IN THE UNITED STATES DISTRICT COURT

IN AND FOR THE DISTRICT OF DELAWARE

ROCHE DIABETES CARE, INC.,	)	
Plaintiff,	)	
v.	)	**CASE NO:**
	)	**24-cv-668-GBW**
TRIVIDIA HEALTH, INC.,	)	
	)	
Defendant.	)	
	)	

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Wilmington, Delaware
Wednesday, April 30, 2025
Markman Hearing Transcript

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BEFORE: HONORABLE GREGORY B. WILLIAMS
UNITED STATES DISTRICT COURT JUDGE

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Michele L. Rolfe, RPR, CRR

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Roche Diabetes Care, Inc. v. Trividia Health, Inc.
IPR2025-00553

APPEARANCES:

MCCARTER & ENGLISH
BY: DANIEL SILVER, ESQ.
-and-
WILMER HAIL
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PROCEEDINGS

(REPORTER'S NOTE: The following hearing was held in Courtroom 6B, beginning at 1:00 p.m.)

THE COURT: Good afternoon, you may be seated.

All right. We're here this afternoon for the *Markman* hearing in *Roche Diabetes Care, Inc v. Trividia Health, Inc.* Civil Action No. 24-668.

Let's get started by having counsel put the appearances on the record.

MR. SILVER: Good afternoon, Your Honor. Dan Silver from McCarter English on behalf of Roche Diabetes Care. I'm joined today by my colleagues from Wilmer Hail, Omar Khan, Dennis Wang, David Yin and Benjamin Morris. And

we also have two in-house representatives, Mona Gupta and Charles Fox.

THE COURT: All right. Good afternoon.

All right. Ms. Delcollo?

MS. DELCOLLO: Good afternoon, Your Honor, Renee Delcollo from Greenberg Traurig on behalf of Trividia. I'm joined by my co-counsel Herbert Finn, Callie Sand from our Chicago office and our client representive from Trividia Pennie Goldmann.

Thank you, Your Honor.

THE COURT: All right. Good afternoon, all.

All right. I received the -- it looks like two slightly different versions of the letter. I assume we're going by the later version, which means that Claim 7 is still in -- will still be argued?

MR. KHAN: Correct, Your Honor. Thank you.

THE COURT: All right. We've set aside three hours for this claim construction hearing, split equally between the two sides; so 90 minutes each. And I know that we have a portion with the Roche patents and then second portion with the Trividia patents.

So let's get started with the Roche patents, the '467 and the '849 patents.

So, Mr. Khan?

MR. KHAN: Thank you, Your Honor. So the -- all

three of the patents in this case relate to test strips, which are useful for blood glucose monitoring. And, essentially, the test strips have a sample-receiving chamber on one end, you place a blood sample into the sample-receiving chamber, there's a reagent in the sample-receiving chamber that mixes with the blood sample, it has an electrical chemical reaction, the electrical chemical reacted detected by the electrodes in the test strip and the test strips have a second end that inserts into a blood glucose meter. So then the electrodes then pass the detection to the meter, which then detects and measures and then tells the user what the blood glucose level essentially is.

So the '467 and '849 patents are about the -- the '467 is slightly directed more to the structure of the test strips and innovative structures for the test strip; and the '849 is about how to manufacture those and other types of test strips.

So the '467 patents starts by talking about the problems in the prior art. So the test strips at the time of the invention were required to be -- had to have smaller test samples and faster analysis times, and it was desirable -- as the patent itself explains -- to have a reagent layer that was as thin and useable as possible.

One of the problems -- and there are several

problems and several solutions that are talked about in the patents, but one of the problems that the patent talks about is in the prior art the reagent layer created a meniscus, and when there's a meniscus created, the thickness at the ends is -- it's thicker than in the middle, which, as the patent itself explains on the face of it, can cause inconsistency in the filling of the chamber where the blood sample is being placed, can cause prolonged dissolution intervals, and then ultimately the test results themselves can be less effective than there would be if there wasn't a meniscus problem.

So one of the solutions that's in the '467 patent, and it directly ties the meniscus effect and the resolution of the meniscus effect to this solution, is to place the reagent on the base substrate underneath the spacing layer. So basically by placing the reagent layer underneath the spacing layer and on top of the base substrate you now don't have a meniscus effect anymore.

Notably whenever the patent is talking about the meniscus effect -- and this is going to come up later -- there's no discussion of the reagent layer necessarily going to the dosing edge, so that's an important component of the statement of the invention and the problems that were solved over the prior art. The meniscus effect problem is not solved in -- at least in the statements of the invention by

having the reagent layer go to the dosing edge.

So the first term --

THE COURT: Before you go further.

MR. KHAN: Yes.

THE COURT: Do you have copies of the slides for the Court?

MR. KHAN: Oh, yes, we do, Your Honor.

THE COURT: All right.

MR. KHAN: So the first term that the parties are disputing here is "sample-receiving chamber." And "sample-receiving chamber" we contend should be given its plain and ordinary meaning. To the extent that the Court is inclined to apply a construction, we think it should be "a chamber or compartment in which the sample is received." Those words, Your Honor, they track almost exactly the language that the specification itself uses to describe a sample-receiving chamber in a definitional way.

In Trividia's proposed construction it is "an area bounded by the base substrate and the [void]/[cavity]" in the claim we're talking about "in the spacing layer." And there's a couple of things that aren't disputed on this term, Your Honor. So there's no dispute that -- there's no -- that Trividia has any lexicography or definitional language to support its construction. There's no dispute there's no disclaimer. There's no dispute that there's no

statement of the invention that would limit the claim in the way that Trividia is urging the Court to adopt. And there's no dispute that Roche's construction picks up the exact language that the specification talks about in discussing "sample-receiving chamber."

So with that sort of background we'll step into the claim. So Claim 1, exemplary Claim 1, talks about a sample-receiving chamber here that's a part of the spacing layer, and the spacing layer is above the base substrate and it has a void, and the void at least partially defines a sample-receiving chamber.

And there's -- again, the words that Trividia wants to incorporate into the claim are not in here. There's no suggestion that the sample-receiving chamber has to be bounded by the base substrate; or that it's "bounded by the void," the void partially defines the chamber and not the other way around.

And there's no requirement in the claims, Your Honor, for height or volume requirements. You can see there's nothing in here that says the sample-receiving chamber has to have a certain height. There's nothing in there that says it has to have a certain volume. Those are in certain dependent claims that are not in the independent claims that recite the term.

So hear's Trividia's construction, so they are

asking for the "sample-receiving chamber" term to be given a construction "an area bounded by the base substrate and the [void]/[cavity]." And essentially what they want is two things: First, they want to take the word "sample-receiving" out of the claim, so their construction doesn't say "sample-receiving." So it doesn't provide or state the function to which the area where the claim chamber is being put.

The second is they are going to talk the word "chamber" out and replace it by "an area bounded by the base substrate and the [void]/[cavity] in the spacing layer." As I've already kind of alluded to there's no height or volume requirements in the independent claims. The claim itself doesn't say that the chamber has to be bounded by the base substrate, and the void partially defines the chamber, it's not that the chamber is bounded by the void.

So our construction, Your Honor, finds direct support in the specification. So the specification in the very, very beginning of the patent, essentially, it's in the introduction, it says: The test strip has several basic components, one of the competents is a chamber in which the sample fluid is received for testing. This "sample-receiving chamber," that's as close, Your Honor, as definitional language as we've ever seen, so we contend that that is definitional with respect to the phrase

"sample-receiving chamber."

And that construction is confirmed by other instances of discussion in the specification of "sample-receiving chamber." So, in other instances, "sample-receiving chamber" is described as being -- providing a place for receiving the sample fluid. The sample fluid enters and moves into the sample-receiving chamber. There's numerous instances where basically the sample-receiving chamber is given a broad understanding.

The plain and ordinary meaning of "chamber" or "sample-receiving chamber," as in prior cases, the chamber has been given its ordinary and plain meaning to just refer to a "compartment" or a "receptacle." And there are Federal Circuit and Judges in this district have previously held similarly.

So I've started to talk a little bit about some of the issues that we think are present to Trividia's construction, there's no height or volume requirements in the independent claims; the claims don't talk about the sample-receiving chamber being bounded by the base substrate; the definitional language in the specification that favors Roche. But there's some other issues -- and basically we're going to try to get through them here -- so Trividia's construction introduces redundancy and essentially tautology -- and we'll talk about it in a

second.

(Reporter clarification.)

It's inconsistent with the claim language.

And then the specification0, you know, we just talked about how the specification we believe supports Roche's construction. I'd like to talk a little bit about how the specification does not support Trividia's construction; the specification is actually to the contrary.

So starting with the claims. So the first issue is that -- among the other issues I've already raised is that if you introduce the construction that Trividia has proposed into the claims basically the word "void" is already in there and the word "cavity" is already in there, so this is the claim as written: Void that at least is partially define as sample-receiving chamber, cavity in Claim 1 is at least partially define as sample-receiving chamber. And they would have the claim read: Void that at least partially defines an area bounded by the base substrate and a void. And so you have a void being -- defining an area that's bounded by the void. And it's -- it's completely unclear and, in fact, redundant as to what's already in the claim.

The other notion that's it's got in their construction is the word "bounded." So "bounded," Your Honor, is different than what the claim says, which says

partially defines. So the claim doesn't say partially defines a bound, it doesn't say partially defined as boundary, it just says "partially defines." And that makes sense in the context of a chamber because a chamber is meant to hold something, so the void is actually part of the chamber. And so it's not -- the void isn't bounding the chamber, it is -- it's not the boundary of the chamber, the void is a part of the chamber. And so their construction for that reason also on its face sort of doesn't quite line-up with how the claim and the specification talks about what the chamber is.

So then turning to the specification. They cite a number of passages from the specification. One of them is on the right. This is directly from their excerpt of the brief, Your Honor. And the one that they like -- seem to like the most is: The spacing layer includes a void portion to provide a sample-receiving chamber extending between the base substrate and the covering layer. None of those words, Your Honor, are in the claim. So it -- the claim doesn't say the sample-receiving chamber extends between the base substrate and the covering layer. And, of course -- as we'll talk about in a second -- that's just one embodiment that's described.

Here is Figure 2 and Figure 3 of the patent. And Figure 2 is an exploded view of the layers in the test

strip and so from top to bottom. Figure 3 is when those layers are pressed together, and it's a cross section. And we've added, Your Honor, on Figure 2 this red dotted line that indicates where the cross section is taken. So the cross section is taken in the gap here and across diagonally across Figure 2 there. So what we're seeing on Figure 3 is the hash marked are the solid pieces here, the non-hash mark here, Your Honor, these two boxes, two and a half boxes here there is the gap or the void here that's created in Figure 2.

And you'll see in the next slide, in Figure 3, in the labeling, element 24 is described as the sample-receiving chamber and that -- as I've noted already -- because of the way that the cross section is made, the non-hash mark pieces here, Your Honor, are all of the sample-receiving chamber or the void.

And so the -- here's why their construction is contrary to the specification. So the specification only uses the term "bounded" once, it's right here in column 14:47-50. And it says: "The chamber is bounded on its bottom sign by reagent layer and its top side by chamber cover." So, of course, that's different from what they are advocating, which is that the chamber should be bounded by the base substrate and the void. And so, therefore, the claim obviously should be understood to be broader than

either of those proposals.

It's also not necessarily bounded by the base substrate. So, again, the cavity or the void is depicted here in 24, that's the sample-receiving chamber, we put a red box around it, and the orange layer here that's the reagent layer, layer 33. And here the chamber is bounded by the reagent layer, the blue is the base substrate, that's layer 33 -- sorry layer 12, so layer 12 here is not bounding the chamber in this figure.

So, Your Honor, throughout the specification it's pretty clear that the sample-receiving chamber is not bounded the way that they want and we think for the reason -- really quite simply because the specification includes a definition of sample-receiving chamber that Roche's construction or plain meaning should be adopted.

If there are no questions, I'll take a pause here.

THE COURT: All right. I understand your argument.

MR. KHAN: Thank you.

THE COURT: All right. Trividia?

MS. SAND: Your Honor, can I approach? I've got copies of our presentation as well.

THE COURT: Yes.

MS. SAND: Good afternoon, Your Honor. Before I

address the sample-receiving chamber, I also wanted to just briefly go through the two Roche patents. So we have the '467 patent and the '849 patent. And as the other side said, these are related, they share a specification, so when we're citing to things in the '467 patent, they are also found in the '849 patent.

The '467 patent is directed to a test strip for measuring glucose. The '849 is directed to methods of manufacturing that test strip.

We have slightly different views of the technical problem that the Roche patents are trying to solve. So the Roche patents in the specification talks about what was known in the prior art. And they are pretty specific on that point, they talk about how it was known in the prior art to provide elongated webs of test strip material on which a continuous stripe of reagent is deposited. The test strips are then cut from the elongated web, the cuts extending through the reagent layer. That's what the prior art teaches us.

But there's a problem with manufacturing test strips with that stripe of reagent. You have a sample-receiving chamber that ends up having two different levels on the floor. The first level is a base substrate. The second level is the reagent layer that's going across the base substrate. And the problem with this is that the

reagent layer is going to have edges that are uneven in thickness and width, the edge quality can vary. The specification is very clear that these type of inhomogeneities can lead to inaccuracies when it comes to analyte concentration.

And why this is important is as you make these sample-receiving chambers smaller and smaller -- which everyone wants because that means you're going to be needing less blood to go in there, no one wants to have to be pricking their finger more than they need to -- the quality of the reagent layer becomes more important; it's just a smaller chamber there's less room for error. So the goal of the Roche patents was to form a test strip with a small sample-receiving chamber that includes a reagent layer that avoids the drawbacks discussed above, those discontinuities in the floor of the chamber.

The summary of the invention, the Roche patents are very clear on that point. You have a reagent layer sandwiched between the spacing layer and the base substrate, it extends to the first and second sides of the base substrate, and it also extends to the sample-receiving end of the test strip. And this is important because that gives a uniform reagent layer, that's what avoids the edge and meniscus effects that they discuss above.

We have two example claims here, as I mentioned

earlier, the '467 patent is directed to the test strip, the '849 is for a method of manufacturing. There's a lot of similar elements: Base substrate, spacing layer, covering layer and a reagent layer that goes between a base substrate and the spacing layer.

So moving into sample-receiving chamber. Trividia is proposing: "An area bounded by the base substrate and the [void]/[cavity] in the spacing layer." Roche has said this term doesn't need any further construction, has its plain and ordinary meaning. And that might apply in some patents, but the issue we have with that here is some of the claim language. So if you look at some of these dependent claims, like Claims 17-20 of the '467, you can see that they have specific requirements, specific dimensions.

Claim 17, for example, you've got a height requirement; same for Claim 18. Claims 19 and 20 both have volume requirements. And so when we're looking at how do we interpret "chamber," we're saying this is a term that needs to have specific dimensions; what makes up the bottom of this chamber; what makes up the sides of this chamber; how do we determine what the volume is; what point are we starting from, what point are we ending from.

THE COURT: Well, if you have a term that has a limitation that's included in the dependent claim, doesn't

that necessarily mean that that added limitation is not in the independent claim?

MS. SAND: That's true, you know, the dependent claims are going to be more narrow, but we're going to be construing a term consistently throughout, so if the dependent claims have a sample-receiving chamber that has specific dimensions, we do think that should be interpreted consistently across all of these claims.

THE COURT: So you -- if a dependent claim has certain size limitation, you think that should be implied into the independent claim?

MS. SAND: I apologize if I wasn't clear on that, Your Honor. Those specific size limitations, no, those are specific to those dependent claims. It's more the aspect of in order to have these size limitations, we need to have an agreed-upon definition of what the chamber is or what the compartment is; like what makes up the sides, what makes up the bottom, what makes up the top. And so while the independent claims don't have those specific height requirements, when we get into these dependent claims that have height requirements, they have volume requirements, to us that suggests that this is a term that needs to have some specific boundaries. We don't need to have that specific height in the independent claim, but we need to know what is the top, what is the bottom, what are the sides.

So the '849 patent, that also describes a sample-receiving chamber, you have a cavity that at least partially defines. And so that goes back to what we were discussing a little bit earlier, which is we know what partially defines a sample-receiving chamber, but what else does? And the claims are just not entirely clear on that point.

Now, one thing I wanted to note is that Roche did criticize us for not including the term "sample-receiving" in there, we are open to modifying our claim construction to include that, if that's a point of contention. For us the thing that's important is just determining what are the boundaries of that sample-receiving chamber; what makes up the bottom, what makes up the sides.

So the specification does provide us more guidance as to what these boundaries of the sample-receiving chamber are. For example, in the basic description, the spacing layer, that's the portion that partially defines the sample-receiving chamber, the specification teaches us that it includes a void portion to provide a sample-receiving chamber extending between the base substrate and the covering layer. And, again, it specifies that the test strip has a spacing layer that overlies the base substrate, that's why we're using that as our bottom boundary, and that the spacing layer in part defines the sample-receiving

chamber.

In particular, it includes a void portion substantially defining the height and the perimeter of the sample-receiving chamber. So, again, that's where our proposed construction is from, we're looking at the specification we're seeing it tell us that the void portion defines height and perimeter. We're seeing that the spacing layer is overlying the base substrate, and so that's what we're proposing just to give some boundaries and clarification to this term.

So, as I said earlier, Roche has said the plain and ordinary meaning of this term doesn't need to be anything more than chamber or compartment in which a sample is received. And, again, we're open to including this "sample-receiving" language in our construction, but what we keep coming back to is what are these specific boundaries, and Roche hasn't been willing to concede any.

So if we're sitting here and we're in a scenario where these boundaries, what defines the height, what defines the length, what decides the width is it the base substrate? Is it the electrodes? Is it an adhesive layer? They point to something in the specification talking about the reagent layer, but the claim language is clear that the reagent layer is disposed in the sample-receiving chamber, so, in our view, the claim language rules that out. But the

fact that they are not willing to concede any boundaries on this point, for us just shows why we need this type of construction.

Now, Roche has criticized the use of this [void]/[cavity] as a boundary. But, again, going back to the claims and specification, they are teaching us that the [void]/[cavity] in the spacing layer, that's that layer 22 -- unfortunately the highlighting doesn't show up clearly there, but you can see it on the right side. It teaches us that that [void]/[cavity] in the spacing layer must at least partially define the sample-receiving chamber.

If you have any additional questions, I'm happy to answer them. Otherwise, I will pause there.

THE COURT: How do you respond to Roche's argument that Trividia's proposed construction introduces redundancy?

MS. SAND: So we disagree that there's redundancy there. But to the extent that there's anything that we need to modify to resolve that issue, we're open to it. We just haven't gotten a proposal from them other than that they don't like our construction.

So we are open to interpreting this in a way where maybe we're just adding a lower and upper boundary. The important thing for us is that we come to some sort of agreement of what the boundaries are and we just don't have

any agreement on that point.

THE COURT: Well, how do you respond to Roche's argument that, you know, these are words used in common parlance and there's case law that says that, you know, you don't -- its plain and ordinary meaning, you don't need any construction? And then their argument about the specification at the very beginning defines, sort of, what -- by definition defines "sample-receiving chamber," and thus, you know, adding additional construction just because -- I'm just trying to understand why you would think that if there are words that a jury could easily understand, why do you think that you have to have some boundaries defined? You didn't make an indefiniteness argument.

MS. SAND: Yeah, so I'll try and respond to each of these points.

The first one related to the cases that they cited talking about plain and ordinary meaning. Now, I'm not disputing that "chamber" doesn't always need to be construed; it can have its plain and ordinary meaning in many situations. One of the cases they cited the *Dyson* case, for example, that's talking about a chamber on a vacuum cleaner. If we were dealing with that type of situation, we wouldn't be sitting here arguing that construction.

What we're struggling with here is that we have

claim language that gives us a sample-receiving chamber, but it only partially defines it. We've got a spacing layer that partially defines. And when we see that kind of language, it makes you wonder but what else defines the sample-receiving chamber? What else makes it up? And then when you have dependent claims that have these specific requirements that's not in those cases that they are pointing to where you have specific height and volume requirements, so that's the reason why we think it needs to have more boundaries other than just saying a "chamber in which the samples are received."

The second point -- and I apologize, the second point related to -- if you'll remind me, again, Your Honor, I want to make sure I'm answering your questions directly.

THE COURT: I said that -- I asked you about redundancy.

MS. SAND: Yes. So in terms of redundancy, if an issue here is that the claim language already says "a spacing layer partially defines," you know, we can adjust it as such to leave that out. For us we think it's helpful to have that the spacing layer has the specific boundary because in the specification it talks about how the spacing layer is the height and perimeter of the sample-receiving chamber. However, if you think that's a redundant point, if you think it's unnecessary that we need that spacing layer

here, we're willing to modify our construction where, for example, we're just talking about how the spacing -- the space -- I apologize. The sample-receiving chamber has the base substrate, has the spacing layer -- like we are not 100 percent wedded to the language. We understand that construing claims is an imperfect art. For us the main points we're trying to get at is what are these boundaries exactly. The claims only tell us that the spacing layer is the partial definition of it and we're just trying to come one a construction that adds what else defines that void in the spacing layer; what else defines that sample-receiving chamber.

THE COURT: Okay. Is it possible that different embodiments could be bounded by different layers?

MS. SAND: It is possible. But when there's a tension between the specification and what the claims require, the claims should control.

So, for example, Roche pointed to an embodiment where the -- they said "the sample-receiving chamber has the reagent layer is the bottom boundary." Well, the claim language here specifically says that "the reagent layer is disposed in the sample-receiving chamber." So when you look at that claim language, that suggests that's not the bottom boundary, it -- the sample-receiving chamber is separate from the reagent layer, otherwise the reagent layer wouldn't

be disposed in it.

THE COURT: All right. I understand your argument.

MS. SAND: Okay.

THE COURT: All right. Any reply or we're moving on to the next?

MR. KHAN: I think the issues on the sample-receiving chamber are mostly joined, Your Honor, and don't need to belabor it. I just make one very small point. I think the concession right at the end that the sample-receiving chamber can be bounded by multiple layers, that's, in our view, sort of the end of it, because the word in the claim is not bounded, it's partially defined. The void partially defines a chamber, and so it doesn't say that the void partially defines the boundary or the end boundary, it just says the void partially defines. And the void is part of a chamber, just like the inside of a glass, the void inside of a glass is part of the glass or a cup.

And so, really the claim language is fully supportive, there's a definition the specification. And on the point of the heights and volumes, you know, a person of ordinary skill in the art, their expert, our expert, can look at what's a sample-receiving chamber, how it's bounded, a word not in the claim, and figure out what its height and volume are, and the jury can easily understand that as well.

So with that, moving on to "covering a portion of the base substrate." So on this, Your Honor, Roche is proposing, once again, the plain and ordinary meaning. We've also tried to explain to the Court what we think that means, and it's basically covering a part of the base substrate. And really what we've tried to say is what does "portion" mean and the dictionary definitions in other case law are quite clear that a "portion" is just a part.

Trividia is proposing, essentially, that covering a portion of the base substrate can be construed to mean covering the opposite side edges and a dosing end edge of the base substrate. And, again, as I did before, Your Honor, a couple of things are not disputed, there's no dispute, they are not relying on lexicography or definitional language, Trividia is not. They are not relying on disclaimer. There's no dispute that the plain meaning of "portion" is part. There's -- and this is important because it kind of relates to the point my colleague on the other side was making a little while ago, there's no statement of the invention or the problem or solution in the specification that uses that language, that uses the language that they have on the screen right there. And you won't see it anywhere in their papers, you won't see it here today.

There's also no statement in the invention

anywhere the specification that ties any aspect of the alleged invention expressly or any aspect of the problem or solution to needing the reagent layer to go to the dosing end -- end edge. So nowhere in the specification will you see expressing a statement that there's a problem in the prior art that is solved by needing the reagent layer to go to the dosing end that's not in the patent.

So with that Your Honor, we'll start with the claims. And the "covering a portion of the base substrate" limitation is in the reagent layer element of the claim. So there's a reagent layer disposed in the sample-receiving chamber and the reagent layer covers a portion of the base substrate. So the language is pretty clear on its face it's covering a portion of the base substrate, not the whole base substrate. It doesn't tell you that it necessarily has to go to the side edges; it doesn't tell you that it has to go to the end edges, to the dosing end edge.

And if we look at now Trividia's construction, Trividia's construction is "covering the opposite side edges and a dosing end edge of the base substrate." And what they are basically doing is they took the word "portion of" out of the claim and replaced it with "the opposite side edges and a dosing end edge of."

And there's a couple of problems with that, and some of them are fundamental. And one of them is that the

two side edges are already in the claim, so it said -- the claim already says "a reagent layer covering a portion of the base substrate..." and then "the reagent layer extends under the spacing layer to two side edges of the base substrate." So the claim itself already tells me that the reagent layer goes to the two side edges of the base substrate. So at least half of their alleged -- additional language is unnecessary and redundant in light of the claim.

The other half of their additional language is that "the reagent covers the dosing end edge of the base substrate." Well, that's really problematic because we have a dependent claim where the reagent layer extends to the end edge of the base substrate. And so, of course, the most fundamental claim differentiation principles require that the broader -- that the independent claim is broader than the dependent claim and that, therefore, the independent claim -- in the independent claim the reagent layer does not extend to the end edge of the base substrate.

And so just to reset on the meaning of the word "portion," "portion" is quite clearly and almost, you know, universally understood to mean a "part," including in this District in prior decisions by other judges in the District. And as I've already talked about there are at least two limitations that are rendered superfluous and redundant by adding Trividia's claim language -- proposed construction

into the claim language. And one of them is a dependent claim, which, of course, by the principle claim differentiation that the independent claim must be broader.

At least the Federal Circuit has noted a couple of different times that the presence of the claim limitation in an independent claim is powerful evidence that the independent claim or the claims from which that dependent claim depend do not include that limitation or are broader.

The specification is completely consistent with Roche's proposal and actually contradicts Trividia's proposal.

So figure 8, Your Honor, is described as a preferred embodiment. And here figure 8 we've added the red dotted lines, Your Honor, and the arrows, so those are not in the original figure, and we've colored the reagent layer orange, that's also not in the original figure. But you can see the test strips -- this is the web of the test strips that is created and -- how the assembly test strips are created. Each of the test strips has a reagent layer covering the electrodes at the end there. And the reagent layer in figure 8 is not going to the dosing end edge, this is the dosing end edge right here. And so that's an example in the specification that will be covered by Claim 1 that we just talked about. And for that reason Trividia's construction is improper.

They, in their briefing, say well, don't worry about figure 8 because there's this other passage in the specification that talks about trimming that top edge -- the top, that white part, Your Honor, that -- above the reagent layer, it talks -- and they say well, that part is always trimmed off. Well, not really because the passage that they are referring to is in the context of figure 13, a different embodiment; so figure 8 stands on its own.

There are numerous examples of the -- in the specification of the reagent layer not necessarily extending all the way to the dosing end edge and the reagent layer is described as substantially covering the floor, it's described as being close to the first edge, but not to the edge; whereas the reagent layer is coating most of the floor, not the entire floor.

And they point to this passage repeatedly -- and my colleague on her side started her presentation with this passage which is under -- which is the second paragraph under "summary of the invention." And she contended, essentially, that this passage is what allows Trividia to propose that the reagent layer should extend to the doing end edge. Really important part about this passage is it starts with "in one form thereof..." so this is one aspect of the present invention that's being described in this paragraph, and we don't contest it. One aspect of the

present invention yes, absolutely, requires that the reagent layer extends to the dosing end edge, but this is one embodiment, one example of the present invention. It is not commensurate with the full scope of the invention as reflected in the independent claims and in the other examples that are provided in the patent.

So they have another couple of passages that are cited in their brief. I'm just going to try to march through them all, but the thematic point is the same. In each instance we're going to see that the passages or the paragraphs right before start with "in a preferred form," so, again, not descriptive of the invention as a whole, "in another preferred form," again not descriptive of the invention as a whole.

And so throughout, Your Honor, there's not going to be a statement as I started my presentation today there's not going to be a statement of the invention as a whole that says you must go to the dosing end edge -- the reagent layer must go to the dosing end edge. There's also no statement requiring a solution that requires that.

So these are just other examples in their brief that I've already kind of alluded to, same thematic point, it that's a form thereof, it's a preferred embodiment, these again are not statements of the invention as a whole.

To the problem solution, so the problem in the

prior art and the solution that the patent tried to offer. The solution that the patent tried to offer to the meniscus effect doesn't talk about the reagent layer going to the dosing end edge. The solution is place the reagent on to the base substrate before the spacing layer is added; there was is no meniscus effect. And that's exactly what we said in the file history. We said by placing the reagent layer on the base substrate before the spacing layer is added there's no meniscus effect. There's nothing in there that says have the reagent layer go to the dosing end edge. Right.

Then they also talk about what is a problem in the prior art that's described as a two different levels problem; the problem that there are two different levels in the patent sometimes because the base substrate might have one level and the reagent layer creates a second level. Again, the patent doesn't -- nowhere in the patent will the solution to that problem -- nowhere, will the solution to that problem be tied to extending the reagent -- to the dosing end edge. The solution is here. The solution is that when you put the spacing layer -- when you put the reagent layer under the spacing layer it makes the reagent layer more flat and it makes it thinner; and we've got dependent claims that are directed to that aspect of the invention.

And so, Your Honor, again, nothing in the invention or the statements of the invention requires the result that they are after, and it's essentially through attorney argument, not even expert testimony or extrinsic evidence, that they are suggesting to you that there should be additional language read into the specification in the seams of the invention.

Unless the Court has any questions, maybe I can pause there.

THE COURT: I don't have any questions. I understand your argument.

MR. KHAN: Okay.

THE COURT: So Ms. Sand, let me ask you an important question: How can Trividia's proposed construction be the appropriate construction if it excludes preferred embodiments?

MS. SAND: So our position on this is that it doesn't exclude any preferred embodiment here. When we look at the embodiments the specification, they all talk about the reagent layer extending to the dosing edge. And so we don't see any situation where our construction is excluding a preferred embodiment, like these embodiments all line up with the purpose of the invention. If there's a specific embodiment that you're curious about, I'm happy to address that more specifically.

THE COURT: Well, the one on -- how about the one on column 27:57-62.

MS. SAND: So for this specific construction, this -- all of these embodiments -- it's really one embodiment walking through the manufacturing of these test strips. So what we're looking at here is discussing preparing the reagent layer. It's one step in this manufacturing process. So, for example, Roche put up figure 8 and said, see, we had this end edge, it doesn't have to be cut off, it's another embodiment that Trividia is pointing to, but that's a step in the manufacturing process where the reagent stripe is laid down on top of the base substrate.

If you continue through the manufacturing steps, which include putting a spacing layer above it, putting a covering portion on, when you get to the separating the test strip portion, that's when the specification talks about you cut through to separate everything into these test strips and you also cut off that dosing edge to give yourself a clean line.

So this specific section, 27:57-62, that's just part of the manufacturing process; the final product does have that end edge removed.

THE COURT: How do you respond to the argument that the only difference between the independent claim, Claim 1 and the dependent claims, Claims 2 and 3, is that

the reagent layer extends to the end edge of the base substrate or has an end edge that is aligned with the end edge of the base substrate, which is dependent Claims 2 and 3, thus those claims that -- those limitations could not be in Claim 1.

MS. SAND: So when it comes to dependent claims, it's not using the exact same language that we're proposing for our claim construction. And so while these are pretty similar claim limitations, we have cases like the *Chewy* case, for example, where dependent claims using similar language are not necessarily going to exclude an independent claim from having a similar limitation read into it. It's different terminology; a patent draftee will use different ways of claiming that same terms. So I think the fact that it's in certain of the dependent claims as "end edge," they don't specify what the end edge is exactly. Our construction is talking about a dosing end edge specifically and so there's a little bit of a distinction there.

For us the overarching point has been more what is the purpose of the invention, what does the specification teach us, what is required from that. Now, we understand that the claim isn't explicitly requiring this, but when you look through the patent, when you look at what it's teaching around, Roche is pointing to this meniscus effect and they're saying we've solved that, all you need to look at is

that the reagent layer is between the spacing layer and the base substrate. That's not entirely accurate because, you know, we just got done talking about a sample-receiving chamber, that's a void in the spacing layer. Where you have a void there's not going to be anything in the spacing layer pressing down on the reagent to smooth it out, there's going to be inhomogeneities there, it's not going to be perfectly even because there's not a weight pressing above it.

And so how do you solve that problem? Well, you have it extend to the end edges so that it's trimmed off of the manufacturing process and then we get a nice, clean smooth homogenous layer.

THE COURT: Where does the claim require extending to the dosing end edge?

MS. SAND: I admit the claim does not explicitly require it to extend to the dosing end edge. But what we're basing this off of -- and generally, you know, the case law is clear that we can't read a limiting embodiment into the claims, but here all the embodiments are talking about it. The prior art -- what we're teaching away from is prior art that has a continuous stripe of reagent layer extending across these webs of test strips.

So what's the distinction between the prior art if we still have these two levels in the base substrate? I can jump ahead to -- this is where the specification is

talking about the prior art again. So Roche is saying we don't need to get into whether the end edge is covered here, like we just need the reagent layer to go to these side edges of the test strip. That looks an awful lot like this prior art problem that the patent is saying we need to get away from, this is the issue here, it is saying it is known to provide elongated webs of a test strip material on which a continuous stripe of reagent gets deposited. The test strips are then cut from the elongated web, the cuts extending through the reagent layer.

And then it teaches that in those types of test strips you have a sample-receiving chamber with two different levels, a base substrate and a reagent layer, and that these discontinuities can be problematic. So that's the problem that it's teaching here, and what we're struggling with reconciling is when Roche is saying "plain and ordinary meaning," what it's really getting at is that this reagent layer doesn't need to extend to the dosing edge, but what we're left with is this prior art problem that we're trying to solve. So, yes, we're not explicitly saying that there's -- the patentee acting as its lexicographer here, but, like, the purpose of the invention, what it's distinguishing from in the prior art it's all teaching away from what Roche is trying to cover right here.

THE COURT: Yeah, but they say that placing the

reagent onto the base substrate before the spacing layer is added there's no meniscus effect.

MS. SAND: The problem with that -- and I'm not going to say that this -- the reagent layer is not limited to the sample-receiving chamber, I should say. So if there's parts where the reagent layer is sandwiched between the spacing layer and the base substrate that can be a situation where the meniscus effect is limited because you've got that spacing layer on top of that. But the sample-receiving chamber, there's no spacing layer there, the sample-receiving chamber is void of the spacing layer.

And so when they are talking about this problem here -- so you can see here in figure 2, for example, the spacing layer is that element 22, it's got that U shape in it, that's what's goes on that top of the reagent, that's that partially defining the sample-receiving chamber. So when they are saying we can get rid of this meniscus effect because we have the spacing layer on top of that, that doesn't apply when it comes to the sample-receiving chamber, that portion that we're talking about. There's nothing in the spacing layer pressing down on that reagent layer in that void region, so how do you remove these inhomogeneities, how do you remove these end edge quality issues. And the specification teaches that it's by cutting those edges off to get a nice clean line. You're removing

where there's most likely to be variable quality or there might be issues that causes it to be inaccurate or not a uniform layer.

And when it comes to the prosecution history, we're not arguing disclaimer here, but, again, during prosecution the applicant confirmed that it's the edge quality of these reagent stripes that can be highly variable. And those inhomogeneities can lead to inaccuracies in determining anatoly concentration.

So, once again, this is the prior art problem they are teaching, these reagent layers that are just put down that can have some problems with edge quality and how do we solve that. And over and over again the specification teaches that the reagent layer extends to the first and second sides of the base substrate and that it extends to the sample receiving end of the test strip. We see it in the figures, we see it in the embodiments.

And so while limitations from the specification usually should not be imported into the claims when this features the aspect of the invention as a whole, when this is how they are getting over this prior art problem, this is a problem that they're trying to solve in the patent, then that feature is clearly limiting even if it's not explicit in the claim language.

So, again, here, Roche's construction covering

the prior art problem. Again, we get back to these elongated webs of test strip material, they were pointing to figure 8 showing a reagent stripe on top of a web of a base substrate. When you look at that, that looks very similar to what's being described here. I can't really distinguish from it. And so we have an issue here where they're effectively trying to recapture this prior art problem that they were teaching away from.

THE COURT: All right. I understand.

MS. SAND: Do you have any other questions for me?

THE COURT: No. I have a question for Mr. Khan.

MS. SAND: Okay.

THE COURT: So Mr. Khan, I'd like you to respond to Trividia's argument that that this looks -- go back to 467 at column 2:20-21 that Trividia had on the screen, which is page 24 of Trividia's slides. And Ms. Sand has said that this looks very similar to the prior art problem, and it looks like Roche is trying to recapture the prior art that Roche was teaching away from.

How do you respond to that?

MR. KHAN: Yes, Your Honor. So, first of all, to the extent that we were trying to recapture -- I think we just heard that they are not making a disclaimer argument, but let's put that aside for a second.

This passage is talking about a continuous stripe of reagent is deposited, the test strips are then cut from the elongated web, the cuts extending through the reagent layer, the sample-receiving chamber has a floor with two different levels. There's nothing in here about spacing layer, there's nothing in here about the reagent layer being under the spacing layer.

If we can flip back to slide 6 of Roche. Here's where the patent itself talks about how to avoid the meniscus effect. And what does it say? It doesn't say -- just rely on the prior art. It says what you have to do is place the reagent onto the base substrate before the spacing layer is added. And that portion, that concept was not in that prior passage, not in the prior art.

Just three additional points, Your Honor, with the Court's indulgence on this. First, we heard reference to the *Chewy* case, that case was about a dependent claim which -- the claim differentiation argument that was made was with respect to an independent claim and a dependent claim from -- that did not depend from that independent claim, so they were not on the same claim tree, so they were in different claim trees. And so that was -- that's a completely different fact pattern from what we're talking about here where you've got basically an independent Claim 1 and then the direct dissidence, the direct dependence sort

of narrowing the claim to exactly the construction that Trividia is seeking here.

I think I heard for the first time today that all of the embodiments have the dosing end, have the reagent layer going to the dosing end edge. I don't think that's quite right. We showed about a half dozen examples, including the one that the Court pointed to, where it said the reagent layer goes close to the edge. But I think the best example that directly responds to counsel's argument on that, this is in column 17:50-63 and here -- I'm going to start the Court here at: "In the most preferred embodiment, the reagent layer extends the full width of the test strip." The next sentence. "The reagent layer also preferably extends from the end edge to the vent opening." "Preferably extends from the end edge to the vent opening." Not in all cases, not in all preferred embodiments, in one preferably -- in one embodiment it preferably extends from the end edge to the vent opening.

So it's pretty clear in the patent, Your Honor, that it's a nonlimiting preferred feature to have it go to the dosing end edge. There's also preferred embodiments in figure 8 and the other passages that we showed you where those are not requiring the reagent layer to go to the dosing end edge.

With that, Your Honor, unless the Court has any

questions, we can move on to the next term.

THE COURT: No, I don't have any more questions.

MR. KHAN: The next two terms the parties have agreed to submit those on the papers, but happy to take any questions to the extent that the Court has any. That is "sandwiched between" and "layer."

THE COURT: Do the parties -- so Roche contends that the plain and ordinary meaning is "a thickness of material" and that Roche disagrees that the layer which may have multiple materials -- Roche contends it may have the same or different materials from the materials below or above it.

MR. KHAN: Yes, Your Honor.

THE COURT: What about the thickness and the layer, does it have to be different than the thickness of the material in the layer above or below it?

MR. KHAN: No, Your Honor. And, again, let's -- we could do this very quickly. So here the claim tells you which layer -- what the differences are between the layers. It tells you one is a spacing layer, one is a covering layer, one is a reagent layer, and there's an adhesive layer down here so that's -- the claim itself tells you -- has adjectives that describe why the layers are different.

In all ordinary respects, the plain and ordinary meaning is that -- and this is contrary to what Trividia is

proposing, which basically for them both -- either the thickness or other properties of the layer would be different. And there's nothing in the claim that requires that, the dictionary definitions are consistent with, it's just a thickness of matter, it's a certain thickness, and for different layers and different thicknesses can be the same or different.

There's a case in the District, Judge Andrews held that "layer" doesn't even require a construction, but to the extent the Court feels it does require a construction, we offer thickness of material.

I mean, it is a very common concept to think of "layers" as being the same thickness. There are layers of an onion, there's layers of ham in a sandwich, there's cases that we cited in the briefing where "layers" are used to basically refer to different layers of paint, where layers are basically the same but they are thicknesses of material that may or may not be stacked up on top of each other.

There are examples in the patent where the layers are the same, same thickness. So here we have the body cover 18 and the chamber cover 20, both made of Melinex four to five mils, and then the spacing layer is four to five mils. So the examples in the specification are consistent with it and directly rebut, Your Honor, the notion that the thicknesses have to be consistent.

Maybe I can pause there and not get into too much --

THE COURT: You answered my question.

MR. KHAN: Thank you.

THE COURT: I'll let Trividia if you have anything you want to -- any comments, argument that you want to make on "layer," since I asked Roche a pointed question, I wanted to give you an opportunity to stress any comments that you wish to make.

MS. SAND: Yes, Your Honor. Just very briefly. So it seems the parties are in agreement on a layer being a thickness of material. What we're trying to figure out is how we distinguish one layer from another. And the point I wanted to address very briefly was where Roche was showing these sample materials that they can use and saying see these layers that are next to each other, they can be made out of the same material. That actually showed there being an adhesive layer between the spacing layer -- spacing layer, adhesive layer, that was a different material -- and then chamber cover and body cover are all in one row and those are made out of the same material.

So we don't think that contradicts the argument we're trying to make where these are different materials because that embodiment in the specification actually does show that adhesive layer with a different material between

them.

We're not saying that if a layer has one material that appears in the test strip that can't appear anywhere else. What we're just saying is that the layers that are adjacent to each other should be different materials.

THE COURT: All right. I understand your argument.

MS. SAND: Thank you, Your Honor.

THE COURT: All right. Let's move on to the next.

MR. WANG: All right. Good afternoon, Your Honor, Dennis Wang on behalf of Roche.

So for this next term -- and actually for the next two terms, they all relate to the Roche '849 patent. And as Your Honor may recall, this is the patent that relates to the method of manufacturing test strips. And there are a few key concepts relating to manufacturing described in this patent that are relevant to the parties' disputes for the next few terms. So what I would like to do is briefly go over these concepts before jumping into the disputed terms.

So what's shown here is figure 8A from the '849 patent, and what it is showing here is the concept of a web. And you can see the web, it's the thin line shown here in

the direction of the arrows, and it passes through these two rollers kind of through this apparatus. A "web" is a continuous elongated strip of flexible material. In this particular case, this is the web of the base substrate material which electrodes formed upon them.

As you can see, there's this apparatus in this upper left corner which is depositing the reagent stripe. What's happening is the web is moving underneath that apparatus as it gets rolled through these two rollers and it is applying this long continuous stripe of reagent material and getting stripes.

If we look at that portion of the web you get figure 8, which we've been talking about, and, again, connecting to some of the concepts we've been talking about before. The result of this procedure is a long reagent stripe that covers multiple sets of electrodes. And figure 8 shows five sets of electrodes, these are going to be eventually split into individual test strip components. And what is important to see here is this reagent doing this long continuous stripe is going to cover each of those electrodes.

And as we discussed before earlier this is -- by applying this reagent in this manner before the spacing layer is applied, this is what prevents the meniscus effect, the meniscus issue in the prior art.

And then what's shown here are the next several steps where -- starting from where we left off -- additional layers of material are applied on top eventually being cut in figure 14 to form individual test strips. And one important thing to note is while these figures show the application of layers one at a time, the specification is also very clear that you can have two or more basic components, such as these layers, be applied simultaneously.

All right. With that, let's jump into the next term which is "the two edges." The term "the two edges" appears in two independent claims of the '849 patent, Claim 18 and Claim 27. And the issue before the Court is whether Trividia has met its burden to prove by clear and convincing evidence that the term "the two edges" is indefinite.

Trividia's argument essentially boils down to this: Its contention that the claim does not previously recite explicitly any edges and, therefore, when we get to the term "the two edges," the claim lacks antecedent basis and, therefore, is evident.

Trividia is incorrect and has not met its burden for two primary reasons we're going to discuss. First, the law is very clear that no explicit antecedent basis is required so long as a skilled artisan reading the claim terms in view of the specification can ascertain the meaning of reasonable certainty. And we think the claim language of

the claim and every embodiment in the specification spell preciously whether the two edge refer -- that refer to the two side edges of the test strip where the reagent extends across the full width.

I don't believe Trividia actually disputes that; I don't think Trividia disputes that every embodiment, every single one shows a reagent layer that extends across the full width of the test strip to the two side edges. Instead what Trividia tries to do is to try to create some ambiguity by pointing to a number of different references to edges throughout the specification, but -- and this is the second point: Every example that Trividia points to is not a plausible interpretation because they will not comport with the claim language; they actually contradict the claim limitations. So none of Trividia's examples takeaway from the reasonable certainty of this claim term.

So as a starting point, the well-settled law is that the lack of antecedent basis does not render a claim indefinite so long as the scope of the claim can be reasonable ascertainable by those skilled in the art. And the proper framework to determine that is to read the claims in light of the specification, that's the Supreme Court's description in *Nautilus*. And the corollary to that is -- as the Federal Circuit recognized, the claim language standing along is not the correct standard of law in order to

determine reasonable certainty. And so the question is: What do the claims say in view of the specification?

To circle back real quick on figure 8, which we've been showing multiple times now, figure 8 and its corresponding description where it says: The most corresponding embodiment the reagent layer extends to full width of the test strip shows that -- shows that the reagent layer extends across multiple test strips in the web, and it's going to extent to each of the edges, the side edges when the test strips are formed. And this is exactly what's claimed.

So if we go to Claim 18, this is a representative independent claim in which "the two edges" term appears. You can see the term is highlighted, it's in the element that we've labeled "G." And we've included in our slides a full walkthrough of Claim 18 with all the corresponding claim elements with the specification descriptions and figures, and we think it's helpful to go through that to see how the claim specification give reasonable certainty to the term, and those are in the packet that we will leave with the Court. But for purposes of this presentation, we're going to focus on two key elements: Element C and element G.

Element C is the step of applying the continuous stripe of reagent material through the web, such that the

continuous stripe covers each of the set of plurality of sets of measuring electrodes. We can see that in this figure, the reagent covers each set of electrodes in the web.

And then when we get to element G, element G describes -- and we're going to skip a few steps. But element G describes is a web of test strips as a result of the prior steps A-F. And we see what that looks like in figure 13, figure 13 shows the point of this process where you have a web of test strips and there's dash lines 264 that the patent describes, that's where the web will be cut to form the individual test strips.

And so going back to Claim 18, element G, it says that each of the test strips in that --

(Reporter clarification.)

-- one of which is the term in dispute where the reagent layer extends under the spacing layer to the two side edges of the base substrate.

When we're looking at figure 13, we're looking at the spacing layer. The spacing layer has now been applied, so you can't see the reagent. But if we look underneath -- and we go back to figure 8 and we superimpose the dash lines -- you can see very clearly where the edges of the test strip will be formed and how the reagent layer is going to extend from side edge to side edge.

And as you mentioned, the specification says "in the most preferred embodiment, the reagent layer extends the full width of the test strip," and that's exactly what's being claimed here.

And then lastly, the web is cut along those dash lines that we've talked about to form those two edges.

So we think if we walk through the claim, with the specification in mind, it's very clear that the two edges in element G refers to the two edges shown here, the two side edges of the test strip; that's shown in every single embodiment of the specification which is -- informs the meaning of this term.

Now, I'd like to turn to Trividia's argument. So as I mentioned before, Trividia does not dispute that the two edges that we just showed does -- can reasonably refer to those two side edges that we showed, that's not a dispute. Trividia to manufacture some ambiguity by pointing to other edges that are referenced throughout the specification. The issue is none of these edges that Trividia points to are plausible interpretations because they would actually contradict the web limitation.

So let's go to each one. So first they talk about something called "web edges," and highlighted here in figure 7 in red what those web edges are. And these web edges cannot be what's referenced by the claim as the "two

edges" for at least two reasons. First starting from the left-hand side, you can see how the reagent layer, which is extending across -- and we colored in orange -- does not extend to the web edges, which is required by element G.

On the other hand, if you try to flip the reagent so that it does extend to those two side edges, now it doesn't meet element C, because element C requires the continuous stripe reagent to cover each of the sets of electrodes. So no matter how you flip or spin the -- spin it, it doesn't comport with the claims and cannot be a plausible interpretation of the two edges.

Trividia also refers to the dosing edges, and we have exerted here from the joint claim construction brief a section from Trividia's argument at page 42 where they point to a portion of the specification where they say: The reagent layer extends to the both -- to both side edges and the dosing edges, plural, of the test strip. And based on this, they conclude that the specification explains that the reagent layer makes acceptable either of the side edges or the end edges, plural again, of the base substrate.

The problem is that that's not what the patent says. So we have on the bottom what the patent does say, it says: "Both side edges and a dosing edge," singular. The only pair of edges is the side edges that we're talking about, which we believe is what the two edges refer to; that

single dosing edge is not a pair of edges. We know that the claim says that "the two edges," so it's not reasonably -- it's not a reasonable interpretation to say that the two edges can be satisfied by a single dosing edge.

And even if you were to try to combine a dosing edge with another edge, such as the side edge or a bottom web edge, again, it doesn't comport with the claim because reagent layer having to be a continuous stripe that covers each of the electrodes that limitation would not be made if you were to change the orientation of the reagent stripe to cover those two edges.

So in sum, based on the plain language of the claims, as we walked through, in view of the specification, the two edges is reasonably ascertainable to mean the two side edges that's show here.

And unless Your Honor has any questions, I'll pause here.

THE COURT: I don't have any questions. I understand your argument.

MR. FINN: Good afternoon, Your Honor, Herbert Finn on behalf of Trividia.

THE COURT: All right.

MR. FINN: Before we go into what the claims require and why we think it's indefinite, I want to remind the Court what the purpose of indefiniteness is. The

purpose of indefiniteness is to put the POSITA, the person of ordinary skill in the art, on notice of what the claims require. And if there's ambiguities in the claims, then the terms are indefinite; that was under *Nautilus*, Supreme Court case, as you see at the bottom there "a patent must be precise enough to afford clear notice of what is claimed..." basically we're telling people what causes infringement and what doesn't.

Now, it's Trividia's position that the use of "two edges" in Claims 18 and 27 is indefinite because, as Mr. Wang repeatedly said, there are a number of edges in those claims for which the reagent can go towards.

In Claims 18 and 27, each claim has one instance of the two edges, but neither of those instances have any antecedent basis. Yes, we'll agree with that a lack of antecedent basis is correctable, but in this case the ambiguity remains.

Now, the claims recite that the reagent layers extend under a spacing layer to the two edges of the base substrate. Now, on the base substrate there are the side edges and a dosing edge. Everyone is in agreement on that. There are other edges too, there's the meter insertion edge at the other end, and throughout the patent you'll see reference to other edges on other components, but for the base substrate there are those four edges, basically: The

dosing edges, the two side edges and the meter insertion edge.

Roche would have you believe that the two test strip sides are equal to the base substrate side edges. They are not. Claims 18 and 27 require that the reagent extend to two edges, but don't tell you which two. And, in fact, you could see Claim 1 doesn't help because Claim 1 talks about first and second side edges, a sample receiving end, a meter insertion end; those are what we are discussing. There are web edges that are different than test strips, first and second sides. So none of that helps define the edges that are identified in Claims 18 and 27.

The specification identifies a number of different edges as well. You could see at column 3:24-32 it says: A first and second reagent layer side edges aligned with the sides of the test strip. It means they are not equal to, they are aligned with them; it doesn't necessarily go all the way there, they go towards them.

THE COURT: So how do you respond to Roche's argument that understanding the direction in which the reagent layer extends relative to the sets of measuring electrodes, and, therefore, the base substrate, a POSA would be able to determine which two edges the reagent layer extends towards?

MR. FINN: Well, it's not necessarily that you

can guess your way to it. There are at least three edges that you could worry about. We need to know which two you need to cover to infringement. Is it the two side edges? Is it a side edge and a dosing edge? Is it a side edge and a dosing edge when a dosing edge can also be on a side; the patent describes embodiments where a dosing edge is on the side of a test strip, not just at the top. So a POSITA would have to guess and the public would have to guess which of those edges -- two of these three edges that you'd have to cover to infringement.

THE COURT: All right.

MR. FINN: And just for clarity, there's no requirement in any of the claims as to what the test strip looks like or how the reagent is configured, placed on base substrate. It can be in the shape -- even though it's a continuous strip, you can make a continuous strip that's not necessarily one parallel line, it can be continuous and perhaps in a way that still catches the edges that you're concerned about; whatever those edges may be.

THE COURT: All right.

MR. FINN: Unless you have anything further, Your Honor...

THE COURT: No, I understand your argument.

MR. WANG: Your Honor, may I respond briefly before moving on to the next term?

THE COURT: Yes.

MR. WANG: Thank you.

So counsel for Trividia has -- one of his arguments was that there's at least three edges that someone has to worry about to figure out whether they infringe or not, but -- and would have to be left to guess. That's not correct because every time the specification mentions "two edges" or "a pair of edges" or "the two edges," it's always, every single time, the two side edges of the base substrate. And remember the proper inquiry to determine whether the claim term is reasonably ascertainable is you have to read the claim term in view of the specification. And when you do that, there is enough certainty, certainly reasonable certainty for a skilled artisan to understand what those two edges refer to, "the two side edges."

And counsel for Trividia also says there's not a claim that requires any shape or structure, that's also not true. As shown here, there's plenty of structure. Right. There's a web of base substrate material, a skilled artesian knows a structure or the shape of a web, so web of test strips -- the test strip also has a very specific structure known to a skilled artesian, especially if we read the terms, as we should, in view of the specification, so the structure and orientation that Trividia's counsel says is missing is actually right there in the claims in view of the

specification.

So unless Your Honor has more questions on that term, I'm happy to move on to the next term and dispute.

THE COURT: I don't have any more questions.

MR. WANG: All right. So the next term is the "web of capillary-defining material." And as with the prior term, Trividia contends that this term lacks -- is indefinite for lack of antecedent basis. And I think Trividia is simply wrong here, there's a very clear antecedent basis directly in the claim language and Trividia isn't able to show otherwise.

So if we go to the claim language, so the disputed term is in element E, and it says: "Laminating the web of capillary-defining material." Right here. And immediately prior -- the step that comes right before is "providing a web-covering material defining the base substrate material a series of capillary channels," that is a "web of capillary-defining material."

In fact, this term in E is just shorthand for saying what this longer phrase is, but it has a very clear reference and clear antecedent basis. And even though they are not the same terms, we know that's not a requirement from the case law. We had two examples in our briefing *Energizer Holdings and Simpson Strong-Tie*. In both cases, the Federal Circuit found that sufficient antecedent basis

that didn't use the exact same words as the attorneys used.

For example, in *Energizer Holdings*, the term at issue was "said zinc anode." A sufficient antecedent basis, which is the longer term "anode gel comprised of zinc as the active anode component."

Similar in *Simpson Strong-Tie*, the issue was "structural component," and the Federal Circuit found antecedent basis in a structure called the "joist." They are not even the same words.

Here we have the "web capillary-defining material," and that should find a sufficient antecedent in the prior term "a web of covering material defining with the base substrate material a series of capillary channels."

So turning to Trividia's arguments, they make two essential arguments that we'll address. So first Trividia, again, tries to introduce certain ambiguity by saying that "the web of covering material" includes the base substrate material, while the "web of capillary-defining material" does not include the base substrate material; and, therefore, they cannot be referencing or they can't be equivalent structures. That's wrong and we'll get to that in one second.

The second argument, just to cover both, is the -- they argue that the specification describes the spacing layer as defined the capillaries, not the covering

layer. So they are wrong on both counts.

So if we go back to Claim 27, element D says "a web of covering material defining with the base substrate material, a series of capillary channels." It does not say "a web of covering material including the base substrate material." This element, step D, the covering material has not yet been combined with the base substrate material, that happens in the next step in element D.

The reference to the base substrate material i element D is simply to say that the covering material, the web of covering material will define with the base substrate material, the capillary channels. We see that in figure 10 of the specification. Shown here in figure 10, we colored the covering layer in green, the specification calls this the spacing layer, but that corresponds with the covering layer, because as you can see they include these things called "die-cut precapillaries --" so these are the channels, part of the channels are going to be formed. And it is not yet combined or laminated with the web of base substrate. It's not yet included, but it will define, when combined with the base substrate material, a series of capillary channels; in other words, this is a web of capillary-defining material as claimed.

Which brings us to the second argument that Trividia makes is that well, the specification calls this

green layer a spacing layer and not a covering layer, therefore that cannot be the same thing. But we also know that claims don't have to use same exact terms to describe the same structures in the specification. And if you look at the structures we just talked about, this spacing layer, this green layer, 196, in fact covers the base substrate material, including the reagent and the electrodes. It is, in other words, literally a covering material. And it does define with the base substrate capillary -- a series of capillary channels.

So to sum up, we think the "web of capillary-defining material has a very clear antecedent basis is directly in the claim limitation and is therefore not indefinite.

Unless Your Honor has any questions, I'll conclude there.

THE COURT: All right. I understand your argument.

MR. WANG: Thank you, Your Honor.

MR. FINN: Thank you, Your Honor. You've heard that Trividia believes the term "web of capillary-defining material" is indefinite and is lacking antecedent basis. We obviously disagree with Roche that there is an antecedent basis, we don't believe there is one. You'll note that the term "web of capillary-defining material" is only used once.

It's used in Claim 27. You won't find it in the specification anywhere. You won't find it any in other claim. You won't find any basis for describing it.

In fact, counsel just told you that all other instances of defining or creating capillaries has to do with the spacer layer. That's what's in the entire specification is that the spacing layer or spacer layer defines the capillaries. Now in Claim 27 out of nowhere we get "a web of capillary-defining material."

Now, counsel just ended saying that the claims don't have to be construed the same. Spacing layer can be called something else in a different claim, I think that's what he's insinuating. But they could be construed consistently across themselves. You don't suddenly say "spacing layer" for 26 claims and then in 27 call a "covering layer" the spacing layer. You just don't do that for purposes of construction.

And as we've seen in Claim 27, it's a combination of covering material and substrate material that forms the capillaries, not spacing material as you've seen in the specification and all the other claims.

The last two claims that we've looked at -- at least form Trividia's point of view -- is because they lack antecedent basis at the very least. If the Court were to determine that they are not indefinite, we would ask the

Court to fix the antecedent basis problem, because, as we've started out, indefiniteness is a notice to provide clarity as to what the claims require. At least in rendering a construction, the Court should correct what the two terms that we've pointed out lacking antecedent basis -- one of which Roche agrees with, "the two edges" -- what a proper antecedent basis for those terms would be.

If the Court has any other questions, I'll certainly entertain them.

THE COURT: No, I don't have any other questions.

I have a follow-up question for Roche.

MR. WANG: Your Honor, may I put in just a very short reply?

THE COURT: Yeah. And I have a question for you.

MR. WANG: I'm sorry, I didn't hear, Your Honor. Go ahead.

THE COURT: Okay. How do you respond to Trividia's argument that if claim terms use different words, they should be construed differently? And if you have a -- if the claims talk about "spacing layer" in Claims 1-26, then you can't just suddenly in Claim 27 say "covering layer" and define that to be the same as "spacing layer?"

MR. WANG: Yes, Your Honor. So the reason

why -- you know, counsel for Trividia says there's something wrong with that, but we disagree. There would be a issue if Claim 27 also recited explicitly a "spacing layer" when we're trying to construe those terms differently or an independent claim. Different independent claims can call different terms -- describe similar structures using different terms. We cited a Federal Circuit case in our brief *Hormone Research Foundation v. GENENTECH* which stands for that proposition.

So there is actually nothing legally incorrect, much less a reason for finding indefiniteness where another independent claim term talks about a structure using different language. AND as I mentioned before, "spacing layer" is not explicitly recited in claim 27, so there's no internal contradiction.

And relatedly what counsel for Trividia was saying -- was arguing was that a skilled artesian wouldn't be able to tell whether they infringed capillary-defining material, but the structure is there. If a web of covering material defining the base substrate material, a series of capillary channels, all the structural limitations are there, there's no uncertainly or anything that would render the claim indefinite.

THE COURT: Okay. I understand.

MR. WANG: Okay. Thank you, Your Honor.

THE COURT: All right. Term 7.

MR. KHAN: Thank you, Your Honor.

Term 7 -- I'll try to make this quick -- basically Trividia's argument is that for each of the method claims in the '849 patent the lettering and/or for other reasons the steps must be found to be required to be performed in exactly the order performed in the claim.

We, for this purpose, are saying that no such order should be required, that they should be given plain and ordinary meaning.

On this, Your Honor --

THE COURT: But you recognize, in your briefing you said even if the Court finds that some may be required to be performed in order, you say it wouldn't be all.

MR. KHAN: Correct.

THE COURT: But in reaching the different steps, doesn't it sort of naturally appear that some of those steps have to be performed in a certain order?

MR. KHAN: Your Honor, let me take it this way. So Trividia is arguing to you, I think, essentially it's all or none. So they haven't presented to you some -- in the briefing, at least, some intermediate argument saying okay, if it's not in all order it must be B and C are in order or D and E are in order; they haven't presented that to you or explained to you why that should be the case, right, so they

are basically saying it's all or none.

We've suggested in an alternative mode to say we think that no order should be required in steps whatsoever, but to some extent that some of the steps the Court were to find are required to be in order, it can't be all. And I'm going to show you some examples of the steps that absolutely can't be found to be ordered because it's very clear from the claim language in the specification that those claim -- that those steps actually can be performed out of order, the specification contemplates it can be performed out of order.

So we start, Your Honor, from the basic proposition that the Federal Circuit is crystal clear that unless the steps of the method claim actually requires, through the claim language itself, that there be an order that there is no such order and none will be construed.

And there's even a case, Your Honor, where the claim had letter and numbers in front of it, so the claim steps had numbering and lettering to indicate what -- as a referential tool, Your Honor, the -- each of the steps. And in that case -- this is the *Gleizer* case. Essentially the Federal Circuit said no, what was denoted as step B does not have to come before step D. And that sort of accords, Your Honor, generally with the notion that, you know, that the letters and numbers that are associated with the steps, you know, those are reverential in nature, there's a need for

ease of reference they don't necessarily connote an order.

They cite one case, the *Amgen* case, and the *Amgen* case actually just affirms the basic principle that the Federal Circuit has told us again and again that there's not going to be an ordering required unless -- and here's the language -- "the claim language logically requires that the process steps be performed in sequence." So the *Amgen* case is not on point with respect to -- or doesn't displace the ordinary Federal Circuit guidance that the steps don't have to be performed in order.

Here, Your Honor, we -- not only is there sort of no necessary ordering in the claims itself, the specification tells you the opposite. The specification literally says the test strip may be assembles sequentially by successfully laying down one layer at a time -- that's Trividia's position, the test strip has to be built one layer at a time in succession of the steps to be performed in an order.

Then it says: Alternatively, the test strip can be prepared by assembling and processing individual components or layers, which are then laminated together. In one preferred embodiment form two or more components are performed simultaneously. So the specification is actually teaching exactly the opposite of what Trividia's proposal is; the specification is expressly teaching that you don't

require ordering, that they can be performed out of order, and that they can also be performed simultaneously.

This, Your Honor, is Figure 2, which we've seen before, and it has all of the layers in this particular embodiment stacked up, and the -- if you just look at this structure, there's no necessary requirement that I can't build the top assembly, all of the spacing layer and all of the other layers above it first, and then make the bottom layer with the base substrate and the reagent layer and then put them together. There's nothing in the specification, nothing that requires a contrary result.

And if we look at the claims now, here's claim -- representative Claim 18, in Claim 18 there's two steps, what we'll call element E and element F. And element E just says laminating the web of spacing material to the base substrate; and then element F says laminating a web of covering material to the spacing material. And as we saw the laminating just means sticking together or placing together. And so what this is saying is put the spacing material with the base substrate material, put the covering material with the spacing material, but those can be performed out of order. You can put the covering material with the spacing material first and then you can put the spacing material with the base substrate material, it's -- the claim doesn't require you to do one or the other first.

Another example, Your Honor, is in Claim 1, steps D and E; in this example, we have laminating the web of spacing material on top of the base substrate, and then aligning and laminating a web of covering material over the base substrate. So here laminating is just another -- synonymous with placing together or gluing together. And so this is saying put the spacing material on top of the base substrate, align and put the covering material over the base substrate, and those can be performed simultaneously. They can happen at the same time. You have three layers that are aligned, you can put them all together at the same time, that's what the specification was talking about when it said you could do these steps in order -- simultaneously.

And so the Trividia brief has an argument that says well, you can't do what I just said because the -- and this is -- up top here, Your Honor, we have Trividia's brief and they say well, no, the latter step, step E, requires aligning and then laminating a web of covering material on top of a laminated base substrate. But that's not what the claim says, the claim doesn't say you have to have a laminated base substrate, it just says you need a base substrate. So the base substrate is not required for the base substrate to have been previously laminated to anything else. So those two steps can happen simultaneously in the claims as written and only if you add the word "laminated"

potentially Trividia has an argument that they should be performed in order.

Here's another couple of examples. So Claim 18 says "providing a web of base substrate material," and it says "providing a web of spacing material," and there's nothing that says you can't do those out of order; you can provide base material first and the covering material second. The specification tells you, tells us all that the base substrate is actually -- is a roll and the spacing material is also a roll and so you can just provide the base substrate to the machine in any order and you can provide the spacing material to the machine in any order, and you can provide them simultaneously. You can provide the base material first, the spacing material first in any order you'd like.

So overall, Your Honor, the claim language does not require ordering. The Federal Circuit is clear that ordering is not required. And here you've got the specification teaching directly in contrary to ordering in the claims.

THE COURT: Okay.

MR. KHAN: Thank you, Your Honor.

MS. SAND: Your Honor, I wanted to start out by correcting one point: Roche said that we're taking the position that this is an all or nothing, either every single

step needs to be in order or none of them. That's not quite our position. We do believe that the claim language how it's written that our position is all the steps should be in order. However, if the Court disagrees with it, and just thinks some steps should be performed in order, we'd ask that the Court at least construe this term to identify what steps need to be performed in order and which ones don't.

THE COURT: Well, actually I'd like to hear from the parties as to what you think if I found that some of them had to be performed in order, what those are and which ones don't need to be performed in order.

MS. SAND: So our view is that all of these should be performed in order just as a matter of logic.

THE COURT: That's what I have in front of me right now, that's what you said.

MS. SAND: Yes. So we agree with what Roche said in its brief, which is the claim steps require an order where the specific claim language necessarily requires it. For example, one must provide a web of base substrate before one can laminate certain material to the base substrate. Why? Because the latter steps require these antecedent structures.

So I think we're all in agreement on that point that where you have these terms -- where you have these steps that are referring to an earlier antecedent structure,

those are ones that should be performed in order.

So when you look at that, we think that at least steps A through C need to be performed in ordered. In step A you're providing a base substrate, step B involving performing electrode on that web, that's done using lasers, that's not going to be done at the same time as step C, for example, where you're applying a stripe of reagent material; that has to come after the electrodes are formed because it requires covering at least one electrode of the electrode step with the stripe of reagent material. So this is just based on these antecedent structures, and we think the claim language is pretty clear on that point as to whether these steps should be performed in order.

Then we also think under this same logic that at least the cutting and separating steps -- I don't think this is particularly controversial -- they need to be performed last. They involve cutting the test strips out of the material, they involve separating, we have that fully laminated structure, that fully put together structure and we're taking and cutting and separating out the test strips.

So that leaves was these laminating steps -- I'll say for shorthand -- aligning and laminating. And those are -- we still believe should be performed in order. They are not quite as clear cut as the other steps of these processes. But we do think, for example, in Claim 1, the

point that really sticks out to us is we don't think that steps 1D and 1E are performed simultaneously. Step E has some pretty specific language, it talks about aligning and then laminating a web of covering material over a base substrate. That's not going to be performed as the exact same time as the step below it -- before it.

Claim 18 --

THE COURT: Well, why couldn't they be performed simultaneously?

MS. SAND: So aligning and laminating, I think, are two different things here. So if we have a laminating step, laminating a web spacing material, and then we're aligning a material over the base substrate and then laminating, that's just a sequential step in our minds. It's not going to be done at the same time, it's two separate steps effectively.

THE COURT: All right.

MS. SAND: And then for 18, we have here this providing a web of space material, laminating a web of space material and laminating a web of covering material. What's a little interesting here is it talks about providing a web of spacing material, it doesn't talk about providing a web of covering material, so we think there's some distinction here between providing that web and laminating that web.

First, you put it onto a reel, then you laminate

it to a base substrate material. And then after that you have that web of covering material that goes on a spacing material, and that's going to cover each one of those capillary channels. And the important thing about those capillary channels is in step B it talks about how those capillary channels are partially overlaying a set of electrodes, and that goes all the way back to those earlier steps where we're performing those electrode on the base substrate. So, again, just as a matter of logic in the claim language, we just think it makes sense to have the steps performed in order.

Then the same logic applies to Claim 27 here, we have providing a web of covering material, and then, obviously, we believe that the web of capillary-defining material no antecedent basis there, but we do think that "providing" is an distinctive step from "laminating," and it's not necessarily done at the same time.

THE COURT: All right. With that, do you have anything else?

MS. SAND: No.

THE COURT: All right. I want to hear from Roche on some follow-up on this reply.

MR. WANG: Yes, Your Honor. So as presented in the briefing, it did -- we read it as basically all or none, and I think we heard it a little differently today.

THE COURT: Yeah, well even if the Court agreed -- well, even if the Court found that -- because whatever they argued, the Court could read the language and logically decide that, you know, yeah, but some have to be performed in order, but not all. And then if I leave it at that then I'm just kicking the can down the road because somebody is going to say that we disagree about the order of the sum, and so I -- you know, I think I -- what I would like to have is just some limited supplemental briefing on this issue as to if the Court found that some or not all the steps must be performed in order, which steps must be performed in order.

MR. KHAN: Happy to provide the briefing, Your Honor. And then with the Court's guidance, we'll focus on the terms that they argued today.

THE COURT: Okay.

MR. KHAN: Right. Because -- that are necessarily performed in order, and if the -- is that what the Court had in mind?

THE COURT: Yeah. And with respect to that, let's keep the briefing limited to 10 pages or less, both sides.

MR. KHAN: Thank you, Your Honor. That makes great sense.

I think at this point we're going to move on

and --

THE COURT: Let's have -- let's put a schedule in for that. Let's have Roche's supplemental brief due within seven days from today; Trividia's answering brief due seven days thereafter.

MR. KHAN: Thank you, Your Honor, for the guidance.

I think because we're going to move on to Trividia's patent now, I'm going to turn the floor over to Trividia counsel.

Your Honor, one clarification on the briefing on the order of steps, if you don't mind. Does it make sense for them to go first because, you know, if we're talking about which steps to be performed in order.

THE COURT: It was their argument, yeah, we'll make Trividia -- your brief due within seven days of today and then Roche's answering brief seven days thereafter.

MR. KHAN: Thank you for the clarification, Your Honor.

MR. FINN: Thank you, Your Honor. We'll now turn to U.S. Patent number 8,128,981, referred to as "'981 patent" owned by Trividia.

As we've been talking during this whole hearing, this patent relates to test strip biosensors, as it's referred to here, and a method of manufacture. It was filed

in 2007 and issued in 2012.

The patent, the '981 patent attempts to address the same problems we've been discussing the last couple of hours, namely as the sample sizes that are being tested on the strips get smaller and smaller in volume, how do you create and manufacture a test strip that remains accurate and you do it efficiently and cost effectively. We're using the same types of processing techniques, one focused in particular is laser ablation.

Claim 1 of the '981 patent is the sample claim where it talks about using multiple sources, multiple processing sources, multiple lasers to achieve efficiency and accuracy. In Claim 1 there are three separate processing sources, so there's three separate lasers working in the method, two of which move.

Your Honor, we had actually briefed what we're referring to as "movements terms" as two separate terms. The parties in the letter that you received either last night or this morning agreed to do a construction together as to the similarities of those two terms, because they are -- one term is a movement of a first or second processing source and the other term is laser beam moved relative to a conductive layer along the first/second Kerf, and the terms seemed to focus mostly on movement. And the constructions proposed by both parties are frankly identical. Trividia is

proposing a plain and ordinary meaning for both and Roche is proposing some limitations that we'll walk through in a minute.

It's Trividia's position that plain and ordinary meaning is all you would need to construe here. As this court started this hearing a number of hours ago asked the parties a question with respect to the sample-receiving chamber and the other patents that why are we construing it, aren't these words simple enough that a jury could easily understand them.

THE COURT: Yeah, but in this instance, Roche is arguing that, yeah, it would be plain and ordinary meaning, but for the disclaimer that Trividia used to get past the rejection.

MR. FINN: We don't believe there's a disclaimer, Your Honor. And Roche's own expert, who they've used in support of this, has found a plain and ordinary meaning for these terms and used them in submitting a declaration to the Patent Office just two months ago. Now they are coming here and saying there's a whole different interpretation, there's a whole different construction for these terms.

I'll just jump to what the Court raised on the disclaimer issue. It's our position that we did not engage in a disclaimer practice; it's not clear and unequivocal

that we gave up scope. What is referred to there is a piece of prior art in the prosecution history, the reference is referred to as "Groll." And the Examiner cited Groll as "using a broad field laser or a wide laser, together with a mask."

And Trividia argued around it, noting that the combination of a broad field laser and a mask were stationary. Amended the claims. Here you see the prosecution history where the primary disclosure of Groll is described as using a single pass laser to create all the structures. Groll does not expressly state forming three individual elements in three separate steps.

In our patent, in the Trividia patent, we have three processing sources that require movement -- excuse me, two of which require movement, the third could be stationary.

And you see at the time the Examiner says that we've amended the claims to use two different focused laser beams, and because a broad field laser uses no moving parts during ablation there's a difference. So it didn't focus just on excluding broad laser beams or broad laser beams with a mask, it focused more on the number of processing sources, which is not just the laser, Your Honor, it's the laser and perhaps a lens, something that is used in conjunction with the laser. So it focused on a -- the

number of processing sources and movement. It didn't limit it or avoid a combination of a broad field laser, which is nowhere in the specification, nowhere in the claims, the term is not used with a mask.

THE COURT: So you're saying if a broad field laser that is moving would not be something that's disclaimed?

MR. FINN: That's correct, Your Honor. And you can have -- frankly, you can find movement because what Roche is proposing is that a broad field laser passes through a mask, right, but movement.

I can come up with a broad field laser that moves -- that has a mask where the laser moves if you put perhaps a lens and then you tilt the lens, that would be moving the laser.

In the first construction, moving the parts of the processing source, that would be moving a part of the processing source; the processing source would be the laser, the mask and the lens. You tilt the lens and you direct the laser down the web, that would be movement. You could tilt -- you can tilt the entire operation, keep everything in place, but put it on a tilt and let the laser beam work its way down the web, that's movement. So it was the combination of a number of processing source and movement, not the specific lasers and components.

THE COURT: Was there disclaimer of the movement of the first or second processing source?

MR. FINN: You mean the lack of movement, Your Honor?

THE COURT: Right.

MR. FINN: Okay. Yes, a completely stationary -- a completely stationary processing source may cause problems, may be disclaimed, but that would be stationary laser and all components with it. So...

Going back, the Examiner -- to reenforce and confirm, the Examiner said using movement with two different processing sources along the boundary is one of the distinguishing features. It goes on and says in a different claim, in what ends up being Claim 18, it's a fact that it's a focus laser beam that's moving.

Claim number 1, which at the time was independent Claim 18, was just talking about movements.

So Roche is trying to put in a negative limitation that was never disclaimed. At the same time, and curiously, later we'll hear that a focused laser beam is indefinite. We'll hear that from Roche because they don't know the boundaries of that. Well, that's just the opposite, in my mind, of a broader wide, it's only an extent, if that's what they're going to argue. So they are adding ambiguity to the claim by putting a "broad field

laser" in there. That term is not used in the patent; it's not used in the claims; there's no definition of what a broad field laser is. So not only are they trying to add a disclaimer that didn't occur, they're doing so by adding ambiguity and indefiniteness on a term that they -- nobody knows what's in the patent, and they say the converse of is indefinite.

THE COURT: All right. So would Trividia in its proposed construction -- all right. So Trividia is saying plain and ordinary meaning?

MR. FINN: Correct.

THE COURT: But we're dealing with whether there's disclaimer on not. Is Trividia saying at most if there was disclaimer, it's -- you know, the stationary broad field -- well, not specifically, but it just dealt with movement or no movement, and so the plain -- if there was disclaimer, the plain and ordinary meaning would be subject to the requirement of using movement of the first or second processing source along a boundary?

MR. FINN: I don't believe it's an entire disclaimer that way, because we argued during prosecution that it was not only movement, there was a number -- I'd have to see what the proposed change is. I think if you have a number of stationaries as opposed to the one stationary in Groll, that may get you -- that may not --

that is not disclaimed. If you have multiples or one that moves, that's not disclaimed.

So I think it's -- I don't think there's disclaimer, frankly, Your Honor. And frankly, neither did Roche's expert. Roche's expert -- Roche relied on the declaration of Dr. Cunningham and, frankly, that's extrinsic evidence that's only supposed to be relied upon if there's some ambiguity in the claims. I believe there's no ambiguity. It's a question of disclaimer, which is something else.

But you go to Dr. Cunningham's IPR declaration, which he actually executed a week before he executed the declaration he submitted to this court, he says very clearly there: "I will give the claim terms their plain and ordinary meaning..." so he knows a plain and ordinary meaning. He goes on and tries to explain away in anticipation of this why he's using a plain and ordinary meaning. And he says: "I have applied the plain and customary meaning as described above..." But right before that he says "it's obvious under either construction..." so he had two constructions in his head: One is a plain and ordinary meaning and one is something else that he doesn't tell us here.

And at his deposition just last week, he says: "I gave the terms ordinary and customary meaning..." and "I

may not have told you what I consider plain and ordinary is not..." "I may not have included the consideration... the prosecution history which describes other processing techniques." He was just focused on one particular instance.

And then as we already mentioned if a POSITA doesn't know what a focused laser beam is, will a POSITA know what a broad field laser is.

THE COURT: I understand.

MR. KHAN: All right. Thank you, Your Honor.

So on this term I think Trividia's asking for essentially no construction. We think it's pretty important here for at least three reasons to give this term a construction.

The first is that the term is not "movement" or "moving," the term is movement of a processing source along a first Kerf for boundary, laser beam move relative to the conductive layer along the first Kerf for a first boundary. The jury can be aided in trying -- in offering an interpretation or understanding of those words in helping the jury understanding what those words mean in light of intrinsic evidence for sure.

The second is I think you just heard there's actually a dispute between the parties. There's not just a dispute about disclaimer, Your Honor -- and I want to be

very clear about this because Roche's position is the plain and ordinary meaning on its face excludes -- we don't have to get to the disclaimer, on its face in moving processing source or a laser beam moving necessarily in its plain and ordinary meaning excludes broad field laser ablation through a mask. And but --

THE COURT: Well, couldn't a broad field laser with a mask be moving?

MR. KHAN: No, Your Honor, because -- and I heard for the first time -- it's nowhere in the briefing, there's no evidence to this effect. I heard for first time in argument my colleague on the other side suggest and opine sort of on the fly that there might be some ways in which you could move a broad field laser ablation when it's working through a mask. There's really no such thing.

And if we could go to 118. Here the evidence that the court has in front of it. This is evidence, not attorney argument. They didn't point to any intrinsic evidence in front of you, they didn't point to any specification cites that would suggest to you that a broad field laser ablation through mask can move. So this is the evidence that's in front of the Court to suggest that the plain meaning of movement of a processing source or laser moving relative to the conductive layer along the first and second Kerf, the plain meaning excludes broad laser ablation

through a mask.

Here we have our expert opining in his expert declaration. I'm going to get to the IPR declaration and the allegations of inconsistency in just a second. But for now our expert testified point-blank that the laser and broad field laser ablation does not move when it's operating through mask. And guess what, Your Honor, that's exactly what Trividia said in the file history. So the statements in the file history -- there's statement not just about Groll, there are statements about the state of the art as it relates to moving processing sources and moving lasers.

So if we look -- this is in the file history: During which a broad field laser does not move relative to the electrical component being performed. That is not a statement about Groll, that is a statement about the plain meaning of the word "laser moving" or "moving processing sources."

Next because a broad field laser system uses no moving parts during ablation, Groll fails to disclose or suggest the movement of processing sources recited by Claim 18. Again, because a broad field laser system uses no moving parts during ablation, that is no statement about Groll, that's a statement about the state of the art as it relates to what broad field laser ablation through a mask is and how it's outside of the words "movement of a processing

source" and outside of the words "laser moving."

If we could go back to the beginning of the presentation. So we do think -- there's no evidence in the briefing to the contrary, you heard for the first time my colleague on the other side offered some off-the-cuff understandings of how a broad field laser could move in the context of working through a mask, but there's really no such thing.

And the third reason, Your Honor, to really give this construction is that Groll is Roche's patent, that's how we do it. And so what is happening here is Trividia is trying to recapture what it sort of distinguished in the prior art. And the third reason, Your Honor, is really to give this court a construction is that even if the Court doesn't agree with us on the plain and ordinary meaning is we think there is a disclaimer here.

So the background of the patent of how we got here is actually quite important because Trividia's version of how we got here -- I heard it again today -- is that the patent is really about sort of the number of lasers and the lasers being different. So here, again, these are Trividia's briefs, again and again you see oh, it's about the number of the lasers and not the specific type of the laser. And here point-blank they say the claims cover broad field laser ablation that passes through a mask. So a

point-blank statement in their brief that says nothing in the claims suggest that this term should exclude ablation by a broad field laser that passes through a mask.

So the perspective offered in their brief is the claims cover all laser ablation, the claims are not -- the disclaimer issues, there are none, as you heard again today, they're really about differences in the number of lasers, but not about the type of lasers.

So let's look at what the original claims looked like. These are the original claims before the Examiner rejection based on Groll. So -- and on the left we have what was Claim 18 that post-amendment issued as Claim 1, on the right we have Claim 35, with post-amendment issued as Claim 18.

So what do we see in Claim 18 and 35 which is issued as Claim 1 and 18 respectively -- that's important. We see that there are two lasers or two processing techniques; a first and a second processing technique. A first and a second laser ablation process.

We see that the claim expressly in the original form said the first and the second processing technique are, quote, not -- the second processing technique is, quote, not the same as the first processing technique. And the second laser ablation process is not the same as the first laser ablation process.

So in the original claim before the Examiner applied the Groll rejection, there were multiple lasers recited and the laser -- by the claim language said to be different. So what happened next? The examiner rejected that claim on the basis of Groll. And the notion that multiple lasers was somehow novel or inventive that was deemed obvious by the Examiner and rejected -- that notion was rejected by the Examiner. And the Examiner said that one of ordinary skill would be motivated to use two lasers, and even though Groll itself failed to teach the use of two different lasers, but it would be obvious because -- for various reasons having to -- not needing to change the mask constantly.

So what do they do then? So then here's now the amended claim and the amended claim -- again, Claim 18 became issued Claim 1, Claim 35 then become issued Claim 18. So what changed and what didn't change? What changed was we then add the words "movement of a processing source along at least first boundary" and the other claim we add "the beam" -- "the focused laser beam moved relative to the conductive layer along the first Kerf."

What didn't change? The number of layers or processing sources didn't change, it's the same.

What also didn't change is the second processing source is different from the first processing source. Here

it is, the second -- quote, the second processing source is not the same as the first processing source. In the other claim, the first laser beam being different to the second laser beam. It's the same. So those aspects of the claims didn't change, what was added was what we refer to as "movement terms."

So they filed that amendment and what do they say? They say Groll forms electrical -- and this is a Roche patent. In our view, this is now what they are accusing of infringement in this case. Groll forms electrical components using a broad field laser that passes through a mask. And why is that problem? Well, as -- in talking about the state-of-the-art during ablation a broad field laser does not move relative to an electrical component being formed.

(Court reporter asked for clarification.)

Because a broad field laser system uses no moving parts during ablation, Groll fails to disclose or suggest the movement of processing sources..."

So what we're talking about is the plain meaning of the words on the page excludes broad field laser ablation through a mask. But even if the Court were to disagree with that, this is just a crystal clear disclaimer in sort of exactly the way the Federal Circuit contemplates where there's an amendment to overcome prior art. The words that

are used to explain the amendment and how it overcomes a prior art are exactly these words are the words that Roche is proposing to include in the construction.

So what is broad field laser ablation through a mask and why is different from a moving laser? So this is -- broad field laser ablation is on the left. There's a laser source. There's a mask that has a pattern in it. The laser shines through the mask and it creates a pattern on the film. And the ribbon underneath it might move, but the laser is stationary, the mask is stationary.

In contrast, the moving laser is on the right. And here's the moving laser, the moving laser scribes or cuts across and actually moves along the pattern that's desired. And so that's why they distinguish Groll, they distinguish it both on an understanding of state-of-the-art and based on what Groll taught. And so the Examiner at the end of it all says, you know what I'm going to accept, so here's the -- I'm going to accept what Trividia said because Groll fails to teach cutting individual elements by moving a laser along the edges of Kerfs that defines the elements.

So the background of the pattern here is it was all about the movement of terms, and it is undisputed before Your Honor that, that the plain meaning of those terms excludes "broad field laser ablation through a mask."

THE COURT: If I accept your argument, I'm

struggling whether that excludes a moving broad field laser that passes through a mask.

MR. KHAN: Your Honor, there's no evidence that such a thing exists. I think you heard it from counsel here for the first time there's no evidence in the record that such a thing exists. It's certainly in the state-of-the-art that that is not what is contemplated.

THE COURT: But doesn't exist in Groll.

MR. KHAN: Groll had a stationary laser.

THE COURT: Right. They were overcoming Groll, and so if doesn't exist, you know --

MR. KHAN: There's no evidence that doesn't exist.

THE COURT: Right. So if I bought your argument and worked with your construction, but instead of which excludes a broad field laser that passes through a mask, change it to -- supplement it to say "a stationary broad field laser that passes through a mask" to not exclude a moving broad field laser that passes through a mask.

MR. KHAN: I think, Your Honor, that could be acceptable. I need to talk to the client and to the team. If I could have that opportunity in the break very quickly, but I think that would work, because -- but the one thing I would add is there is one thing moving in Groll and that is -- sorry, let me just go back -- and that's the roll,

right. So the laser is not moving, the mask is not moving, but Groll is moving. So I just want to be very clear about when we say that the claim includes a stationary broad field laser ablation through a mask that, you know, just because a roll is moving suddenly we're not talking about a moving laser, but -- and if we're on the same page on that, I think that would be okay, yes.

I do want to touch on -- I think I've actually made most of the points, but I want to talk a little bit about this passage in the specification. I don't think it sort of bears on what we're talking about at all, but it's featured heavily in Trividia's briefs so I'll talk about it here. This specification talks about laser ablation and laser systems generally, and it's completely consistent with the file history because it talks about laser systems comprising potentially focused beams and projected masks, and it uses the term "move the focused laser beam relative to conductive layer" when it's talking about the use of focused laser beam. When it is talking about the use of a mask, it doesn't use the word "moving." So if we read the passage that talks about the mask, there's nothing about movement in there.

And then when it comes back to talking about the focused laser beam, it's talking about moving relative to conductive layer. And regardless of what's in this passage

or not, there's definitely nothing -- as Trividia's counsel admitted and I think I agree with him, there's nothing in the specification about broad field laser ablation through a mask, and this passage does not somehow suggest that a broad field laser ablation system through a mask that a laser in that system could move; there's nothing in here that says that expressly.

I'm going to move forward. So Trividia a couple of times today suggested that there was something improper or inconsistent about our expert's two declarations. And this is what Dr. Cunningham, our expert, talked about in his -- this report declaration. He said --

(Reporter clarification.)

He basically applied that ordinary and customary meaning, and he said: "I have to take into account the applicants' statements to the Patent Office characterizing its invention."

And then in his deposition he made clear that he views the exclusion of "broad field laser ablation through a mask," he views that exclusion as the plain and ordinary meaning of movement of a first/second processing source.

And what did he do in his IPR? He said the same thing. He said I'm going to give the terms their plain and ordinary meaning. And he said the prior art makes the challenged claims obvious under either construction. Now,

in the IPR, Your Honor, there was no dispute and they haven't responded yet, but we don't think there's going to be a dispute over this term. Why? Because he's applying art where the laser is moving.

So the prior art taught scanning the focused laser beam, the elements formed by movement of the laser. So in the IPR he's not applying art that's broad field laser ablation through a mask, he's applying art that is directly moving, and so we don't think this is going to be a term that's disputed in the IPR proceedings.

And to the extent there was any doubt about what he was doing in the two declarations, in the deposition he made it crystal clear that the parties appear to have a dispute about what the plain and ordinary meaning is; Trividia has one wording, Roche has another wording, but I think Roche's construction is the plain and ordinary meaning on this term.

So with that, Your Honor, as I said, we think, as a matter of plain and ordinary meaning, you could get to Roche's construction, but certainly there's a disclaimer here.

THE COURT: Okay.

MR. KHAN: Thank you.

MR. FINN: Your Honor, if I could just address one thing that counsel said. He took issue with my

hypothetical of putting a lens -- what he called a hypothetical, putting a lens in front of a processing source and moving the lens or using the lens to direct the laser beam. That's the exact question I asked their expert during his deposition last week. It's page 89 of the transcript of Exhibit I. My question was:

"QUESTION: If I use a lens in front of a laser and move the lens, is that a moving part of the processing source?"

Dr. Cunningham's answer was:

"ANSWER: Hypothetically, you could consider that being at least one part of the processing source would be a movement of a lens during the processing step."

And that's exactly what we were concerned about when we see their construction where they take processing source and they say parts of processing source. You asked about a stationary, nonstationary, I want to make sure it's clear that anything moving in that assembly, whether it be the laser, the mask, a lens, anything in that assembly moving we would consider qualifies as movement.

THE COURT: Well, if that was the case, wouldn't -- that wouldn't have gotten you past Groll.

MR. FINN: Well, Groll was stationary.

THE COURT: Right. But you're saying if anything -- so with respect to Mr. Khan's question that he

wanted to make sure that if the roll --

MR. FINN: Well, the roll is not part of the processing source.

THE COURT: Okay.

MR. FINN: I'm limiting the processing source to what the laser -- processing source is more than a laser, there's testimony to that too, I believe, earlier a page or two. But in this instance you've got a laser and the laser itself works with other components to create the ablation, it's the other components in their construction, the parts of the processing source that may be moving as well. The roll isn't part of the processing source, the roll isn't part of the laser.

THE COURT: All right. I understand.

MR. KHAN: We're going to move on the next term, but we got that straight from the applicant's statements and file history, but I'll rest on that issue and we'll move to the next term.

THE COURT: All right.

MR. FINN: Your Honor, the last term we're going to address is "focused laser beam." And I may have foreshadowed this a bit when we were talking about the other terms, we, again, believe that it's a plain and ordinary meaning to one skilled in the art; it's commonplace.

Roche has taken the position that it's

indefinite as there's no, according to them, limitations on it or identification of limitations. Again, it's our position that a POSITA would understand the meaning within a reasonable certainty as required under *Nautilus*.

The term shows up only in Claim 18 and it refers to a "first and second focused laser beam." In that claim, that's all it says is a first and focused -- first and second focused laser beam. However, if you go down to Claims 21 and 22, you get an approximate width identification, at least creating a range for what a focused laser beam would be under Claims 21 and 22.

For Claim 21, the first being, the first focused laser beam is approximately 20 micro-meters. The second -- in Claim 22, the second focused laser beam is approximately 100 micro-meters. That alone gives you an identification of at least what a focused laser beam would be between those two.

THE COURT: But --

MR. FINN: Yes, Your Honor.

THE COURT: There's no issue with am antecedent basis here?

MR. FINN: I don't see one, Your Honor.

THE COURT: Right. So I'm pointing out that, you know, there's no problem that there's no antecedent basis here, but there's a problem with the --

MR. FINN: No, I --

THE COURT: With the terms on Roche's patents.

MR. FINN: Your Honor, I misunderstood your question.

The antecedent basis for "first beam" is "first focused laser beam" in Claim 18. The antecedent basis for "second beam" in Claim 22 is "second focused laser beam." Those are the only beams referred to first and seconds in Claim 20 -- excuse me Claim 18.

THE COURT: Right, but there's no antecedent basis in Claim 18.

MR. FINN: There's none required, Your Honor, because it starts out using "a", that's the first time you find it, it's not -- that's the definition itself, "a first focused laser beam." It doesn't say "the" like it did in the other situations.

THE COURT: Okay.

MR. FINN: Turn to the specification, Your Honor, and you'll find examples throughout what a focused laser beam is at the patent -- '981 patent, Exhibit 3, column 9:46-67 refers to "commercial products that exist" that evidenced what a focused laser beam is; HeraScan, which is a direct writing ablation system. Then at the bottom of the second paragraph there it refers to laser systems available by Glassex Industry and a micro machine systems

from Exitech. These are commercial products that one skilled in the art at the time that this was filed would know about and they would know the specifications for -- or if they didn't know them, they certainly could go find them.

The term is also a known term in the art. If you want to go to external evidence, which we don't think is necessary, but going to the external evidence, two of Roche's patents use the term "focused laser beam."

Other third parties Dexcom and Avails Medical, again, have used the term "focused laser beam," and these are all before the filing of the '981.

Roche's own expert in his patent, this patent 229 -- 6,468,229, Dr. Cunningham, Roche's expert, is an inventor in this patent. He uses the term "focused laser energy." And when he used it, he testified at his deposition that he understood the term regarding focused lasers.

What Dr. Cunningham is now calling "indefinite," as I said, a week earlier in his IPR declaration he said had a plain and ordinary meaning that he used to construe it. Never told us what it was, but at least he knew what one was. And then at his deposition again last week, he confirmed just that, that he understood what the term meant.

And then lastly, as we discussed earlier, if Roche wants to include "broad field laser" as a term, it's

never used in the '981, but they want to include it in some of the other constructions, if that's definite, then how is "focused laser beam" not definite as well?

THE COURT: Understood.

MR. FINN: Unless you have questions, Your Honor...

THE COURT: No, I understand.

MR. YIN: May I proceed, Your Honor?

THE COURT: Yes.

MR. YIN: So this term is "focus laser beam." As my friend on the other side said it appears in independent Claim 18 of the '981 patent. And Roche's position is that "focused laser beam" is indefinite because it is used in the patent and in this prosecution history as a term of degree that lacks objective boundary within the intrinsic record.

And Trividia's position, I hear, is that "focused laser beam" has some plain and ordinary meaning, but we still haven't heard through three briefs from Trividia, through a deposition of Roche's expert what that plain and ordinary meaning is. They haven't told Roche or the Court what is the boundary between the focused laser beam and the broad field lasers.

So to understand why this focused laser beam is a term degree, it's helpful to understand how the term came

about. We'll start with the claims where "focused laser beam" appears in independent Claim 18, which requires a "first focused laser beam that moves relative to a conductive layer along the first Kerf" and a second focused laser beam that moves relative to the conductive layer along the second Kerf."

And the claim language itself does not provide an objective boundary, but two dependent claims do provide two examples of what "focused laser beams" include. They range from at least approximately 20 micro-meters in dependent Claim 21 and at least 100 micro-meters in dependent Claim 22. But these claims do not say, and Trividia does not concede, that these are the exclusive ranges for focused laser beams. And so the claims do not tell you, and Trividia has not told you, what is the upper bound for "focused laser beam," when does it become a broad field laser.

THE COURT: But isn't Dr. Cunningham Roche's expert?

MR. YIN: He is, Your Honor.

THE COURT: Didn't he admit that he would know what a "focused laser beam" is?

MR. YIN: I don't think so, Your Honor, not in its full scope. What Dr. Cunningham did -- and I can forward ahead to some slides involving Dr. Cunningham -- is

he testified that he understood that there were examples of "focused laser beams" in the specification. He understood the examples included at least approximately 20 micro-meters and at least approximately 100 micro-meters. But he testified that the intrinsic record do not provide the skilled artesian with an objective boundary for when a laser beam is sufficiently focused. And he also testified, importantly, that there is not a universal, established meaning in the field where a dividing line between a focused laser beam on one hand and a nonfocused laser beam that is too broad.

Again, Trividia has not established a dividing line either.

What Dr. Cunningham did for purposes of the IPRs was to -- skip to the end -- was to find the specific examples of focused laser beams within the prior art. So he was able to find a laser beam that matched the -- at least approximately 20-micro-meter embodiment, and he was able to find a laser beam that matched the at least approximately 100 micro-meter embodiment, but he did not need to resort to finding what the limits of "focused laser beam" is. And that's entirely consistent with Federal Circuit precedent, we cited the *Cochlear Bone* case in our briefing and the *Intel v. Wolcom* case in our supplemental brief we filed yesterday. And those cases explain that there is no

inconsistency between arguing that a claim is both invalid and indefinite. It can be invalid because a species that is known is anticipated or obvious by the prior art; and yet it can be indefinite at the same time because the full scope of the term, the boundaries between "focused laser beam" and "nonfocused laser beams" that is still indefinite and that is still unknown to the person of ordinary skill.

So we're turning to how this came -- how this term came about. As my colleague explained, the original claims did not recite "focused laser beams"; instead they recited "first laser ablation processes" and "second laser ablation processes." Interestingly the dependent claims there recited "at least approximately 20 micro-meters" and "at least approximately 100 micro-meters."

The Examiner rejected the original claims; we talked about how the Examiner found that moving -- that two processing sources would have been obvious. And the Examiner also said the "at least 20 micro-meters" and "at least 100 micro-meters" would have been obvious because the beam with the Groll appears to be at least 5 mm or 5,000 micro-meters.

So in response, the applicant added the word "focused" to original Claim 35, which issued as Claim 18. And that also cascaded down to dependent Claims 21 and 22, which now also required the laser beams to be focused laser

beams, not just above 20 micro-meters or above, you know, at least or approximately 100 micro-meters.

And what the applicant told the Examiner was that Groll also fails to disclose or suggest that focused laser beams recited by Claim 35 because Groll's invention only works with a broad field laser; that is the applicant distinguished not only Groll on the basis of movement and lack of movement, it also distinguished Groll on the basis of focused laser beams versus broad field lasers, and that confirms that "focused laser beam" is used as a term of degree.

The Examiner then allowed the amended claims and adopted Trividia's argument that distinguished Groll, and the Examiner noted that Groll uses a wide laser to ablate patterns on a conductive reel in contrast with focused laser beams.

So the problem that was created by use of "focused laser beams" in contrast with "broad field lasers" is that it turned it into a term of degree. And the Federal Circuit has told us that terms of degree must have baselines and objective boundaries to inform the skilled artesian what is the scope of the term. The intrinsic record does contain two data points for what is a "focused laser beam" -- we talked about the at least approximately 20 micro-meters and at least approximately 100 micro-meters. And a third data

point for what is not a focused laser beam, the 5 mm or 5,000 micro-meters from Groll, but the area in between is what is left indefinite to the person of ordinary skill. And the Federal Circuit requires something more, it requires objective boundaries.

Now, I'll briefly touch on two cases that were cited in the briefs by Trividia, the *Sonix* case and the *Guangdong Alison* case. And Trivida suggests that two examples are enough to provide an objective boundary, but that is not what happened in these cases.

In the *Sonix* case there was a standard provided, this number two differentiate brightly and home again nitty requirements for the graphical indicators being negligible to knew hand eyes a determine whether something was negligible or not. Similarly in the *Guangdong Alison* case the Federal Circuit said there were expressed definitions for the term, there were details of the functional characteristics, there were replete with examples and metrics, importantly metrics for how a skilled artesian could measure whether something falls within the scope of the claims. We don't see any of these standards or metrics or objective boundaries for "focused laser beams."

We talked about Dr. Cunningham, he testified that there is no universal established meaning that divides a "focused laser beam" and a "broad field laser." And he

talks about how -- he testified that the claim specification, prosecution history do not provide a skilled artesian with an objective boundary. That's consistent with Trividia's argument, they have not provided an objective boundary and we still don't know what that is.

Trividia points to this passage from the specification which mentions three devices, the HeraScan devise, the LasX device and the Exitech device, but none of those actually provides an objective boundary.

The first device the HeraScan scan device is not a laser beam at all, it is a scanner that can move a laser beam; it is a scan head not a laser itself. And this actually came up in the Cunningham declaration -- deposition that occurred last week where Dr. Cunningham testified that the documents relating to HeraScan candid not disclose any beam widths.

The LasX system and the exit tech system are not even described as focused laser beam. The passage refers to focused laser beams, projected masks or other suitable techniques. And there's no indication that LasX industries and Exitech makes focused laser beams, nor does the intrinsic evidence provide the objective boundary that is so lacking in this case.

Again, my friend from Trividia has provided no objective boundaries from these devices, which are not even

identified in this specification.

The extrinsic evidence also provides no objective boundaries. These are the two Roche patents that use the word "focused laser beams," but it's important to understand that the extrinsic evidence does not provide an objective boundary for four high level reasons.

The first is that there's no suggestion in these references that distinguish between wide or broad lasers on one hand and focused, narrow lasers on another. They don't use the terms in a term of degree way in classifying types of lasers based on size and width. Even if they do use a term "focused laser beam," they don't provide an objective boundary either. And these patents also don't claim a "focused laser beam," this term appears in the specification, not the claims, so they did not have to use the term in a definite way for a skilled artesian.

So here, once again, these patents differentiate moving "focused laser beams" with stationary "broad field laser through a mask." And, of course, those are different and we know those techniques are different, and those were distinguished in the prosecution history separately, but they do not distinguish on the basis of the size of the laser.

THE COURT: All right. Mr. Yin, you've got two minutes to wrap up.

MR. YIN: Very well, Your Honor. Very briefly on the Avails patents and the Dexcom patent, these also don't relate to the art of the '981 patent. The Avails patent relates to using light sources as detectors, it talks about laser beams, light bulbs and LEDs, they are not used to ablate electrodes. And the Dexcom patent also does not relate to blood glucose monitoring test strips.

So ultimately the '981 patent fails to provide the reasonable certainty and clear notice that is demanded. I would invite my friend to tell us once and for all what is the objective boundary that is missing in this case. And to the extent that he believes that there is some contradiction in the arguments, I would say the contradiction is actually on the other foot because it is Trividia that has found evidence distinguishing broad field laser ablation and focus laser beams, and yet they refuse to say and admit that they have actually disclaimed broad field laser ablation that passes through a mask in the prosecution history.

Thank you, Your Honor.

THE COURT: Anything else for Trividia?

MR. FINN: If I could impose briefly, Your Honor?

Your Honor, we've been challenged to put out a construction, our construction is plain and ordinary meaning to one skilled in the art. I am not skilled in the art.

I'm not going to try to put one forward. However, we have during the presentation heard a number of things. We've heard an upper limit of Groll having a broad field laser or 5,000 micro-meters, that seems to be an upper limit to me. We've heard that there's a range, confirmed what I said earlier, of 20-100 micro-meters, so -- in the claims.

We know that Dr. Cunningham, while he read the patent, he didn't know about the commercial products that were described in the patent. He just said oh, they're there. His testimony just last week:

"QUESTION: So you didn't look at the examples that are cited in the specification; is that your testimony?

"ANSWER: No, no."

He didn't look. They are there. One skilled in the art at the time would know what those commercial products were and what laser systems they were using and how they helped define things.

THE COURT: So Trividia doesn't have a proposed construction?

MR. FINN: We have not put one forward. It's plain and ordinary meaning.

THE COURT: And what does Trividia's experts say is the plain and ordinary meaning?

MR. FINN: We have not put one forth, Your Honor. We haven't put forth an expert in this situation.

THE COURT: All right.

MR. FINN: It is certainly not a broad field or a wide field laser, which according to Groll is 5,000 meters so it would be something less than that for certain. We have a range of at least 20-100 micro-meters. There are the examples. We will live with those example, but we can't think of them all.

The bottom range is -- I would -- zero, right. Anything short of zero, zero is no light at all, no beam at all, but short would be narrow and focused.

Mr. Yin mentioned that the examples we used weren't in the claims or that the "focused laser beam" terminology that we pointed to in some of the examples were not in the claims. That's not the issue. The issue is would one skilled in the art understand the terminology whether it's in the claims, whether it's in the specification, wherever it is used; presumably it was used in the specification because someone knew what it meant.

THE COURT: All right.

MR. FINN: Thank you.

THE COURT: All right. The Court will take these matters under advisement. You have the schedule on the supplemental briefing with respect to the claim term dealing with the -- I think that was Claim No. 7 dealing with methods, the steps, so the Court will consider those

when they are submitted, and get a ruling on these claim construction issues in a prompt manner.

The Court typically shoots for within 60 days, and we'll try to meet that in this case. It may not -- it may be 60 days from the close of briefing on the supplemental issue.

So, with that, we are adjourned. Thank you both sides, good job on your presentations.

DEPUTY CLERK: All rise.

(Whereupon, the following proceeding concluded at 4:09 p.m.)

I hereby certify the foregoing is a true and accurate transcript from my stenographic notes in the proceeding.

/s/ Michele L. Rolfe, RPR, CRR

U.S. District Court