve
14:12:43 13 it. But we'll issue guidance about how to -- about how that
14:12:50 14 could be resolved or how it might be brought back before the
14:12:53 15 Court.

14:12:54 16 The only other thing I will say about this term
14:12:56 17 is it struck me as possible that another unbriefed or
14:12:59 18 largely unbriefed issue is what "plurality of nodes" means.
14:13:04 19 Struck me as very possible that there could be a dispute
14:13:08 20 about whether "plurality of nodes" means each and every node
14:13:12 21 or at least more than one node or something or all nodes. I
14:13:19 22 think the parties were wary of each other because they
14:13:23 23 weren't sure what the other side was saying, even though
14:13:25 24 there were multiple meet and confers prior to this Markman
14:13:29 25 hearing. So if there's further meeting and conferring on

14:13:31 1 this term it should take into account all the aspects of the
14:13:34 2 term, "coupling," "plurality of nodes," "row and column
14:13:37 3 circuitry" to see whether or not agreement can be reached.
14:13:40 4 And if it can't, again, I'll give you instructions on how
14:13:42 5 the issue can be reteed up with the Court.

14:13:46 6 Okay. I think we took care of that. All right.

14:13:49 7 Let's then move on to term three. And this is
14:13:55 8 the "variable voltage circuitry" term. And I will say, just
14:13:59 9 as a prelude to you, I acknowledge this is certainly me, but
14:14:09 10 I wrote down a little preamble for you all to say after
14:14:15 11 reading multiple times this term in the briefing, and here's
14:14:19 12 what I wrote. I said I came away from this understanding
14:14:24 13 that RESN does not like the phrase "analog voltage levels"
14:14:31 14 in OmniVision's proposed construction. And I also think I
14:14:34 15 understand that OmniVision doesn't think that this term
14:14:40 16 would encompass an image sensor that would "simply set
14:14:45 17 different predetermined voltages." On page 44 of the brief.
14:14:50 18 And I also, I think I understand that RESN thinks that the
14:14:55 19 term "analog" does not "preclude having multiple set voltage
14:15:00 20 levels." That's on page 46 on the brief. But beyond that,
14:15:06 21 I both don't understand the substance of the dispute, nor do
14:15:09 22 I understand that how nearly any piece of evidence cited by
14:15:13 23 the parties helps explain to me what's going on here or
14:15:17 24 whose construction is correct.

14:15:18 25 So let's start from scratch with your best to

14:15:20 1 try to explain it to me. Okay. So this is -- this term,
14:15:24 2 there's not thing in it I really understood. So we'll have
14:15:29 3 to start with the beginning.

14:15:31 4 Okay. With that said, Mr. Gilman.

14:15:33 5 MR. GILMAN: Thank you, Your Honor. I think
14:15:35 6 that there are -- the way that we have been looking at the
14:15:37 7 dispute, there are two aspects of it that may be related,
14:15:40 8 but I think resonate with the way that you phrased how you
14:15:44 9 understand it and hoping we can elucidate it further.

14:15:49 10 The first is that OmniVision's proposal limits
14:15:51 11 the term to only analog choice of voltage levels. And I
14:15:55 12 think that this is connected with their -- this dispute
14:16:00 13 about whether does varying allow you to select from a range
14:16:05 14 of choices or does varying require you to generate a new
14:16:10 15 value. That's the best I can understand what OmniVision is
14:16:14 16 trying to limit the claim to. And I think that's a little
14:16:18 17 bit through the term "analog" that you can't have a menu of
14:16:21 18 choices that you choose from or you select from within the
14:16:24 19 scope of varying the voltage.

14:16:26 20 THE COURT: I mean, maybe just a way of a
14:16:29 21 starting point, is what we're talking about here, this
14:16:32 22 "variable voltage circuitry," does it have to do with that
14:16:36 23 bridge, the bridge that's the transfer gate.

14:16:39 24 MR. GILMAN: It does, Your Honor.

14:16:40 25 THE COURT: All right.

14:16:40 1 MR. GILMAN: So what we're talking about, the
14:16:43 2 "variable voltage circuitry" in the specification, it's
14:16:47 3 referred to as "selectable voltage circuitry." We talked
14:16:50 4 about this a little bit before in term one. It's
14:16:54 5 determining what voltage to apply to that transfer gate and
14:16:57 6 that is going to effect whether and how signal flows from
14:17:01 7 the photo diode to the floating diffusion.

14:17:04 8 THE COURT: How is that signal going to flow.
14:17:07 9 Okay.

14:17:08 10 MR. GILMAN: Okay. So in the prior art the
14:17:11 11 general idea was that this was a switch. The way that
14:17:14 12 counsel for OmniVision showed it, that it's either on or
14:17:20 13 off. Those are the preset configurations, we've got an on
14:17:25 14 voltage and off voltage.

14:17:26 15 THE COURT: So there's one preset configuration
14:17:29 16 that was on voltage and that means up, which means you can't
14:17:33 17 go through?

14:17:34 18 MR. GILMAN: On means, the way we think means
14:17:36 19 down.

14:17:36 20 THE COURT: And then off voltage, which means
14:17:38 21 up?

14:17:39 22 MR. GILMAN: Correct.

14:17:39 23 THE COURT: It's just one thing, one
14:17:42 24 predetermined level?

14:17:43 25 MR. GILMAN: Correct, Your Honor.

14:17:44 1 THE COURT: Okay.

14:17:45 2 MR. GILMAN: And I think there was some
14:17:46 3 confusion about a line in our brief. I'll get into that in
14:17:50 4 a second about that aspect of it. But the part of the
14:17:53 5 invention of the '671 Patent is being able to select from a
14:17:58 6 range or being able to vary the voltage using this
14:18:03 7 selectable voltage circuit.

14:18:06 8 THE COURT: That's representative of the last
14:18:08 9 limitation of Claim 1, for example, of the '671?

14:18:11 10 MR. GILMAN: Correct, Your Honor, exactly. One
14:18:13 11 of the reasons I talked about it briefly earlier today, this
14:18:16 12 issue of blooming, that if you have too much light coming in
14:18:20 13 it can overflow and you might want to not turn the gate on
14:18:24 14 because you don't want to get everything out of the photo
14:18:26 15 diode, but you might want to lower it a little bit so that
14:18:30 16 some of the charge spills off and doesn't end up going where
14:18:33 17 you don't want it to go. So this is an example of the
14:18:36 18 patent teaching that you can select a voltage that's in
14:18:38 19 between on and off. You might want to have more power to
14:18:41 20 how you do it and there are these dashed lines at the top of
14:18:45 21 Fig. 5 that represent choices of how you can select the
14:18:48 22 voltage there. You can lower that gate a little bit so a
14:18:53 23 little charge spills off or you can lower it a lot so a lot
14:18:56 24 spills off. But in any case, you're not dropping that gate
14:18:59 25 all the way down to flat to let the whole circuit flow.

14:19:02 1 THE COURT: And that's what that portion of
14:19:04 2 column 14 is talking about as well, that's referenced in
14:19:08 3 Fig. 5.

14:19:08 4 MR. GILMAN: Correct, Your Honor, yes. The risk
14:19:10 5 is that if the charge starts overflowing, it could overflow
14:19:13 6 in bad places. This is control sort of like a sluice gate,
14:19:18 7 you drop it a little bit, let the charge spill out.

14:19:21 8 THE COURT: But this light that you're worried
14:19:24 9 about can so high, isn't that all light that's part of the
14:19:28 10 light that came in that's about this little piece, wouldn't
14:19:31 11 you want all of it?

14:19:33 12 MR. GILMAN: The problem is, Your Honor, if it's
14:19:35 13 higher than the capacity of what the imaging circuit can
14:19:40 14 tolerate and deal with, then it could wash out neighboring
14:19:44 15 pixels. It could flood out and affect neighboring pixels
14:19:46 16 and wash them out.

14:19:46 17 THE COURT: Even though it would kind of be
14:19:48 18 accurate to the image itself?

14:19:53 19 MR. GILMAN: I think the problem isn't it's not
14:19:53 20 going to be accurate, it's that it's not going to stay where
14:19:54 21 it should stay. It's going to affect neighboring pixels if
14:19:56 22 this voltage isn't dealt with in a way to siphon it off.
14:20:01 23 That's the blooming effect. That's one of the benefits of
14:20:04 24 having a selectable voltage is you don't have to be on or
14:20:07 25 off, you can have these intermediate steps to be able to

14:20:11 1 deal with that happening in CMOS sensor.

14:20:24 2 THE COURT: Can I ask, and this may be a dumb
14:20:29 3 question, but you don't like analog. It seemed like in the
14:20:34 4 briefing the phrase "analog voltage levels" in their
14:20:38 5 construction was bad. Is that because you thought analog
14:20:43 6 voltage levels means only something, something that cannot
14:20:50 7 include predetermined levels?

14:20:51 8 MR. GILMAN: It can't -- we understood it to
14:20:54 9 mean that you're not allowed to just select from a menu of
14:20:57 10 choices. And that is, I think, for example, there's parts
14:21:02 11 of the specification where you're doing the voltage
14:21:05 12 selection in the digital domain and then using a digital
14:21:08 13 analog converter to apply the voltage to the transfer gate.

14:21:12 14 THE COURT: So I mean, I guess I'm just trying
14:21:18 15 to -- yeah, I'm just trying to figure out how the words in
14:21:25 16 the proposed constructions tie to the key dispute. And I'm
14:21:32 17 not sure -- I know we're talking about -- I mean, we want to
14:21:37 18 know -- I think you're saying, you think that this claim
14:21:41 19 language could allow for a world where the only type of
14:21:47 20 variable voltage circuitry is the on or off, this totally
14:21:51 21 predetermined world.

14:21:53 22 MR. GILMAN: No, no. It would not just be the
14:21:55 23 on or off world, not just choosing one preset voltage where
14:22:00 24 you go on. And I think that that is -- I think that that is
14:22:05 25 where there's some of the disconnect. And this is I think

14:22:08 1 what started some of this disconnect in page 6 of the joint
14:22:11 2 claim construction briefing, where the patented invention is
14:22:15 3 distinguishing a single set of preset parameters. But that
14:22:19 4 means what's clear is the second sentence of that, which is
14:22:23 5 I think usually quoted out when OmniVision cites this
14:22:27 6 sentence, is that the single set of preset parameters means
14:22:31 7 only one on and only one off. And it doesn't preclude
14:22:35 8 having a menu of choices where you can select from among
14:22:39 9 among the menu. It just means you can't just have on and
14:22:42 10 off preset, you have intermediate values that you can select
14:22:46 11 from, which is why it's referred to as a selectable voltage
14:22:49 12 circuit and why in the specification it's disclosed there
14:22:55 13 examples of doing it digitally. You can choose voltage one,
14:22:59 14 voltage two, voltage three.

14:23:01 15 THE COURT: You're just under 15 minutes, but
14:23:04 16 don't rush. We're on this term and we need to have a good
14:23:08 17 explanation. I'll explain what happens if we run out of
14:23:08 18 time and the other side has some extra time. Okay.

14:23:12 19 So I'm just thinking of a world, thinking of
14:23:15 20 like a variable -- thinking of almost like a dial, like what
14:23:20 21 can we choose? And you're not saying that the world can
14:23:23 22 just be on/off?

14:23:27 23 MR. GILMAN: Correct.

14:23:27 24 THE COURT: Is the dispute that they're
14:23:30 25 saying --

14:23:34 1 MR. GILMAN: I think it's like an old car radio.
14:23:36 2 Do you have to tune it with the dial or can you have a
14:23:39 3 couple of buttons you can push to switch stations? And our
14:23:44 4 proposal is that variable voltage circuitry, which is
14:23:47 5 disclosed as selectable voltage circuitry, could include
14:23:50 6 preset stations if you have a number of options. It's not
14:23:54 7 just an on/off button but a number of choices you can choose
14:23:58 8 from as opposed to having to tune it precisely.

14:24:00 9 THE COURT: So should I forget about the word
14:24:03 10 "analog" and just focus on the word "predetermined?" Is
14:24:07 11 "predetermined" the key? What is the key thing that's in
14:24:10 12 their construction, the key word, or even if it's not a word
14:24:13 13 that's in their construction, it's a word that you think
14:24:16 14 that word means that is bad that you do not want in this
14:24:19 15 construction?

14:24:19 16 MR. GILMAN: Yeah, I think it's the idea that
14:24:22 17 you cannot have preset options to choose from. And to be
14:24:25 18 clear, and to avoid any confusion, this is not preset in the
14:24:31 19 sense of a single voltage on and a single voltage off. This
14:24:34 20 is in the sense that you could have a number of set options
14:24:37 21 to choose from of what the voltage is going to look like.
14:24:40 22 And that's the whole point of the invention, is it's not
14:24:43 23 just on or off. You can choose intermediate values and you
14:24:47 24 can change the value, but you can do that within a number of
14:24:50 25 preset options. It doesn't have to be something that you're

14:24:54 1 determining. And I think analog is how they tried to
14:24:57 2 capture it, but it doesn't have to be something you're
14:25:01 3 determining on the fly.

14:25:02 4 THE COURT: Okay. So the claim in this term
14:25:04 5 could allow for a world -- it must have various options,
14:25:09 6 more than just on/off?

14:25:12 7 MR. GILMAN: Yes.

14:25:12 8 THE COURT: But it could allow for where all of
14:25:15 9 those options are, quote unquote, "preset," whatever that
14:25:17 10 means, or it might not, is that right?

14:25:20 11 MR. GILMAN: Correct, Your Honor.

14:25:20 12 THE COURT: Your point is only that all preset
14:25:23 13 is a possibility?

14:25:25 14 MR. GILMAN: As long as it's more than just
14:25:27 15 on/off.

14:25:28 16 THE COURT: As long as it's more than just
14:25:29 17 on/off.

14:25:31 18 MR. GILMAN: And I think that was the confusion
14:25:32 19 when they used the term preset in the briefing, said there
14:25:32 20 was an on voltage and an off voltage. And that's not what
14:25:36 21 we're saying. That use of the term "preset" is not what we
14:25:39 22 meant when we used that sentence, as shown by the next
14:25:42 23 sentence we used in our briefing.

14:25:44 24 THE COURT: Okay. But I think they pointed to
14:25:50 25 this portion of the brief that you do have highlighted,

14:25:56 1 which says that like, the prior art before the patent, you
14:26:04 2 could -- CMOS sensors could generally only be created with a
14:26:07 3 single set of preset parameters. Did I get it right? Maybe
14:26:11 4 they're saying, see, that's the prior art. But you want to
14:26:15 5 encapsulate the prior art as to this term that could only be
14:26:18 6 a single set of preset parameters. That's what we're
14:26:22 7 getting away from. Is that what's happening here?

14:26:24 8 MR. GILMAN: I believe that's their argument and
14:26:26 9 that's based on a misunderstanding of what a single set of
14:26:29 10 preset parameters means there, because it ignores what the
14:26:32 11 second sentence is. The second sentence says, what are the
14:26:34 12 term single set of preset parameters. That means one on and
14:26:36 13 one off. That's what was in the prior art. That's what was
14:26:40 14 being distinguished.

14:26:41 15 THE COURT: Okay. So the thing that you're
14:26:43 16 saying is in the prior art and that is being distinguished
14:26:46 17 is that the transfer gates could be fabricated with one on
14:26:52 18 voltage and only one off voltage. That's not what you are
14:26:56 19 saying variable voltage is, that's what you were referring
14:27:01 20 to?

14:27:02 21 MR. GILMAN: Correct, Your Honor.

14:27:03 22 THE COURT: So if the other side agreed that
14:27:08 23 variable voltage circuitry just can't be that, you wouldn't
14:27:14 24 disagree?

14:27:15 25 MR. GILMAN: Correct, Your Honor.

14:27:16 1 THE COURT: Do you really think they do? What
14:27:18 2 do you think the real dispute is?

14:27:21 3 MR. GILMAN: Their products have multiple
14:27:24 4 voltages they choose between, but they do it discretely.

14:27:27 5 THE COURT: And discretely means?

14:27:28 6 MR. GILMAN: They can choose voltage one,
14:27:30 7 voltage two, voltage three as opposed to have a dial that
14:27:34 8 tunes in.

14:27:35 9 THE COURT: So is their product not a single set
14:27:37 10 of preset parameters?

14:27:39 11 MR. GILMAN: It's not just on/off.

14:27:40 12 THE COURT: I know it's not on/off, but you're
14:27:43 13 telling me that's not what you mean by this, you mean not
14:27:46 14 on/off, but could be single set of preset parameters meaning
14:27:50 15 the parameters which admittedly must be more than just
14:27:54 16 on/off, there must be other gradations. They could all be
14:27:57 17 preset.

14:27:58 18 MR. GILMAN: They could all be preset.

14:27:59 19 THE COURT: Do they disagree with that?

14:28:02 20 MR. GILMAN: I believe they disagree that the
14:28:04 21 claim would cover that.

14:28:05 22 THE COURT: They do. Okay. So we are --
14:28:07 23 because you guys -- not only did you have the briefing and
14:28:10 24 the three meet and confers in the briefing, but I required
14:28:12 25 you to have a separate meet and confer afterwards and then

1 report back to me as to whether there was still a dispute.

14:28:16 2 You must have discussed this issue, right?

14:28:18 3 MR. GILMAN: This is, as best as I understand,
14:28:21 4 what the dispute is between the parties, that they think you
14:28:24 5 need to have -- it's phrased differently, but that analog
14:28:30 6 means you have to be able to have a knob to tune it, can't
14:28:31 7 just be a choosing between different voltages.

14:28:33 8 THE COURT: Analog means you have to have a knob
14:28:36 9 to tune it. Okay. I think, regardless, the dispute you're
14:28:40 10 telling me you think you do have, if I look at these two
14:28:42 11 proposed constructions, I don't know how that speaks to it.
14:28:44 12 I mean, how do the words of these constructions speak to
14:28:47 13 this issue that you're saying? Do you agree they don't?

14:28:50 14 MR. GILMAN: I think that's what they mean by
14:28:52 15 the term "analog." And I think the term "analog" can't be
14:28:55 16 in there because their embodiments say they choose it
14:28:58 17 digitally.

14:29:00 18 THE COURT: So by analog you think they mean not
14:29:08 19 solely preset parameters. What do you think they mean by
14:29:14 20 analog in words?

14:29:17 21 MR. GILMAN: Yeah. I think that they mean you
14:29:20 22 have to be able -- it's not a -- a specific value that you
14:29:27 23 could preprogram into it, that it has to be a continuous
14:29:32 24 value to determine it.

14:29:34 25 THE COURT: Has to be a continuous value that

14:29:38 1 you determine. Okay.

14:29:40 2 So in the time you have left, there's about
14:29:43 3 eight minutes. If this is the dispute, why don't you tell
14:29:46 4 me what the evidence is, the key evidence is that indicates
14:29:52 5 that this variable voltage circuitry could involve simply
14:30:01 6 previously known parameters, more than just on/off and
14:30:04 7 doesn't absolutely have to be a, quote, continuous value,
14:30:10 8 whatever that means.

14:30:11 9 MR. GILMAN: I think, and to quickly go through,
14:30:15 10 the fact that the specification equates or discloses an
14:30:21 11 embodiment that's a variable voltage circuitry, that's
14:30:21 12 selectable voltage circuitry means you can choose from among
14:30:25 13 a number of options as opposed to --

14:30:27 14 THE COURT: You're pointing me to a piece of the
14:30:29 15 specification?

14:30:31 16 MR. GILMAN: Yes.

14:30:32 17 THE COURT: Which one.

14:30:33 18 MR. GILMAN: This is Fig. 1 of the '671
14:30:35 19 specification. It shows that the variable voltage circuitry
14:30:39 20 is equated with selectable voltage circuitry. That's how
14:30:42 21 the element is labeled in the figures. It's equating it
14:30:46 22 with selecting to being at the barrier. Fig. 5 of the '671
14:30:51 23 patent, which shows discrete steps that you can take to deal
14:30:55 24 with the blooming issue as opposed to some sort of analog
14:31:00 25 determinations, but that you can have these -- there are

14:31:03 1 three discrete steps here that are shown of lowering the
14:31:07 2 barrier of the transfer gate through different voltages.

14:31:12 3 THE COURT: I'm sorry. I'm not following
14:31:14 4 anything. So when -- just to tell you, we're literally
14:31:18 5 starting from scratch.

14:31:20 6 MR. GILMAN: Okay.

14:31:20 7 THE COURT: And it may be me, but this term in
14:31:22 8 the briefing, there wasn't hardly a word that I thought was
14:31:25 9 helpful. And I'll say, thinking about for a jury, how
14:31:30 10 you're going to make up presentations that will be
14:31:34 11 understandable. But okay. I'm looking for -- I know, I
14:31:40 12 think from you, that our dispute is could the term
14:31:44 13 encapsulate only a preset predetermined voltages, more than
14:31:51 14 just on/off? Could it? Or must it capture whatever it
14:31:58 15 means to be continuous or on the fly? That dispute, I want
14:32:03 16 to see some evidence in column 14 that tells me something or
14:32:07 17 Fig. 1 that tells me the answer is your way. Yeah, look, it
14:32:10 18 could be just all preset. There's box around "selectable
14:32:15 19 voltage circuitry." What does that tell me about this
14:32:18 20 dispute.

14:32:18 21 MR. GILMAN: That the specification equates to
14:32:21 22 variable voltage with a selectable voltage, so you can
14:32:24 23 choose as opposed to have to set it with a know, which is
14:32:28 24 their thing. If you have a menu of options and you select,
14:32:31 25 that is different than what they're saying is required.

14:32:33 1 THE COURT: So is what you're saying that the
14:32:36 2 term "selectable" means or could mean "predetermined?"

14:32:39 3 MR. GILMAN: Yeah. You're choosing from a menu,
14:32:41 4 yes. Yes, selectable.

14:32:43 5 THE COURT: You mentioned something about a
14:32:45 6 know. They think you need a knob. I don't have any
14:32:48 7 understanding of what that is or why or how it relates to
14:32:52 8 this continuous issue. Okay. But so at least "selectable"
14:32:54 9 you think means "predetermined?"

14:33:00 10 MR. GILMAN: Yes.

14:33:00 11 THE COURT: Is there --

14:33:02 12 MR. GILMAN: I think in conjunction with Fig. 5
14:33:04 13 it shows that you change the voltage in these discrete
14:33:09 14 steps. You have these choices of the different dashed lines
14:33:12 15 you can choose from, so those would be preset values that
14:33:15 16 you're choosing between and that's how you deal with the
14:33:20 17 blooming issue.

14:33:21 18 THE COURT: It tells me these are preset values
14:33:23 19 or could be preset values?

14:33:25 20 MR. GILMAN: The fact that it's showing you
14:33:27 21 options that you have. It's not -- that are evenly spaced,
14:33:31 22 it's not requiring a continuous adjustment or a knob in
14:33:34 23 their sense of you need an analog change because they're
14:33:38 24 showing discrete steps you could take.

14:33:39 25 THE COURT: So are you literally saying the fact

14:33:42 1 that there are lines on a picture, those lines can
14:33:46 2 correspond or do correspond to, quote, "preselected levels?"

14:33:49 3 MR. GILMAN: I think that it's showing, not -- a
14:33:53 4 choosing among different options.

14:33:56 5 THE COURT: Pre-known options?

14:33:57 6 MR. GILMAN: Yes. Yeah.

14:33:59 7 THE COURT: As opposed to I see you're
14:34:02 8 contrasting that with this knob or this continuous idea.
14:34:05 9 What would that look like if depicted or --

14:34:08 10 MR. GILMAN: That would just be a range, not
14:34:11 11 discrete levels that you would have some sort of being able
14:34:15 12 to go up and down in an analog sense, so by any
14:34:19 13 indeterminate amount as opposed to choosing a level.

14:34:21 14 THE COURT: So those lines up there could or
14:34:23 15 maybe do, in your mind, equate to predetermined levels of
14:34:26 16 voltage, which means the opposite of what the thing they say
14:34:30 17 this can't be. Is there any words in column 14 that's
14:34:33 18 making reference to those lines?

14:34:36 19 MR. GILMAN: It is -- it's not in column 14.
14:34:44 20 There are other places in the specification where it's the
14:34:50 21 voltage is set by setting -- by choosing a bit value, but
14:34:55 22 internal register, so that I would think is probably the
14:34:59 23 closest in column 2. In Claim 3, where it is a digital
14:35:04 24 change to choose a specific value as opposed to a continuous
14:35:09 25 knob.

14:35:09 1 THE COURT: So what you're saying in column 2,
14:35:11 2 lines 8 to 12, there's a reference to, this is the '671
14:35:21 3 patent, the transfer gate voltage can be set -- oh, okay.
14:35:28 4 This is -- all right. For example, by setting a register,
14:35:36 5 and you think what that is saying is, hey, you know how the
14:35:40 6 claim claims variable voltage circuitry? You know what that
14:35:45 7 could mean? It could mean totally just presetting different
14:35:52 8 voltages for this transfer gate and that's it. Is that
14:35:58 9 right?

14:35:58 10 MR. GILMAN: Yes. And choose voltage 1, 2, 3,
14:36:00 11 4, whatever the options are, by setting this register.

14:36:07 12 THE COURT: So this column 2, lines 8 to 12
14:36:11 13 seems like you think that's a particularly important piece
14:36:13 14 of the spec for you, is that right?

14:36:16 15 MR. GILMAN: I think that that in that it's
14:36:19 16 further evidence. I do think it is the way that it's
14:36:23 17 described in the figure and in the specification and the
14:36:26 18 examples that are shown are all -- these are all consistent
14:36:28 19 with each other and built on each other.

14:36:31 20 THE COURT: I mean, the language sounds -- I
14:36:33 21 mean, I don't know what it means, but the transfer gate I
14:36:36 22 know we're talking about the transfer gate here. The
14:36:39 23 voltage, the voltage has something to do with the voltage
14:36:41 24 circuitry, it can be set, and I think you mean set is like
14:36:45 25 a -- is like a clue, you mean, like preset, predetermined?

14:36:51 1 MR. GILMAN: It can be -- yes, selected, set,
14:36:54 2 yes.

14:36:54 3 THE COURT: By setting a register, whatever that
14:36:57 4 is. And then this Claim 3 says "is controlled by register."
14:37:03 5 And it may be in here. I mean, I didn't have that line in
14:37:07 6 the patent highlighted. Usually when you cite a portion you
14:37:13 7 have it highlighted. It could be that you did cite it and I
14:37:17 8 just missed it, but I don't remember that piece of the
14:37:19 9 patent being said to be important or focusing on it. And I
14:37:23 10 apologize again if you did and I missed it. But, okay. Is
14:37:27 11 there other evidence aside from what we've already looked at
14:37:31 12 that you think is essentially the patent saying, yeah, with
14:37:35 13 regard to this variable voltage circuitry that we're
14:37:38 14 claiming, no, no, those levels, those values, those could
14:37:45 15 all be predetermined?

14:37:46 16 MR. GILMAN: And I think this gets into how much
14:37:48 17 have a proxy analog is come in to be the antithesis of
14:37:53 18 preset. But the patent is clear that you set these values
14:37:57 19 digitally. There are digital adjustments. And therefore
14:38:00 20 the analog voltage level itself is not limited to analog
14:38:04 21 voltage level or a dial, you could set it digitally or
14:38:07 22 discretely or choosing between other values.

14:38:10 23 THE COURT: Let me hear from the other side.
24 You're at your time. And what I'll do is I'll give you just
14:38:13 25 a minute or two of rebuttal as well. But they have plenty

14:38:17 1 of time, so let me at least hear from them on this term and
2 hear anything they want to say about and my questions, we'll
14:38:23 3 try to work through it and I'll at least give you a chance
14:38:25 4 to make a couple points, okay,

5 MR. GILMAN: Thank you, Your Honor.

14:38:36 6 THE COURT: Thanks, Mr. Gilman.

14:38:36 7 MR. BLUESTONE: Your Honor, do you have that
14:38:37 8 other matter?

14:38:38 9 THE COURT: Okay. Gosh. Thank you. Yes.

10 Geez. That's for 2:30. Thanks for mentioning that.

14:38:40 11 They're probably waiting for me over there. So we'll take a
14:38:41 12 short break and come back and try to finish out those terms.

14:38:46 13 So the Court will stand in recess. Thank you.

14:38:51 14 COURT CLERK: All rise.

14:38:54 15 (A brief recess was taken.)

14:58:44 16 COURT CLERK: All rise.

14:58:44 17 THE COURT: All right. Please be seated,
14:58:45 18 everybody. And thanks, Mr. Bluestone, and everyone was
14:58:49 19 sitting over there waiting for me, so thank you.

14:58:52 20 All right. Let's turn to OmniVision's argument
14:58:54 21 with regard to the term three.

14:59:04 22 MR. BLUESTONE: Thank you, Your Honor. I'm on
14:59:13 23 slide 65 which is showing kind of our conclusions. And we
14:59:18 24 appreciate Mr. Gilman's candor. This is the first time we
14:59:22 25 heard RESN agreed to the fact that the operation of variable

14:59:25 1 voltage circuitry does not apply to merely switching between
14:59:31 2 on and off control signals.

14:59:34 3 THE COURT: In the meet and confer that you had,
14:59:36 4 the one that I ordered to happen after the briefing
14:59:39 5 occurred, this issue must have come up. What was said then?

14:59:43 6 MR. BLUESTONE: Candidly, Your Honor, Mr. Gilman
14:59:45 7 wasn't on those meet and confers, so again, that's kind of
14:59:47 8 why I'm thanking him for his candor. We couldn't get an
14:59:49 9 answer up to these issues. We tried to go and get it
14:59:52 10 confirmed that it wouldn't cover the prior art. The
14:59:55 11 infringement contentions aren't pointing to anything. We
14:59:58 12 tried to get supplementation of the infringement
15:00:00 13 contentions.

15:00:01 14 But to kind of get to kind of the point here, if
15:00:04 15 in fact this is RESN's interpretation, it's on and off
15:00:08 16 control signals, '671 has no business being in the case.
15:00:12 17 There's nothing in the infringement contentions that talk
15:00:14 18 about intermediary values. And my understanding that's not
15:00:17 19 how any of our products work. So to the extent that us
15:00:21 20 trying to work out with them and wait for supplemental
15:00:24 21 infringement contentions was a mistake and we should have
15:00:26 22 raised it with you earlier and maybe filed a motion with
15:00:29 23 you, I apologize. But based on what we heard now, that it
15:00:33 24 doesn't encompass on and off signals, just switching between
15:00:38 25 the two, the rest is pretty much academic.

15:00:42 1 THE COURT: I'm not sure I understand what you
15:00:44 2 mean, but maybe you'll explain it. From an infringement
15:00:47 3 perspective?

15:00:48 4 MR. BLUESTONE: The claim construction issues
15:00:52 5 raised in this language, the "variable voltage circuitry,"
15:00:56 6 they said it's adjustment. The debate, here, I'll put the
15:01:00 7 competing constructions on here. Sorry, slide 52. And
15:01:07 8 maybe it will be helpful to point to, this is in the joint
15:01:11 9 appendix, at JA 1236. This is what they pointed to to our
15:01:18 10 products as having variable voltage circuitry. There is
15:01:21 11 nothing in this generic block diagram that is talking about
15:01:25 12 intermediary voltage levels, changing the shape of that
15:01:30 13 control signal. There is nothing in this product that would
15:01:33 14 do that. We've given them tens of thousands of pages of a
15:01:36 15 variety of products, the bible, so to speak, of how these
15:01:39 16 products work. There is nothing that does this.

15:01:43 17 THE COURT: Tell me if I'm wrong, I think you're
15:01:45 18 talking about like infringement/non-infringement issues?

15:01:48 19 MR. BLUESTONE: Correct. I'm just trying to
15:01:50 20 frame this kind of why are we crossing paths, what's going
15:01:52 21 on. We've been assuming all this time that they're reading
15:01:55 22 it on the prior art, prior art they're saying know it's not
15:01:59 23 just switching on and off, to give some context.

15:02:01 24 THE COURT: Okay.

15:02:05 25 MR. BLUESTONE: So the issue at hand of when I

15:02:08 1 went to that other slide later --

15:02:11 2 THE COURT: Could you go back to the
15:02:12 3 constructions.

15:02:13 4 MR. BLUESTONE: Yeah.

15:02:14 5 THE COURT: So I think we've established through
15:02:19 6 hearing from the other side that they do not think that a
15:02:24 7 variable voltage circuitry is simply a circuitry in which
15:02:28 8 the voltage is -- or which involves switching between --
15:02:36 9 solely switching between on and off voltages or something
15:02:39 10 like that. That's what you just said?

15:02:43 11 MR. BLUESTONE: Yes.

15:02:44 12 THE COURT: But they do think that the term is
15:02:48 13 broad enough to capture a world in which all of the variable
15:02:55 14 voltages that could be selected are all predetermined,
15:02:59 15 whatever that is?

15:03:01 16 MR. BLUESTONE: Right.

15:03:01 17 THE COURT: And I think the first question is,
15:03:03 18 are you going to disagree with that?

15:03:06 19 MR. BLUESTONE: That question is academic, so
15:03:09 20 long as what they're saying is we're not covering a device
15:03:12 21 that merely switches between low voltage and high voltage.
15:03:17 22 They need to -- I'll put some the slide that I referenced
15:03:20 23 before, might be slightly helpful to get to the point here.
15:03:23 24 This is slide 57 which showed the general timing diagram.
15:03:27 25 This is slide 58, showing the generic operation. My

15:03:30 1 understanding is that the generic option of what Mr. Gilman
15:03:36 2 said is not what they're covering. I have slide 60 showing
15:03:39 3 one shape. Slide 62, you're changing that shape, that
15:03:44 4 pulse, it's going lower now. Slide 63, you're changing the
15:03:48 5 pulse to be higher. His intermediary value part is saying
15:03:52 6 I'm changing the value, the levels of this. And
15:03:56 7 "adjustable" is the key language. We both agree that
15:04:00 8 "adjustable" is required.

15:04:01 9 THE COURT: Right.

15:04:02 10 MR. BLUESTONE: As long as everyone agrees that
15:04:04 11 adjustable is to the levels of this signal and not just
15:04:08 12 switching between low and high, that resolves the dispute.

15:04:12 13 THE COURT: Now, you said low and high. He was
15:04:14 14 saying on and off. Is there a difference between those?

15:04:17 15 MR. BLUESTONE: Yes. Practically speaking, no.
15:04:20 16 But just to articulate it technically, slide 60, see how it
15:04:25 17 says TG 120, below, underscore TG. If you can see that all
15:04:30 18 the way on the left. Sorry, let me zoom in for you Your
15:04:34 19 Honor.

15:04:34 20 THE COURT: Oh, see it.

15:04:35 21 MR. BLUESTONE: There we go. That's off.
15:04:37 22 That's a low level. Then when you want to turn the switch,
15:04:41 23 close the switch, put down the draw bridge, whatever analogy
15:04:45 24 you want to use, this voltage goes high. This is prior art.
15:04:51 25 So what he said on the record already that he believes that

15:04:55 1 our products would have some intermediary value, that
15:04:59 2 changing I think it was Figs. 5 and 6 that he showed, that
15:05:04 3 gate changing, that on the record as establishing that we're
15:05:07 4 not talking about the prior art on and off. And based on
15:05:11 5 the infringement contentions our only read was you're just
15:05:14 6 reading on a 4 pixel.

15:05:19 7 THE COURT: So do you have Figs. 5 and 6?

15:05:24 8 MR. BLUESTONE: Yes, I do. Sorry. There we go.
15:05:43 9 Fig. 5 at JA 10.

15:05:45 10 THE COURT: So what Mr. Gilman was telling me,
15:05:48 11 look, look at those lines, those lines are different, I
15:05:55 12 guess, voltage levels --

15:05:57 13 MR. BLUESTONE: Yeah.

15:05:58 14 THE COURT: -- and they could be voltage levels
15:06:00 15 that are, quote unquote, "predetermined" before blank,
15:06:05 16 predetermined before what? And that's the key thing. And
15:06:10 17 you're saying that's okay, yeah, they could be, they could
15:06:15 18 all be predetermined levels, but there's more than just
15:06:20 19 on/off or low/high?

15:06:23 20 MR. BLUESTONE: Yes. What he said about
15:06:24 21 intermediary values is he's saying, so your standard
15:06:28 22 operation, take that white off thing that's forming the
15:06:31 23 barrier, that height of 226 is not changing in the prior
15:06:35 24 art. Standard pixel let's say says zero volts and four
15:06:41 25 volts. There's two numbers. The variable voltage circuitry

15:06:45 1 is saying, I don't know if I like zero and two, there's
15:06:49 2 circumstances for blooming, for example, that Mr. Gilman
15:06:52 3 mentioned, where two volts isn't going to work, I need to
15:06:56 4 change it to 1.8.

15:06:58 5 THE COURT: Now that I'm looking at it, maybe I
15:07:00 6 misunderstand, but I find each of those lines represented a
15:07:03 7 different voltage level. But I now see that the word "off"
15:07:05 8 is like in the middle of all of them. The zero is off, is
15:07:10 9 zero like the very top one?

15:07:13 10 MR. BLUESTONE: Yeah. The problem is Fig. 5 is
15:07:15 11 not conducive to the paradigm that you're looking at. I
15:07:21 12 would say that looking at Fig. 11 is a better way of
15:07:24 13 understanding the signals that are happening. They're
15:07:28 14 trying to show barriers in a different way. This is just
15:07:33 15 the variable voltage circuitry, this is the control signal.
15:07:38 16 This is what, before, when we're talking about dependent
15:07:40 17 Claims 5 and 6, you're saying who is generating this
15:07:44 18 voltage. And Claim 5 was saying it doesn't have to be on
15:07:48 19 chip and Claim 6 was, no, no, I do want that generation on
15:07:52 20 chip. That's what this instructs here. If that helps.

15:07:58 21 The point that I'm making, Your Honor, is there
15:08:00 22 were two issues. Well, let me put the claim language back
15:08:03 23 up. I'm sorry that this is kind of confusing, but again,
15:08:07 24 this is the first time we've heard them say we're not trying
15:08:11 25 to read on just switching on and off, and that pragmatically

15:08:16 1 is what we need to hear and what we needed to hear for
15:08:17 2 months.

15:08:17 3 THE COURT: I don't understand in all the lead
15:08:19 4 up and through the briefing and then I asked the parties to
15:08:21 5 meet and confer again and it still didn't come -- I don't
15:08:24 6 know. Anyway. I guess we are where we are, but so you were
15:08:29 7 going to bring me back to like --

15:08:31 8 MR. BLUESTONE: Yeah. So if we look at their
15:08:34 9 construction, here's to kind of get to points of what are we
15:08:37 10 deciding here. Let's just get to what we have to get done.
15:08:39 11 Circuitry in which the voltage can be adjusted.

15:08:41 12 THE COURT: You didn't like that.

15:08:42 13 MR. BLUESTONE: We didn't like that.

15:08:44 14 THE COURT: What was the problem?

15:08:45 15 MR. BLUESTONE: Because based on their read of
15:08:47 16 the infringement contentions, they're talking arguably about
15:08:50 17 saying adjusted means just switching between low and high as
15:08:53 18 I show in Fig. 11.

15:08:57 19 THE COURT: So in other words, because I don't
15:09:00 20 think either of these constructions probably clearly in
15:09:03 21 words like fully set out whatever this dispute is. Here's
15:09:10 22 what you thought theirs meant. Circuitry in which the
15:09:14 23 voltage can be adjusted, and by that we mean, that could
15:09:19 24 include simply adjusting between low and high?

15:09:23 25 MR. BLUESTONE: Exactly, Your Honor.

15:09:26 1 THE COURT: To preset -- to particular preset
15:09:30 2 values?

15:09:31 3 MR. BLUESTONE: Correct. And that's why these
15:09:33 4 slides that we are going through, we're pointing out their
15:09:37 5 admission on slide 56 where they're saying it's not merely
15:09:40 6 on and off. And that's why in our brief we said if they're
15:09:45 7 conceding it's not merely on and off, why are we here for
15:09:50 8 '671? But I'm probably going too far for you

15:09:50 9 THE COURT: Because the thing you're saying
15:09:52 10 there is because if you understood what our product does,
15:09:59 11 what is it --

15:10:00 12 MR. BLUESTONE: I mean, if you had a basis to
15:10:02 13 say there was some intermediary voltage level, it should
15:10:06 14 have been in the infringement contentions. It's never been
15:10:09 15 there, so we've been assuming that they're reading it on the
15:10:12 16 prior art and we're here potentially talking past each other
15:10:16 17 until today. It's unfortunate.

15:10:18 18 THE COURT: But if -- and so in your
15:10:22 19 construction, conversely, which was "circuitry that provides
15:10:27 20 adjustable analog voltage levels for the control signal."

15:10:32 21 MR. BLUESTONE: Yes.

15:10:33 22 THE COURT: My guess is that in the words
15:10:35 23 "adjustable analog voltage levels" you were meaning to
15:10:40 24 convey something that sounds like got to be something more
15:10:44 25 than just low and high?

15:10:46 1 MR. BLUESTONE: Yeah.

15:10:46 2 THE COURT: Anything more than just low and
15:10:48 3 high. Is that what you're trying to convey?

15:10:51 4 MR. BLUESTONE: Trying to convey two points.
15:10:53 5 One, if you look at what they show in their infringement
15:10:56 6 contentions elucidating why we're at where we are. In 1236,
15:11:00 7 to point to just some digital control logic, generic
15:11:05 8 register, that have nothing to do with this. So we're
15:11:06 9 saying analog because in that pixel array, what is actually
15:11:12 10 being sent -- sorry, back to this slide. Find a Fig. 1 for
15:11:16 11 you. Everything in this -- I'm on slide 55. Everything
15:11:21 12 that's going on here with that, these little transistor
15:11:25 13 components are not digital signals, they're not ones and
15:11:30 14 zeros or discrete levels, it's all just literally mechanical
15:11:34 15 charge going on here. I will acquiesce the point, Your
15:11:38 16 Honor, that you do not need to put an analog in your claim
15:11:42 17 construction. We can resolve that the person of skill in
15:11:44 18 the art looking at what the control signal is doing knows
15:11:46 19 it's analog.

15:11:47 20 THE COURT: But what would be the words that you
15:11:49 21 would say, look, I think this term means this in words? And
15:11:52 22 I actually think it's possible, based on what I heard from
15:11:55 23 the other side, maybe they won't dispute it because we both
15:11:58 24 agree that whatever the term means it means something more
15:12:02 25 than just preset high and low voltage.

15:12:05 1 MR. BLUESTONE: Right.

15:12:05 2 THE COURT: What would the words be?

15:12:07 3 MR. BLUESTONE: So I'm going to separate that
15:12:09 4 into two parts. Let's ignore the predetermined for a quick
15:12:13 5 second, because that's in the claim language elsewhere and
15:12:16 6 just talk about what this means. Our proposal of circuitry
15:12:19 7 that provides adjustable voltage levels for the control
15:12:24 8 signal is acceptable. The difference there is just they
15:12:28 9 said in which voltage can be adjusted, which is far too
15:12:31 10 generic. If we're talking about the voltage levels for the
15:12:34 11 control signal as shown in Fig. 11, that works for this.
15:12:39 12 And when you're ready, I'll hit the second point to kind of
15:12:43 13 explain the predetermined if you like.

15:12:45 14 THE COURT: You say the construction could be
15:12:46 15 "which is circuitry that provides adjustable," and you take
15:12:49 16 out "analog," "adjustable voltage levels for the control
15:12:53 17 signal."

15:12:53 18 MR. BLUESTONE: Right. And based on Mr.
15:12:55 19 Gilman's representation that that doesn't cover merely on
15:12:58 20 and off, we're fine.

15:13:00 21 THE COURT: But if -- but if we were -- but if
15:13:05 22 we were attempting in words to articulate a meaning that
15:13:11 23 could not be the meaning that you say is precluded, what
15:13:16 24 else would you add to ensure that there's no
15:13:18 25 misunderstanding?

15:13:19 1 MR. BLUESTONE: Am I allowed to use a carve out
15:13:23 2 like "wherein it does not include," because that would be
15:13:27 3 "wherein it does not include merely switching on and off
15:13:30 4 voltage for the control signal."

15:13:33 5 THE COURT: Wherein the circuit? Wherein what
15:13:39 6 doesn't?

15:13:40 7 MR. BLUESTONE: "Wherein the variable voltage
15:13:42 8 circuitry does not merely switch between an on and off
15:13:46 9 control signal."

15:13:47 10 THE COURT: Not merely switch.

15:13:49 11 MR. BLUESTONE: I might want to massage the
15:13:52 12 language a little bit, but generally, yes.

15:13:55 13 THE COURT: On and off voltage signal?

15:13:59 14 MR. BLUESTONE: Yes.

15:13:59 15 THE COURT: So "circuitry that provides
15:14:01 16 adjustable voltage levels for the control signal wherein
15:14:04 17 that circuitry does not merely switch between an on and off
15:14:12 18 voltage."

15:14:12 19 MR. BLUESTONE: Level.

15:14:13 20 THE COURT: Level.

15:14:15 21 MR. BLUESTONE: Yep.

15:14:15 22 THE COURT: Okay. Let me ask you to pause there
15:14:18 23 and I'll just ask Mr. Gilman just to stand up briefly and
15:14:23 24 say, Mr. Gilman, hearing that proposal and what your
15:14:26 25 colleague is saying, do you think we have an O2 Micro

15:14:31 1 dispute about the meaning of the term?

15:14:35 2 MS. GAZA: I would just say to be clear, to make
15:14:38 3 sure that we understand it, would be "does not merely switch
15:14:42 4 between a singular on and a singular off," then I think
15:14:47 5 we're in agreement and there's know O2 Micro.

15:14:55 6 THE COURT: "A singular on, a singular off."
15:15:00 7 Mr. Bluestone, hearing that caveat, does that work.

15:15:03 8 MR. BLUESTONE: Generally, I think that's fine,
15:15:05 9 Your Honor, as long as I understand what they're saying
15:15:08 10 singular. I think Mr. Gilman -- yeah, I think generally
15:15:11 11 that's fine, just switching between on and off, yeah.

15:15:15 12 THE COURT: Okay. Mr. Gilman, do you believe
15:15:18 13 based on what you heard, do you think there's some prospect
15:15:21 14 that the parties could further meet and confer and come to
15:15:24 15 some joint agreement on the meaning of this term?

15:15:28 16 MR. GILMAN: To the extent we didn't just do
15:15:31 17 that, yes.

15:15:32 18 THE COURT: Yeah, maybe you just did. But all
15:15:35 19 right. So what I'll do then with regard to term three is
15:15:43 20 I'll -- I believe based on what's been said, I'm not sure
15:15:46 21 that we have an O2 Micro dispute. I think the clarity that
15:15:50 22 was brought by argument today, the parties may be able to
15:15:54 23 agree on what the meaning of this term is. I'll ask them to
15:15:56 24 further meet and confer after our hearing today and that by
15:16:00 25 no later than say two weeks from today's date send me a

15:16:05 1 joint letter that tells me whether or not they have agreed,
15:16:07 2 and if so, what the agreed upon construction is. Or for
15:16:14 3 some reason they haven't, very briefly describe the nature
15:16:18 4 of the dispute and if that scenario occurs, I can provide
15:16:22 5 guidance as to the prior term as to how they can address
15:16:25 6 that in the future. All right. Understood?

15:16:30 7 MR. GILMAN: Yes, Your Honor.

15:16:31 8 THE COURT: All right. Thank you.

15:16:32 9 Here's what I'm going to do. As I said, RESN is
15:16:34 10 out of time. But OmniVision has time left. Why don't we at
15:16:42 11 a minimum let OmniVision use that time to address term four?
15:16:49 12 And then I'll let them use whatever time they need to for
15:16:54 13 that. I'll give RESN just a couple minutes of response, but
15:16:58 14 I want to be faithful to the time allocation to make sure
15:17:01 15 it's fair, so not much more than that. At a minimum we'll
15:17:05 16 get through that term.

15:17:06 17 So let me turn to OmniVision's counsel. Who is
15:17:09 18 going to argue term four?

15:17:12 19 MR. BLUESTONE: The "tending to" argument, the
15:17:14 20 rest of the argument will be by me, Your Honor.

15:17:16 21 THE COURT: Yes, the "tending to" argument. All
15:17:18 22 right. Let's start there, and I'll turn to you, Mr.
15:17:23 23 Bluestone.

15:17:23 24 MR. BLUESTONE: So we're now dealing with the
15:17:25 25 the "tending to" language that's shown on the screen in

15:17:28 1 slide 67. That relates to the '145 and '274 Patents. So to
15:17:33 2 be clear, we're out of the '671 world, although we're free
15:17:37 3 to reference the same specification because it's common with
15:17:41 4 the exception of a summary of the invention section, so it
15:17:44 5 doesn't really matter what we cite to.

15:17:47 6 THE COURT: What do you think is a better -- we
15:17:49 7 may be -- I mean sometimes the parties cite to that both
15:17:53 8 specs for different points, so is there one you wish to use
15:17:54 9 initially as a representative claim.

15:17:56 10 MR. BLUESTONE: Yeah, I mean '671 --
15:17:58 11 representative claim, I would go with Claim 1 of the '145
15:18:02 12 Patent.

15:18:02 13 THE COURT: Okay.

15:18:04 14 MR. BLUESTONE: And start with that. The
15:18:05 15 language is slightly different, but the issue is generally
15:18:07 16 the same.

15:18:08 17 THE COURT: All right. So here the language is
15:18:15 18 and "in an absence of the control voltage, the control
15:18:20 19 terminal creates an electric field tending to repel the
15:18:24 20 electrons from a portion of the body by the control
15:18:30 21 terminal."

15:18:30 22 THE COURT: Correct.

15:18:32 23 THE COURT: Let's just take a step back. What
15:18:35 24 the heck are we talking about? What does -- we're going to
15:18:39 25 be talking about the "tending to" term and more particularly

15:18:43 1 we're going to be talking about concepts of like repelling
15:18:48 2 certain electrons or causing certain electrons to move in a
15:18:53 3 particular direction. Well, let's take a step back and
15:18:56 4 remind ourselves what the heck are we talking about in the
15:18:59 5 language of this invention? What electrons and where are
15:19:03 6 they coming about and why do we want to move them? That
15:19:07 7 would be a good place to start.

15:19:08 8 MR. BLUESTONE: Thank you, Your Honor. So I'm
15:19:10 9 on slide 19 and I'm looking at this Fig. 31. Both of these
15:19:14 10 claims are reciting -- sorry, I turned off the output
15:19:18 11 button. I apologize. So I have a highlighted figure of
15:19:25 12 Fig. 31, and you see kind of this purple color where the
15:19:29 13 arrow is pointing to. This is the control terminal. We're
15:19:33 14 not talking about what's happening below the surface. All
15:19:36 15 these dashed lines you see where it says gate oxide, Your
15:19:40 16 Honor, on the left side right above 701?

15:19:43 17 THE COURT: Yeah.

15:19:45 18 MR. BLUESTONE: Over here? There's a layer
15:19:48 19 that's going on that's an insulating layer. The way --

15:19:53 20 THE COURT: Let's -- this is -- you're talking a
15:19:57 21 generic control terminal. It's the transfer gate?

15:20:02 22 MR. BLUESTONE: Correct.

15:20:02 23 THE COURT: So it's got something to do
15:20:04 24 conceptually with what maybe wasn't depicted particularly
15:20:08 25 well in Fig. 1?

15:20:10 1 MR. BLUESTONE: Yes, exactly. So I'm going to
15:20:12 2 go back to slide 17. I've just highlight in blue. We're
15:20:16 3 talking about this is schematically showing the transfer
15:20:19 4 gate. The transfer gate and the control terminal are the
15:20:22 5 same thing. They're synonymous.

15:20:24 6 THE COURT: Okay.

15:20:25 7 MR. BLUESTONE: You can use whatever term you
15:20:27 8 want, it will mean the same thing here.

15:20:29 9 THE COURT: The thing that's going to go up and
15:20:31 10 down at potentially different voltages, it's going to allow
15:20:35 11 electrical signals to go from the pixel to the diffusion?

15:20:40 12 THE COURT: Correct. So I'm going to show Fig.
15:20:43 13 14 on the next slide, slide 18. And this might have to be
15:20:50 14 zoomed up a little. Bit you see where it says TG 177 at the
15:20:56 15 top?

15:20:57 16 THE COURT: Yes.

15:20:57 17 MR. BLUESTONE: That is where the transfer gate
15:21:01 18 is shown here. I'm going to go back to this in a quick
15:21:04 19 second and go to slide 19 and show you where they're
15:21:06 20 actually showing the mechanical operation, which is in Fig.
15:21:09 21 31. It's this highlighted thing in purple.

15:21:13 22 THE COURT: That's the transfer gate?

15:21:15 23 MR. BLUESTONE: Nope. That is the control
15:21:20 24 terminal or transfer gate.

15:21:22 25 THE COURT: That is the transfer gate?

15:21:24 1 THE COURT: I'm sorry, that's the transfer gate.
15:21:30 2 And so the diffusion -- I know the transfer gate is between
15:21:35 3 the diffusion. I see the word floating diffusion. It's to
15:21:40 4 the left.

15:21:40 5 MR. BLUESTONE: Yep.

15:21:41 6 THE COURT: And then and our pixel, is that not
15:21:47 7 depicted?

15:21:48 8 MR. BLUESTONE: Yeah, this isn't a good picture
15:21:50 9 showing the pixel. I can pull up something from the '671
15:21:53 10 Patent.

15:21:53 11 THE COURT: It's fine. I'm guessing the pixel
15:21:56 12 is somewhere on the right?

15:21:57 13 MR. BLUESTONE: Correct.

15:21:58 14 THE COURT: Okay.

15:21:59 15 MR. BLUESTONE: This is probably a better view,
15:22:02 16 Fig. 17, back to the previous slide. So ignore -- the blue
15:22:07 17 is going to be relevant to other stuff for now, but you can
15:22:10 18 ignore it for purposes of this discussion here. After using
15:22:14 19 the floating diffusion node, on the right where it says
15:22:18 20 n-type deep implant 715, above that PD implant, that's the
15:22:22 21 photo diode.

15:22:23 22 THE COURT: Okay.

15:22:24 23 MR. BLUESTONE: So if we were to merge 31 and
15:22:27 24 14, imagine that I have that purple block where it says .2
15:22:33 25 micrometers. When I apply a voltage there, there's an

15:22:38 1 insulating layer in between. That voltage creates an
15:22:41 2 electric field. The electric field draws in electrons to
15:22:47 3 the top and causes a path that doesn't exist right now, but
15:22:51 4 will cause a path to exist that will essentially close the
15:22:57 5 gap here. So this is relevant to "in the absence of a
15:23:01 6 voltage" language. By applying a voltage above, which I'll
15:23:05 7 try to markup in blue. I apply a voltage at this control
15:23:10 8 terminal here, this will create this channel which will
15:23:16 9 allow charge to pass through. In the absence of that charge
15:23:20 10 passing through, there's no electric field, and it's going
15:23:23 11 to be two separate elements and the charge will stay in the
15:23:26 12 respective places. This is a lot of background. We
15:23:29 13 probably don't need to resolve the "tending to" issue, but I
15:23:34 14 just wanted to give you that context.

15:23:35 15 THE COURT: Voltage is going to be applied to
15:23:38 16 the transfer gate, which is going to cause the transfer gate
15:23:40 17 to move, right?

15:23:42 18 MR. BLUESTONE: No. The transfer gate doesn't
15:23:44 19 move. So the magic, if you will, of a transistor is you're
15:23:48 20 not having charge going from that top point. Let me do the
15:23:52 21 next slide 31. Do you see that hash mark lines here? Just
15:23:58 22 trying to highlight this in green. Those little hash points
15:24:02 23 here, this is an insulating layer. Charge does not go,
15:24:06 24 physical -- like imagine you have -- you're sticking your
15:24:10 25 finger in the electric socket, right, there's a charge that

15:24:13 1 passes to your finger. That's not what's happening. This
15:24:16 2 is applying a charge which creates an electric field, that
15:24:19 3 electric field passes through the insulator, but individual
15:24:22 4 charges do not. This is not essential for the
15:24:24 5 indefiniteness part, but that is how it works.

15:24:28 6 THE COURT: Okay.

15:24:29 7 MR. BLUESTONE: So the claim language -- so by
15:24:32 8 way of background, remember what I said, in the absence of a
15:24:36 9 control voltage, the control voltage being applied here is
15:24:39 10 what turns on and off the switch. By applying a voltage to
15:24:43 11 this terminal, I'm closing the gap between these two
15:24:47 12 components and letting charge flow below. So if it was a
15:24:50 13 component here and a component here, when I apply a voltage
15:24:53 14 it makes a path here and now these guys can go one way or
15:24:57 15 the other.

15:25:00 16 THE COURT: I thought -- I thought that was what
15:25:04 17 it was suggesting and I thought maybe I had it wrong, but
15:25:06 18 applying a voltage of a certain type has an impact on the
15:25:12 19 transfer gate?

15:25:13 20 MR. BLUESTONE: You are applying voltage to the
15:25:15 21 transfer gate. The transfer gate -- it's called moss vats
15:25:20 22 back in the day because it was metal. Now you use something
15:25:24 23 called poly. Distinction is irrelevant to what we're
15:25:26 24 talking about now. All it is is let's say a point where you
15:25:29 25 apply the volt, it's not doing anything generically, just

15:25:33 1 receiving a voltage.

15:25:34 2 THE COURT: Maybe another way to ask it. Is the
15:25:37 3 thing that's the transfer gate up there, the thing in brown,
15:25:40 4 right, that's the transfer gate?

15:25:41 5 MR. BLUESTONE: Yeah, that maroon-ish color.

15:25:44 6 THE COURT: Maroon, okay.

15:25:46 7 MR. BLUESTONE: Whatever it would be.

15:25:47 8 THE COURT: In that, in a scenario now where
15:25:50 9 it's in an off scenario where no current could go through
15:25:54 10 from the pixel to the diffusion.

15:25:57 11 MR. BLUESTONE: It is just structure right now.
15:25:59 12 It is not reciting what's happening in an on state. Those
15:26:05 13 little gaps, that shape of all those little balloon-ish
15:26:10 14 things underneath are going to change to form a channel.

15:26:13 15 THE COURT: Okay. So it's not an on state.

15:26:18 16 MR. BLUESTONE: Let me pull -- there's a picture
15:26:20 17 that Dr. Carley had used which might elucidate this in the
15:26:25 18 briefs. Do you guys remember what page that was? There it
15:26:30 19 is. I found it. It's on page 64. This is a generic
15:26:36 20 representation. We took issue with it, so we're just
15:26:39 21 talking about general operation, so I'll use it. This is on
15:26:42 22 the joint claim construction brief, 64, so I'm going to try
15:26:48 23 to mark this up. The transfer gate is the blue thing that
15:26:51 24 they've highlighted. There's an insulating layer in pink,
15:26:54 25 so that's telling you charge is not passing from the

15:26:59 1 transfer gate to what's labeled as the body. Now, when I
15:27:02 2 apply a voltage to this transfer gate here, let's say I put
15:27:08 3 two volts in and apply it to here, what's going to happen is
15:27:11 4 it's going to create an electric field, which is going to
15:27:14 5 draw the charges here. And because it's an n+ region,
15:27:18 6 again, again this would take a lot of time to do the
15:27:21 7 details, what that's going to do is create this and make
15:27:24 8 this act like another n+ region, so it's building that
15:27:29 9 drawbridge analogy that we talked about now. I'm connecting
15:27:32 10 the source to the drain and charge going from A to B.
15:27:35 11 That's what's pushing down the drawbridge, the electric
15:27:40 12 field which is generated by the voltage applied to the
15:27:42 13 transfer gate.

15:27:43 14 THE COURT: So by applying voltage to the
15:27:46 15 transfer gate, the transfer gate itself, it's not physically
15:27:52 16 moving or opening or instead something is going to happen
15:27:59 17 somehow that will allow electrical current to go from one
15:28:08 18 side of the transfer gate to the other?

15:28:10 19 MR. BLUESTONE: Exactly. Exactly. When I apply
15:28:13 20 the voltage it looks like this markup where I've drawn kind
15:28:16 21 of a line between the source and the drain. This is the
15:28:20 22 closed switch condition.

15:28:22 23 THE COURT: That's the closed.

15:28:25 24 MR. BLUESTONE: Yeah, because I've applied the
15:28:26 25 voltage. When you don't apply the voltage, it's just that

15:28:32 1 gap.

15:28:33 2 THE COURT: All right.

15:28:33 3 MR. BLUESTONE: Charge is not going to flow from
15:28:35 4 N to P to N.

15:28:37 5 THE COURT: Ultimately charge is not flowing?

15:28:39 6 MR. BLUESTONE: Right.

15:28:40 7 THE COURT: Closed means charge is flowing?

15:28:42 8 MR. BLUESTONE: Yes.

15:28:43 9 THE COURT: And you were showing like an example
15:28:45 10 where you're applying two volts. There's like different
15:28:49 11 voltages.

15:28:50 12 MR. BLUESTONE: Yes.

15:28:52 13 THE COURT: The more the voltage, does that mean
15:28:55 14 more charge flows or how does the variable voltage impact
15:28:59 15 the amount of charge flowing?

15:29:01 16 MR. BLUESTONE: So it's a good question. There
15:29:03 17 are circumstances in which you basically hit a threshold
15:29:06 18 where you're creating that channel between the two. And I'm
15:29:09 19 not so concerned about -- sorry -- once I've created the
15:29:13 20 channel on a sufficient level, I kind of don't care about
15:29:17 21 the voltage that much any more in a generic context.

15:29:22 22 THE COURT: Isn't there something about how they
15:29:22 23 get the voltages, it's important because you might want to
15:29:24 24 only let this much in or that much in or no?

15:29:28 25 MR. BLUESTONE: Yes. There were different

15:29:30 1 things for that particular example in which their solution
15:29:34 2 was instead of just switching it earlier or later or
15:29:37 3 something like that, they're going to try and change that
15:29:40 4 height and let some bleed through.

15:29:42 5 THE COURT: Okay. All right. So by applying
15:29:45 6 the voltage to the transfer gate --

15:29:47 7 MR. BLUESTONE: Yeah.

15:29:47 8 THE COURT: -- you are going to create -- is it
15:29:50 9 right to say we're creating an electrical field --

15:29:53 10 MR. BLUESTONE: Yes.

15:29:54 11 THE COURT: -- that will itself permit charge to
15:29:58 12 flow from one part of the structure, i.e., a part where the
15:30:04 13 pixel is, over to the other part, the part near where the
15:30:08 14 diffusion is?

15:30:10 15 MR. BLUESTONE: Correct. That is not what I'm
15:30:11 16 highlighting in blue in this slide 17. Everything above in
15:30:16 17 this clause in slide 17 starts with an electrical terminal
15:30:21 18 electrically coupled to the body is that generic
15:30:24 19 circumstance. I'm going to apply an electric field, it's
15:30:27 20 going to open and close the circuit. In the blue, it's now
15:30:33 21 saying I now want to do something that's the opposite. I'm
15:30:40 22 going to try and keep the switch open, the drawbridge up.
15:30:44 23 And the only thing this claim tells me, magically, so to
15:30:49 24 speak, in the claim, it's not telling me how I do it. I'm
15:30:52 25 going to go back to slide 19. This generic control terminal

15:30:58 1 now needs to have some magical ability, in the absence of a
15:31:01 2 control voltage, the way you normally turn on the switch, to
15:31:05 3 now create an electric field that's going to do the
15:31:08 4 opposite. It's going to repel the electrons. And our issue
15:31:15 5 with this claim and the reason why we're saying "tending to"
15:31:19 6 is the issue in this claim.

15:31:21 7 THE COURT: Repel what electrons?

15:31:25 8 MR. BLUESTONE: The electrons that are generated
15:31:27 9 it says earlier in the claim under the first subpart up
15:31:30 10 here.

15:31:30 11 THE COURT: The ones that were generated by
15:31:32 12 applying voltage to the --

15:31:35 13 MR. BLUESTONE: Nope.

15:31:36 14 THE COURT: -- transfer gate?

15:31:37 15 MR. BLUESTONE: Yeah, it's confusing. It's
15:31:40 16 the -- there we go. The electrons generated are up here.
15:32:00 17 It's the electrons generated by the photons in the photo
15:32:05 18 diode 210 here. That's what it's saying it wants to do.

15:32:16 19 So all of this is background. I want to
15:32:19 20 synthesize it down to what the real problem with this claim
15:32:22 21 is. Hopefully it's helpful. I just don't want to get lost
15:32:26 22 into the technicalities, because it's actually probably not
15:32:29 23 essential for the indefiniteness determination, but
15:32:32 24 hopefully that's helpful.

15:32:33 25 THE COURT: So we're repelling something about

15:32:34 1 the light that came in through the photo diode?

15:32:37 2 MR. BLUESTONE: Yes.

15:32:37 3 THE COURT: Okay.

15:32:38 4 MR. BLUESTONE: Yes. So we've got this
15:32:41 5 terminal. We now how it generically is supposed to work. I
15:32:45 6 apply voltage, it creates an electric field, that electric
15:32:49 7 field draws the electrons up and creates the channel. This
15:32:53 8 now is purely functional language to this structure, not
15:32:57 9 telling me what it's composed of, how it's supposed to do
15:33:02 10 this. There is some generic discussion in the spec, but the
15:33:04 11 claim is not telling us. It's purely functional. In the
15:33:07 12 absence of a control voltage, a control terminal is going to
15:33:10 13 create an electric field tending to repel the electrons in
15:33:15 14 the portion of the body by the control terminal. In
15:33:18 15 addition to it just being purely functional language, we
15:33:21 16 have a really big problem. How do I know when an electric
15:33:25 17 field is sufficiently tending to repel? Dr. Carley admits,
15:33:34 18 everyone agrees that as a scientific principle an electric
15:33:37 19 field repels charge. If I put a charge in the electric
15:33:41 20 field, it will repel it. But now we have a term of degree.

15:33:45 21 And I'll go back to the slides that kind of hit
15:33:49 22 on this point more specifically. I'll go to slide -- there
15:34:05 23 we go. Slide 70. Now we have determinant of a degree and
15:34:10 24 it's similar, I think, Your Honor, to the analysis in the
15:34:14 25 *Integra* case where there was an "about" issue and "about"

15:34:16 1 had something that wasn't giving sufficient clarity and
15:34:19 2 obviously it relates to the facts of each case and each
15:34:23 3 patent is its own universe that we have to walk into. But
15:34:28 4 the problem we have, it's not merely whether there's an
15:34:32 5 electric field that's not sufficient for me to determine
15:34:35 6 whether I'm in or out of the scope of this claim. It's not
15:34:39 7 whether that electric field actually causes movement. I
15:34:43 8 don't know that. Is there actually an electric field that's
15:34:47 9 doing anything? It's tending to. I don't know. We have
15:34:51 10 whether an electric field is tending to cause movement of
15:34:54 11 the electrons as recited.

15:34:56 12 THE COURT: This electric field, it's being
15:34:58 13 created by the transfer gate -- you say control terminal is
15:35:05 14 a synonym for transfer gate?

15:35:07 15 MR. BLUESTONE: Yes.

15:35:08 16 THE COURT: So somehow the transfer gate is
15:35:10 17 creating this electric field?

15:35:11 18 MR. BLUESTONE: Yep. It's going in the opposite
15:35:13 19 way.

15:35:13 20 THE COURT: And it's repelling electrons coming
15:35:16 21 in from the diode?

15:35:20 22 MR. BLUESTONE: Repelling electrons from the
15:35:22 23 channel that is guiding whether or not it's going to go from
15:35:25 24 the photo diode to the floating diffusion or not. So if we
15:35:30 25 picture your analogy, and I'm in a medieval castle and the

15:35:35 1 photo diode is the moat, the transfer gate is operating as
15:35:39 2 that drawbridge. Can I let things go out.

15:35:43 3 THE COURT: Right. But I'm asking, I think the
15:35:46 4 thing that is being -- that is tending to be repelled,
15:35:49 5 they're electrons?

15:35:52 6 MR. BLUESTONE: Yes.

15:35:52 7 THE COURT: I thought you told me they were
15:35:56 8 electrons coming from the photo diode relating to the light
15:35:57 9 that's coming in.

15:35:59 10 MR. BLUESTONE: Great point. That's why this
15:36:01 11 claim is also additionally indefinite. Electrons are
15:36:04 12 electrons in there. It doesn't know, when you're applying
15:36:05 13 an electric field, whether or not you're going to repel the
15:36:06 14 electrons that came from the photo diode somehow or whether
15:36:11 15 you're trying to repel generic electrons that are floating
15:36:15 16 around in that space.

15:36:16 17 THE COURT: Okay. But in any event, this
15:36:23 18 control terminal is going to create an electrical field and
15:36:27 19 that field is going to tend to repel some kind of electrons?

15:36:30 20 MR. BLUESTONE: Yes.

15:36:31 21 THE COURT: Coming from somewhere and your big
15:36:33 22 gripe is it just says "tending to repel," but we don't know
15:36:37 23 what that means.

15:36:38 24 MR. BLUESTONE: Right. I know what it means to
15:36:40 25 repel, I don't know what it means for it to be "tending to"

15:36:43 1 repel. And we're dealing with patent claims and a purely
15:36:47 2 functional claim limitation that has no specific structure
15:36:51 3 to guide me when I do or do not read into the claim. So Ms.
15:36:58 4 Lynch gave a great example that I'll share with you. I
15:36:58 5 asked her, did you have a sandwich for lunch. And she says
15:37:01 6 I tend to have sandwiches. She hasn't given me enough scope
15:37:06 7 of whether she's eaten that sandwich or not. Tend to is
15:37:10 8 this probability amorphous thing that is subjective. What
15:37:13 9 does that mean? We have no reasonable scope to define it.

15:37:16 10 THE COURT: Now, what do we think they think it
15:37:19 11 means? Let's look at their proposed construction.

15:37:23 12 MR. BLUESTONE: Great question. I think if
15:37:26 13 there's any most simplistic best facts that we have that
15:37:30 14 makes your job as easy as possible to indefiniteness, it's
15:37:34 15 the fact that Dr. Carley himself -- I'm on slide 73 -- is
15:37:37 16 writing the term out of the claim. They're proposed
15:37:40 17 construction is an electric -- "electric field tending to
15:37:44 18 repel the electrons" is an "electric field that repels."

15:37:48 19 THE COURT: Except I'm not totally sure that's
15:37:51 20 where they ended. I'm being a little facetious because the
15:37:57 21 place we'd look of course is the construction, so it's not
15:38:01 22 going to be an indefinite term, so we're going to look in
15:38:02 23 that box, but we don't have any construction, because we
15:38:04 24 have nothing in quotes, so we don't know for sure, so we're
15:38:08 25 guessing.

15:38:09 1 MR. BLUESTONE: But we could have Dr. Carley's
15:38:12 2 part of the testimony.

15:38:13 3 THE COURT: He says that and then there's some
15:38:15 4 back and forth and then near the end, don't they start to
15:38:18 5 say something that sounds like, well, any, you know, at
15:38:21 6 least some, but not all?

15:38:23 7 MR. BLUESTONE: Yeah, that's right. That's a
15:38:25 8 different issue, but yes.

15:38:26 9 THE COURT: Well, is that the construction or is
15:38:29 10 it, you know -- like, I don't think we know for sure,
15:38:32 11 because we don't have a fixed proposal on it, but so we have
15:38:35 12 to kind of read in the briefing and figure out what is it
15:38:38 13 that they think this means. So do you think it's Dr.
15:38:44 14 Carley's explanation up here?

15:38:45 15 MR. BLUESTONE: Dr. Carley is their technical
15:38:47 16 expert. He has be asked what it means. He has said his
15:38:50 17 resolution for the '145 Patent of what this means is to read
15:38:54 18 out the term "tending to" all together. He may not be
15:38:57 19 intending to do this, Your Honor, but the law is the law.
15:39:01 20 This happened, I think, again -- I think it was *Integra*,
15:39:04 21 that case, but the Federal Circuit, the Federal Circuit says
15:39:10 22 you can't read out a claim term. So even if we didn't know
15:39:14 23 what any of this means, I'm on slide 79, jumping around a
15:39:21 24 little bit. Even if no one knows what any of this means,
15:39:24 25 the purely mechanical act of them proposing a construction

15:39:27 1 that renders the claim term meaningless is definitive
15:39:31 2 evidence that it's indefinite. Now, obviously the Court is
15:39:35 3 not going to feel comfortable just based on what you might
4 perceive as a mistake, but we're going to talk about some
15:39:40 5 more, the lack of an objective standard in the intrinsic
15:39:43 6 evidence. But the fact that Dr. Carley is saying, I would
15:39:47 7 just ignore this language, is telling you he can't come up
15:39:50 8 with a construction for what it means.

15:39:51 9 THE COURT: So I mean, maybe we'll put it
15:39:54 10 together. In paragraph 77 of Dr. Carley's, it's his opening
15:39:58 11 declaration. He posits, "A POSITA would therefore
15:40:02 12 understand the meaning of 'tending to repel electrons' would
15:40:05 13 mean an electric field that repels electrons away from a
15:40:10 14 particular location or region." I think that begs the
15:40:11 15 question, what does that mean? What do you understand -- so
15:40:18 16 I understand that what is a problem with that, from your
15:40:21 17 perspective? It's that, you think it reads the words
15:40:25 18 "tending to" out of the claim.

15:40:27 19 MR. BLUESTONE: Correct.

15:40:27 20 THE COURT: Because if you took it out of the
15:40:33 21 claim, you'd have the words "repel electrons," so it gives
15:40:37 22 no meaning to the words "tending to."

15:40:39 23 MR. BLUESTONE: Exactly.

15:40:40 24 THE COURT: But what do you think "an electrical
15:40:42 25 field that repels electrons" means? Say "tending to" wasn't

15:40:47 1 in it, what do you think that would literally mean, read
15:40:50 2 literally?

15:40:51 3 MR. BLUESTONE: Now, there would still be other
15:40:53 4 problems with the claim. But that said, it would mean that
15:40:56 5 that electric field is of -- will actually repel electrons.
15:41:02 6 This is standard scientific principles. You put a charge in
15:41:05 7 an electric field, it will move it.

15:41:07 8 THE COURT: But let's say there -- how many
15:41:11 9 electrons at any one time do you think are hanging out?

15:41:15 10 MR. BLUESTONE: Oh, millions, I'm sure.

15:41:17 11 THE COURT: Okay. So let's say the construction
15:41:19 12 is, and, you know, I disagree with you about how it's
15:41:22 13 reading out and stuff, let's say it's an electric field that
15:41:26 14 repels electrons, what is the base bottom limit that that
15:41:30 15 requires? Does it literally require -- well, as long as it
15:41:37 16 says "repels electrons," so as long as more than two
15:41:40 17 electrons, two or more electrons are repelled? In other
15:41:44 18 words, do you think this means any or a certain amount?

15:41:50 19 MR. BLUESTONE: No, I think it means any. If I
15:41:53 20 put a charge, it's scientific principles and both experts
15:41:55 21 agree to this. Dr. Carley says it, Dr. Theuwissen says
15:42:00 22 this. An electric field will act on the electrons and move
15:42:04 23 them. If we're going down this path where this was the
15:42:08 24 claim language you'd have an additional issue where how do I
15:42:12 25 know that it's going in this right direction and where is it

15:42:14 1 even going.

15:42:15 2 THE COURT: The reason I ask you is maybe this
15:42:17 3 is the part of the briefing and their reply briefing where I
15:42:21 4 wondered if they were making the same point in a different
15:42:24 5 way or a slightly different way. And it's in -- on page 55
15:42:30 6 of the joint brief. And it's the first paragraph of the
15:42:41 7 reply. And they start out by saying that you have failed to
15:42:45 8 show indefiniteness. And then they talk about how they
15:42:50 9 demonstrated in their opening brief, including through Dr.
15:42:54 10 Carley's testimony, that "tending to" is sufficiently there,
15:43:01 11 no restricting article boundaries required. And then they
15:43:04 12 say, "As Dr. Carley explained the term, 'tending to' is used
15:43:07 13 in the art because it's a fundamental part of electrical
15:43:11 14 circuit design, that not every single electron would move in
15:43:16 15 the same direction, e.g., from the bottom or from a portion
15:43:19 16 of the body." And then they say, "Instead it is a basic
15:43:22 17 concept in semiconductor design in the industry that
15:43:26 18 electric fields such as those claimed here will generally
15:43:29 19 cause movement of electrons, but not all electrons and
15:43:33 20 therefore a term like 'tending to' is proper." So they
15:43:38 21 highlighted it in bold and italics, "but not all electrons."

15:43:44 22 Do you think that is saying something that is in
15:43:47 23 line with their -- Dr. Carley's proposal that this term
15:43:53 24 means repel electrons or different?

15:43:55 25 MR. BLUESTONE: No. I mean it's a fundamental

15:43:57 1 problem because we're talking about patent claims and how do
15:44:01 2 I know whether I infringe or not? His answer here is not
15:44:05 3 all electrons, may one electron, maybe two electrons, maybe
15:44:06 4 ten. Well, electrons move randomly all the time. There's
15:44:10 5 electrons in this table, in this chair, everywhere, that are
15:44:15 6 moving in an every which way direction. I need an electric
15:44:19 7 field that's going to corral them to where they're supposed
15:44:23 8 to go. They're always moving. Right? It's just a random
15:44:24 9 part of the universe, Your Honor. I'm sorry we're going
15:44:25 10 into quantum physics. But they're randomly moving
15:44:31 11 everywhere. So if he wants to say it's generally understood
15:44:35 12 that an electric field would move an electron, it hasn't
15:44:39 13 solved our structural problem. What is this control
15:44:43 14 terminal supposed to be? It's something that tends to move
15:44:45 15 an electric field. How do I measure whether you even
15:44:48 16 infringe that. Electrons are always moving.

15:44:51 17 THE COURT: I guess maybe what I was asking,
15:44:53 18 though, I think you thought that Dr. Carley's articulation
15:45:01 19 of what the term means, which is "an electric field that
15:45:05 20 repels electrons," I think you said, Judge, what that
15:45:08 21 literally means, in terms of what would encompass
15:45:12 22 infringement, any repelling of any electrons. Isn't that
15:45:15 23 what you just said previously? When Dr. Carley says the
15:45:21 24 term means "an electric field that repels electrons away
15:45:26 25 from a particular location or region," that's his proposed

15:45:30 1 definition. I said what to you think that means, in other
15:45:34 2 words, what would be the bare minimum that would satisfy
15:45:36 3 that, and I think you said, well, a field that repelled any
15:45:39 4 electrons. Is that right or is that --

15:45:43 5 MR. BLUESTONE: It would generally apply to all
15:45:45 6 the of the electrons. The problem is we're talking in two
15:45:49 7 different paradigms. We're talking about a patent claim
15:45:51 8 where I'm looking at a product and how do I know that this
15:45:54 9 structure will sufficiently cause a function or cause an
15:45:57 10 action to occur. They could have claimed it with doping.
15:45:59 11 They could have claimed it with structural things that we
15:46:02 12 can point to and measure. How do I know how deep that
15:46:05 13 electrical field is going? Where does it have to go? It
15:46:09 14 becomes almost a purely subjective test. I appreciate Your
15:46:13 15 Honor's point about what if they don't have "tending to,"
15:46:16 16 but they did put "tending to." It's a term of degree that's
15:46:20 17 making it fuzzy to the point there is no objective baseline
15:46:24 18 test.

15:46:24 19 We have, on slide 78, all the evidence from Dr.
15:46:28 20 Theuwissen that's saying this isn't what you would do. How
15:46:32 21 do we make sense of when "tending to" is satisfied?

15:46:35 22 THE COURT: I'm sorry. And I'm not -- I'm sure
15:46:39 23 it's about articulating, but I'm not understanding your
15:46:42 24 answer to my question. So again, I'll go back to paragraph
15:46:45 25 77 from Dr. Carley's report. It's the paragraph where Dr.

15:46:50 1 Carley, I think you said, is providing the construction, a
15:46:52 2 construction that of course should have been in the box
15:46:54 3 where we have claim constructions. It wasn't, but we can
15:46:58 4 look and hunt and try to figure out what do they think this
15:47:01 5 means. Well, I think you said, Judge, I think the best
15:47:05 6 place where it looks like they're saying what they think the
15:47:08 7 term means is paragraph 77. Am I right so far?

15:47:12 8 MR. BLUESTONE: Yes. I think that's the most
15:47:13 9 reliable source of what their construction is from Dr.
15:47:17 10 Carley.

15:47:17 11 THE COURT: I know you think that this proposed
15:47:20 12 construction is wrong, it should not be adopted because you
15:47:23 13 think it reads out the words "tending to." I'm
15:47:26 14 understanding that, but I want to get a sense of what you
15:47:31 15 think the construction itself means. Okay. So their
15:47:35 16 construction now, "tending to repel electrons," if this is
15:47:39 17 correct, and what paragraph 77 is meant to say is, is "an
15:47:42 18 electric field that repels electrons away from a particular
15:47:45 19 location or region."

15:47:46 20 Okay. Say that I adopted that construction,
15:47:49 21 right? The question is what would it mean? In other words,
15:47:52 22 what would suffice to infringe? Right? That's the
15:47:58 23 question. Do you think that means, when it says "that
15:48:01 24 repels electrons," that means repels all the electrons,
15:48:05 25 every single electron from the particular region? Or do you

15:48:09 1 think it means, Judge, no, I actually think at the lowest
15:48:13 2 level, the lowest thing it could do but that would actually
15:48:17 3 infringe, if it just simply repelled one electron. Which do
15:48:22 4 you think it is.

15:48:23 5 MR. BLUESTONE: So I think your question, just
15:48:24 6 to make sure I understand, Your Honor. So I apologies if I
15:48:25 7 wasn't answering previously. In 77, between "that repels
15:48:29 8 electrons," the question is which electrons, what electrons
15:48:33 9 and how many electrons?

15:48:34 10 THE COURT: I'm not even talking about which.
15:48:35 11 Let's just say, think about a world where -- let's stipulate
15:48:39 12 there's a whole bunch of electrons that are heading toward
15:48:44 13 our electrical field or are in the mix, in the area around
15:48:48 14 our electrical field. Say there's a million of them, okay?
15:48:54 15 And our construction, we got to have this electrical field,
15:48:57 16 it has to be tending to repel the electrons from a portion
15:49:00 17 of the body of the control terminal. So stipulating within
15:49:04 18 this portion of the body of the control terminal, it's got a
15:49:08 19 million electrons in it and we know their proposed
15:49:11 20 construction for this term is "an electric field that repels
15:49:12 21 electrons away from a particular location or region." We've
15:49:15 22 got a million of them. What do you think they mean or what
15:49:19 23 do you understand this phraseology to mean? What would
15:49:22 24 suffice to meet the limitation? We've got a million
15:49:25 25 electrons. To repel electrons away from a particular

15:49:31 1 region, do all of them have to be repelled or just one of
15:49:35 2 them?

15:49:35 3 MR. BLUESTONE: I think this is exactly the
15:49:36 4 problem that even if the language didn't have "tending
15:49:39 5 to" --

15:49:41 6 THE COURT: What do you think they say it means,
15:49:43 7 because I think they say it means "but not all electrons."
15:49:48 8 So in other words, I think maybe what they're saying is
15:49:53 9 repels electrons, but doesn't have to be all of them, just
15:49:58 10 something less than all. I ask because like if, if tending
15:50:04 11 to repel electrons in the claim, if repel electrons in the
15:50:12 12 claim included every single electron and then the phrase was
15:50:15 13 "tending to repel electrons," "tending to" maybe could mean,
15:50:19 14 hey, hey, it doesn't have to be absolutely all of them, it
15:50:23 15 could be a little less than all and it could have meaning.
15:50:25 16 And I wonder if that's what they're suggesting. But I want
15:50:28 17 to know what you think because you guys met and conferred
15:50:31 18 about this really substantively and hard and you know what
15:50:34 19 the other side means, right? What is it?

15:50:36 20 MR. BLUESTONE: I don't want to deflect the
15:50:38 21 blame on that. Our position was indefinite. We explained
15:50:40 22 why. You can see it in our opening brief where we tried to
15:50:45 23 disclose to them the various reasons why we thought it was a
15:50:48 24 problem. And we don't have a construction from them. So at
15:50:51 25 this point I don't know what Dr. Carley contact means by

15:50:55 1 that, and I would say it still raises problems to exactly
15:50:58 2 the point you're trying to figure out, how many electrons
15:51:03 3 and what are we talking about. It isn't the way it should
15:51:06 4 have been claimed in the first place. How do I know in the
15:51:07 5 absence of a voltage it's creating an electric field that
15:51:08 6 repels it, how many I even testing for this? Right?

15:51:12 7 THE COURT: Right.

15:51:13 8 MR. BLUESTONE: What am I repelling?

15:51:14 9 THE COURT: I guess all I'm suggesting is I
15:51:16 10 think your major criticism with this construction is that it
15:51:20 11 reads out "tending to."

15:51:22 12 MR. BLUESTONE: Yes.

15:51:22 13 THE COURT: But I wonder if what they're
15:51:24 14 suggesting, I could be wrong, is that the phrase "repel
15:51:28 15 electrons" suggests all, and "tending to" is like a -- it's
15:51:33 16 like a somewhat of a limiter that's, hey. Hey, it doesn't
15:51:37 17 have to be all, just anything less than all.

15:51:39 18 MR. BLUESTONE: That's exactly -- okay. So now
15:51:42 19 we're in the term degree universe. This is like a
15:51:45 20 substantial, substantially some of the electrons. "Tending
15:51:48 21 to" doesn't give me anything. So I want to go down the
15:51:51 22 universe of what you're saying, Your Honor, and follow this
15:51:53 23 path. A term of degree requires an objective baseline. We
15:51:58 24 need to have some way that not Dr. Carley says it's five
15:52:02 25 electrons and Dr. Smith says it's a hundred and Dr.

15:52:06 1 Theuwissen says it's a million. This is where the law goes
15:52:09 2 on this, that you had need to have an objective standard
15:52:12 3 about what "tending to" means.

15:52:14 4 THE COURT: I guess I'm asking in this world the
15:52:16 5 standard could be anything less than all, right?

15:52:18 6 MR. BLUESTONE: But this is where we put -- we
15:52:21 7 see on slide 78 this is where Dr. Theuwissen and the experts
15:52:24 8 come in, because they're supposed to go in and tell the
15:52:27 9 Court this has an understanding, there is an objective
15:52:30 10 baseline of what "tending to" means. And Dr. Theuwissen
15:52:33 11 with 40 years of experience, he's an active professor and
15:52:37 12 consultant in the field. If you search his name on Youtube
15:52:40 13 you can see his speeches. He's telling you there is no
15:52:43 14 objective standard to assess what this means. It's not
15:52:46 15 there. So what they're trying -- I'm not trying to dodge
15:52:50 16 the question, Your Honor, I think it actually reinforces the
15:52:54 17 problem. To answer your question of what he means by this,
15:52:58 18 RESN needs to go and point and say we've acknowledged this
15:53:02 19 is a term of degree and here's what the field understands it
15:53:05 20 means. If it's operating like a substantially or a fuzzy
15:53:09 21 how many electrons, someone needs to have an understanding
15:53:11 22 of what that means or it's purely subjective. If it's
15:53:15 23 subjective, it's indefinite.

15:53:17 24 THE COURT: Okay. And you're just under five
15:53:20 25 minutes left and I'll certainly give you a minute or two in

15:53:24 1 rebuttal. But again, I think the reason I'm asking these
15:53:27 2 questions is because I understand your criticism of their
15:53:33 3 proposal, but -- and so I'm trying to figure out how might
15:53:41 4 their proposal not totally read out "tending to" or what
15:53:47 5 meaning might they suggest those words actually do have in
15:53:50 6 the claim. I'm trying to figure that out based on the clues
15:53:55 7 that we might have from the briefing.

15:53:56 8 MR. BLUESTONE: I think for the '145 Patent
15:53:58 9 they've kind of -- I don't want to be flip, but they've kind
15:54:02 10 of given that away. They know that it doesn't have a
15:54:06 11 meaning and he's saying I've just got to pretend like it
15:54:09 12 doesn't exist. It's telling you, under *Datamize* and
15:54:14 13 *Integra*, that it's over, it's indefinite because he can't
14 come up with a meaning. Now, to make it clear for the
15:54:17 15 record, because we'll be looking at this later, for '274
15:54:20 16 he's saying average, there's some average movement. And the
15:54:23 17 record is clear where Dr. Theuwissen says, what average
15:54:27 18 movement? You're inviting more questions than answers.

15:54:29 19 THE COURT: It's just that I'm suggesting I
15:54:32 20 don't think they're going to get up here and say, you know
15:54:35 21 what, it doesn't read it out. It reads it out. Tending to
15:54:37 22 repel, we all know repel electrons means blank, and as he
15:54:40 23 said the construction was repel electrons and you're right,
15:54:44 24 it just reads it out. They're not going to do that.
15:54:46 25 They're going to get up and here and say something else, I

1 think.

2 MR. BLUESTONE: And I'm happy to respond in
15:54:50 3 rebuttal to what they say, Your Honor.

15:54:50 4 THE COURT: But you already had this
15:54:52 5 conversation with them weeks before this hearing in these
15:54:55 6 meet and confers, that I ordered, which were really
15:54:57 7 substantive, the ones that would have, that would have
15:55:00 8 demonstrated what the issues were as to the other two terms
15:55:04 9 that they didn't. And so I'm wondering like, what was said,
15:55:07 10 and what did you say in response? And I think your answer
15:55:10 11 is going to be, I don't know, I don't really remember that
15:55:12 12 we talked about this.

15:55:13 13 MR. BLUESTONE: Your Honor, I'll say on the
15:55:15 14 record we came to every meet and confer in good faith,
15:55:17 15 offered up positions in good faith, and generally the answer
15:55:21 16 was not to elucidate much more about their position. I
17 don't want to get into he said/she said. I'm sure Mr.
15:55:24 18 Gilman and his colleagues would say I'm sure it was
15:55:28 19 something else, but we didn't get any answers.

15:55:29 20 THE COURT: So when you asked them, look, I
15:55:30 21 think you're just reading out "tending to," how could they
15:55:33 22 be? And they said blank. What did they say?

15:55:37 23 MR. BLUESTONE: They disagreed.

15:55:38 24 THE COURT: That was the sum total of this back
15:55:41 25 and forth?

15:55:41 1 MR. BLUESTONE: Unfortunately. I'm happy to
15:55:43 2 schedule a time, Your Honor, where we sit on a call with you
15:55:44 3 and we go back and forth with our questions about
15:55:47 4 everything. We came in as a DJ because we didn't want to
15:55:51 5 have threats of suit anymore. So we're happy to resolve it,
15:55:55 6 whichever way.

15:55:55 7 THE COURT: Trust me, that is not my job to do.
15:55:58 8 That is what I thought before this hearing happened, so that
15:56:00 9 I'm not doing what I am now - I'm not saying it's your
15:56:02 10 fault - which is trying to figure out what the heck the
15:56:05 11 parties mean and what the responses are from the other
15:56:08 12 sides' arguments with regard to claim construction.

15:56:09 13 MR. BLUESTONE: I mean --

15:56:09 14 THE COURT: Really briefly, before we go, I want
15:56:10 15 to save a minute or two. Slightly different is the I think
15:56:15 16 maybe proposed construction for the second term.

15:56:19 17 MR. BLUESTONE: Yeah.

15:56:19 18 THE COURT: "An electric field that causes
15:56:21 19 electrons to exhibit average movement in a particular
15:56:23 20 direction."

15:56:23 21 MR. BLUESTONE: Right.

15:56:24 22 THE COURT: What does average movement mean? Do
15:56:27 23 you have an issue with that?

15:56:28 24 MR. BLUESTONE: Exactly, there's no -- it
15:56:32 25 invites more questions than answers on that front. I will

15:56:35 1 direct you to slide 77. And Dr. Theuwissen talks about this
15:56:40 2 as well. When he's saying, I'm going to remove -- so if you
15:56:45 3 recall back probably ten minutes ago, Your Honor, you were
15:56:48 4 asking me the question of which electrons, what are we even
15:56:51 5 talking about. Dr. Carley goes and says, well, I can do an
15:56:55 6 averaging, I can get rid of thermal noise. Thermal noise is
15:56:58 7 electrons that are popping up unintended. It's noise, it's
15:57:02 8 not the photo diode signal, it's something else. I can do
15:57:05 9 something to filter it out, I can come up with a solution
15:57:09 10 that's not an objective baseline. He's saying I could
15:57:13 11 average. That's not sufficient. If Dr. Carley on the
15:57:14 12 record presented and said, you know what, here's the
15:57:17 13 treatise on semiconductor processing and design and here is
15:57:20 14 the way you figure this out, his opinion would have some
15:57:24 15 weight to it. We'd probably disagree, but it would have
15:57:27 16 some weight. He hasn't pointed to any objective standard of
15:57:31 17 what it means, just kind of coming up with an idea.

15:57:34 18 THE COURT: All right. I'll give you a minute
15:57:36 19 or two in rebuttal on this term. Thank you.

20 MR. BLUESTONE: All right. Thank you, Your
21 Honor.

15:57:44 22 THE COURT: RESN is out of time, but I'll give
15:57:46 23 just a couple minutes for them to make hopefully some
15:57:52 24 helpful responsive points. And before they do, Mr. Gilman,
15:58:01 25 the meet and confer that I ordered to happen after all the

15:58:04 1 briefing was done, sounds like you weren't on it, is that
15:58:08 2 right?

15:58:08 3 MR. GILMAN: For some of it I was, for some of
15:58:12 4 it Mr. Gerson was on, that's correct.

15:58:15 5 THE COURT: Maybe I'll just keep it specifically
15:58:17 6 to this issue. Like presumably there would have been a back
15:58:22 7 and forth about, you know, this -- this -- you know, this,
15:58:28 8 what is your proposal as to what Dr. Carley says, paragraph
15:58:33 9 77, that just reads out the word "tending to." No, it
15:58:36 10 doesn't, because blah, blah, blah. Oh, I see. But then did
15:58:40 11 that kind of thing happen here?

15:58:43 12 MR. GILMAN: Your Honor, it did. And I think
15:58:45 13 the briefing and Dr. Carley's declaration lay out what our
15:58:51 14 positions on this is. And that's this idea of "tending to"
15:58:57 15 being a term of directionality for overall electron flow
15:59:02 16 that is generally causing movements. It's expressed
15:59:05 17 differently in Dr. Carley's report as average movement in a
15:59:08 18 given direction or generally moving or tending to move in a
15:59:11 19 given direction.

15:59:12 20 THE COURT: Maybe can I -- I think to answer my
15:59:15 21 question, you're saying, but this was all gone into in some
15:59:19 22 detail in this meet and confer.

15:59:21 23 MR. GILMAN: Right. And it's in the briefing.
15:59:23 24 This has all been flushed out in the record, Your Honor,
15:59:25 25 yes.

15:59:25 1 THE COURT: So if I were to ask you, since you
15:59:27 2 don't think these terms are indefinite, you must think
15:59:31 3 there's a construction that can be provided about them, what
15:59:34 4 they mean. Again, your boxes don't have any words in them.
15:59:38 5 But am I right to suggest that the constructions you're
15:59:42 6 proposing for these terms are what's found in paragraph 77
15:59:44 7 and 78 of Dr. Carley's opening report?

15:59:49 8 MR. GILMAN: I would say paragraph 74 is a
15:59:51 9 better expression of them. And again, I think, Your Honor,
15:59:57 10 gets back to the point that there are millions or possibly
16:00:01 11 even more beyond that of electrons in the regions that we're
16:00:05 12 talking about and there's going to be some level of random
16:00:09 13 movement of the electrons. We're not talking about one
16:00:11 14 going one way and one going the other. The overall
16:00:15 15 movement. "Tending to" is a term of directionality. It's a
16 16 term of average directionality. If I were to say this room
16:00:19 17 is tending to get colder the longer the day goes on, it
16:00:22 18 doesn't mean --

16:00:22 19 THE COURT: I'm sorry, I have to stop you. I'm
16:00:25 20 trying to figure out the words that make up your
16:00:29 21 construction of the term, because we know in this meet and
16:00:32 22 confer, where you're telling me you had this back and forth,
16:00:33 23 well, Mr. Bluestone, he doesn't know. He thinks your
16:00:35 24 construction for these terms is paragraph 77 and 78. But I
16:00:39 25 think you're telling me, no, that's not the best

16:00:41 1 articulation of what these terms mean. The best
16:00:44 2 articulation of what these terms mean is somewhere found in
16:00:48 3 the wording of paragraph 74. Where? What wording?

16:00:54 4 MR. GILMAN: I think, Your Honor, the final
16:00:55 5 sentence of paragraph 74, "exhibit an average movement." I
16:00:59 6 think that's expressed throughout Dr. Carley's report that
16:01:01 7 "tending to" means "an average movement" or "exhibit an
16:01:06 8 average movement in a direction."

16:01:08 9 THE COURT: But that's describing the second of
16:01:11 10 the two terms, "an electric field in the body tending to
16:01:17 11 cause electrons in the body to move in a direction from the
16:01:21 12 first terminal to the second terminal." And that is the
16:01:27 13 articulation in paragraph 78 that he gives for that term.
16:01:35 14 But is this "average movement" concept also relevant to the
16:01:38 15 construction for the first term?

16:01:40 16 MR. GILMAN: The "tending to cause electrons
16:01:42 17 move in a given direction," yeah.

16:01:54 18 THE COURT: I don't know what to do. I don't
16:01:57 19 know what to do here. Because first of all, I got to tell
16:02:00 20 you, it's very frustrating. It's very -- I'm sure it's
16:02:04 21 frustrating for your colleagues on the other side too,
16:02:08 22 because it's incredible the amount of process that happens
16:02:11 23 before we get to this hearing. And all that process, the
16:02:16 24 back and forth on identifying what terms are being
16:02:19 25 construed, the construction of the joint claim construction

16:02:22 1 chart, the process of going back and forth in the briefing
16:02:25 2 to set out the briefing on the real key disputes. And then
16:02:29 3 our judges found, sadly, that even then sometimes the
16:02:32 4 parties haven't talked enough to really understand, even
16:02:35 5 when the briefing is done, what exactly is the dispute, what
16:02:39 6 exactly are the constructions. And so they've implemented a
16:02:42 7 procedure, which I have a turning point, in which even after
16:02:46 8 the briefing is done, we have ordered a second meet and
16:02:49 9 confer in light of the briefing about the disputes to see if
16:02:52 10 they can be resolved and as a minimum a back and forth. All
16:02:55 11 that happened here. And I think in terms of as base an
16:03:00 12 understanding of what do you think the term means, I think
16:03:03 13 you're telling me it's something different than they think
16:03:08 14 it means, that maybe it's in paragraph 77 as to the first
16:03:13 15 term. I just don't know -- the problem is it's a waste of
16:03:16 16 time. It's a waste of the Court's time.

16:03:18 17 I can't tell you how many motions I have
16:03:21 18 pending, but I carved out hours and hours for this claim
16:03:25 19 construction hearing today. And I think it's pretty clear
16:03:29 20 that the meet and confers, including the ones that led up to
16:03:32 21 this hearing, were a mess. They were a mess on these
16:03:35 22 issues.

16:03:35 23 As to terms two and three, half the time we
16:03:38 24 spent today was doing the work to understand what each side
16:03:41 25 was really arguing to realize there might not be a dispute

16:03:45 1 at all. But I had to do that work in this hearing, right?
16:03:49 2 Which is work I should never have to do because of all the
16:03:52 3 work you're going to do beforehand. And I don't know for
16:03:56 4 sure, but I'm pretty sure if I was placing blame, like why
16:04:00 5 do we have this mess, I think it's a lot on your side. I
16:04:04 6 mean, one of the reasons is we don't even have
16:04:04 7 constructions. We don't even know what you think it means
16:04:06 8 because we've got nothing in the boxes. You know what I
16:04:09 9 mean? And now we're wasting our time and it's really rough.
16:04:13 10 It's really rough.

16:04:14 11 I don't know what to do, because how can they
16:04:16 12 respond when they're hearing for the first time what your
16:04:19 13 positions about what the constructions of these terms are?
16:04:22 14 What can we do? How can we do that? What is your
16:04:25 15 construction for the first of these two terms, the words you
16:04:31 16 think it means?

16:04:33 17 MR. GILMAN: The general movement away from.

16:04:39 18 THE COURT: A general movement away from or
16:04:42 19 average. Is that something difference than average
16:04:45 20 movement?

16:04:45 21 MR. GILMAN: I believe those would be the same.

16:04:47 22 THE COURT: So essentially what Dr. Carleey says
16:04:50 23 in paragraph 77 about this first term, that's wrong, that's
16:04:53 24 not the construction? Because you knew the whole bit in the
16:04:59 25 brief was about how that construction it just facially reads

16:05:03 1 out "tending to." That was the whole thing. And it's hard,
16:05:08 2 because I can't -- how can I even -- it's a shame, because
16:05:12 3 it punishes the other side in a way, because I can't resolve
16:05:15 4 the dispute. I can't resolve it because positions change.
16:05:22 5 It's a shame.

16:05:22 6 All right. Let's stop there. Let's stop there.

16:05:26 7 I don't think there's going to be more that we
16:05:29 8 can do with regard to this term because unfortunately I
16:05:32 9 don't think that there was a sufficient back and forth
16:05:35 10 articulation of what the plaintiff's -- what the patentee's
16:05:40 11 position was. I mean, how was there any, Mr. Gilman? I
16:05:46 12 mean, aren't you not telling me that what your expert
16:05:49 13 suggests is the construction for this first term in
16:05:52 14 paragraph 77 is in fact not the appropriate construction?

16:05:56 15 MR. GILMAN: I believe, Your Honor, in the
16:05:58 16 context of the paragraphs that come before it, where he's
16:06:00 17 discussing average movement, that that, that informs what
16:06:04 18 that means.

16:06:06 19 THE COURT: And when in the briefing you saw
16:06:08 20 their response to that proposal, and how it read out the
16:06:12 21 terms "tending to," you had to know they thought that was
16:06:17 22 the construction, not that average movement or regular
16:06:20 23 movement was part of it.

16:06:23 24 MR. GILMAN: I mean, respectfully, Your Honor,
16:06:25 25 in our opening position on page 49, in our rebuttal on page

16:06:30 1 55, we're talking about average and general movement overall
16:06:33 2 with the electrons. And it could have been clearer, it
16:06:40 3 could have been expressed in the box, but that that is what
16:06:42 4 the position was as expressed during the discussion between
16:06:46 5 the parties and in the briefing, "tending to" refers to
16:06:49 6 average movement.

16:06:51 7 THE COURT: Yeah, but you had a whole section in
16:06:54 8 your opening brief about how don't worry about "tending to,"
16:06:57 9 don't worry about it. It's in tons of patents. And that
16:07:01 10 facially seems like it's in the response to the assertion
16:07:04 11 that, well, if we just remove "tending to" and otherwise the
16:07:08 12 construction is what the claim language is, it's not a big
16:07:11 13 deal, because "tending to" --

16:07:15 14 MR. GILMAN: In the context of the electrical
16:07:16 15 arch that you're talking about, the overall direction of the
16:07:19 16 flow. And that that is a term "tending to" that is used
16:07:23 17 throughout the claims, not that it's meaningless, but
16:07:27 18 that --

16:07:28 19 THE COURT: Maybe lastly, can you just tell me,
16:07:31 20 I think what you're saying is, Judge, look, I think we did
16:07:34 21 actually convey in our briefing that our proposed
16:07:37 22 construction, what we think both of these terms mean. We
16:07:40 23 think it was the same thing. We think it was the same
16:07:43 24 construction for both and there's parts of the briefing
16:07:45 25 where we clearly said that or even if we didn't clearly do

16:07:48 1 it, where we did it, where you can see that that's what we
16:07:51 2 we're trying to do now. If you understand what I'm saying,
16:07:54 3 where would those parts be?

16:07:56 4 MR. GILMAN: I think, Your Honor, on page 49 of
16:07:58 5 the briefing.

16:07:59 6 THE COURT: Okay. I'm there. Where on page 49?

16:08:12 7 MR. GILMAN: The partial paragraph that begins
16:08:14 8 at the bottom. For example, Dr. Carley explains that "a
16:08:20 9 POSITAS would be well aware of the idea that an electric
16:08:22 10 field repels or causes electrons to commit average
16:08:29 11 movement." And that we are talking about "tending to,"
16:08:31 12 we're talking about average movement.

16:08:34 13 THE COURT: All right. So that was an
16:08:36 14 assertion. Now there's no citation at the end of that
16:08:39 15 sentence, but the next sentence cites paragraph 72. If we
16:08:53 16 look at the end of paragraph 72, don't we see different
16:09:06 17 constructions for the two terms?

16:09:09 18 MR. GILMAN: The end of paragraph 72. I think
16:09:11 19 it's probably better articulated later in the brief.

16:09:15 20 THE COURT: Where is the other part of the --

16:09:20 21 MR. GILMAN: In page 55 of our briefs, about mid
16:09:23 22 way through the page. As Dr. Carley explaint, "The term
16:09:27 23 'tending to' is used in the art because there's a
16:09:29 24 fundamental principle of electrical circuit design that not
16:09:34 25 every single electron moved in the same direction, e.g.,

16:09:38 1 from the body or from a portion of the body. Instead it's a
16:09:41 2 basic concept in semiconductor design and in the industry
16:09:43 3 that electrical fields such as those claimed here will
16:09:45 4 generally cause movement of the electrons, but not all
16:09:48 5 electrons, and therefore the term 'tending to' is proper."
16:09:52 6 Citing paragraph 72 to 78 of his report inclusive, which
16:09:56 7 includes a discussion of average movement of the universe of
16:10:00 8 electrons in a particular direction.

16:10:05 9 THE COURT: Okay. And then lastly, just to --
16:10:14 10 just to -- so that I have some understanding of it.
16:10:18 11 Whatever the constructions of these terms are, which I think
16:10:25 12 you're going to say is for both, is something like causing
16:10:30 13 electrons to exhibit average movement in a particular
16:10:33 14 direction, what does that mean in layman's terms? I see on
16:10:37 15 page 55, as I noted, you have the words "but not all
16:10:41 16 electrons." And it's bolded and italicized. Makes me think
16:10:46 17 there's something about that phrase that's important, maybe,
16:10:49 18 to your understanding of the meaning of these terms. What
16:10:51 19 is it?

16:10:53 20 MR. GILMAN: I think, Your Honor, that gets to
16:10:54 21 what separates "tending to" from an absolute statement that
16:10:58 22 "tending to" would mean on average in that direction to Your
16:11:02 23 Honor's earlier example. If a single electron goes in the
16:11:05 24 other direction, is that included or excluded? This would
16:11:07 25 mean you look at the universe of electrons and there net

16:11:12 1 movement, which would be assessed by where the potential is
16:11:15 2 or what the net flow of the voltage is. You can easily
16:11:19 3 assess overall which way the current is flowing and which
16:11:30 4 way the potential is going.

16:11:32 5 THE COURT: All right. We'll have to leave it
16:11:34 6 there. You're out of time.

16:11:38 7 And Mr. Bluestone, you have a minute or two
16:11:43 8 left.

16:11:44 9 MR. BLUESTONE: Thank you, Your Honor. I'll be
16:11:45 10 very brief. Two things. We would submit to the Court that
16:11:50 11 on page 57 in the reply portion of the brief they set forth
16:11:55 12 exactly what they think the construction is and that is
16:11:57 13 tending to repel that reads out that language. That's the
16:12:00 14 first sentence of that third paragraph on the page.

16:12:03 15 THE COURT: Right. So you're surprised when you
16:12:05 16 hear that the construction at least for the first term at
16:12:08 17 issue is essentially the same as the one for the second
16:12:11 18 term?

16:12:11 19 MR. BLUESTONE: Correct.

16:12:12 20 THE COURT: Because it's different than --
16:12:14 21 because you seized on what you thought was the construction
16:12:17 22 for the first term in paragraph 77, because it seemed like
16:12:19 23 it just takes out those two words. That was a big part of
16:12:24 24 your briefing.

16:12:25 25 MR. BLUESTONE: That's exactly correct. And

16:12:26 1 also, to be clear, the language they're using "tending to
16:12:29 2 repel" is the '145 language. '274 is the language in the
16:12:35 3 second sentence. "Tending to cause electrons to move in a
16:12:38 4 body" is '274, so they're construing them differently. Both
16:12:43 5 we believe are indefinite. We didn't get to go into the
16:12:47 6 '274 issue.

16:12:48 7 The last point, this new construction. One
16:12:52 8 subpoint is they're saying generally causing the movement.
16:12:55 9 Well, we're at a term of degree again now. You're just
16:12:58 10 substituting "tending to" to "generally," kind of just
16:13:02 11 pivoted, but the same problem.

16:13:05 12 The second subpoint, Mr. Gilman was candid
16:13:10 13 enough to say, you know, it's not this absolute anymore. So
16:13:11 14 the concession that it's a term of degree again also
16:13:13 15 reinforces that we need an objective baseline. There is
16:13:16 16 nothing in the record that provides that for the Court.

16:13:19 17 THE COURT: Okay. All right. Thank you. All
16:13:22 18 right. That's -- we're at the end of our time.

16:13:27 19 Here's what I'm going to do with regard to term
16:13:32 20 four. So I think on the one hand, at least as it relates to
16:13:47 21 at least one of the two terms at issue, the position that
16:13:56 22 RESN took today was at a minimum very difficult to discern
16:14:02 23 from the briefing at issue, in terms of what they think the
16:14:06 24 term means. That term, and what it appeared, at least to
16:14:12 25 OmniVision, was RESNs proposed construction, generated a

16:14:19 1 whole bunch of argument in the briefing that made up a
16:14:22 2 pretty substantial part of this briefing. And at a minimum,
16:14:30 3 again, it's just very unclear what RESN's position was in
16:14:36 4 terms of the meaning at issue, which in turn of course
16:14:40 5 informs indefiniteness dispute.

16:14:43 6 On the other hand, it's probably the case that
16:14:46 7 at some level you could look to broad citations like
16:14:51 8 paragraph 72 to 78 and vagueness and you couldn't clearly
16:14:56 9 say, well, I don't know, you can't possibly see how
16:14:59 10 something RESN is suggesting today was encapsulated by its
16:15:04 11 expert's declaration or something in the briefing. At a
16:15:07 12 minimum, it just presents a confused record for sure. For
16:15:13 13 me, at least, in terms of trying to make a decision on
16:15:15 14 indefiniteness.

16:15:18 15 And I do think it's probably the case that a lot
16:15:21 16 of that confusion is due to RESN's side. But it's hard for
16:15:25 17 me to know for sure. I wasn't on these meet and confers,
16:15:28 18 which I set up for the very purpose of making sure we had a
16:15:35 19 very clear record coming in today. And on the other hand,
16:15:36 20 the outcome of this dispute would mean, literally, if
16:15:39 21 OmniVision was correct that two patents would go away. And
16:15:42 22 that's pretty significant for that to happen. And I can't
16:15:47 23 be in a position where I'm making a case dispositive
16:15:52 24 decision on a record that I think is unclear and may be
16:15:56 25 shifting.

16:15:59 1 On the other hand, I can't absolutely say for
16:16:01 2 sure that there isn't kernels of some of RESN's position at
16:16:06 3 least as to one of its two terms isn't found in its briefing
16:16:11 4 or accompanying declarations.

16:16:12 5 It's all to say, at least as to this term, and
16:16:15 6 also noting that the issue of definiteness is one that can
16:16:18 7 be taken up during the Markman process, but need not be,
16:16:22 8 it's not required to be, could be taken up at a later stage,
16:16:26 9 including the dispositive stage, I am pretty confident I am
16:16:30 10 not going to be in a position to make a decision as to
16:16:33 11 whether the terms are definite based on this record at this
16:16:36 12 stage of the case.

16:16:38 13 And so for now I'm going to decline to construe
16:16:41 14 the term or to assess with finality the issue of
16:16:46 15 definiteness with regard to term four. And as with at least
16:16:49 16 one other term I'll try to give instruction to the parties
16:16:53 17 in a follow up oral order as to how we might finally resolve
16:16:57 18 this issue after there is further meet and conferring about
16:17:00 19 what exactly the parties' positions are as to the term,
16:17:05 20 which is the best path I can take to attempt to be fair to
16:17:09 21 both sides here.

16:17:11 22 As so we -- we discussed four terms today over,
16:17:18 23 we've be at it since 11 o'clock. So it's almost 4:15. We
16:17:24 24 had argument and I think pretty clear briefing on the
16:17:26 25 disputes as to term one. I think as to one of our other two

16:17:35 1 terms it became clear that a key aspect of the parties'
16:17:38 2 dispute wasn't sufficiently engaged by the meet and confer
16:17:42 3 process, the briefing process, and is still left to be
16:17:44 4 discussed by the parties. It turned out as to the third
16:17:48 5 term the parties didn't have a dispute but didn't know that
16:17:51 6 even despite the meeting and conferring process. And the
16:17:55 7 issue as to term four is one I can't resolve because of this
16:18:00 8 muddled record.

16:18:00 9 So I will be able to provide a construction as
16:18:03 10 to term one. I'll try to do that relatively quickly as I
16:18:07 11 can after the hearing today. And frankly, I'm not sure what
16:18:13 12 will happen with regard to the three remaining terms, but
16:18:17 13 I'll admit them and take them under advisement.

16:18:19 14 And I'll say this on the record, but I think a
16:18:28 15 couple of things clearly happened here or didn't happen
16:18:33 16 here. I do think the back and forth between the parties
16:18:36 17 that's supposed to happen at various stages, including after
16:18:39 18 the briefing is done, to really elucidate what are the
16:18:43 19 disputes and what are the parties' responses to those
16:18:48 20 disputes, it's clear it didn't happen sufficiently. It's
16:18:51 21 clear the fact that it didn't happen made a lot of today
16:18:56 22 wasteful, frankly. Wasteful. So there's not much I can do
16:18:59 23 about that right now, except to implore you and Delaware
16:19:03 24 counsel as well, that something different would have to
16:19:08 25 happen the next Markman you have.

16:19:10 1 And look, I'm a mild-mannered person, right.
16:19:14 2 But not every judge you meet is going to be so mild mannered
16:19:18 3 about it. And if it happens again, you'll be in real
16:19:21 4 trouble. And so at a minimum, I think that was a real fail.

16:19:28 5 Second, for RESN's benefit, again, I urge you --
16:19:32 6 I think we saw today in multiple instances this is a Markman
16:19:37 7 hearing. It's a claim construction hearing, but it was not
16:19:40 8 clear what your proposed constructions were and that is
16:19:44 9 because you did not articulate, you did not articulate them
16:19:48 10 in words clearly in the briefing. And that failure of
16:19:54 11 articulation, it left ambiguity, it left people, including
16:19:59 12 the other side and me, in the dark. And again, if you did
16:20:04 13 that in our court with regard to other of our judges, I know
16:20:09 14 that they would not accept it. And today's outcome I think
16:20:13 15 will be at a minimum simply that we wasted some time, we
16:20:17 16 couldn't resolve. I mean, but the outcome could have been
16:20:23 17 worse for you with other judges. And so that was another
16:20:27 18 fail. Big fail, that again, really made today's process
16:20:34 19 wasteful.

16:20:36 20 And so I'll have to go and figure out what to do
16:20:43 21 about that and keep the case moving. At the end I can make
16:20:47 22 a decision as to term one and I will do that quickly. I
16:20:51 23 will give instruction to the parties about how to resolve
16:20:53 24 the terms they couldn't resolve today. I'll give some
16:20:58 25 thought about what it means about the remainder to the terms

16:21:01 1 that were briefed that we didn't get a chance to argue.

16:21:04 2 Okay. So with that all that said and knowing
16:21:06 3 that we're out of time here, we'll end our Markman hearing
16:21:11 4 today.

16:21:11 5 To our out of town folks, I wish you safe
16:21:14 6 travels, and conclude our hearing and the Court will stand
16:21:18 7 adjourned. Thank you.

16:21:20 8 COURT CLERK: All rise.

16:21:24 9 (Court adjourned at 4:21 p.m.)

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14 I hereby certify the foregoing is a true and
15 accurate transcript from my stenographic notes in the
16 proceedings.

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/s/ Stacy M. Ingram, RPR
Official Court Reporter
U.S. District Court

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