1 IN THE UNITED STATES DISTRICT COURT

2 FOR THE DISTRICT OF DELAWARE

3 BECKMAN COULTER, INC.,)
)
4 Plaintiff,)
) C.A. No. 24-945-CFC
5 v.)
)
6 CYTEK BIOSCIENCES, INC.,)
)
7 Defendant.)
)
8

9

10 Wednesday, September 17, 2025
9:02 a.m.
11 Markman Hearing

12

13 844 King Street
Wilmington, Delaware
14

15 BEFORE: THE HONORABLE COLM F. CONNOLLY
United States District Court Judge
16

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18 APPEARANCES:

19
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-and-
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21 P R O C E E D I N G S

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23 (Proceedings commenced in the courtroom beginning at
24 9:02 a.m.)

25 **THE COURT:** Please be seated. Good morning.

1 All right. Ms. Hayes.

2 **MS. HAYNES:** Good morning, Your Honor.

3 Christine Haynes from Richards, Layton & Finger on behalf

4 of the plaintiff. With me from my office is Fred

5 Cottrell. And also with us are our cocounsel from Wilmer

6 Hale, Omar Khan, Jeffrey Dennhardt, and Asher McGuffin.

7 And in the gallery, we have Mike Levy from our client.

8 Thank you, Your Honor.

9 **MR. TIGAN:** Good morning, Your Honor. Jeremy

10 Tigan with Morris Nichols on behalf of Cytek. I'm joined

11 by my associate, Cameron Clark.

12 From the Cooley firm I have Reuben Chen, Adam

13 Pivovar, Dustin Knight, and Betsy Flanagan at counsel

14 table. And in the back, our expert witness, Dr. Ilkov.

15 **THE COURT:** Thank you.

16 All right. You know, counsel are so nice in

17 this case, I hate to have to start the hearing this way,

18 but I'm going to. So this is what you all gave for me

19 to read. And I'd like you all to turn to the

20 plaintiff's supplemental brief at Page 28.

21 Look at the first full paragraph, the first

22 eight lines. So there are multiple quotes from the

23 specification of the patent. There are no citations.

24 So I stopped reading the brief at that point.

25 So the plaintiffs, your brief, I stopped

1 reading, and I won't read it after Page 28.
2 I can't be clearer. It's in my scheduling
3 order. I've talked to you. I talk to lawyers all the
4 time. You've got to pinpoint. In fact, you don't even
5 pinpoint; you don't cite.
6 I am not doing that. It is not fair. It's
7 horrible advocacy. It's a waste of client's money. I
8 didn't read the arguments. So keep that in mind when
9 you do your presentations.
10 All right. Now, I think, from what I did
11 read in the briefing, two terms have been dispensed
12 with. Can you confirm that? So first and second
13 dichroic filter, I believe, is no longer an issue in
14 dispute; is that right?
15 **MR. CHEN:** That's correct, Your Honor.
16 **MR. KHAN:** Your Honor, our understanding of
17 the Court's ruling from last time was that first and
18 second filter in the '443 was resolved.
19 With respect to first dichroic filter in the
20 '106 Patent, Claim 1, that filter is differently
21 situated than the first and second filters in the '443
22 patent. And, specifically because the claim language is
23 different in the first dichroic filter in the '106
24 Patent, Claim 1, in the claim itself, comes after a
25 curved mirror. And so we think that warrants separate

1 consideration.

2 **THE COURT:** You didn't brief it. You didn't

3 brief it.

4 **MR. KHAN:** We did, Your Honor, at -- it's at

5 Page 11 through 13 of our supplemental brief, Your Honor.

6 **THE COURT:** No. Sorry. They didn't brief it.

7 Sorry. They don't contest it. I mean, like, in other

8 words -- sorry. Confused the sides. Didn't you sit on

9 that side?

10 Okay. They are not challenging anymore.

11 **MR. CHEN:** Your Honor, our understanding is

12 that Your Honor already decided on the filter term, so

13 there's no reason to be submitting additional briefing

14 about the filter when Your Honor already decided that the

15 written description supports the positional significance

16 of first and second with respect to the filter term.

17 That covers all filter terms. We were talking about the

18 dichroic filter at the last hearing.

19 **THE COURT:** Well, maybe you made assumptions I

20 didn't. But the bottom line is, you didn't brief it, so

21 I'm going to go with plain and ordinary meaning. I'm

22 going to go with Beckman's approach.

23 **MR. KHAN:** We understand, Your Honor.

24 **THE COURT:** Okay.

25 I'm just going to decline to construe the

1 term. All right. So I think the same thing applies for
2 first and second optical filter.
3 **MR. KHAN:** It does, Your Honor.
4 **THE COURT:** Okay. So same thing. There was
5 no argument offered. I'm just going to go with --
6 **MR. CHEN:** Your Honor, I would like to just
7 comment. I believe last time we were talking about the
8 dichroic filters and optical filters, and Your Honor had
9 decided, based on the transcript that we read, that the
10 filter term was already decided.
11 You wanted additional briefing with respect
12 to the other first and second terms, and that's exactly
13 the instruction that was followed, respectfully, Your
14 Honor.
15 **THE COURT:** Well, respectfully, I construed
16 first and second filter. And when you briefed it on
17 Page 10 of the joint claim construction brief, what I
18 followed when I construed the terms at the first hearing,
19 I talked about how you wanted me to globally do first and
20 second. I wasn't willing to do that. I was going to
21 break it down term by term.
22 And if I look at Page 10, the first term is
23 curved mirror. The second term is focusing optical
24 element. The third term is filter, which I construed.
25 **MR. CHEN:** Right.

1 **THE COURT:** The third term is optical filter.
2 I did not construe it.
3 The next term is dichroic filter. I did not
4 construe it. The next term is semiconductor detector.
5 The next term is image. And I expected that we were
6 going to have supplemental briefing that will address
7 each of those terms, as you all presented to me.
8 So I didn't see anything. I'm not construing
9 first and second dichroic filter. And I am not
10 construing first and second optical filter.
11 **MR. CHEN:** Understood, Your Honor.
12 **THE COURT:** Now, obviously *02 Micro*, we go to
13 trial, it comes up, we have to construe it; I'll deal
14 with it then. I'm just not doing it now.
15 **MR. CHEN:** Appreciate that, Your Honor. Thank
16 you.
17 **THE COURT:** Okay.
18 All right. Why don't we start with first and
19 second curved mirror.
20 **MR. KHAN:** All right. Thank you, Your Honor.
21 So on first and second curved mirror, it's
22 part of a set of terms in the '106 Patent Claim 1. And
23 those three terms are first curved mirror, first
24 dichroic filter, which, Judge, you just said is going to
25 be plain and ordinary meaning until -- and then the

1 third term -- they're all connected in the claims, Your
2 Honor, so that's why we're going to try to -- it would
3 be use useful to treat them together.
4 Before we get to the actual term, we thought,
5 with the Court's indulgence, if we could just have a
6 quick background on the specification which bears on,
7 actually, this very term and how it uses the term in the
8 specification.
9 So in the specification, Your Honor, there's
10 a passage that talks about a first optical element and a
11 second optical element, but they are not the first and
12 second optical elements in the optical path, which is
13 what Cytek wants.
14 And if we look at the passage here and the
15 Figure 25 that we've annotated with the first optical
16 element is something that produces the beam of light
17 with an image. That corresponds to element 902.
18 Then there's a dichroic filter in the
19 passage. It says the dichroic filter located between
20 said first optical element and said image, and then
21 there's a second optical element located in one of the
22 branches. And there's an image relay optical element
23 near the other image.
24 So here, Your Honor, here's the passage and
25 specification talking about two -- a first optical

1 element and a second optical element and -- but there's
2 a third optical element in the middle, and it's -- the
3 use of the word "first" and "second" is out of order
4 because there are -- it would have referred to the
5 dichroic filter as the second optical element and that
6 last focusing lens as the third optical element, and so
7 what --
8 **THE COURT:** Sorry. I'm losing you. I don't
9 get it.
10 **MR. KHAN:** Sure.
11 **THE COURT:** So you may want to start over
12 because I'm just not --
13 **MR. KHAN:** Understood, Your Honor.
14 So in this passage, there are --
15 **THE COURT:** This is from the '582 Patent.
16 **MR. KHAN:** This is from the '582 Patent at
17 639, 50, Your Honor. And it's describing a first optical
18 element and then it says that's the optical element that
19 produces a beam of light.
20 And then it says there's a dichroic filter,
21 and it identifies a dichroic filter. And then it
22 identifies a second optical element located in one of
23 the branches created by the filter.
24 And then it says there's an image relay
25 optical element located near the image produced by the

1 optical element in the other branch.
2 And so the point, Your Honor, that we're
3 trying to make is that the passage is talking about four
4 different optical elements, but only two of them are
5 labeled first and second. And they're actually labeled
6 first and second non-sequentially because the dichroic
7 filter is in the middle of the first and the second
8 optical element. And that's the point, Your Honor.
9 So the terms "first" and "second" are used
10 non-sequentially in this passage because the dichroic
11 filter qualifies as an optical element, as we discussed
12 last time around.
13 It's an object -- it's an element that acts
14 on light. So it's just like all the other elements in
15 the system. It's an optical element.
16 And what the passage is saying is that: I'm
17 going to call this the first optical element, and I'm
18 going to call this the second optical element, but I'm
19 going to -- it's using the terms "first" and "second"
20 merely to refer to two different elements in the system.
21 **THE COURT:** You know, what you're saying is
22 every single part of that figure is an optical element.
23 **MR. KHAN:** Exactly, Your Honor. All of them
24 are optical elements. But I'm focused on the use of the
25 words "first" and "second" as well. And critically, the

1 use of the words "first" and "second" is not, in this
2 passage, connoting order or sequence.
3 **THE COURT:** Hold on. Hold on.
4 **MR. KHAN:** Yes.
5 **THE COURT:** Go ahead.
6 **MR. KHAN:** And so the point is kind of what I
7 was saying, Your Honor, that this passage is saying -- is
8 using the words "first" and "second" not to talk about
9 how components are ordered in the optical path because
10 there's a dichroic filter -- sorry. There is --
11 **THE COURT:** Haven't I already ruled that
12 Figure 25 shows a sequential first and second?
13 **MR. KHAN:** I don't think, Judge, you ruled
14 exactly that. I think -- but I don't think anybody is
15 disputing that Figure 25 has a certain configuration, and
16 that the sets are ordered, that the semiconductors and
17 all the other optical elements are lined up in the way
18 that they are. There's actually no factual dispute about
19 how Figure 25 works.
20 And all we are pointing out here, Your Honor,
21 is that there's a usage of the first and second in a
22 nonsequential way. And actually, the patent does it
23 again. And now it's talking about different optical
24 elements. And this is at -- again in the '582 Patent.
25 And here it's saying, "I have a collimating optical

1 element, which is Element 902." And then it says, "I
2 have a dichroic filter." That's, of course, an optical
3 element here as well. And then there's a second optical
4 element that receives light from the dichroic filter.
5 Here -- that's over here.
6 And so, again, the use of the word "second"
7 is nonsequential. It's a nonsequential optical element,
8 because if the passage were wanting to use first and
9 second sequentially, what would it say? It would say,
10 "I've got a first optical element, I've got a second
11 optical element, and I've got a third optical element."
12 And it doesn't do that. The passage just says, "I've
13 got a collimating optical element, a dichroic filter,
14 and a second optical element."
15 **THE COURT:** Right. It doesn't treat dichroic
16 filter as an optical element in this discussion.
17 **MR. KHAN:** But as of --
18 **THE COURT:** So, I mean, you agree, right, it
19 expressly defines the first optical element as 902.
20 **MR. KHAN:** It does not say the words "first
21 optical element." But optical element --
22 **THE COURT:** Can you go back to the prior
23 passage?
24 **MR. KHAN:** Yes.
25 **THE COURT:** So expressly, like, the first

1 optical element is undisputed. I can't see anymore
2 because it's so far away. Is it 902?
3 **MR. KHAN:** Yes, Your Honor.
4 **THE COURT:** Right. So that passage, which is
5 Column 6, Lines 39 through 50, expressly identifies as
6 the first optical element 902, correct?
7 **MR. KHAN:** It does, yes, Your Honor.
8 **THE COURT:** Right. And it defines a second
9 optical element as what?
10 **MR. KHAN:** The second optical element is the
11 lens that captures -- that's in one of the branches that
12 captures the light, right.
13 **THE COURT:** Correct. What is it?
14 **MR. KHAN:** It's a focusing lens. It's an
15 optical --
16 **THE COURT:** No, no, no. What number is it?
17 **MR. KHAN:** Oh. 905.
18 **THE COURT:** 905. Okay.
19 And that occurs sequentially after the first
20 optical element?
21 **MR. KHAN:** After the first optical element,
22 but not immediately second sequentially, right, because
23 the --
24 **THE COURT:** But in terms of what has been
25 defined in this passage as an optical element, or what's

1 being characterized as an optical element, it is
2 sequential. I'm done. It's sequential. I've already
3 ruled. I don't want to rehash this. I have limited
4 time.
5 **MR. KHAN:** Okay.
6 **THE COURT:** I have very limited time. I have
7 given you guys way too much time.
8 And the way you briefed it, you don't deserve
9 any time, right, because of what I said. I mean, look,
10 and just for the record, I want to make sure the Federal
11 Circuit appreciates that, it's literally 2 feet of
12 documents, 2 feet of documents that you want me to
13 review without pointing me to a cite.
14 It's ridiculous, so move on. I don't repeat
15 argument. I dealt with this argument on the last
16 hearing, on the Figure 25. Let's go.
17 **MR. KHAN:** All right. We apologize for that,
18 Your Honor. We meant to incorporate the prior cites.
19 But can we go to the curved mirror, please.
20 So here's the curved mirror section, Your
21 Honor. So on curved mirror, the language in the claim
22 is that it's a first curved mirror. And the other
23 language in the claim is what tells you where the
24 position of the curved mirror is. It's not first and
25 second.

1 The other language in the claim tells you
2 that the curved mirror is receiving light passed through
3 the collimating optical element. And then the other
4 language in the claim tells you that the curved mirror
5 reflects light towards the first semiconductor detector.
6 So the word "first" is not, in this claim
7 language, noting positional sequence, because the rest
8 of claim tells you what it is.
9 It's also, Your Honor -- Judge, it's a
10 comprising claim.
11 **THE COURT:** Hold on. Sorry. Give me a
12 second.
13 Okay. Sorry. Go ahead.
14 **MR. KHAN:** All I'm saying, Judge, it's a
15 comprising claim. And so what that means is that there
16 can be elements that come before the first curved
17 mirror -- a first curved mirror, including other curved
18 mirrors that come before the first curved mirror.
19 And the specification, Your Honor, never uses
20 the word "first" in connection with curved mirror or any
21 other similar elements. And instead, it just identifies
22 optical element 907 as a second optical element.
23 In the claims --
24 **THE COURT:** What about Claim 5? In Claim 5
25 depends ultimately from Claim 1, right?

1 **MR. KHAN:** It does, Your Honor. So --
2 **THE COURT:** Can you address that, please?
3 **MR. KHAN:** So Claim 5 is an unasserted claim,
4 Your Honor. And --
5 **THE COURT:** I realize. But it has a second
6 curved mirror, right?
7 **MR. KHAN:** It does have a second curved
8 mirror.
9 **THE COURT:** So can you just address that? And
10 that comes sequentially after the first curved mirror,
11 right? It has to, right?
12 **MR. KHAN:** It does not. Your Honor, the -- in
13 this instance, a second curved mirror, perhaps, sort of
14 comes after, but it doesn't have to come sequentially
15 after, right?
16 **THE COURT:** I'm sorry. I lost you. "After"
17 seems to me sequentially. I mean, well, "after," by
18 definition is a relative term referring to sequence.
19 **MR. KHAN:** Exactly. So in Claim 5 --
20 Can we switch to the ELMO?
21 **THE COURT:** It might be the source button on
22 the podium maybe.
23 Okay. Great. Thank you. Need optics.
24 **MR. KHAN:** Trying to figure out how to...
25 There it is. Okay.

1 So in Claim 5, Your Honor, there's a second
2 curved mirror and a second dichroic filter. And it's
3 arranged to reflect at least a portion of light
4 reflected by the first dichroic filter.
5 And so what we would agree with Your Honor is
6 that a first curved mirror has to come before a second
7 curved mirror. We agree with that.
8 **THE COURT:** Okay.
9 **MR. KHAN:** But it doesn't have to be the
10 immediate next. So what Cytek is arguing is that the
11 first and second curved mirrors have to be back to back.
12 **THE COURT:** Hold up.
13 **MR. KHAN:** First and second in sequence.
14 **THE COURT:** I don't think they are saying
15 that. It just has to come after. It doesn't say that it
16 can't be something in between it.
17 **MR. KHAN:** We would agree with that, Your
18 Honor.
19 **THE COURT:** Maybe we don't have a dispute
20 because all they're saying is that the second has to come
21 after the first.
22 Correct, Mr. Chen?
23 **MR. CHEN:** It has to be the second curved
24 mirror. There can be other components in between.
25 **THE COURT:** Right.

1 **MR. CHEN:** There has to be a first mirror and
2 then the second mirror.
3 **THE COURT:** In other words, the only thing
4 that can't be in between is a curved mirror.
5 **MR. CHEN:** Correct.
6 **MR. KHAN:** Well, that's maybe the area of
7 dispute then, Your Honor.
8 **THE COURT:** Okay. Well...
9 **MR. KHAN:** Thank you for that.
10 **THE COURT:** In Claim 5, there's no curved
11 mirror in between the first and second curved mirror.
12 **MR. KHAN:** Right. But all -- it says the
13 second curved mirror is receiving, essentially, the light
14 from the first -- from a first curved mirror.
15 **THE COURT:** Yeah.
16 **MR. KHAN:** But there can be intervening curved
17 mirrors that may have also received the light. It's a
18 comprising claim, Your Honor, so it doesn't preclude the
19 notion that the light could have passed through an
20 intermediate curved mirror. That's all -- that's
21 essentially my point.
22 **THE COURT:** Okay. I see. All right. I
23 understand now. Sorry.
24 **MR. KHAN:** All right.
25 So, Your Honor, in this claim in '106 Patent,

1 Claim 1 --

2 **THE COURT:** I do want to go back to, is there

3 any disclosure in the written description where between

4 the first and second curved mirror, there's another

5 curved mirror?

6 **MR. KHAN:** The words "first" and "second" are

7 not used to describe the curved mirrors at all.

8 **THE COURT:** Okay.

9 **MR. KHAN:** And so the figure just labels a

10 plurality of curved mirrors. And so the words -- the

11 usage of the words "first" and "second" in connection

12 with curved mirrors is nonexistent in the specification.

13 **THE COURT:** Okay. Is there any indirect

14 reference to a curved mirror in the written description

15 using the words "first" or "second"?

16 **MR. KHAN:** I don't believe so, Your Honor.

17 **THE COURT:** In other words, there's no first

18 optical element or first --

19 **MR. KHAN:** Second optical element.

20 **THE COURT:** So there is a second optical

21 element that refers to a curved mirror?

22 **MR. KHAN:** There's a second optical element

23 that refers to a curved mirror. Turns out that it's the

24 first curved mirror, actually.

25 **THE COURT:** Right. Exactly. I just wanted to

1 make sure. And that would be Figure 25?
2 **MR. KHAN:** In Figure 25, right. So in a
3 sense, the use of the word "second optical element" to
4 refer to the first initial curved mirror tells you the
5 first and second are not doing any work with respect to
6 usage to suggest sequentiality or order or sequence as it
7 applies to curved mirrors.
8 **THE COURT:** Okay.
9 **MR. KHAN:** And the point that I would make,
10 Your Honor, is in this claim, there are three elements.
11 It says that there's a first dichroic filter between a
12 first curved mirror and a first semiconductor detector.
13 And, Your Honor, what we would submit --
14 **THE COURT:** Hold on. When you say "it
15 says" --
16 **MR. KHAN:** The claim.
17 **THE COURT:** The claim. I just want to make
18 sure. Claim 1. All right.
19 **MR. KHAN:** '106 Patent, Claim 1 says, "A first
20 dichroic filter between a first curved mirror and a first
21 semiconductor detector."
22 **THE COURT:** Okay.
23 **MR. KHAN:** And that's the language in the
24 claim.
25 And, Your Honor, we submit that to the extent

1 that there's the word "first" is doing any work in this
2 claim, it's actually grouping these limitations together
3 and saying, hey, I've got a first group of a curved
4 mirror, a dichroic filter, and a semiconductor detector.
5 And that's one of the usages of "first" and
6 "second" that the Federal Circuit has embraced and said,
7 hey, you know, first and second -- to find that its
8 usage is sequential, you have to necessarily find that
9 the specification requires that usage.
10 But combining the various elements into a
11 first group, that is something that patent drafters and
12 claim drafters do all the time.
13 And so the word "first" is doing work in this
14 claim. It's not without meaning. It's sort of saying,
15 here's my first group.
16 As I was pointing out earlier, Your Honor,
17 it's a comprising claim. So when I defined the first
18 group as curved mirror, dichroic filter, semiconductor
19 detector, I can have elements that come before it. And
20 that's sort of what -- that's basically what we're
21 trying to get at.
22 Thank you, Your Honor.
23 **THE COURT:** Thank you.
24 **MR. CHEN:** Good morning, Your Honor. Reuben
25 Chen for Cytek Biosciences.

1 **THE COURT:** Good morning.

2 **MR. CHEN:** May I approach with the slides?

3 **THE COURT:** Yes, please.

4 **MR. CHEN:** Your Honor, I'd like to just

5 quickly point out that with respect to plaintiff's slides

6 that they just showed you, that Slide 4 is talking about

7 a specification passage that's not described in

8 Figure 25.

9 So I just want the record to reflect that

10 that discussion is not with respect to Figure 25; even

11 though, they included Figure 25 and try to map those

12 particular elements onto Figure 25, which we don't think

13 is accurate.

14 The other --

15 **THE COURT:** Hold up. I do want to check

16 something out now.

17 **MR. CHEN:** Sure.

18 **THE COURT:** Column 6 was the discussion,

19 right?

20 **MR. CHEN:** That's correct, Your Honor.

21 Column 6 is not specifically with reference to Figure 25.

22 **THE COURT:** The discussion in the written

23 description of Figure 25 is in Column --

24 **MR. CHEN:** Forty-four, Your Honor, and 45.

25 **THE COURT:** Yeah, 25 and 44.

1 Okay. Thank you. And 45.
2 **MR. CHEN:** Thank you.
3 **THE COURT:** Thank you. All right.
4 **MR. CHEN:** Correct.
5 The second thing I wanted to point out is
6 with respect to their Slide 54, where they are talking
7 about --
8 **THE COURT:** I don't have their slides. When
9 you say 54 --
10 Sorry. All right. Go ahead. I found their
11 slides. Go ahead.
12 **MR. CHEN:** Thank you, Your Honor.
13 **THE COURT:** What are you on, Slide?
14 **MR. CHEN:** Fifty-four.
15 **THE COURT:** Fifty-four. Okay. Great. Got
16 it.
17 **MR. CHEN:** With respect to Slide 54, where
18 there is the discussion of the actual asserted claim, the
19 asserted claim they're trying to map on to Figure 25,
20 but, again, there's no such requirement.
21 And as we pointed out at the last hearing and
22 that we'll point out with respect to some additional
23 terms, the original claims of the parent '412 Patent do
24 map on to Figure 25, Your Honor.
25 **THE COURT:** Right.

1 **MR. CHEN:** Okay.

2 **THE COURT:** And federal case law is explicit

3 that I can treat the claim of the original application as

4 part of the prosecution history, correct?

5 **MR. CHEN:** That's correct, Your Honor.

6 **THE COURT:** Right. I mean, it's not a

7 question of, like, there's ambiguity. There is express

8 Federal Circuit case law which talks about that original

9 claim, which makes sense, right, because that's the

10 inventor, that's their first shot, and it kind of reveals

11 a lot.

12 **MR. CHEN:** Absolutely, Your Honor. Correct.

13 So turning to the first curved mirror term.

14 If we can go to the next slide, please.

15 There is a specification passage that talks

16 about concave mirrors. There isn't a labeling of a

17 first or second with respect to the concave, which is a

18 subset of curved mirrors, but they are sequential.

19 And you can see Figure 25A is sort of the

20 reverse of Figure 25.

21 So the optical fiber is now coming in from

22 the right instead of the left, and it's coming in from

23 the top instead of the bottom. So you have the optical

24 fiber 852 and then there's the collimating optical

25 element 902. And then it travels through the same

1 components as you see in Figure 25, which is a dichroic
2 filter. And then 905 is a focusing lens.
3 And then 940 are the semiconductor detectors
4 here. And what you see is that 907 is the first curved
5 mirror or concave mirror. And then it just continues
6 sequentially, 910, 911, 912, 913.
7 And when you read the specification as a
8 whole, and specifically Columns 44 to 46, you see that
9 the specification is providing positional significant
10 sequence with respect to these various claim terms.
11 For example, first image is a really good
12 example. And perhaps we can turn to that just real
13 quick. I'll talk about that in more detail soon.
14 **THE COURT:** Well, actually, here's the deal:
15 I've heard enough.
16 **MR. CHEN:** Okay. Thank you.
17 **THE COURT:** What about, just quickly address
18 Claim 1 and Claim 5 in the '106 Patent and why you think
19 that that also supports your position.
20 **MR. CHEN:** Absolutely. And we've got a slide
21 on that. So just pulling up the claim language here.
22 We do believe that it supports our position
23 because you have a second curved mirror and a second
24 dichroic filter. And specifically, as you read through
25 the claim language, the second dichroic filters arranged

1 and configure to allow the second color band in the
2 fluorescent light to pass through the second dichroic
3 filter onto the second semiconductor detector.
4 **THE COURT:** Right. Now, what do you say to
5 his argument that, all right, he admits, Mr. Khan admits
6 that, all right, the second has to come after the first,
7 but it doesn't preclude there being a mirror in between?
8 **MR. CHEN:** Yeah.
9 **THE COURT:** In the claim language.
10 **MR. CHEN:** Yeah. It doesn't make any sense,
11 because if you look at all the first and seconds, and
12 there's a third semiconductor detector here, they're all
13 in sequence and they have to receive like the third color
14 band of light. There's a second color band and there's a
15 third color band of light.
16 It doesn't make any sense if you say, Well, a
17 third one could be the second one, a second one can be
18 the third one. It just doesn't make sense.
19 And even if you were to say, "Okay. There's
20 a multi-detector system. And, you know, the first
21 curved mirror is broken, I need to replace it," a person
22 of ordinary skill in the art would know which is the
23 right first curved mirror to replace. They wouldn't
24 think, "Oh, I've got to replace the third one."
25 I mean, a person of ordinary skill in the art

1 would know that. And, frankly, a layperson would know
2 that, too, Your Honor.
3 **THE COURT:** All right. So I agree with you.
4 And I think that Claims 1 and 5, but more importantly,
5 coupled with Figure 25, and the original claims of the
6 patent, which read on Figure 25, in addition, I would add
7 even 25A, which again, shows positional sequencing. I
8 think when you read all those together, it's very clear
9 that there should be sequencing here.
10 **MR. CHEN:** Thank you, Your Honor.
11 **THE COURT:** So I'm going to construe it that
12 way.
13 All right. So that dispenses with the first
14 and second curved mirror terms.
15 Let's go to the next term. Actually, let's
16 go next to... I don't want to do "focusing optical
17 element" next. I want to leave that.
18 Let's do "focusing lens" next.
19 **MR. KHAN:** Focusing lens is configured to
20 focus light?
21 **THE COURT:** No.
22 **MR. KHAN:** Or focusing optical element?
23 **THE COURT:** Focusing lens, I thought, was part
24 of the original briefing we didn't cover at the last
25 hearing.

1 **MR. KNIGHT:** You're correct, Your Honor. It
2 wasn't relative to the first and second terms.
3 **THE COURT:** Right.
4 **MR. KNIGHT:** Right.
5 **THE COURT:** I know that. Well, actually, you
6 say "it wasn't relative to," I don't know. Part of the
7 reason I want to do "focusing lens" is because I'm
8 wondering what it's going to do when I think about
9 "focusing optical element."
10 **MR. KHAN:** Understood, Your Honor.
11 **MR. DENNHARDT:** Good morning, Judge. Jeff
12 Dennhardt.
13 All right. So the dispute here is our
14 construction is that a focusing lens configured to focus
15 light means a lens to converge light. "Focus" means
16 converge. The parties, I think, agree on that point.
17 Cytek's construction by contrast additionally
18 requires that the lenses must capture all collimated
19 light rays that pass through a filter and project them
20 as converging rays onto the focal point of the lens.
21 So the question is whether they need -- a
22 focusing lens need only converge to light to focus, or
23 whether it requires all of the additional requirements
24 that Cytek is seeking to impute to those claims.
25 And if we look at the specification, this is

1 on our Slide 122, the specification repeatedly confirms
2 that a focusing lens is used to converge light.
3 This is a very simple term, we think, Your
4 Honor. The first one --
5 **THE COURT:** Just a second. Sorry.
6 Would you agree to construe it as "lenses
7 that capture and converge collimated light"?
8 **MR. DENNHARDT:** I don't think we have an issue
9 with "capture."
10 I think "collimated light" would not be
11 right, Your Honor, because the '107 Patent claims don't
12 mention the word "collimated" at all.
13 So that would be clearly improperly imputing
14 a requirement from the specification into the claims.
15 There's simply no requirement that the light be
16 collimated.
17 I'm sorry. Can you repeat the rest of your
18 construction? I want to make sure I'm addressing your
19 question.
20 **THE COURT:** I just wondered if you would
21 accept "lenses that capture and converge collimated
22 light."
23 And you're saying you would accept "lenses
24 that capture and converge light."
25 **MR. DENNHARDT:** That's right. I think if you

1 took out the word "collimated," we would be okay with
2 that.
3 And I would note, Your Honor, this is our
4 Slide 128. Cytek recognizes that the '107 claims don't
5 require collimating. In fact, they told you so
6 expressly.
7 (Reporter clarification.)
8 **MR. DENNHARDT:** I'm so sorry.
9 The '107 claims may omit claiming a
10 collimating optical element or a collimated beam. It's
11 simply not in the claims. There's no reason to impute
12 that requirement into the claims.
13 I understand --
14 **THE COURT:** Hold on a second.
15 What's this from?
16 **MR. DENNHARDT:** This is from the joint brief.
17 This is their answering position. It's the joint brief
18 at Page 114.
19 **THE COURT:** Okay. Thank you.
20 **MR. DENNHARDT:** Now, I understand, Your Honor,
21 that they say the specification only supports collimated
22 light.
23 That's a written description question, Your
24 Honor. That can be a dispute that the parties address
25 later in the case. But for purposes of claim

1 construction, it would be improper to impute this
2 requirement into the claims.
3 I'll also just submit, so you have it, Your
4 Honor, that Columns 56 through 58 repeatedly describe a
5 WDM that does not include collimated light.
6 There's one use of the word "collimated" in
7 that entire set of columns, and it's specifically
8 identifies it as a hypothetical.
9 So we would submit that the written
10 description argument is wrong. But in any case, that's
11 not a question for claim construction.
12 I'm happy to address the rest of the
13 specification, but I think you get it.
14 **THE COURT:** All right. Let's hear what the
15 other side says.
16 **MR. DENNHARDT:** Thank you, Your Honor.
17 **THE COURT:** Thank you.
18 **MR. KNIGHT:** Good morning, Your Honor. Dustin
19 Knight.
20 I'm focusing on -- focusing lens, Cytek's
21 original briefing, we do acknowledge the fact that the
22 '107, Claim 1, does not include a collimated optical
23 element configured to project a collimated beam.
24 But as we state in our briefing, this is a
25 significant written description issue.

1 And our proposed construction is an attempt,
2 albeit a meager one, to try to reconcile issues with the
3 written description what's in the claims.
4 **THE COURT:** So then, could you live with
5 "lenses that capture and converge light," right? Well,
6 actually...
7 So your biggest problem is Claim 1? Or
8 sorry, yeah, Claim 1, right, of the '107 Patent?
9 **MR. KNIGHT:** That's right, Your Honor.
10 **THE COURT:** And you admit that the
11 descriptions in Columns 56, maybe it's 55 and 56, only
12 use... only disclose a "collimating light rays passing
13 through" in the context of hypothetical; you agree with
14 that?
15 **MR. KNIGHT:** Can I confer with my colleagues?
16 **THE COURT:** Sure.
17 **MR. KNIGHT:** Thank you.
18 (Counsel confer.)
19 **MR. KNIGHT:** Your Honor, if I look at
20 Column 56 through 58, it's discussing a WDM. They use
21 the same item numbers as Figure 25. They've just -- but
22 now they're talking about an imaging optical arrangement.
23 What we briefed, and what we talked about,
24 and what we're aware of is the disclosures related to
25 Figure 25 for Columns 44 and 45.

1 And I don't think I can tell you here today,
2 having not looked at this more closely, having not been
3 brought up, that we would say there's written
4 description support for a WDM that does not propagate --
5 **THE COURT:** I'm not asking, actually, whether
6 there's written description support for it.
7 **MR. KNIGHT:** I'm sorry.
8 **THE COURT:** That's not what I meant.
9 In fact, what I'm getting at is, I'm just
10 wondering whether it's just better to give them what
11 they asked for, and then we just have written
12 description briefing.
13 **MR. KNIGHT:** One moment, Your Honor. Thank
14 you.
15 (Counsel confer.)
16 **MR. KNIGHT:** Your Honor, as long as it's set
17 for the record that we're preserving a written
18 description argument for later in the case, then we can
19 live with that.
20 **THE COURT:** Okay. Then that's what I'm going
21 to do. All right. Thank you very much.
22 **MR. DENNHARDT:** Thank you.
23 **THE COURT:** All right. So then, let's go to
24 focusing optical element. So wait, maybe you all have
25 that then. So I construed "focusing lenses" as...

1 Well, actually, I don't know whether we want
2 to me say there's no construction necessary or that it's
3 lenses that converge light. Does it matter?
4 **MR. KHAN:** We don't think it matters, Your
5 Honor.
6 **THE COURT:** What do you all? I am content.
7 **MR. KNIGHT:** If we could have a formal
8 construction, that would be helpful to us.
9 **THE COURT:** All right. Well, then, I will
10 just construe it as, I'm giving it its plain and ordinary
11 meaning that constitutes lenses that converge light.
12 The reason why I asked is I was persuaded
13 that it probably encapsulates capturing. The plaintiff
14 doesn't dispute it. I don't know if that makes a
15 difference to you all.
16 **MR. KNIGHT:** It does, Your Honor.
17 **THE COURT:** Okay. You don't object, so I'm
18 going to construe it as the plain and ordinary meaning,
19 as lenses that capture and converge light. Okay? That's
20 how I've construed it. Thank you.
21 All right. Next. Let's do focusing optical
22 elements.
23 **MR. KHAN:** On focusing optical element, Your
24 Honor, there's a couple of sort of legal principles we
25 just want to lay out very quickly.

1 **THE COURT:** Okay.

2 **MR. KHAN:** So it's a longstanding claim
3 construction principle, Your Honor, that where there's a
4 reasonable interpretation to cover an embodiment, that
5 it's incorrect to construe claims to exclude that
6 embodiment.

7 This passage and this principle is not
8 necessarily about preferred embodiments or exemplary
9 embodiments. It's just saying if there's a reasonable
10 way to interpret the claim to include a specific
11 embodiment, then it's incorrect to exclude it.

12 And, specifically, it's a separate claim
13 construction principle, Your Honor, that a construction
14 that excludes all disclosed embodiments is especially
15 disfavored.

16 I just wanted to talk about those because
17 that's going to come up in the context of second
18 focusing optical element.

19 **THE COURT:** These quotes are from what,
20 means-plus-function cases? What's the context that these
21 statements that you've got on the screen are addressing?

22 **MR. KHAN:** These are statements of -- these
23 are the statements of claim construction law, Your Honor,
24 in these cases. They are well-established principles
25 that are not sort of, you know, really in dispute.

1 There's no -- there's nothing to read into in
2 terms of understanding the application of the case
3 because we're just quoting exactly what the background
4 section, the legal section of these cases say.
5 **THE COURT:** Okay. So the first sentence, "The
6 specification discloses embodiments that appear to be
7 excluded under defendant's narrower construction an
8 outcome our precedence disfavor."
9 I don't understand that. I mean, that
10 sentence is taken so out of context. You agree that
11 each claim is a separate invention, correct?
12 **MR. KHAN:** Claims are required to be
13 patentably distinct.
14 **THE COURT:** Correct.
15 (Reporter clarification.)
16 **MR. KHAN:** Patentably distinct.
17 **THE COURT:** Okay. So if we're talking about a
18 construction of Claim 1, the fact that the construction a
19 party asks for about Claim 1 reads out disclosed
20 embodiments is of no consequence if Claim 2 doesn't,
21 right?
22 **MR. KHAN:** It may be, Your Honor. There's no
23 requirement that -- there's not -- I'm being very clear.
24 There's no requirement that every claim cover all the
25 embodiments.

1 **THE COURT:** Couldn't be. Wouldn't make any
2 sense.
3 **MR. KHAN:** Yeah. So we agree on that, Your
4 Honor.
5 **THE COURT:** Okay.
6 **MR. KHAN:** But we're just saying that
7 excluding all the embodiments is especially disfavored.
8 **THE COURT:** If all the claims excluded all the
9 embodiments, I hear you.
10 **MR. KHAN:** But if any single claim excludes --
11 construction excludes all the embodiments that are
12 disclosed, that's contrary to what --
13 **THE COURT:** That can't be right. That cannot
14 be right as a matter of law. It cannot be.
15 **MR. KHAN:** Well, your Honor --
16 **THE COURT:** In fact, think about it, because
17 you're a patentee. You want all the time to be able to
18 have a claim read on something that is not disclosed in
19 the written description, an embodiment that's not
20 disclosed. You want that all the time if you're a
21 patentee.
22 **MR. KHAN:** And if there's a reasonable
23 construction that would read on to an embodiment, that's
24 all we're saying, Your Honor.
25 It is not a rule. It's not saying it's

1 required. That's not --

2 **THE COURT:** Well, actually, I'm just telling

3 you that sentence doesn't make sense to me. I actually

4 think it flies in the face of patent law and I think, as

5 a patentee, you wouldn't want it. So I'm not sure how it

6 helps you. Just go ahead.

7 **MR. KHAN:** And the second principle, Your

8 Honor, laid out that that -- I think we had a discussion

9 last time, Your Honor, about claim differentiations and,

10 you know, claim language being rendered superfluous sort

11 of maybe in this context, Judge, you found that less

12 persuasive than in other contexts.

13 And I wanted to point out that one of the

14 things we're going to talk about in connection with this

15 set of claims and this limitation is we're not just

16 rendering claim terms -- dependent claims superfluous.

17 We are rendering them -- striking them from the claim --

18 we are rendering them inconsistent.

19 In other words, the independent claim becomes

20 inconsistent with dependent claims once we start

21 adopting Cytek's construction.

22 And the Federal Circuit recognizes that those

23 are two different things. That's not just rendering

24 claims superfluous, that you've rendered the independent

25 and dependent claims completely inconsistent, and that's

1 the only point.
2 So can we go to focusing optical element? So
3 if we start on focusing optical element, Your Honor.
4 The Slide 17, okay.
5 So here's Claim 1, Your Honor. And in
6 Claim 1, there's a first focusing optical element. The
7 positional language comes not from the word "first," it
8 comes from other elements of the claim.
9 So the claim tells you that it's going to
10 receive light reflected by the optical relay and then
11 it's going to focus it down to a semiconductor detector.
12 And so the claim tells you what the relevant
13 optical path is. It's the light, it's the path from the
14 relay to the focusing element down and to the first
15 semiconductor. And, Your Honor, it's a comprising
16 claim.
17 **THE COURT:** Can I just ask, before we get
18 started and go down this road, because I may not have
19 been as clear as I should have been at the last hearing.
20 I was very clear at the last hearing that I was
21 construing optical element to be means-plus-function
22 term.
23 You all agree on that, right?
24 **MR. KHAN:** Yeah.
25 **THE COURT:** Okay. I just want to make sure.

1 Do you agree that because I've construed "optical
2 element" as means-plus-function, then necessarily
3 "focusing optical element" is means-plus-function?
4 **MR. KHAN:** We understood your ruling to have
5 been that.
6 **THE COURT:** I didn't ask what you understood
7 because I think in fairness to you, other than not put
8 pinpoint citations, you did the briefing that a
9 reasonable advocate would have done based on my ruling.
10 That's not my question. I just want to start
11 from scratch.
12 I construed "optical element" to be
13 means-plus-function. Now we're talking about "focusing
14 optical element." I haven't formally ruled that
15 "focusing optical element" is means-plus-function.
16 I just want to make sure. I'm gathering, in
17 your view, having construed "optical element" as
18 means-plus-function, as a matter of logic, I would
19 construe "focusing optical element" as
20 means-plus-function; is that right?
21 **MR. KHAN:** No, Your Honor. We think "focusing
22 optical element," the word "focusing" now starts to
23 create structure that tells you what exactly we're
24 talking about.
25 **THE COURT:** All right. What I would encourage

1 you to do, I know Mr. Chen is shaking his head, but
2 address that because that's why I wish I had been clearer
3 in my hearing, in my statement last hearing, which is I
4 am not precluding you from asserting today, I'm not
5 saying I'm going to agree with you, but I'm not
6 precluding you from asserting that "focusing optical
7 element" is not means-plus-function. All right?
8 And so particularly what I would like you to
9 focus on, jeepers what a pun, is what things other than
10 a lens and possibly a curved mirror focus?
11 **MR. KHAN:** Right. And, your Honor, that's the
12 key, is that once you've added the word "focusing," you
13 very much narrow the class of structures.
14 **THE COURT:** What is the class of structures
15 that, by adding the word "focusing," I've narrowed the
16 universe to?
17 **MR. KHAN:** I think it's lens, mirror, and
18 diffraction grading. I think it's those things,
19 essentially. And so that is why in the original
20 briefing, Your Honor, in the joint brief, we had taken
21 the position that once -- even if an optical element does
22 not, in and of itself, connote structure, that focusing
23 optical element would, because it reduces the --
24 radically reduces the class of structures to now qualify.
25 We also provided evidence, Your Honor, that

1 that -- those three words in tandem connected, focusing
2 optical element, are used in dictionaries, treatises,
3 publications, et cetera, to refer to the specific
4 structures we were talking about.
5 **THE COURT:** Just give me a second.
6 Does a mirror always converge light?
7 **MR. KHAN:** I don't believe so, Your Honor.
8 **THE COURT:** Yeah. I wouldn't think so. How
9 about a grading?
10 **MR. KHAN:** I don't -- I think each of those
11 elements can converge or diverge.
12 **THE COURT:** I didn't say "can." I purposely
13 didn't say "can," right?
14 **MR. KHAN:** Yeah.
15 **THE COURT:** And I'm a layman. But doesn't
16 make sense to me that a mirror always would converge
17 light. And you agree it doesn't.
18 **MR. KHAN:** Right.
19 **THE COURT:** I don't know what a grading is,
20 really. I don't know that I've ever seen one, so...
21 But you're telling me a grading always
22 converges light that reflects off it?
23 **MR. KHAN:** I don't believe it does, Your
24 Honor.
25 **THE COURT:** Yeah. I don't think so either.

1 But a lens, you would say, converges light?
2 **MR. KHAN:** A lens would converge light. And
3 that's the quintessential example of a focusing optical
4 element.
5 **THE COURT:** Right. Well, that's why I'm
6 wondering why not we just construe "focusing optical
7 element" to be a lens.
8 Mr. Chen.
9 **MR. CHEN:** Lens can also diverge light, Your
10 Honor. It can be a different kind of lens of this shape
11 and light can diverge through it.
12 **THE COURT:** Right. But if we had a focusing
13 lens, in other words, if it's a focusing optical
14 element... could you live with "focusing optical element
15 is a focusing lens"?
16 **MR. CHEN:** No. Because we do think it's
17 subject to means-plus-function, Your Honor.
18 **THE COURT:** All right. All right. I'll come
19 back to that.
20 **MR. KHAN:** We could live with that, Your
21 Honor.
22 **THE COURT:** You could live with "focusing
23 lens"?
24 **MR. KHAN:** I think we could live with
25 "focusing optical lens" as opposed to "focusing lens."

1 **THE COURT:** All right. Let me hear from them.
2 **MR. CHEN:** So, Your Honor, "focusing" is a
3 functional term, so it doesn't add any additional
4 structure to the term "optical element."
5 **THE COURT:** But what to a POSA, what structure
6 is out there that could focus something?
7 **MR. CHEN:** There's a variety of structures.
8 You could have a concave mirror that focuses. You could
9 have a lens that focuses. Those are just two examples.
10 There's a variety of structures that can perform the
11 function of focusing. That's why it's not appropriate.
12 **THE COURT:** I mean, you could have... all
13 right. So we could have a concave... we could have, in
14 other words, you agree that a mirror, a grading, and a
15 lens can all focus. You're not going to dispute that.
16 **MR. CHEN:** I don't dispute that, that's
17 correct. And there's other structures as well.
18 **THE COURT:** What other structures?
19 **MR. CHEN:** Dr. Ilkov could probably answer
20 those questions better than me, actually.
21 But there are, you know, a variety of
22 structures that can do that. I mean, one that's
23 disclosed in the patent is this back plane, concave
24 mirror that's connected to the objective 60, which makes
25 it a composite microscope objective. And that actually

1 focuses, converges light. So there's a variety of even
2 types of mirrors.
3 **THE COURT:** So actually, let's go over that.
4 Let's just talk about, what do you agree that the
5 patent... because this is relevant to your
6 means-plus-function.
7 **MR. CHEN:** Yes.
8 **THE COURT:** If I accepted it as
9 means-plus-function, right --
10 **MR. CHEN:** Yes.
11 **THE COURT:** -- you wanted to... what would you
12 admit is disclosed in the patent as an optical element
13 that focuses?
14 **MR. CHEN:** Right.
15 We say, Your Honor, focusing lens that is of
16 a size that captures all light rays of at least a
17 portion of a collimated beam.
18 And that's because that performs the two
19 recited functions for the focusing optical element. So
20 there's specific recited functions, one being to receive
21 at least a portion of a collimated beam reflected by the
22 optical relay element; and, Number 2, to focus the
23 portion of the collimated beam received from the optical
24 relay element onto a semiconductor detector. That's for
25 the '582, Claim 1.

1 Your Honor, for other claims, we take the
2 position, for example, in Claim 17 in the '582, that
3 it's indefinite.
4 So that's in our briefing, Your Honor. I'm
5 happy to repeat what's in the briefing, but our position
6 as to what the appropriate structure is, is captured in
7 Pages 22 through 28 of our briefing.
8 **THE COURT:** Okay. All right. Thank you.
9 Just give me a second, all right?
10 **MR. CHEN:** Absolutely. And I'm also happy to
11 address the sequential positional significance of the
12 first focusing and second focusing optical element.
13 **THE COURT:** This is part of the disadvantage.
14 I didn't read their supplemental briefing on this issue.
15 I don't want to prejudice you by that, so...
16 **MR. CHEN:** Understood, Your Honor.
17 **THE COURT:** But it makes it much more
18 difficult for me.
19 **MR. CHEN:** Understood.
20 **THE COURT:** I mean, in fact, if you would
21 rather, I will give you this option. Since they didn't,
22 because of their failure, you want me to just leave this
23 for trial?
24 **MR. CHEN:** Yeah. Yes, Your Honor.
25 **THE COURT:** That's what I'm going to do --

1 **MR. CHEN:** Okay. Thank you.
2 **THE COURT:** -- leave it for trial. I'm not
3 going to construe it.
4 **MR. CHEN:** And that's with respect to
5 means-plus-function. But on first and second --
6 **THE COURT:** I'm not going to touch the term --
7 **MR. CHEN:** Okay.
8 **THE COURT:** -- because I'm not going to
9 revisit it. I'm not going to touch the term.
10 I dedicated all that time, spent hours, spent
11 hours on this. Got to read their brief, got to the
12 point where, like, you've got to be kidding me. I'm
13 going to now go through literally thousands of pages and
14 find this? I'm not going to do it. But I don't want to
15 prejudice the other party.
16 So if you'd rather, I'll just leave it and
17 we'll proceed. So that's actually what I'm going to do.
18 **MR. CHEN:** Thank you, Your Honor.
19 **THE COURT:** In fact, what I'm going to do,
20 let's just cut to the chase. I'm not going to construe
21 "optical element configured to detect," unless you want
22 me to.
23 **MR. CHEN:** That one, Your Honor, I believe we
24 should.
25 **THE COURT:** All right. Well, I'll try. We'll

1 see.

2 "Collimating optical element," I'm not going

3 to construe it unless you want me to.

4 **MR. CHEN:** We do want that one, Your Honor.

5 **THE COURT:** Okay. "Collecting optical

6 element"?

7 **MR. CHEN:** Yes. Yes, we do want that one.

8 **THE COURT:** Well, and then "focusing optical

9 element" is the only one left. So I'm not going to

10 construe it right now. We'll move on.

11 **MR. CHEN:** Understood. Okay.

12 **THE COURT:** I may not be able to do a great

13 job since I don't have fulsome briefing, but we'll do

14 what we can.

15 All right. So, really, it's a case

16 management issue because of the failure of the

17 plaintiffs to cite to the record in their briefing on

18 Page 28, I made the administrative decision not to read

19 further in their briefing. And included in the

20 briefing, then, that I did not consider was the

21 "focusing optical element."

22 And we can't do these patent cases, as an

23 administrative matter, if people aren't going to do the

24 basic courtesy of putting citations, not even pinpoint

25 citations.

1 So I'm not going to construe "focusing
2 optical element" since the defendant is okay with that.
3 All right. Hold on one second.
4 All right. Let's do "image" next.
5 **MR. DENNHARDT:** Thank you, Your Honor.
6 So the dispute here, Your Honor, is whether
7 an image must be pictorial, as Cytek contends. And the
8 second question is whether rays generated from
9 corresponding points on an object must converge to a
10 corresponding point.
11 **THE COURT:** All right. Let's start with
12 "pictorial." What do you understand "pictorial" to mean?
13 **MR. DENNHARDT:** It's a great question, Your
14 Honor. I don't know. We said that repeatedly in our
15 briefing. We said, "What is pictorial"? I think their
16 response was, "Well, it doesn't require a camera," but
17 they never went on to tell us what it does require.
18 **THE COURT:** It seemed to me you said you
19 didn't know, but you seem to imply to have a pictorial
20 image, you had to have a camera. I thought that's your
21 position.
22 **MR. DENNHARDT:** That's what we thought. They
23 said no, in their answering brief.
24 **THE COURT:** Well, actually, I don't know why
25 you necessarily would. But I will say, and it seems to

1 me you kind of clue in on the fact that there's also a
2 description, or "image" is, in the written description,
3 modified by pictorial at least once, right?
4 **MR. DENNHARDT:** I don't believe so, Your
5 Honor.
6 **THE COURT:** Okay. But it is digital.
7 **MR. DENNHARDT:** There is a reference to a
8 digital image. I agree with that.
9 **THE COURT:** I thought you, okay. What's a
10 digital image?
11 **MR. DENNHARDT:** I would say created by
12 electronics. So...
13 **THE COURT:** Can a digital image be pictorial?
14 **MR. DENNHARDT:** I don't know what "pictorial"
15 means.
16 I mean, like I said, our view is that
17 "pictorial" seems to imply a picture, so a camera. A
18 camera, I think, could be digital, but not all cameras
19 are digital. So I think it could be.
20 But I think this goes to the heart of the
21 problem, Your Honor, which is how is the jury to know
22 whether something is or is not pictorial?
23 I think their construction just introduces
24 additional questions and actually makes it harder for
25 the jury to assess the question of infringement.

1 **THE COURT:** Hold on a second, please.
2 Sorry about this.
3 What is a representation?
4 **MR. DENNHARDT:** I think it's broad. I think
5 when we're talking about these systems and these
6 particular claims, what we are referring to is light is
7 going to pass through an object, and that light will
8 represent that object.
9 So in the context of these flow cytometers,
10 for example, will have a dye on a cell, is one potential
11 example. The light can pass through the cell. It's
12 going to interact with the dye, and certain light is
13 going to come out. That light is representing the cell,
14 right? That would be the object.
15 And that light is then used -- it's
16 quantitated. It's -- you assess the magnitude of light
17 that might come out. And that can give you different
18 kinds of information about that cell or about a group of
19 cells, for example.
20 So the light in that context could be a
21 representation of the object. You might also have --
22 **THE COURT:** Let me ask you this. I want to
23 kind of try to "Joe Six-Pack" terms for me.
24 So I go for a heart test, okay? It's like an
25 EKG, so, you know, it has a graph of whatever my heart

is doing, right? Is that an image of what my heart is doing? Is it an image of my heart? Let me put it that way. Let's start with that.

MR. DENNHARDT: I would think not in the optical sense. And, you know, we are using "image" as it is used in optics, not as it might be used in other areas of focus.

So in optics --

THE COURT: In optics, do they use the word "representation"?

MR. DENNHARDT: Repeatedly. And let me just start by noting both sides agree that representation of an object is correct.

THE COURT: Right.

MR. DENNHARDT: We see dictionaries all over the place.

THE COURT: No, no. I get you see that they define "image," but do you have a dictionary definition for "representation"?

MR. DENNHARDT: I don't think -- sorry. I didn't mean to cut you off.

THE COURT: But do you know, is there a definition in an optics dictionary that defines the word "representation"?

MR. DENNHARDT: I don't think we've identified

1 one for Your Honor. And, just candidly, I'm not sure
2 whether it is or not. I don't think I've seen one.
3 **THE COURT:** Does anybody have that dictionary
4 right now handy, the Oxford Dictionary of Physics, can
5 they look up, is the word "representation" in it?
6 **MR. DENNHARDT:** We can try and take a look,
7 Your Honor. I think we may have to pull down the full
8 dictionary. I think we just have the excerpted printouts
9 that were exhibits.
10 **THE COURT:** All right.
11 **MR. DENNHARDT:** And so I think in the context
12 here, what we're talking about is light, right? We're
13 talking about optics. So it's how the light represents
14 the object. I don't think they disagree with that.
15 So the only question is: Do we need the
16 other stuff, the other words that they put around it?
17 And I think as we see from the dictionaries
18 here, the commonly understood definition of "image," as
19 a person of ordinary skill in the art would understand
20 it, is as a representation of an object.
21 And because both parties agree on that, I
22 think when we get to the question of infringement or
23 validity, whether something is or is not a
24 representation of an object, I don't think that's really
25 going to be the dispute.

1 I think the dispute, to the extent that
2 you're focusing on the parties' constructions, is
3 whether that image has to be, as they say, pictorial,
4 rays of light converge from different points to a
5 corresponding point by an optical component, et cetera.
6 **THE COURT:** Hold on.
7 Where is the word "converge" in their
8 definition?
9 **MR. DENNHARDT:** Focus. I'm sorry. Maybe I
10 said "converge." Focused. I think we agree that
11 "focused" and "converge" are sort of equivalents.
12 **THE COURT:** All right.
13 **MR. DENNHARDT:** And I think what we'll see,
14 Your Honor, is that the specification talks about many
15 different types of images. You noted digital image. We
16 also see references to finite focalized image, finite
17 focused image, collimated afocal image.
18 So the specification identifies specific
19 types of images that might occur in the systems. But
20 the claims don't do that, right? They just say "image."
21 So an image, as used in the claims, must be
22 broad enough to encompass at least the different types
23 of images that are recited in the specification and
24 their construction doesn't do that.
25 So they require, for example, the light to be

1 focused. But the specification expressly discloses a
2 collimated afocal image. An afocal image, of course, is
3 the opposite of a focused image.
4 So their construction excludes disclosures
5 that are recited expressly in the specification. They
6 want to limit it to just, for example, the finite
7 focused image, and that's improper. The claim doesn't
8 do that. The claim just says "image."
9 I'll note, Your Honor, that in the joint
10 claim construction chart, they have no intrinsic
11 evidence at all. Completely blank. So they're not
12 pointing to anything in the specification because, of
13 course, the specification, as we've just seen, doesn't
14 support them.
15 I'll also just go to the rest of their
16 construction. Rays of light from points on an object
17 are focused to a corresponding point. So there's a
18 multiple-to-one relationship that they're trying to draw
19 here. Rays of light from points focus to a
20 corresponding point.
21 So they would say there's no image, no image,
22 no image. It's only when you get to that single point
23 that an image is created, right? That's also not true.
24 We know that, in fact, you're not going to
25 have all of the points on an object are focused to a

1 corresponding point. So this is just simply wrong, as a
2 matter of physics.
3 I'll also note that they want to try and say
4 all of the points on an object are focused to a
5 corresponding point, but their own expert agrees that in
6 the real world, you're never going to have that because
7 light doesn't behave in a perfect, idealized manner.
8 You have things like in a real-world imaging
9 optical system -- this is their expert saying this --
10 there's light scattering, there's aberrations, and
11 there's diffraction.
12 Light is going to travel in different ways.
13 It's not all going to go or be focused to a
14 corresponding point. So their construction is also
15 wrong as a matter of how the real world works, as
16 confirmed by their own expert.
17 And, in fact, it's also contrary to exhibits
18 that their expert relies on. So, for example, this is
19 the optics textbook that their expert relies upon, and
20 it talks about light can go and reach a point P. That's
21 referred to as a perfect image, right?
22 But then it goes on to say they could
23 conceivably arrive to form a finite patch of light or a
24 blur spot about P. So not at P, but about P. It would
25 still be an image.

1 So it doesn't have to have this perfect focus
2 that they're trying to do, for a number of different
3 reasons. Their expert agrees, the references that their
4 expert relies on agrees, and the specification agrees,
5 but their construction can't be true.
6 **THE COURT:** How is this going to play out?
7 Because, see, I have a really hard time understanding
8 this. Right? Because you say, "Defendant ignores the
9 evidence, including the specification's disclosure of
10 non-pictorial images and extrinsic evidence defining
11 image."
12 All right. Then, when you refer to those,
13 you're talking about, one, that there's a digital image,
14 right? But, to me, a digital image is a pictorial
15 image. I mean, in other words, a picture is a picture.
16 Right? I can see it.
17 **MR. DENNHARDT:** Sure.
18 **THE COURT:** And they're relying on extrinsic
19 evidence. I mean, they cite in their brief the figures
20 and some things, but they are really, at the end of the
21 day, relying on their expert.
22 But what I'm worried about is what's the jury
23 going to think. And I think maybe if you help me
24 understand, how do you think this is going to be put in
25 front of the jury, and what would be the dispute.

1 **MR. DENNHARDT:** Yeah. So there are two things
2 going on here, I think. The first is pictorial. As we
3 said, I don't quite understand what they're trying to get
4 at.
5 **THE COURT:** Well, I think they probably want
6 to limit it to those figures with the dots on the plane.
7 **MR. DENNHARDT:** That may be. It's not clear
8 to me what --
9 **THE COURT:** I think it's Plane 605. I don't
10 know.
11 **MR. DENNHARDT:** I understand what you're
12 referring to, Your Honor.
13 It's not clear why those are necessarily
14 pictorial and what wouldn't be pictorial if those are.
15 But in any case, to Your Honor's point, a digital image
16 is a specific type of image that's recited in the
17 patent, right?
18 So even if we assume, even if we equate
19 digital with pictorial, well, that's -- the claim
20 doesn't say "digital image," it just says "image." It's
21 broader. It has to encompass nondigital images.
22 And the other thing that I think is going on
23 here is this, they're saying an image forms where light
24 rays converge, not where they're collimated.
25 So that's their point why they want to say it

1 has to be focused. They want to be able to turn around
2 and say, well, we don't infringe, or maybe it's an
3 indefiniteness argument. I'm not sure. But they want
4 to say, well, the claim says a collimated beam forms an
5 image. But an image can't be formed in a collimated
6 beam. It has to be focused.
7 So I think that's really what's going on
8 here, Your Honor. And that's wrong for at least two
9 reasons. The first is --
10 **THE COURT:** Don't get into the indefiniteness
11 now. If they want an indefiniteness argument, they're
12 going to just say go with yours.
13 **MR. DENNHARDT:** And maybe it's a
14 non-infringement argument. They'll say, well, aren't --
15 we have images formed in a collimated beam and that's
16 impossible, right? But the claim tells you that that's
17 not impossible.
18 I mean, we have to assume that the claim is
19 right, right? The claim language is what controls here.
20 And the claim language tells you a collimated beam
21 produces a first image. So they are trying to say,
22 well, no, an image can't be formed by a collimated beam.
23 But the claim language says exactly the
24 opposite. So they want to say, well, Your Honor, the
25 claim is impossible, right? But that's not how claim

1 construction works. You don't say the claim language is
2 wrong.
3 And the other thing, of course, is the
4 specification tells you that there are images in
5 collimated beams. It talks about a collimated, afocal
6 image. So it identifies particular types of images that
7 can occur in a collimated beam. A collimated afocal
8 image, that's at Column 36, Lines 25 to 32.
9 So they want to exclude this embodiment.
10 They want to exclude this disclosure. They want to
11 exclude the claims, and they want to say, well, you can
12 never have an image in a collimated beam so we're done.
13 The other thing I would note, Your Honor, is
14 you were talking about you can see a picture, a digital
15 image, for example.
16 And in optics, you can see an image, that's
17 right, but it's not necessarily going to look like the
18 object. It may just look kind of like a blob of light,
19 right? That's the example that I was giving where the
20 light goes through a cell as one example and what comes
21 out, it's not going to look like a picture of the cell,
22 right? It's going to look like a blob of light. But
23 that's still an image because it's a representation of
24 that cell, and the way that it's used in these systems
25 is it will consider the magnitude of the light that's

1 coming out, and that gives you information about the
2 cell.
3 So that's how it works in the -- in flow
4 cytometers.
5 **THE COURT:** Okay. Anything else?
6 **MR. DENNHARDT:** I think that does it, Your
7 Honor.
8 **THE COURT:** All right. Let's hear from the
9 other side.
10 **MR. KNIGHT:** Your Honor, on image, I think I
11 heard from my colleague here that it is a term in optics,
12 and so it is actually a term of art in optics.
13 And I just wanted to provide you with one of
14 the pieces of extrinsic evidence that Beckman Coulter
15 relied on. It's Exhibit 26. And it's talking about
16 image formation and specifically what it is. And it
17 says, "It's a collection of rays from each point on an
18 object and their redirection by an optical component
19 onto a corresponding point of an image."
20 And so there is a very well-known definition
21 for what an image is and the dynamics that are at play
22 when we are talking about optics when we are talking
23 about light.
24 I know you're very interested in the
25 pictorial representation of an object, so I will address

1 that first.

2 When we talk about "pictorial," what we're

3 talking about is something that's visual. If you have

4 an object, there are a bunch of different

5 representations of that object. You could have

6 something acoustical; you could have something

7 electrical. I think you mentioned an example of an EKG

8 as being something that might be digital or data.

9 Pictorial is simply the fact that we're

10 talking about image. It's in the word itself. It's

11 visual.

12 Next slide, please.

13 **THE COURT:** Hold up.

14 **MR. KNIGHT:** Yes.

15 **THE COURT:** Can you live with "a visual

16 representation"?

17 **MR. DENNHARDT:** Your Honor, so long as we're

18 not going to later hear from the other side, "Well, this

19 doesn't look like the object," right, it's visual but it

20 doesn't look like the object and, therefore, you know

21 that's not a visual representation, I think that would be

22 a problem.

23 And so it's not clear to me what work the

24 word "visual" would be even doing here. We are talking

25 about an optical system, we're not talking about an

1 audio system or an acoustics system or --
2 **THE COURT:** I mean, would you all agree, I
3 mean, See, and I don't know like visual because it sounds
4 like you need a human --
5 **MR. DENNHARDT:** Exactly.
6 **THE COURT:** -- as opposed to a machine.
7 **MR. DENNHARDT:** You got it.
8 **THE COURT:** But "a representation created by
9 light," would you live with that?
10 **MR. PIVOVAR:** No.
11 **MR. DENNHARDT:** I think we can live with that.
12 **THE COURT:** Sir, I don't know your name, but
13 throughout this hearing and the last hearing, you have
14 not only demonstrated facial expressions constantly,
15 enough that my clerks talked about it when we left the
16 last hearing, but you have throughout this hearing, in a
17 very loud voice, well, actually, it's in a whisper, but
18 it's a stage whisper. And it doesn't help your colleague
19 at the podium when you keep staying stuff out loud. It
20 distracts me. It's kind of rude to him. All right?
21 **MR. PIVOVAR:** I apologize, Your Honor.
22 **THE COURT:** Can you cut it?
23 **MR. PIVOVAR:** I will.
24 **THE COURT:** Thank you.
25 All right. Now, I'm sorry, sir. Develop

1 your own thought and go from there. Could you live with
2 "a representation created by light"?
3 **MR. KNIGHT:** As to a replacement for
4 "pictorial" or as --
5 **THE COURT:** No, for "image."
6 Pictorial is not going to do it. I mean, I
7 looked up pictorial in the dictionary last night. I
8 mean, even the definition, it just references back to
9 "picture." Picture sounds like something painted.
10 I mean, this is going to go to a jury, right?
11 **MR. KNIGHT:** Right.
12 **THE COURT:** Because do you paint it? As
13 plaintiff points out, do you need to have a camera? It
14 doesn't further the day for me.
15 When I hear you both talk, what comes out to
16 me is that you are saying, well, ultimately, whatever
17 this image is, it has to be created by a light source or
18 it has to emanate from a light source.
19 **MR. KNIGHT:** That is correct, but there's a
20 more critical component. And so if pictorial doesn't
21 work, understand Your Honor's concerns, we'd be willing
22 to forego that.
23 What we wouldn't be able to forego is the
24 optical principle here that we see where you have an
25 object that's a light source. You have rays that are

1 emanating from that light source that goes through an
2 optical component.
3 Here we have a lens, right?
4 **THE COURT:** Right.
5 **MR. KNIGHT:** And then what an image is is
6 well-known in optics and there is uniformity in terms of
7 the extrinsic sources on both sides on this, is that an
8 image, it is a representation. It looks like that
9 object.
10 But there's two critical pieces here. One is
11 that if you have light that's going from a particular
12 point on the object, and we'll look at the lower point
13 on the object here.
14 We've got three light rays, one that's
15 hitting the bottom of the lens, one that's hitting the
16 middle of the lens, and one's hitting the top. They all
17 converge on a corresponding point on the image.
18 Likewise, if you look at a different point on the
19 object, same thing happens.
20 Two things you can see here with an image and
21 why it is a representation of an object and also
22 different. One, is that the image is actually flipped
23 in orientation. You can see, like, there's a small dot
24 in the object on the top.
25 **THE COURT:** Right. Like looking through a

1 telescope.

2 **MR. KNIGHT:** That's exactly right, Your Honor.

3 And then the second is that it's magnified.

4 And that magnification is a function of the lens. And

5 where that image forms is on an image point, it's

6 basically the vertical. It's how far it is away from

7 that optical component.

8 Now, we actually know a lot about images.

9 There's a lot of real-world applications. Your eyes

10 process images.

11 We have an example here. This is just a

12 real-world example. You have -- the sun hits, say, the

13 Statue of Liberty. Light bounces off the Statue of

14 Liberty. That's the object. That light goes through

15 your cornea, hits the lens by your iris, and then

16 focuses down. And what you have that hits your retina

17 is an image.

18 Now, we heard in grade school that, you know,

19 what we actually see in the real world is actually

20 flipped and our brain reorients it. But that's the

21 concept we're talking about here with an image. And so

22 what's critical here --

23 **THE COURT:** Actually, can I step you back?

24 **MR. KNIGHT:** Sorry.

25 **THE COURT:** No, don't be sorry. You are good,

1 actually, very polite. I appreciate it.
2 But it focuses if your lenses are 20/20,
3 right?
4 **MR. KNIGHT:** Correct.
5 **THE COURT:** But the fact that my lenses aren't
6 20/20, they might be distorted. I might have a cataract.
7 And now my image is cloudy, but it's still an image, and
8 it's still an image of the object.
9 And I think that's what they're objecting to
10 is, you know, this focusing to a corresponding point.
11 **MR. KNIGHT:** Right. Corresponding collection
12 of points. And I think -- and I understand that, too,
13 having corrective lenses myself, is that you can still
14 have an image, even if it's not sharpened to as much as
15 you can.
16 If you think about the ELMO here, right? We
17 were doing adjustments and it was really blurry, and
18 then we finally found the focal point where it's
19 sharpest.
20 The light rays, when we're getting there,
21 they're still moving toward convergence. They're still
22 focusing. It's just whether you -- the surface here is
23 at the focal point. If it's at the focal point, there's
24 full convergence. If you're a little bit further up,
25 the light rays are still focusing, they're just not

1 focusing to corresponding points. And so that's the
2 difference between a blurry image and then a sharp
3 image. It's exactly at the focal point.
4 They're both representations of an object,
5 but one -- the critical thing we're thinking about --
6 I'm sorry. Do you have a question?
7 **THE COURT:** Go ahead. Finish.
8 **MR. KNIGHT:** Yeah.
9 One of the critical things that we're
10 thinking about when we talk about imaging in optics is
11 the fact that light is converging down.
12 And we have intrinsic support.
13 **THE COURT:** So what does your machine do that
14 it wouldn't infringe if I give you your construction
15 here? I'm just curious. Like, again, trying to figure
16 out the effect of my construction.
17 **MR. KNIGHT:** So the issue that we have is
18 directed towards collimating optical element. We have an
19 internal conflict between what is a collimated beam and a
20 collimating optical element that projects a collimated
21 beam including a first image.
22 Image is term of art. It's well known by a
23 person of ordinary skill in the art. And a person of
24 ordinary skill, in looking at that particular claim and
25 the function of that claim -- and I believe it's

1 Claim 14 of the '582 Patent -- they would find these two
2 concepts to be irreconcilable. One of the reasons why
3 is that "image" and "object," they're talking about
4 optical systems in imaging optics. And yet what we have
5 here is a system that is non-imaging.
6 **THE COURT:** So it's really not an infringement
7 argument, it's that they drafted an impossible claim.
8 **MR. KNIGHT:** They drafted an impossible claim.
9 The specification doesn't make any sense. And my
10 colleague here mentioned that there is disclosure of a
11 collimating afocal image. Right?
12 So what is an afocal image? Image is well
13 known for being focused at the focus point; therefore, a
14 collimating afocal image --
15 **THE COURT:** You're saying it doesn't make
16 sense.
17 **MR. KNIGHT:** It doesn't make any sense.
18 Because if you have a collimating optical element, you
19 have a collimated beam, right?
20 And a collimated beam, in the most perfect
21 sense, would just have light rays projecting to
22 infinity. There would be no image play. There would be
23 no place for all the light to converge.
24 So if you have an image that's baked into
25 what's projected in your collimating optical element,

1 it's at infinity.

2 **THE COURT:** All right. So collimating afocal

3 image was in the written description?

4 **MR. KNIGHT:** It's in the written description

5 as an alternative to a configuration for, I believe, the

6 composite microscope objective. Not even the WDM, not

7 related to the collimating optical element.

8 **THE COURT:** Okay. Let's step back.

9 So there's a phrase in the written

10 description "collimating afocal image," which you are

11 telling me actually describes an impossibility. It's a

12 nonsequitur. That's what you're saying?

13 **MR. KNIGHT:** That's correct, Your Honor.

14 **THE COURT:** Okay. Do you have any intrinsic

15 evidence from which I could draw that conclusion?

16 **MR. KNIGHT:** In the way that the patent

17 actually talks about images, and they are very clear with

18 respect to the written description for Figure 9A about

19 what an image is, how -- you know, where it's projected

20 from, and that it's -- the fact it's on an image plane.

21 **THE COURT:** The problem is, and I would say,

22 having tried to understand and read 9A, give you the

23 benefit of the doubt. It does discuss a phenomenon

24 exactly as you say, but it doesn't preclude that, in the

25 universe of optics, there is a collimating afocal image.

1 It's an embodiment, it's a description of it. It doesn't
2 say that this is the entire universe of how light is
3 focused to create an image.
4 I mean, can you show me language where it
5 does that? Again, I don't debate that it supports kind
6 of your, well, it's not inconsistent for sure. But I go
7 back to: What can you show me in the patent that, if I
8 read it, I would conclude, boy, this patent's use of the
9 term "collimating afocal image," it just makes no sense
10 and it's wrong, and it's a real error, and it's not even
11 in the claim, it's in the written description?
12 **MR. KNIGHT:** All right. So if we go to
13 Figure 25, it talks about a collimating optical element
14 that projects a collimated beam, correct?
15 And so with the collimated beam, there is no
16 image. And it's inconsistent with the way that image is
17 formed here. So having a collimated afocal image
18 doesn't make any sense.
19 I appreciate your struggle on this, Your
20 Honor.
21 **THE COURT:** I've actually never had a case,
22 and, believe me, I've had a lot of cases where there's
23 really nonsensical stuff in patents, and especially in
24 claims. But I don't recall ever having a case where I
25 was asked to just reject, out of hand, you know,

1 terminology in a written description based on, basically,
2 extrinsic evidence.
3 **MR. PIVOVAR:** Your Honor, I'm sorry to --
4 apologize. Can I just remind my colleague there's some
5 intrinsic record from the file history that might bear on
6 this.
7 **THE COURT:** All right. Lets do this, let's
8 take a ten-minute break. Give the court reporter a
9 break.
10 (Whereupon, a recess was taken.)
11 **THE COURT:** All right. Please be seated.
12 **MR. KNIGHT:** To answer your question from
13 prior to the break about additional intrinsic support for
14 image and image relating to focusing light, I want to
15 draw your attention, Your Honor, to Exhibit 7. This is
16 the prosecution history for the '106 Patent.
17 I think you looked at it earlier in our first
18 claim construction hearing when they were talking about
19 collimating.
20 But, in particular, it highlights the fact
21 that there's a difference between collimating and
22 focusing, and focusing is required for image formation.
23 And so in the highlighted section here, the
24 applicant specifically disagreed that objective lens in
25 the prior art was configured to focus light because the

1 objective lens collimated rather than focuses. And
2 those two things are not the same.
3 Now, focusing, they later say involves
4 converging light. And then on Page 10, they indicate
5 that a light that doubled lens 906, focuses, converges
6 on to the image plane 605.
7 So what that highlights is that there's a
8 distinction for the applicant between collimating and
9 focusing. And when we talk about image formation, given
10 that we specifically reference an image plane, we are
11 talking about focusing light.
12 **THE COURT:** So --
13 **MR. KNIGHT:** Sorry.
14 **THE COURT:** You don't have to apologize.
15 **MR. KNIGHT:** Didn't want to interrupt you,
16 Your Honor.
17 **THE COURT:** Can an image be formed by
18 collimating light?
19 **MR. KNIGHT:** No.
20 **THE COURT:** It's because the rays are
21 parallel, right?
22 **MR. KNIGHT:** Correct.
23 **THE COURT:** All right.
24 Definitely think, when you want me to
25 construe the term this way, that it can be formed by

1 converging rays.

2 **MR. KNIGHT:** That's correct.

3 **THE COURT:** How about diverging rays? Can an

4 image be created by diverging rays?

5 **MR. KNIGHT:** Not a real image, Your Honor, to

6 be technically correct.

7 **THE COURT:** Can you show me, in the intrinsic

8 evidence, where the creation of an image by diverging

9 rays is precluded?

10 You can speak with them if you want.

11 **MR. KNIGHT:** One moment, Your Honor.

12 (Counsel confer.)

13 **MR. KNIGHT:** Your Honor, I think the question

14 as to whether a image can be formed by diverging rays

15 highlights the difference between a real image, which is

16 what we have been talking about, and a virtual image.

17 And the claims, themselves, talk about

18 projecting a first image or producing a second image.

19 And that indicates a certain directionality, in that the

20 image has to be formed at some point after the optical

21 element.

22 With a virtual image, that image actually

23 forms prior to the optical element.

24 And if we could pull up a slide that talks

25 about a virtual image. Down a couple more, please.

1 Thirty-eight. All right.
2 So when we're talking about a virtual image,
3 this goes to your question, Your Honor, about whether
4 you can form an image by diverging rays. Well, the
5 image itself doesn't actually form, you know, after the
6 light passes through the optical component. And that
7 makes sense. There's no convergence.
8 And rather, what you do when you're talking
9 about a virtual image, is if you were to orient those
10 rays and pull them back to the point of convergence,
11 that's where the virtual image would be. It's virtual.
12 It doesn't exist.
13 If I can make one additional point, Your
14 Honor.
15 **THE COURT:** Sure.
16 **MR. KNIGHT:** So one of the problems that we
17 have with representation of an object in that it could
18 include a collimating afocal image is that from what I
19 heard from counsel is that any kind of light at any point
20 after it passes through a collimating optical element can
21 qualify as an image.
22 And given that the claims in the '582 Patent
23 specifically recite a first image and second image, we
24 have a notice issue.
25 How am I to determine if I'm infringing and

1 where the first image is or where the second image is,
2 and how do I distinguish between those two, if I'm using
3 a collimated beam, and there's no actual focusing of the
4 light to a particular image point or collection of image
5 points on an image plane?
6 And, Your Honor, just one last point. I know
7 I said earlier, one last point, but this is truly one
8 last point.
9 The pictorial representation, I know we've
10 already discussed it, but as Your Honor might be aware,
11 that didn't come out of the ether. We actually
12 referenced a modern optical engineering dictionary, and
13 that's where it arises. So it's --
14 **THE COURT:** Do you know, is "representation" a
15 defined word in that dictionary?
16 **MR. KNIGHT:** We will look into that for you
17 and get back to you.
18 **THE COURT:** All right. Give me a second.
19 **MR. KNIGHT:** All right. Thank you, Your
20 Honor.
21 **THE COURT:** Does the plaintiff...
22 Oh, you're back. All right. Sorry.
23 Can you have an image formed by collimating
24 rays?
25 **MR. DENNHARDT:** Of course you can. A

1 collimated afocal image, the specification tells us that.
2 **THE COURT:** Other than that reference to which
3 is Column 36, Lines 25 through 32 of the '582 Patent, can
4 you point to anything else that shows that you can have
5 an image formed by collimated light rays?
6 **MR. DENNHARDT:** Well, there are at least two
7 references to collimated afocal image in the
8 specification. I know Your Honor has them available and
9 can control F through them. So you will find two of them
10 in there.
11 **THE COURT:** Okay.
12 **MR. DENNHARDT:** I don't have the other one at
13 my fingertips. I apologize.
14 But I think, Your Honor, you hit the nail on
15 the head with your question about virtual images.
16 **THE COURT:** Actually, the question I hit on
17 the head that I would like you to answer is: Other than
18 now there's two references in the written description to
19 collimated afocal images, can you point to anything else,
20 extrinsic or intrinsic, that tells me that there's such a
21 thing as collimated afocal images or, in other words,
22 that there's an image produced by collimated light?
23 **MR. DENNHARDT:** Yes, Your Honor. The claims.
24 The claims all tell you that a collimated beam produces
25 an image. It's all over the claims.

1 **THE COURT:** Okay. So that's it, though. It's
2 the claims, and it's the two references in the written
3 description?
4 **MR. DENNHARDT:** The claims and the two
5 references in the written description are the ones that
6 specifically refer to a collimated afocal image.
7 There's also --
8 **THE COURT:** Okay.
9 **MR. DENNHARDT:** Sorry. There's also, recall
10 earlier, I pointed you to Columns 56 through 58 that are
11 talking about Figure 25 in a context of a different
12 embodiment, and it talks about --
13 **THE COURT:** Well, time out. Hold up. Let me
14 just get it.
15 **MR. DENNHARDT:** Yeah. It's at the very
16 bottom.
17 **THE COURT:** Let me just pull it and find it.
18 **MR. DENNHARDT:** It's at Column 56.
19 **THE COURT:** All right. So we're now in the
20 '582 Patent, Column 56?
21 **MR. DENNHARDT:** That's right.
22 And all the patents have the same
23 specification so it's --
24 **THE COURT:** Great.
25 **MR. DENNHARDT:** -- it's across the way, but

1 yes.

2 At the very bottom, around Line 57.

3 **THE COURT:** All right. So that's right, it's

4 a discussion of Figure 25, 26, 27, and 28. Yep, go

5 ahead.

6 **MR. DENNHARDT:** Yep. So it's talking about

7 that. It goes through Column 58.

8 Throughout this it references "image"

9 repeatedly. For example, you will see one at the very

10 bottom, Line 67, "produces an image of substantially the

11 same size."

12 **THE COURT:** But you're telling me this is

13 showing light created by collimated rays because at the

14 902, it's emanating out of the 902 as a collimated ray?

15 **MR. DENNHARDT:** It's that, and you will also

16 see that again at...

17 Here we are.

18 **THE COURT:** Okay. Just before you get any

19 further, but doesn't it...

20 Isn't there convergence of the rays after

21 they leave? In other words, prior to there being an

22 image, there's convergence, correct?

23 **MR. DENNHARDT:** Prior to there being... no. I

24 don't think so.

25 **THE COURT:** So let's do this. Pull up

1 Figure 25.

2 **MR. DENNHARDT:** Sure. You want me to put it

3 on the screen, Your Honor?

4 **THE COURT:** Sure, that'd be great.

5 **MR. DENNHARDT:** Actually, I'll do it on the

6 ELMO, if that's all right.

7 And maybe, Your Honor, before we get there,

8 just because this talks about Figure 25, Columns 44

9 through 46 repeatedly refers to a collimated beam

10 forming an image, right?

11 So "collimating optical element projects a

12 magnified image." Here we see "may use an achromatic

13 doublet lens as the first collimating element." Talks

14 about since images, right, are created before the

15 focusing lens.

16 So there is no convergence, right? The image

17 is created before the focusing lens. So the entire

18 description of Figure 25 is about images and collimated

19 beams.

20 So it's all over the place in the patent.

21 The claims tell you that a collimated beam forms an

22 image. The specification tells you, and then there is

23 the specific references to the "collimated afocal

24 image," which identifies a particular kind of image in a

25 collimated beam.

1 **THE COURT:** Okay.

2 **MR. DENNHARDT:** So it's all over the place,

3 Your Honor.

4 I'm happy to pull up Figure 25 if you like.

5 **THE COURT:** And your expert would say there is

6 such a thing as a collimated afocal image?

7 **MR. DENNHARDT:** Of course.

8 **THE COURT:** Well, I know that. There's enough

9 money out there for experts to tell you anything.

10 **MR. DENNHARDT:** Your Honor, I think it would

11 be hard pressed to suggest that that's not something that

12 exists because, again, the specification tells you it

13 exists, right? So --

14 **THE COURT:** No. No. I'm sorry. I just don't

15 accept that, for what it's worth.

16 I mean, there's too many bad patents filed.

17 People will say whatever they need to say. I'm not

18 going to just accept for you...

19 You might be right as a matter of claim

20 construction, but in the world out there, to be honest,

21 you know, my gut tells me people don't think an image is

22 created by collimated light. That's what my gut says.

23 It's just the rules of claim construction might say

24 otherwise here.

25 **MR. DENNHARDT:** And, Your Honor, if I could

1 from a frame the thinking on this. You're right, the
2 specification and the rules of claim construction would
3 suggest that you could say that a collimated beam forms
4 an image because we see it in the spec, and we see it in
5 the claims.
6 But they also haven't pointed you to anything
7 that says, well, you can never have a collimated beam
8 with an image, right? There's simply nothing in the
9 record that says that other than --
10 **THE COURT:** Their problem is they have to
11 point to extrinsic evidence. I totally agree with that.
12 And, now, they do cite this prosecution
13 history discussion. I'm not sure, though, it's got to
14 be, I guess, clear and unequivocal, I mean, you know,
15 under the rules of interpretation.
16 **MR. DENNHARDT:** So let me point you to a
17 different portion of the prosecution history that, in
18 fact goes the other way.
19 Well, let me address first their point and
20 and then I will point you to something else.
21 So what they said, Your Honor, is converging
22 is different -- excuse me -- collimating is different
23 from focusing. I told you at the last hearing we don't
24 dispute that.
25 They also said a focused beam can form an

1 image. We agree with that too, right?
2 What that doesn't tell you is that a
3 collimated beam can't form an image. So there is a step
4 missing in that.
5 And here, this is our Exhibit C from our
6 supplemental briefing, Your Honor. This is from the
7 examiner interview, right? This is from the file
8 history. And he says, "We're talking about collimating
9 optical element that projects a magnified image."
10 So he has found that there is this connection
11 between a collimating optical element forming an image
12 and the lens that doesn't.
13 So, in fact, I would submit, Your Honor, that
14 they are missing a step in their assessment on the file
15 history and, in fact, the file history goes the other
16 direction, right?
17 **THE COURT:** What's a magnified image?
18 **MR. DENNHARDT:** So a magnified image, I
19 believe, is when the image is bigger than the original
20 object.
21 **THE COURT:** Right. And how does it make it
22 bigger? Doesn't it have to converge or diverge the rays?
23 **MR. DENNHARDT:** I would submit not, Your
24 Honor.
25 **THE COURT:** I mean, otherwise, I mean,

1 collimated light can only go through something that's
2 pure glass. That's not a lens.
3 I mean, if you're going to magnify it, don't
4 you need a lens to magnify?
5 **MR. DENNHARDT:** So you might need a lens to
6 magnify. Actually, Figure 25 shows exactly this.
7 So we've got the object here. The actual
8 object isn't shown. Right? But it's showing you this
9 is points on an object.
10 So the light then diverges, right? It goes
11 into the objective, the collimating optical element --
12 excuse me. It goes into the collimating optical
13 element 902, right?
14 Well, now we see the light that's coming out
15 the size of that beam is actually bigger than the
16 points, right? So, now, this would be magnified because
17 it's bigger than the actual object, and it's a
18 collimated beam and Figure 25, the description of
19 Figure 25, tells you that there's an image in here.
20 So a magnified -- and a magnified image can
21 absolutely be created in a collimated beam. And that's
22 exactly what the examiner found in the file history.
23 **THE COURT:** All right. What you both agree on
24 is that the image has to be formed by a light.
25 **MR. DENNHARDT:** Agree, Your Honor.

1 **MR. KNIGHT:** Yes.

2 **THE COURT:** You agree, right?

3 **MR. DENNHARDT:** Your Honor, the last point

4 that I would make is, I think my colleague on the other

5 side, in fact, made clear what's going on here.

6 They're trying to limit the claims to real

7 images, right? You asked can diverging rays form an

8 image. He said, well, not a real image, but he conceded

9 that a virtual image can be created, right?

10 Well, the claims don't say real image. He

11 wants to limit us to real image, right? He wants to

12 limit us to the rays have to be converging. Well, that

13 excludes virtual images, which the claim doesn't do,

14 right? The claim just says "images."

15 It excludes collimated afocal images, which

16 are expressly discussed in the specification and

17 expressly discussed throughout the written description

18 of Figure 25. So there's simply nothing here that says

19 a collimated beam can't form an image. All of the

20 evidence goes the other way. All of it.

21 **THE COURT:** Right. But you say "all the

22 evidence." There's no evidence in the written

23 description of virtual images.

24 **MR. DENNHARDT:** Correct.

25 **THE COURT:** Okay. But there is, there is

1 evidence of a disclosure of a collimated afocal image --
2 **MR. DENNHARDT:** Collimated afocal image --
3 **THE COURT:** -- which cannot be reconciled with
4 their definition.
5 **MR. DENNHARDT:** That's right. You got it.
6 **THE COURT:** Anything else?
7 **MR. DENNHARDT:** I think that's it, Your Honor.
8 **THE COURT:** One other question for you, sir,
9 come on up.
10 **MR. KNIGHT:** Yes.
11 **THE COURT:** All right. You can go ahead and
12 say what you want to say, and then I'll ask you a
13 question.
14 **MR. KNIGHT:** Thank you, Your Honor.
15 So my colleague here just said that there's
16 no evidence in the written description that conforms
17 with our construction, and that's -- we expressly talked
18 about Figure 9 --
19 **THE COURT:** Yeah. So --
20 **MR. KNIGHT:** -- as well as Figure 36.
21 **THE COURT:** Actually, I don't believe that's
22 what he said.
23 First of all, I agree with you. Figure 9 is
24 consistent with what you say. The question is: Is
25 there any disclosure of a virtual image? And I think he

1 says, I don't think it's disputed, there is not.
2 **MR. KNIGHT:** There is none, and it wouldn't
3 make any sense.
4 **THE COURT:** But that favors you, so give him
5 credit. He actually acknowledged that there is no
6 virtual image disclosed. So then you can come back and
7 say, see, there's no virtual image disclosed. But there
8 is a collimated afocal image disclosed.
9 And now can you point to any claim which
10 would, if I accept your construction, allow for a
11 collimated afocal image?
12 **MR. KNIGHT:** No, Your Honor, because --
13 **THE COURT:** I don't think you can.
14 **MR. KNIGHT:** Right.
15 **THE COURT:** I think that's the right answer.
16 I don't think you have a choice.
17 **MR. KNIGHT:** One additional point that I --
18 **THE COURT:** Just wait.
19 **MR. KNIGHT:** Sorry, Your Honor.
20 **THE COURT:** I think we left it, with respect
21 to collimated, I didn't construe it, right?
22 **MR. KNIGHT:** Correct.
23 **THE COURT:** And I think what's going to happen
24 at trial is your experts are going to get up there and
25 your expert's going to say, if I'm looking at Figure 25,

1 as soon as it leaves 902, it's not collimated, it's
2 impossible, or it just wouldn't be collimated; is that
3 right?
4 **MR. KNIGHT:** I don't know that that's
5 accurate, Your Honor.
6 **THE COURT:** Okay.
7 I'm troubled by what I'm going to have to
8 construe this as, but I just don't see a way around it,
9 and part of it's based on what I think is just common
10 sense and minimal understanding of optics that I have.
11 For instance, the idea that you can have
12 magnification without having some kind of divergence or
13 convergence doesn't make sense to me.
14 Does it make sense to you?
15 **MR. KNIGHT:** It does not, Your Honor.
16 **THE COURT:** And that's what their position is.
17 And the idea that you could have collimated,
18 purely collimated light create an image doesn't sound
19 right to me.
20 But the patent discusses collimated afocal
21 images. And as I say, my gut tells me, my limited
22 experience tells me you're right.
23 And I think this is a great example of
24 something that points to what I think just doesn't make
25 sense in claim construction, which is that we begin with

1 the, quote/unquote "plain and ordinary meaning in the
2 context of a patent," unquote. And then we're told to
3 look to extrinsic evidence solely at the beginning.
4 But if you think about it, ordinary is a
5 normative term. It has to refer to extrinsic evidence
6 in order for the term "ordinary" to have any meaning.
7 It just doesn't make sense. But that's the way we're
8 required to construe patents.
9 And the problem for you is that the patent
10 talks about a collimated afocal image. And so I think
11 the limitation you want to impose, I can't, under the
12 rules of construction.
13 I do think it would be better than just
14 deferring to the plaintiff's proposal of representation
15 of an object to add that. It has to be a representation
16 of an object created by light or emanating from a light
17 source.
18 It sounds like you'll agree to that, I mean,
19 but you're reserving your objections, I understand. But
20 you'll agree at least that much is true, correct?
21 **MR. KNIGHT:** That much is true.
22 **THE COURT:** Yeah. So I think that I'm going
23 to construe it that way, which is, in effect, the plain
24 and ordinary meaning, at least upon to which you can all
25 agree.

1 And then you're going to make an
2 indefiniteness argument, and what I am going to do is
3 talk to you at the end of this as how we should maybe
4 manage the case going forward, and maybe we should have
5 some briefing and motion practice on some of these
6 issues about adequacy, written description, enablement,
7 and indefiniteness. All right?
8 **MR. KNIGHT:** Thank you, Your Honor.
9 **THE COURT:** All right. So that takes care of
10 "image."
11 I've construed it as a representation of an
12 object created by light or emanating from a light
13 source.
14 You know, I refer you all, I had, I call it
15 the Bacon case. I can't remember the title of the case,
16 but Morris Nichols is in here somewhere, aren't they?
17 **MR. TIGAN:** It wasn't my case, Your Honor, but
18 it might be *Hormel versus* --
19 **THE COURT:** Thank you. Good memory.
20 Mr. Tigan, good memory.
21 You might want to look at that because what I
22 did in that case was the defendant was so sure they had
23 a winning indefiniteness argument that I offered them
24 the opportunity to just litigate one summary judgment
25 motion, but we would do it right away.

1 And as outlined in my opinion in that case,
2 and I was affirmed, the Federal Circuit has treated
3 indefiniteness, even though you can have competing
4 expert testimony, as an appropriate subject for summary
5 judgment motion.
6 And in that case, I had a hearing, and I
7 heard competing expert testimony and made determinations
8 as to credibility and ruled and found the patent
9 indefinite. And it was affirmed.
10 You all might want to read that case and we
11 can talk about whether we should have some kind of
12 similar mechanism here.
13 Okay. That takes care of "image."
14 Want to do "portion," the "portion" term
15 next?
16 **MR. DENNHARDT:** Me again, Your Honor.
17 **THE COURT:** All right.
18 **MR. DENNHARDT:** So the dispute here, Your
19 Honor, is whether "portion" gets its plain and ordinary
20 meaning.
21 It's a well-understood term. The jury is
22 going to know what portion means. Courts repeatedly
23 hold that "portion" has its plain and ordinary meaning
24 because a jury knows what it means, and multiple courts
25 have construed it as a part of any whole, either

separated from or integrated with it.

Cytek's construction, by contrast, builds in a bunch of stuff that's simply not part of the word "portion."

THE COURT: Now, it sounds like, well, maybe it doesn't sound like, but would you agree to their construction if I just deleted "within a defined beam"?

MR. DENNHARDT: I think we can do that.

THE COURT: Okay. So let's just focus on that.

MR. DENNHARDT: Sure.

I think the place to start, Your Honor, is they never addressed this. We asked them, what is a defined beam.

THE COURT: Hold on a second.

Would you agree to that? I'll just leave it at that.

MR. KNIGHT: We can agree to that.

THE COURT: All right. Great. I like that.

MR. DENNHARDT: Love it.

THE COURT: Man. All right. So I'm going to construe "portion of the," per stipulation by the parties, to mean a subset of the spectrum of wavelengths of light.

All right. Can we have more of those types

1 of constructions, please.
2 What's next?
3 Why don't we do "first" and "second" image.
4 **MR. CHEN:** Should I go first?
5 **MR. DENNHARDT:** I had to get to my slides.
6 **THE COURT:** Okay. No problem.
7 **MR. DENNHARDT:** Three in a row. All right.
8 So, Your Honor, we understood your ruling as
9 it related to curved mirror talking about Claims 1 and
10 5. What you found was that -- well, there was an order
11 required between them. We understand your ruling on
12 that.
13 This term goes exactly the other way. Right?
14 So what we see in Claim 1 is an optical relay element
15 produces a first image, and what we see in Claim 12 is
16 the collimating optical element further configured to
17 produce a second image.
18 We know from up here that the optical relay
19 element receives light from the collimating optical
20 element. So the order of things in this claim is
21 collimating optical element, relay. Right?
22 The relay produces the first image and the
23 collimating optical element produces the second image.
24 So that tells us the second image comes before the first
25 image. It goes on to say exactly that. The first image

1 is a reimage of the second image. So, of course, the
2 first image can't come first because it can't reimage
3 something that doesn't exist yet.
4 We show this -- and we understand, Your
5 Honor, the claim is not limited to Figure 25. I'm going
6 to do it in the context of Figure 25 because I think it
7 helps visually.
8 So we see exactly what the claim says
9 depicted here. So we've got a collimating optical
10 element, we've got the relay that receives light from
11 there, and it produces the first image. That's in
12 purple.
13 Then we see in Claim 12 the collimating
14 optical element produces the second image, the light
15 then goes to the optical relay element, and it produces
16 the first image.
17 So, of course the first image can't precede
18 the second image. The claim is written in the opposite
19 direction. So finding it the other way would be
20 completely inconsistent with the claim language.
21 They rely on the '412 Patent. And, Your
22 Honor, I think I heard you say earlier that the claims
23 of the '412 Patent are part of the written description.
24 **THE COURT:** The original. No. What I said
25 was the original claims of the patent that ended up being

1 the '412 Patent count as prosecution history.
2 **MR. DENNHARDT:** So I don't think that's
3 exactly what the case that they cited for you says. It
4 says the original claims -- but it's all talking about in
5 the same patent, right?
6 So the original claims are claims before
7 amendment. Right? That's part of the written
8 description. That's part of the specification.
9 Claims from a different patent are not part
10 of the written description of that patent, and I think
11 if you --
12 **THE COURT:** That patent is the original
13 patent. It's the parent patent.
14 **MR. DENNHARDT:** Right, but --
15 **THE COURT:** So, in other words, the same
16 reason written description kind of freezes in time what
17 was the inventor thinking. And it looked to me like the
18 case law was pretty compelling. You count not only the
19 written description, but you look to those initial
20 claims.
21 **MR. DENNHARDT:** I think -- we would submit,
22 Your Honor that that's not what that case says. It's
23 only talking about one patent. It's talking about --
24 **THE COURT:** Well, I haven't relied on it yet.
25 **MR. DENNHARDT:** I understand. I understand.

1 **THE COURT:** I did rely on it. I did rely on
2 it. It was probably the fourth source of evidence I
3 relied on. But go ahead.
4 **MR. DENNHARDT:** Understood. I just wanted to
5 make sure because I don't think we addressed that point.
6 So we don't think the '412 Patent has any
7 relevance here, but in any case, it's different from the
8 actual asserted claims, right?
9 So the claims, as we just saw, tell us that
10 the second image comes sequentially before the first
11 image.
12 They would exclude that embodiment, right?
13 So their construction would render those claims, again,
14 impossible because it's totally inconsistent. We just
15 saw that. It's also inconsistent with Figure 25. And
16 it renders Claim 1 and its dependents an impossibility.
17 So now that's Claim 1 and Claim 12. So let's
18 now turn to the second set of claims that also use this
19 term. So that's Claims 14, 20, and their dependents,
20 right? So they actually do the opposite.
21 They say collimating optical element projects
22 a collimated beam including a first image. Then they
23 say -- excuse me -- the same thing as in Claim 20. So
24 both 14 and 20 say collimating optical element produces
25 the first image.

1 So let me build that for you here. We've got
2 the collimating optical element. It includes --
3 projects a beam including the first image.
4 Then Claim 14 goes on to say there's an
5 optical relay element and it produces a second image.
6 So what we see now is Claims 1 and 12 say
7 "second" before "first." Claims 14 and 20 say "first"
8 before "second."
9 What does that tell us? Well, it tells us
10 that "first" and "second" are not importing any order.
11 They're just designating different images in the system.
12 So there is no way to find their construction consistent
13 with both of these claims.
14 And so what we would submit, Your Honor, is
15 that "first" and "second" here are very clearly not
16 being used to indicate any sequence or order. They're
17 just used as a designation, Image A, Image B.
18 I think that's it. Easy.
19 **THE COURT:** All right. Thank you.
20 **MR. DENNHARDT:** Thanks, Your Honor.
21 **THE COURT:** Mr. Chen.
22 **MR. CHEN:** Thank you, Your Honor.
23 So we followed your Court's -- Your Honor's
24 instructions at the last hearing, and we looked for
25 evidence in the intrinsic record, specifically the

1 original specification, to support our construction for
2 "first and second image" having positional significance
3 and the specification is supportive, highly supportive
4 of our position.
5 **THE COURT:** So I am not saying you don't have
6 arguments that are supportive, but here is the challenge
7 for you.
8 **MR. CHEN:** Sure.
9 **THE COURT:** So Claim 12.
10 **MR. CHEN:** Yes.
11 **THE COURT:** And Claims 14 and 20.
12 **MR. CHEN:** Sure.
13 **THE COURT:** And those are big challenges.
14 **MR. CHEN:** Sure. Understood, Your Honor.
15 So would you like me to address those first
16 and then --
17 **THE COURT:** Yes. Go ahead.
18 **MR. CHEN:** Okay. So let's go to Claim 12.
19 So Claim 12 is not part of the original
20 specification. It's also not asserted here by the
21 plaintiffs and for good reason, because we think had
22 they asserted it, it would be indefinite. We think what
23 the patentee meant to write is "wherein the second image
24 is a reimage of the first image." That's the only way
25 it makes sense. So that's our response to Claim 12.

1 **THE COURT:** All right.
2 **MR. CHEN:** I think, if I'm not mistaken --
3 **THE COURT:** 14 and 20, they put them together.
4 How do --
5 **MR. CHEN:** Yeah. Claims 14 and 20, what
6 they're trying to do is they are trying to map Claims 14
7 and 20 onto Figure 25. And again, that's not proper.
8 There doesn't have to be every single claim,
9 as Your Honor correctly recognized, mapping onto
10 exemplary embodiments. That simply is not required.
11 And what we see is in the original claims,
12 right here, there is a clear mapping of a collimating
13 optical element that captures light from the extended
14 light source and projects a magnified image of the
15 object as a first light beam, right?
16 So it travels through and it gets focused
17 down by the focusing lens 905, and then there's the
18 image.
19 And then for dependent Claim 3, we see that
20 the image relay optical element 907 is arranged to
21 receive a color band of interest of the first light
22 beam, the image relay optical element configured to
23 project a second image --
24 **THE COURT:** So let's say I agree with you.
25 Let's do this.

1 **MR. CHEN:** Yes.

2 **THE COURT:** I think you are probably right,

3 that's the better description, and that Claims 14 and 20

4 weren't meant to read on Figure 25.

5 **MR. CHEN:** That's right.

6 **THE COURT:** Where does that end up? I still

7 am stuck with I've got 14 and 20 --

8 **MR. CHEN:** Yes.

9 **THE COURT:** -- which describe not only a

10 nonsequential but the reverse sequential, right?

11 **MR. CHEN:** Well, no. I think 14 and 20 is

12 consistent. "First" is first and "second" is second. I

13 don't see an issue with "image" there.

14 Only Claim 12, which is not asserted, has

15 this supposed issue, but we think it would be indefinite

16 Claims 14 and 20, no issue there. First image, second

17 image in sequence.

18 If Your Honor would like me to, I could

19 actually try to sketch out what I believe Claim 14 would

20 look like.

21 **THE COURT:** Hold up.

22 I can't see that. Maybe you can focus on it.

23 **MR. CHEN:** Yes, yes, I will, Your Honor. Just

24 trying to make it look...

25 So you can have a light source, so just to

1 follow the claim language here. You have a collimating
2 optical element arranged to receive light from a light
3 source. The collimating optical element configured to
4 project a collimated beam, including a first image where
5 the collimating optical element has a collimated
6 distance.
7 And then you have an optical relay element.
8 So as you recall in Figure 25, you have --
9 **THE COURT:** So I get you can draw a picture,
10 but does it preclude the second image from coming before
11 the first image?
12 **MR. CHEN:** Yes. I believe it does because it
13 says there's an optical relay element. That's the
14 mirror, right? That's the optical relay element arranged
15 to receive the collimated beam. The optical relay
16 element configured to extend the distance of the
17 collimated beam, wherein the optical relay element
18 comprises a curved mirror or concave shaped dichroic
19 filter configured to produce a second image, right?
20 And so this optical relay image -- sorry,
21 optical relay element has to be configured to extend the
22 collimated distance of the collimated beam, right?
23 And so it's receiving the collimated beam --
24 here's the curved mirror -- and then it's projecting,
25 basically, onto a second image. So it is sequential.

1 **THE COURT:** All right. And then just in a
2 nutshell, though, your argument for why...
3 You admit there's a presumption that first
4 and second are not sequential under the law, right?
5 **MR. CHEN:** I think the law is it's not like
6 it's a rule, but it basically says that if there's
7 intrinsic evidence that requires a sequence, then there
8 should be a sequence. And here there is a lot of
9 intrinsic evidence --
10 **THE COURT:** But if I have a comprising claim
11 where "first" and "second" are used, I'm to assume that
12 it's not sequential unless there's evidence to the
13 contrary.
14 **MR. CHEN:** The *3M* case, I just want to make
15 sure I get it correct. I don't want to misquote the
16 case. And the *3M* case is very fact-specific, whereas in
17 plaintiff's original briefing, they -- the *3M* case is in
18 the bigger binder. Sorry, Your Honor.
19 **THE COURT:** That's okay.
20 **MR. CHEN:** May I have a minute?
21 **THE COURT:** I mean, your point, I guess,
22 though, would be it's not a presumption like
23 means-plus-function is a presumption.
24 **MR. CHEN:** No. That's right.
25 **THE WITNESS:** It's, again, you've got to

1 read -- it's *Phillips*. You've got to read it in its
2 totality --
3 **MR. CHEN:** That's correct.
4 **THE COURT:** -- in the light of the
5 specification.
6 **MR. CHEN:** That's correct.
7 **THE COURT:** And therefore, your point would be
8 there is no nonsequential use of "first" and "second" in
9 the written description.
10 **MR. CHEN:** That's right.
11 **THE COURT:** You shouldn't impose such a
12 limitation into the claims.
13 **MR. CHEN:** That's correct. Absolutely
14 correct. Thank you.
15 Yes, yes. So the -- I have it now here in
16 front of me.
17 Thank you, Ms. Flanagan.
18 It just states, "The use of the terms 'first'
19 and 'second' is common patent law convention to
20 distinguish between repeated instances of an element or
21 limitation."
22 But then it goes on to say, "In the context
23 of Claim 1," so it's very context specific, and the *3M*
24 case involved a first pattern and second pattern. It
25 wasn't talking about an optical path of light. It's

1 very different than the other two cases that are cited.
2 One is, like, on an exercise machine, if I can quickly
3 point out that.
4 **THE COURT:** What are you looking for, a case
5 law thing?
6 **MR. CHEN:** Oh, yeah. Just the case law that
7 they try to use in their supplemental briefing. They
8 added some --
9 **THE COURT:** Yeah. Let's go back to it. We're
10 limited on time.
11 **MR. CHEN:** Yes, understood.
12 **THE COURT:** So let's stick to the --
13 **MR. CHEN:** Intrinsic evidence.
14 **THE COURT:** Let's look again, your summary
15 of...
16 You are saying it's sequential here --
17 **MR. CHEN:** That's it, right.
18 **THE COURT:** -- because Figure 25 --
19 **MR. CHEN:** Yes.
20 **THE COURT:** -- as interpreted by the original
21 claims in the original parent application.
22 **MR. CHEN:** And the original specification.
23 The written description specifically says that there is
24 an image near focusing lens 905, and then it says the
25 concave mirror 907 therefore creates a second image of

1 the collimating lens 902 near a second focusing lens 908.
2 **THE COURT:** Right. So again, you're saying 25
3 is pretty clear that image --
4 **MR. CHEN:** That's right. As your --
5 **THE COURT:** -- is also sequential? Okay.
6 **MR. CHEN:** As Your Honor has recognized.
7 **THE COURT:** So that's your biggest piece of
8 evidence. All right.
9 And your second would be --
10 **MR. CHEN:** The original claims.
11 **THE COURT:** -- the original claims which
12 purport to read on it.
13 **MR. CHEN:** Correct, Your Honor.
14 **THE COURT:** Okay. Anything else?
15 **MR. CHEN:** We think the claim language 14 and
16 20 is also supportive. It requires a sequence of "first"
17 and "second."
18 **THE COURT:** Okay.
19 **MR. CHEN:** And then that is -- and one more
20 piece of evidence is when they wanted to use
21 "additional," they were able to use the word "additional"
22 in other patents.
23 **THE COURT:** Right. Okay.
24 **MR. CHEN:** Thank you.
25 **THE COURT:** Thank you.

1 All right.

2 **MR. DENNHARDT:** Let me start with the *3M* case,
3 Your Honor. It says, "First and second should not be
4 read to impose a serial or temporal limitation unless the
5 intrinsic evidence requires sequential ordering."

6 They are trying to tell you, well, the
7 absence of any "first" and "second" means that "first"
8 and "second" have order. Well, that's not what this
9 says, right? The absence of something doesn't require
10 that a limitation have sequential ordering, right? So
11 their position is just inconsistent with the *3M*
12 principles.

13 **THE COURT:** All right. Hold up.

14 So I'm just having a hard time with the quote
15 here. Can you point me where it says the use...

16 What you're referring to. You have got an
17 excerpt on the slide from *3M Innovations* at Page 1371.
18 And at the end of...

19 I see where there's some discussion about
20 "the terms 'first pattern' and 'second pattern' should
21 not in and of itself impose a serial or temporal
22 limitation."

23 By the way, you omit pretty important
24 language. You omit the introduction, the words that
25 immediately precede that, which says "in the context of

1 Claim 1." Okay. So that's the first thing that I am a
2 little troubled by.
3 But I can't find where does it pick up and
4 say "unless intrinsic evidence requires otherwise"?
5 Can you show me the case?
6 **MR. DENNHARDT:** I'm sorry. I didn't hear the
7 end of your question. I apologize.
8 **THE COURT:** So I am looking at your quote from
9 the case.
10 **MR. DENNHARDT:** Yeah.
11 **THE COURT:** And I see that language you've got
12 up on the first line of your box, until we get to
13 temporal limitation.
14 Where is the "unless"?
15 **MR. DENNHARDT:** Sorry. "Unless" is in
16 brackets. We added that to streamline this.
17 **THE COURT:** Okay. But where does it pick up?
18 **MR. DENNHARDT:** Your Honor, I apologize. I
19 don't have the full case in front of me. I think we'd be
20 happy to follow up with the full quote.
21 And certainly, Your Honor, to the first
22 point, we thought, you know, including "first pattern"
23 is -- makes clear that we are not talking about
24 generally, right? We are not saying first never, right?
25 We are talking about first here. So we weren't meaning

1 to mislead you on that, Your Honor.
2 And I think, Your Honor, there's -- this is a
3 pretty standard principle across --
4 **THE COURT:** Well, since it is, show me another
5 case. Because I am concerned it's misleading.
6 **MR. DENNHARDT:** Sure. Here's three cases.
7 The first one is *3M*, we've already talked about that one.
8 Here --
9 **THE COURT:** And that doesn't hold it. Just so
10 you're clear, *3M* does not say that unless the intrinsic
11 evidence requires otherwise, first and second are not
12 sequential. Doesn't say that.
13 **MR. DENNHARDT:** So this is the *Free Motion*
14 case. Here is it's saying, "First does not denote
15 spatial location. The correct construction of the word
16 first merely associates the first pivot point with the
17 first extension arm."
18 That's what we have here. First relay, first
19 dichroic filter, first focusing lens, first
20 semiconductor detector, right? It's associating all of
21 these in a group of elements because they all interact
22 together.
23 **THE COURT:** All right. So show me in the
24 written description where there's a "first" and "second"
25 other than Figure 25.

1 **MR. DENNHARDT:** Where there's -- in general
2 are you asking?
3 **THE COURT:** Anywhere, yeah, just show me.
4 What I want you to show me is show me in the intrinsic
5 evidence where it would require or support nonsequential.
6 **MR. DENNHARDT:** So I think we would posit that
7 it's the opposite, right? The claims require it.
8 If we go to 39, right? Again, we've talked
9 about this already, right, but this requires it. And
10 the claims, of course, are intrinsic evidence, and so
11 their construction -- and they conceded this, right?
12 They said their construction can't be reconciled with
13 Claim 12. They say, oh, well, if we rewrite the claim,
14 then it's consistent.
15 **THE COURT:** Agree. And you're not asserting
16 Claim 12 here, right?
17 **MR. DENNHARDT:** Well, you're not -- we're not,
18 Your Honor, but it is the same point that they made --
19 **THE COURT:** All right. So other than
20 Claim 12 --
21 **MR. DENNHARDT:** -- on curved mirror on
22 Claim 5. Sorry.
23 **THE COURT:** Dispense with Claim 12. Other
24 than that Claim 12, show me intrinsic evidence that
25 requires sequential...

1 Sorry. That actually would either not
2 require sequential or would show the opposite of
3 sequential, which I think they admit Claim 12 does.
4 **MR. DENNHARDT:** Sure. I don't dispute, Your
5 Honor, that I can't point you to a different part of the
6 written description, but I think that's flipping the
7 burden here. Right? It's flipping it on us to say,
8 well, show that they're not sequential, and that's not
9 right.
10 **THE COURT:** No, no. The reason, well, I'm not
11 going to get into an argument with you. Okay. So you
12 can't show me anything.
13 Now, then, you mentioned Claim 14 and 20, and
14 I challenged them to address that. Mr. Chen did a
15 pretty good job.
16 So here's your opportunity, show me why I've
17 got to read 14 and 12 to not be sequential.
18 **MR. DENNHARDT:** Sure. Let's put aside
19 Claim 12. That's the one that has second image, so I'm
20 not going to talk about second image.
21 **THE COURT:** If I said 12, I misspoke.
22 **MR. DENNHARDT:** No, you didn't. You didn't.
23 My slide has both on there, and I just wanted to make
24 clear, I'm not going to talk about the portion of
25 Claim 12 that has "second image."

1 **THE COURT:** Right. But do it without
2 referring to Figure 25. Just look at the language of the
3 Claim 14 and 20.
4 **MR. DENNHARDT:** Sure. Yeah.
5 Claim 1 -- and I'll explain. I'm starting
6 with Claim 1, but I'll explain that. So it's the
7 optical relay element produces the first image. Right?
8 **THE COURT:** Okay. Hold on a second. I do
9 want to make sure I get this right.
10 For starters, Claims 14 and 20, do they
11 depend from Claim 1?
12 **MR. DENNHARDT:** They're both independents.
13 **THE COURT:** Okay. So why am I looking at --
14 (Speaking simultaneously.)
15 **MR. DENNHARDT:** I'm sorry. I'll get there. I
16 promise.
17 So Claim 1, optical relay element reflects
18 the beam to produce a first image.
19 With me?
20 **THE COURT:** Yes.
21 **MR. DENNHARDT:** All right. Now, Claim 14 says
22 the optical relay element produces a second image.
23 So the optical relay element in Claim 1 is
24 producing the first image, and then Claim 14 and 20 is
25 producing the second image.

1 That tells you, Your Honor, that we're not
2 talking about the order of things in the optical path.
3 It says what comes off of the optical relay element in
4 Claim 1 is the first image and in 14 and 20, it's the
5 second image. That confirms that "first" and "second"
6 is not giving you an order.
7 **THE COURT:** Okay. All right. Anything else?
8 **MR. DENNHARDT:** Just briefly, Your Honor.
9 They didn't talk about it, but it's in their brief and in
10 their slides.
11 On the numerical ordering of elements, the
12 MPEP expressly tells you that you're not to give weight
13 as to the scope of the claims based on the numbering of
14 the elements.
15 If we go to 13. Thank you.
16 Use of reference is to be considered having
17 no effect on the scope of the claims. So -- and then
18 the -- this is the *Core Wireless* case from the Eastern
19 District of Texas case.
20 **THE COURT:** Do you have a Federal Circuit case
21 which says that?
22 **MR. DENNHARDT:** The Federal Circuit has never
23 addressed that issue.
24 **THE COURT:** Okay. So I'm not listening to
25 what --

1 (Speaking simultaneously.)
2 **MR. DENNHARDT:** So the MPEP, I think, applies
3 to patents, and courts have said that MPEP is given the
4 weight of law.
5 And, I think, Your Honor, I would also say as
6 a general matter, right, the same claim term is be to
7 interpreted consistently throughout the patent.
8 So they can't reconcile it with Claim 1,
9 right? They want to say, well, let's just put aside
10 Claim 1. But "first image," as a matter of law, is to
11 be read to have the same meaning throughout.
12 And the only way to do that is to say, well,
13 "first image" is not giving you a sequence or order.
14 The same claim term throughout the claims is
15 presumably -- is presumptively given the same meaning.
16 **THE COURT:** Presumptively. But it's not
17 required.
18 **MR. DENNHARDT:** It's not. That's right. But
19 there's no evidence to the contrary here. There's
20 nothing that would suggest, well, let's give it this
21 meaning here and this meaning here.
22 **THE COURT:** Okay.
23 **MR. DENNHARDT:** And the last thing I would
24 point to, Your Honor -- again, if we go back to 39 -- is
25 what my colleague on the other side had to do was he

1 couldn't say, well, first and second, that gives you
2 enough. He had to say, well, it tells you the relay does
3 this. And then it gets passed to this other thing and
4 then it gets passed to this other thing.
5 That confirms for you, Your Honor -- and I'll
6 show it in the context of 14 and 20 -- that "first" and
7 "second" is not giving you the sequence, it's the other
8 language. It's the fact that it projects light to
9 the -- it projects the first image and then the optical
10 relay element receives the light from the collimating
11 optical element and produces the second image.
12 So "first" and "second" are not giving you
13 the order, it's the way that it describes the
14 progression of light that gives you how things flow
15 within the optical path, not "first" and "second."
16 **THE COURT:** All right. What are the asserted
17 claims of the '582 Patent right now?
18 **MR. DENNHARDT:** So it's -- I'm not sure --
19 it's at least 1, 14, and 20. So each of those three
20 independent claims that we've been talking about are each
21 asserted.
22 **THE COURT:** And for the '443 patent, I was
23 confused by the briefing on that. It said you dropped 17
24 and 18?
25 **MR. DENNHARDT:** Yes, Your Honor. In view of

1 your ruling, so that we didn't have to sort of further
2 dispute this, we said let's put those claims aside.
3 **THE COURT:** They briefed 16 and you didn't,
4 and I'm confused.
5 **MR. DENNHARDT:** It's not asserted. You have
6 to ask them.
7 **THE COURT:** Okay. Thanks.
8 **MR. DENNHARDT:** I have the full list of
9 asserted claims for the --
10 **THE COURT:** What I wanted to make sure was --
11 **MR. DENNHARDT:** -- the independent claims.
12 **THE COURT:** -- whether 1, 14, and 20 are
13 asserted.
14 There is no "second image" in Claim 1; is
15 that right?
16 **MR. DENNHARDT:** That's right.
17 **THE COURT:** So what I'm going to do is, I'm
18 going to construe "second image" in Claim 14 and 20 to
19 mean an image that is created after the first image.
20 That's not exactly what you asked for,
21 defendant, but I think -- are you okay with that?
22 **MR. CHEN:** Sequentially after, not like the
23 third one or the fourth one.
24 **MR. DENNHARDT:** We would dispute that, Your
25 Honor.

1 **THE COURT:** Hold up.
2 I can't do that. I don't think that the
3 claim of 14 and 20 require that. And I'm back to
4 Figure 25. Are there any other disclosures of first or
5 second images other than Figure 25 in the patent?
6 **MR. CHEN:** Figure 25, which has the written
7 description that very clearly points out, which is the
8 first image and which is the second image. The original
9 claims, which specifically point out --
10 **THE COURT:** I got that.
11 Are there any other than Figure 25 and I
12 guess 25A has sequence in it?
13 **MR. CHEN:** That's right.
14 **THE COURT:** But is there anything else?
15 Anything else?
16 **MR. CHEN:** I believe that is it, Your Honor.
17 **THE COURT:** Okay. And then --
18 **MR. CHEN:** I want to make sure --
19 **THE COURT:** Hold up. I'm going to correct
20 myself.
21 And can you point to me anywhere in the
22 written description where there is an image between a
23 first and second image?
24 **MR. DENNHARDT:** Standing here today, I can't.
25 **THE COURT:** Okay. So I'm actually going to

1 then adopt the defendant's position. It is, it's the
2 second image is created after the first image and there
3 is no intervening image. Okay.
4 What I don't want to do is go first and
5 second because there's a first image in Claim 1 and
6 there is no second image, and I just don't know what
7 would come up with respect to Claim 1. So I don't want
8 to go there. All right?
9 So I'm just going to construe second image,
10 for the purpose of 14 and 20. If there's any other
11 asserted claims with a second image, please let me know.
12 Is there?
13 **MR. DENNHARDT:** I expect there are, but as
14 dependent claims, not independent claims.
15 **THE COURT:** Then that's fine.
16 **MR. DENNHARDT:** Yeah.
17 **THE COURT:** So the "second image" for the
18 purposes of Claims 14 and 20, and the reason I'm
19 construing it this way are, I think it's a natural
20 reading of the two claims, especially when read in light
21 of the specification, which *Phillips* instructs is what
22 we're supposed to do. And the only disclosure of first
23 and second images in the written description are
24 disclosures where the second image follows the first
25 image with no intervening image.

1 And Figure 25, in particular, in the written
2 descriptions discussed in Figure 25 I find very
3 informative in that regard.
4 And I don't think that *3M* requires me, the
5 way plaintiff has suggested, effectively to put a
6 presumption against sequencing first and second. And
7 that's enough that I need to say.
8 **MR. DENNHARDT:** We understand. Thank you,
9 Your Honor.
10 **THE COURT:** All right. That takes care of
11 "second image."
12 I'm not going to construe "first image."
13 All right. Let's see. We've got to move
14 fast. What else have we got?
15 First and second. Did we do focusing optical
16 element? I forget.
17 **MR. CHEN:** We didn't do that one yet. We did
18 first and second curved mirror.
19 **THE COURT:** Let's do first and second focusing
20 optical element.
21 **MR. KHAN:** Thank you, Your Honor.
22 So this is an example where the claims that
23 they are asking to be construed, the claims, themselves,
24 require that the second focusing optical element come
25 before the first focusing optical element. And that's

1 essentially what we're going to try to show today
2 through the claims. And then there is written
3 description support for our position here as well, which
4 we'll also get through.
5 Starting with the claims. So, in the claims,
6 there's a first focusing optical element, and it
7 receives light from the optical relay. Then it's
8 configured to focus the light onto the first
9 semiconductor detector. And the dependent claims from
10 Claim 1 in the '582 Patent, Claims 7 and 8, they start
11 talking about branches. And they say, hey, so now the
12 filter is going to create a first branch, and the first
13 branch is the light from the collimated optical element
14 received by the relay. That's the first branch.
15 And then it talks about the second branch.
16 And the second branch goes to the second focusing
17 optical element onto the second semiconductor detector.
18 And if you sort of -- this is in Claims 1, 7,
19 and 8, the structure of Claim 17 and 18 is almost
20 identical. And so we're going to try to treat them
21 together. If I can show you in a build that we did to
22 show how this all puts together.
23 So again, we start with the claim saying I've
24 got an optical filter between the collimating optical
25 element and the optical relay.

1 **THE COURT:** Okay. Can I stop you there?
2 **MR. KHAN:** Yes.
3 **THE COURT:** So right now we're discussing
4 Claims 1, 3, 17, 18, and 26.
5 **MR. KHAN:** Correct.
6 **THE COURT:** I just want to stop you.
7 Mr. Chen, right, are you going to argue this?
8 **MR. CHEN:** Yes, that's correct.
9 **THE COURT:** Do you agree that Claims 1, 3, 17,
10 18, and 26 read on Figure 25?
11 **MR. CHEN:** I do not believe they do. I have
12 to go back and check. The support that we rely on is the
13 original specification, which includes original claims.
14 So both the written description and the original claims
15 support our position.
16 **THE COURT:** I get you say that, but I just
17 want to know, you've taken the position in the past with
18 a couple of the claims. You are saying these don't even
19 read on Figure 25.
20 **MR. CHEN:** I believe that's correct.
21 **THE COURT:** All right. So why don't you just
22 be prepared to answer that question.
23 **MR. CHEN:** I will.
24 **THE COURT:** Okay. Sorry. Go ahead, Mr. Khan.
25 **MR. KHAN:** And, Your Honor, I think the

1 ultimate conclusion of their construction is it's going
2 to read out all the embodiments because there's no
3 disclosed embodiment in the specification that's going to
4 address what they're trying to do.
5 But, anyway, let's step through it.
6 **THE COURT:** Okay.
7 **MR. KHAN:** So, again, Your Honor, I know --
8 we're just using Figure 25 for illustrative purposes.
9 We're not saying this is how Figure 25 is described in
10 the patent. So I'm just using Figure 25 to show where
11 the pieces are.
12 **THE COURT:** Well, do you contend that
13 Claims 1, 3, 17, 18, and 26 all read on Figure 25?
14 **MR. KHAN:** They do as we understand them.
15 Therefore, they would be consistent with the written
16 description in that regard. They're consistent with the
17 written description for other reasons as well, which
18 we'll get to in just a second.
19 **THE COURT:** Okay.
20 **MR. KHAN:** So there's an optical filter, Your
21 Honor. Again, just using it for illustrative purposes to
22 show that there's an optical filter along a path between
23 the collimating optical element and the relay.
24 **THE COURT:** Now, you previously called that
25 optical, did you not, a dichroic filter?

1 **MR. KHAN:** I believe in this claim it's called
2 an optical filter, and so that's why I'm using that.
3 **THE COURT:** Well, you might be. So is it the
4 say thing as a dichroic filter?
5 **MR. KHAN:** In the written description, that
6 filter is a dichroic filter.
7 **THE COURT:** And a dichroic filter is also an
8 optical filter?
9 **MR. KHAN:** And a dichroic filter is one form
10 of optical filter, yes.
11 **THE COURT:** Okay.
12 **MR. KHAN:** So it says there's a filter between
13 the collimating optical element and the relay. And so
14 then it says, "The filter is configured to separate the
15 beam into a first branch and a second branch."
16 So the filter is going to create two
17 branches. And so what we've done, Your Honor, is we
18 just annotated the first and second branch.
19 So now the filter creates a first branch, and
20 the claim says the optical relay element gets the first
21 branch. So the first branch goes to the optical relay
22 element, that's the first branch.
23 And then, of course, the second branch then
24 goes the other way, right?
25 And it says, "The second focusing optical

1 element receives the second branch." And that's the
2 second focusing optical element receiving the second
3 branch.
4 And what gets the first branch? The claim
5 tells you. The claim says the first focusing optical
6 element gets the first branch. And that's sort of after
7 the light has bounced off the filter, onto the relay,
8 and now it's onto the focusing optical element.
9 And then the claim goes on to say, I've got
10 semiconductor detectors behind the focusing optical
11 elements that now are going to detect the light. And
12 there's a first semiconductor detector associated with
13 the first focusing optical element, and then the claim
14 is going to say I've got a second semiconductor detector
15 associated with the second focusing optical element.
16 And so what's going on in this claim, Your
17 Honor, is the second focusing optical element is the
18 initial in the configuration in their view. And the
19 claim, itself, tells you that. And this is not
20 inconsistent with the case law we pointed out to you in
21 the brief, which is to say all that's going on is the
22 claim is saying I've got a first group of elements
23 associated with the first branch there.
24 And so I've got a first branch, and that
25 first branch is going to be detected, focused by the

first focusing optical element, and then it's going to be focused down onto the first semiconductor detector. It's a comprising claim, Your Honor, and so, therefore, the claim on its face, the independent claims that don't preclude the notion of additional elements being configured.

And then the dependent claims actually require it. The dependent claims that are asserted in this case that they are asking you to construe.

So the specification, Your Honor, this is one of the descriptions that I was getting to earlier, which is the specification actually describes a focusing optical element as the second optical element in the path.

And so, but it's actually the third optical element in the path. So there's an instance of nonsequential use of "first" and "second" in connection in the focusing optical element.

The written description also equates the words "additional" and "second" specifically as it relates to the focusing lens. In describing the exact same element, it's 908, the same element, one time it says, hey, that's an additional focusing optical arrangement, 908. At a different time, same element, it says it's a second focusing lens, 908.

1 **THE COURT:** And that helps you how?
2 **MR. KHAN:** Because, Your Honor, the
3 specification is equating word "second" with
4 "additional." It's not saying second is sequential. So
5 that's a use of the word "second" not to mean
6 "sequential." So it's an affirmative evidence of
7 nonsequential use of "second." And by extension, the
8 affirmative evidence of nonsequential use of "first."
9 So then, we have more. What is the first,
10 the initial focusing lens in Figure 25 called? And now
11 this is a description of Figure 25. So before I was
12 talking about the claims, just using Figure 25 to
13 illustrate where the components are, but this is now the
14 specification talking about Figure 25.
15 So what does Figure 25 say that initial lens
16 is? It doesn't say "first." It doesn't say "initial."
17 It calls it the "final," a final focusing lens, which is
18 the opposite, Your Honor, of what they are trying to get
19 you to construe, which is they're saying it should be
20 the initial focusing lens.
21 So the initial focusing lens here is
22 described as final. The second focusing lens is just
23 described as additional.
24 And so this is exactly what I think Your
25 Honor was sort of asking for in connection with some of

1 the other terms, it's the use of "first" and "second" in
2 a nonsequential way to describe the focusing lenses, and
3 that's exactly consistent with the claims because the
4 claims require exactly a nonsequential order.
5 I think they are relying on, essentially, the
6 original claims again, but we would submit that these
7 claims are different. And they also, we submit, cover
8 Figure 25 if properly construed as we are asking them to
9 be.
10 The usage and numbering, we talked about
11 that, that the MPEP says that that's not relevant. We
12 understand Your Honor's position on that, so I'm not
13 going to belabor it.
14 **THE COURT:** Well, my position on it is the
15 Federal Circuit. I was commenting on the Eastern
16 District of Texas case, that that's a district court case
17 and the Federal Circuit has never opined on it, according
18 to your cocounsel.
19 **MR. KHAN:** It is true. We looked for that
20 case, Your Honor. And we didn't find --
21 **THE COURT:** So you did.
22 **MR. KHAN:** And we didn't find it. So you're
23 right, and we understand and appreciate your view on
24 that.
25 Sorry. So Cytek's construction is just

1 irreconcilable within the claims themselves that they
2 are asking you to construe. And then again, you know,
3 we think what they're -- they're going to -- they're
4 asking for a construction, essentially, that would rule
5 out all of the disclosed embodiments, which, as we gave
6 you the case, Your Honor, where that's not a
7 particularly favorable construction outcome.
8 **THE COURT:** All right. Now, just do me a
9 favor. Back up, because we were only dealing with the
10 "semiconductor detector" term here, right?
11 So can you just, focusing on that in
12 Figure 25, show me where that is not sequential.
13 **MR. KHAN:** So I'm sorry, we were focusing on
14 "focusing optical element" --
15 **THE COURT:** Wait. I got confused. Sorry. We
16 were focusing on...
17 Right. And you've already done.
18 Then the last slide, though, just came up,
19 "focusing semiconductor detector." We haven't dealt
20 with that yet.
21 **MR. KHAN:** Correct. I would ask for that to
22 be dealt with together with this.
23 **THE COURT:** Well, that's what I was just going
24 to ask. Okay. So can you just go back and show me what
25 the "semiconductor detector" term, though, because you

1 alluded to that.
2 **MR. KHAN:** Yeah.
3 **THE COURT:** The sequence of that in Figure 25.
4 I had been focusing on the "optical element."
5 **MR. KHAN:** Yeah.
6 **THE COURT:** In the figure itself.
7 **MR. KHAN:** So, Your Honor, in the figure,
8 there's no reference to "first" and "second" as applied
9 to the semiconductor.
10 **THE WITNESS:** No, but just show me
11 semiconductors.
12 **MR. KHAN:** Oh, oh.
13 **THE COURT:** In other words, you did that, what
14 I thought was helpful...
15 There.
16 **MR. KHAN:** Yeah.
17 **THE COURT:** That slide, what is that?
18 Okay. Thank you. I just want to focus on
19 that for a second.
20 **MR. KHAN:** Yes.
21 **THE COURT:** Okay. So the semiconductor
22 detector, basically, it's correlated with the focusing
23 optical element. They go together.
24 **MR. KHAN:** Correct, Your Honor.
25 **THE COURT:** All right. And you would admit

1 that in the Figure 25, every numbered focusing optical
2 element has a corresponding numbered semiconductor
3 detector; is that right?
4 **MR. KHAN:** In Figure 25, that's how it's laid
5 out, correct.
6 **THE COURT:** Right. And you would agree that
7 each focusing optical element and its corresponding
8 semiconductor detector are in the same place in the
9 sequence?
10 **MR. KHAN:** They are --
11 **THE COURT:** So, in other words, and just to be
12 clear, so, in other words, if I have a fourth focusing
13 optical element, it corresponds to the fourth
14 semiconductor detector?
15 **MR. KHAN:** In the claim, the specification, in
16 describing Figure 25, never uses "first" and "second"
17 with respect to focusing optical lenses. Never uses
18 "first" and "second" with represent to semiconductor
19 detector.
20 I would submit that the structure of the
21 claim is correct, Your Honor, as you said. In the
22 structure of the claim, the claim is saying, I've got a
23 first branch. That's going to go to the first focusing
24 optical element and the first semiconductor detector.
25 **THE COURT:** Okay.

1 **MR. KHAN:** But the first branch is not the
2 first in the...
3 There is a second branch, and these are
4 coming before the first focusing optical element --
5 **THE COURT:** And when you say "these," just to
6 be clear because you are using a pointer on the slide,
7 your point is that the...
8 Well, first of all, I think your point would
9 be that the final focusing optical element is
10 sequentially the same as the...
11 Let me stop there. What is 907?
12 **MR. KHAN:** 907 is an optical relay element.
13 So --
14 **THE COURT:** That's fine.
15 903 is either an optical filter or a dichroic
16 filter. It is an optical filter, I guess, is easiest.
17 That's the genus.
18 **MR. KHAN:** In the claim, it's described as an
19 optical filter. I apologize, Your Honor. In these
20 claims, yes.
21 **THE COURT:** All right. And then 905 and 906
22 are respectively, according to you, a focusing optical
23 element and a semiconductor detector, correct?
24 **MR. KHAN:** Correct, Your Honor.
25 This is a depiction of the claim. We're only

1 using Figure 25 as an illustration.
2 In the written description, 905 is described
3 as a final focusing lens. 906 is never described as
4 "first." 908 is described as "another focusing optical
5 element arrangement." 908 is also described as "a
6 second focusing lens."
7 **THE COURT:** In the written description?
8 **MR. KHAN:** In the written description.
9 So I was trying to break apart the claim and
10 the written description. This is the language of the
11 claim, and then I can go over the written description
12 again.
13 **THE COURT:** No, no. If I were to summarize
14 the written description for you, what I think the salient
15 points you would want to make are, that 905 is described
16 as a final focusing optical element.
17 **MR. KHAN:** The exact language in the written
18 description is "final focusing lens," yes.
19 **THE COURT:** Final focusing lens I should say.
20 Okay.
21 And then 908 is described as a "second."
22 **MR. KHAN:** A second focusing lens.
23 **THE COURT:** Right.
24 **MR. KHAN:** And then also, same element, 908 is
25 described as "another focusing optical arrangement 908."

1 **THE COURT:** Okay. And is there any
2 description in the written description of what you've got
3 here in the chart labeled the "first semiconductor
4 detector"?
5 **MR. KHAN:** There is in the written
6 description. It never uses the word "first" or "second"
7 to refer to any of the semiconductor detectors. It just
8 says there are a plurality of semiconductor detectors or
9 there are additional semiconductor detectors.
10 In this claim, Your Honor, though --
11 **THE COURT:** Don't go to the claim. Just on
12 the written description.
13 **MR. KHAN:** On the written description. Okay.
14 Thank you. Sorry. Yep.
15 **THE COURT:** But I think it's undisputed that
16 the focusing elements that are labeled 908, 918, 919,
17 920, and 921, and would you agree, they all have a
18 corresponding semiconductor detector?
19 **MR. CHEN:** Correct.
20 **THE COURT:** Yeah. Okay. All right.
21 Anything else?
22 **MR. KHAN:** No, Your Honor. In this claim we
23 think there's only one outcome, but thank you.
24 **THE COURT:** "This claim," well, wait.
25 **MR. KHAN:** These claims.

1 **THE COURT:** There's five claims.

2 **MR. KHAN:** Yeah, 1, 3, 17, 18, 26. The claim,

3 itself, tells you what the answer is.

4 **THE COURT:** All right. Okay. Thank you.

5 **MR. CHEN:** Thank you, Your Honor.

6 To answer Your Honor's questions with respect

7 to these five Claims 1, 13, 17, 18, 26 --

8 **THE COURT:** Actually, do you mind keeping that

9 slide up, please?

10 **MR. CHEN:** -- 26 --

11 **THE COURT:** Go ahead.

12 **MR. CHEN:** As with respect to Claims 1, 3, 17,

13 18, and 26, none of those claims map on to Figure 25, so

14 that is correct. That is our position, Your Honor.

15 But the original claims do, as I will

16 explain. So the --

17 **THE COURT:** And let's leave the original

18 claims out there. Let's deal with the written

19 description itself.

20 **MR. CHEN:** Sure. We'll focus on that first.

21 **THE COURT:** Do you dispute that 905 is

22 identified as the "final focusing lens"?

23 **MR. CHEN:** I would like to go through that

24 part of the specification, Your Honor, in fact.

25 **THE COURT:** Okay.

1 **MR. CHEN:** So could you go to the ELMO,
2 please.
3 Thank you.
4 So what is that passage referring to? It
5 needs clarification. So what this is referring to is
6 that you start off with a collimating optical element.
7 It captures light from a light source, and it projects a
8 magnified image of an object near a final focusing lens
9 905.
10 If we could go to Figure 25, please.
11 What this is referring to is that you have an
12 optical path here, and at the end of the optical path,
13 there is a focusing lens. That's all that the word
14 "final" was intended in the specification to say with
15 respect to this path to the first semiconductor
16 detector, you have these various optical elements, a
17 collimating optical element, you've got a dichroic
18 filter, you've got a band pass filter. Eventually you
19 get to a final focusing lens which focuses the beam of
20 light into an image, into a first image, to a first
21 semiconductor detector.
22 **THE COURT:** Wait. When you say in the first
23 image, does the written description describe the image
24 created by the "final focusing lens" as the first image?
25 **MR. KHAN:** It does, Your Honor. If we go to

1 the next column. So we're in Column 44, bottom of
2 Column 44.
3 If I could go back to the ELMO, please.
4 Thank you.
5 Then we go to the next column, Column 45.
6 45, okay.
7 We then see that there is a first image near
8 the focusing lense 905, right? And we also see that
9 there is the concave mirror 907 that creates a second
10 image near a second focusing lens 908.
11 So if we can actually go back to Figure 25,
12 that's exactly what the specification and written
13 description describes. This is 905, creates a first
14 image. And then there's the optical relay element, and
15 then it creates this second image.
16 **THE COURT:** Right.
17 **MR. CHEN:** Second focusing lens, second image.
18 We can go back to the ELMO.
19 Column 45, Lines 20 to 26.
20 May I continue, Your Honor?
21 **THE COURT:** Oh, I'm sorry. Yes, yes.
22 **MR. CHEN:** Thank you, yes.
23 I just want to emphasize that the point about
24 the original claims being part of the specification,
25 there's a lot of case law that supports that.

1 We only cited the *Crown Packaging* case, but
2 I'm sure Your Honor knows, there's a lot of Federal
3 Circuit case law that supports this black letter law.
4 There's also the *Mentor Graphics vs. Eve*
5 case, which is 851 F.3d 1275 at 1297. That's a Federal
6 Circuit, 2017.
7 There's the *Cisco Systems vs. Cirrex* case,
8 856 F.3d 997 1007, Federal Circuit, 2017.
9 And so when we look at the original claims,
10 we see that, in fact, the original claims map onto
11 Figure 25, so there's no exclusion of an exemplary
12 embodiment of the patent here. It reads directly onto
13 the claims.
14 Both with respect to the first focusing
15 optical element and second focusing optical element,
16 we've got another slide here that also highlights the
17 first semiconductor detector, as you can see in that
18 same element in Claim 1, and the second semiconductor
19 detector in Claim 6. It's completely consistent with
20 the original specification and original invention of the
21 patents.
22 Unless Your Honor has any other questions, I
23 think --
24 **THE COURT:** No.
25 So what we are going to do is we are going to

1 take a break. We are going to take lunch for 45
2 minutes. We'll come back, and we'll pick up. Does that
3 work?
4 **MR. CHEN:** Thank you, Your Honor.
5 (Whereupon, a recess was taken.)
6 **THE COURT:** Please be seated.
7 All right. So when we left off, we were
8 doing two terms together, right? First and second
9 focusing optical element and semiconductor detector,
10 right, those two terms.
11 All right. Let's just do this. Because
12 we'll have enough time to finish the rest. Quick
13 summaries of, and I want intrinsic evidence only, all
14 right?
15 So start with the plaintiff and you want to
16 point immediately to the claims and then you want to
17 point to Figure 25 as an embodiment of the five claims,
18 correct?
19 **MR. KHAN:** Correct, Your Honor. So --
20 **THE COURT:** And you want to really emphasize,
21 it seems to me, in the written description the fact that
22 the final, there's a reference in the written description
23 to 905 in Figure 25 as being the final focusing optical
24 lens; is that right?
25 **MR. KHAN:** Correct, Your Honor.

1 **THE COURT:** Well, let me ask you this. Are
2 there any identifications of any part of Figure 25 in the
3 written description that use a number, you know, second,
4 third, first?
5 **MR. KHAN:** So, Your Honor, I wrote myself a
6 sticky on this point, so I'll just go through it.
7 For curved mirror in connection with
8 Figure 25, first and second, never used.
9 For semiconductor in connection with
10 Figure 25, first and second, never used.
11 For focusing lens, first and second together
12 never used. "Final" is used. "Second focusing lens" is
13 used.
14 **THE COURT:** And another.
15 **MR. KHAN:** And "another focusing optical
16 arrangement" is used, all in connection with Figure 25.
17 **THE COURT:** Well, hold on. So the only one
18 that uses a number, second, right, is "optical --
19 **MR. KHAN:** Focusing lens 908.
20 **THE COURT:** Or focusing lens. Sorry.
21 **MR. KHAN:** 908, yep.
22 **THE COURT:** That's it. And that does have
23 "second," though, in the written description.
24 **MR. KHAN:** And it's equating it with
25 "another."

1 **THE COURT:** Right. I hear you.
2 **MR. KHAN:** We would say that that's the
3 opposite of using it in a sequential way. It's using it
4 exactly the way the Federal Circuit asks --
5 **THE COURT:** And "second" is at what cite of
6 the patent?
7 **MR. KHAN:** It's at, Your Honor, 45, 16 to 22.
8 And "additional focusing optical arrangement" is at 58, 2
9 to 9.
10 **THE COURT:** Okay. All right. Go ahead.
11 **MR. KHAN:** And then, Your Honor, I think, as
12 we were talking about, the claims in this instance are
13 the most powerful evidence.
14 **THE COURT:** Are what?
15 **MR. KHAN:** Are the most powerful evidence that
16 the construction has to be nonsequential, because what
17 the claim -- both claims, you know --
18 **THE COURT:** Both claims? Wait, there's five
19 claims.
20 **MR. KHAN:** Five claims, sorry.
21 Each independent claim and its dependents
22 create a first branch and a second branch and the first
23 branch is after the second branch. And the first branch
24 gives you a first focusing lens and a first
25 semiconductor detector, and the second branch gives you

1 a second focusing lens and a second semiconductor
2 detector.
3 And just the claim, itself, reading it, leads
4 to the conclusion that it's nonsequential. But as we
5 just talked about, Your Honor, here there's also written
6 description support for nonsequential use of the
7 numerical terms "first" and "second."
8 **THE COURT:** Right. But the universe of those
9 written description references, to be clear, first of
10 all, they all go to Figure 25.
11 **MR. KHAN:** Everything I said was Figure 25.
12 **THE COURT:** Right. And there's only one
13 that's numerical and that's 908, which is referred to as
14 the "second focusing lens."
15 **MR. KHAN:** A "second focusing lens" and
16 "another focusing optical arrangement 908."
17 **THE COURT:** Right, but the second. I'm just
18 saying --
19 **MR. KHAN:** Yes.
20 **THE COURT:** -- it's only with respect to 908.
21 **MR. KHAN:** Correct.
22 **THE COURT:** Right.
23 **MR. KHAN:** Yes.
24 **THE COURT:** Now, and it does refer to it as
25 "another."

1 **MR. KHAN:** Yes.

2 **THE COURT:** Okay. And then the final, which

3 is referring to 905, which the final focusing lens.

4 **MR. KHAN:** Yes.

5 **THE COURT:** That's it, though. I just want to

6 be clear.

7 **MR. KHAN:** The dichroic filter is referred to

8 as "first dichroic filter." This is the dichroic filter

9 in Figure 25.

10 **THE COURT:** That's 903.

11 **MR. KHAN:** And that's referred to as a "first

12 dichroic filter."

13 **THE COURT:** Correct.

14 **MR. KHAN:** And then there is another dichroic

15 filter and that is, again, Your Honor, in our view,

16 evidence that nonsequential use, there is another

17 dichroic filter --

18 **THE COURT:** Well, actually, in Figure 25,

19 though, it's very clear, the first dichroic filter 903,

20 it's the first element that the ray hits coming out of

21 the magnifying glass.

22 **MR. KHAN:** And I was going to go into second,

23 which is when there is a second dichroic filter and then

24 the use of the word "second" is equated with

25 "additional." So --

1 **THE COURT:** Right. But the use of the word
2 "second," it is sequential. Dichroic filter is
3 sequential in Figure 25.
4 Are you disputing that?
5 **MR. KHAN:** In Figure 25 --
6 **THE COURT:** Yeah.
7 **MR. KHAN:** -- the first --
8 **THE COURT:** The first dichroic filter is 903,
9 right?
10 **MR. KHAN:** And that's described as a second or
11 as an additional dichroic filter. It's described as
12 both. The same element is described as both. That is
13 the next, sequential next after the first, yes.
14 **THE COURT:** Right.
15 **MR. KHAN:** Right.
16 But in our view, Your Honor, equating between
17 second dichroic filter and additional dichroic filter,
18 the specification doesn't. It uses the same, describes
19 the same element. I believe it's --
20 **THE COURT:** Just to tell you, I don't find it
21 persuasive that it says second and then it says but it
22 should be an additional. I just don't find that
23 persuasive, for what it's worth.
24 And I give you credit for just acknowledging,
25 because I don't think you have a choice, that with the

1 dichroic filters, it has to be sequential. I mean, it
2 just has to be.
3 **MR. KHAN:** And, Your Honor, I would submit to
4 you is that the claims that talk about a first dichroic
5 filter are different from the claims that we're looking
6 at here.
7 **THE COURT:** It could be.
8 **MR. KHAN:** Right.
9 **THE COURT:** And then the claims, though, you
10 are telling me that in 1, 3, 17, 18, and 26, there is a
11 first branch and a second branch?
12 **MR. KHAN:** In the dependent claims of Claim 1
13 which is Claims --
14 **THE COURT:** Because I don't see a branch in
15 Claim 1.
16 **MR. KHAN:** Yeah. It's in Claims 7 and 8, Your
17 Honor.
18 **THE COURT:** Okay.
19 **MR. KHAN:** So they're on the screen, or it's
20 Claim 7 and 8 that create the same structure as Claims 17
21 and 18.
22 **THE COURT:** Okay. They are dependent claims.
23 **MR. KHAN:** Correct, Your Honor.
24 And so, Your Honor, this is an instance
25 where, essentially, Cytek is asking for an extraordinary

1 result. I mean, to negate all the claim language that
2 creates the opposite of what they want in terms of
3 sequential reading.
4 **THE COURT:** Okay. Well, you think it negates
5 all the claim language? Okay.
6 **MR. KHAN:** It would, Your Honor, because, you
7 know, it would, basically create a situation where the
8 first focusing element in their view has to be the
9 initial focusing element, but the claim, itself, tells
10 you that it's not the initial focusing element. The
11 second branch goes --
12 **THE COURT:** Where does the claim tell you it's
13 not?
14 **MR. KHAN:** In the order of the claim and how
15 the branches are being created.
16 **THE COURT:** Now, do me a favor. Walk we
17 through that without referring to Figure 25 and tell me
18 why it must.
19 **MR. KHAN:** I think, Your Honor, if we just
20 abstracted, deleted Figure 25 from --
21 **THE COURT:** Yeah.
22 **MR. KHAN:** -- behind what's on Slide 25 on the
23 screen here, that is, essentially, what the claim is
24 talking about. Essentially the...
25 Yeah. So we can just, you know, mentally we

1 can omit Figure 25 from what we're showing.
2 So there's a collimating optical element and
3 there's a filter and a relay. That's Claim 18. And it
4 says the filter is between the relay and the collimating
5 optical element.
6 And then the filter creates two branches, a
7 first and second branch. The first branch goes to the
8 relay. It bounces off the filter and goes to the relay.
9 The second branch goes through the filter, and it goes
10 to what's known as the second focusing optical element.
11 So the claim, itself, is saying that the
12 second branch is before the first branch because the
13 first branch has to travel farther, Your Honor. It has
14 to go through the relay and then back to the next
15 focusing lens, to what is described then as the first
16 focusing lens.
17 And then, Your Honor, what I would -- I mean,
18 it's not just negating the claim language. Of course,
19 in our view, it's ruling out Figure 25. But we are
20 sitting here, and they haven't pointed to you a single
21 embodiment in the specification that this would cover.
22 So --
23 **THE COURT:** When you "that this would cover"?
24 **MR. KHAN:** Sorry. These claims would cover, I
25 mean, you know, under their construction.

1 So under their construction there is no
2 disclosed embodiment in the specification, the written
3 description, that would meet their version of these
4 claims, their construction of these claims.
5 **THE COURT:** All right. Let me just, is first,
6 second focusing optical element only in Claims 1, 3, 17,
7 18, 26 of the '582 patent?
8 **MR. KHAN:** And certain other dependents,
9 correct. Yes, Your Honor.
10 **THE COURT:** All dependent claims from those
11 five claims?
12 **MR. KHAN:** From those five, yes.
13 **THE COURT:** Okay. And is first and second
14 semiconductor detector in only those five claims and the
15 claims that depend from them?
16 **MR. KHAN:** It is not, Your Honor. For that
17 term, and we briefed this separately for exactly that
18 reason, there is another claim, '106, Claim 1, that also
19 has a first semiconductor detector, and that's why in our
20 view, Your Honor, it would be appropriate to deal with
21 the first semiconductor detector in these claims separate
22 from the first semiconductor detector in the '106 Patent
23 Claim 1.
24 Because that one, as I already acknowledged
25 to you, Your Honor, that claim is different. That

1 claim, just to be clear about it, that claim just says a
2 curved mirror, a dichroic filter, a first semiconductor
3 detector, right?
4 But that claim, in candor, doesn't create the
5 structure that this claim does by telling you exactly
6 where the branches are going and what they are doing.
7 And so we think it's appropriate to treat the
8 two first semiconductor terms separately.
9 Your Honor, you asked us to draw the claim
10 without Figure 25. And this was, my colleague and I
11 tried to draw this here. So you have a collimating
12 optical element here. You have a filter. It creates
13 two branches, first branch, second branch.
14 The second branch goes to the second focusing
15 optical element and the second detector. The second
16 branch goes up, the first branch goes to the relay, the
17 filter, the first focusing element, and the first
18 detector.
19 And this, Your Honor, without using
20 Figure 25, again makes clear that it's not necessarily
21 the initial sequential.
22 **THE COURT:** All right. Mr. Chen, you would
23 say, if I'm looking at the written description, you want
24 me to focus on Figure 25.
25 **MR. CHEN:** Correct.

1 **THE COURT:** And you want me to focus on how
2 it's disclosed in the original claim.
3 **MR. CHEN:** That's correct.
4 **THE COURT:** And...
5 **MR. CHEN:** And this doesn't include all of the
6 claim language, sorry, all of the written description
7 that supports our position and also deals with the final
8 focusing --
9 **THE COURT:** So put aside the final for a
10 second. Let's say you persuaded me on that.
11 **MR. CHEN:** Okay.
12 **THE COURT:** That final doesn't show that they
13 are out of sequence.
14 **MR. CHEN:** Yes.
15 **THE COURT:** Okay?
16 **MR. CHEN:** Right.
17 **THE COURT:** And then do you agree that the
18 only numeric description of a part of the Figure 25 is
19 908 where it's described as a second focusing lens?
20 **MR. CHEN:** 908 is described as a second
21 focusing lens, but just the next sentence in Column 45,
22 Lines 22 --
23 **THE COURT:** Yeah.
24 **MR. CHEN:** -- to 26, and I will just go ahead
25 and put this on the ELMO, Your Honor. This is 45, right?

1 **THE COURT:** Okay.

2 **MR. CHEN:** Discusses that there is a first
3 image near the focusing lens 905. The first image that's
4 associated with focusing lense 905, because that's the
5 first focusing lens, and then there is a second image
6 that's associated with the second focusing lens 908.

7 **THE COURT:** Right. But what shows that
8 they're necessarily sequential just by that?

9 **MR. CHEN:** Oh, because this is talking about
10 Figure 25. So if you go back to Figure 25, we see that.
11 We see that 905, which creates the first image, is the
12 first focusing lens. And 908, which creates the second
13 image, is the second focusing lens.

14 Now, the other side --

15 **THE COURT:** Hold up. Hold up.

16 **MR. CHEN:** Sure.

17 **THE COURT:** Where does it say first focusing
18 lens?

19 **MR. CHEN:** It does not say first focusing
20 lens.

21 **THE COURT:** Okay. That is what threw me for a
22 loop because I didn't see that.

23 **MR. CHEN:** Right, right. If you can go back
24 to the --

25 **THE COURT:** But the only thing it describes as

1 first and second is the image.
2 **MR. CHEN:** That's correct.
3 **THE COURT:** Which we've already dealt with.
4 **MR. CHEN:** That's correct. But then when we
5 get to the original claims, it makes it very clear the
6 first image and second image --
7 **THE COURT:** But that's where you are really
8 relying on the original claims.
9 So how about this? You are saying that
10 Figure 25 is not read on by any of the five claims.
11 **MR. CHEN:** That's right.
12 **THE COURT:** Correct?
13 **MR. CHEN:** They came later. They're trying to
14 write claims onto products.
15 **THE COURT:** Okay.
16 **MR. CHEN:** Uh-huh.
17 **THE COURT:** Now, and you're pointing to solely
18 Figure 25 and the description that accompanies it in the
19 written description for me to interpret these claim terms
20 that are in those five asserted claims, right?
21 **MR. CHEN:** Plus the original claims, which --
22 **THE COURT:** Okay.
23 **MR. CHEN:** -- which are part of the original
24 specification.
25 **THE COURT:** All right.

1 **MR. CHEN:** And there's also Figure 25A as
2 well, which does show a consequencing of 905, 908, 918,
3 919, 920, 921.
4 **THE COURT:** And that's fair, and I think
5 that's an accurate description of Figure 25A.
6 **MR. CHEN:** Correct.
7 **THE COURT:** But is there any disclosure on the
8 written description that the five claims do read on that
9 discloses a sequencing?
10 **MR. CHEN:** I think those claims were drafted
11 much later, and I'm not sure there's written description
12 support for them.
13 **THE COURT:** But that's a different question.
14 **MR. CHEN:** So --
15 **THE COURT:** And I hear you. That could be.
16 **MR. CHEN:** Uh-huh.
17 **THE COURT:** But, see, where I'm trying to
18 figure out right now is --
19 **MR. CHEN:** Yeah.
20 **THE COURT:** -- I'm trying to figure out how
21 you deal with the claim language --
22 **MR. CHEN:** Yeah.
23 **THE COURT:** -- right? That's the problem.
24 And so let's just say, for example, let's just assume I
25 totally agree with your reading of Figure 25. I totally

1 agree with 25A. And I agree with you that the asserted
2 claims don't read on --
3 **MR. CHEN:** Yes.
4 **THE COURT:** -- Figure 25 or 25A.
5 **MR. CHEN:** Right.
6 **THE COURT:** I've still got these claims I've
7 got to interpret.
8 **MR. CHEN:** Right, right. And I completely
9 understand that. And with respect to the independent
10 claims, "first" and "second" are consistent with
11 positional significance and sequence.
12 The only claims that they point you to are
13 nonasserted Claims 7 and 8 that have to do with the
14 branches. And we talked about that at the last claim
15 construction hearing where we could put up their slides,
16 and we could actually, if you wouldn't mind giving me
17 the figure that you drew, I would be happy to use that
18 on the ELMO.
19 **THE COURT:** It's under the ELMO, I think.
20 **MR. CHEN:** Oh. I think you guys took it away.
21 Do you guys have the figure that he drew?
22 **MR. KHAN:** It's on the screen. Sorry.
23 **MR. CHEN:** Oh. Not that one. The one that
24 you physically drew. If I could borrow that, I would
25 appreciate that, Counsel.

1 **MR. DENNHARDT:** Oh, sorry.

2 **THE COURT:** This is the branching.

3 **MR. CHEN:** Yeah, this is the branching, right?
4 And we talked about how this is the same juncture. So it
5 doesn't matter if you call this one the first branch or
6 the second branch. This claim doesn't map onto this
7 figure, which is why it's --

8 **THE COURT:** But you're back on the figure --

9 **MR. CHEN:** -- it's very frustrating, which is
10 why I want to use their figure. Because if I use their
11 figure --

12 You guys don't have it anymore?

13 **THE COURT:** You got rid of the drawing?

14 **MR. CHEN:** Yeah. I just don't see it.

15 **THE COURT:** Are you sure it's not on the ELMO?

16 **MR. DENNHARDT:** No, no. It was in the front
17 of this other one. I'm sorry.

18 **MR. CHEN:** Okay. Thank you.

19 **THE COURT:** No problem. It was such masterful
20 artwork, we've got to take advantage of it.

21 **MR. CHEN:** Exactly. It's a Picasso.

22 So here, right, even the way they drew it,
23 there's a branch here. It doesn't really matter if this
24 is the first branch, right? And this is the second
25 branch.

1 But, again, this is all about --
2 **THE COURT:** But it does matter because what
3 they are saying is the second branch could come before
4 sequentially the first branch.
5 **MR. CHEN:** Neither comes before the other
6 because this isn't the...
7 It is not about the same optical path of
8 light. At this point, they are branching off.
9 **THE COURT:** Yeah.
10 **MR. CHEN:** They are branching off. And so --
11 **THE COURT:** They're either simultaneous or one
12 is ahead of the other in time sequence.
13 **MR. CHEN:** They're branching off so they're
14 simultaneous. So at this juncture right here --
15 **THE COURT:** Okay.
16 **MR. CHEN:** -- this could be the first branch
17 or this could be the second branch. They decided to call
18 this one, based on the other claim terms, the first
19 branch.
20 **THE COURT:** Yeah.
21 **MR. CHEN:** Right? And because this is not
22 Figure 25 anymore, the way they drew it actually is
23 consistent with the way that we are viewing things, which
24 this is the first branch, or this is the first detector
25 or this is the second detector, right?

1 And then there could be a third detector and
2 there could be a fourth detector. But the point is
3 "branch" isn't recited in any of the asserted claims.
4 "Branch" is not recited in any of the asserted claims.
5 **THE COURT:** Okay. But then --
6 **MR. CHEN:** I'm not sure why they're trying to
7 use that.
8 **THE COURT:** So then go to the asserted claims.
9 **MR. CHEN:** Yes. The asserted claims.
10 **THE COURT:** Hold on a second. Actually, wait
11 a second. I am a little confused here. I thought I
12 already covered this with them.
13 I asked you, Mr. Khan, is first and second
14 focusing optical element only in Claims 1, 3, 17, 18, 26
15 of the '582 patent and you said and certain other
16 dependent claims as well, right? Then we did the same
17 thing for the first and second semiconductor detector.
18 **MR. KHAN:** So the asserted claim, each of the
19 five claims, 1, 3, 17, 18, 26, are asserted.
20 **THE COURT:** Okay.
21 **MR. KHAN:** The other dependent claims that are
22 of greatest importance that I was referring to in my
23 answer to you, Judge, was Claim 7 and 8 that depend from
24 Claim 1.
25 **THE COURT:** And they're asserted?

1 **MR. KHAN:** They're not asserted, but they're
2 dependent claims that inform the scope of Claim 1. And
3 the reason they do is because Claims 7 and 8 mirror
4 almost exactly the structure of Claims 17 and 18, which
5 are asserted. So we submit, Your Honor, that Claim 1,
6 yeah, and --
7 **THE COURT:** So bottom line, let's assume...
8 Frankly, you shouldn't assume it. I think
9 your best argument are Claims 7 and 8, right?
10 **MR. KHAN:** Claims 7 and 8 and Claims 17 and
11 18, which are also asserted. And 17 and 18 use the word
12 "branch," and they create the branches in exactly the way
13 we've been talking about.
14 **THE COURT:** All right. But and you're saying
15 Claims 17 and 18 are asserted?
16 **MR. KHAN:** Correct, Your Honor.
17 **THE COURT:** All right. Why don't you then,
18 Mr. Chen, look at Claims 17 and 18.
19 I do think this is a really bizzaro world,
20 right, we're living in where there is real dependence on
21 unasserted claims like Claim 12.
22 **MR. CHEN:** Right. Okay. So --
23 **THE COURT:** So 17.
24 **MR. CHEN:** Seventeen depends on Claim 14. So
25 none of the independent claim --

1 **THE COURT:** Hold on a second. And 14 is an
2 independent claim.
3 **MR. CHEN:** Right. So none of the --
4 **THE COURT:** So wait. I'm sorry to interrupt
5 you. Sorry.
6 But, Mr. Khan, I thought you told me that all
7 the claims that use focusing, first and second focusing
8 optical element are either the five that are identified
9 in the slide or depend from them.
10 So now you're telling me it's not limited to
11 that?
12 Oh, 17 and 18 are listed there. I apologize.
13 Totally apologize.
14 **MR. KHAN:** They are, Your Honor. And Claim 14
15 doesn't recite these terms.
16 **THE COURT:** Okay. I see. Thank you.
17 All right. So let's just see. Mr. Chen, I
18 think you are going to tell me you don't see anything in
19 Claim 17 which would require sequencing, right? Because
20 there's no second.
21 **MR. CHEN:** There's no second there.
22 **THE COURT:** Right.
23 **MR. CHEN:** That's correct, Your Honor. There
24 is a second in Claim 18.
25 **THE COURT:** Eighteen?

1 **MR. CHEN:** Yes.
2 And there is -- yeah, the whole point here is
3 that they should be in sequence, not a first one and
4 then the second one can be the third one, fifth one.
5 And even their drawing supports that, where there is a
6 first...
7 Because Claim 18 does recite a first branch
8 and a second branch, but the point is the focusing
9 optical elements are in sequence. One is the initial,
10 that's the first, and the second one is sequential.
11 **THE COURT:** All right. All right. Can we
12 just have clarification. Which claims use the term...
13 Which asserted claims? Because I am only
14 interpreting asserted claims. Okay?
15 Oh, is that a problem, Mr. Khan?
16 **MR. KHAN:** Your Honor, the asserted claims
17 would be interpreted in light of their dependence.
18 In this case, what Cytek is asking with
19 respect to Claim 1 would negate claim language in the
20 dependent claims. So in any event, happy to address --
21 **THE COURT:** Well, let's start with this: What
22 asserted claims use the phrase or use the term "second
23 focusing optical element"?
24 **MR. CHEN:** Claim 18, Your Honor.
25 **THE COURT:** Any other claim?

1 **MR. KHAN:** Twenty-six.
2 **MR. CHEN:** That's correct.
3 **THE COURT:** Does Claim 26 depend from --
4 **MR. KHAN:** Oh, apologize, Your Honor. I
5 misread that. It does not. It does not use that term.
6 **MR. CHEN:** That's right, yes.
7 **THE COURT:** So then other than Claim 18, are
8 there any other asserted claims that use the term "second
9 focusing optical element"?
10 **MR. CHEN:** No. The rest of the asserted
11 claims just use "first focusing optical element."
12 **THE COURT:** Okay. Are there any terms that
13 use...
14 Are there any claims other than Claim 18 --
15 well, strike that again and start over.
16 First of all, for the record, Mr. Khan, do
17 you disagree that the only claim, the only claim that's
18 been asserted in this case that uses the term "second
19 focusing optical element" is Claim 18 of the '582
20 patent?
21 **MR. KHAN:** I'm just checking, Your Honor.
22 **THE COURT:** Thank you.
23 **MR. KHAN:** If you could give me a second.
24 **THE COURT:** No problem.
25 **MR. KHAN:** Appreciate it.

1 I believe that's correct.
2 **THE COURT:** Okay. What are the asserted
3 claims that use the term "second semiconductor detector"?
4 **MR. CHEN:** Claim 18, Your Honor.
5 **THE COURT:** Anything else?
6 **MR. CHEN:** I do not believe so. Oh, wait.
7 For the '582? For the --
8 **THE COURT:** We'll get the '106 in a second.
9 **MR. CHEN:** Right. Yes.
10 **THE COURT:** But just for the '582.
11 **MR. KHAN:** In the '582, I believe that's also
12 correct, Your Honor. In the asserted claims of the '582
13 patent, it's Claim 18.
14 **THE COURT:** Okay. Are there any other
15 asserted claims? Now, I think we have Claim 1 of the
16 '106 patent; is that right?
17 **MR. KHAN:** Claim 1 of the '106 Patent, yes,
18 Your Honor.
19 **THE COURT:** And either of those two, the two
20 terms we're talking about, does it use it?
21 **MR. KHAN:** The second terms are not in Claim 1
22 of the '106 Patent.
23 **THE COURT:** There are no second terms?
24 **MR. KHAN:** It's just first terms, not second.
25 **THE COURT:** Yep. Okay.

1 So are there any other asserted claims,
2 period, that use either the term "second focusing
3 optical element" or "second semiconductor detector"
4 other than Claim 18 of the '582 Patent?
5 **MR. KHAN:** If we are limiting ourselves to
6 asserted claims, that's it.
7 **MR. CHEN:** Claim 5, Your Honor, uses a second
8 semiconductor detector of the '106.
9 **THE COURT:** The '106? Okay.
10 **MR. KHAN:** Claim 5 is not asserted.
11 **THE COURT:** Claim 5 is not asserted, so I
12 don't have to construe it.
13 **MR. KHAN:** I think what Mr. Chen --
14 **THE COURT:** Look, it's really simple. I do
15 want to kind of move on.
16 I just want to know what the universe is of
17 asserted claims that use the term either "second
18 focusing optical element" or "second semiconductor
19 detector."
20 And it sounds like right now the entire
21 universe is Claim 18 of the '582 Patent.
22 **MR. KHAN:** For asserted claims, yes.
23 **THE COURT:** Okay. And Mr. Chen, you agree?
24 **MR. CHEN:** Correct, Your Honor.
25 **THE COURT:** All right. I don't need argument

1 anymore.

2 **MR. KHAN:** Okay.

3 **THE COURT:** Here's what I'm going to do. I

4 don't believe that it's required to be sequential in

5 Claim 18. I read Claim 18. I don't see anything in the

6 claim language that requires sequencing.

7 I think Figure 25 requires sequencing. The

8 defendant says Claim 18 does not read on Figure 25, and

9 I think Mr. Khan's also admitted it doesn't read on

10 Figure 25.

11 **MR. KHAN:** It does.

12 **THE COURT:** Oh, you say it does?

13 **MR. KHAN:** Under our construction, it would

14 appropriately encompass Figure 25, yes.

15 **THE COURT:** Okay. Well, I don't have to

16 decide that. I don't have to decide that because the

17 main thing is, you say it doesn't.

18 **MR. CHEN:** Uh-huh.

19 **THE COURT:** And that's what really I find most

20 informative, right? At the end of the day, I look to

21 *Phillips*, and I look to whether or not the terms in the

22 claim that I am asked to construe, I am asked to look at

23 what they mean. I read the claim, but I also am informed

24 by the written description. And if the claim actually

25 read on Figure 25, I would be informed, and I'd say it's

1 got to be sequenced. But the defendant says it doesn't
2 read on it, and then I don't see why I'd be informed by
3 Figure 25. Okay?
4 **MR. KHAN:** Thank you, Your Honor.
5 **THE COURT:** All right. Next.
6 So understand I ruled that, essentially, I am
7 agreeing with the plaintiff on both of those terms,
8 right, "second focusing optical element" and "second
9 conductor detector" in that there doesn't have to be
10 sequencing.
11 So what I'm saying is, essentially, I don't
12 agree with the defendant that the "second focusing
13 optical element" or "second semiconductor detector" in
14 Claim 18 must follow immediately after "first focusing
15 optical element" or "first semiconductor detector"
16 without any intervening optical element or semiconductor
17 detector.
18 **MR. CHEN:** Just with respect to the asserted
19 claim. But could I actually just make one point, Your
20 Honor?
21 **THE COURT:** Yeah, you can make a point.
22 **MR. CHEN:** Okay. Can I get that --
23 **THE COURT:** Oh, no, no. Don't make another
24 argument. I've got to move on. So sorry.
25 **MR. CHEN:** Okay. Just based on the other

1 claim language, Your Honor, it is the second focusing
2 lens that's receiving the second branch. They are
3 branching off at that juncture.
4 **THE COURT:** Yeah, I just don't buy that.
5 Okay. Then I will state further for the record, then,
6 why.
7 First of all, I've read the claim. I don't
8 see anything in the claim that requires sequencing.
9 Second, I actually found the drawing probative.
10 And Mr. Chen, you won't like this, and I
11 think you are wonderful advocate, but you won't like it,
12 your inability to persuade me that that diagram shows
13 sequencing. I don't think it does. I think it could
14 show simultaneous transmission on branches, Number 1.
15 And then, Number 2, it doesn't tell you which
16 comes first. And Mr. Chen admitted that there also
17 could be a third and fourth. And the problem is that
18 the drawing, just like the claim language itself,
19 doesn't mandate which branch comes first or second. It
20 just labels them that way.
21 And the fact is, I think what was really
22 telling is when Mr. Chen looked at the branches, it's
23 like he told me, well, you can call the second one the
24 first or you can call the first one the second. That
25 goes to the point. That's the whole point.

1 All right. Sorry it took me so long. Next.
2 So I think, are the only things left the
3 means-plus-function or there are any more first or
4 second left?
5 **MR. CHEN:** I believe that's correct, Your
6 Honor, just "optical element," "collecting optical
7 element," and "collimating optical element."
8 **THE COURT:** Yeah. So the three
9 means-plus-function terms.
10 **MR. KHAN:** Yes, Your Honor.
11 **THE COURT:** Okay. All right. Let's hear then
12 on them.
13 And then, which one? Do you think there's a
14 benefit to picking one first?
15 **MR. CHEN:** I think it would be good to start
16 with "optical element."
17 **THE COURT:** Okay. We'll do that.
18 **MR. KHAN:** So on this one, Your Honor, Judge,
19 you held that the corresponding structure for this term
20 is 408 and/or 413, and you asked for additional briefing
21 on whether it should be "and" or whether it should be
22 "or."
23 And I think, perhaps, the defendant went a
24 little bit beyond that in their briefing and also talked
25 about whether there was linking structure.

1 With the Court's permission, maybe I can just
2 address the corresponding structure issue first. And if
3 you would like, whether it's "and" or "or," and then if
4 you would like argument on the linking issue, I can
5 address that as well.
6 **THE COURT:** Okay. That sounds good.
7 **MR. KHAN:** And my apologies again, Your Honor,
8 for the missing citations on Page 28. We have them here,
9 and we think we are going to be able to cover them in
10 detail.
11 **THE COURT:** Okay.
12 **MR. KHAN:** So, Your Honor, the claim term is
13 "optical element configured to detect scattered light."
14 The claim does not say all scattered light. It does not
15 say all forward and scattered light. It just says
16 scattered light. And so the specification is pretty
17 clear that you can have one or more detectors.
18 At Column 27, Lines 22 to 27, it says, "The
19 optical sensing subsystem includes one or more
20 detectors. Such detectors may include forward scatter
21 FSC, side scatter SSC," and then it also refers to a
22 fluorescence detector. We omitted that but it also says
23 that in the specification so I just wanted to make that
24 clear.
25 And then in talking about element 408, the

1 408 is the subject of its own figure, Figure 37. It's
2 standalone figure to talk about 408.
3 And it says detector 408 detects FSC, which,
4 as we discussed, is forward scattered light, and
5 remaining light into the detector 408.
6 And that language, of course, is the linking
7 language that I think Your Honor also identified during
8 the last hearing that links this to the claim function.
9 There's a separate figure, entirely separate
10 figure that refers to a second light detection system.
11 And the second light detection system is in 413. And it
12 says you may have a second light detection system 413,
13 different figure from when it was talking about 408
14 alone, different figure.
15 Now it says you can have 413 in accordance
16 with some embodiments of the present disclosure. So you
17 can have a second light detection system 413 in
18 accordance with some embodiments.
19 And then optional language to say the FSC may
20 be detected by 408. Side scatter may be detected by
21 second light detection system 413.
22 So, Your Honor, we think the specification is
23 pretty clear that both detectors are not required. You
24 have the overview of the flow cytometer and the
25 discussions in the background saying it can be one or

1 more detectors, FS, forward scatter, or side scatter.
2 You have a discussion of Figure 37 that's
3 very focused on element 408, and then you have a
4 separate figure that talks about elements 408 and 413
5 together and 413 is described as a, quote, "second light
6 detection system" separate from 408, and throughout the
7 specification uses optional language of the kind that
8 the Federal Circuit has said would allow -- would
9 require --
10 **THE COURT:** Wait, what do you mean the
11 "optional language"? What are you referring to?
12 **MR. KHAN:** Sorry. The "may include." You
13 know, so if the specification says that the system may
14 include 408, that suggests that the corresponding
15 structure for "optical element configured to detect" can
16 be either 408 or 413. That's all I'm saying. So just
17 referring to the "may" language that's often used in
18 describing 408 and 413.
19 On the linking issue --
20 **THE COURT:** Well, let's just do this. You
21 think they are two separate issues, right? There's
22 either the "and/or" and then you want to deal...
23 I thought you said to me let's just deal with
24 the is it an "or" or an "and," 408 and 413.
25 **MR. KHAN:** We didn't brief the linking issue

1 because I thought, Judge, your order was pretty clear
2 that you only wanted to hear briefing or get briefing on
3 the "and/or" issue and brief that. We didn't brief the
4 linking issue.
5 **THE COURT:** Yeah, okay. So let me hear from
6 them on the "and/or."
7 **MR. KHAN:** Okay.
8 **MR. CHEN:** Thank you, Your Honor.
9 Let me start with the claim language. The
10 claim language recites, "An optical element configured
11 to detect scattered light emitted by the particle in the
12 flow channel and illuminated by a light source." It
13 recites "to detect scattered light," and just like the
14 term "image" that --
15 **THE COURT:** Hold up. Hold up. Hold up.
16 Before you go any further, I want to make sure.
17 This is where I got really confused with the
18 briefing. So this is Claim 13. You all agree 13 is
19 asserted, right?
20 **MR. CHEN:** That's correct, Your Honor.
21 **THE COURT:** I just want to make sure. Because
22 you put 16, though, and I didn't understand what you were
23 doing about Claim 16.
24 **MR. CHEN:** They dropped Claims 17 and 18 --
25 **THE COURT:** Yeah.

1 **MR. CHEN:** -- and they didn't tell us that
2 before the briefing.
3 **THE COURT:** Well, that's fine.
4 **MR. CHEN:** And so 16 is the claim that 17
5 depends on.
6 **THE COURT:** I see. Okay. All right.
7 **MR. KHAN:** And Claim 16 was not asserted.
8 **THE COURT:** Okay. Great. So then it's true,
9 all I have to worry about is Claim 13?
10 **MR. CHEN:** Correct.
11 **THE COURT:** Okay. Great. All right. Sorry.
12 Thanks.
13 **MR. CHEN:** Yeah, so here is the claim
14 language.
15 **THE COURT:** Yep.
16 **MR. CHEN:** The optical element has to detect
17 scattered light. And just like "image" is broader,
18 "scattered light" covers both forward scattered light and
19 side scattered light.
20 And when we actually look at the other claims
21 in the '443 Patent --
22 And switch the ELMO, please.
23 -- you can see that with respect to Claim 13,
24 the language is "to detect scattered light," but with
25 respect to a nonasserted claim that also depends on

1 independent Claim 1, there's a recitation of "side
2 scattered detectors."
3 We can go back to the slides, please.
4 And so our first position is that the claims
5 recite optical element. I know we discussed this at the
6 first *Markman* hearing, Your Honor, but a detector is not
7 an optical element.
8 Next slide, please.
9 The detector is not an optical element. This
10 is what they had originally pointed to as the optical
11 element. This composite objective 60, it does not
12 perform the function of detecting, and so we believe it
13 is indefinite because there's no optical element that
14 performs the function of the detecting.
15 Now, next slide, please.
16 **THE COURT:** Wait. I'm sorry. But see, now, I
17 am really just narrowly focused on: Is it 408 or 413?
18 Or is it 408 and 413?
19 I can't keep revisiting stuff. You have to
20 understand, I have 300 patent cases. I can't do that.
21 **MR. CHEN:** Understood.
22 **THE COURT:** I can't remember stuff. You know,
23 I dealt with a different patent case yesterday.
24 So do me a favor, now you're off on
25 indefiniteness, so I don't know. Now I'm thinking,

1 like, okay, what am I missing?

2 **MR. CHEN:** Understood.

3 **THE COURT:** You have taken me somewhere where

4 I don't know where I am going.

5 **MR. CHEN:** I wasn't you sure that issue was

6 decided or not but I'm happy to go --

7 **THE COURT:** When you say "that issue," I

8 thought it was really clear I decided --

9 **MR. CHEN:** Means-plus-function.

10 **THE COURT:** -- means-plus-function.

11 **MR. CHEN:** Right.

12 **THE COURT:** And I decided that structure would

13 have to be found in --

14 **MR. CHEN:** The specification.

15 **THE COURT:** It has to be.

16 **MR. CHEN:** Absolutely.

17 **THE COURT:** And now, and I said the patent

18 might be rendered indefinite because... Or the claim

19 might be, right, if it doesn't show structure.

20 **MR. CHEN:** That's fine.

21 **THE COURT:** But it appeared that 408 and 413

22 detect light.

23 **MR. CHEN:** That is correct that they're

24 detectors and they're not optical elements. That's the

25 point that I wanted to make.

1 **THE COURT:** But I found that, at your request,
2 "optical element" is a means-plus-function term. It's at
3 nonce term.
4 **MR. CHEN:** Correct. Element is a nonce term
5 and --
6 **THE COURT:** Element is.
7 **MR. CHEN:** Understood. I am happy to move on
8 and explain why, consistent with the claim language being
9 broader to capture both forward scattered light and side
10 scattered light, that both detectors, it's an "and," both
11 detectors are required.
12 **THE COURT:** Okay.
13 **MR. CHEN:** The 408 forward scatter detector
14 and the 413 side scatter detector, both of them are
15 required to cover the full scope of the claim language,
16 which is to detect scattered light.
17 Doesn't say detect forward scattered light.
18 Doesn't say detect side scattered light. They could
19 have claimed that.
20 They didn't. They claimed something broader,
21 which requires that --
22 **THE COURT:** Well, when you say "broader," is
23 it broader or narrower? I mean, in other words, it could
24 be, I mean, as an English person --
25 **MR. CHEN:** Yes.

1 **THE COURT:** -- you know, like, as opposed to a
2 science person, you know, just reading the grammar,
3 right, that to detect scattered light means I detect two
4 rays from a side scatter or I detect two or three rays
5 from a forward scatter.
6 In other words, if I do it just purely on the
7 language and, again, not scientific, there may be --
8 **MR. CHEN:** Right.
9 **THE COURT:** -- that a POSA comes in and says
10 something different. But just from an English point of
11 view, to detect scattered light just means some portion
12 at least of the light that's scattered.
13 **MR. CHEN:** Uh-huh.
14 **THE COURT:** So why is it broader? It's
15 narrower.
16 **MR. CHEN:** It's broader because when the laser
17 hits the cells in the flow cell, light scatters in a
18 variety of directions. We talked about this at the first
19 *Markman* hearing.
20 **THE COURT:** Right.
21 **MR. CHEN:** And in order to cover the detection
22 of the scattered light, you need both a forward scatter
23 detector and side scatter detector.
24 And they actually have different functions.
25 A forward scatter detector is usually used to measure

1 data with respect to size of particles, whereas a side
2 scatter detector is usually used to detect morphology of
3 the particles in the flow cell.
4 **THE COURT:** Let me ask you this. Is this
5 thing, the box in the middle is the WMD? What is that
6 box in the middle called?
7 **MR. CHEN:** Oh, no, this is before the WDM.
8 **THE COURT:** Sorry, WDM. What's the box,
9 Figure 38?
10 **MR. CHEN:** Yeah, so the 60 in Figure 38 is the
11 composite microscope objective.
12 **THE COURT:** Okay.
13 **MR. CHEN:** We are going to be talking about
14 that more with respect to the "collecting optical
15 element" term, Your Honor.
16 **THE COURT:** All right. Now, the light gets in
17 there.
18 **MR. CHEN:** That's right.
19 **THE COURT:** What's it made out of?
20 **MR. CHEN:** Light is usually laser light.
21 **THE COURT:** The light is. What's the 60?
22 What 60 made out of?
23 **MR. CHEN:** Oh, 60 is usually, it can either be
24 glass or plastic. And then the flow cell is 409. And
25 that's where the cells will enter. And then the light

1 will irradiate the cells. And the light will both
2 scatter as well as fluoresce. The cells will fluoresce
3 light. And the fluoresce --
4 **THE COURT:** Would you agree that -- sorry. Go
5 ahead.
6 **MR. CHEN:** Sorry.
7 The fluorescent light will go to the WDM.
8 The scattered light is being detected by 408 and 413.
9 **THE COURT:** Okay. Now, 60 --
10 **MR. CHEN:** Sixty.
11 **THE COURT:** -- is it within a box, a metal box
12 or, like, what is it in?
13 **MR. CHEN:** Yeah. It's within, like, a bigger
14 flow cytometer machine. It's not part of the WDM. It's
15 not part of the WDM.
16 You have the WDM that receives the
17 fluorescent light through an optical fiber.
18 If we can actually put up Figure 31, which
19 is, I think, one of the very first slides from Slide 3.
20 So you see 60 here as well. It doesn't show
21 the forward scatter or side scatter detectors on this
22 figure. But it does show the 60, which is the composite
23 microscope objective or the collecting optical element.
24 And so light will scatter after it hits the
25 cells in the flow cell. And the cells will also

1 fluoresce. And it's the fluorescent light that
2 eventually gets to the optical fiber 852.
3 **THE COURT:** Through the cable.
4 **MR. CHEN:** Through the cable, that's right,
5 optical fiber cable to the WDM 90. And then 90 is
6 described in more detail in Figure 25.
7 And so going back to the --
8 **THE COURT:** Just give me a second.
9 **MR. CHEN:** Sure.
10 **THE COURT:** Okay. Now, you were about to say
11 something, and I asked you to wait a second so I could
12 read.
13 **MR. CHEN:** No. I was just reiterating the
14 point that the claim language says "detect scattered
15 light, which includes both forward scatter and side
16 scattered light." And that's why you need both detector
17 408 and detection system 413.
18 And that's also supported by Federal Circuit,
19 as well as Delaware case law, that says if you have,
20 basically, multiple functions, or here, "a broader claim
21 that covers both forward scattered and side scattered
22 light."
23 Similar to the term "image," right? The
24 other side is arguing that "image" is broader; it covers
25 both real images and virtual images.

1 Same thing here, "scattered light." And they
2 have other claims where they use the words "side
3 scattered" rather than "scattered."
4 **THE COURT:** All right. I don't find that
5 argument particularly compelling. Now, I'm afraid I
6 might be missing something, so that's why I was asking
7 questions about the structure of these machines.
8 **MR. CHEN:** Yes.
9 **THE COURT:** For instance, I asked you: Was
10 60, the box, what's it made out of? I thought you might
11 tell me, I don't know, it was titanium; it's sealed so no
12 light can escape from it except by a fiber cable or, you
13 know, something, right?
14 **MR. CHEN:** Yes.
15 **THE COURT:** But didn't say that. You said
16 it's glass.
17 **MR. CHEN:** Yeah, that's right.
18 **THE COURT:** All right. And I always
19 appreciate your honesty.
20 **MR. CHEN:** Uh-huh.
21 **THE COURT:** So, but it sounds to me like it's
22 understood that not all the light that's being emitted,
23 whether it's on the side or whether it's forward, is
24 being captured by 408 and 413.
25 **MR. CHEN:** Not all, that's correct, Your

1 Honor. But in this particular space, there's forward
2 scattered detectors and side scattered detectors. That's
3 common in this industry because they capture different
4 things.
5 **THE COURT:** Right. But they don't capture
6 everything.
7 **MR. CHEN:** They don't capture everything, but
8 they perform different functions. One is to capture,
9 basically, data with respect to size. That's -- I
10 believe that's forward scatter, but my expert will
11 correct me if I have the two things reversed.
12 And the side scatter detector is used to
13 detect data with respect to the morphology of the cells
14 and particles going through the flow cytometer.
15 **THE COURT:** All right. But, for instance, the
16 side detecters, they're not capturing every ray or
17 particle of light emitted on the side.
18 **MR. CHEN:** They don't have to because they
19 will already be able to perform their function of telling
20 us the morphology data that we want to have from the
21 sample of cells.
22 Just similarly, the forward scatter will tell
23 us the information we want about the size so we don't
24 have to capture every single ray.
25 **THE COURT:** I got it. That's good.

1 **MR. CHEN:** Okay.
2 **THE COURT:** That's all I wanted to know.
3 **MR. CHEN:** Understood.
4 **THE COURT:** They don't have to capture
5 everything. I thought... the nature of my questions was
6 to disclose... for me to discover, wow, is it anticipated
7 that all the light that's being emitted is being
8 captured? And the answer to that this clearly, "No."
9 **MR. CHEN:** Right. No.
10 **THE COURT:** Okay.
11 **MR. CHEN:** That's correct, Your Honor.
12 **THE COURT:** Now, Claim 13 doesn't depend in
13 any way from Claim 5, correct?
14 **MR. CHEN:** That's correct, Your Honor. They
15 both depend on Claim 1.
16 **THE COURT:** Okay. All right. Then I'm going
17 to rule that the structure for Claim 13 of the '443
18 Patent is 408 or 413.
19 **MR. CHEN:** Okay.
20 **THE COURT:** Okay? Because I actually don't
21 think claim, that the detecting scattered light is
22 broader than what's anticipated as being detected by side
23 scattered detectors, for instance, in Claim 5 of the
24 patent. To the contrary, as I've previously articulated,
25 to me, it's much narrower.

1 It's basically, to read on this element of
2 Claim 13, you would have to have an optical element that
3 is configured to detect some scattered light. Doesn't
4 have to be all of the scattered light. And that
5 scattered light could be forward, it could be side
6 light, and it doesn't have to be, in its entirety,
7 whether it's forward or side.
8 Okay. So that takes care of that claim.
9 What's the next claim?
10 **MR. CHEN:** "Collecting optical element."
11 Would you like me to go first, Your Honor?
12 **THE COURT:** Well, wait a second. See, when
13 you jump to "collecting"...
14 Is this Claim 18 of the '443?
15 **MR. KHAN:** Your Honor --
16 **MR. CHEN:** Claim 1 and 13 of the '106, Your
17 Honor.
18 **THE COURT:** Okay. Let's just hold up.
19 **MR. KHAN:** I was just going put on the record,
20 Your Honor, there are no other asserted claims with the
21 language "optical element configured to detect." So I
22 think we can put that one to bed.
23 **THE COURT:** I think we all agree on that.
24 **MR. CHEN:** Yes.
25 **THE COURT:** We all agree on that.

1 Now, the question is, though, an optical
2 element that does something besides merely detecting.
3 **MR. CHEN:** Yes.
4 **THE COURT:** Right. And so for that, what do
5 we have?
6 **MR. CHEN:** "Collecting optical element," Your
7 Honor, which is Claims 1 and 13 of the '106 Patent.
8 **THE COURT:** Okay. But the only thing I'm at a
9 loss for is, what about claim... oh, because Claim 18 is
10 gone from the '443.
11 **MR. CHEN:** They dropped them. That's correct.
12 **MR. KHAN:** That's what I was --
13 **THE COURT:** Thank you.
14 **MR. CHEN:** They dropped them because -- yes.
15 **THE COURT:** Yes. I got it.
16 All right. Thank you.
17 All right. So now, go ahead.
18 **MR. CHEN:** Collecting optical element.
19 **THE COURT:** Yep.
20 **MR. CHEN:** Would you like me to go first?
21 **THE COURT:** Yeah, why don't you.
22 **MR. CHEN:** Okay.
23 **THE COURT:** Change things around here.
24 We've got two terms, right?
25 **MR. CHEN:** Yes.

1 **THE COURT:** All right.

2 **MR. CHEN:** Could we go to Slide 69, please?

3 So the parties agree on the claimed function
4 here, which is to collect and focus fluorescent light
5 emitted by a particle illuminated by the light source,
6 such that the fluorescent light leaving the collecting
7 optical element converges.

8 So that's agreed upon. There's no dispute
9 that this is the claimed function.

10 **THE COURT:** Yep.

11 **MR. CHEN:** And so there is no structure for
12 collecting optical element. Collecting optical element
13 is only found in the claims. It's not even in the
14 written description at all. It is subject to
15 means-plus-function.

16 And when we look to see what in the
17 specification performs the function, it always requires
18 a concave mirror and an aberration corrector plate.

19 And you need that in order to make the light
20 converge, you need a concave mirror, 601, in order to
21 make the light converge.

22 So using this -- let's see -- this top figure
23 here, this looks, hopefully, familiar at this point.
24 It's similar to what we looked at previously when we
25 were looking at the side scatter detectors, Your Honor.

1 **THE COURT:** Okay.

2 **MR. CHEN:** Right.

3 But now we're talking about fluorescent
4 light. And so what happens is, light will come in, you
5 will hit the flow cell, there's scattering that happens,
6 but then there's also fluorescing.

7 And that fluorescent light will be gathered
8 by the concave mirror and then converged. And what the
9 aberration corrector plate does, it fixes aberrations in
10 the light so that you can properly have converging
11 light.

12 And that's why this is recited throughout the
13 patent in various embodiments. Every single embodiment
14 requires a concave mirror and an aberration corrector
15 plate.

16 And, in fact, when we look at the original
17 claims of the patent, we see that they actually recited
18 that the composite microscope objective includes a
19 mirror and an aberration corrector plate.

20 There's nothing in the original claims where
21 you have a composite microscope objective that is --
22 that's off by itself. That doesn't further, then,
23 specify that you need to have a spherical mirror and an
24 aberration corrector plate in order to perform the
25 claimed function.

1 As Your Honor knows, you need to have
2 structure that's sufficient for performing the claim
3 function. A microscope objective, by itself, is not
4 sufficient to perform the claim function of converging
5 light.
6 And here's an example. This is extrinsic
7 evidence, and also discussed by our expert, Dr. Ilkov.
8 And...
9 The laser is not showing up very well. Can I
10 get the other one, please? Thank you.
11 So here's the objects of the lights flowing
12 in this direction, right? This direction, your eyeball
13 is up here and looking through the microscope objective.
14 And, basically, light here, which is diverging, actually
15 gets collimated in this objective. So this is a
16 collimating objective. It's not an objective that
17 converges light.
18 That's why you always need a concave mirror
19 and an aberration corrector plate.
20 **THE COURT:** All right. Just give me a break
21 here.
22 Again, and I deferred to you about whether
23 you're prejudiced and I would construe this, because
24 they didn't cover this, right?
25 **MR. CHEN:** Right.

1 **THE COURT:** So I didn't read it.
2 Let me just step back, though.
3 **MR. CHEN:** Sure.
4 **THE COURT:** My limited experience with
5 means-plus-function is, you know, the norm is, you battle
6 over whether it's means-plus-function, then you battle
7 over whether there's a specific embodiment disclosed in
8 the written description --
9 **MR. CHEN:** That's right.
10 **THE COURT:** -- that performs the function.
11 **MR. CHEN:** Correct.
12 **THE COURT:** So you're saying there isn't?
13 **MR. CHEN:** Oh, there is for this term, there
14 is.
15 **THE COURT:** Well, it sounds like you're saying
16 there's some combination of disclosures in the patent
17 that do it. That's what, kind of, is throwing me for a
18 little bit of a loop here. And I'm...
19 **MR. CHEN:** I think I understand --
20 **THE COURT:** Does the law permit that?
21 **MR. CHEN:** I think I understand what Your
22 Honor is asking, but, of course, please let me know if
23 maybe I'm not understanding you correctly.
24 So the first issue is: Does the term
25 "collecting optical element" by itself connote

1 sufficient structure for performing the recited
2 function?
3 **THE COURT:** Right.
4 **MR. CHEN:** Which, we all agree on, is the
5 collecting and focusing and converging the light, right?
6 And our position is, no. And, in fact, the
7 written description doesn't even use the term
8 "collecting optical element" at all.
9 That said, the written description does say,
10 in multiple embodiments, that a concave mirror and
11 aberration corrector plate perform this function of
12 collecting the light and converging it.
13 And that is shown in various figures and
14 various written description disclosures, and always
15 involves a concave mirror and an aberration corrector
16 plate.
17 **THE COURT:** Can you show me a specific example
18 where there is this disclosure of both of these things --
19 **MR. CHEN:** Yes.
20 **THE COURT:** -- acting together to perform the
21 claimed function?
22 **MR. CHEN:** Absolutely.
23 **THE COURT:** As opposed to, I'm looking at your
24 slide --
25 **MR. CHEN:** Right.

1 **THE COURT:** -- and it seems to be pulling
2 together different things in the written description to
3 do this.
4 **MR. CHEN:** Absolutely. And this is also
5 described in our briefing, but I do have some of these
6 places memorized.
7 And so the first place is on Column 3. There
8 is a discussion of the composite microscope objective,
9 includes a concave mirror and an aberration compensation
10 plate. We call it a corrector plate in other places.
11 So that's one area.
12 **THE COURT:** Well, no, no, no. That's where it
13 discloses an exemplary embodiment.
14 **MR. CHEN:** Uh-huh.
15 **THE COURT:** But where does it say here that
16 that composite microscope objective collects and focuses
17 fluorescent light emitted by a particle illuminated by
18 the light source such that the fluorescent light leaving
19 the collecting optical element converges?
20 **MR. CHEN:** Understood.
21 **THE COURT:** You're just saying that's applying
22 what you're... like, basically, POSA knowledge?
23 **MR. CHEN:** Absolutely, Your Honor. Yeah.
24 **THE COURT:** Okay.
25 **MR. CHEN:** I understand what you're asking.

1 And let me just get to places that discuss that.
2 It's cited in our briefing.
3 Let's go to our original briefing. That's
4 probably the best place.
5 Column 34, Lines 43 through 55. Column 34.
6 Talking about this right here?
7 Forty-eight onwards. "Figure 9A" --
8 **THE COURT:** Yeah, so Figure 9A. Okay.
9 **MR. CHEN:** -- "depicts the results of ray
10 tracing from the embodiment of a composite microscope
11 objective, 60, illustrated in Figure 8. As depicted in
12 Figure 9A, scattered and fluorescence emissions from
13 three spatially separated locations in the flow channel
14 near the center of cuvette, 603, may initially propagate
15 for back surface mirror, 601, and pass first through the
16 cuvette, 603, to be internally reflected back to the back
17 surface mirror, 601, then pass through the cuvette,
18 subsequently pass through the aspheric corrector plate,
19 602, and finally forms three distinct images near an
20 image plane, 605."
21 So that's just one place. And there's
22 multiple places.
23 **THE COURT:** Well, hold up. So then the
24 structure described there consists of 601, 602, 603, 604,
25 and 605.

1 **MR. CHEN:** Correct.

2 **THE COURT:** Okay. And is that sufficient
3 structure to accomplish, then, that by itself, those five
4 parts, 601 through 605, you're saying together are
5 sufficient structure?

6 **MR. CHEN:** That's correct.

7 There's various embodiments, some with
8 slightly different structures. All of them share the
9 common components of a concave mirror and an aberration
10 corrector plate.

11 And so, as you can see, our construction has
12 four different proposed structures consistent with the
13 specification. I'll put it up here, Your Honor. And
14 they each have a concave mirror and an aberration
15 corrector plate.

16 But Your Honor is right, with respect to
17 Figure 9A, there are other components as well.

18 We're, in a way, pointing to them through the
19 language here, but the most important aspect is that you
20 need to have a concave mirror because that performs a
21 converging function, focuses the light, and you have to
22 have the aberration corrector plate because there's
23 aberrations that are occurring that need to be fixed.

24 There are other passages as well.

25 **THE COURT:** Just hold on a second, please.

1 All right. So Figure 11 has 601, 602, 603,
2 and 604. Is there a figure that has all of those
3 components plus 605 in the patent?
4 **MR. CHEN:** Figure 11.
5 **THE COURT:** That's what I just identified.
6 **MR. CHEN:** Yes.
7 **THE COURT:** So it's missing 605.
8 **MR. CHEN:** That is correct. That is correct.
9 605 is just the image.
10 **THE COURT:** So how is that a structure?
11 **MR. CHEN:** Yeah, that's just the image plane
12 so you do not need that.
13 **THE COURT:** So, for instance, if you were
14 talking to a jury, we could say Figure 11 would be a
15 corresponding structure.
16 **MR. CHEN:** Figure 11, I believe, is a
17 corresponding structure, yes.
18 There are various embodiments and that's why
19 there's just a slight pause, Your Honor. I just want
20 to --
21 **THE COURT:** No, see, what I'm used to...
22 This is limited, but what I'm used to with
23 means-plus-function is the corresponding structure. I
24 literally point to the patent. I tell the jury the
25 corresponding structure is here, and it actually looks

1 like I could do that here.
2 **MR. CHEN:** Yes.
3 **THE COURT:** I could say the corresponding
4 structure is Figure 11.
5 **MR. CHEN:** Yes.
6 **THE COURT:** Could you live with that instead
7 of all the different language you put in your table?
8 **MR. CHEN:** I could. I could.
9 **THE COURT:** How about the plaintiffs?
10 **MR. KHAN:** Your Honor, Figure 11 includes
11 elements that are not associated with the claim function,
12 so it includes things that, like, part of the flow cell.
13 The flow cell is not the structure that's gathering the
14 light, right? And so I think --
15 **THE COURT:** But wait. What do you do with the
16 passage that Mr. Chen just pointed me to? Is it
17 Column 44, right?
18 **MR. KHAN:** Thirty-four, Your Honor.
19 **THE COURT:** Thirty-four?
20 **MR. KHAN:** Yes.
21 **THE COURT:** I mean, that appears to...
22 Well, actually, let me ask you this. Are you
23 saying that whatever it is that's depicted in Figure 11
24 does not collect and focus fluorescent light emitted by
25 a particle illuminated by the light source such that the

1 fluorescent light leaving the collecting optical element
2 converges?
3 **MR. KHAN:** We are not disputing that certain
4 elements in that figure do that. If I could level up and
5 just frame the dispute.
6 The first dispute, in light of Your Honor's
7 suggestion with respect to focusing optical element, is
8 whether collecting optical element is sufficient
9 structure. And we're prepared to speak to that. But if
10 what we're talking about is, assuming collecting optical
11 element is not sufficient structure, what's the
12 corresponding structure?
13 The framing that I would offer you, Judge, is
14 they are pointing to very specific embodiments and
15 saying, hey, it's got to be sort of these two elements,
16 pluck it out of Figure 11, these two elements from
17 Figure 9, these two elements from over here.
18 The specification actually levels up and says
19 there's a composite microscope objective. The composite
20 microscope objective gathers, collects images, light,
21 and puts it onto the fiber. That's in Figure 1.
22 And so we would say, Your Honor, the
23 composite microscope objective is sufficient structure
24 to perform the function. And they disagree with us. I
25 see Mr. Chen shaking his head.

1 **THE COURT:** Yeah. You guys are all head
2 shakers.
3 **MR. KHAN:** So I'm just saying, there's a
4 disagreement, and that's -- I think I am accurately
5 characterizing the disagreement, which is we would say
6 the corresponding structure can be articulated at a level
7 of generality.
8 And the Federal Circuit instructs that where
9 the specification uses optional language, and we can
10 show you where that is in the specification, you know,
11 may include X, Y, Z, or does not include.
12 In fact, in this specification, Your Honor,
13 we can show you, there's passages that talk about an
14 aberration corrector plate, which is what Mr. Chen was
15 pointing to may, not be required. There's passages in
16 the specification that say concave mirror may be
17 included. That means may not be included. There's
18 language in the specifications five times.
19 **THE COURT:** Yeah. Well, again, what happens
20 when I don't read your brief, right?
21 **MR. KHAN:** Yeah.
22 And we understand that, Your Honor, and we're
23 prepared to walk through the specifications on that
24 issue.
25 **MR. CHEN:** The Federal Circuit also makes it

1 really clear that the structure needs to be clearly
2 linked with performing the claim function.
3 The only structures that are clearly linked
4 with performing the claim functions always include a
5 concave mirror, aberration corrector plate. Could not
6 be more clear in the specification.
7 And objective, by itself, is insufficient
8 structure for performing the function. Does not
9 converge light. Doesn't have to converge light.
10 **THE COURT:** The only reason I'm even hearing
11 this argument is because, Mr. Chen, you said you really
12 want a ruling on these last three terms.
13 **MR. CHEN:** We do want a ruling on this one.
14 **THE COURT:** I know. But, I mean, I'm just,
15 you know, I'm steamed. I mean, you know, I came out
16 here, I told you, it really gets my...
17 I can't believe I had to encounter that in
18 the briefing. The only reason we even had the hearing
19 is because you didn't do. You know, you played by the
20 rules.
21 But the truth of the matter is, I'm not fully
22 up to speed on these last three terms because there's
23 only so much you can do if you are me.
24 **MR. CHEN:** Understood.
25 **MR. KHAN:** Judge, would it help for us to

1 present the specification cites we're relying on?
2 Because we have them, and we can walk through them.
3 **THE COURT:** Well, the problem is, if you
4 present it, would it be helpful? Yeah. At 2:30? You
5 know, but I had to prepare for this.
6 I have limited time. I have to get my
7 reportables out by September 30. I won't because of
8 stuff like this.
9 **MR. CHEN:** Could I take two minutes to confer
10 with my colleagues, Your Honor?
11 **THE COURT:** Yeah.
12 **MR. CHEN:** Okay.
13 (Counsel confer.)
14 **THE COURT:** By the way, I mean, next time I
15 get a brief from this side, if it has something like
16 that, I'm striking it, and I am going to take measures,
17 because this was not fair to the defendant, and it wasn't
18 fair to the Court.
19 **MR. KHAN:** Understood, Your Honor. Thank you.
20 **MR. CHEN:** Sorry, Your Honor.
21 I was just trying to ask my colleague if we
22 could forego the "collimating optical element," but
23 unfortunately, it shows up in so many claims, I don't
24 think we can avoid that. But perhaps you could take the
25 "collecting optical element" under advisement?

1 **THE COURT:** Actually, how about we do this.
2 Is there a way to structure the case now? We've had a
3 couple of issues about indefiniteness and the written
4 description.
5 **MR. CHEN:** Yes. Yes.
6 **THE COURT:** Then maybe what we do is, is there
7 a way you can bring motions related to that, or tee those
8 issues up without me needing to address these remaining
9 three terms?
10 **MR. CHEN:** Can you give me a minute, Your
11 Honor?
12 (Counsel confer.)
13 **MR. KHAN:** If I could also be heard on that
14 issue? Eventually, not right now.
15 **MR. CHEN:** A few things, Your Honor. So
16 there's a lot of claims still that are being asserted.
17 The parties had initially agreed that they would narrow
18 asserted claims in prior art after *Markman*.
19 Perhaps, we could have an agreement that they
20 can narrow before there's a ruling on all the terms.
21 That might help, then, us be able to file a summary
22 judgment motion that would hopefully --
23 **THE COURT:** I like that. I like that idea.
24 Mr. Khan?
25 **MR. KHAN:** Your Honor, as to early motion

1 practice, I think the terms that we have been talking
2 about today and the issues that they've purported to
3 raise with respect to indefiniteness and written
4 description, those are not case dispositive. In other
5 words, they are directed to a handful of claims in
6 certain patents.
7 **THE COURT:** Okay. That may be, but let's do
8 this, let's do it in stages. I think... and there was an
9 issue before. You said it was on mooted, the narrowing
10 thing, right? The last time I was here, didn't you all
11 say that that motion you brought --
12 **MR. CHEN:** That's correct, yes.
13 **THE COURT:** -- right, had been mooted? But
14 that's maybe what we ought to do. We ought to force the
15 plaintiff to narrow its asserted claims, and maybe some
16 of these will go away. That seems, to me, a good way to
17 resolve.
18 And at that point, after you've narrowed it,
19 we could have a status conference and I could hear, is a
20 proposal. I'm not saying I'd agree to it. I'm not
21 saying I'd agree to it, but I might.
22 And I will say this, Mr. Khan's made a very
23 good point. When I did it in the *Hip Hormel* case, it's
24 because it got rid of the case in its entirety. And I'm
25 not saying... it would have gotten rid.

1 I mean, in other words, what I'm not going to
2 do is, I'm not doing partial summary judgment motions.
3 That doesn't... that does not help. That's, generally,
4 a waste of Court assets, which are so limited.
5 **MR. CHEN:** Understood.
6 **THE COURT:** And I'm also, to be very clear,
7 because I think somebody could misinterpret what I said
8 of it would get rid of the case in its entirety. I've
9 rejected indefiniteness arguments as many, or more than
10 I've ever granted a motion.
11 **MR. CHEN:** Right.
12 **THE COURT:** So don't... I have not formed any
13 judgment. I have no idea about the merits of an
14 indefiniteness claim. But it just seems to me that it
15 can be a useful exercise to move a case efficiently.
16 All right. So I do think what we ought to do
17 is, I don't think it's productive right now to go
18 forward with these three claims, especially if some of
19 them went out the door because they weren't even going
20 to be asserted going forward.
21 So where are we, right now, how many claims
22 have been asserted? Rather, how many are currently
23 being asserted?
24 **MR. KHAN:** We're at 40 claims, Your Honor. It
25 was 42, but we withdrew two claims as part of the

1 briefing.

2 Sorry, 42. We are now at 42.

3 **THE COURT:** Forty-two over three patents?

4 **MR. KHAN:** Four patents.

5 **THE COURT:** Four patents.

6 **MR. CHEN:** Forty-two over four patents, and

7 effectively 57 claims, because there's these multiple

8 dependent, sort of, scenarios.

9 **MR. KHAN:** And, Your Honor, we've agreed to go

10 down to 22 within a couple of weeks of the *Markman* order.

11 So we are already -- we've already agreed to go down to

12 half of that, essentially, you know, within short order

13 of a *Markman* ruling.

14 **THE COURT:** Okay.

15 What's your... you have a proposal?

16 **MR. CHEN:** What we would propose, I think, is

17 consistent with what Your Honor is saying, is to require

18 them to narrow claims down to...

19 (Counsel confer.)

20 **MR. KHAN:** There was a ruling --

21 **MR. CHEN:** That's true. That's true. If it's

22 case dispositive, we would ask for more of a narrowing

23 than 22, Your Honor.

24 If we could get them to agree to ten claims,

25 I think that would be much more manageable.

1 **THE COURT:** Well, definitely would be more
2 manageable.
3 **MR. CHEN:** They're going to have to do that
4 for trial anyways.
5 **THE COURT:** Well, right. I tend not to force
6 it because the really good trial lawyers know, you can't
7 try a case with even ten claims.
8 **MR. CHEN:** Right.
9 **THE COURT:** Good lawyers, the best I see,
10 don't do stuff like that.
11 **MR. CHEN:** Right.
12 **MR. KHAN:** Your Honor, we argued this issue
13 before Judge Tennyson, and she ruled. And we agreed to
14 22 claims within a couple of weeks of a *Markman* ruling.
15 We think that's appropriate in light of,
16 we've got four patents in the case, fact discovery is
17 about to close, and then we were expecting to get some
18 expert discovery. And we're open to narrowing, of
19 course. We know we can't try, you know, that many
20 claims.
21 But I think it makes sense to let us complete
22 fact discovery. And on fact discovery, Your Honor, it
23 is going to be needed for any indefiniteness issue. And
24 let me give you an example.
25 So at the hearing -- you know, you heard at

1 the last hearing about how "collimation" and
2 "collimated." They were suggesting to you it's
3 indefinite because no one knows what "collimated" means,
4 right?
5 And, you know, one of the things that they
6 didn't tell you, and we didn't tell you at the time, is
7 the evidence is going to show that their own collimation
8 lens in their product, it is -- the way they collimate
9 it is just by holding it up and shining a light source,
10 and then moving the collimating lens until they see the
11 right spot size on the wall.
12 That's -- so they're not -- there's no
13 measurement. There's no quantitation. There's no
14 nothing.
15 So fact discovery is going to be incredibly
16 important to a lot of -- both claim development, but
17 also, a lot of indefiniteness issues that they're trying
18 to raise here about, "What is collimation mean to a
19 person of ordinary skill in the art?" I think we need
20 to hear all of those issues.
21 **THE COURT:** Sorry. I'm trying to think why
22 that's relevant right now for me to care.
23 **MR. KHAN:** It's relevant because, Your Honor,
24 in terms of claim narrowing and in terms of when to have
25 an early SJ practice, right, we need fact discovery to

1 complete.
2 We're almost done with fact discovery, about
3 a month, six weeks out, according to new agreement we
4 have. And we're moving right into expert discovery
5 anyway.
6 And so from our perspective, you know, we're
7 at the point -- we're not too far away from the point of
8 them being able to make summary judgment motions anyway.
9 And so it kind of makes sense to just hold this until
10 then.
11 **THE COURT:** Yeah. I'm not making a ruling on
12 summary judgment, and I expressed that. I said it might
13 not be a smart idea at all.
14 Here's what I'm inclined to do. I'm inclined
15 to say... she gave you two weeks from the *Markman*
16 hearing?
17 **MR. KHAN:** I believe that's right, two weeks.
18 Yes, Your Honor.
19 **THE COURT:** And, of course, I already had the
20 *Markman* hearing.
21 **MR. KHAN:** I'm sorry? The ruling. Sorry.
22 The ruling.
23 **THE COURT:** Okay. So I've given you rulings
24 on all but the three terms that I will defend as not
25 being prepared today because of the failure of you to

1 cite to the record, and so I stopped reading your brief.
2 I think that's the only thing a judge in my position
3 could do.
4 We're on our second *Markman* hearing. We've
5 incurred an awful lot of judicial time to date, and we
6 need to move the case. And so when I figure out all
7 those factors, I think, at this point, I'm going to
8 require the plaintiffs to narrow the claims to 16
9 claims.
10 Within two weeks good enough?
11 **MR. CHEN:** Yes.
12 **MR. KHAN:** We can do two weeks, Your Honor.
13 **THE COURT:** Sixteen claims.
14 And you ought to think about, when you're
15 trying to figure out what claims, I mean, I don't know
16 if it can be avoided, but to the extent you can avoid my
17 having to construe those outstanding three terms, that
18 would be a smart idea.
19 **MR. KHAN:** I believe there are only two
20 outstanding terms. I may be mistaken. It's just
21 "collimating optical element" and "collecting optical
22 element," because focusing optical element, I think --
23 **THE COURT:** I've ruled on.
24 **MR. KHAN:** Yes, you're right.
25 **THE COURT:** Right. Is that true, there's only

1 two?

2 **MR. KHAN:** There's only two.

3 **MR. CHEN:** I believe that's correct, Your

4 Honor.

5 **THE COURT:** Well, then, ideally neither of

6 those two terms would be in the 16 asserted claims.

7 Because then they are not prejudiced.

8 **MR. CHEN:** Thank you.

9 **THE COURT:** Right? Now, I'm not saying you

10 have to do it, you know, but that would make sense.

11 Now, once you narrow in two weeks, if they,

12 they being the defendant -- a singular, "it" -- wants to

13 propose a way to tee up certain issues that it thinks

14 might be efficient, I'm willing to entertain that.

15 By the way, I take it, if the plaintiff has

16 some efficient way of resolving the case too, I'm

17 willing to listen to that. I raise that initially not

18 because of...

19 Well, not because of any reason other than I

20 haven't found it to be successful when you have

21 inadequate written descriptions and indefiniteness. And

22 to be candid, as I've alluded to earlier is, there's

23 some issues that, you know, my antenna says aren't right

24 with some of this patent issue, like a collimated afocal

25 image.

1 Now, maybe. I'm open-minded. I say things
2 all the time, I have initial reactions, I articulate it,
3 and then I change my mind. I have actually granted
4 motions or reconsidered rulings I've issued in writing.
5 But I'm just saying, my antenna is up. It just doesn't
6 make a lot of sense.
7 And that's also why I, earlier on, suggested
8 there may be early briefing we could address on written
9 description, enablement, or indefiniteness. But it may
10 be a stupid idea.
11 All right. But here's what I'm going to do.
12 We're going to finish for the day. I've construed all
13 but those two terms, and we're going to just hold them
14 in abeyance. Well, actually, we'll just hold their
15 construction in abeyance. They may go away.
16 I'm going to require the plaintiff, within
17 two weeks of today, to identify the 16 claims that will
18 be the universe from which it will select claims to try
19 at trial.
20 And then, if you all meet and confer and
21 decide it's worthwhile to have a status conference to
22 discuss ways to move the case, I'm willing to do that.
23 I won't have the status conference, by the way, it won't
24 be until, like, November at the earliest. I am pretty
25 flooded.

1 Does that make sense?
2 **MR. KHAN:** It does, Your Honor.
3 And just to be clear, once we narrow, they
4 would also be required to narrow their prior art per
5 Judge Tennyson's order in the schedule.
6 **THE COURT:** Yeah, I don't know what her order
7 is.
8 But, Mr. Chen, do you understand that there's
9 going to be corresponding narrowing of the defense after
10 the narrowing of --
11 **MR. CHEN:** Understood, Your Honor.
12 **THE COURT:** Okay. Sounds good.
13 Okay. All right. Thank you all very much
14 then. Have a good day.
15 (The proceedings concluded at 2:53 p.m.)
16
17
18 CERTIFICATE OF COURT REPORTER
19
20 I hereby certify that the foregoing is a true and
21 accurate transcript from my stenographic notes in the
22 proceeding.
23
24 /s/ Bonnie R. Archer
Bonnie R. Archer, RPR, FCRR
Official Court Reporter
25 U.S. District Court

[648]
MR. CHEN: [283]
MR. DENNHARDT: [113] 28/11 29/8 29/25 30/8 30/16 30/20 31/16 33/22 49/5 49/13 49/22 50/4 50/7 50/11 50/14 51/4 52/4 52/11 52/15 52/20 52/25 53/6 53/11 54/9 54/13 57/17 58/1 58/7 58/11 59/13 61/6 62/17 63/5 63/7 63/11 76/25 77/6 77/12 77/23 78/4 78/9 78/15 78/18 78/21 78/25 79/6 79/15 79/23 80/2 80/5 81/2 81/7 81/10 81/25 82/16 83/18 83/23 84/5 84/25 85/3 85/24 86/2 86/5 86/7 91/16 91/18 92/8 92/11 92/20 93/5 93/7 95/2 95/14 95/21 95/25 96/4 97/20 106/2 107/6 107/10 107/15 107/18 108/6 108/13 109/1 109/6 109/17 109/21 110/4 110/18 110/22 111/4 111/12 111/15 111/21 112/8 112/22 113/2 113/18 113/23 114/18 114/25 115/5 115/8 115/11 115/16 115/24 116/24 117/13 117/16 118/8 153/1 153/16
MR. KHAN: [217]
MR. KNIGHT: [57] 28/1 28/4 31/18 32/9 32/15 32/17 32/19 33/7 33/13 33/16 34/7 34/16 61/10 62/14 64/3 64/11 64/19 65/5 66/2 66/24 67/4 67/11 68/8 68/17 69/8 69/17 70/4 70/13 70/16 71/12 72/12 73/13 73/15 73/19 73/22 74/2 74/5 74/11 74/13 75/16 76/16 76/19 85/1 86/10 86/14 86/20 87/2 87/12 87/14 87/17 87/19 87/22 88/4 88/15 89/21 90/8 92/18
MR. PIVOVAR: [4] 63/10 63/21 63/23 72/3
MR. TIGAN: [2] 3/9 90/17
MS. HAYNES: [1] 3/2
THE COURT: [644]
THE WITNESS: [2] 102/25 128/10

'

'106 [17] 4/20 4/23 7/22 18/25 20/19 25/18 72/16 146/18 146/22 160/8 160/16 160/17 160/22 161/8 161/9 181/16 182/7
'107 [5] 29/11 30/4 30/9 31/22 32/8
'412 [5] 23/23 94/21 94/23 95/1 96/6
'443 [7] 4/18 4/21 114/22 170/21 180/17 181/14 182/10
'582 [20] 9/15 9/16 11/24 45/25 46/2 69/1 75/22 77/3 78/20 114/17 119/10 146/7 155/15 159/19 160/7 160/10 160/11 160/12 161/4 161/21
'first [1] 106/20
'first' [1] 103/18
'second [1] 106/20
'second' [1] 103/19

-

-- and [1] 170/1
-- as [1] 104/20
-- because [1] 104/18
-- in [1] 103/4
-- is [1] 105/5
-- it's [1] 140/20
-- the [2] 105/11 142/7
-- this [1] 154/16
-and [2] 1/21 2/12

/

/s [1] 207/23

0

02 [1] 7/12

1

1 [67] 4/20 4/24 7/22 15/25 19/1 20/18 20/19 25/18 27/4 31/22 32/7 32/8 36/18 36/19 39/5 39/6 45/25 93/9 93/14 96/16 96/17 97/6 103/23 107/1 111/5 111/6 111/11 111/17 111/23 112/4 113/8 113/10 114/19 115/12 115/14 117/5 117/7 119/10 119/18 120/4 120/9 121/13 133/2 133/7 133/12 136/18 143/10 143/12 143/15 146/6 146/18 146/23 155/14 155/19 155/24 156/2 156/5 158/19 160/15 160/17 160/21 164/14 171/1 180/15 181/16 182/7 193/21
10 [3] 6/17 6/22 73/4
1007 [1] 136/8
11 [9] 5/5 191/1 191/4 191/14 191/16 192/4 192/10 192/23 193/16
114 [1] 30/18
12 [20] 93/15 94/13 96/17 97/6 98/9 98/18 98/19 98/25 100/14 109/13 109/16 109/20 109/23 109/24 110/3 110/17 110/19 110/21 110/25 156/21
122 [1] 29/1
1275 [1] 136/5
128 [1] 30/4
1297 [1] 136/5
13 [12] 5/5 112/15 133/7 169/18 169/18 170/9 170/23 180/12 180/17 181/2 181/16 182/7
1371 [1] 106/17
14 [32] 69/1 96/19 96/24 97/4 97/7 98/11 99/3 99/5 99/6 100/3 100/7 100/11 100/16 100/19 105/15 110/13 110/17 111/3 111/10 111/21 111/24 112/4 114/6 114/19 115/12 115/18 116/3 117/10 117/18 156/24 157/1 157/14
16 [9] 115/3 139/7 169/22 169/23 170/4 170/7 204/8 205/6 206/17
17 [26] 1/10 39/4 46/2 114/23 119/19 120/4 120/9 121/13 133/2 133/7 133/12 143/10 143/20 146/6 155/14 155/19 156/4 156/10 156/11 156/15 156/18 156/23 157/12 157/19 169/24 170/4
18 [37] 114/24 119/19 120/4 120/10 121/13 133/2 133/7 133/13 143/10 143/21 145/3 146/7 155/14 155/19 156/4 156/11 156/11 156/15 156/18 157/12 157/24 158/7 158/24 159/7 159/14 159/19 160/4 160/13 161/4 161/21 162/5 162/5 162/8 163/14 169/24 181/14 182/9

2

2 [6] 14/11 14/12 36/20 45/22 139/8 164/15
2 feet [2] 14/11 14/12
20 [30] 67/2 67/2 67/6 67/6 96/19 96/23 96/24 97/7 98/11 99/3 99/5 99/7 100/3 100/7 100/11 100/16 105/16 110/13 111/3 111/10 111/24 112/4 114/6 114/19 115/12 115/18 116/3 117/10 117/18 135/19
20/20 [2] 67/2 67/6
2017 [2] 136/6 136/8
2025 [1] 1/10
22 [7] 46/7 139/7 148/22 166/18 200/10 200/23 201/14
24 [1] 1/4
24-945-CFC [1] 1/4
25 [109] 8/15 11/12 11/15 11/19 14/16 20/1 20/2 22/8 22/10 22/11 22/12 22/21 22/23 22/25 23/19 23/24 24/20 25/1 27/5 27/6 32/21 32/25 60/8 71/13 77/3 78/11 79/4 80/1 80/8 80/18 81/4 84/6 84/18 84/19 85/18 87/25 94/5 94/6 96/15 99/7 100/4 101/8 104/18 105/2 108/25 111/2 116/4 116/5 116/6 116/11 118/1 118/2 120/10 120/19 121/8 121/9 121/10 121/13 125/10 125/11 125/12 125/14 125/15 126/8 127/12 128/3 129/1 129/4 129/16 131/1 133/13 134/10 135/11 136/11 137/17 137/23 138/2 138/8 138/10 138/16 140/10 140/11 141/9 141/18 142/3 142/5 144/17 144/20 144/22 145/1 145/19 147/10 147/20 147/24 148/18 149/10 149/10 150/10 150/18 151/25 152/4 154/22 162/7 162/8 162/10 162/14 162/25 163/3 177/6
25A [7] 24/19 27/7 116/12 151/1 151/5 152/1 152/4
26 [16] 61/15 79/4 120/4 120/10 121/13 133/2 133/7 133/10 133/13 135/19 143/10 146/7 148/24 155/14 155/19 159/3
27 [3] 79/4 166/18 166/18
28 [6] 3/20 4/1 46/7 48/18 79/4 166/8
2:30 [1] 196/4
2:53 [1] 207/15

3

3 [12] 99/19 120/4 120/9 121/13 133/2 133/12 143/10 146/6 155/14 155/19 176/19 188/7
30 [1] 196/7
300 [1] 171/20
31 [1] 176/18
32 [2] 60/8 77/3
34 [2] 189/5 189/5
36 [3] 60/8 77/3 86/20
37 [2] 167/1 168/2
38 [2] 175/9 175/10
39 [3] 13/5 109/8 113/24
3M [10] 102/14 102/16 102/17 103/23 106/2 106/11 106/17 108/7 108/10 118/4

4

4 [1] 22/6
40 [1] 199/24
408 [23] 165/20 166/25 167/1 167/2 167/3 167/5 167/13 167/20 168/3 168/4 168/6 168/14 168/16 168/18 168/24 171/17 171/18 172/21 173/13 176/8 177/17 178/24 180/18
409 [1] 175/24
413 [19] 165/20 167/11 167/12 167/15 167/17 167/21 168/4 168/5 168/16 168/18 168/24 171/17 171/18 172/21 173/14 176/8 177/17 178/24 180/18
42 [3] 199/25 200/2 200/2
43 [1] 189/5
44 [7] 22/25 25/8 32/25 80/8 135/1 135/2 192/17
45 [10] 22/24 23/1 32/25 135/5 135/6 135/19 137/1 139/7 148/21 148/25
46 [2] 25/8 80/9

5

5 [15] 15/24 15/24 16/3 16/19 17/1 18/10 25/18 27/4 93/10 109/22 161/7 161/10 161/11 180/13 180/23
50 [2] 9/17 13/5
54 [3] 23/6 23/9 23/17
55 [2] 32/11 189/5
56 [7] 31/4 32/11 32/11 32/20 78/10 78/18 78/20
57 [2] 79/2 200/7

5

58 [5] 31/4 32/20 78/10 79/7 139/8

6

6 [4] 13/5 22/18 22/21 136/19
60 [11] 44/24 171/11 175/10 175/21 175/22 175/23 176/9 176/20 176/22 178/10 189/11
601 [6] 183/20 189/15 189/17 189/24 190/4 191/1
602 [3] 189/19 189/24 191/1
603 [4] 189/14 189/16 189/24 191/1
604 [2] 189/24 191/2
605 [8] 58/9 73/6 189/20 189/25 190/4 191/3 191/7 191/9
639 [1] 9/17
67 [1] 79/10
69 [1] 183/2

7

7 [10] 72/15 119/10 119/18 143/16 143/20 152/13 155/23 156/3 156/9 156/10

8

8 [10] 119/10 119/19 143/16 143/20 152/13 155/23 156/3 156/9 156/10 189/11
844 [1] 1/13
851 [1] 136/5
852 [2] 24/24 177/2
856 [1] 136/8
856 F.3d [1] 136/8

9

9 [4] 86/18 86/23 139/9 193/17
90 [2] 177/5 177/5
902 [11] 8/17 12/1 12/19 13/2 13/6 24/25 79/14 79/14 84/13 88/1 105/1
903 [4] 130/15 141/10 141/19 142/8
905 [17] 13/17 13/18 25/2 99/17 104/24 130/21 131/2 131/15 133/21 134/9 135/8 135/13 137/23 141/3 149/3 149/4 149/11
905, [1] 151/2
905, 908 [1] 151/2
906 [3] 73/5 130/21 131/3
907 [7] 15/22 25/4 99/20 104/25 130/11 130/12 135/9
908 [21] 105/1 124/22 124/24 124/25 131/4 131/5 131/21 131/24 131/25 132/16 135/10 138/19 138/21 140/13 140/16 140/20 148/19 148/20 149/6 149/12 151/2
910 [1] 25/6
911 [1] 25/6
912 [1] 25/6
913 [1] 25/6
918 [2] 132/16 151/2
919 [2] 132/16 151/3
920 [2] 132/17 151/3
921 [2] 132/17 151/3
940 [1] 25/3
945 [1] 1/4
997 [1] 136/8
9:02 [2] 1/10 2/24
9A [6] 70/18 70/22 189/7 189/8 189/12 190/17

A

a.m [2] 1/10 2/24
aberration [14] 183/18 184/9 184/14 184/19 184/24 185/19 187/11 187/15 188/9 190/9 190/14 190/22 194/14 195/5
aberrations [3] 56/10 184/9 190/23
abeyance [2] 206/14 206/15
able [9] 37/17 48/12 59/1 64/23 105/21 166/9 179/19 197/21 203/8
about [152] 5/14 5/17 6/7 6/19 8/10 8/25 10/3 11/8 11/18 11/23 15/24 22/6 23/7 24/8 24/16 25/13 25/17 28/8 32/22 32/23 35/8 35/16 36/17 36/19 37/16 38/9 38/14 40/13 40/24 42/4 42/9 45/4 51/2 51/5 51/18 51/18 53/12 53/13 54/14 56/20 56/24 56/24 57/13 57/22 60/5 60/14 61/1 61/15 61/22 61/23 62/2 62/3 62/10 62/25 62/25 63/15 66/8 66/21 67/16 68/5 68/10 68/10 69/3 70/17 70/18 71/13 72/13 72/18 73/9 73/11 74/3 74/16 74/17 74/25 75/2 75/3 75/9 77/15 78/11 78/12 79/6 80/8 80/14 80/18 83/8 86/18 89/4 89/10 90/6 91/11 93/9 95/4 95/23 95/23 103/25 106/19 107/23 107/25 108/7 109/9 110/20 110/24 112/2 112/9 114/20 119/11 119/15 125/12 125/14 126/10 135/23 139/12 140/5 143/4 144/24 147/1 149/9 150/9 152/14 153/4 154/1 154/7 156/13 160/20 165/25 166/25 167/2 167/13 168/4 169/23 170/9 174/18 175/13 177/10 178/7 179/23 182/9 184/3 185/22 189/6 192/9 193/10 194/13 197/1 197/3 198/2 199/13 201/17 202/1 202/18 203/2 204/14
absence [2] 106/7 106/9
absolutely [9] 24/12 25/20 46/10 84/21 103/13 172/16 187/22 188/4 188/23
abstracted [1] 144/20
accept [5] 29/21 29/23 81/15 81/18 87/10
accepted [1] 45/8
accompanies [1] 150/18
accomplish [1] 190/3
accordance [2] 167/15 167/18
according [3] 126/17 130/22 203/3
accurate [4] 22/13 88/5 151/5 207/21
accurately [1] 194/4
achromatic [1] 80/12
acknowledge [1] 31/21
acknowledged [2] 87/5 146/24
acknowledging [1] 142/24
acoustical [1] 62/6
acoustics [1] 63/1
across [2] 78/25 108/3
acting [1] 187/20
acts [1] 10/13
actual [6] 8/4 23/18 76/3 84/7 84/17 96/8
actually [68] 8/7 10/5 11/18 11/22 19/24 21/2 25/14 27/15 28/5 32/6 33/5 34/1 38/2 38/3 44/20 44/25 45/3 47/17 49/24 50/24 61/12 63/17 65/22 66/8 66/19 66/19 66/23 67/1 70/11 70/17 71/21 74/22 75/5 76/11 77/16 80/5 84/6 84/15 86/21 87/5 96/20 100/19 110/1 116/25 124/7 124/12 124/15 133/8 135/11 141/18 152/16 154/22 155/10 162/24 163/19 164/9 170/20 174/24 176/18 180/20 184/17 185/14 191/25 192/22 193/18 197/1 206/3 206/14
ADAM [2] 2/14 3/12
add [3] 27/6 44/3 89/15
added [3] 41/12 104/8 107/16
adding [1] 41/15
addition [1] 27/6
additional [23] 5/13 6/11 23/22 28/23 44/3 50/24 72/13 75/13 87/17 105/21 105/21 124/5 124/20 124/23 125/4 125/23 132/9 139/8 141/25 142/11 142/17 142/22 165/20
additionally [1] 28/17
address [18] 7/6 16/2 16/9 25/17 30/24 31/12 41/2 46/11 61/25 82/19 98/15 110/14 121/4 158/20 166/2 166/5 197/8 206/8
addressed [3] 92/13 96/5 112/23
addressing [2] 29/18 35/21
adequacy [1] 90/6
adjustments [1] 67/17
administrative [2] 48/18 48/23
admit [5] 32/10 45/12 102/3 110/3 128/25
admits [2] 26/5 26/5
admitted [2] 162/9 164/16
adopt [1] 117/1
adopting [1] 38/21
advantage [1] 153/20
advisement [1] 196/25
advocacy [1] 4/7
advocate [2] 40/9 164/11
affirmative [2] 125/6 125/8
affirmed [2] 91/2 91/9
afocal [29] 54/17 55/2 55/2 60/5 60/7 69/11 69/12 69/14 70/2 70/10 70/25 71/9 71/17 75/18 77/1 77/7 77/19 77/21 78/6 80/23 81/6 85/15 86/1 86/2 87/8 87/11 88/20 89/10 205/24
afraid [1] 178/5
after [27] 4/1 4/24 13/19 13/21 16/10 16/14 16/15 16/16 16/17 17/15 17/21 26/6 74/20 75/5 75/20 79/20 115/19 115/22 117/2 123/6 139/23 142/13 163/14 176/24 197/18 198/18 207/9
again [31] 11/23 11/24 12/6 23/20 27/7 68/15 71/5 79/16 81/12 91/16 96/13 99/7 102/25 104/14 105/2 109/8 113/24 119/23 121/7 121/21 126/6 127/2 131/12 141/15 147/20 154/1 159/15 166/7 174/7 185/22 194/19
against [1] 118/6
agree [53] 12/18 17/5 17/7 17/17 27/3 28/16 29/6 32/13 36/10 37/3 39/23 40/1 41/5 42/17 44/14 45/4 50/8 52/12 53/21 54/10 63/2 82/11 83/1 84/23 84/25 85/2 86/23 89/18 89/20 89/25 92/6 92/16 92/18 99/24 109/15 120/9 129/6 132/17 148/17 151/25 152/1 152/1 161/23 163/12 169/18 176/4 181/23 181/25 183/3 187/4 198/20 198/21 200/24
agreed [5] 183/8 197/17 200/9 200/11 201/13
agreeing [1] 163/7
agreement [2] 197/19 203/3
agrees [4] 56/5 57/3 57/4 57/4
ahead [17] 11/5 15/13 23/10 23/11 38/6 68/7 79/5 86/11 96/3 98/17 120/24 133/11 139/10 148/24 154/12 176/5 182/17
albeit [1] 32/2
all [224]
allow [3] 26/1 87/10 168/8
alluded [2] 128/1 205/22
almost [3] 119/19 156/4 203/2
alone [1] 167/14
along [1] 121/22
already [16] 5/12 5/14 6/10 11/11 14/2 76/10 108/7 109/9 127/17 146/24 150/3 155/12 179/19 200/11 200/11 203/19
also [62] 3/5 15/9 18/17 25/19 31/3 41/25 43/9 46/10 50/1 51/21

A

also... [52] 54/16 55/15 55/23 56/3 56/14 56/17 65/21 78/7 78/9 79/15 82/6 82/25 96/15 96/18 98/20 105/5 105/16 113/5 119/4 122/7 124/19 126/7 131/5 131/24 135/8 136/4 136/16 140/5 146/18 148/7 151/1 156/11 160/11 162/9 162/23 164/16 165/24 166/21 166/22 167/7 170/25 176/25 177/18 184/6 185/7 188/4 194/25 197/13 199/6 202/17 206/7 207/4
alternative [1] 70/5
always [8] 42/6 42/16 42/21 178/18 183/17 185/18 187/14 195/4
am [25] 4/6 7/9 34/6 41/4 75/25 90/2 98/5 100/7 107/1 107/8 108/5 111/13 155/11 158/13 162/22 162/22 162/23 163/6 171/17 172/1 172/4 173/7 194/4 196/16 206/24
ambiguity [1] 24/7
amendment [1] 95/7
annotated [2] 8/15 122/18
another [14] 19/4 108/4 131/4 131/25 136/16 138/14 138/15 138/25 140/16 140/25 141/14 141/16 146/18 163/23
answer [9] 44/19 72/12 77/17 87/15 120/22 133/3 133/6 155/23 180/8
answering [2] 30/17 49/23
antenna [2] 205/23 206/5
anticipated [2] 180/6 180/22
any [56] 14/9 15/20 19/3 19/13 20/5 21/1 26/10 26/16 31/10 37/1 37/10 44/3 58/15 69/9 69/17 70/14 71/18 75/19 75/19 79/18 86/25 87/3 87/9 89/6 91/25 96/6 96/7 97/10 97/16 106/7 116/4 116/11 117/10 132/1 132/7 136/22 138/2 138/2 150/10 151/7 155/3 155/4 158/20 158/25 159/8 159/12 159/14 160/14 161/1 163/16 165/3 169/16 180/13 199/12 201/23 205/19
anybody [2] 11/14 53/3
anymore [5] 5/10 13/1 153/12 154/22 162/1
anything [18] 7/8 55/12 61/5 77/4 77/19 81/9 82/6 86/6 105/14 110/12 112/7 116/14 116/15 132/21 157/18 160/5 162/5 164/8
anyway [3] 121/5 203/5 203/8
anyways [1] 201/4
anywhere [2] 109/3 116/21
apart [1] 131/9
apologies [1] 166/7
apologize [11] 14/17 63/21 72/4 73/14 77/13 107/7 107/18 130/19 157/12 157/13 159/4
appear [1] 36/6
APPEARANCES [2] 1/18 2/1
appeared [1] 172/21
appears [1] 192/21
applicant [2] 72/24 73/8
application [3] 24/3 36/2 104/21
applications [1] 66/9
applied [1] 128/8
applies [3] 6/1 20/7 113/2
applying [1] 188/21
appreciate [7] 7/15 67/1 71/19 126/23 152/25 159/25 178/19
appreciates [1] 14/11
approach [2] 5/22 22/2
appropriate [6] 44/11 46/6 91/4 146/20 147/7 201/15
appropriately [1] 162/14
Archer [2] 207/23 207/24
are [212]
area [2] 18/6 188/11
areas [1] 52/6
aren't [5] 48/23 59/14 67/5 90/16 205/23
argue [1] 120/7
argued [1] 201/12
arguing [2] 17/10 177/24
argument [20] 6/5 14/15 14/15 26/5 31/10 33/18 59/3 59/11 59/14 69/7 90/2 90/23 102/2 110/11 156/9 161/25 163/24 166/4 178/5 195/11
arguments [3] 4/8 98/6 199/9
arises [1] 76/13
arm [1] 108/17
around [6] 10/12 53/16 59/1 79/2 88/8 182/23
arranged [5] 17/3 25/25 99/20 101/2 101/14
arrangement [7] 32/22 124/24 131/5 131/25 138/16 139/8 140/16
arrive [1] 56/23
ARSHT [1] 2/9
art [10] 26/22 26/25 53/19 61/12 68/22 68/23 72/25 197/18 202/19 207/4
articulate [1] 206/2
articulated [2] 180/24 194/6
artwork [1] 153/20
as [180] 7/7 9/5 9/6 10/11 10/11 10/25 12/3 12/16 12/17 12/19 13/5 13/9 13/25 14/1 15/22 20/6 21/16 21/18 23/21 24/3 25/1 25/7 25/24 28/20 29/6 31/8 31/24 32/21 33/16 33/16 33/25 34/10 34/18 34/19 37/14 38/4 39/19 39/19 40/2 40/17 40/18 40/19 43/25 44/17 45/8 45/12 46/6 48/22 49/7 52/5 52/6 53/17 53/18 53/20 54/3 54/21 55/13 56/1 56/15 56/15 56/21 58/2 60/20 62/8 62/17 63/6 64/3 64/4 64/12 67/14 67/14 70/5 70/24 74/14 75/21 76/10 77/21 79/14 80/13 81/6 81/19 86/20 86/20 88/1 88/1 88/8 88/21 90/3 90/11 91/1 91/4 91/8 91/25 93/8 95/1 96/9 96/23 97/17 99/9 99/15 101/8 104/20 105/4 105/6 112/13 113/5 113/10 117/13 119/3 121/14 121/17 122/4 124/13 124/20 125/22 125/23 126/8 127/5 128/8 129/21 130/10 130/18 131/1 131/3 131/3 131/4 131/5 131/16 131/21 131/25 133/12 133/15 133/22 134/24 136/17 137/17 137/23 139/11 140/4 140/13 140/24 141/8 141/11 142/10 142/11 142/11 142/12 143/20 145/10 145/15 146/24 148/19 148/20 149/25 151/1 155/16 166/5 167/4 168/5 171/10 173/24 174/1 176/2 176/2 176/20 177/19 177/19 180/22 180/24 185/1 187/23 189/11 190/11 190/17 190/24 197/25 199/9 199/25 203/24 205/22
ASHER [2] 2/4 3/6
aside [4] 110/18 113/9 115/2 148/9
ask [12] 39/17 40/6 51/22 86/12 115/6 127/21 127/24 138/1 175/4 192/22 196/21 200/22
asked [13] 33/11 34/12 71/25 85/7 92/13 115/20 147/9 155/13 162/22 162/22 165/20 177/11 178/9
asking [13] 33/5 109/2 118/23 124/9 125/25 126/8 127/2 127/4 143/25 158/18 178/6 186/22 188/25
asks [2] 36/19 139/4
aspect [1] 190/19
aspheric [1] 189/18
asserted [53] 23/18 23/19 96/8 98/20 98/22 100/14 114/16 114/21 115/5 115/9 115/13 117/11 124/8 150/20 152/1 155/3 155/4 155/8 155/9 155/18 155/19 155/25 156/1 156/5 156/11 156/15 158/13 158/14 158/16 158/22 159/8 159/10 159/18 160/2 160/12 160/15 161/1 161/6 161/10 161/11 161/17 161/22 163/18 169/19 170/7 181/20 197/16 197/18 198/15 199/20 199/22 199/23 205/6
asserting [3] 41/4 41/6 109/15
assess [2] 50/25 51/16
assessment [1] 83/14
assets [1] 199/4
associate [1] 3/11
associated [6] 123/12 123/15 123/23 149/4 149/6 192/11
associates [1] 108/16
associating [1] 108/20
assume [6] 58/18 59/18 102/11 151/24 156/7 156/8
assuming [1] 193/10
assumptions [1] 5/19
attempt [1] 32/1
attention [1] 72/15
audio [1] 63/1
available [1] 77/8
avoid [2] 196/24 204/16
avoided [1] 204/16
aware [2] 32/24 76/10
away [7] 13/2 66/6 90/25 152/20 198/16 203/7 206/15
awful [1] 204/5

B

B [1] 97/17
back [35] 3/14 12/22 17/11 17/11 19/2 43/19 44/23 64/8 66/23 70/8 71/7 75/10 76/17 76/22 87/6 104/9 113/24 116/3 120/12 127/9 127/24 135/3 135/11 135/18 137/2 145/14 149/10 149/23 153/8 171/3 177/7 186/2 189/15 189/16 189/16
background [3] 8/6 36/3 167/25
Bacon [1] 90/15
bad [1] 81/16
baked [1] 69/24
band [6] 26/1 26/14 26/14 26/15 99/21 134/18
based [7] 6/9 40/9 72/1 88/9 112/13 154/18 163/25
basic [1] 48/24
basically [12] 21/20 66/6 72/1 101/25 102/6 128/22 144/7 177/20 179/9 181/1 185/14 188/22
battle [2] 186/5 186/6
be [212]
beam [47] 8/16 9/19 30/10 31/23 45/17 45/21 45/23 59/4 59/6 59/15 59/20 59/22 60/7 60/12 68/19 68/21 69/19 69/20 71/14 71/15 76/3 77/24 80/9 80/21 80/25 82/3 82/7 82/25 83/3 84/15 84/18 84/21 85/19 92/7 92/14 96/22 97/3 99/15 99/22 101/4 101/15 101/17 101/22 101/23 111/18 122/15 134/19
beams [2] 60/5 80/19
bear [1] 72/5
bears [1] 8/6
because [116] 4/22 9/4 9/12 10/6 10/10 11/9 12/8 13/2 13/22 14/9 15/7 17/20 24/9

B

because... [103] 25/23 26/11 28/7 29/11 35/16 36/3 37/16 39/18 40/1 40/7 41/2 41/23 43/16 45/5 45/18 46/22 47/8 48/16 53/21 55/12 56/6 57/7 57/8 60/23 63/3 64/12 69/18 72/25 73/20 79/13 80/8 81/12 82/4 84/16 87/12 90/21 91/24 94/2 94/6 96/5 96/14 98/21 101/12 104/18 108/5 108/21 117/5 121/2 125/2 126/3 127/9 127/25 130/6 137/11 139/16 142/25 143/14 144/6 145/12 146/24 149/4 149/9 149/22 153/10 154/2 154/6 154/21 156/3 157/19 158/7 158/13 162/16 169/1 169/21 171/13 172/18 174/16 179/3 179/18 180/20 182/9 182/14 185/23 190/20 190/22 195/11 195/19 195/22 196/2 196/7 196/17 198/24 199/7 199/19 200/7 201/6 202/3 202/23 203/25 204/22 205/7 205/18 205/19
BECKMAN [2] 1/3 61/14
Beckman's [1] 5/22
becomes [1] 38/19
bed [1] 181/22
been [15] 4/11 13/24 33/2 39/19 39/19 40/5 41/2 74/16 114/20 128/4 156/13 159/18 198/1 198/13 199/22
before [29] 1/15 8/4 15/16 15/18 17/6 21/19 39/17 79/18 80/7 80/14 80/17 93/24 95/6 96/10 97/7 97/8 101/10 118/25 125/11 130/4 145/12 154/3 154/5 169/16 170/2 175/7 197/20 198/9 201/13
begin [1] 88/25
beginning [2] 2/23 89/3
behalf [2] 3/3 3/10
behave [1] 56/7
behind [2] 123/10 144/22
being [27] 14/1 26/7 36/23 38/10 45/20 62/8 69/13 79/21 79/23 94/25 97/16 124/5 135/24 137/23 144/15 173/8 176/8 178/22 178/24 180/7 180/7 180/22 197/16 199/23 203/8 203/25 205/12
belabor [1] 126/13
believe [32] 4/13 6/7 19/16 25/22 42/7 42/23 47/23 50/4 68/25 70/5 71/22 83/19 86/21 100/19 101/12 116/16 120/11 120/20 122/1 142/19 160/1 160/6 160/11 162/4 165/5 171/12 179/10 191/16 195/17 203/17 204/19 205/3
benefit [2] 70/23 165/14
besides [1] 182/2
best [3] 156/9 189/4 201/9
BETSY [2] 2/15 3/13
better [4] 33/10 44/20 89/13 100/3
between [24] 8/19 17/16 17/24 18/4 18/11 19/3 20/11 20/20 26/7 68/2 68/19 72/21 73/8 74/15 76/2 83/11 93/11 103/20 116/22 119/24 121/22 122/12 142/16 145/4
beyond [1] 165/24
big [1] 98/13
bigger [6] 83/19 83/22 84/15 84/17 102/18 176/13
biggest [2] 32/7 105/7
binder [1] 102/18
BIOSCIENCES [2] 1/6 21/25
bit [3] 67/24 165/24 186/18
bizzaro [1] 156/19
black [1] 136/3
blank [1] 55/11
blob [2] 60/18 60/22
blur [1] 56/24
blurry [2] 67/17 68/2
Bonnie [2] 207/23 207/24
borrow [1] 152/24
both [32] 52/12 53/21 64/15 65/7 68/4 84/23 96/24 97/13 110/23 111/12 120/14 136/14 139/17 139/18 142/12 142/12 163/7 167/23 170/18 173/9 173/10 173/10 173/14 174/22 176/1 177/15 177/16 177/21 177/25 180/15 187/18 202/16
bottom [8] 5/20 24/23 65/15 78/16 79/2 79/10 135/1 156/7
bounced [1] 123/7
bounces [2] 66/13 145/8
box [7] 107/12 175/5 175/6 175/8 176/11 176/11 178/10
boy [1] 71/8
brackets [1] 107/16
brain [1] 66/20
branch [63] 10/1 119/12 119/13 119/14 119/15 119/16 122/15 122/15 122/18 122/19 122/21 122/21 122/22 122/23 123/1 123/3 123/4 123/6 123/23 123/24 123/25 129/23 130/1 130/3 139/22 139/22 139/23 139/23 139/23 139/25 143/11 143/11 143/14 144/11 145/7 145/7 145/9 145/12 145/12 145/13 147/13 147/13 147/14 147/16 147/16 153/5 153/6 153/23 153/24 153/25 154/3 154/4 154/16 154/17 154/19 154/24 155/3 155/4 156/12 158/7 158/8 164/2 164/19
branches [13] 8/22 9/23 13/11 119/11 122/17 144/15 145/6 147/6 147/13 152/14 156/12 164/14 164/22
branching [6] 153/2 153/3 154/8 154/10 154/13 164/3
break [7] 6/21 72/8 72/9 72/13 131/9 137/1 185/20
brief [23] 3/20 3/24 3/25 5/2 5/3 5/5 5/6 5/20 6/17 30/16 30/17 41/20 47/11 49/23 57/19 112/9 123/21 168/25 169/3 169/3 194/20 196/15 204/1
briefed [5] 6/16 14/8 32/23 115/3 146/17
briefing [36] 4/11 5/13 6/11 7/6 27/24 31/21 31/24 33/12 40/8 41/20 46/4 46/5 46/7 46/14 48/13 48/17 48/19 48/20 49/15 83/6 90/5 102/17 104/7 114/23 165/20 165/24 169/2 169/2 169/18 170/2 188/5 189/2 189/3 195/18 200/1 206/8
briefly [1] 112/8
bring [1] 197/7
broad [2] 51/4 54/22
broader [11] 58/21 170/17 173/9 173/20 173/22 173/23 174/14 174/16 177/20 177/24 180/22
broken [1] 26/21
brought [2] 33/3 198/11
build [2] 97/1 119/21
builds [1] 92/2
bunch [2] 62/4 92/3
burden [1] 110/7
button [1] 16/21
buy [1] 164/4

C

C [2] 2/21 83/5
C.A [1] 1/4
cable [4] 177/3 177/4 177/5 178/12
call [8] 10/17 10/18 90/14 153/5 154/17 164/23 164/24 188/10
called [4] 121/24 122/1 125/10 175/6
calls [1] 125/17
came [3] 127/18 150/13 195/15
camera [5] 49/16 49/20 50/17 50/18 64/13
cameras [1] 50/18
CAMERON [2] 2/10 3/11
can [140] 4/12 12/22 14/19 15/16 16/2 16/9 16/20 17/24 18/16 21/19 24/3 24/14 24/19 25/12 26/17 29/17 30/24 32/15 33/1 33/18 39/2 39/17 42/11 42/12 42/13 43/9 43/10 43/11 44/10 44/15 44/22 48/14 50/13 51/11 51/17 53/4 53/6 56/20 57/16 60/7 60/11 60/14 60/16 62/15 63/11 63/22 65/20 65/23 66/23 67/13 67/15 71/4 71/7 72/4 73/17 73/25 74/3 74/7 74/10 74/14 75/4 75/13 75/20 76/23 76/25 77/3 77/4 77/9 77/19 82/7 82/25 84/1 84/20 85/7 85/9 86/11 87/6 87/9 87/13 88/11 89/24 91/3 91/11 92/8 92/18 92/25 100/22 100/25 101/9 104/2 106/15 107/5 116/21 119/21 120/1 127/11 127/24 131/11 135/11 135/18 136/17 144/25 145/1 149/23 158/4 158/11 163/21 163/22 164/23 164/24 166/1 166/4 166/17 167/15 167/17 167/25 168/15 170/23 171/3 175/23 176/18 178/12 181/22 184/10 185/9 187/17 190/11 194/6 194/9 194/13 195/23 196/2 196/24 197/7 197/10 197/20 199/15 204/12 204/16 204/16
can't [30] 4/2 13/1 17/16 18/4 37/13 48/22 57/5 59/5 59/22 83/3 85/19 89/11 90/15 94/2 94/2 94/17 100/22 107/3 109/12 110/5 110/12 113/8 116/2 116/24 171/19 171/20 171/22 195/17 201/6 201/19
candid [1] 205/22
candidly [1] 53/1
candor [1] 147/4
cannot [3] 37/13 37/14 86/3
capture [14] 28/18 29/7 29/9 29/21 29/24 32/5 34/19 173/9 179/3 179/5 179/7 179/8 179/24 180/4
captured [3] 46/6 178/24 180/8
captures [5] 13/11 13/12 45/16 99/13 134/7
capturing [2] 34/13 179/16
care [5] 90/9 91/13 118/10 181/8 202/22
case [66] 3/17 24/2 24/8 30/25 31/10 33/18 36/2 48/15 58/15 71/21 71/24 90/4 90/15 90/15 90/17 90/22 91/1 91/6 91/10 95/3 95/18 95/22 96/7 102/14 102/16 102/16 102/17 103/24 104/4 104/6 106/2 107/5 107/9 107/19 108/5 108/14 112/18 112/19 112/20 123/20 124/9 126/16 126/16 126/20 127/6 135/25 136/1 136/3 136/5 136/7 158/18 159/18 171/23 177/19 197/2 198/4 198/23 198/24 199/8 199/15 200/22 201/7 201/16 204/6 205/16 206/22
cases [8] 35/20 35/24 36/4 48/22 71/22 104/1 108/6 171/20
cataract [1] 67/6
cell [15] 51/10 51/11 51/13 51/18 60/20 60/21 60/24 61/2 174/17 175/3 175/24

C

cell... [4] 176/25 184/5 192/12 192/13
cells [9] 51/19 174/17 175/25 176/1 176/2 176/25 176/25 179/13 179/21
center [1] 189/14
certain [8] 11/15 51/12 74/19 146/8 155/15 193/3 198/6 205/13
certainly [1] 107/21
CERTIFICATE [1] 207/18
certify [1] 207/20
cetera [2] 42/3 54/5
CFC [1] 1/4
challenge [1] 98/6
challenged [1] 110/14
challenges [1] 98/13
challenging [1] 5/10
change [2] 182/23 206/3
channel [2] 169/12 189/13
characterized [1] 14/1
characterizing [1] 194/5
chart [2] 55/10 132/3
chase [1] 47/20
check [2] 22/15 120/12
checking [1] 159/21
CHEN [22] 2/13 3/12 17/22 21/25 41/1 43/8 97/21 110/14 120/7 147/22 156/18 157/17 161/13 161/23 164/10 164/16 164/22 192/16 193/25 194/14 195/11 207/8
choice [2] 87/16 142/25
CHRISTINE [2] 1/20 3/3
Circuit [17] 14/11 21/6 24/8 38/22 91/2 112/20 112/22 126/15 126/17 136/3 136/6 136/8 139/4 168/8 177/18 194/8 194/25
Cirrex [1] 136/7
Cisco [1] 136/7
citations [5] 3/23 40/8 48/24 48/25 166/8
cite [7] 4/5 14/13 48/17 57/19 82/12 139/5 204/1
cited [4] 95/3 104/1 136/1 189/2
cites [2] 14/18 196/1
claim [302]
Claim 1 [46] 4/20 4/24 7/22 15/25 19/1 20/18 20/19 25/18 31/22 32/7 32/8 36/18 36/19 39/5 39/6 45/25 96/17 103/23 107/1 111/5 111/6 111/11 111/17 111/23 112/4 113/8 113/10 115/14 117/5 117/7 119/10 136/18 143/12 143/15 146/18 146/23 155/24 156/2 156/5 158/19 160/15 160/17 160/21 171/1 180/15 181/16
Claim 12 [17] 93/15 94/13 96/17 98/9 98/18 98/19 98/25 100/14 109/13 109/16 109/20 109/23 109/24 110/3 110/19 110/25 156/21
Claim 13 [6] 169/18 170/9 170/23 180/12 180/17 181/2
Claim 14 [10] 69/1 97/4 100/19 110/13 111/3 111/21 111/24 115/18 156/24 157/14
Claim 16 [2] 169/23 170/7
Claim 17 [3] 46/2 119/19 157/19
Claim 18 [17] 145/3 157/24 158/7 158/24 159/7 159/14 159/19 160/4 160/13 161/4 161/21 162/5 162/5 162/8 163/14 181/14 182/9
Claim 2 [1] 36/20
Claim 20 [1] 96/23
Claim 26 [1] 159/3
Claim 3 [1] 99/19
Claim 5 [12] 15/24 15/24 16/3 16/19 17/1 18/10 25/18 109/22 161/7 161/10 180/13 180/23
Claim 6 [1] 136/19
Claim 7 [2] 143/20 155/23
claimed [6] 173/19 173/20 183/3 183/9 184/25 187/21
claiming [1] 30/9
claims [219]
Claims 1 [11] 27/4 93/9 119/18 120/4 120/9 121/13 133/7 133/12 146/6 155/14 182/7
Claims 14 [3] 100/16 111/10 117/18
Claims 17 [4] 143/20 156/4 156/10 156/15
Claims 7 [5] 119/10 152/13 156/3 156/9 156/10
clarification [4] 30/7 36/15 134/5 158/12
CLARK [2] 2/10 3/11
class [3] 41/13 41/14 41/24
clear [32] 27/8 36/23 39/19 39/20 58/7 58/13 62/23 70/17 82/14 85/5 99/12 105/3 107/23 108/10 110/24 129/12 130/6 140/9 141/6 141/19 147/1 147/20 150/5 166/17 166/24 167/23 169/1 172/8 195/1 195/6 199/6 207/3
clearer [2] 4/2 41/2
clearly [6] 29/13 97/15 116/7 180/8 195/1 195/3
clerks [1] 63/15
client [1] 3/7
client's [1] 4/7
close [1] 201/17
closely [1] 33/2
cloudy [1] 67/7
clue [1] 50/1
cocounsel [2] 3/5 126/18
colleague [9] 61/11 63/18 69/10 72/4 85/4 86/15 113/25 147/10 196/21
colleagues [2] 32/15 196/10
collect [2] 183/4 192/24
collecting [21] 48/5 165/6 175/14 176/23 181/10 181/13 182/6 182/18 183/6 183/12 183/12 186/25 187/5 187/8 187/12 188/19 193/1 193/8 193/10 196/25 204/21
collection [3] 61/17 67/11 76/4
collects [2] 188/16 193/20
collimate [1] 202/8
collimated [87] 28/18 29/7 29/10 29/12 29/16 29/21 30/1 30/10 30/21 31/5 31/6 31/22 31/23 45/17 45/21 45/23 54/17 55/2 58/24 59/4 59/5 59/15 59/20 59/22 60/5 60/5 60/7 60/7 60/12 68/19 68/20 69/19 69/20 71/14 71/15 71/17 73/1 76/3 77/1 77/5 77/7 77/19 77/21 77/22 77/24 78/6 79/13 79/14 80/9 80/18 80/21 80/23 80/25 81/6 81/22 82/3 82/7 83/3 84/1 84/18 84/21 85/15 85/19 86/1 86/2 87/8 87/11 87/21 88/1 88/2 88/17 88/18 88/20 89/10 96/22 101/4 101/5 101/15 101/17 101/22 101/22 101/23 119/13 185/15 202/2 202/3 205/24
collimating [62] 11/25 12/13 15/3 24/24 30/5 30/10 32/12 48/2 68/18 68/20 69/11 69/14 69/18 69/25 70/2 70/7 70/10 70/25 71/9 71/13 72/19 72/21 73/8 73/18 75/18 75/20 76/23 80/11 80/13 82/22 83/8 83/11 84/11 84/12 93/16 93/19 93/21 93/23 94/9 94/13 96/21 96/24 97/2 99/12 101/1 101/3 101/5 105/1 114/10 119/24 121/23 122/13 134/6 134/17 145/2 145/4 147/11 165/7 185/16 196/22 202/10 204/21
collimation [3] 202/1 202/7 202/18
COLM [1] 1/15
color [5] 26/1 26/13 26/14 26/15 99/21
column [22] 13/5 22/18 22/21 22/23 32/20 60/8 77/3 78/18 78/20 79/7 135/1 135/1 135/2 135/5 135/5 135/19 148/21 166/18 188/7 189/5 189/5 192/17
Column 27 [1] 166/18
Column 3 [1] 188/7
Column 34 [2] 189/5 189/5
Column 36 [2] 60/8 77/3
Column 44 [3] 135/1 135/2 192/17
Column 45 [3] 135/5 135/19 148/21
Column 56 [3] 32/20 78/18 78/20
Column 58 [1] 79/7
Column 6 [3] 13/5 22/18 22/21
columns [7] 25/8 31/4 31/7 32/11 32/25 78/10 80/8
Columns 44 [1] 32/25
Columns 56 [2] 31/4 32/11
combination [1] 186/16
combining [1] 21/10
come [21] 15/16 15/18 16/14 17/6 17/15 17/20 21/19 26/6 35/17 43/18 51/13 51/17 76/11 86/9 87/6 94/2 117/7 118/24 137/2 154/3 184/4
comes [15] 4/24 7/13 16/10 16/14 39/7 39/8 60/20 64/15 93/24 96/10 112/3 154/5 164/16 164/19 174/9
coming [7] 24/21 24/22 61/1 84/14 101/10 130/4 141/20
commenced [1] 2/23
comment [1] 6/7
commenting [1] 126/15
common [4] 88/9 103/19 179/3 190/9
commonly [1] 53/18
compelling [2] 95/18 178/5
compensation [1] 188/9
competing [2] 91/3 91/7
complete [2] 201/21 203/1
completely [5] 38/25 55/11 94/20 136/19 152/8
component [6] 54/5 61/18 64/20 65/2 66/7 75/6
components [7] 11/9 17/24 25/1 125/13 190/9 190/17 191/3
composite [13] 44/25 70/6 171/11 175/11 176/22 184/18 184/21 188/8 188/16 189/10 193/19 193/19 193/23
comprises [1] 101/18
comprising [7] 15/10 15/15 18/18 21/17 39/15 102/10 124/3
concave [22] 24/16 24/17 25/5 44/8 44/13 44/23 101/18 104/25 135/9 183/18 183/20 184/8 184/14 185/18 187/10 187/15 188/9 190/9 190/14 190/20 194/16 195/5
conceded [2] 85/8 109/11
conceivably [1] 56/23
concept [1] 66/21
concepts [1] 69/2
concerned [1] 108/5
concerns [1] 64/21
conclude [1] 71/8
concluded [1] 207/15
conclusion [3] 70/15 121/1 140/4
conductor [1] 163/9

C

confer [9] 32/15 32/18 33/15 74/12 196/9 196/13 197/12 200/19 206/20
conference [3] 198/19 206/21 206/23
configuration [3] 11/15 70/5 123/18
configure [1] 26/1
configured [19] 27/19 28/14 31/23 47/21 72/25 93/16 99/22 101/3 101/16 101/19 101/21 119/8 122/14 124/6 166/13 168/15 169/10 181/3 181/21
confirm [1] 4/12
confirmed [1] 56/16
confirms [3] 29/1 112/5 114/5
conflict [1] 68/19
conforms [1] 86/16
confused [6] 5/8 114/23 115/4 127/15 155/11 169/17
connected [3] 8/1 42/1 44/24
connection [9] 15/20 19/11 38/14 83/10 124/17 125/25 138/7 138/9 138/16
CONNOLLY [1] 1/15
connote [2] 41/22 186/25
connoting [1] 11/2
consequence [1] 36/20
consequencing [1] 151/2
consider [2] 48/20 60/25
consideration [1] 5/1
considered [1] 112/16
consistent [13] 86/24 97/12 100/12 109/14 121/15 121/16 126/3 136/19 152/10 154/23 173/8 190/12 200/17
consistently [1] 113/7
consists [1] 189/24
constantly [1] 63/14
constitutes [1] 34/11
construction [57] 6/17 28/14 28/17 29/18 31/1 31/11 32/1 34/2 34/8 35/3 35/13 35/13 35/23 36/7 36/18 36/18 37/11 37/23 38/21 50/23 54/24 55/4 55/10 55/16 56/14 57/5 60/1 68/14 68/16 72/18 81/20 81/23 82/2 86/17 87/10 88/25 89/12 92/2 92/7 96/13 97/12 98/1 108/15 109/11 109/12 121/1 126/25 127/4 127/7 139/16 145/25 146/1 146/4 152/15 162/13 190/11 206/15
constructions [2] 54/2 93/1
construe [32] 5/25 7/2 7/4 7/13 27/11 29/6 34/10 34/18 35/5 40/19 43/6 47/3 47/20 48/3 48/10 49/1 73/25 87/21 88/8 89/8 89/23 92/22 115/18 117/9 118/12 124/9 125/19 127/2 161/12 162/22 185/23 204/17
construed [13] 6/15 6/18 6/24 33/25 34/20 40/1 40/12 40/17 90/11 91/25 118/23 126/8 206/12
construing [4] 7/8 7/10 39/21 117/19
contend [1] 121/12
contends [1] 49/7
content [1] 34/6
contest [1] 5/7
context [15] 32/13 35/17 35/20 36/10 38/11 51/9 51/20 53/11 78/11 89/2 94/6 103/22 103/23 106/25 114/6
contexts [1] 38/12
continue [1] 135/20
CONTINUED [1] 2/1
continues [1] 25/5
contrary [5] 37/12 56/17 102/13 113/19 180/24
contrast [2] 28/17 92/2
control [1] 77/9
controls [1] 59/19
convention [1] 103/19
converge [28] 28/15 28/16 28/22 29/2 29/7 29/21 29/24 32/5 34/3 34/11 34/19 42/6 42/11 42/16 43/2 49/9 54/4 54/7 54/10 54/11 58/24 65/17 69/23 83/22 183/20 183/21 195/9 195/9
converged [1] 184/8
convergence [8] 67/21 67/24 75/7 75/10 79/20 79/22 80/16 88/13
converges [8] 42/22 43/1 45/1 73/5 183/7 185/17 188/19 193/2
converging [11] 28/20 68/11 73/4 74/1 82/21 85/12 184/10 185/4 187/5 187/12 190/21
COOLEY [2] 2/13 3/12
Core [1] 112/18
cornea [1] 66/15
correct [82] 4/15 13/6 13/13 17/22 18/5 22/20 23/4 24/4 24/5 24/12 28/1 36/11 36/14 44/17 52/13 64/19 67/4 70/13 71/14 73/22 74/2 74/6 79/22 85/24 87/22 89/20 102/15 103/3 103/6 103/13 103/14 105/13 108/15 116/19 120/5 120/8 120/20 127/21 128/24 129/5 129/21 130/23 130/24 132/19 133/14 137/18 137/19 137/25 140/21 141/13 143/23 146/9 147/25 148/3 150/2 150/4 150/12 151/6 156/16 157/23 159/2 160/1 160/12 161/24 165/5 169/20 170/10 172/23 173/4 178/25 179/11 180/11 180/13 180/14 182/11 186/11 190/1 190/6 191/8 191/8 198/12 205/3
corrective [1] 67/13
correctly [2] 99/9 186/23
corrector [15] 183/18 184/9 184/14 184/19 184/24 185/19 187/11 187/15 188/10 189/18 190/10 190/15 190/22 194/14 195/5
correlated [1] 128/22
corresponding [27] 49/9 49/10 54/5 55/17 55/20 56/1 56/5 56/14 61/19 65/17 67/10 67/11 68/1 129/2 129/7 132/18 165/19 166/2 168/14 191/15 191/17 191/23 191/25 192/3 193/12 194/6 207/9
corresponds [2] 8/17 129/13
COTTRELL [2] 1/20 3/5
could [72] 8/5 18/19 26/17 32/4 34/7 43/14 43/20 43/22 43/24 44/6 44/8 44/8 44/12 44/13 44/13 44/19 50/18 50/19 51/20 56/22 62/5 62/6 64/1 70/15 74/24 75/17 81/25 82/3 88/17 100/18 134/1 134/10 135/3 143/7 151/15 152/15 152/16 152/24 154/3 154/16 154/17 155/1 155/2 159/23 163/19 164/13 164/17 173/18 173/23 177/11 181/5 181/5 183/2 191/14 192/1 192/3 192/6 192/8 192/8 193/4 195/5 196/9 196/22 196/24 197/13 197/19 198/19 198/19 199/7 200/24 204/3 206/8
couldn't [2] 37/1 114/1
COULTER [2] 1/3 61/14
counsel [12] 2/6 2/17 3/13 3/16 32/18 33/15 74/12 75/19 152/25 196/13 197/12 200/19
count [2] 95/1 95/18
couple [6] 34/24 74/25 120/18 197/3 200/10 201/14
coupled [1] 27/5
course [15] 12/2 55/2 55/13 60/3 76/25 81/7 94/1 94/17 109/10 122/23 145/18 167/6 186/22 201/19 203/19
court [9] 1/1 1/15 72/8 126/16 196/18 199/4 207/18 207/24 207/25
Court's [4] 4/17 8/5 97/23 166/1
courtesy [1] 48/24
courtroom [1] 2/23
courts [3] 91/22 91/24 113/3
cover [11] 27/24 35/4 36/24 126/7 145/21 145/23 145/24 166/9 173/15 174/21 185/24
covered [1] 155/12
covers [4] 5/17 170/18 177/21 177/24
create [10] 40/23 71/3 88/18 119/12 122/16 139/22 143/20 144/7 147/4 156/12
created [19] 9/23 50/11 55/23 63/8 64/2 64/17 74/4 79/13 80/14 80/17 81/22 84/21 85/9 89/16 90/12 115/19 117/2 134/24 144/15
creates [10] 104/25 122/19 135/9 135/13 135/15 144/2 145/6 147/12 149/11 149/12
creation [1] 74/8
credibility [1] 91/8
credit [2] 87/5 142/24
critical [5] 64/20 65/10 66/22 68/5 68/9
critically [1] 10/25
Crown [1] 136/1
curious [1] 68/15
currently [1] 199/22
curved [63] 4/25 6/23 7/19 7/21 7/23 14/19 14/20 14/21 14/22 14/24 15/2 15/4 15/16 15/17 15/17 15/18 15/20 16/6 16/7 16/10 16/13 17/2 17/6 17/7 17/11 17/23 18/4 18/10 18/11 18/13 18/14 18/16 18/20 19/4 19/5 19/7 19/10 19/12 19/14 19/21 19/23 19/24 20/4 20/7 20/12 20/20 21/3 21/18 24/13 24/18 25/4 25/23 26/21 26/23 27/14 41/10 93/9 101/18 101/24 109/21 118/18 138/7 147/2
cut [3] 47/20 52/21 63/22
cuvette [3] 189/14 189/16 189/17
CYTEK [10] 1/6 3/10 8/13 17/10 21/25 28/24 30/4 49/7 143/25 158/18
Cytek's [5] 28/17 31/20 38/21 92/2 126/25
cytometer [3] 167/24 176/14 179/14
cytometers [2] 51/9 61/4

D

D [2] 1/20 2/21
data [5] 62/8 175/1 179/9 179/13 179/20
date [1] 204/5
day [5] 57/21 64/14 162/20 206/12 207/14
deal [7] 7/13 25/14 133/18 146/20 151/21 168/22 168/23
dealing [1] 127/9
deals [1] 148/7
dealt [5] 14/15 127/19 127/22 150/3 171/23
debate [1] 71/5
decide [3] 162/16 162/16 206/21
decided [8] 5/12 5/14 6/9 6/10 154/17 172/6 172/8 172/12
decision [1] 48/18
decline [1] 5/25
dedicated [1] 47/10
defend [1] 203/24
defendant [12] 1/7 2/17 49/2 57/8 90/22 115/21 162/8 163/1 163/12 165/23 196/17 205/12
defendant's [2] 36/7 117/1
defense [1] 207/9

D

deferred [1] 185/22
deferring [1] 89/14
define [1] 52/18
defined [5] 13/25 21/17 76/15 92/7 92/14
defines [3] 12/19 13/8 52/23
defining [1] 57/10
definitely [2] 73/24 201/1
definition [8] 16/18 52/18 52/23 53/18 54/8 61/20 64/8 86/4
DELAWARE [3] 1/2 1/13 177/19
deleted [2] 92/7 144/20
demonstrated [1] 63/14
DENNHARDT [3] 2/4 3/6 28/12
denote [1] 108/14
depend [7] 111/11 146/15 155/23 157/9 159/3 180/12 180/15
dependence [2] 156/20 158/17
dependent [16] 38/16 38/20 38/25 99/19 117/14 119/9 124/7 124/8 143/12 143/22 146/10 155/16 155/21 156/2 158/20 200/8
dependents [4] 96/16 96/19 139/21 146/8
depends [4] 15/25 156/24 170/5 170/25
depicted [3] 94/9 189/11 192/23
depiction [1] 130/25
depicts [1] 189/9
describe [5] 19/7 31/4 100/9 126/2 134/23
described [22] 22/7 121/9 125/22 125/23 130/18 131/2 131/3 131/4 131/5 131/15 131/21 131/25 142/10 142/11 142/12 145/15 148/19 148/20 168/5 177/6 188/5 189/24
describes [6] 70/11 114/13 124/12 135/13 142/18 149/25
describing [4] 9/17 124/21 129/16 168/18
description [91] 5/15 19/3 19/14 22/23 30/23 31/10 31/25 32/3 33/4 33/6 33/12 33/18 37/19 50/2 50/2 70/3 70/4 70/10 70/18 71/1 71/11 72/1 77/18 78/3 78/5 80/18 84/18 85/17 85/23 86/16 90/6 94/23 95/8 95/10 95/16 95/19 100/3 103/9 104/23 108/24 110/6 116/7 116/22 117/23 119/3 120/14 121/16 121/17 122/5 124/19 125/11 131/2 131/7 131/8 131/10 131/11 131/14 131/18 132/2 132/2 132/6 132/12 132/13 133/19 134/23 135/13 137/21 137/22 138/3 138/23 140/6 140/9 146/3 147/23 148/6 148/18 150/18 150/19 151/5 151/8 151/11 162/24 183/14 186/8 187/7 187/9 187/14 188/2 197/4 198/4 206/9
descriptions [4] 32/11 118/2 124/11 205/21
deserve [1] 14/8
designating [1] 97/11
designation [1] 97/17
detail [3] 25/13 166/10 177/6
detect [21] 47/21 123/11 166/13 168/15 169/11 169/13 170/16 170/24 172/22 173/16 173/17 173/18 174/3 174/3 174/4 174/11 175/2 177/14 179/13 181/3 181/21
detected [5] 123/25 167/20 167/20 176/8 180/22
detecters [1] 179/16
detecting [4] 171/12 171/14 180/21 182/2
detection [8] 167/10 167/11 167/12 167/17 167/21 168/6 174/21 177/17
detector [69] 7/4 15/5 20/12 20/21 21/4 21/19 26/3 26/12 26/20 39/11 45/24 108/20 119/9 119/17 123/12 123/14 124/2 127/10 127/19 127/25 128/22 129/3 129/8 129/14 129/19 129/24 130/23 132/4 132/18 134/16 134/21 136/17 136/19 137/9 139/25 140/2 146/14 146/19 146/21 146/22 147/3 147/15 147/18 154/24 154/25 155/1 155/2 155/17 160/3 161/3 161/8 161/19 163/9 163/13 163/15 163/17 166/22 167/3 167/5 171/6 171/9 173/13 173/14 174/23 174/23 174/25 175/2 177/16 179/12
detector 408 [1] 167/5
detectors [19] 25/3 123/10 132/7 132/8 132/9 166/17 166/20 166/20 167/23 168/1 171/2 172/24 173/10 173/11 176/21 179/2 179/2 180/23 183/25
detects [1] 167/3
determinations [1] 91/7
determine [1] 75/25
Develop [1] 63/25
development [1] 202/16
diagram [1] 164/12
dichroic [55] 4/13 4/19 4/23 5/18 6/8 7/3 7/9 7/24 8/18 8/19 9/5 9/20 9/21 10/6 10/10 11/10 12/2 12/4 12/13 12/15 17/2 17/4 20/11 20/20 21/4 21/18 25/1 25/24 25/25 26/2 101/18 108/19 121/25 122/4 122/6 122/7 122/9 130/15 134/17 141/7 141/8 141/8 141/12 141/14 141/17 141/19 141/23 142/2 142/8 142/11 142/17 142/17 143/1 143/4 147/2
dictionaries [3] 42/2 52/15 53/17
dictionary [8] 52/18 52/23 53/3 53/4 53/8 64/7 76/12 76/15
did [18] 4/10 5/4 7/2 7/3 40/8 48/20 90/22 96/1 96/1 110/14 118/15 118/17 119/21 121/25 126/21 128/13 155/16 198/23
didn't [41] 4/8 5/2 5/2 5/6 5/8 5/20 5/20 7/8 27/24 40/6 42/12 42/13 46/14 46/21 49/19 52/21 73/15 76/11 87/21 107/6 110/22 110/22 112/9 115/1 115/3 118/17 126/20 126/22 149/22 168/25 169/3 169/22 170/1 173/20 178/15 185/24 186/1 195/19 198/10 202/6 202/6
difference [4] 34/15 68/2 72/21 74/15
different [40] 4/23 10/4 10/20 11/23 38/23 43/10 51/17 54/4 54/15 54/22 56/12 57/2 62/4 65/18 65/22 78/11 82/17 82/22 82/22 95/9 96/7 97/11 104/1 110/5 124/24 126/7 143/5 146/25 151/13 167/13 167/14 171/23 174/10 174/24 179/3 179/8 188/2 190/8 190/12 192/7
differentiations [1] 38/9
differently [1] 4/20
difficult [1] 46/18
diffraction [2] 41/18 56/11
digital [14] 50/6 50/8 50/10 50/13 50/18 50/19 54/15 57/13 57/14 58/15 58/19 58/20 60/14 62/8
directed [2] 68/18 198/5
direction [4] 83/16 94/19 185/12 185/12
directionality [1] 74/19
directions [1] 174/18
directly [1] 136/12
disadvantage [1] 46/13
disagree [3] 53/14 159/17 193/24
disagreed [1] 72/24
disagreement [2] 194/4 194/5
disclose [2] 32/12 180/6
disclosed [15] 35/14 36/19 37/12 37/18 37/20 44/23 45/12 87/6 87/7 87/8 121/3 127/5 146/2 148/2 186/7
discloses [4] 36/6 55/1 151/9 188/13
disclosure [10] 19/3 57/9 60/10 69/10 86/1 86/25 117/22 151/7 167/16 187/18
disclosures [6] 32/24 55/4 116/4 117/24 186/16 187/14
discover [1] 180/6
discovery [8] 201/16 201/18 201/22 201/22 202/15 202/25 203/2 203/4
discuss [3] 70/23 189/1 206/22
discussed [8] 10/11 76/10 85/16 85/17 118/2 167/4 171/5 185/7
discusses [2] 88/20 149/2
discussing [2] 32/20 120/3
discussion [11] 12/16 22/10 22/18 22/22 23/18 38/8 79/4 82/13 106/19 168/2 188/8
discussions [1] 167/25
disfavor [1] 36/8
disfavored [2] 35/15 37/7
Dispense [1] 109/23
dispensed [1] 4/11
dispenses [1] 27/13
dispositive [2] 198/4 200/22
dispute [23] 4/14 11/18 17/19 18/7 28/13 30/24 34/14 35/25 44/15 44/16 49/6 53/25 54/1 57/25 82/24 91/18 110/4 115/2 115/24 133/21 183/8 193/5 193/6
disputed [1] 87/1
disputing [3] 11/15 142/4 193/3
distance [3] 101/6 101/16 101/22
distinct [3] 36/13 36/16 189/19
distinction [1] 73/8
distinguish [2] 76/2 103/20
distorted [1] 67/6
distracts [1] 63/20
district [7] 1/1 1/2 1/15 112/19 126/16 126/16 207/25
diverge [4] 42/11 43/9 43/11 83/22
divergence [1] 88/12
diverges [1] 84/10
diverging [7] 74/3 74/4 74/8 74/14 75/4 85/7 185/14
do [141] 4/9 6/19 6/20 12/12 19/2 21/12 22/15 23/23 25/22 26/4 27/16 27/18 28/7 28/8 31/21 33/21 34/6 34/21 40/1 41/1 43/16 44/22 45/4 46/25 47/14 47/17 47/19 48/4 48/7 48/12 48/13 48/22 48/23 49/4 49/12 52/9 52/18 52/22 53/15 54/20 54/24 55/8 57/2 57/24 64/6 64/12 64/13 68/6 68/13 70/14 72/7 75/8 76/2 76/14 79/25 80/5 82/12 85/13 89/13 90/2 90/25 91/14 92/8 93/3 94/6 96/20 99/4 99/6 99/25 111/1 111/8 111/10 112/20 113/12 113/25 115/17 116/2 117/4 117/22 118/15 118/17 118/19

D

do... [59] 120/9 120/11 120/11 121/4 121/12 121/14 127/8 133/8 133/15 133/21 136/25 137/11 144/16 148/17 151/8 152/13 152/21 156/3 156/19 159/16 160/6 161/14 162/3 165/13 165/17 168/10 168/20 171/20 171/24 174/6 182/4 186/17 188/3 188/5 191/12 192/1 192/15 192/15 193/4 195/13 195/19 195/23 197/1 197/6 198/7 198/8 198/14 199/2 199/16 199/16 201/3 201/10 203/14 204/3 204/12 205/10 206/11 206/22 207/8
documents [2] 14/12 14/12
does [72] 6/3 11/22 12/20 13/7 16/1 16/7 16/12 31/5 31/22 33/4 34/3 34/16 41/21 42/6 42/23 49/17 53/3 61/6 68/13 70/23 71/5 76/21 83/21 88/14 88/15 97/9 100/6 101/10 101/12 107/3 107/17 108/10 108/14 110/3 114/2 125/15 134/23 134/25 137/2 138/22 140/24 144/12 147/5 149/17 149/19 151/2 154/2 158/7 159/3 159/5 159/5 160/20 162/8 162/11 162/12 164/13 166/14 166/14 171/11 176/22 182/2 184/9 186/20 186/24 187/9 188/15 192/24 194/11 195/8 199/3 207/1 207/2
doesn't [79] 12/12 12/15 16/14 17/9 17/15 18/18 26/7 26/10 26/16 26/18 34/14 36/20 38/3 42/15 42/17 44/3 49/16 54/24 55/7 55/13 56/7 57/1 58/20 62/19 62/20 63/18 64/14 64/20 69/9 69/15 69/17 70/24 71/1 71/18 75/5 75/12 79/19 83/2 83/12 83/22 85/13 88/13 88/18 88/24 89/7 92/6 94/3 99/8 106/9 108/9 108/12 125/16 125/16 142/18 147/4 148/5 148/12 153/5 153/6 153/23 157/15 162/9 162/17 163/1 163/9 164/15 164/19 172/19 173/17 173/18 176/20 180/12 181/3 181/6 184/22 187/7 195/9 199/3 206/5
doing [13] 4/6 7/14 20/5 21/1 21/13 52/1 52/2 62/24 67/17 137/8 147/6 169/23 199/2
don't [127] 4/4 4/5 5/7 7/18 9/8 11/13 11/14 14/3 14/8 14/14 17/14 17/19 19/16 22/12 23/8 27/16 28/6 29/8 29/11 30/4 33/1 34/1 34/4 34/14 34/17 36/9 42/7 42/10 42/19 42/20 42/23 42/25 44/16 46/15 47/14 48/13 49/14 49/24 50/4 50/14 52/20 52/25 53/2 53/14 53/24 54/20 58/3 58/9 59/2 59/10 60/1 63/3 63/12 66/25 71/5 71/24 73/14 77/12 79/24 81/14 81/21 82/23 84/3 85/10 86/21 87/1 87/13 87/16 88/4 88/8 93/3 95/2 96/5 96/6 98/5 100/13 102/15 107/19 110/4 116/2 117/4 117/6 117/7 118/4 120/18 120/21 124/4 132/11 142/20 142/22 142/25 143/14 152/2 153/12 153/14 156/17 157/18 161/12 161/25 162/4 162/5 162/15 162/16 163/2 163/11 163/23 164/4 164/7 164/13 171/25 172/4 178/4 178/11 179/5 179/7 179/18 179/23 180/4 180/20 182/21 194/20 196/23 199/12 199/17 201/10 204/15 207/6
done [6] 14/2 40/9 60/12 122/17 127/17 203/2
door [1] 199/19
dot [1] 65/23
dots [1] 58/6
doubled [1] 73/5
doublet [1] 80/13
doubt [1] 70/23
down [13] 6/21 39/11 39/14 39/18 53/7 66/16 68/11 74/25 99/17 124/2 200/10 200/11 200/18
Dr. [3] 3/14 44/19 185/7
Dr. Ilkov [3] 3/14 44/19 185/7
drafted [3] 69/7 69/8 151/10
drafters [2] 21/11 21/12
draw [6] 55/18 70/15 72/15 101/9 147/9 147/11
drawing [4] 153/13 158/5 164/9 164/18
drew [5] 152/17 152/21 152/24 153/22 154/22
dropped [4] 114/23 169/24 182/11 182/14
during [1] 167/7
DUSTIN [3] 2/14 3/13 31/18
dye [2] 51/10 51/12
dynamics [1] 61/21

E

E [2] 2/21 2/21
each [10] 7/7 36/11 42/10 61/17 114/19 114/20 129/7 139/21 155/18 190/14
earlier [8] 21/16 72/17 76/7 78/10 94/22 124/11 205/22 206/7
earliest [1] 206/24
early [3] 197/25 202/25 206/8
easiest [1] 130/16
Eastern [2] 112/18 126/15
Easy [1] 97/18
effect [3] 68/16 89/23 112/17
effectively [2] 118/5 200/7
efficient [2] 205/14 205/16
efficiently [1] 199/15
eight [3] 3/22 75/1 189/7
Eighteen [1] 157/25
either [12] 42/25 91/25 110/1 130/15 154/11 157/8 160/19 161/2 161/17 168/16 168/22 175/23
EKG [2] 51/25 62/7
electrical [1] 62/7
electronics [1] 50/12
element [260]
element 902 [1] 84/13
elements [32] 8/12 10/4 10/14 10/20 10/24 11/17 11/24 15/16 15/21 20/10 21/10 21/19 22/12 34/22 39/8 42/11 108/21 112/11 112/14 123/11 123/22 124/5 132/16 134/16 158/9 168/4 172/24 192/11 193/4 193/15 193/16 193/17
ELMO [11] 16/20 67/16 80/6 134/1 135/3 135/18 148/25 152/18 152/19 153/15 170/22
else [12] 61/5 77/4 77/19 82/20 86/6 105/14 112/7 116/14 116/15 118/14 132/21 160/5
emanate [1] 64/18
emanating [4] 65/1 79/14 89/16 90/12
embodiment [18] 35/4 35/6 35/11 37/19 37/23 60/9 71/1 78/12 96/12 121/3 136/12 137/17 145/21 146/2 184/13 186/7 188/13 189/10
embodiments [19] 35/8 35/9 35/14 36/6 36/20 36/25 37/7 37/9 37/11 99/10 121/2 127/5 167/16 167/18 184/13 187/10 190/7 191/18 193/14
embraced [1] 21/6
emissions [1] 189/12
emitted [7] 169/11 178/22 179/17 180/7 183/5 188/17 192/24
emphasize [2] 135/23 137/20
enablement [2] 90/6 206/9
encapsulates [1] 34/13
encompass [3] 54/22 58/21 162/14
encounter [1] 195/17
encourage [1] 40/25
end [7] 57/20 90/3 100/6 106/18 107/7 134/12 162/20
ended [1] 94/25
engineering [1] 76/12
English [2] 173/24 174/10
enough [8] 25/15 54/22 63/15 81/8 114/2 118/7 137/12 204/10
enter [1] 175/25
entertain [1] 205/14
entire [4] 31/7 71/2 80/17 161/20
entirely [1] 167/9
entirety [3] 181/6 198/24 199/8
equate [1] 58/18
equated [1] 141/24
equates [1] 124/19
equating [3] 125/3 138/24 142/16
equivalents [1] 54/11
error [1] 71/10
escape [1] 178/12
especially [5] 35/14 37/7 71/23 117/20 199/18
ESQ [12] 1/20 1/20 2/3 2/4 2/4 2/9 2/10 2/13 2/14 2/14 2/15 2/15
essentially [12] 18/13 18/21 41/19 119/1 126/5 127/4 143/25 144/23 144/24 163/6 163/11 200/12
established [1] 35/24
et [2] 42/3 54/5
ether [1] 76/11
Eve [1] 136/4
even [24] 4/4 22/10 26/19 27/7 41/21 45/1 48/24 58/18 58/18 62/24 64/8 67/14 70/6 71/10 91/3 120/18 153/22 158/5 183/13 187/7 195/10 195/18 199/19 201/7
event [1] 158/20
eventually [3] 134/18 177/2 197/14
ever [3] 42/20 71/24 199/10
every [7] 10/22 36/24 99/8 129/1 179/16 179/24 184/13
everything [4] 140/11 179/6 179/7 180/5
evidence [40] 41/25 55/11 57/9 57/10 57/19 61/14 70/15 72/2 74/8 82/11 85/20 85/22 85/22 86/1 86/16 89/3 89/5 96/2 97/25 102/7 102/9 102/12 104/13 105/8 105/20 106/5 107/4 108/11 109/5 109/10 109/24 113/19 125/6 125/8 137/13 139/13 139/15 141/16 185/7 202/7
exact [2] 124/21 131/17
exactly [29] 6/12 10/23 11/14 16/19 19/25 36/3 40/23 59/23 63/5 66/2 68/3 70/24 84/6 84/22 93/13 93/25 94/8 95/3 115/20 125/24 126/3 126/4 135/12 139/4 146/17 147/5 153/21 156/4 156/12
examiner [2] 83/7 84/22
example [23] 25/11 25/12 43/3 46/2 51/10 51/11 51/19 54/25 55/6 56/18 60/15 60/19 60/20 62/7 66/11 66/12

E

example... [7] 79/9 88/23 118/22 151/24 185/6 187/17 201/24
examples [1] 44/9
except [1] 178/12
excerpt [1] 106/17
excerpted [1] 53/8
exclude [6] 35/5 35/11 60/9 60/10 60/11 96/12
excluded [2] 36/7 37/8
excludes [6] 35/14 37/10 37/11 55/4 85/13 85/15
excluding [1] 37/7
exclusion [1] 136/11
excuse [3] 82/22 84/12 96/23
exemplary [4] 35/8 99/10 136/11 188/13
exercise [2] 104/2 199/15
Exhibit [3] 61/15 72/15 83/5
Exhibit 26 [1] 61/15
Exhibit 7 [1] 72/15
exhibits [2] 53/9 56/17
exist [2] 75/12 94/3
exists [2] 81/12 81/13
expect [1] 117/13
expected [1] 7/5
expecting [1] 201/17
experience [2] 88/22 186/4
expert [16] 3/14 56/5 56/9 56/16 56/18 56/19 57/3 57/4 57/21 81/5 91/4 91/7 179/10 185/7 201/18 203/4
expert's [1] 87/25
experts [2] 81/9 87/24
explain [4] 111/5 111/6 133/16 173/8
explicit [1] 24/2
express [1] 24/7
expressed [1] 203/12
expressions [1] 63/14
expressly [10] 12/19 12/25 13/5 30/6 55/1 55/5 85/16 85/17 86/17 112/12
extend [2] 101/16 101/21
extended [1] 99/13
extension [2] 108/17 125/7
extent [3] 20/25 54/1 204/16
extraordinary [1] 143/25
extrinsic [10] 57/10 57/18 61/14 65/7 72/2 77/20 82/11 89/3 89/5 185/6
eyeball [1] 185/12
eyes [1] 66/9

F

F [2] 1/15 77/9
F.3d [2] 136/5 136/8
face [2] 38/4 124/4
facial [1] 63/14
fact [35] 4/4 30/5 31/21 33/9 36/18 37/16 46/20 47/19 50/1 55/24 56/17 62/9 67/5 68/11 70/20 72/20 82/18 83/13 83/15 85/5 102/16 114/8 133/24 136/10 137/21 164/21 184/16 187/6 194/12 201/16 201/22 201/22 202/15 202/25 203/2
fact-specific [1] 102/16
factors [1] 204/7
factual [1] 11/18
failure [3] 46/22 48/16 203/25
fair [4] 4/6 151/4 196/17 196/18
fairness [1] 40/7
familiar [1] 183/23
far [3] 13/2 66/6 203/7
farther [1] 145/13
fast [1] 118/14
favor [3] 127/9 144/16 171/24
favorable [1] 127/7
favors [1] 87/4
FCRR [1] 207/24
federal [18] 14/10 21/6 24/2 24/8 38/22 91/2 112/20 112/22 126/15 126/17 136/2 136/5 136/8 139/4 168/8 177/18 194/8 194/25
feet [2] 14/11 14/12
few [1] 197/15
fiber [7] 24/21 24/24 176/17 177/2 177/5 178/12 193/21
fifth [1] 158/4
Fifty [2] 23/14 23/15
Fifty-four [2] 23/14 23/15
figure [158] 8/15 10/22 11/12 11/15 11/19 14/16 16/24 19/9 20/1 20/2 22/8 22/10 22/11 22/12 22/21 22/23 23/19 23/24 24/19 24/20 25/1 27/5 27/6 32/21 32/25 68/15 70/18 71/13 78/11 79/4 80/1 80/8 80/18 81/4 84/6 84/18 84/19 85/18 86/18 86/20 86/23 87/25 94/5 94/6 96/15 99/7 100/4 101/8 104/18 108/25 111/2 116/4 116/5 116/6 116/11 118/1 118/2 120/10 120/19 121/8 121/9 121/10 121/13 125/10 125/11 125/12 125/14 125/15 126/8 127/12 128/3 128/6 128/7 129/1 129/4 129/16 131/1 133/13 134/10 135/11 136/11 137/17 137/23 138/2 138/8 138/10 138/16 140/10 140/11 141/9 141/18 142/3 142/5 144/17 144/20 145/1 145/19 147/10 147/20 147/24 148/18 149/10 149/10 150/10 150/18 151/1 151/5 151/18 151/20 151/25 152/4 152/17 152/21 153/7 153/8 153/10 153/11 154/22 162/7 162/8 162/10 162/14 162/25 163/3 167/1 167/1 167/2 167/9 167/10 167/13 167/14 168/2 168/4 175/9 175/10 176/18 176/22 177/6 183/22 189/7 189/8 189/11 189/12 190/17 191/1 191/2 191/4 191/14 191/16 192/4 192/10 192/23 193/4 193/16 193/17 193/21 204/6 204/15
Figure 1 [1] 193/21
Figure 11 [8] 191/1 191/4 191/14 191/16 192/4 192/10 192/23 193/16
Figure 25 [99] 8/15 11/12 11/15 11/19 14/16 20/1 20/2 22/8 22/10 22/11 22/12 22/21 22/23 23/19 23/24 24/20 25/1 27/5 27/6 32/21 32/25 71/13 78/11 79/4 80/1 80/8 80/18 81/4 84/6 84/18 84/19 85/18 87/25 94/5 94/6 96/15 99/7 100/4 101/8 104/18 108/25 111/2 116/4 116/5 116/6 116/11 118/1 118/2 120/10 120/19 121/8 121/9 121/10 125/10 125/14 125/15 126/8 127/12 128/3 129/1 129/4 129/16 131/1 133/13 134/10 135/11 136/11 137/17 137/23 138/2 138/8 138/10 138/16 140/10 140/11 141/9 141/18 142/5 144/17 144/20 145/1 145/19 147/10 147/20 147/24 148/18 149/10 149/10 150/10 150/18 151/25 152/4 154/22 162/7 162/8 162/10 162/14 162/25 163/3 177/6
Figure 25A [3] 24/19 151/1 151/5
Figure 31 [1] 176/18
Figure 36 [1] 86/20
Figure 37 [2] 167/1 168/2
Figure 38 [2] 175/9 175/10
Figure 8 [1] 189/11
Figure 9 [3] 86/18 86/23 193/17
Figure 9A [5] 70/18 189/7 189/8 189/12 190/17
figures [3] 57/19 58/6 187/13
file [6] 72/5 83/7 83/14 83/15 84/22 197/21
filed [1] 81/16
filter [90] 4/13 4/18 4/19 4/20 4/23 5/12 5/14 5/16 5/17 5/18 6/2 6/10 6/16 6/24 7/1 7/3 7/9 7/10 7/24 8/18 8/19 9/5 9/20 9/21 9/23 10/7 10/11 11/10 12/2 12/4 12/13 12/16 17/2 17/4 20/11 20/20 21/4 21/18 25/2 25/24 26/3 28/19 101/19 108/19 119/12 119/24 121/20 121/22 121/25 122/2 122/4 122/6 122/6 122/7 122/8 122/9 122/10 122/12 122/14 122/16 122/19 123/7 130/15 130/16 130/16 130/19 134/18 134/18 141/7 141/8 141/8 141/12 141/15 141/17 141/19 141/23 142/2 142/8 142/11 142/17 142/17 143/5 145/3 145/4 145/6 145/8 145/9 147/2 147/12 147/17
filters [5] 4/21 6/8 6/8 25/25 143/1
final [21] 125/17 125/17 125/22 130/9 131/3 131/16 131/18 131/19 133/22 134/8 134/14 134/19 134/24 137/22 137/23 138/12 141/2 141/3 148/7 148/9 148/12
finally [2] 67/18 189/19
find [15] 21/7 21/8 47/14 69/1 77/9 78/17 97/12 107/3 118/2 126/20 126/22 142/20 142/22 162/19 178/4
finding [1] 94/19
fine [4] 117/15 130/14 170/3 172/20
FINGER [2] 1/19 3/3
fingertips [1] 77/13
finish [3] 68/7 137/12 206/12
finite [4] 54/16 54/16 55/6 56/23
firm [1] 3/12
first [333]
five [15] 133/1 133/7 137/17 139/18 139/20 146/11 146/12 146/14 150/10 150/20 151/8 155/19 157/8 190/3 194/18
fixed [1] 190/23
fixes [1] 184/9
FLANAGAN [3] 2/15 3/13 103/17
flies [1] 38/4
flipped [2] 65/22 66/20
flipping [2] 110/6 110/7
flooded [1] 206/25
flow [15] 51/9 61/3 114/14 167/24 169/12 174/17 175/3 175/24 176/14 176/25 179/14 184/5 189/13 192/12 192/13
flowing [1] 185/11
fluoresce [4] 176/2 176/2 176/3 177/1
fluorescence [2] 166/22 189/12
fluorescent [12] 26/2 176/7 176/17 177/1 183/4 183/6 184/3 184/7 188/17 188/18 192/24 193/1
fluorescing [1] 184/6
focal [5] 28/20 67/18 67/23 67/23 68/3
focalized [1] 54/16
focus [25] 27/20 28/14 28/15 28/22 39/11 41/9 41/10 44/6 44/15 45/22 52/7 54/9 55/19 57/1 69/13 72/25 92/9 100/22 119/8 128/18 133/20 147/24 148/1 183/4 192/24
focused [21] 10/24 54/10 54/11 54/17 55/1 55/3 55/7 55/17 55/25 56/4 56/13 59/1 59/6

F

focused... [8] 69/13 71/3 82/25 99/16 123/25 124/2 168/3 171/17
focuses [11] 44/8 44/9 45/1 45/13 66/16 67/2 73/1 73/5 134/19 188/16 190/21
focusing [184] 6/23 9/6 13/14 25/2 27/16 27/18 27/19 27/22 27/23 28/7 28/9 28/14 28/22 29/2 31/20 31/20 33/24 33/25 34/21 34/23 35/18 39/2 39/3 39/6 39/14 40/3 40/13 40/15 40/19 40/21 40/22 41/6 41/12 41/15 41/22 42/1 43/3 43/6 43/12 43/13 43/14 43/15 43/22 43/25 43/25 44/2 44/11 45/15 45/19 46/12 46/12 48/8 48/21 49/1 54/2 67/10 67/22 67/25 68/1 72/14 72/22 72/22 73/3 73/9 73/11 76/3 80/15 80/17 82/23 99/17 104/24 105/1 108/19 118/15 118/19 118/24 118/25 119/6 119/16 122/25 123/2 123/5 123/8 123/10 123/13 123/15 123/17 124/1 124/12 124/18 124/21 124/23 124/25 125/10 125/17 125/20 125/21 125/22 126/2 127/11 127/13 127/14 127/16 127/19 128/4 128/22 129/1 129/7 129/12 129/17 129/23 130/4 130/9 130/22 131/3 131/4 131/6 131/16 131/18 131/19 131/22 131/25 132/16 133/22 134/8 134/13 134/19 134/24 135/8 135/10 135/17 136/14 136/15 137/9 137/23 138/11 138/12 138/15 138/19 138/20 139/8 139/24 140/1 140/14 140/15 140/16 141/3 144/8 144/9 144/10 145/10 145/15 145/16 146/6 147/14 147/17 148/8 148/19 148/21 149/3 149/4 149/5 149/6 149/12 149/13 149/17 149/19 155/14 157/7 157/7 158/8 158/23 159/9 159/11 159/19 161/2 161/18 163/8 163/12 163/14 164/1 187/5 193/7 204/22
follow [3] 101/1 107/20 163/14
followed [3] 6/13 6/18 97/23
follows [1] 117/24
force [2] 198/14 201/5
forego [3] 64/22 64/23 196/22
foregoing [1] 207/20
forget [1] 118/16
form [8] 56/23 75/4 75/5 82/25 83/3 85/7 85/19 122/9
formal [1] 34/7
formally [1] 40/14
formation [3] 61/16 72/22 73/9
formed [12] 59/5 59/15 59/22 71/17 73/17 73/25 74/14 74/20 76/23 77/5 84/24 199/12
forming [2] 80/10 83/11
forms [7] 58/23 59/4 66/5 74/23 80/21 82/3 189/19
Forty [4] 22/24 189/7 200/3 200/6
Forty-eight [1] 189/7
Forty-four [1] 22/24
Forty-two [2] 200/3 200/6
forward [23] 90/4 166/15 166/20 167/4 168/1 170/18 173/9 173/13 173/17 174/5 174/22 174/25 176/21 177/15 177/21 178/23 179/1 179/10 179/22 181/5 181/7 199/18 199/20
found [12] 23/10 38/11 67/18 83/10 84/22 91/8 93/10 164/9 172/13 173/1 183/13 205/20
four [11] 10/3 22/24 23/14 23/15 190/12 192/18 192/19 200/4 200/5 200/6 201/16
fourth [6] 96/2 115/23 129/12 129/13 155/2 164/17
frame [2] 82/1 193/5
framing [1] 193/13
frankly [2] 27/1 156/8
Fred [1] 3/4
FREDERICK [1] 1/20
Free [1] 108/13
freezes [1] 95/16
front [4] 57/25 103/16 107/19 153/16
frustrating [1] 153/9
FS [1] 168/1
FSC [3] 166/21 167/3 167/19
full [7] 3/21 53/7 67/24 107/19 107/20 115/8 173/15
fully [1] 195/21
fulsome [1] 48/13
function [45] 35/20 39/21 40/2 40/3 40/13 40/15 40/18 40/20 41/7 43/17 44/11 45/6 45/9 47/5 66/4 68/25 102/23 165/3 165/9 167/8 171/12 171/14 172/9 172/10 173/2 179/19 183/3 183/9 183/15 183/17 184/25 185/3 185/4 186/5 186/6 186/10 187/2 187/11 187/21 190/21 191/23 192/11 193/24 195/2 195/8
functional [1] 44/3
functions [6] 45/19 45/20 174/24 177/20 179/8 195/4
further [9] 48/19 64/14 67/24 79/19 93/16 115/1 164/5 169/16 184/22

G

G [1] 2/21
gallery [1] 3/7
gathered [1] 184/7
gathering [2] 40/16 192/13
gathers [1] 193/20
gave [3] 3/18 127/5 203/15
general [2] 109/1 113/6
generality [1] 194/7
generally [2] 107/24 199/3
generated [1] 49/8
genus [1] 130/17
get [38] 8/4 9/9 21/21 31/13 39/17 52/17 53/22 55/22 58/3 59/10 76/17 78/14 79/18 80/7 87/24 93/5 101/9 102/15 107/12 110/11 111/9 111/15 119/4 120/16 121/18 125/18 134/19 150/5 160/8 163/22 169/2 185/10 189/1 196/6 196/15 199/8 200/24 201/17
gets [11] 91/19 99/16 114/3 114/4 122/20 123/4 123/6 175/16 177/2 185/15 195/16
getting [3] 33/9 67/20 124/11
give [19] 15/11 33/10 42/5 46/9 46/21 51/17 68/14 70/22 72/8 76/18 87/4 112/12 113/20 142/24 159/23 177/8 185/20 197/10 201/24
given [6] 14/7 73/9 75/22 113/3 113/15 203/23
gives [5] 61/1 114/1 114/14 139/24 139/25
giving [7] 34/10 60/19 112/6 113/13 114/7 114/12 152/16
glass [4] 84/2 141/21 175/24 178/16
globally [1] 6/19
go [84] 5/21 5/22 6/5 7/12 11/5 12/22 14/16 14/19 15/13 19/2 23/10 23/11 24/14 27/15 27/16 33/23 38/6 39/2 39/18 45/3 47/13 51/24 55/15 56/13 56/20 59/12 64/1 64/10 68/7 71/6 71/12 79/4 84/1 86/11 93/4 96/3 98/17 98/18 104/9 109/8 112/15 113/24 117/4 117/8 120/12 120/24 127/24 128/23 129/23 131/11 132/11 133/11 133/23 134/1 134/10 134/25 135/3 135/5 135/11 135/18 138/6 139/10 140/10 141/22 145/14 148/24 149/10 149/23 155/8 169/16 171/3 172/6 176/4 176/7 181/11 182/17 182/20 183/2 189/3 198/16 199/17 200/9 200/11 206/15
goes [30] 50/20 56/22 60/20 65/1 66/14 75/3 79/7 82/18 83/15 84/10 84/12 85/20 93/13 93/25 94/15 97/4 103/22 119/16 122/21 122/24 123/9 144/11 145/7 145/8 145/9 145/9 147/14 147/16 147/16 164/25
going [126] 3/18 5/21 5/22 5/25 6/5 6/20 7/6 7/24 8/2 10/17 10/18 10/19 27/11 28/8 33/20 34/18 35/17 38/14 39/9 39/11 41/5 44/15 46/25 47/3 47/6 47/8 47/9 47/13 47/14 47/17 47/19 47/20 48/2 48/9 48/23 49/1 51/7 51/12 51/13 53/25 55/24 56/6 56/12 56/13 57/6 57/23 57/24 58/2 58/22 59/7 59/12 60/17 60/21 60/22 62/18 64/6 64/10 65/11 81/18 84/3 85/5 87/23 87/24 87/25 88/7 89/22 90/1 90/2 90/4 91/22 92/21 94/5 110/11 110/20 110/24 115/17 115/18 116/19 116/25 117/9 118/12 119/1 119/12 119/20 120/7 121/1 121/3 122/16 123/11 123/14 123/16 123/21 123/25 124/1 126/13 127/3 127/23 129/23 136/25 136/25 137/1 141/22 147/6 157/18 162/3 166/9 172/4 175/13 177/7 179/14 180/16 181/19 196/16 199/1 199/19 199/20 201/3 201/23 202/7 202/15 204/7 206/11 206/12 206/13 206/16 207/9
gone [1] 182/10
good [23] 2/25 3/2 3/9 21/24 22/1 25/11 28/11 31/18 66/25 90/19 90/20 98/21 110/15 165/15 166/6 179/25 198/16 198/23 201/6 201/9 204/10 207/12 207/14
got [54] 4/4 12/10 12/10 12/11 12/13 21/3 23/15 25/20 26/24 35/21 47/11 47/11 47/12 63/7 65/14 82/13 84/7 86/5 94/9 94/10 97/1 100/7 102/25 103/1 106/16 107/11 110/17 116/10 118/13 118/14 119/24 123/9 123/14 123/22 123/24 127/15 129/22 132/2 134/17 134/18 136/16 152/6 152/7 153/13 153/20 163/1 163/24 169/17 179/25 182/15 182/24 193/15 198/24 201/16
gotten [1] 198/25
grade [1] 66/18
grading [5] 41/18 42/9 42/19 42/21 44/14
grammar [1] 174/2
granted [2] 199/10 206/3
graph [1] 51/25
Graphics [1] 136/4
great [10] 16/23 23/15 48/12 49/13 78/24 80/4 88/23 92/19 170/8 170/11
greatest [1] 155/22
group [7] 21/3 21/11 21/15 21/18 51/18

G

group... [2] 108/21 123/22
grouping [1] 21/2
guess [4] 82/14 102/21 116/12 130/16
gut [3] 81/21 81/22 88/21
guys [5] 14/7 152/20 152/21 153/12 194/1

H

had [24] 6/8 38/8 41/2 41/20 43/12 49/20 71/21 71/22 90/14 90/22 91/6 93/5 98/21 113/25 114/2 128/4 171/10 195/17 195/18 196/5 197/2 197/17 198/13 203/19
Hale [1] 3/6
half [1] 200/12
hand [1] 71/25
handful [1] 198/5
handy [1] 53/4
happen [1] 87/23
happens [4] 65/19 184/4 184/5 194/19
happy [9] 31/12 46/5 46/10 81/4 107/20 152/17 158/20 172/6 173/7
hard [3] 57/7 81/11 106/14
harder [1] 50/24
has [57] 11/15 13/24 16/5 16/11 17/6 17/15 17/20 17/23 18/1 21/6 26/6 51/25 54/3 58/21 59/1 59/6 64/17 64/18 74/20 77/8 83/10 84/24 89/5 89/15 91/2 91/23 96/6 100/14 101/5 101/21 105/6 110/19 110/23 110/25 112/22 116/6 116/12 118/5 123/7 126/17 129/2 136/22 139/16 143/1 143/2 144/8 145/13 145/13 146/19 168/8 170/16 172/15 190/11 191/1 191/2 196/15 205/15
hate [1] 3/17
have [208]
haven't [7] 11/11 40/14 82/6 95/24 127/19 145/20 205/20
having [12] 33/2 33/2 40/17 67/13 70/22 71/17 71/24 88/12 98/2 106/14 112/16 204/17
Hayes [1] 3/1
HAYNES [2] 1/20 3/3
he [14] 26/5 83/8 83/10 85/8 85/8 85/10 85/11 86/22 86/25 87/5 113/25 114/2 152/21 164/23
head [5] 41/1 77/15 77/17 193/25 194/1
hear [14] 31/14 37/9 44/1 61/8 62/18 64/15 107/6 139/1 151/15 165/11 169/2 169/5 198/19 202/20
heard [8] 25/15 61/11 66/18 75/19 91/7 94/22 197/13 201/25
hearing [30] 1/11 3/17 5/18 6/18 14/16 23/21 27/25 39/19 39/20 41/3 41/3 63/13 63/13 63/16 63/16 72/18 82/23 91/6 97/24 152/15 167/8 171/6 174/19 195/10 195/18 201/25 202/1 203/16 203/20 204/4
heart [5] 50/20 51/24 51/25 52/1 52/2
held [1] 165/19
help [5] 57/23 63/18 195/25 197/21 199/3
helpful [3] 34/8 128/14 196/4
helps [3] 38/6 94/7 125/1
her [1] 207/6
here [113] 8/14 8/24 11/20 11/25 12/3 12/5 12/5 25/4 25/21 26/12 27/9 28/13 33/1 49/6 53/12 53/18 55/19 58/2 58/23 59/8 59/19 61/11 62/24 64/24 65/3 65/10 65/13 65/20 66/11 66/21 66/22 67/16 67/22 68/15 69/5 69/10 71/17 72/23 79/17 80/12 81/24 83/5 84/7 84/19 85/5 85/18 86/15 90/16 91/12 91/18 93/18 94/9 96/7 97/1 97/15 98/6 98/20 99/12 101/1 102/8 103/15 104/16 106/15 107/25 108/8 108/14 108/18 109/16 110/7 113/19 113/21 113/21 116/24 119/3 125/21 127/10 132/3 134/12 136/12 136/16 140/5 143/6 144/23 145/20 147/11 147/12 153/22 153/23 154/14 155/11 158/2 166/8 170/13 176/20 177/20 178/1 182/23 183/4 183/23 185/13 185/14 185/21 186/18 188/15 189/6 190/13 190/19 191/25 192/1 193/17 195/16 198/10 202/18
here's [13] 8/24 14/20 21/15 25/14 39/5 101/24 108/6 110/16 162/3 185/6 185/11 203/14 206/11
hereby [1] 207/20
hey [5] 21/3 21/7 119/11 124/23 193/15
highlighted [1] 72/23
highlights [4] 72/20 73/7 74/15 136/16
highly [1] 98/3
him [2] 63/20 87/4
Hip [1] 198/23
his [3] 26/5 41/1 193/25
history [10] 24/4 72/5 72/16 82/13 82/17 83/8 83/15 83/15 84/22 95/1
hit [3] 77/14 77/16 184/5
hits [6] 66/12 66/15 66/16 141/20 174/17 176/24
hitting [3] 65/15 65/15 65/16
hold [34] 11/3 11/3 15/11 17/12 20/14 22/15 30/14 49/3 51/1 54/6 62/13 78/13 91/23 92/15 100/21 106/13 108/9 111/8 116/1 116/19 138/17 149/15 149/15 155/10 157/1 169/15 169/15 169/15 181/18 189/23 190/25 203/9 206/13 206/14
holding [1] 202/9
honest [1] 81/20
honesty [1] 178/19
Honor [308]
Honor's [6] 58/15 64/21 97/23 126/12 133/6 193/6
HONORABLE [1] 1/15
hopefully [2] 183/23 197/22
Hormel [2] 90/18 198/23
horrible [1] 4/7
hours [2] 47/10 47/11
how [40] 6/19 8/7 11/9 11/19 16/24 34/20 38/5 42/8 50/21 53/13 56/15 57/6 57/24 59/25 61/3 66/6 70/19 71/2 74/3 75/25 76/2 83/21 90/3 99/4 114/14 119/22 121/9 125/1 129/4 144/14 148/1 150/9 151/20 153/4 191/10 192/9 197/1 199/21 199/22 202/1
huh [6] 150/16 151/16 162/18 174/13 178/20 188/14
human [1] 63/4
hypothetical [2] 31/8 32/13

I

I [709]
I'd [6] 3/19 22/4 162/25 163/2 198/20 198/21
I'll [18] 7/13 25/13 31/3 43/18 47/16 47/25 55/9 55/15 56/3 80/5 86/12 92/16 111/5 111/6 111/15 114/5 138/6 190/13
I'm [150] 3/10 3/18 5/21 5/21 5/25 6/5 7/8 7/14 9/8 9/12 10/16 10/17 10/18 10/24 14/2 15/14 16/16 27/11 28/7 29/17 29/18 30/8 31/12 31/20 33/5 33/7 33/9 33/9 33/20 34/10 34/17 36/23 38/2 38/5 40/16 41/4 41/5 41/5 42/15 43/5 46/4 46/10 46/25 47/2 47/6 47/8 47/9 47/12 47/14 47/17 47/19 47/20 48/2 48/9 49/1 53/1 54/9 57/22 59/3 63/25 68/6 68/15 72/3 75/25 76/2 81/4 81/14 81/17 82/13 87/25 88/7 88/7 89/22 92/21 94/5 99/2 102/11 106/14 107/6 110/10 110/19 110/24 111/5 111/15 112/24 114/18 115/4 115/17 115/17 116/3 116/19 116/25 117/9 117/18 118/12 121/10 122/2 126/12 127/13 135/21 136/2 140/17 147/23 151/11 151/17 151/20 153/17 155/6 157/4 159/21 162/3 163/11 168/16 171/16 171/25 172/6 178/5 180/16 182/8 186/18 186/23 187/23 191/21 191/22 194/3 195/10 195/14 195/15 195/21 196/16 198/20 198/20 198/24 199/1 199/2 199/6 202/21 203/11 203/14 203/14 203/21 204/7 205/9 205/14 205/16 206/1 206/5 206/11 206/16 206/22
I've [37] 4/3 12/10 12/10 12/11 12/12 14/2 21/3 25/15 26/24 34/20 40/1 41/15 42/20 53/2 71/21 71/22 90/11 100/7 110/16 119/23 123/9 123/14 123/22 123/24 129/22 152/6 152/6 163/24 164/7 180/24 199/8 199/10 203/23 204/23 205/22 206/4 206/12
idea [7] 88/11 88/17 197/23 199/13 203/13 204/18 206/10
idealized [1] 56/7
ideally [1] 205/5
identical [1] 119/20
identifications [1] 138/2
identified [5] 52/25 133/22 157/8 167/7 191/5
identifies [8] 9/21 9/22 13/5 15/21 31/8 54/18 60/6 80/24
identify [1] 206/17
ignores [1] 57/8
III [1] 1/20
Ilkov [3] 3/14 44/19 185/7
illuminated [4] 169/12 183/5 188/17 192/25
illustrate [1] 125/13
illustrated [1] 189/11
illustration [1] 131/1
illustrative [2] 121/8 121/21
image [283]
images [29] 54/15 54/19 54/23 57/10 58/21 59/15 60/4 60/6 66/8 66/10 70/17 77/15 77/19 77/21 80/14 80/18 85/7 85/13 85/14 85/15 85/23 88/21 97/11 116/5 117/23 177/25 177/25 189/19 193/20
imaging [5] 32/22 56/8 68/10 69/4 69/5
immediate [1] 17/10
immediately [4] 13/22 106/25 137/16 163/14
imply [2] 49/19 50/17
importance [1] 155/22
important [3] 106/23 190/19 202/16
importantly [1] 27/4
importing [1] 97/10
impose [4] 89/11 103/11 106/4 106/21
impossibility [2] 70/11 96/16
impossible [7] 59/16 59/17 59/25 69/7 69/8 88/2 96/14

I

improper [2] 31/1 55/7
improperly [1] 29/13
impute [3] 28/24 30/11 31/1
imputing [1] 29/13
inability [1] 164/12
inadequate [1] 205/21
INC [2] 1/3 1/6
inclined [2] 203/14 203/14
include [11] 31/5 31/22 35/10 75/18 148/5 166/20 168/12 168/14 194/11 194/11 195/4
included [4] 22/11 48/19 194/17 194/17
includes [8] 97/2 120/13 166/19 177/15 184/18 188/9 192/10 192/12
including [7] 15/17 57/9 68/21 96/22 97/3 101/4 107/22
inconsistent [10] 38/18 38/20 38/25 71/6 71/16 94/20 96/14 96/15 106/11 123/20
incorporate [1] 14/18
incorrect [2] 35/5 35/11
incredibly [1] 202/15
incurred [1] 204/5
indefinite [7] 46/3 91/9 98/22 100/15 171/13 172/18 202/3
indefiniteness [16] 59/3 59/10 59/11 90/2 90/7 90/23 91/3 171/25 197/3 198/3 199/9 199/14 201/23 202/17 205/21 206/9
independent [11] 38/19 38/24 114/20 115/11 117/14 124/4 139/21 152/9 156/25 157/2 171/1
independents [1] 111/12
indicate [2] 73/4 97/16
indicates [1] 74/19
indirect [1] 19/13
indulgence [1] 8/5
industry [1] 179/3
infinity [2] 69/22 70/1
inform [1] 156/2
information [3] 51/18 61/1 179/23
informative [2] 118/3 162/20
informed [3] 162/23 162/25 163/2
infringe [2] 59/2 68/14
infringement [4] 50/25 53/22 59/14 69/6
infringing [1] 75/25
initial [13] 20/4 95/19 123/18 125/10 125/15 125/16 125/20 125/21 144/9 144/10 147/21 158/9 206/2
initially [3] 189/14 197/17 205/17
Innovations [1] 106/17
instance [9] 16/13 88/11 124/16 139/12 143/24 178/9 179/15 180/23 191/13
instances [1] 103/20
instead [4] 15/21 24/22 24/23 192/6
instruction [1] 6/13
instructions [1] 97/24
instructs [2] 117/21 194/8
insufficient [1] 195/7
integrated [1] 92/1
intended [1] 134/14
interact [2] 51/12 108/21
interest [1] 99/21
interested [1] 61/24
intermediate [1] 18/20
internal [1] 68/19
internally [1] 189/16
interpret [3] 35/10 150/19 152/7
interpretation [2] 35/4 82/15
interpreted [3] 104/20 113/7 158/17
interpreting [1] 158/14
interrupt [2] 73/15 157/4
intervening [4] 18/16 117/3 117/25 163/16
interview [1] 83/7
intrinsic [18] 55/10 68/12 70/14 72/5 72/13 74/7 77/20 97/25 102/7 102/9 104/13 106/5 107/4 108/10 109/4 109/10 109/24 137/13
introduces [1] 50/23
introduction [1] 106/24
invention [2] 36/11 136/20
inventor [2] 24/10 95/17
involved [1] 103/24
involves [2] 73/3 187/15
iris [1] 66/15
irradiate [1] 176/1
irreconcilable [2] 69/2 127/1
is [721]
isn't [6] 24/16 79/20 84/8 154/6 155/3 186/12
issue [26] 4/13 29/8 31/25 46/14 48/16 68/17 75/24 100/13 100/15 100/16 112/23 166/2 166/4 168/19 168/25 169/3 169/4 172/5 172/7 186/24 194/24 197/14 198/9 201/12 201/23 205/24
issued [1] 206/4
issues [10] 32/2 90/6 168/21 197/3 197/8 198/2 202/17 202/20 205/13 205/23
it [528]
it's [271]
item [1] 32/21
its [14] 21/7 34/10 91/19 91/23 96/16 103/1 124/4 129/7 139/21 167/1 181/6 198/15 198/24 199/8
itself [18] 4/24 41/22 62/10 75/5 106/21 123/19 128/6 133/3 133/19 140/3 144/9 145/11 164/18 184/22 185/3 186/25 190/3 195/7

J

jeepers [1] 41/9
Jeff [1] 28/11
JEFFREY [2] 2/4 3/6
JEREMY [2] 2/9 3/9
job [2] 48/13 110/15
Joe [1] 51/23
joined [1] 3/10
joint [5] 6/17 30/16 30/17 41/20 55/9
judge [15] 1/15 7/24 11/13 15/9 15/14 28/11 38/11 155/23 165/18 169/1 193/13 195/25 201/13 204/2 207/5
Judge Tennyson [1] 201/13
Judge Tennyson's [1] 207/5
judgment [7] 90/24 91/5 197/22 199/2 199/13 203/8 203/12
judicial [1] 204/5
jump [1] 181/13
juncture [3] 153/4 154/14 164/3
jury [9] 50/21 50/25 57/22 57/25 64/10 91/21 91/24 191/14 191/24
just [221]

K

KAHN [1] 2/3
keep [3] 4/8 63/19 171/19
keeping [1] 133/8
key [1] 41/12
Khan [8] 3/6 26/5 120/24 155/13 157/6 158/15 159/16 197/24
Khan's [2] 162/9 198/22
kidding [1] 47/12
kind [17] 11/6 24/10 43/10 50/1 51/23 60/18 63/20 71/5 75/19 80/24 88/12 91/11 95/16 161/15 168/7 186/17 203/9
kinds [1] 51/18
King [1] 1/13
KNIGHT [3] 2/14 3/13 31/19
know [89] 3/16 10/21 21/7 26/20 26/22 27/1 27/1 28/5 28/6 34/1 34/14 35/25 38/10 41/1 42/19 42/20 44/21 49/14 49/19 49/24 50/14 50/21 51/25 52/5 52/22 55/24 58/10 61/24 62/20 63/3 63/12 66/8 66/18 67/10 70/19 71/25 75/5 76/6 76/9 76/14 77/8 81/8 81/21 82/14 88/4 90/14 91/22 93/18 107/22 117/6 117/11 120/17 121/7 127/2 138/3 139/17 144/7 144/25 145/25 161/16 168/13 171/5 171/22 171/25 172/4 174/1 174/2 178/11 178/13 180/2 186/5 186/22 194/10 195/14 195/15 195/15 195/19 196/5 200/12 201/6 201/19 201/19 201/25 202/5 203/6 204/15 205/10 205/23 207/6
knowledge [1] 188/22
known [5] 61/20 65/6 68/22 69/13 145/10
knows [4] 91/24 136/2 185/1 202/3

L

L [1] 1/20
labeled [4] 10/5 10/5 132/3 132/16
labeling [1] 24/16
labels [2] 19/9 164/20
laid [2] 38/8 129/4
language [54] 4/22 14/21 14/23 15/1 15/4 15/7 20/23 25/21 25/25 26/9 38/10 39/7 59/19 59/20 59/23 60/1 71/4 94/20 101/1 105/15 106/24 107/11 111/2 114/8 131/10 131/17 144/1 144/5 145/18 148/6 151/21 158/19 162/6 164/1 164/18 167/6 167/7 167/19 168/7 168/11 168/17 169/9 169/10 170/14 170/24 173/8 173/15 174/7 177/14 181/21 190/19 192/7 194/9 194/18
laser [3] 174/16 175/20 185/9
last [29] 4/17 5/18 6/7 9/6 10/12 14/15 23/21 27/24 38/9 39/19 39/20 41/3 63/13 63/16 64/7 76/6 76/7 76/8 82/23 85/3 97/24 113/23 127/18 152/14 167/8 195/12 195/22 198/10 202/1
later [6] 30/25 33/18 62/18 73/3 150/13 151/11
law [19] 24/2 24/8 35/23 37/14 38/4 95/18 102/4 102/5 103/19 104/5 104/6 113/4 113/10 123/20 135/25 136/3 136/3 177/19 186/20
lawyers [3] 4/3 201/6 201/9
lay [1] 34/25
layman [1] 42/15
layperson [1] 27/1
LAYTON [2] 1/19 3/3
leads [1] 140/3
least [11] 17/3 45/16 45/21 50/3 54/22 59/8 77/6 89/20 89/24 114/19 174/12
leave [7] 27/17 46/22 47/2 47/16 79/21 92/16 133/17
leaves [1] 88/1
leaving [3] 183/6 188/18 193/1
left [7] 24/22 48/9 63/15 87/20 137/7 165/2 165/4
legal [2] 34/24 36/4
lens [93] 9/6 13/11 13/14 25/2 27/18 27/19 27/23 28/7 28/14 28/15 28/20 28/22 29/2 31/20 41/10 41/17 43/1 43/2 43/7 43/9 43/10 43/13 43/15 43/23 43/25 43/25 44/9 44/15 45/15

L

lens... [64] 65/3 65/15 65/16 66/4 66/15 72/24 73/1 73/5 80/13 80/15 80/17 83/12 84/2 84/4 84/5 99/17 104/24 105/1 105/1 108/19 124/21 124/25 125/10 125/15 125/17 125/20 125/21 125/22 131/3 131/6 131/18 131/19 131/22 133/22 134/8 134/13 134/19 134/24 135/10 135/17 137/24 138/11 138/12 138/19 138/20 139/24 140/1 140/14 140/15 141/3 145/15 145/16 148/19 148/21 149/3 149/5 149/6 149/12 149/13 149/18 149/20 164/2 202/8 202/10
lense [2] 135/8 149/4
lense 905 [1] 149/4
lenses [14] 28/18 29/6 29/21 29/23 32/5 33/25 34/3 34/11 34/19 67/2 67/5 67/13 126/2 129/17
less [1] 38/11
let [23] 44/1 51/22 52/2 52/11 78/13 78/17 82/16 82/19 97/1 106/2 117/11 130/11 138/1 146/5 169/5 169/9 175/4 186/2 186/22 189/1 192/22 201/21 201/24
let's [49] 14/16 27/15 27/15 27/18 31/14 33/23 34/21 45/3 45/4 47/20 49/4 49/11 52/3 61/8 70/8 72/7 79/25 92/9 96/17 98/18 99/24 99/25 104/9 104/12 104/14 110/18 113/9 113/20 115/2 118/13 118/19 121/5 133/17 133/18 137/11 148/10 151/24 151/24 156/7 157/17 158/21 165/11 168/20 168/23 181/18 183/22 189/3 198/7 198/8
Lets [1] 72/7
letter [1] 136/3
level [2] 193/4 194/6
levels [1] 193/18
Levy [1] 3/7
Liberty [2] 66/13 66/14
light [218]
lights [1] 185/11
like [69] 3/19 5/7 6/6 10/14 12/25 22/4 24/7 26/13 41/8 47/12 50/16 51/24 56/8 60/17 60/18 60/21 60/22 62/19 62/20 63/3 63/4 64/9 65/8 65/23 65/25 68/15 77/17 81/4 89/18 92/5 92/6 92/19 95/17 98/15 100/18 100/20 102/5 102/22 104/2 115/22 133/23 156/21 161/20 164/10 164/11 164/18 164/23 166/3 166/4 169/13 170/17 172/1 174/1 176/12 176/13 178/21 181/11 182/20 186/15 188/22 192/1 192/12 196/8 196/15 197/23 197/23 201/10 205/24 206/24
Likewise [1] 65/18
limit [5] 55/6 58/6 85/6 85/11 85/12
limitation [8] 38/15 89/11 103/12 103/21 106/4 106/10 106/22 107/13
limitations [1] 21/2
limited [10] 14/3 14/6 88/21 94/5 104/10 157/10 186/4 191/22 196/6 199/4
limiting [1] 161/5
line [5] 5/20 79/2 79/10 107/12 156/7
Line 57 [1] 79/2
Line 67 [1] 79/10
lined [1] 11/17
lines [8] 3/22 13/5 60/8 77/3 135/19 148/22 166/18 189/5
Lines 20 [1] 135/19
Lines 22 [2] 148/22 166/18
Lines 25 [2] 60/8 77/3
Lines 39 [1] 13/5
Lines 43 [1] 189/5
linked [2] 195/2 195/3
linking [6] 165/25 166/4 167/6 168/19 168/25 169/4
links [1] 167/8
list [1] 115/8
listed [1] 157/12
listen [1] 205/17
listening [1] 112/24
literally [3] 14/11 47/13 191/24
litigate [1] 90/24
little [5] 67/24 107/2 155/11 165/24 186/18
live [11] 32/4 33/19 43/14 43/20 43/22 43/24 62/15 63/9 63/11 64/1 192/6
living [1] 156/20
LLP [1] 2/13
located [4] 8/19 8/21 9/22 9/25
location [1] 108/15
locations [1] 189/13
logic [1] 40/18
long [3] 33/16 62/17 165/1
longer [1] 4/13
longstanding [1] 35/2
look [34] 3/21 6/22 8/14 14/9 26/11 28/25 32/19 53/5 53/6 60/17 60/18 60/21 60/22 62/19 62/20 65/12 65/18 76/16 89/3 90/21 95/19 100/20 100/24 104/14 111/2 136/9 156/18 161/14 162/20 162/21 162/22 170/20 183/16 184/16
looked [8] 33/2 64/7 72/17 95/17 97/24 126/19 164/22 183/24
looking [11] 65/25 68/24 87/25 104/4 107/8 111/13 143/5 147/23 183/25 185/13 187/23
looks [3] 65/8 183/23 191/25
loop [2] 149/22 186/18
losing [1] 9/8
loss [1] 182/9
lost [1] 16/16
lot [12] 24/11 66/8 66/9 71/22 102/8 135/25 136/2 197/16 202/16 202/17 204/5 206/6
loud [2] 63/17 63/19
Love [1] 92/20
lower [1] 65/12
lunch [1] 137/1

M

machine [4] 63/6 68/13 104/2 176/14
machines [1] 178/7
made [9] 5/19 48/18 85/5 91/7 109/18 175/19 175/22 178/10 198/22
magnification [2] 66/4 88/12
magnified [10] 66/3 80/12 83/9 83/17 83/18 84/16 84/20 84/20 99/14 134/8
magnify [3] 84/3 84/4 84/6
magnifying [1] 141/21
magnitude [2] 51/16 60/25
main [1] 162/17
make [48] 10/3 14/10 20/1 20/9 20/17 26/10 26/16 26/18 29/18 37/1 38/3 39/25 40/16 42/16 69/9 69/15 69/17 71/18 75/13 83/21 85/4 87/3 88/13 88/14 88/24 89/7 90/1 96/5 100/24 102/14 110/23 111/9 115/10 116/18 131/15 163/19 163/21 163/23 166/23 169/16 169/21 172/25 183/19 183/21 203/8 205/10 206/6 207/1
makes [14] 24/9 34/14 44/24 46/17 50/24 71/9 75/7 98/25 107/23 147/20 150/5 194/25 201/21 203/9
making [1] 203/11
Man [1] 92/21
manage [1] 90/4
manageable [2] 200/25 201/2
management [1] 48/16
mandate [1] 164/19
manner [1] 56/7
many [7] 54/14 81/16 196/23 199/9 199/21 199/22 201/19
map [7] 22/11 23/19 23/24 99/6 133/13 136/10 153/6
mapping [2] 99/9 99/12
Markman [10] 1/11 171/6 174/19 197/18 200/10 200/13 201/14 203/15 203/20 204/4
masterful [1] 153/19
matter [13] 34/3 37/14 40/18 48/23 56/2 56/15 81/19 113/6 113/10 153/5 153/23 154/2 195/21
matters [1] 34/4
may [31] 9/11 18/17 22/2 30/9 36/22 39/18 48/12 53/7 58/7 60/18 80/12 102/20 135/20 166/20 167/12 167/19 167/20 168/12 168/13 168/17 174/7 189/14 194/11 194/15 194/16 194/17 198/7 204/20 206/8 206/9 206/15
maybe [22] 5/19 16/22 17/19 18/6 32/11 33/24 38/11 54/9 57/23 59/2 59/13 80/7 90/3 90/4 92/5 100/22 166/1 186/23 197/6 198/14 198/15 206/1
MCGUFFIN [2] 2/4 3/6
me [131] 3/4 3/18 6/19 7/7 14/12 14/13 15/11 16/17 34/2 38/3 42/5 42/16 42/21 44/1 44/20 46/9 46/18 46/22 47/12 47/22 48/3 49/18 50/1 51/22 51/23 52/2 52/11 57/14 57/23 58/8 62/23 63/20 64/14 64/16 70/11 71/4 71/7 71/22 73/24 74/7 76/18 77/20 78/13 78/17 79/12 80/2 81/21 82/16 82/19 82/22 84/12 88/13 88/19 88/21 88/22 91/16 95/17 96/23 97/1 98/15 100/18 103/16 106/2 106/15 107/5 107/19 108/4 108/23 109/3 109/4 109/4 109/24 110/12 110/16 111/19 116/21 117/11 118/4 127/8 127/12 127/24 128/10 130/11 137/21 138/1 143/10 144/16 144/17 146/5 147/24 148/1 148/10 149/21 150/19 152/16 157/6 157/10 157/18 159/23 164/12 164/23 165/1 168/23 169/5 169/9 171/24 172/3 175/4 177/8 178/11 178/21 179/11 180/6 180/25 181/11 182/20 185/20 186/2 186/17 186/22 187/17 189/1 192/16 192/22 195/23 197/8 197/10 198/16 199/14 201/24 202/22
meager [1] 32/2
mean [47] 5/7 12/18 14/9 16/17 24/6 26/25 36/9 44/12 44/22 46/20 49/12 50/16 52/21 57/15 57/19 59/18 63/2 63/3 64/6 64/8 64/10 71/4 81/16 82/14 83/25 83/25 84/3 89/18 92/23 102/21 115/19 125/5 143/1 144/1 145/17 145/25 162/23 168/10 173/23 173/24 192/21 195/14 195/15 196/14 199/1 202/18 204/15
meaning [15] 5/21 7/25 21/14 34/11 34/18 89/1 89/6 89/24 91/20 91/23 107/25 113/11 113/15 113/21 113/21
means [34] 15/15 28/15 28/15 35/20 39/21 40/2 40/3 40/13 40/15 40/18 40/20 41/7 43/17 45/6 45/9 47/5 50/15 91/22 91/24 102/23 106/7 165/3 165/9 172/9 172/10

M

means... [9] 173/2 174/3 174/11 183/15 186/5 186/6 191/23 194/17 202/3
means-plus-function [23] 35/20 39/21 40/2 40/3 40/13 40/15 40/18 40/20 41/7 43/17 45/6 45/9 47/5 102/23 165/3 165/9 172/9 172/10 173/2 183/15 186/5 186/6 191/23
meant [4] 14/18 33/8 98/23 100/4
measure [1] 174/25
measurement [1] 202/13
measures [1] 196/16
mechanism [1] 91/12
meet [2] 146/3 206/20
memorized [1] 188/6
memory [2] 90/19 90/20
mentally [1] 144/25
mention [1] 29/12
mentioned [3] 62/7 69/10 110/13
Mentor [1] 136/4
merely [3] 10/20 108/16 182/2
merits [1] 199/13
metal [1] 176/11
Micro [1] 7/12
microscope [14] 44/25 70/6 175/11 176/23 184/18 184/21 185/3 185/13 188/8 188/16 189/10 193/19 193/20 193/23
middle [5] 9/2 10/7 65/16 175/5 175/6
might [25] 16/21 51/17 51/21 52/6 54/19 62/8 67/6 67/6 72/5 76/10 81/19 81/23 84/5 90/18 90/21 91/10 122/3 172/18 172/19 178/6 178/10 197/21 198/21 203/12 205/14
Mike [1] 3/7
mind [4] 4/8 133/8 152/16 206/3
minded [1] 206/1
minimal [1] 88/10
minute [3] 72/8 102/20 197/10
minutes [2] 137/2 196/9
mirror [86] 4/25 6/23 7/19 7/21 7/23 14/19 14/20 14/21 14/22 14/24 15/2 15/4 15/17 15/17 15/18 15/20 16/6 16/8 16/10 16/13 17/2 17/6 17/7 17/24 18/1 18/2 18/4 18/11 18/11 18/13 18/14 18/20 19/4 19/5 19/14 19/21 19/23 19/24 20/4 20/12 20/20 21/4 21/18 24/13 25/5 25/5 25/23 26/7 26/21 26/23 27/14 41/10 41/17 42/6 42/16 44/8 44/14 44/24 93/9 101/14 101/18 101/24 104/25 109/21 118/18 135/9 138/7 147/2 156/3 183/18 183/20 184/8 184/14 184/19 184/23 185/18 187/10 187/15 188/9 189/15 189/17 190/9 190/14 190/20 194/16 195/5
mirrors [10] 15/18 17/11 18/17 19/7 19/10 19/12 20/7 24/16 24/18 45/2
misinterpret [1] 199/7
mislead [1] 108/1
misleading [1] 108/5
misquote [1] 102/15
misread [1] 159/5
missing [6] 83/4 83/14 166/8 172/1 178/6 191/7
misspoke [1] 110/21
mistaken [2] 99/2 204/20
modern [1] 76/12
modified [1] 50/3
moment [2] 33/13 74/11
money [2] 4/7 81/9
month [1] 203/3
mooted [2] 198/9 198/13
more [20] 25/13 27/4 33/2 46/17 64/20 74/25 92/25 105/19 125/9 165/3 166/17 166/19 168/1 175/14 177/6 195/6 199/9 200/22 200/25 201/1
morning [7] 2/25 3/2 3/9 21/24 22/1 28/11 31/18
morphology [3] 175/2 179/13 179/20
MORRIS [3] 2/9 3/10 90/16
most [5] 69/20 139/13 139/15 162/19 190/19
motion [8] 90/5 90/25 91/5 108/13 197/22 197/25 198/11 199/10
motions [4] 197/7 199/2 203/8 206/4
move [9] 14/14 48/10 118/13 161/15 163/24 173/7 199/15 204/6 206/22
moving [3] 67/21 202/10 203/4
MPEP [4] 112/12 113/2 113/3 126/11
Mr [2] 26/5 120/24
Mr. [27] 17/22 41/1 43/8 90/20 97/21 110/14 120/7 147/22 155/13 156/18 157/6 157/17 158/15 159/16 161/13 161/23 162/9 164/10 164/16 164/22 192/16 193/25 194/14 195/11 197/24 198/22 207/8
Mr. Chen [19] 17/22 41/1 43/8 97/21 110/14 120/7 147/22 156/18 157/17 161/13 161/23 164/10 164/16 164/22 192/16 193/25 194/14 195/11 207/8
Mr. Khan [5] 155/13 157/6 158/15 159/16 197/24
Mr. Khan's [1] 162/9
Mr. Khan's made [1] 198/22
Mr. Tigan [1] 90/20
Ms. [2] 3/1 103/17
Ms. Flanagan [1] 103/17
Ms. Hayes [1] 3/1
much [12] 14/7 33/21 41/13 46/17 67/14 89/20 89/21 151/11 180/25 195/23 200/25 207/13
multi [1] 26/20
multi-detector [1] 26/20
multiple [7] 3/22 55/18 91/24 177/20 187/10 189/22 200/7
must [6] 28/18 49/7 49/9 54/21 144/18 163/14
my [49] 3/4 3/11 4/2 18/21 21/15 32/15 40/9 40/10 41/3 41/3 51/25 52/1 52/2 61/11 63/15 67/5 67/7 68/16 69/9 72/4 77/13 81/21 81/22 85/4 86/15 88/21 88/21 90/17 91/1 93/5 110/23 113/25 126/14 147/10 155/22 166/7 179/10 180/5 186/4 195/16 196/6 196/10 196/21 204/2 204/16 205/23 206/3 206/5 207/21
myself [3] 67/13 116/20 138/5

N

N [1] 2/21
nail [1] 77/14
name [1] 63/12
narrow [9] 41/13 197/17 197/20 198/15 200/18 204/8 205/11 207/3 207/4
narrowed [2] 41/15 198/18
narrower [4] 36/7 173/23 174/15 180/25
narrowing [6] 198/9 200/22 201/18 202/24 207/9 207/10
narrowly [1] 171/17
natural [1] 117/19
nature [1] 180/5
near [10] 8/23 9/25 104/24 105/1 134/8 135/7 135/10 149/3 189/14 189/19
necessarily [8] 21/8 35/8 40/2 49/25 58/13 60/17 147/20 149/8
necessary [1] 34/2
need [25] 16/23 26/21 28/21 28/22 53/15 63/4 64/13 81/17 84/4 84/5 118/7 161/25 174/22 177/16 183/19 183/20 184/23 185/1 185/18 190/20 190/23 191/12 202/19 202/25 204/6
needed [1] 201/23
needing [1] 197/8
needs [2] 134/5 195/1
negate [2] 144/1 158/19
negates [1] 144/4
negating [1] 145/18
neither [2] 154/5 205/5
never [17] 15/19 49/17 56/6 60/12 71/21 82/7 92/13 107/24 112/22 126/17 129/16 129/17 131/3 132/6 138/8 138/10 138/12
new [1] 203/3
next [26] 7/3 7/4 7/5 17/10 24/14 27/15 27/16 27/17 27/18 34/21 49/4 62/12 91/15 93/2 135/1 135/5 142/13 142/13 145/14 148/21 163/5 165/1 171/8 171/15 181/9 196/14
nice [1] 3/16
NICHOLS [3] 2/9 3/10 90/16
night [1] 64/7
no [104] 1/4 3/23 4/13 5/6 5/13 6/5 11/18 13/16 13/16 13/16 18/10 19/17 23/20 27/21 29/15 30/11 34/2 36/1 36/20 36/22 36/24 40/21 43/16 49/23 52/17 52/17 55/10 55/21 55/21 55/22 59/22 63/10 64/5 66/25 69/22 69/23 71/9 71/15 73/19 75/7 76/3 79/23 80/16 81/14 81/14 85/22 86/16 87/5 87/7 87/12 93/6 94/24 97/12 100/11 100/16 102/24 103/8 110/10 110/10 110/22 112/17 113/19 115/14 117/3 117/6 117/25 121/2 128/8 128/10 131/13 131/13 132/22 136/11 136/24 146/1 153/16 153/16 153/19 157/20 157/21 159/10 159/24 160/23 163/23 163/23 171/13 175/7 177/13 178/11 180/8 180/9 181/20 183/8 183/11 187/6 188/12 188/12 188/12 191/21 199/13 202/3 202/12 202/13 202/13
non [5] 10/6 10/10 57/10 59/14 69/5
non-imaging [1] 69/5
non-infringement [1] 59/14
non-pictorial [1] 57/10
non-sequentially [2] 10/6 10/10
nonasserted [2] 152/13 170/25
nonce [2] 173/3 173/4
nondigital [1] 58/21
none [4] 87/2 133/13 156/25 157/3
nonexistent [1] 19/12
nonsensical [1] 71/23
nonsequential [15] 11/22 12/7 12/7 100/10 103/8 109/5 124/17 125/7 125/8 126/2 126/4 139/16 140/4 140/6 141/16
nonsequitur [1] 70/12
norm [1] 186/5
normative [1] 89/5
not [256]
note [4] 30/3 55/9 56/3 60/13
noted [1] 54/15
notes [1] 207/21
nothing [6] 36/1 82/8 85/18 113/20 184/20 202/14
notice [1] 75/24
noting [2] 15/7 52/12
notion [2] 18/19 124/5

N

November [1] 206/24
now [76] 4/10 7/12 7/14 11/23 18/23 22/16 24/21 26/4 30/20 32/22 40/13 40/22 41/24 47/13 48/10 53/4 59/11 63/25 66/8 66/18 67/7 73/3 77/18 78/19 82/12 84/14 84/16 87/9 92/5 96/17 96/18 97/6 103/15 110/13 111/21 114/17 119/11 120/3 121/24 122/19 123/8 123/11 125/10 125/13 127/8 140/24 144/16 149/14 150/17 151/18 157/10 160/15 161/20 167/15 171/15 171/16 171/24 171/25 172/17 175/16 176/9 177/10 178/5 180/12 182/1 182/17 184/3 197/2 197/14 199/17 199/21 200/2 202/22 205/9 205/11 206/1
number [7] 13/16 45/22 57/2 138/3 138/18 164/14 164/15
Number 1 [1] 164/14
Number 2 [2] 45/22 164/15
numbered [2] 129/1 129/2
numbering [2] 112/13 126/10
numbers [1] 32/21
numeric [1] 148/18
numerical [3] 112/11 140/7 140/13
nutshell [1] 102/2

O

O [1] 2/21
object [43] 10/13 34/17 49/9 51/7 51/8 51/14 51/21 52/13 53/14 53/20 53/24 55/16 55/25 56/4 60/18 61/18 61/25 62/4 62/5 62/19 62/20 64/25 65/9 65/12 65/13 65/19 65/21 65/24 66/14 67/8 68/4 69/3 75/17 83/20 84/7 84/8 84/9 84/17 89/15 89/16 90/12 99/15 134/8
objecting [1] 67/9
objections [1] 89/19
objective [23] 44/24 44/25 70/6 72/24 73/1 84/11 171/11 175/11 176/23 184/18 184/21 185/3 185/13 185/15 185/16 185/16 188/8 188/16 189/11 193/19 193/20 193/23 195/7
objects [1] 185/11
obviously [1] 7/12
occur [2] 54/19 60/7
occurring [1] 190/23
occurs [1] 13/19
off [14] 42/22 52/21 66/13 112/3 123/7 134/6 137/7 145/8 154/8 154/10 154/13 164/3 171/24 184/22
offer [1] 193/13
offered [2] 6/5 90/23
office [1] 3/4
Official [1] 207/24
often [1] 168/17
oh [22] 13/17 26/24 76/22 104/6 109/13 128/12 128/12 135/21 149/9 152/20 152/23 153/1 157/12 158/15 159/4 160/6 162/12 163/23 175/7 175/23 182/9 186/13
okay [154] 5/10 5/24 6/4 7/17 13/18 14/5 15/13 16/23 16/25 17/8 18/8 18/22 19/8 19/13 20/8 20/22 23/1 23/15 24/1 25/16 26/19 30/1 30/19 33/20 34/17 34/19 35/1 36/5 36/17 37/5 39/4 39/25 46/8 47/1 47/7 48/5 48/11 49/2 50/6 50/9 51/24 61/5 70/8 70/14 77/11 78/1 78/8 79/18 81/1 85/25 88/6 91/13 92/9 93/6 98/18 102/19 105/5 105/14 105/18 105/23 107/1 107/17 110/11 111/8 111/13 112/7 112/24 113/22 115/7 115/21 116/17 116/25 117/3 120/1 120/24 121/6 121/19 122/11 127/24 128/18 128/21 129/25 131/20 132/1 132/13 132/20 133/4 133/25 135/6 139/10 141/2 143/18 143/22 144/4 144/5 146/13 148/11 148/15 149/1 149/21 150/15 150/22 153/18 154/15 155/5 155/20 156/22 157/16 158/14 159/12 160/2 160/14 160/25 161/9 161/23 162/2 162/15 163/3 163/22 163/25 164/5 165/11 165/17 166/6 166/11 169/5 169/7 170/6 170/8 170/11 172/1 173/12 175/12 176/9 177/10 180/1 180/10 180/16 180/19 180/20 181/8 181/18 182/8 182/22 184/1 188/24 189/8 190/2 196/12 198/7 200/14 203/23 207/12 207/13
OMAR [2] 2/3 3/6
omit [4] 30/9 106/23 106/24 145/1
omitted [1] 166/22
once [6] 38/20 41/12 41/21 50/3 205/11 207/3
one [93] 8/21 9/22 13/11 21/5 26/17 26/17 26/17 26/18 26/24 29/4 31/6 32/2 33/13 38/13 42/20 44/22 45/20 47/23 48/4 48/7 48/9 49/3 51/10 53/1 53/2 55/18 57/13 60/20 61/13 65/10 65/14 65/15 65/22 68/5 68/9 69/2 74/11 75/13 75/16 76/6 76/7 76/7 77/12 79/9 86/8 87/17 90/24 95/23 104/2 105/19 108/7 108/7 110/19 115/23 115/23 118/17 122/9 124/10 124/22 132/23 138/17 140/12 146/24 152/23 152/23 153/5 153/17 154/11 154/18 158/3 158/4 158/4 158/4 158/9 158/10 163/19 164/23 164/24 165/13 165/14 165/18 166/17 166/19 167/25 176/19 179/8 181/22 185/10 188/11 189/21 195/13 202/3 202/5
one's [1] 65/16
ones [1] 78/5
only [48] 10/4 18/3 28/22 30/21 32/11 32/12 39/1 48/9 53/15 55/22 63/14 84/1 95/18 95/23 98/24 100/9 100/14 113/12 117/22 127/9 130/25 132/23 136/1 137/13 138/17 140/12 140/20 146/6 146/14 148/18 149/25 152/12 155/14 158/13 159/17 159/17 165/2 169/2 182/8 183/13 195/3 195/10 195/18 195/23 204/2 204/19 204/25 205/2
onwards [1] 189/7
open [2] 201/18 206/1
open-minded [1] 206/1
opined [1] 126/17
opinion [1] 91/1
opportunity [2] 90/24 110/16
opposed [4] 43/25 63/6 174/1 187/23
opposite [9] 55/3 59/24 94/18 96/20 109/7 110/2 125/18 139/3 144/2
optical [302]
optics [16] 16/23 52/6 52/8 52/9 52/23 53/13 56/19 60/16 61/11 61/12 61/22 65/6 68/10 69/4 70/25 88/10
option [1] 46/21
optional [4] 167/19 168/7 168/11 194/9
order [25] 4/3 9/3 11/2 20/6 89/6 93/10 93/20 97/10 97/16 106/8 112/2 112/6 113/13 114/13 126/4 144/14 169/1 174/21 183/19 183/20 184/24 200/10 200/12 207/5 207/6
ordered [2] 11/9 11/16
ordering [3] 106/5 106/10 112/11
ordinary [16] 5/21 7/25 26/22 26/25 34/10 34/18 53/19 68/23 68/24 89/1 89/4 89/6 89/24 91/19 91/23 202/19
orient [1] 75/9
orientation [1] 65/23
original [42] 23/23 24/3 24/8 27/5 27/24 31/21 41/19 83/19 94/24 94/25 95/4 95/6 95/12 98/1 98/19 99/11 102/17 104/20 104/21 104/22 105/10 105/11 116/8 120/13 120/13 120/14 126/6 133/15 133/17 135/24 136/9 136/10 136/20 136/20 148/2 150/5 150/8 150/21 150/23 184/16 184/20 189/3
originally [1] 171/10
other [99] 5/7 6/12 8/23 10/1 10/14 11/17 14/22 15/1 15/3 15/17 15/21 17/24 18/3 19/17 22/14 31/15 38/12 38/19 39/8 40/7 41/9 43/13 44/14 44/17 44/18 46/1 47/15 52/6 53/16 53/16 57/15 58/22 60/3 60/13 61/9 62/18 77/2 77/12 77/17 77/21 79/21 82/9 82/18 83/15 85/4 85/20 86/8 93/13 94/19 95/15 104/1 105/22 108/25 109/19 109/23 113/25 114/3 114/4 114/7 116/4 116/5 116/11 117/10 121/17 122/24 126/1 128/13 129/11 129/12 136/22 146/8 149/14 153/17 154/5 154/12 154/18 155/15 155/21 158/25 159/7 159/8 159/14 160/14 161/1 161/4 163/25 170/20 173/23 174/6 177/24 178/2 181/20 185/10 188/10 190/17 190/24 198/4 199/1 205/19
otherwise [4] 81/24 83/25 107/4 108/11
ought [4] 198/14 198/14 199/16 204/14
our [44] 3/5 3/7 3/14 4/16 5/5 5/11 25/22 28/13 29/1 30/3 31/24 32/1 36/8 46/4 46/5 46/7 49/14 50/16 66/20 72/17 83/5 83/5 86/17 98/1 98/4 98/25 119/3 120/15 133/14 141/15 142/16 145/19 146/19 148/7 162/13 171/4 185/7 187/6 188/5 189/2 189/3 190/11 203/6 204/4
ourselves [1] 161/5
out [57] 9/3 11/20 16/24 19/23 21/16 22/5 22/16 23/5 23/21 23/22 30/1 34/25 36/10 36/19 38/8 38/13 44/6 51/13 51/17 57/6 60/21 61/1 63/19 64/13 64/15 68/16 71/25 76/11 78/13 79/14 81/9 81/20 84/14 100/19 104/3 116/7 116/9 121/2 123/20 127/5 129/5 133/18 141/20 145/19 148/13 151/18 151/20 175/19 175/22 178/10 193/16 195/15 196/7 199/19 203/3 204/6 204/15
outcome [3] 36/8 127/7 132/23
outlined [1] 91/1
outstanding [2] 204/17 204/20
over [14] 9/11 12/5 45/3 52/15 77/25 80/20 81/2 131/11 159/15 186/6 186/7 193/17 200/3 200/6
overview [1] 167/24
own [5] 56/5 56/16

O

own... [3] 64/1 167/1 202/7
Oxford [1] 53/4

P

P [5] 2/21 56/20 56/24 56/24 56/24
p.m [1] 207/15
Pack [1] 51/23
Packaging [1] 136/1
Page [10] 3/20 4/1 5/5 6/17 6/22 30/18 48/18 73/4 106/17 166/8
Page 10 [3] 6/17 6/22 73/4
Page 11 [1] 5/5
Page 114 [1] 30/18
Page 1371 [1] 106/17
Page 28 [4] 3/20 4/1 48/18 166/8
pages [2] 46/7 47/13
Pages 22 [1] 46/7
paint [1] 64/12
painted [1] 64/9
paragraph [1] 3/21
parallel [1] 73/21
parent [3] 23/23 95/13 104/21
part [24] 7/22 10/22 24/4 27/23 28/6 46/13 88/9 91/25 92/3 94/23 95/7 95/8 95/9 98/19 110/5 133/24 135/24 138/2 148/18 150/23 176/14 176/15 192/12 199/25
partial [1] 199/2
particle [5] 169/11 179/17 183/5 188/17 192/25
particles [3] 175/1 175/3 179/14
particular [10] 22/12 51/6 60/6 65/11 68/24 72/20 76/4 80/24 118/1 179/1
particularly [3] 41/8 127/7 178/5
parties [6] 28/16 30/24 53/21 92/23 183/3 197/17
parties' [1] 54/2
parts [1] 190/4
party [2] 36/19 47/15
pass [8] 26/2 28/19 51/7 51/11 134/18 189/15 189/17 189/18
passage [20] 8/10 8/14 8/19 8/24 9/14 10/3 10/10 10/16 11/2 11/7 12/8 12/12 12/23 13/4 13/25 22/7 24/15 35/7 134/4 192/16
passages [3] 190/24 194/13 194/15
passed [4] 15/2 18/19 114/3 114/4
passes [2] 75/6 75/20
passing [1] 32/12
past [1] 120/17
patch [1] 56/23
patent [79] 3/23 4/20 4/22 4/24 7/22 9/15 9/16 11/22 11/24 18/25 20/19 21/11 23/23 25/18 27/6 29/11 32/8 38/4 44/23 45/5 45/12 48/22 58/17 69/1 70/16 71/7 72/16 75/22 77/3 78/20 80/20 88/20 89/2 89/9 91/8 94/21 94/23 94/25 95/1 95/5 95/9 95/10 95/12 95/13 95/13 95/23 96/6 103/19 113/7 114/17 114/22 116/5 119/10 121/10 136/12 139/6 146/7 146/22 155/15 159/20 160/13 160/16 160/17 160/22 161/4 161/21 170/21 171/20 171/23 172/17 180/18 180/24 182/7 184/13 184/17 186/16 191/3 191/24 205/24
patent's [1] 71/8
patentably [2] 36/13 36/16
patentee [4] 37/17 37/21 38/5 98/23
patents [13] 71/23 78/22 81/16 89/8 105/22 113/3 136/21 198/6 200/3 200/4 200/5 200/6 201/16
path [14] 8/12 11/9 39/13 39/13 103/25 112/2 114/15 121/22 124/14 124/16 134/12 134/12 134/15 154/7
pattern [3] 103/24 103/24 107/22
pattern' [2] 106/20 106/20
pause [1] 191/19
people [3] 48/23 81/17 81/21
per [2] 92/22 207/4
perfect [4] 56/7 56/21 57/1 69/20
perform [9] 44/10 171/12 179/8 179/19 184/24 185/4 187/11 187/20 193/24
performing [5] 185/2 187/1 195/2 195/4 195/8
performs [5] 45/18 171/14 183/17 186/10 190/20
perhaps [5] 16/13 25/12 165/23 196/24 197/19
period [1] 161/2
permission [1] 166/1
permit [1] 186/20
person [8] 26/21 26/25 53/19 68/23 68/23 173/24 174/2 202/19
perspective [1] 203/6
persuade [1] 164/12
persuaded [2] 34/12 148/10
persuasive [3] 38/12 142/21 142/23
phenomenon [1] 70/23
Phillips [3] 103/1 117/21 162/21
phrase [2] 70/9 158/22
physically [1] 152/24
physics [2] 53/4 56/2
Picasso [1] 153/21
pick [3] 107/3 107/17 137/2
picking [1] 165/14
pictorial [25] 49/7 49/12 49/12 49/15 49/19 50/3 50/13 50/14 50/17 50/22 54/3 57/10 57/14 58/2 58/14 58/14 58/19 61/25 62/2 62/9 64/4 64/6 64/7 64/20 76/9
picture [8] 50/17 57/15 57/15 60/14 60/21 64/9 64/9 101/9
piece [2] 105/7 105/20
pieces [3] 61/14 65/10 121/11
pinpoint [4] 4/4 4/5 40/8 48/24
pivot [1] 108/16
PIVOVAR [2] 2/14 3/13
place [9] 52/16 69/23 80/20 81/2 92/12 129/8 188/7 189/4 189/21
places [4] 188/6 188/10 189/1 189/22
plain [8] 5/21 7/25 34/10 34/18 89/1 89/23 91/19 91/23
plaintiff [12] 1/4 2/6 3/4 34/13 64/13 76/21 118/5 137/15 163/7 198/15 205/15 206/16
plaintiff's [4] 3/20 22/5 89/14 102/17
plaintiffs [5] 3/25 48/17 98/21 192/9 204/8
plane [9] 44/23 58/6 58/9 70/20 73/6 73/10 76/5 189/20 191/11
plastic [1] 175/24
plate [16] 183/18 184/9 184/15 184/19 184/24 185/19 187/11 187/16 188/10 188/10 189/18 190/10 190/15 190/22 194/14 195/5
play [3] 57/6 61/21 69/22
played [1] 195/19
please [24] 2/25 14/19 16/2 22/3 24/14 51/1 62/12 72/11 74/25 93/1 117/11 133/9 134/2 134/10 135/3 137/6 170/22 171/3 171/8 171/15 183/2 185/10 186/22 190/25
pluck [1] 193/16
plurality [2] 19/10 132/8
plus [25] 35/20 39/21 40/2 40/3 40/13 40/15 40/18 40/20 41/7 43/17 45/6 45/9 47/5 102/23 150/21 165/3 165/9 172/9 172/10 173/2 183/15 186/5 186/6 191/3 191/23
podium [2] 16/22 63/19
point [92] 3/24 10/2 10/8 11/6 18/21 20/9 22/5 23/5 23/22 28/16 28/20 38/13 39/1 47/12 49/10 54/5 55/17 55/20 55/22 56/1 56/5 56/14 56/20 58/15 58/25 61/17 61/19 65/12 65/12 65/17 65/18 66/5 67/10 67/18 67/23 67/23 68/3 69/13 74/20 75/10 75/13 75/19 76/4 76/6 76/7 76/8 77/4 77/19 82/11 82/16 82/19 82/20 85/3 87/9 87/17 96/5 102/21 103/7 104/3 106/15 107/22 108/16 109/18 110/5 113/24 116/9 116/21 130/7 130/8 135/23 137/16 137/17 138/6 152/12 154/8 155/2 158/2 158/8 163/19 163/21 164/25 164/25 172/25 174/10 177/14 183/23 191/24 198/18 198/23 203/7 203/7 204/7
pointed [7] 23/21 78/10 82/6 123/20 145/20 171/10 192/16
pointer [1] 130/6
pointing [8] 11/20 14/13 21/16 55/12 150/17 190/18 193/14 194/15
points [15] 49/9 54/4 55/16 55/19 55/25 56/4 64/13 67/12 68/1 76/5 84/9 84/16 88/24 116/7 131/15
polite [1] 67/1
portion [14] 17/3 45/17 45/21 45/23 82/17 91/14 91/14 91/19 91/22 91/23 92/4 92/22 110/24 174/11
POSA [3] 44/5 174/9 188/22
posit [1] 109/6
position [22] 14/24 25/19 25/22 30/17 41/21 46/2 46/5 49/21 88/16 98/4 106/11 117/1 119/3 120/15 120/17 126/12 126/14 133/14 148/7 171/4 187/6 204/2
positional [8] 5/15 15/7 25/9 27/7 39/7 46/11 98/2 152/11
possibly [1] 41/10
potential [1] 51/10
powerful [2] 139/13 139/15
practice [3] 90/5 198/1 202/25
precede [2] 94/17 106/25
precedence [1] 36/8
preclude [5] 18/18 26/7 70/24 101/10 124/5
precluded [1] 74/9
precluding [2] 41/4 41/6
preferred [1] 35/8
prejudice [2] 46/15 47/15
prejudiced [2] 185/23 205/7
prepare [1] 196/5
prepared [4] 120/22 193/9 194/23 203/25
present [3] 167/16 196/1 196/4
presentations [1] 4/9
presented [1] 7/7
preserving [1] 33/17
pressed [1] 81/11
presumably [1] 113/15
presumption [4] 102/3 102/22 102/23 118/6
presumptively [2] 113/15 113/16
pretty [9] 95/18 105/3 106/23 108/3 110/15 166/16 167/23 169/1 206/24

P

previously [3] 121/24 180/24 183/24
principle [6] 35/3 35/7 35/13 38/7 64/24 108/3
principles [3] 34/24 35/24 106/12
printouts [1] 53/8
prior [9] 12/22 14/18 72/13 72/25 74/23 79/21 79/23 197/18 207/4
probably [6] 34/13 44/19 58/5 96/2 100/2 189/4
probative [1] 164/9
problem [13] 32/7 50/21 62/22 70/21 82/10 89/9 93/6 151/23 153/19 158/15 159/24 164/17 196/3
problems [1] 75/16
proceed [1] 47/17
proceeding [1] 207/22
proceedings [2] 2/23 207/15
process [1] 66/10
produce [3] 93/17 101/19 111/18
produced [2] 9/25 77/22
produces [16] 8/16 9/19 59/21 77/24 79/10 93/15 93/22 93/23 94/11 94/14 94/15 96/24 97/5 111/7 111/22 114/11
producing [3] 74/18 111/24 111/25
product [1] 202/8
productive [1] 199/17
products [1] 150/14
progression [1] 114/14
project [4] 28/19 31/23 99/23 101/4
projected [2] 69/25 70/19
projecting [3] 69/21 74/18 101/24
projects [10] 68/20 71/14 80/11 83/9 96/21 97/3 99/14 114/8 114/9 134/7
promise [1] 111/16
propagate [2] 33/4 189/14
proper [1] 99/7
properly [2] 126/8 184/10
proposal [3] 89/14 198/20 200/15
propose [2] 200/16 205/13
proposed [2] 32/1 190/12
prosecution [5] 24/4 72/16 82/12 82/17 95/1
provide [1] 61/13
provided [1] 41/25
providing [1] 25/9
publications [1] 42/3
pull [6] 53/7 74/24 75/10 78/17 79/25 81/4
pulling [2] 25/21 188/1
pun [1] 41/9
pure [1] 84/2
purely [2] 88/18 174/6
purple [1] 94/12
purport [1] 105/12
purported [1] 198/2
purpose [1] 117/10
purposely [1] 42/12
purposes [4] 30/25 117/18 121/8 121/21
put [19] 40/7 52/2 53/16 57/24 80/2 99/3 110/18 113/9 115/2 118/5 148/9 148/25 152/15 169/22 176/18 181/19 181/22 190/13 192/7
puts [2] 119/22 193/21
putting [1] 48/24

Q

qualifies [1] 10/11
qualify [2] 41/24 75/21
quantitated [1] 51/16
quantitation [1] 202/13
question [24] 24/7 28/21 29/19 30/23 31/11 40/10 49/8 49/13 50/25 53/15 53/22 68/6 72/12 74/13 75/3 77/15 77/16 86/8 86/13 86/24 107/7 120/22 151/13 182/1
questions [6] 44/20 50/24 133/6 136/22 178/7 180/5
quick [3] 8/6 25/13 137/12
quickly [4] 22/5 25/17 34/25 104/2
quintessential [1] 43/3
quite [1] 58/3
quote [5] 89/1 106/14 107/8 107/20 168/5
quote/unquote [1] 89/1
quotes [2] 3/22 35/19
quoting [1] 36/3

R

R [3] 2/21 207/23 207/24
radically [1] 41/24
raise [3] 198/3 202/18 205/17
rather [6] 46/21 47/16 73/1 75/8 178/3 199/22
ray [5] 79/14 141/20 179/16 179/24 189/9
rays [32] 28/19 28/20 32/12 45/16 49/8 54/4 55/16 55/19 58/24 61/17 64/25 65/14 67/20 67/25 69/21 73/20 74/1 74/3 74/4 74/9 74/14 75/4 75/10 76/24 77/5 79/13 79/20 83/22 85/7 85/12 174/4 174/4
reach [1] 56/20
reactions [1] 206/2
read [44] 3/19 4/1 4/8 4/11 6/9 25/7 25/24 27/6 27/8 36/1 37/18 37/23 46/14 47/11 48/18 70/22 71/8 91/10 100/4 103/1 103/1 105/12 106/4 110/17 113/11 117/20 120/10 120/19 121/2 121/13 150/10 151/8 152/2 162/5 162/8 162/9 162/23 162/25 163/2 164/7 177/12 181/1 186/1 194/20
reading [8] 3/24 4/1 117/20 140/3 144/3 151/25 174/2 204/1
reads [2] 36/19 136/12
real [16] 25/12 56/6 56/8 56/15 66/9 66/12 66/19 71/10 74/5 74/15 85/6 85/8 85/10 85/11 156/20 177/25
real-world [3] 56/8 66/9 66/12
realize [1] 16/5
really [25] 25/11 35/25 42/20 48/15 53/24 57/7 57/20 59/7 67/17 69/6 71/23 137/20 150/7 153/23 156/19 161/14 162/19 164/21 169/17 171/17 172/8 195/1 195/11 195/16 201/6
reason [13] 5/13 28/7 30/11 34/12 95/16 98/21 110/10 117/18 146/18 156/3 195/10 195/18 205/19
reasonable [4] 35/4 35/9 37/22 40/9
reasons [4] 57/3 59/9 69/2 121/17
recall [3] 71/24 78/9 101/8
receive [6] 26/13 39/10 45/20 99/21 101/2 101/15
received [3] 18/17 45/23 119/14
receives [7] 12/4 93/19 94/10 114/10 119/7 123/1 176/16
receiving [5] 15/2 18/13 101/23 123/2 164/2
recess [2] 72/10 137/5
recitation [1] 171/1
recite [4] 75/23 157/15 158/7 171/5
recited [10] 45/19 45/20 54/23 55/5 58/16 155/3 155/4 184/12 184/17 187/1
recites [2] 169/10 169/13
recognized [2] 99/9 105/6
recognizes [2] 30/4 38/22
reconcile [2] 32/2 113/8
reconciled [2] 86/3 109/12
reconsidered [1] 206/4
record [11] 14/10 22/9 33/17 48/17 72/5 82/9 97/25 159/16 164/5 181/19 204/1
redirection [1] 61/18
reduces [2] 41/23 41/24
refer [9] 10/20 20/4 42/3 57/12 78/6 89/5 90/14 132/7 140/24
reference [8] 19/14 22/21 50/7 73/10 77/2 112/16 128/8 137/22
referenced [1] 76/12
references [10] 54/16 57/3 64/8 77/7 77/18 78/2 78/5 79/8 80/23 140/9
referred [5] 9/4 56/21 140/13 141/7 141/11
referring [13] 16/18 51/6 58/12 106/16 111/2 134/4 134/5 134/11 141/3 144/17 155/22 168/11 168/17
refers [5] 19/21 19/23 80/9 166/21 167/10
reflect [2] 17/3 22/9
reflected [4] 17/4 39/10 45/21 189/16
reflects [3] 15/5 42/22 111/17
regard [2] 118/3 121/16
rehash [1] 14/3
reimage [3] 94/1 94/2 98/24
reiterating [1] 177/13
reject [1] 71/25
rejected [1] 199/9
related [4] 32/24 70/7 93/9 197/7
relates [1] 124/21
relating [1] 72/14
relationship [1] 55/18
relative [3] 16/18 28/2 28/6
relay [46] 8/22 9/24 39/10 39/14 45/22 45/24 93/14 93/18 93/21 93/22 94/10 94/15 97/5 99/20 99/22 101/7 101/13 101/14 101/15 101/17 101/20 101/21 108/18 111/7 111/17 111/22 111/23 112/3 114/2 114/10 119/7 119/14 119/25 121/23 122/13 122/20 122/21 123/7 130/12 135/14 145/3 145/4 145/8 145/8 145/14 147/16
relevance [1] 96/7
relevant [5] 39/12 45/5 126/11 202/22 202/23
relied [3] 61/15 95/24 96/3
relies [3] 56/18 56/19 57/4
rely [4] 94/21 96/1 96/1 120/12
relying [5] 57/18 57/21 126/5 150/8 196/1
remaining [2] 167/5 197/8
remember [2] 90/15 171/22
remind [1] 72/4
render [1] 96/13
rendered [3] 38/10 38/24 172/18
rendering [4] 38/16 38/17 38/18 38/23
renders [1] 96/16
reorients [1] 66/20
repeat [3] 14/14 29/17 46/5
repeated [1] 103/20
repeatedly [7] 29/1 31/4 49/14 52/11 79/9 80/9 91/22
replace [3] 26/21 26/23 26/24
replacement [1] 64/3
reportables [1] 196/7
reporter [5] 30/7 36/15 72/8 207/18 207/24
represent [2] 51/8 129/18

R

representation [23] 51/3 51/21 52/10 52/12 52/19 52/24 53/5 53/20 53/24 60/23 61/25 62/16 62/21 63/8 64/2 65/8 65/21 75/17 76/9 76/14 89/14 89/15 90/11
representations [2] 62/5 68/4
representing [1] 51/13
represents [1] 53/13
request [1] 173/1
require [17] 30/5 49/16 49/17 54/25 106/9 109/5 109/7 110/2 116/3 118/24 124/8 126/4 157/19 168/9 200/17 204/8 206/16
required [13] 36/12 38/1 72/22 89/8 93/11 99/10 113/17 162/4 167/23 173/11 173/15 194/15 207/4
requirement [7] 23/20 29/14 29/15 30/12 31/2 36/23 36/24
requirements [1] 28/23
requires [17] 21/9 28/18 28/23 102/7 105/16 106/5 107/4 108/11 109/9 109/25 118/4 162/6 162/7 164/8 173/21 183/17 184/14
reserving [1] 89/19
resolve [1] 198/17
resolved [1] 4/18
resolving [1] 205/16
respect [33] 4/19 5/16 6/11 20/5 22/5 22/10 23/6 23/17 23/22 24/17 25/10 47/4 70/18 87/20 117/7 129/17 133/6 133/12 134/15 136/14 140/20 152/9 158/19 163/18 170/23 170/25 175/1 175/14 179/9 179/13 190/16 193/7 198/3
respectfully [2] 6/13 6/15
respectively [1] 130/22
response [2] 49/16 98/25
rest [6] 15/7 29/17 31/12 55/15 137/12 159/10
result [1] 144/1
results [1] 189/9
retina [1] 66/16
REUBEN [3] 2/13 3/12 21/24
reveals [1] 24/10
reverse [2] 24/20 100/10
reversed [1] 179/11
review [1] 14/13
revisit [1] 47/9
revisiting [1] 171/19
rewrite [1] 109/13
RICHARDS [2] 1/19 3/3
rid [4] 153/13 198/24 198/25 199/8
ridiculous [1] 14/14
right [372]
road [1] 39/18
ROSALYND [1] 2/15
row [1] 93/7
RPR [1] 207/24
rude [1] 63/20
rule [4] 37/25 102/6 127/4 180/17
ruled [8] 11/11 11/13 14/3 40/14 91/8 163/6 201/13 204/23
rules [5] 81/23 82/2 82/15 89/12 195/20
ruling [16] 4/17 40/4 40/9 93/8 93/11 115/1 145/19 195/12 195/13 197/20 200/13 200/20 201/14 203/11 203/21 203/22
rulings [2] 203/23 206/4

S

s [3] 2/4 2/21 207/23
said [36] 7/24 8/20 8/20 14/9 21/6 49/14 49/15 49/18 49/23 50/16 54/10 58/3 76/7 82/21 82/25 85/8 86/15 86/22 94/24 109/12 110/21 113/3 114/23 115/2 129/21 140/11 155/15 168/8 168/23 172/17 178/15 187/9 195/11 198/9 199/7 203/12
salient [1] 131/14
same [31] 6/1 6/4 24/25 32/21 65/19 73/2 78/22 79/11 95/5 95/15 96/23 109/18 113/6 113/11 113/14 113/15 124/22 124/22 124/24 129/8 130/10 131/24 136/18 142/12 142/18 142/19 143/20 153/4 154/7 155/16 178/1
sample [1] 179/21
saw [2] 96/9 96/15
say [117] 12/9 12/9 12/20 17/15 20/14 23/9 26/4 26/16 26/19 28/6 30/21 33/3 34/2 36/4 42/12 42/13 43/1 45/15 49/25 50/11 54/3 54/20 55/21 56/3 56/22 57/8 58/20 58/25 59/2 59/4 59/12 59/14 59/21 59/24 60/1 60/11 66/12 70/21 70/24 71/2 73/3 81/5 81/17 81/17 81/23 82/3 85/10 85/21 86/12 86/12 86/24 87/7 87/25 88/21 93/25 94/22 96/21 96/23 96/24 97/4 97/6 97/7 99/24 103/22 107/4 108/10 108/12 109/13 110/7 113/5 113/9 113/12 114/1 114/2 118/7 119/11 120/16 122/4 123/9 123/14 123/21 125/15 125/16 125/16 130/5 131/19 134/14 134/22 139/2 147/23 148/10 149/17 149/19 151/24 162/12 162/17 162/25 166/14 166/15 167/19 172/7 173/17 173/18 173/22 177/10 178/15 187/9 188/15 191/14 192/3 193/22 194/5 194/16 198/11 198/22 203/15 206/1
saying [54] 10/16 10/21 11/7 11/7 11/25 15/14 17/14 17/20 21/3 21/14 29/23 35/9 37/6 37/24 37/25 41/5 56/9 58/23 64/16 69/15 70/12 98/5 104/16 105/2 107/24 108/14 119/23 120/18 121/9 123/22 125/4 125/19 129/22 140/18 145/11 150/9 154/3 156/14 163/11 167/25 168/16 186/12 186/15 188/21 190/4 192/23 193/15 194/3 198/20 198/21 198/25 200/17 205/9 206/5
says [65] 8/19 9/18 9/20 9/24 12/1 12/12 18/12 20/11 20/15 20/19 31/15 55/8 58/20 59/4 59/23 61/17 81/22 82/7 82/9 83/8 85/14 85/18 87/1 94/8 95/3 95/4 95/22 101/13 102/6 104/23 104/24 106/3 106/9 106/15 106/25 111/21 112/3 112/21 122/12 122/14 122/20 122/25 123/5 124/23 124/25 126/11 132/8 142/21 142/21 145/4 147/1 162/8 163/1 166/15 166/18 166/22 167/3 167/12 167/15 168/13 174/9 177/14 177/19 193/18 205/23
scatter [22] 166/20 166/21 167/20 168/1 168/1 173/13 173/14 174/4 174/5 174/22 174/23 174/25 175/2 176/2 176/21 176/21 176/24 177/15 179/10 179/12 179/22 183/25
scattered [38] 166/13 166/14 166/15 166/16 167/4 169/11 169/13 170/17 170/18 170/18 170/19 170/24 171/2 173/9 173/10 173/16 173/17 173/18 174/3 174/11 174/12 174/22 176/8 177/14 177/16 177/21 177/21 178/1 178/3 178/3 179/2 179/2 180/21 180/23 181/3 181/4 181/5 189/12
scattering [2] 56/10 184/5
scatters [1] 174/17
scenarios [1] 200/8
schedule [1] 207/5
scheduling [1] 4/2
school [1] 66/18
science [1] 174/2
scientific [1] 174/7
scope [4] 112/13 112/17 156/2 173/15
scratch [1] 40/11
screen [5] 35/21 80/3 143/19 144/23 152/22
sealed [1] 178/11
seated [3] 2/25 72/11 137/6
second [307]
seconds [1] 26/11
section [4] 14/20 36/4 36/4 72/23
see [71] 7/8 13/1 18/22 24/19 25/1 25/4 25/8 48/1 52/15 52/17 53/17 54/13 54/16 57/7 57/16 60/14 60/16 63/3 64/24 65/20 65/23 66/19 79/9 79/16 80/12 82/4 82/4 84/14 87/7 88/8 93/14 93/15 94/8 94/13 97/6 99/11 99/19 100/13 100/22 106/19 107/11 118/13 135/7 135/8 136/10 136/17 143/14 149/10 149/11 149/22 151/17 153/14 157/16 157/17 157/18 162/5 163/2 164/8 170/6 170/23 171/16 176/20 181/12 183/16 183/22 184/17 190/11 191/21 193/25 201/9 202/10
seeking [1] 28/24
seem [1] 49/19
seemed [1] 49/18
seems [7] 16/17 49/25 50/17 137/21 188/1 198/16 199/14
seen [3] 42/20 53/2 55/13
select [1] 206/18
semiconductor [57] 7/4 15/5 20/12 20/21 21/4 21/18 25/3 26/3 26/12 39/11 39/15 45/24 108/20 119/9 119/17 123/10 123/12 123/14 124/2 127/10 127/19 127/25 128/9 128/21 129/2 129/8 129/14 129/18 129/24 130/23 132/3 132/7 132/8 132/9 132/18 134/15 134/21 136/17 136/18 137/9 138/9 139/25 140/1 146/14 146/19 146/21 146/22 147/2 147/8 155/17 160/3 161/3 161/8 161/18 163/13 163/15 163/16
semiconductors [2] 11/16 128/11
sense [28] 20/3 24/9 26/10 26/16 26/18 37/2 38/3 42/16 52/5 69/9 69/16 69/17 69/21 71/9 71/18 75/7 87/3 88/10 88/13 88/14 88/25 89/7 98/25 201/21 203/9 205/10 206/6 207/1
sensing [1] 166/19
sentence [4] 36/5 36/10 38/3 148/21
separate [10] 4/25 35/12 36/11 122/14 146/21 167/9 167/9 168/4 168/6 168/21
separated [2] 92/1 189/13
separately [2] 146/17 147/8
September [2] 1/10 196/7
September 30 [1] 196/7
sequence [22] 11/2 15/7 16/18 17/13 20/6 25/10 26/13 97/16 100/17 102/7 102/8 105/16 113/13 114/7 116/12 128/3 129/9 148/13 152/11 154/12

S

sequence... [2] 158/3 158/9
sequenced [1] 163/1
sequencing [10] 27/7 27/9 118/6 151/9 157/19 162/6 162/7 163/10 164/8 164/13
sequential [33] 11/12 14/2 14/2 21/8 24/18 46/11 100/10 101/25 102/4 102/12 104/16 105/5 106/5 106/10 108/12 109/25 110/2 110/3 110/8 110/17 125/4 125/6 127/12 139/3 142/2 142/3 142/13 143/1 144/3 147/21 149/8 158/10 162/4
sequentiality [1] 20/6
sequentially [13] 10/6 10/10 12/9 13/19 13/22 16/10 16/14 16/17 25/6 96/10 115/22 130/10 154/4
serial [2] 106/4 106/21
set [5] 7/22 31/7 33/16 38/15 96/18
sets [1] 11/16
Seventeen [1] 156/24
shakers [1] 194/2
shaking [2] 41/1 193/25
shape [1] 43/10
shaped [1] 101/18
share [1] 190/8
sharp [1] 68/2
sharpened [1] 67/14
sharpest [1] 67/19
she [2] 201/13 203/15
shining [1] 202/9
short [1] 200/12
shot [1] 24/10
should [16] 27/9 39/19 47/24 90/3 90/4 91/11 93/4 102/8 106/3 106/20 125/19 131/19 142/22 158/3 165/21 165/21
shouldn't [2] 103/11 156/8
show [34] 71/4 71/7 74/7 94/4 107/5 108/4 108/23 109/3 109/4 109/4 109/24 110/2 110/8 110/12 110/16 114/6 119/1 119/21 119/22 121/10 121/22 127/12 127/24 128/10 148/12 151/2 164/14 172/19 176/20 176/22 187/17 194/10 194/13 202/7
showed [1] 22/6
showing [4] 79/13 84/8 145/1 185/9
shown [2] 84/8 187/13
shows [7] 11/12 27/7 77/4 84/6 149/7 164/12 196/23
side [33] 5/9 31/15 61/9 62/18 85/5 113/25 149/14 166/21 167/20 168/1 170/19 171/1 173/9 173/14 173/18 174/4 174/23 175/1 176/21 177/15 177/21 177/24 178/2 178/23 179/2 179/12 179/16 179/17 180/22 181/5 181/7 183/25 196/15
sides [3] 5/8 52/12 65/7
significance [4] 5/15 46/11 98/2 152/11
significant [2] 25/9 31/25
similar [4] 15/21 91/12 177/23 183/24
similarly [1] 179/22
simple [2] 29/3 161/14
simply [8] 29/15 30/11 56/1 62/9 82/8 85/18 92/3 99/10
simultaneous [3] 154/11 154/14 164/14
simultaneously [2] 111/14 113/1
since [5] 46/21 48/13 49/2 80/14 108/4
single [7] 10/22 37/10 55/22 99/8 145/20 179/24 184/13
singular [1] 205/12
sir [3] 63/12 63/25 86/8
sit [1] 5/8
sitting [1] 145/20
situated [1] 4/21
situation [1] 144/7
six [3] 51/23 159/1 203/3
six weeks [1] 203/3
Six-Pack [1] 51/23
Sixteen [1] 204/13
Sixty [1] 176/10
size [7] 45/16 79/11 84/15 175/1 179/9 179/23 202/11
SJ [1] 202/25
sketch [1] 100/19
skill [6] 26/22 26/25 53/19 68/23 68/24 202/19
slide [25] 22/6 23/6 23/13 23/17 24/14 25/20 29/1 30/4 39/4 62/12 74/24 106/17 110/23 127/18 128/17 130/6 133/9 136/16 144/22 157/9 171/8 171/15 176/19 183/2 187/24
Slide 122 [1] 29/1
Slide 128 [1] 30/4
Slide 17 [1] 39/4
Slide 25 [1] 144/22
Slide 3 [1] 176/19
Slide 4 [1] 22/6
Slide 54 [2] 23/6 23/17
slides [9] 22/2 22/5 23/8 23/11 93/5 112/10 152/15 171/3 176/19
slight [1] 191/19
slightly [1] 190/8
small [1] 65/23
smart [2] 203/13 204/18
so [449]
solely [2] 89/3 150/17
some [24] 23/22 57/20 72/4 74/20 88/12 90/5 90/5 91/11 104/8 106/19 125/25 167/16 167/18 174/11 181/3 186/16 188/5 190/7 198/15 199/18 201/17 205/16 205/23 205/24
somebody [1] 199/7
something [26] 8/16 17/16 21/11 22/16 37/18 44/6 50/22 53/23 62/3 62/6 62/6 62/8 64/9 81/11 82/20 84/1 88/24 94/3 106/9 173/20 174/10 177/11 178/6 178/13 182/2 196/15
somewhere [2] 90/16 172/3
soon [2] 25/13 88/1
sorry [63] 5/6 5/7 5/8 9/8 11/10 15/11 15/13 16/16 18/23 23/10 29/5 29/17 30/8 32/8 33/7 51/2 52/20 54/9 63/25 66/24 66/25 68/6 72/3 73/13 76/22 78/9 81/14 87/19 101/20 102/18 107/6 107/15 109/22 110/1 111/15 120/24 126/25 127/13 127/15 132/14 135/21 138/20 139/20 145/24 148/6 152/22 153/1 153/17 157/4 157/5 163/24 165/1 168/12 170/11 171/16 175/8 176/4 176/6 196/20 200/2 202/21 203/21 203/21
sort [14] 16/13 21/14 21/20 24/19 34/24 35/25 38/10 54/11 115/1 119/18 123/6 125/25 193/15 200/8
sound [2] 88/18 92/6
sounds [9] 63/3 64/9 89/18 92/5 161/20 166/6 178/21 186/15 207/12
source [17] 16/21 64/17 64/18 64/25 65/1 89/17 90/13 96/2 99/14 100/25 101/3 134/7 169/12 183/5 188/18 192/25 202/9
sources [1] 65/7
space [1] 179/1
spatial [1] 108/15
spatially [1] 189/13
speak [2] 74/10 193/9
Speaking [2] 111/14 113/1
spec [1] 82/4
specific [11] 35/10 42/3 45/20 54/18 58/16 80/23 102/16 103/23 186/7 187/17 193/14
specifically [15] 4/22 22/21 25/8 25/24 31/7 35/12 61/16 72/24 73/10 75/23 78/6 97/25 104/23 116/9 124/20
specification [73] 3/23 8/6 8/8 8/9 8/25 15/19 19/12 21/9 22/7 24/15 25/7 25/9 28/25 29/1 29/14 30/21 31/13 36/6 54/14 54/18 54/23 55/1 55/5 55/12 55/13 57/4 60/4 69/9 77/1 77/8 78/23 80/22 81/12 82/2 85/16 95/8 98/1 98/3 98/20 103/5 104/22 117/21 120/13 121/3 124/10 124/12 125/3 125/14 129/15 133/24 134/14 135/12 135/24 136/20 142/18 145/21 146/2 150/24 166/16 166/23 167/22 168/7 168/13 172/14 183/17 190/13 193/18 194/9 194/10 194/12 194/16 195/6 196/1
specification's [1] 57/9
specifications [2] 194/18 194/23
specify [1] 184/23
spectrum [1] 92/23
speed [1] 195/22
spent [2] 47/10 47/10
spherical [1] 184/23
spot [2] 56/24 202/11
SSC [1] 166/21
stage [1] 63/18
stages [1] 198/8
standalone [1] 167/2
standard [1] 108/3
Standing [1] 116/24
start [19] 3/17 7/18 9/11 38/20 39/3 40/10 49/11 52/3 52/12 92/12 106/2 119/10 119/23 134/6 137/15 158/21 159/15 165/15 169/9
started [1] 39/18
starters [1] 111/10
starting [2] 111/5 119/5
starts [1] 40/22
state [2] 31/24 164/5
statement [1] 41/3
statements [3] 35/21 35/22 35/23
states [3] 1/1 1/15 103/18
Statue [2] 66/13 66/13
status [3] 198/19 206/21 206/23
staying [1] 63/19
steamed [1] 195/15
stenographic [1] 207/21
step [6] 66/23 70/8 83/3 83/14 121/5 186/2
stick [1] 104/12
sticky [1] 138/6
still [11] 56/25 60/23 67/7 67/8 67/13 67/21 67/21 67/25 100/6 152/6 197/16
stipulation [1] 92/22
stop [3] 120/1 120/6 130/11
stopped [3] 3/24 3/25 204/1
streamline [1] 107/16
Street [1] 1/13
strike [1] 159/15
striking [2] 38/17 196/16
structure [40] 40/23 41/22 44/4 44/5 46/6 119/19 129/20 129/22 143/20 147/5 156/4 165/19 165/25 166/2 168/15 172/12 172/19 178/7 180/17 183/11 185/2 187/1 189/24 190/3 190/5 191/10 191/15 191/17 191/23 191/25 192/4 192/13 193/9 193/11 193/12 193/23 194/6 195/1 195/8 197/2
structures [12] 41/13 41/14 41/24 42/4 44/7 44/10 44/17 44/18 44/22 190/8 190/12 195/3
struggle [1] 71/19
stuck [1] 100/7
stuff [8] 53/16 63/19 71/23 92/3 171/19 171/22 196/8 201/10
stupid [1] 206/10

S

subject [4] 43/17 91/4 167/1 183/14
submit [13] 20/13 20/25 31/3 31/9 83/13 83/23 95/21 97/14 126/6 126/7 129/20 143/3 156/5
submitting [1] 5/13
subsequently [1] 189/18
subset [2] 24/18 92/23
substantially [1] 79/10
subsystem [1] 166/19
successful [1] 205/20
such [9] 23/20 77/20 81/6 103/11 153/19 166/20 183/6 188/18 192/25
sufficient [8] 185/2 185/4 187/1 190/2 190/5 193/8 193/11 193/23
suggest [4] 20/6 81/11 82/3 113/20
suggested [2] 118/5 206/7
suggesting [1] 202/2
suggestion [1] 193/7
suggests [1] 168/14
summaries [1] 137/13
summarize [1] 131/13
summary [7] 90/24 91/4 104/14 197/21 199/2 203/8 203/12
sun [1] 66/12
superfluous [3] 38/10 38/16 38/24
supplemental [6] 3/20 5/5 7/6 46/14 83/6 104/7
support [12] 33/4 33/6 55/14 68/12 72/13 98/1 109/5 119/3 120/12 120/15 140/6 151/12
supported [1] 177/18
supportive [4] 98/3 98/3 98/6 105/16
supports [9] 5/15 25/19 25/22 30/21 71/5 135/25 136/3 148/7 158/5
supposed [2] 100/15 117/22
sure [44] 9/10 14/10 20/1 20/18 22/17 29/18 32/16 38/5 39/25 40/16 53/1 57/17 59/3 71/6 75/15 80/2 80/4 82/13 90/22 92/11 96/5 98/8 98/12 98/14 102/15 108/6 110/4 110/18 111/4 111/9 114/18 115/10 116/18 133/20 136/2 149/16 151/11 153/15 155/6 169/16 169/21 172/5 177/9 186/3
surface [3] 67/22 189/15 189/17
switch [2] 16/20 170/22
system [17] 10/15 10/20 26/20 56/9 62/25 63/1 63/1 69/5 97/11 167/10 167/11 167/12 167/17 167/21 168/6 168/13 177/17
systems [5] 51/5 54/19 60/24 69/4 136/7

T

table [2] 3/14 192/7
take [10] 46/1 53/6 72/8 137/1 137/1 153/20 196/9 196/16 196/24 205/15
taken [6] 36/10 41/20 72/10 120/17 137/5 172/3
takes [4] 90/9 91/13 118/10 181/8
talk [19] 4/3 11/8 25/13 35/16 38/14 45/4 62/2 64/15 68/10 73/9 74/17 90/3 91/11 110/20 110/24 112/9 143/4 167/2 194/13
talked [13] 4/3 6/19 32/23 63/15 86/17 108/7 109/8 126/10 140/5 152/14 153/4 165/24 174/18
talking [59] 5/17 6/7 8/25 10/3 11/23 22/6 23/6 32/22 36/17 40/13 40/24 42/4 51/5 53/12 53/13 57/13 60/14 61/15 61/22 61/22 62/3 62/10 62/24 62/25 66/21 69/3 72/18 73/11 74/16 75/2 75/8 78/11 79/6 83/8 93/9 95/4 95/23 95/23 103/25 107/23 107/25 112/2 114/20 119/11 125/12 125/14 139/12 144/24 149/9 156/13 160/20 166/25 167/13 175/13 184/3 189/6 191/14 193/10 198/1
talks [15] 8/10 24/8 24/15 54/14 56/20 60/5 70/17 71/13 74/24 78/12 80/8 80/13 89/10 119/15 168/4
tandem [1] 42/1
technically [1] 74/6
tee [2] 197/7 205/13
telescope [1] 66/1
tell [20] 33/1 49/17 77/24 80/21 81/9 83/2 96/9 97/9 106/6 142/20 144/12 144/17 157/18 164/15 170/1 178/11 179/22 191/24 202/6 202/6
telling [9] 38/2 42/21 70/11 79/12 143/10 147/5 157/10 164/22 179/19
tells [28] 14/23 15/1 15/4 15/8 20/4 39/9 39/12 40/23 59/16 59/20 60/4 77/1 77/20 80/22 81/12 81/21 84/19 88/21 88/22 93/24 97/9 112/1 112/12 114/2 123/5 123/19 133/3 144/9
temporal [3] 106/4 106/21 107/13
ten [3] 72/8 200/24 201/7
ten-minute [1] 72/8
tend [1] 201/5
Tennyson [1] 201/13
Tennyson's [1] 207/5
term [61] 5/12 5/16 6/1 6/10 6/21 6/21 6/22 6/23 6/24 7/1 7/3 7/4 7/5 8/1 8/4 8/7 8/7 16/18 24/13 27/15 29/3 39/22 44/3 44/4 47/6 47/9 61/11 61/12 68/22 71/9 73/25 89/5 89/6 91/14 91/21 93/13 96/19 113/6 113/14 127/10 127/25 146/17 158/12 158/22 159/5 159/8 159/18 160/3 161/2 161/17 165/19 166/12 169/14 173/2 173/3 173/4 175/15 177/23 186/13 186/24 187/7
terminology [1] 72/1
terms [50] 4/11 5/17 6/12 6/18 7/7 7/22 7/23 10/9 10/19 13/24 23/23 25/10 27/14 28/2 36/2 38/16 51/23 65/6 103/18 106/20 126/1 137/8 137/10 140/7 144/2 147/8 150/19 154/18 157/15 159/12 160/20 160/21 160/23 160/24 162/21 163/7 165/9 182/24 195/12 195/22 197/9 197/20 198/1 202/24 202/24 203/24 204/17 204/20 205/6 206/13
test [1] 51/24
testimony [2] 91/4 91/7
Texas [2] 112/19 126/16
textbook [1] 56/19
than [27] 4/21 38/12 40/7 41/9 44/20 73/1 77/2 77/17 82/9 83/19 84/15 84/17 89/13 104/1 108/25 109/19 109/24 116/5 116/11 159/7 159/14 161/4 178/3 180/22 199/9 200/23 205/19
thank [60] 3/8 3/15 7/15 7/20 16/23 18/9 21/22 21/23 23/1 23/2 23/3 23/12 25/16 27/10 30/19 31/16 31/17 32/17 33/13 33/21 33/22 34/20 46/8 47/1 47/18 49/5 63/24 76/19 86/14 90/8 90/19 97/19 97/22 103/14 103/17 105/24 105/25 112/15 118/8 118/21 128/18 132/14 132/23 133/4 133/5 134/3 135/4 135/22 137/4 153/18 157/16 159/22 163/4 169/8 182/13 182/16 185/10 196/19 205/8 207/13
Thanks [3] 97/20 115/7 170/12
that [886]
that'd [1] 80/4
that's [258]
their [63] 23/6 23/8 23/10 24/10 30/17 46/14 46/22 47/11 48/17 48/19 49/15 49/23 50/23 54/7 54/24 55/4 55/15 56/5 56/9 56/14 56/16 56/18 56/19 57/3 57/3 57/5 57/19 57/21 58/25 61/18 82/10 82/19 83/14 86/4 88/16 92/6 96/13 96/19 97/12 104/7 106/11 109/11 109/12 112/9 112/10 121/1 123/18 144/8 145/25 146/1 146/3 146/4 152/15 153/10 153/10 158/5 158/17 165/24 179/19 202/7 202/8 206/14 207/4
them [45] 8/3 10/4 10/23 28/19 33/10 38/17 38/17 38/18 44/1 55/14 74/10 75/10 77/8 77/9 77/9 90/23 92/13 93/11 99/3 110/14 115/6 119/20 121/14 126/8 146/15 151/12 155/12 157/9 164/20 165/12 166/8 166/9 169/6 173/14 182/11 182/14 190/8 190/18 196/2 196/2 199/19 200/18 200/24 203/8 206/13
themselves [3] 74/17 118/23 127/1
then [146] 7/14 7/25 8/18 8/20 9/18 9/20 9/21 9/24 12/1 12/3 15/3 18/2 18/7 24/24 24/25 25/2 25/3 25/5 32/4 33/11 33/18 33/20 33/23 33/25 34/9 35/11 39/10 40/2 48/8 48/20 51/15 56/22 57/12 65/5 66/3 66/15 67/18 68/2 73/4 80/22 82/20 84/10 86/12 87/6 89/2 90/1 94/13 94/15 96/22 97/4 98/16 99/17 99/19 101/7 101/24 102/1 102/7 103/22 104/24 105/19 109/14 110/13 111/24 112/17 114/3 114/4 114/9 116/17 117/1 117/15 119/2 119/7 119/15 122/14 122/23 122/23 123/9 123/13 124/1 124/7 125/9 127/2 127/18 130/21 131/11 131/21 131/24 135/5 135/7 135/14 135/15 137/16 139/11 141/2 141/14 141/23 142/21 143/9 145/6 145/14 145/15 145/17 148/17 149/5 150/4 155/1 155/5 155/8 155/16 156/17 158/4 159/7 163/2 164/5 164/5 164/15 165/11 165/13 166/3 166/21 166/25 167/19 168/3 168/22 170/8 175/24 175/25 177/5 180/16 184/6 184/8 184/22 186/6 189/17 189/23 190/3 197/6 197/21 201/17 202/10 203/10 205/5 205/7 206/3 206/20 207/14
there [143] 3/22 3/23 6/4 9/4 9/14 11/10 15/15 16/25 17/24 18/1 18/16 19/2 19/13 19/20 20/10 23/18 24/7 24/15 24/16 26/7 27/9 44/6 44/21 50/7 52/22 58/1 60/4 61/20 62/4 64/1 65/6 67/20 69/10 69/22 69/22 70/25 71/15 77/6 77/10 79/20 79/21 79/23 80/7 80/16 80/22 81/5 81/9 81/20 83/3 83/10 85/25 85/25

T

there... [91] 86/25 87/1 87/2 87/5 87/7 87/24 93/10 94/11 97/12 99/8 99/12 100/13 100/16 102/7 102/8 103/8 104/23 110/23 111/15 115/14 116/4 116/11 116/14 116/22 117/2 117/6 117/8 117/12 117/13 119/2 120/1 123/23 128/15 130/3 130/11 132/1 132/5 132/8 132/9 133/18 134/13 135/7 135/9 138/2 141/14 141/16 141/23 143/10 146/1 146/18 149/2 149/5 151/7 155/1 155/2 156/20 157/12 157/21 157/23 158/2 158/5 159/8 159/12 159/14 160/14 160/23 161/1 163/9 164/16 165/3 165/25 174/7 175/17 181/20 183/11 186/12 186/13 186/13 187/18 188/7 189/24 190/17 190/24 191/2 191/18 197/2 197/6 198/8 200/20 204/19 206/8

there's [153] 5/13 8/9 8/18 8/21 8/22 9/1 9/20 9/24 11/10 11/18 11/21 12/3 17/1 18/10 19/4 19/17 19/22 20/11 21/1 23/20 24/7 24/24 26/12 26/14 26/14 26/19 29/15 30/11 31/6 33/3 33/6 34/2 34/24 35/3 35/9 36/1 36/1 36/22 36/23 36/24 37/22 39/6 44/7 44/10 44/17 45/1 45/20 50/1 55/17 55/21 56/10 56/10 56/11 57/13 64/19 65/10 65/23 66/9 67/23 70/9 71/22 72/4 72/21 73/7 75/7 76/3 77/18 77/20 77/22 78/7 78/9 79/22 81/8 81/16 82/8 84/19 85/18 85/22 86/15 87/7 97/4 99/17 101/13 102/3 102/6 102/12 106/19 108/2 108/24 109/1 113/19 113/19 117/5 117/10 119/6 121/2 121/20 121/22 122/12 123/12 124/16 128/8 132/23 133/1 135/14 135/25 136/2 136/4 136/7 136/11 137/22 139/18 140/5 140/12 145/2 145/3 151/1 151/11 153/23 157/20 157/21 165/13 167/9 168/21 171/1 171/13 179/1 183/8 184/5 184/6 184/20 186/7 186/16 189/21 190/7 190/22 191/19 193/19 194/3 194/13 194/15 194/17 195/22 197/16 197/20 200/7 202/12 202/13 202/13 204/25 205/2 205/22 207/8

therefore [6] 62/20 69/13 103/7 104/25 121/15 124/3

these [44] 21/2 25/10 35/19 35/20 35/22 35/22 35/24 36/4 48/22 51/5 51/5 51/9 60/24 69/1 90/5 97/13 108/21 120/18 126/6 130/3 130/5 130/19 132/25 133/7 134/16 145/24 146/3 146/4 146/21 150/19 152/6 157/15 178/7 187/18 188/5 193/15 193/16 193/17 195/12 195/22 197/8 198/16 199/18 200/7

they [165] 5/6 5/7 5/10 8/11 11/18 17/14 22/6 22/11 23/6 24/18 26/13 26/23 28/21 30/5 30/21 32/20 33/11 35/24 46/21 49/17 49/22 52/9 52/17 53/5 53/14 53/16 54/3 54/20 54/25 55/5 55/10 55/21 56/3 56/22 57/19 57/20 58/5 58/25 59/1 59/3 59/11 59/21 59/24 60/9 60/10 60/10 60/11 65/16 67/6 69/1 69/7 69/8 70/17 72/18 73/3 73/4 79/21 81/17 82/6 82/10 82/12 82/21 82/25 83/14 90/16 90/22 92/13 94/21 95/3 96/12 96/20 96/21 96/22 98/22 99/3 99/6 102/17 104/7 104/7 105/20 105/21 106/6 108/21 109/11 109/12 109/13 109/18 110/3 111/10 112/9 113/8 113/9 115/3 118/23 119/10 119/11 120/11 121/14 121/15 124/9 125/18 126/5 126/7 127/1 128/23 129/10 132/17 140/10 143/22 144/2 145/20 147/6 148/12 150/13 152/12 153/22 154/3 154/8 154/10 154/17 154/22 156/3 156/12 157/14 158/3 162/23 164/2 168/21 169/24 170/1 171/10 173/18 173/20 173/20 174/24 178/1 178/2 179/3 179/5 179/7 179/8 179/18 179/18 180/4 180/14 182/11 182/14 184/17 185/24 190/14 193/14 193/24 197/17 197/19 198/5 199/19 202/2 202/5 202/8 202/10 205/7 205/11 205/12 206/15 207/3

They'll [1] 59/14

they're [48] 8/1 10/5 17/20 23/19 26/12 32/22 55/11 55/18 57/2 57/18 58/3 58/23 58/24 59/11 67/9 67/21 67/21 67/25 68/4 69/3 85/6 97/11 97/16 99/6 110/8 111/12 121/4 121/16 125/19 127/3 127/3 127/3 143/19 149/8 150/13 154/11 154/13 154/13 155/6 155/25 156/1 156/1 172/23 172/24 179/16 201/3 202/12 202/17

they've [2] 32/21 198/2

thing [26] 6/1 6/4 18/3 23/5 58/22 60/3 60/13 65/19 68/5 77/21 81/6 96/23 104/5 107/1 113/23 114/3 114/4 122/4 149/25 155/17 162/17 175/5 178/1 182/8 198/10 204/2

things [24] 38/14 38/23 41/9 41/18 56/8 57/20 58/1 65/20 68/9 73/2 93/20 112/2 114/14 154/23 165/2 179/4 179/11 182/23 187/18 188/2 192/12 197/15 202/5 206/1

think [184] 4/10 4/25 6/1 11/13 11/14 11/14 17/14 22/12 25/18 26/24 27/4 27/8 28/8 28/16 29/3 29/8 29/10 29/25 31/13 33/1 34/4 37/16 38/4 38/4 38/8 40/7 40/21 41/17 41/18 42/8 42/10 42/25 43/16 43/24 49/15 50/18 50/19 50/20 50/23 51/4 51/4 52/4 52/20 52/25 53/2 53/7 53/8 53/11 53/14 53/17 53/22 53/24 54/1 54/10 54/13 57/23 57/23 57/24 58/2 58/5 58/9 58/22 59/7 61/6 61/10 62/7 62/21 63/11 67/9 67/12 67/16 72/17 73/24 74/13 77/14 79/24 81/10 81/21 85/4 86/7 86/25 87/1 87/13 87/15 87/16 87/20 87/23 88/9 88/23 88/24 89/4 89/10 89/13 89/22 92/8 92/12 94/6 94/22 95/2 95/10 95/21 96/5 96/6 97/18 98/21 98/22 99/2 100/2 100/11 100/15 102/5 105/15 107/19 108/2 109/6 110/3 110/6 113/2 113/5 115/21 116/2 117/19 118/4 120/25 125/24 126/5 127/3 130/8 131/14 132/15 132/23 136/23 139/11 142/25 144/4 144/19 147/7 151/4 151/10 152/19 152/20 156/8 156/19 157/18 160/15 161/13 162/7 162/9 164/11 164/13 164/13 164/21 165/2 165/13 165/15 165/23 166/9 167/7 167/22 168/21 176/19 180/21 181/22 181/23 186/19 186/21 192/14 194/4 196/24 198/1 198/8 199/7 199/16 199/17 200/16 200/25 201/15 201/21 202/19 202/21 204/2 204/7 204/14 204/22

thinking [5] 68/5 68/10 82/1 95/17 171/25

thinks [1] 205/13

third [18] 6/24 7/1 8/1 9/2 9/6 12/11 26/12 26/13 26/15 26/17 26/18 26/24 115/23 124/15 138/4 155/1 158/4 164/17

Thirty [3] 75/1 192/18 192/19

Thirty-eight [1] 75/1

Thirty-four [2] 192/18 192/19

this [241]

those [45] 7/7 7/23 22/11 27/8 28/24 35/16 38/22 41/18 42/1 42/10 44/9 44/20 57/12 58/6 58/13 58/14 73/2 75/9 76/2 92/25 95/19 96/13 98/13 98/15 114/19 115/2 133/13 137/10 140/8 146/10 146/12 146/14 150/20 151/10 160/19 163/7 190/3 191/2 197/7 198/4 202/20 204/7 204/17 205/6 206/13

though [16] 22/11 78/1 82/13 91/3 102/2 102/22 127/18 127/25 132/10 138/23 141/5 141/19 143/9 169/22 182/1 186/2

thought [15] 8/4 27/23 49/20 49/22 50/9 64/1 107/22 128/14 155/11 157/6 168/23 169/1 172/8 178/10 180/5

thousands [1] 47/13

three [18] 7/23 20/10 42/1 65/14 93/7 108/6 114/19 165/8 174/4 189/13 189/19 195/12 195/22 197/9 199/18 200/3 203/24 204/17

threw [1] 149/21

through [50] 5/5 13/5 15/2 18/19 24/25 25/24 26/2 28/19 31/4 32/13 32/20 43/11 46/7 47/13 51/7 51/11 60/20 65/1 65/25 66/14 75/6 75/20 77/3 77/9 78/10 79/7 80/9 84/1 99/16 119/2 119/4 121/5 133/23 138/6 144/17 145/9 145/14 176/17 177/3 177/4 179/14 185/13 189/5 189/15 189/17 189/18 190/4 190/18 194/23 196/2

throughout [9] 63/13 63/16 79/8 85/17 113/7 113/11 113/14 168/6 184/12

throwing [1] 186/17

TIGAN [3] 2/9 3/10 90/20

time [28] 4/4 4/17 6/7 10/12 14/4 14/6 14/7 14/9 21/12 37/17 37/20 38/9 47/10 57/7 78/13 95/16 104/10 106/14 124/22 124/24 137/12 154/12 196/6 196/14 198/10 202/6 204/5 206/2

times [1] 194/18

titanium [1] 178/11

title [1] 90/15

today [7] 33/1 41/4 116/24 119/1 198/2 203/25 206/17

together [15] 8/3 21/2 27/8 99/3 108/22 119/21 119/22 127/22 128/23 137/8 138/11 168/5 187/20 188/2 190/4

told [6] 30/5 82/23 89/2 157/6 164/23

T

told... [1] 195/16
too [7] 14/7 27/2 67/12 81/16 83/1 203/7 205/16
took [3] 30/1 152/20 165/1
top [4] 24/23 65/16 65/24 183/22
totality [1] 103/2
totally [5] 82/11 96/14 151/25 151/25 157/13
touch [2] 47/6 47/9
toward [1] 67/21
towards [2] 15/5 68/18
tracing [1] 189/10
transcript [2] 6/9 207/21
transmission [1] 164/14
travel [2] 56/12 145/13
travels [2] 24/25 99/16
treat [5] 8/3 12/15 24/3 119/20 147/7
treated [1] 91/2
treatises [1] 42/2
trial [7] 7/13 46/23 47/2 87/24 201/4 201/6 206/19
tried [2] 70/22 147/11
troubled [2] 88/7 107/2
true [10] 55/23 57/5 89/20 89/21 126/19 170/8 200/21 200/21 204/25 207/20
truly [1] 76/7
truth [1] 195/21
try [14] 8/2 22/11 32/2 47/25 51/23 53/6 56/3 100/19 104/7 119/1 119/20 201/7 201/19 206/18
trying [25] 10/3 16/24 21/21 23/19 55/18 57/2 58/3 59/21 68/15 85/6 99/6 99/6 100/24 106/6 121/4 125/18 131/9 150/13 151/17 151/20 155/6 196/21 202/17 202/21 204/15
TUNNELL [1] 2/9
turn [4] 3/19 25/12 59/1 96/18
turning [1] 24/13
Turns [1] 19/23
Twenty [1] 159/1
Twenty-six [1] 159/1
two [52] 4/11 8/25 10/4 10/20 38/23 44/9 45/18 58/1 59/8 65/10 65/20 69/1 73/2 76/2 77/6 77/9 77/18 78/2 78/4 104/1 117/20 122/16 137/8 137/10 145/6 147/8 147/13 160/19 160/19 168/21 174/3 174/4 179/11 182/24 193/15 193/16 193/17 196/9 199/25 200/3 200/6 203/15 203/17 204/10 204/12 204/19 205/1 205/2 205/6 205/11 206/13 206/17
two weeks [3] 203/15 203/17 206/17
type [1] 58/16
types [6] 45/2 54/15 54/19 54/22 60/6 92/25

U

U.S [1] 207/25
Uh [6] 150/16 151/16 162/18 174/13 178/20 188/14
Uh-huh [6] 150/16 151/16 162/18 174/13 178/20 188/14
ultimate [1] 121/1
ultimately [2] 15/25 64/16
unasserted [2] 16/3 156/21
under [9] 36/7 82/15 89/11 102/4 145/25 146/1 152/19 162/13 196/25
understand [31] 5/23 18/23 30/13 30/20 36/9 49/12 53/19 57/24 58/3 58/11 64/21 67/12 70/22 89/19 93/11 94/4 95/25 95/25 118/8 121/14 126/12 126/23 152/9 163/6 169/22 171/20 186/19 186/21 188/25 194/22 207/8
understanding [6] 4/16 5/11 36/2 57/7 88/10 186/23
understood [24] 7/11 9/13 28/10 40/4 40/6 46/16 46/19 48/11 53/18 91/21 93/8 96/4 98/14 104/11 171/21 172/2 173/7 178/22 180/3 188/20 195/24 196/19 199/5 207/11
undisputed [2] 13/1 132/15
unequivocal [1] 82/14
unfortunately [1] 196/23
uniformity [1] 65/6
UNITED [2] 1/1 1/15
universe [7] 41/16 70/25 71/2 140/8 161/16 161/21 206/18
unless [9] 47/21 48/3 102/12 106/4 107/4 107/14 107/15 108/10 136/22
unquote [2] 89/1 89/2
until [5] 7/25 107/12 202/10 203/9 206/24
up [54] 7/13 11/17 17/12 22/15 25/21 33/3 35/17 53/5 62/13 64/7 67/24 74/24 78/13 79/25 81/4 86/9 87/24 93/18 94/25 100/6 100/21 106/13 107/3 107/12 107/17 107/20 116/1 116/19 117/7 127/9 127/18 133/9 137/2 147/16 149/15 149/15 152/15 169/15 169/15 169/15 176/18 181/18 185/9 185/13 189/23 190/13 193/4 193/18 195/22 196/23 197/8 202/9 205/13 206/5
upon [3] 56/19 89/24 183/8
UPTON [1] 2/15
us [19] 3/5 34/8 49/17 77/1 85/11 85/12 93/24 96/9 97/9 97/9 110/7 147/9 170/1 179/20 179/23 193/24 195/25 197/21 201/21
usage [6] 11/21 19/11 20/6 21/8 21/9 126/10
usages [1] 21/5
use [50] 8/3 9/3 10/24 11/1 12/6 12/8 20/3 31/6 32/12 32/20 52/9 71/8 80/12 96/18 103/8 103/18 104/7 105/20 105/21 106/15 112/16 124/17 125/5 125/7 125/8 126/1 138/3 140/6 141/16 141/24 142/1 152/17 153/10 153/10 155/7 156/11 157/7 158/12 158/22 158/22 159/5 159/8 159/11 159/13 160/3 160/20 161/2 161/17 178/2 187/7
used [24] 10/9 19/7 29/2 42/2 51/15 52/6 52/6 54/21 60/24 97/16 97/17 102/11 138/8 138/10 138/12 138/12 138/13 138/16 168/17 174/25 175/2 179/12 191/21 191/22
useful [2] 8/3 199/15
uses [11] 8/7 15/19 129/16 129/17 132/6 138/18 142/18 159/18 161/7 168/7 194/9
using [16] 10/19 11/8 19/15 52/5 76/2 121/8 121/10 121/21 122/2 125/12 130/6 131/1 139/3 139/3 147/19 183/22
usually [4] 174/25 175/2 175/20 175/23

V

v [1] 1/5
validity [1] 53/23
variety [5] 44/7 44/10 44/21 45/1 174/18
various [8] 21/10 25/10 134/16 184/13 187/13 187/14 190/7 191/18
version [1] 146/3
versus [1] 90/18
vertical [1] 66/6
very [33] 8/7 14/6 27/8 29/3 33/21 34/25 36/23 39/20 41/13 61/20 61/24 63/17 67/1 70/17 78/15 79/2 79/9 97/15 102/16 103/23 104/1 116/7 118/2 141/19 150/5 153/9 168/3 176/19 185/9 193/14 198/22 199/6 207/13
view [11] 40/17 50/16 114/25 123/18 126/23 141/15 142/16 144/8 145/19 146/20 174/11
viewing [1] 154/23
virtual [15] 74/16 74/22 74/25 75/2 75/9 75/11 75/11 77/15 85/9 85/13 85/23 86/25 87/6 87/7 177/25
visual [7] 62/3 62/11 62/15 62/19 62/21 62/24 63/3
visually [1] 94/7
voice [1] 63/17
vs [2] 136/4 136/7

W

wait [14] 33/24 87/18 127/15 132/24 134/22 139/18 155/10 157/4 160/6 168/10 171/16 177/11 181/12 192/15
walk [3] 144/16 194/23 196/2
wall [1] 202/11
want [82] 9/11 14/3 14/10 14/12 19/2 20/17 22/9 22/15 27/16 27/17 28/7 29/18 34/1 34/25 37/17 37/20 38/5 39/25 40/10 40/16 46/15 46/22 47/14 47/21 48/3 48/4 48/7 51/22 55/6 56/3 58/5 58/25 59/1 59/3 59/11 59/24 60/9 60/10 60/10 60/11 72/14 73/15 73/24 74/10 80/2 86/12 89/11 90/21 91/10 91/14 102/14 102/15 109/4 111/9 113/9 116/18 117/4 117/7 120/6 120/17 128/18 131/15 135/23 137/13 137/15 137/16 137/20 141/5 144/2 147/23 148/1 153/10 161/15 161/16 168/22 169/16 169/21 179/20 179/23 191/19 195/12 195/13
wanted [16] 6/11 6/19 19/25 23/5 35/16 38/13 45/11 61/13 96/4 105/20 110/23 115/10 166/23 169/2 172/25 180/2
wanting [1] 12/8
wants [4] 8/13 85/11 85/11 205/12
warrants [1] 4/25
was [72] 4/17 4/18 6/4 6/10 6/13 6/20 11/7 21/16 22/18 27/23 34/12 39/20 39/20 48/20 49/16 60/19 67/17 70/3 71/25 72/10 72/25 90/22 90/22 91/2 91/9 93/10 93/10 94/25 95/17 95/18 96/2 113/25 114/22 115/10 124/11 125/11 125/25 126/15 127/23 128/14 131/9 134/14 137/5 140/11 141/22 147/10 153/16 153/19 155/22 155/23 164/21 165/25 167/13 169/1 170/7 172/5 172/8 177/13 178/6 178/9 178/11 180/5 181/19 182/12 194/14 196/17 196/21 198/8 198/9 198/10 199/25 200/20
wasn't [7] 6/20 28/2 28/6 90/17 103/25 172/5 196/17
waste [2] 4/7 199/4
wavelengths [1] 92/23
way [47] 3/17 11/17 11/22 14/7 14/8 27/12 35/10 52/3 60/24 70/16 71/16 73/25 78/25 82/18 85/20 88/8 89/7 89/23 93/13 94/19 97/12 98/24 106/23 113/12 114/13 117/19 118/5 122/24 126/2 139/3 139/4 153/22

W

way... [15] 154/22 154/23 156/12 164/20 180/13 190/18 196/14 197/2 197/7 198/16 202/8 205/13 205/15 205/16 206/23
ways [2] 56/12 206/22
WDM [11] 31/5 32/20 33/4 70/6 175/7 175/8 176/7 176/14 176/15 176/16 177/5
WDM 90 [1] 177/5
we [326]
we'd [2] 64/21 107/19
we'll [16] 23/22 47/17 47/25 48/10 48/13 54/13 65/12 119/4 121/18 133/20 137/2 137/2 137/12 160/8 165/17 206/14
we're [60] 8/2 10/2 21/20 32/24 33/17 36/3 36/17 37/6 37/24 38/14 38/15 40/13 40/23 51/5 53/12 53/12 60/12 62/2 62/9 62/17 62/25 66/21 67/20 68/5 68/9 75/2 78/19 83/8 89/2 89/7 104/9 109/17 112/1 117/22 119/1 119/20 120/3 121/8 121/9 130/25 135/1 143/5 145/1 156/20 160/20 184/3 190/18 193/9 193/10 194/22 196/1 199/24 201/18 203/2 203/4 203/6 203/7 204/4 206/12 206/13
we've [25] 8/15 25/20 52/25 55/13 65/14 76/9 84/7 94/9 94/10 97/1 108/7 109/8 114/20 118/13 122/17 136/16 150/3 153/20 156/13 182/24 197/2 200/9 200/11 201/16 204/4
Wednesday [1] 1/10
weeks [9] 200/10 201/14 203/3 203/15 203/17 204/10 204/12 205/11 206/17
weight [2] 112/12 113/4
well [107] 5/19 6/15 10/25 12/3 16/17 18/6 18/8 25/14 26/16 28/5 32/5 34/1 34/9 35/24 37/15 38/2 43/5 44/17 47/25 48/8 49/16 49/24 58/5 58/19 59/2 59/4 59/14 59/22 59/24 60/11 61/20 62/18 63/17 64/16 65/6 68/22 69/12 71/6 75/4 77/6 78/13 81/8 82/7 82/19 84/14 85/8 85/10 85/12 86/20 91/21 92/5 93/10 95/24 97/9 100/11 106/6 106/8 108/4 109/13 109/17 110/8 110/10 113/9 113/12 113/20 114/1 114/2 119/3 121/12 121/17 122/3 126/14 127/23 130/8 132/24 138/1 138/17 141/18 144/4 151/2 155/16 158/21 159/15 162/15 164/23 166/5 168/20 170/3 173/22 176/2 176/20 177/19 181/12 185/9 186/15 188/12 189/23 190/17 190/24 192/22 194/19 196/3 201/1 201/5 205/5 205/19 206/14
well-established [1] 35/24
well-known [2] 61/20 65/6
well-understood [1] 91/21
went [3] 49/17 165/23 199/19
were [25] 5/17 6/7 7/5 12/8 26/19 42/4 53/9 60/14 67/17 72/18 75/9 105/21 127/9 127/13 127/16 131/13 137/7 139/12 151/10 169/22 177/10 183/25 191/13 201/17 202/2
weren't [3] 100/4 107/25 199/19
what [231]
what's [25] 13/25 30/15 32/3 35/20 46/5 50/9 57/22 59/7 66/22 69/25 83/17 85/5 87/23 93/2 123/16 144/22 145/10 175/8 175/19 175/21 178/10 180/22 181/9 193/11 200/15
whatever [4] 51/25 64/16 81/17 192/23
when [53] 4/8 5/14 6/16 6/18 20/14 21/17 23/8 25/7 27/8 28/8 51/5 53/22 55/22 57/12 61/22 61/22 62/2 63/15 63/19 64/15 67/20 68/10 72/18 73/9 73/24 75/2 75/8 83/19 105/20 117/20 130/5 134/22 136/9 137/7 141/23 145/23 150/4 164/22 167/13 170/20 172/7 173/22 174/16 181/12 183/16 183/24 184/16 194/20 198/23 202/24 204/6 204/14 205/20
where [63] 14/23 19/3 23/6 23/17 35/3 47/12 54/7 58/23 58/24 60/19 64/24 66/5 67/18 70/19 71/4 71/22 71/24 74/8 75/11 76/1 76/1 76/13 100/6 101/4 102/11 106/15 106/19 107/3 107/14 107/17 108/24 109/1 109/5 116/22 117/24 118/22 121/10 125/13 127/6 127/12 143/25 144/7 144/12 147/6 148/19 149/17 150/7 151/17 152/15 156/20 158/5 169/17 172/3 172/4 175/25 178/2 184/20 187/18 188/12 188/15 194/8 194/10 199/21
whereas [2] 102/16 175/1
wherein [2] 98/23 101/17
Whereupon [2] 72/10 137/5
whether [29] 28/21 28/23 33/5 33/10 34/1 49/6 49/8 50/22 53/2 53/23 54/3 67/22 74/14 75/3 91/11 91/19 115/12 162/21 165/21 165/21 165/25 166/3 178/23 178/23 181/7 185/22 186/6 186/7 193/8
which [86] 6/24 7/24 8/6 8/12 12/1 13/4 22/12 24/8 24/9 24/17 25/1 26/22 27/6 27/7 41/3 44/24 50/21 70/10 70/15 74/15 77/2 80/24 85/13 85/15 86/3 87/9 88/25 89/23 89/24 100/9 100/14 105/11 106/25 110/3 112/21 116/6 116/7 116/8 116/9 117/21 119/3 120/13 121/17 123/21 124/11 125/17 125/19 127/5 134/19 136/5 140/13 141/2 141/3 141/23 143/13 149/11 149/12 150/3 150/21 150/23 151/2 153/7 153/9 154/23 156/4 156/11 157/19 158/12 158/13 164/15 164/19 165/13 167/3 173/16 173/21 176/18 176/22 177/15 182/7 183/4 185/14 187/4 194/5 194/14 199/4 206/18
whisper [2] 63/17 63/18
whole [4] 25/8 91/25 158/2 164/25
why [38] 7/18 8/2 25/18 34/12 41/2 41/19 43/5 43/6 44/11 49/24 58/13 58/25 65/21 69/2 93/3 102/2 110/16 111/13 120/21 122/2 144/18 146/19 153/7 153/10 155/6 156/17 163/2 164/6 173/8 174/14 177/16 178/6 182/21 184/12 185/18 191/18 202/21 206/7
will [38] 7/6 34/9 46/21 49/25 51/7 51/10 60/25 61/25 63/23 76/16 77/9 79/9 79/15 81/17 82/20 100/23 120/23 133/15 148/24 164/5 175/25 176/1 176/1 176/2 176/7 176/24 176/25 179/10 179/19 179/22 184/4 184/5 184/7 198/16 198/22 203/24 206/17 206/18
willing [5] 6/20 64/21 205/14 205/17 206/22
Wilmer [1] 3/5
WILMERHALE [1] 2/3
Wilmington [1] 1/13
winning [1] 90/23
Wireless [1] 112/18
wish [1] 41/2
withdrew [1] 199/25
within [10] 92/7 114/15 127/1 176/11 176/13 200/10 200/12 201/14 204/10 206/16
without [9] 14/13 21/14 88/12 111/1 144/17 147/10 147/19 163/16 197/8
witness [1] 3/14
WMD [1] 175/5
won't [6] 4/1 164/10 164/11 196/7 206/23 206/23
wondered [1] 29/20
wonderful [1] 164/11
wondering [3] 28/8 33/10 43/6
word [31] 9/3 12/6 15/6 15/20 20/3 21/1 21/13 29/12 30/1 31/6 39/7 40/22 41/12 41/15 52/9 52/23 53/5 54/7 62/10 62/24 76/15 92/3 105/21 108/15 125/3 125/5 132/6 134/13 141/24 142/1 156/11
words [30] 5/8 10/25 11/1 11/8 12/20 18/3 19/6 19/10 19/11 19/15 19/17 38/19 42/1 43/13 44/14 53/16 57/15 77/21 79/21 95/15 106/24 124/20 128/13 129/11 129/12 173/23 174/6 178/2 198/5 199/1
work [6] 20/5 21/1 21/13 62/23 64/21 137/3
works [4] 11/19 56/15 60/1 61/3
world [8] 56/6 56/8 56/15 66/9 66/12 66/19 81/20 156/19
worried [1] 57/22
worry [1] 170/9
worth [2] 81/15 142/23
worthwhile [1] 206/21
would [149] 6/6 8/2 9/4 12/9 12/9 17/5 17/17 20/1 20/9 20/13 26/22 27/1 27/1 27/6 29/6 29/10 29/13 29/20 29/23 30/1 30/3 31/1 31/9 33/3 34/8 37/23 40/9 40/18 40/25 41/8 41/23 42/16 43/1 43/2 45/11 46/20 49/25 50/11 51/14 52/4 53/19 55/21 56/24 57/25 60/13 62/21 62/24 63/2 63/9 69/1 69/21 69/22 69/22 70/21 71/8 75/11 77/17 81/5 81/10 82/2 83/13 83/23 84/16 85/4 87/10 89/13 90/25 92/6 92/16 94/19 95/21 96/12 96/13 97/14 98/15 98/22 100/15 100/18 100/19 102/22 103/7 105/9 109/5 109/6 110/1 110/2 113/5 113/20 113/23 115/24 117/7 121/15 126/6 127/4 127/21 128/25 129/6 129/20 130/8 131/15 132/17 133/23 139/2 143/3 144/6 144/7 145/17 145/21 145/23 145/24 146/3 146/20 147/22 152/17 152/24 157/19 158/17 158/19 162/13 162/25 165/15 166/3 166/4 168/8 168/8 172/12 176/4 181/2 181/11 182/20 185/23 191/14 193/13 193/22 194/5 195/25 196/4 197/17 197/22 198/25 199/8 200/16 200/22 200/25 201/1 204/18 205/6 205/10 207/4
wouldn't [10] 26/23 37/1 38/5 42/8 58/14

W

wouldn't... [5] 64/23 68/14 87/2 88/2 152/16
wow [1] 180/6
write [2] 98/23 150/14
writing [1] 206/4
written [84] 5/15 19/3 19/14 22/22 30/23 31/9 31/25 32/3 33/3 33/6 33/11 33/17 37/19 50/2 70/3 70/4 70/9 70/18 71/11 72/1 77/18 78/2 78/5 85/17 85/22 86/16 90/6 94/18 94/23 95/7 95/10 95/16 95/19 103/9 104/23 108/24 110/6 116/6 116/22 117/23 118/1 119/2 120/14 121/15 121/17 122/5 124/19 131/2 131/7 131/8 131/10 131/11 131/14 131/17 132/2 132/5 132/12 132/13 133/18 134/23 135/12 137/21 137/22 138/3 138/23 140/5 140/9 146/2 147/23 148/6 150/19 151/8 151/11 162/24 183/14 186/8 187/7 187/9 187/14 188/2 197/3 198/3 205/21 206/8
wrong [6] 31/10 56/1 56/15 59/8 60/2 71/10
wrote [1] 138/5

X

X [1] 194/11

Y

Y [1] 194/11
yeah [61] 18/15 22/25 26/8 26/10 32/8 37/3 39/24 42/8 42/14 42/25 46/24 58/1 68/8 78/15 86/19 89/22 99/5 104/6 104/9 107/10 109/3 111/4 117/16 128/2 128/5 128/16 132/20 133/2 142/6 143/16 144/21 144/25 148/23 151/19 151/22 153/3 153/14 154/9 154/20 156/6 158/2 163/21 164/4 165/8 169/5 169/25 170/13 175/10 176/13 178/17 182/21 188/23 189/8 191/11 194/1 194/19 194/21 196/4 196/11 203/11 207/6
yep [8] 79/4 79/6 132/14 138/21 160/25 170/15 182/19 183/10
yes [74] 11/4 12/24 13/3 13/7 22/3 45/7 45/10 46/24 48/7 48/7 62/14 77/23 79/1 85/1 86/10 98/10 98/17 100/1 100/8 100/23 100/23 101/12 103/15 103/15 104/11 104/19 111/20 114/25 120/2 120/8 122/10 128/20 130/20 131/18 135/21 135/21 135/22 140/19 140/23 141/1 141/4 142/13 146/9 146/12 148/14 152/3 155/9 158/1 159/6 160/9 160/17 161/22 162/14 165/10 173/25 178/8 178/14 181/24 182/3 182/14 182/15 182/25 187/19 191/6 191/17 192/2 192/5 192/20 197/5 197/5 198/12 203/18 204/11 204/24
yesterday [1] 171/23
yet [5] 69/4 94/3 95/24 118/17 127/20
you [633]
you'd [1] 47/16
you'll [2] 89/18 89/20
you're [45] 10/21 28/1 29/23 37/17 37/20 42/21 44/15 54/2 55/24 56/6 57/13 58/11 61/24 67/24 69/15 70/12 75/8 76/22 79/12 82/1 84/3 88/22 89/19 90/1 105/2 106/16 108/10 109/15 109/17 112/12 126/22 150/17 153/8 156/14 157/10 171/24 185/23 186/12 186/15 188/21 188/22 188/25 190/4 204/14 204/24
you've [14] 4/4 35/21 38/24 41/12 47/12 102/25 103/1 107/11 120/17 127/17 132/2 134/17 134/18 198/18
your [377]
yours [1] 59/12

Z

Z [1] 194/11