

UNITED STATES INTERNATIONAL TRADE COMMISSION

In the Matter of:	)	Investigation No.
CERTAIN INTEGRATED CIRCUITS,	)	337-TA-1350
COMPONENTS THEREOF, AND PRODUCTS	)	
CONTAINING THE SAME	)	

Pages: 1 through 105
Place: Washington, D.C.
Date: June 5, 2023

HERITAGE REPORTING CORPORATION

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1 UNITED STATES INTERNATIONAL TRADE COMMISSION
2 Washington, D.C.
3 BEFORE THE HONORABLE CAMERON R. ELLIOT
4 Administrative Law Judge

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6 In the Matter of:) Investigation No.
7 CERTAIN INTEGRATED CIRCUITS,) 337-TA-1350
8 COMPONENTS THEREOF, AND PRODUCTS)
9 CONTAINING THE SAME)

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13 International Trade Commission
14 500 E Street, S.W.
15 Washington, D.C.

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17 Monday, June 5, 2023

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19 MARKMAN HEARING

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21 The Hearing commenced in Courtroom B, pursuant to the
22 notice of the Judge, at 1:00 p.m. Eastern.

23

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25 Reported by: Karen Brynteson, FAPR, RMR, CRR

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1 P R O C E E D I N G S

2 (1:00 p.m.)

3 JUDGE ELLIOT: All right. Okay. Let's go on
4 the record. We're here in the matter of Certain Integrated
5 Circuits, Components Thereof, and Products Containing the
6 Same, United States International Trade Commission
7 Investigation No. 337-TA-1350.

8 My name is Cameron Elliot, Presiding
9 Administrative Law Judge. May I have appearances from
10 counsel, please.

11 MR. ANGELIS: Good afternoon, Your Honor. Theo
12 Angelis from K&L Gates for Complainant Realtek
13 Semiconductor Corporation. With me is my colleague
14 Elizabeth Weiskopf, also of K&L Gates, and the general
15 counsel of Realtek is here as well, Gina Hung.

16 MR. FERGUSON: Good afternoon, Your Honor.
17 Brian Ferguson with Winston & Strawn on behalf of
18 Respondent AMD. With me from Winston is Robert Vlasits,
19 Louis Campbell, David Enzminger, and we have in-house
20 counsel from AMD Jesse Adland as well.

21 JUDGE ELLIOT: All right. So I understand
22 there's no tech tutorial. Is anyone -- does anyone qualify
23 as a NEXT advocate? No?

24 MR. ANGELIS: Not for Complainants, Your Honor.

25 JUDGE ELLIOT: All right, very good. So as far

1 as I'm concerned, we can just get started with the first
2 term. Anything else we need to address before then,
3 Mr. Angelis?

4 MR. ANGELIS: For Complainant, no, Your Honor,
5 but we do have a brief technical presentation at the
6 opening of our presentation, but it's melded into our
7 overall arguments.

8 JUDGE ELLIOT: Oh, very good. Okay.

9 Mr. Ferguson? Anything else?

10 MR. FERGUSON: Nothing, Your Honor.

11 JUDGE ELLIOT: All right. Mr. Angelis, go
12 ahead.

13 MR. ANGELIS: Thank you, Your Honor.

14 Your Honor, may I approach?

15 JUDGE ELLIOT: Yes.

16 MR. ANGELIS: So good afternoon again, Your
17 Honor. May it please the Court:

18 We do have a PowerPoint presentation. I'm
19 hoping it will be able to be displayed on the monitors.

20 JUDGE ELLIOT: Well, do you have any sort of hot
21 seat person to do that? I'm not sure -- I think you're
22 going to have to hook up to the -- they're trying to
23 present their PowerPoint.

24 MR. ANGELIS: We're connected in here.

25 Excellent. Thank you, Mr. Turner.

1 Thank you, Your Honor. May it please the Court:
2 We'd like to begin just with a brief technology background.

3 Your Honor, this is a case obviously about
4 integrated circuit chips. And the functional unit of an
5 integrated circuit is a transistor. And, of course, chips
6 take binary data, perform mathematical calculations, and
7 spit out additional binary data.

8 Now, integrated circuits rely not just on
9 digital signals but also on incoming analog signals. So
10 here, for example, we've shown an incoming wireless signal
11 on the top and an incoming power signal, both in analog
12 form on the left, all of which are important to allowing
13 the transformation to occur.

14 Now, of course, we have the transistors shown
15 here that are at the heart of the transformation that
16 occurs. But there are also critical analog circuits in the
17 chips. So with respect to the incoming wireless signal,
18 we've shown an analog circuit here consisting of two
19 capacitors and an inductor that also is critical to the
20 transformation. And, likewise, we've shown an incoming
21 power signal. And here's an analog circuit consisting of a
22 capacitor and an inductor that likewise feeds into the
23 ultimate transformation that occurs.

24 So over the last many years, chips have been
25 getting smaller and smaller over time. And shrinking

1 transistors to go along with that change in chip size is
2 relatively straightforward. The functionality of the
3 transistor does not change as it gets smaller.

4 In contrast, shrinking the analog circuits is
5 much more challenging. So here we've shown an LC circuit
6 that has both a capacitor and an inductor. But capacitance
7 is a function of the area of the electrode plate and the
8 distance between the two plates. And, similarly,
9 inductance is a function of the length of the wire and the
10 cross-section of the wire.

11 So shrinking these two components down does not
12 yield a linear transformation. To achieve the necessary
13 capacitance from the capacitor and inductance from the
14 inductor is not a straightforward process. And because of
15 that, sophisticated engineers need to spend a lot of time
16 finding unique solutions that are inventive to obtain the
17 necessary capacitance and inductance to handle the analog
18 circuits that are critical to the chip's operation.

19 So now we're turning to the asserted patents,
20 Your Honor. Of course, there are three at issue in this
21 investigation. And I'm on slide 12 for the record.

22 The '245 patent is not within the scope of Order
23 16, so we'll be talking just about the '218 patent here in
24 the middle, which is titled Power mesh arrangement method
25 utilized in an integrated circuit having multiple power

1 domains, as well as the '582 patent, semiconductor device
2 with inductor-capacitor resonant circuit.

3 So there's only one term we'll be arguing today
4 for the '218 patent, and that's "global power mesh." And
5 we've identified the claims where it appears. And there
6 are four terms that will be discussed from the '582 patent,
7 but they really are in two groups, Your Honor.

8 The two extension conductor segments and the
9 coil-conductor segment can be treated together because the
10 arguments for both are essentially the same. And the other
11 two terms, "capacitor component" and the "plurality of
12 connecting segments" component, can likewise largely be
13 discussed together because at least AMD's argument for
14 those terms is the same. Now, Realtek's response is a
15 little bit different for each, and as Realtek will go
16 through and talk about the intrinsic record that applies to
17 each separately.

18 So let's begin with the '218 patent. It's a
19 2011 U.S. patent that claims priority back to a 2007
20 Taiwanese application. And it addresses a situation where
21 advanced integrated circuits have components that need
22 separate power.

23 So because of that, the claims teach a novel and
24 efficient power routing structure for integrated circuits
25 with multiple power domains. And some of the key features

1 are a two-layer global power mesh and two partial local
2 power meshes positioned according to two power domains.

3 So here's one embodiment of the '218 patent that
4 is taken from the figures in the patent itself. And you
5 can see here on the bottom, Your Honor -- and I'll use my
6 laser pointer -- you can see there are two power domains.
7 There's power domain 110 in blue, and there's power domain
8 120 in red. And above those are two partial local power
9 meshes, a first partial local power mesh with red power
10 wires and shaded ground wires, and a second partial local
11 power mesh with blue power wires and white ground wires.
12 Above those is a two-layer global power mesh with both sets
13 of power wires.

14 Now, this is one embodiment, just one embodiment
15 from the '218 patent. And we've created another
16 embodiment, so Your Honor can see. And here, again, this
17 embodiment, which we've created, has two power domains.
18 The red power domain is the first power domain, and the
19 blue power domain is the second power domain. And just as
20 in the prior embodiment we talked about, they're of
21 different shape.

22 Above the red power domain is a first partial
23 local power mesh. And you can see the red wires provide
24 power to the first power domain, and although it's not
25 shown, they do so through vias, which are essentially metal

1 connections between the two layers.

2 In this embodiment, the first partial local
3 power mesh has just one layer. And the parties agree that
4 a partial local power mesh can consist of one layer.

5 The second partial local power mesh shown here,
6 we've shown it with two layers. So this second partial
7 local power mesh has the blue power wires connecting to the
8 second power domain, and on the upper layer of the second
9 partial local power mesh are also two blue power wires as
10 well as the grounds. And again vias would be used to
11 connect through -- to the power wires to one another in the
12 second partial local power mesh and then to the power
13 domain.

14 So in this embodiment we've shown above it, a
15 global power mesh with both sets of power wires -- again,
16 we have the blue power wires and the red power wires in the
17 bottom layer of the global power mesh because the global
18 power mesh has to be able to provide power to each of the
19 power domains.

20 And then, again, the global power mesh is
21 required to have two layers by the claims. And it's
22 required to have both horizontal and vertical lines, power
23 lines.

24 Now, one of the purposes of the invention is to
25 be able to provide power separately to the two power

1 domains. So you can see here in this illustration, here
2 the global power mesh has only the red power lines active;
3 same is true of the first partial local power mesh.

4 And, therefore, power is flowing to the first
5 power domain. Power is not flowing to the second power
6 domain in this example. But in here, in this example, you
7 see the global power mesh, only the blue power lines are
8 active. And so they feed in from the two layers of the
9 global power mesh into both layers of the partial local
10 power mesh in this embodiment, and then into the second
11 power domain, thereby providing power just to the blue
12 power domain and not to the red power domain.

13 So what's the dispute here with respect to the
14 '218 patent? Well, we've shown the parties constructions
15 here. Realtek's proposed construction for "global power
16 mesh" is a power mesh capable of distributing power to
17 multiple power domains. AMD's proposed construction adds
18 two additional requirements, that the global power mesh
19 must be distributed across the full area of the chip's
20 circuitry and that the global power mesh must be for
21 conducting external power into the chip.

22 And Realtek's position is that neither of those
23 two added requirements are limitations of the claim. So
24 let's turn to the first issue.

25 Let me just start, Your Honor, by -- our

1 argument has three parts on this term. First is that
2 Realtek's construction reflects the intrinsic record. A
3 global power mesh is a power mesh that can distribute power
4 to more than one power domain. Global does not require any
5 specific geography. And Realtek's construction is not
6 redundant with the claim language as AMD contends.

7 The second part of our argument is that AMD's
8 construction is improper because it wrongly imports
9 limitations from the specification.

10 And the third part of our argument is that AMD's
11 construction is contrary to the intrinsic record, which
12 teaches a few important things, that a chip can have more
13 than one global power mesh, that there's a need to save
14 space on the metal layers, and that there's no requirement
15 that the global power mesh is for conducting external
16 power.

17 JUDGE ELLIOT: Well, when you say external
18 power, do you mean directly from external power? Is that
19 the dispute? Or are you saying that, under your
20 construction, you can have a scenario where the power goes
21 through some other component or components first before it
22 gets to the global power mesh?

23 MR. ANGELIS: So it's the latter, Your Honor.
24 There's nothing that's limiting in the -- in the claims
25 whatsoever about the nature of the coupling that happens.

1 So here, Your Honor, we've shown the abstract,
2 which of course summarizes the invention. The rules and
3 regulations applying to patents require the abstract to do
4 so. And what the abstract says is that the global power
5 mesh is utilized for providing powers needed by the first
6 and the second power domains.

7 And a global power mesh is global because that's
8 what it does. It provides powers needed by both of those
9 power domains. That's what makes it global. Global does
10 not require any specific geography.

11 In contrast, the partial local power meshes
12 provide power -- need only provide power to one domain. So
13 here's the discussion of the embodiment in Figure 3 with
14 partial local power meshes 310 and 320. And the discussion
15 in this embodiment says that each of the partial local
16 power meshes 310 and 320 is only used to supply the powers
17 needed by the corresponding power domains, power domains
18 110 and 120. So 310 supplies to 110, and 320 supplies 120.
19 A global power mesh must be capable of supplying power to
20 multiple power domains and a partial local power mesh does
21 not.

22 So AMD's primary argument is that Realtek's
23 construction is redundant with this language we have
24 highlighted on slide 26 in yellow. It says "a global power
25 mesh coupling to the first local power mesh and the second

1 local power mesh, to provide the power needed by the first
2 power domain and second power domain separately."

3 But Realtek's proposed construction, which is
4 shown at the top of this slide, slide 26, is not redundant
5 with this language. This language talks about the coupling
6 that allows providing the power needed by the first power
7 domain and the second power domain separately. There's not
8 redundancy there because all Realtek's construction says is
9 that it's a power mesh capable of distributing power to
10 multiple power domains. This goes beyond that and adds
11 limitations which are important to the scope of the claim
12 itself.

13 So, in sum, Realtek's construction is correct
14 because it reflects the intrinsic record and is not
15 redundant. AMD's construction has numerous problems. The
16 first one is that it imports limitations from the
17 embodiments into the claims.

18 And so we don't need to belabor the Federal
19 Circuit law on this point, Your Honor. Your Honor is well
20 aware of it. But we've cited two cases here, Hill-Rom
21 Services and Kara Tech, both of which make clear that we do
22 not read limitations from the embodiments into the
23 specification -- from the specification into the claims.
24 And, likewise, the patentee is entitled to the full scope
25 of the claims and is not to be limited to the preferred

1 embodiment.

2 And that's precisely what AMD is trying to do
3 here. So here on the left of slide 28 we've cited the '218
4 patent from column 4, lines 19 to 25. And there's another
5 portion of column 3 that AMD cites that is essentially
6 identical. But each one of them talk about one embodiment.
7 And in that embodiment, what happens is that the global
8 power mesh is on top of the chip circuitry, is what it
9 says.

10 So this is plainly a description of an
11 embodiment. And under the Federal Circuit law we talked
12 about, AMD may not import this limitation into the claims.

13 But this limitation actually doesn't even say
14 what AMD would like it to say. It does not require
15 covering the entire area of the circuitry with the global
16 power mesh. So what AMD is trying to do is to import a
17 limitation that doesn't even appear in the specification,
18 is only a characterization of the drawings, and under the
19 authority we cited, that's not improper -- excuse me, that
20 is improper. That's not proper.

21 So we respectfully ask that the ALJ reject AMD's
22 proposed construction.

23 Now, there's another problem with AMD's proposed
24 constructions. They're contrary to the intrinsic record.
25 There are embodiments in the intrinsic record that would be

1 read out if AMD's proposed construction were adopted.

2 So here, for example, there's an embodiment that
3 discusses each global power mesh. And so certain
4 embodiments allow multiple global power meshes on a single
5 chip, which isn't surprising, considering a modern chip has
6 many new components and some of those components have
7 multiple power meshes on them.

8 So a chip with multiple global power meshes
9 would not have each global power mesh distributed across
10 its entire circuitry. And because AMD's construction is
11 contrary to this part of the intrinsic record, we
12 respectfully ask Your Honor to reject it.

13 There's another part of the '218 patent that
14 AMD's construction is contrary to. And the patent teaches
15 that there's a desire not to waste an excess large area
16 with wiring. And what it says is consuming a larger area
17 with that wiring is disfavored.

18 So what the patent teaches is that the global
19 power mesh only extends as far across the circuitry as is
20 needed. And because AMD's construction would require
21 extending and consuming the entire area of the circuitry
22 with wiring, it's contrary to the intrinsic record, and we
23 respectfully ask Your Honor to reject it.

24 JUDGE ELLIOT: Well, let me ask you about that
25 point. So if you have -- let's say that these two power

1 domains take up only a small part of the area of the chip,
2 okay, and then let's say 95 percent of the chip is some
3 third power domain, all right?

4 The figures that you had created where you
5 showed a smaller power domain and then a larger one that
6 had sort of an L-shape, the global mesh that you put on
7 there covered a much -- a larger area, right? But if I
8 understand your argument, your argument is you may need the
9 mesh just for those two small areas, but if 95 percent of
10 the rest of the chip is in another power domain, you don't
11 necessarily need a mesh for that?

12 MR. ANGELIS: That's exactly right, Your Honor.

13 JUDGE ELLIOT: Okay.

14 MR. ANGELIS: Yes. And there may be another
15 global power mesh, a second one that provides that one. It
16 would be outside of the scope of the claim in analyzing
17 that.

18 JUDGE ELLIOT: Okay. Understood.

19 MR. ANGELIS: So now let's turn to the second
20 limitation that AMD would like to add, "for conducting
21 internal power into the chip." And AMD's argument --
22 there's a little bit of imprecision, I think, in the
23 briefing, but it became clear in their reply brief that
24 AMD's primary argument is a disavowal argument. It's a
25 disclaimer argument.

1 And so let's just review the law of disavowal
2 here. Disclaimer and disavowal are synonyms of each other,
3 Your Honor, but disavowal requires a clear and unmistakable
4 disavowal of scope during prosecution, and disavowal does
5 not apply where the alleged disavowal of claim scope is
6 ambiguous.

7 So here, Your Honor, the argument relates to the
8 discussion of Chen. And Chen was a 103 combination that
9 was discussed during the prosecution history. And so what
10 happened is that the examiner equated a part of Chen, power
11 grid 22, to the global power mesh. And this is 2282, Your
12 Honor, is the Bates number for this, and it's in
13 Exhibit 107.

14 So Realtek responds. And, remember, disavowal
15 has to be Realtek's statement. It has to be Realtek's
16 statement to be a disavowal by Realtek. So Realtek
17 explains what it understands the examiner is saying. The
18 examiner is equating global power mesh to grid 22 of Chen
19 and the partial local power meshes to grid 21 of Chen. So
20 Realtek, therefore, identifies what it understands the
21 examiner to be saying. And in this middle blurb, Realtek
22 says our invention is different. And Realtek underlines
23 the distinction that it's making. Local power mesh 300
24 couples to global power mesh 400 and the chip circuitry.

25 And so, Your Honor, this is exactly the build we

1 showed you before. You have a coupling between the global
2 power mesh and the partial local power meshes and then into
3 the chip's circuitry. And that's why Realtek's invention
4 works.

5 Chen, in contrast, has no connections between
6 the power grids, power grid 22 and power grid 21. That's
7 the ground on which Realtek distinguished Chen. Its
8 distinguishing characteristics were underlined, and that's
9 the only discussion here -- we've reproduced the entire
10 discussion here about the structures in Chen that are
11 discussed. This is on the bottom left of slide 32.

12 And the only part talking about the global power
13 mesh and the partial local power mesh, 22 and 21, at least
14 the analogs to those that the examiner found, are
15 highlighted here and it's -- the distinguishing is that
16 there's no connection between them.

17 And then what happens, the examiner issues a
18 Notice of Allowance saying your arguments are persuasive,
19 Realtek. We're going to allow this patent to issue.
20 Because of that, the only thing that was distinguished was
21 based on the actual claim language itself. There was no
22 additional limitation added in this back and forth with the
23 examiner.

24 Because of that, AMD's proposed construction for
25 conducting external power into the chip adds a limitation

1 that we believe is improper. And because of that, we ask
2 you to reject that, Your Honor.

3 But there's another problem in the specification
4 that AMD's construction doesn't account for. There's some
5 discussion of the intrinsic record in AMD's briefs, but
6 what the intrinsic record said is that the global power
7 mesh can conduct the external power into the chip by via.
8 These claims don't require that functionality. It's just
9 identified as a possibility.

10 And because it's not a requirement and AMD's
11 construction is contrary to the intrinsic record, we
12 respectfully ask Your Honor to reject the construction.

13 So I'd like to move on now to the '582 patent,
14 Your Honor, unless there are other questions for the '218.

15 JUDGE ELLIOT: Well, my -- the way that I
16 usually do this is we just take each term one at a time.
17 So then Mr. Ferguson would speak next and then we'd move on
18 to the next one. Did the parties reach some other sort of
19 understanding?

20 MR. ANGELIS: We didn't, Your Honor, and we just
21 weren't sure which way you'd like to do it. Your ground
22 rules weren't totally clear to me on that point.

23 JUDGE ELLIOT: Okay.

24 MR. ANGELIS: But we're happy to do that, and
25 this way, we can switch over and go from there.

1 JUDGE ELLIOT: Let's let Mr. Ferguson speak to
2 the '218. But before you go, let me ask you one thing.

3 So I think your proposed construction is a
4 little bit redundant in the sense that the phrase "capable
5 of distributing power to multiple power domains" seems a
6 lot like what the claims say about how the global power
7 mesh couples to the first local power mesh and the second
8 local power mesh to provide the power needed by those -- by
9 the two domains.

10 So here's -- I'm just throwing this out as a
11 possibility. What if I construed this term to mean "a
12 power mesh that need not be distributed across the full
13 area of the chip's circuitry, and that need not conduct
14 external power directly into the chip"?

15 You don't have to tell me now, but just think
16 about that. And if the parties do reach any sort of
17 agreement or change their positions at all, then you should
18 tell me after the fact when you file your final joint
19 construction chart. But just think about that. Okay.

20 MR. ANGELIS: Okay. Will do, Your Honor. Thank
21 you so much.

22 JUDGE ELLIOT: Mr. Ferguson.

23 MR. FERGUSON: Thank you, Your Honor. And may I
24 approach?

25 JUDGE ELLIOT: Yes. Thank you.

1 MR. FERGUSON: Thank you, Your Honor, again, and
2 good afternoon.

3 So I'll give a little bit of a background as
4 well on the '218 patent, because I think it's important to
5 understand exactly what the patent describes are the
6 embodiments, as opposed to an embodiment that Mr. Angelis
7 put up that is nowhere found in the specification or in the
8 drawings.

9 So what the patent discusses is that at the time
10 of this invention, integrated circuits would require
11 different parts or different portions of circuitry that
12 would need different powers. And the specific example that
13 the patent gives is you have a normal operating mode and
14 then you have a sleep mode. So for sleep mode, certain
15 circuits would need a lower operating voltage.

16 And that is the example that's given in the
17 specification. And what the patent says is that it was
18 common practice at the time to provide these circuits with
19 different power domains that would provide the different
20 voltage or powers that were needed to the chip. So this
21 was not anything that was novel in and of itself. This was
22 already something that was well known.

23 And the patent gives an example. This is in
24 Figure 1, Mr. Angelis showed a portion of this as well,
25 where you have a chip, 100, and this particular chip has

1 two power domains. There's a purplish power domain labeled
2 110 and then a beige power domain labeled 120. And
3 different voltages would be applied to the different
4 circuits that are located under those power domains.

5 Now, what was supposedly novel in the '218
6 patent was that what the patent describes is that the tools
7 at the time that were used to provide the circuit layout
8 were automated tools, and they were called the automatic
9 placement and routing tool.

10 So what this did was that it automated an
11 otherwise laborious manual process of how you would take
12 your chip real estate and have to, you know, carefully
13 divide it up for the different circuits that you would need
14 and the different power that you would need.

15 And according to the '218 patent, these tools
16 could only provide a single power domain. So what the '218
17 patent is supposed to allegedly fix is that it will provide
18 a power mesh arrangement method that would allow these
19 tools, these automatic tools, to be able to provide power
20 to different power domains.

21 Now, the claims of this patent that are asserted
22 are not directed to that power mesh arrangement method.
23 Those are the claims that Realtek tried to move to add into
24 the case that Your Honor denied last week. So these claims
25 are only directed to a circuit structure having the

1 different power domains and the different power meshes.

2 And so the patent describes -- and I'm on our
3 slide 10 -- the patent describes what you -- some of the
4 processes that you would do. The first is to arrange a
5 first local power mesh that corresponds to one of the power
6 domains, a second local power mesh, and then on top of
7 that, the global power mesh that's positioned above the
8 first and the second local power meshes. This is Figure 2
9 of the patent.

10 And as the patent describes -- this is column 3,
11 lines 19 through 32 -- the global power mesh would receive
12 the power from outside of the chip and then provide that to
13 the local power meshes, which then connect down to the
14 power domains to provide the different voltages to the
15 circuitry underneath.

16 Now, there's another embodiment that's described
17 in the patent where the local power mesh is divided further
18 into these partial local power meshes. And this is shown
19 in Figure 3. And I just want to be clear, Your Honor, in
20 Figure 3, what's written underneath in the arrows that are
21 pointing to the power wires, in the patent that is
22 incorrectly labeled. And we all agree on that. The
23 specification describes that the wires 321, 322, 311, and
24 312 are actually the power wires and ground wires. They're
25 incorrectly labeled in the '218 patent, Figure 3 as, I

1 believe, power meshes. But, you know, that, again, that is
2 something that we both agree is an error. So I have
3 corrected that here, so it just makes Figure 3 easier to
4 understand.

5 But you can see that what the patent shows are
6 these partial local power meshes that are positioned over
7 the different power domains that were shown back in Figure
8 1. So the patent describes taking the power meshes, the
9 partial local power meshes, and placing them over the top
10 of those different power domains. And you can see that the
11 wires that are shown run both horizontally and vertically
12 for both partial local power meshes. So, for example, the
13 power wire 321, that supplies VDD2, which is one of the
14 voltages, and then the power wire 311, that supplies a
15 second voltage to a different power domain. That's voltage
16 VDD1. And they run both vertically and horizontally.
17 That, of course, is the dispute regarding the term "power
18 mesh" itself.

19 And then we go to the global power mesh. This
20 is Figure 4 of the patent.

21 And the global power mesh is above the local
22 power meshes and above the partial local power meshes. And
23 the difference here -- one of the differences is that the
24 global power mesh has three sets of power wires. It has a
25 common ground wire, which is labeled 403. And you can see

1 that runs both vertically and horizontally. And then it
2 also has two separate power wires 401 and 402. And those
3 two different power wires, 401/402, as the specification
4 describes at column 4, lines 21 to 38, the two power wires
5 401/402 are used to supply the working voltages VDD1/VDD2,
6 needed by the local power meshes.

7 So the global power mesh will have multiple
8 different power wires for the different voltages that the
9 either local power meshes or partial local power meshes
10 will need to ultimately supply the voltage or power to the
11 circuits underneath.

12 Now, when I look at the asserted claims, claim
13 12 through 18 are asserted, and as Your Honor knows, we
14 have moved for summary determination of indefiniteness
15 because claim 1 requires, at least in terms of the terms
16 that are listed, both partial local power meshes and local
17 power meshes as well as the global power mesh.

18 So let's talk about the term itself. Here are
19 the parties' constructions, as you've already seen. And to
20 summarize our position, the term "global" has to be given a
21 meaning. That is general Federal Circuit case law.

22 Realtek picked the terms "global and "local" for
23 a reason. And AMD's construction is consistent with the
24 use of that term because it provides that the global power
25 mesh is distributed across the full area of the chip's

1 circuitry.

2 Now, Mr. Angelis discussed a theoretical
3 situation where there might be multiple global power
4 meshes, but that is nowhere described in the specification.
5 And there's no evidence in this record at all that there's
6 any chip or patent or article that ever discusses having
7 two global power meshes or more in a chip.

8 JUDGE ELLIOT: Well, does it say that -- say,
9 going back to what you had on slide 12, where you show the
10 partial local -- yeah, like there -- I mean, does it say
11 that that's the entire chip?

12 MR. FERGUSON: It does, Your Honor, and I'll
13 explain why, because if I go back one more to Figure 1,
14 Figure 1 says the chip is 100. All right? And the chip --
15 so it is that entire outside box, 100. The power domains
16 are located within that chip. And then when we jump up to
17 Figure 3, you can see, even though it doesn't label 100
18 specifically, it is the exact same chip. It is the exact
19 same power domains, except now it shows the partial or
20 local power meshes on top of it.

21 So if I go back up to the argument, again, we
22 give meaning to "global," because the global power mesh is
23 distributed across a full area of the chip's circuitry. If
24 it wasn't, then there was no reason to use the word
25 "global." It could have used just "local," "partial

1 local," "regional," whatever other terms they could have
2 used, but "global" has a meaning.

3 And then the second portion of our construction
4 is that it's required for conducting the external power
5 into the chip. And the reason we have that portion of our
6 construction is because that is shown in every single
7 embodiment in the specification, and it's also confirmed by
8 what was in the file history.

9 Now, Your Honor touched on Realtek's
10 construction, you know, "capable of distributing a power to
11 multiple power domains," but that is redundant of what's
12 already in claim 12. Claim 12 already says the global
13 power mesh provides the power needed by the first domain
14 and second power domain. So Realtek's construction doesn't
15 really add anything at all and doesn't ascribe a meaning
16 whatsoever to the term "global."

17 JUDGE ELLIOT: Well, no, I think that actually
18 is what they're saying. They're saying that "global"
19 doesn't necessarily mean it has to cover the entirety of
20 the chip. It just has to cover the domains where the
21 invention is needed. Again, I get your point, okay?
22 "Global" means "global." They could have called it
23 something else. They could have called it --

24 MR. FERGUSON: Yeah.

25 JUDGE ELLIOT: -- a multi-domain mesh or

1 something like that, but I think their point is that the
2 part that I pointed out as potentially redundant
3 corresponds to the global part in the claim language.

4 MR. FERGUSON: Then in terms of that, the global
5 -- or to answer the question about the global power mesh is
6 only needed where the power domains are, well, that's what
7 the local power meshes are described for. That's exactly
8 what the local power meshes do.

9 If I go back to, you know, Figure 3 again, the
10 local power meshes, here they're the partial local power
11 meshes, are the ones that supply -- for example, there's
12 two -- these look like identical slides, 13 and 14, but
13 there's actually a difference in terms of what's -- what
14 the specification describes in terms of what the different
15 power wires.

16 So for slide 13, the specification discusses
17 that the partial local power mesh 310 has the power wire
18 311 to supply the working voltage VDD1 needed by the power
19 domain 110. So here the partial local power mesh 310
20 provides the voltage to the power domain 110. And then on
21 slide 14, it's slightly different. It's the partial local
22 power mesh 320 has a power wire 321 that supplies the other
23 working voltage, in this case VDD2.

24 There's error in the specification. It says
25 VDD1 again, but when you look at the specification as a

1 whole, it's clear it's a separate voltage. It's VDD2 for
2 the power domain 120.

3 So the specification, when it talks about what
4 the power domains need for power, it always describes them
5 in the context of the local power meshes; whereas the
6 global power mesh provides the power for the local power
7 meshes and then down through to the circuitry in the power
8 domains.

9 Now, in terms of AMD's construction about the
10 global power mesh is distributed across the full area of
11 the chip's circuitry, that is shown in every embodiment.
12 There's no embodiment shown or described where the global
13 power mesh is anything less than covering the overall area
14 of the chip. This is shown in Figure 4. The global power
15 mesh are the green wires that we've shown. That covers the
16 entirety of the chip. It's shown in Figure 5. Figure 5
17 shows how the global power mesh is formed on the metal
18 layers above the local power meshes or the partial local
19 power meshes, but it covers the entirety of that area. And
20 then in Figure 6 -- and here, Figure 6 does label the chip
21 100, and that is the dark red box or the brown box. And
22 you can see that the -- again, the global power mesh covers
23 the entirety of the chip's surface.

24 Now, as we pointed out in our briefing, you can
25 rely on patent drawings for claim construction purposes.

1 The Federal Circuit has said that in CVI/Beta and the other
2 cases that we cite. And then in the specification, there
3 are portions of the specification that we believe support
4 this position.

5 And in particular, the middle quote at column 4,
6 lines 22 to 25. Each global power mesh comprises a
7 plurality of power supply wires and a plurality of vertical
8 supply wires that are evenly distributed on top of the
9 chip's circuitry. The chip's circuitry is, of course, the
10 entirety of the chip. And it doesn't -- and it uses the
11 phrase "each." That's every global power mesh that's
12 described in the patent is covering the entire area of the
13 chip. It doesn't say "some." It says "each." Each and
14 every global power mesh is evenly distributed on top of the
15 chip's circuitry. And, again, there is no embodiment that
16 is shown or described in this patent where the global power
17 mesh is across less than the entirety of the chip.

18 Now, Your Honor gave an example to Mr. Angelis
19 about, you know, a situation where there might be a local
20 power mesh that only covers 5 percent; the rest of the
21 chip, 95 percent, is not covered by a local power mesh.

22 But you would still require a global power mesh
23 over the entirety of that chip because it's the global
24 power meshes that are needed to provide ultimately the
25 power to the -- however many local power meshes there are

1 underneath, in order for the different voltages to be
2 provided to the chip's circuitry.

3 So unless there are any questions about that,
4 I'll move to the next portion of our limitation -- or the
5 next portion of our claim construction, which is that the
6 global power mesh conducts external power into the chip.
7 And this is repeatedly and consistently described in the
8 specification. At column 3, lines 25 to 32, the global
9 power mesh couples to the external power. And it describes
10 that, such as by way of the input/output pin of the chip.

11 So Your Honor probably is aware the chip has the
12 external pins in the packaging. One of them ultimately --
13 or more of them connect to the actual power that comes from
14 wherever the power source is. Somehow that power has to
15 get into the chip itself, into the different circuitry.
16 And this patent specifically and repeatedly and
17 consistently says that that is done through the global
18 power mesh.

19 Again, at column 3, lines 25 to 32, continuing,
20 "the external power will be inputted into the chip
21 circuitry by way of the global power mesh." At column 4,
22 lines 26 to 30, "the global power mesh can conduct the
23 external power into the chip by via to couple to" the local
24 power meshes. And then at column 6, lines 13 to 14, again,
25 it says, "Only the global power mesh 400 is used to conduct

1 the external power into the chip."

2 On slide 31, there are yet more portions of the
3 specification that are quoted. I'm not going to go through
4 all of them because it's very clear. The global power mesh
5 supplies the voltage to the entire chip through the
6 external power. In the middle quote, column 5, lines 8
7 through 13, again, the power supply wire 401, which is part
8 of the global power mesh, couples to the external power
9 VDD1. And then through this arrangement, it's assured that
10 the external powers are, as the patent says, "definitely
11 inputted into the chip circuitry." That's at column 5,
12 lines 25 to 29.

13 So this is, we think, a situation where when you
14 look at the totality of the patent, it repeatedly and
15 consistently describes the global power mesh as providing
16 the power from the external -- from external to the chip
17 into the chip. And so that is a construction that stays
18 true to the claim language and most naturally aligns with
19 the patent description as Phillips said.

20 And then the last point on this relates to the
21 file history. Now, this isn't necessarily an avowal, but
22 it certainly provides further powerful intrinsic evidence
23 about what the patentee believed the global power mesh did.
24 In response to the examiner's rejection -- and this is the
25 file history, Exhibit 107 at Bates Number 2282 -- Realtek

1 represented to the Patent Office that in the present
2 application, the global power mesh 400 couples to the
3 external power such as by way of the input/output pin of
4 the chip to conduct the external power into the chip.
5 That's what they told the examiner the global power mesh
6 did.

7 That quote from Realtek is exactly what is shown
8 on slide 30 at column 3, lines 25 to 32 of the
9 specification. The global power mesh couples to the
10 external power such as by way of the input/output pin of
11 the chip to conduct the external power into the chip.

12 And, ultimately, the examiner allowed the claims
13 after this argument was made, at least because -- one of
14 the reasons is because the examiner apparently agreed that
15 Chen, the piece of prior art, did not show a global power
16 mesh that coupled to the external power, as the applicant
17 represented to the Patent Office the global power mesh did
18 here.

19 JUDGE ELLIOT: And your point is, is that
20 because -- I have not looked at Chen -- but is that because
21 Chen has -- Chen supplies power through its second power
22 grid and first power grid and there's some sort of
23 intermediary components between those power grids and the
24 external power?

25 MR. FERGUSON: So Chen is not of record in the

1 -- no one submitted it as an exhibit. We could certainly
2 do that for Your Honor if you would like.

3 JUDGE ELLIOT: I can track it down.

4 MR. FERGUSON: To be able to see it. Yeah. So,
5 I mean, yes, at least that's what applicants argued. They
6 argued that Chen has no electrical connections to the VDD
7 ground power network and the other VDDi-VDDn. So these
8 would be -- this would be ground, VDDg, and then this would
9 be the different voltages that would be supplied to the
10 other portions of the chip. And it says that Chen has no
11 connections between what the examiner said was the -- was
12 the global power mesh or what the examiner read on the
13 global power mesh and these power networks that had the
14 VDDi and the VDDg ground.

15 JUDGE ELLIOT: I think I'm going to have to look
16 at Chen because I don't even understand that. I don't know
17 what that means. I mean, where's the power coming from in
18 Chen?

19 MR. FERGUSON: Somewhere.

20 JUDGE ELLIOT: Somewhere. Right.

21 MR. FERGUSON: Clearly, Chen is, you know, a
22 working chip that's going to have power coming into it.
23 What Realtek argued is that at least with respect to what
24 the examiner had identified as the global power mesh and
25 the local power mesh in Chen, the inventor, the applicant,

1 argued that doesn't work because what you've identified, at
2 least what you've identified as the global power mesh
3 doesn't provide, doesn't couple to the external power the
4 way our global power mesh does.

5 So unless Your Honor has any questions --

6 JUDGE ELLIOT: No, I don't.

7 MR. FERGUSON: -- our construction is
8 consistent.

9 JUDGE ELLIOT: Okay. Let's move on to the '528
10 patent -- '582 patent. Sorry.

11 MR. FERGUSON: Do you want us to switch again
12 or --

13 JUDGE ELLIOT: Yes, please. Yes, let's do it
14 that way. Why don't --

15 MR. ANGELIS: Would you like brief rebuttal,
16 Your Honor, on this argument or have you heard everything
17 that you need?

18 JUDGE ELLIOT: Let's not do that actually. I
19 mean, I -- you know, I think -- do I have that in my ground
20 rules? I think I do allow rebuttal, but let's move on to
21 the '582 patent, please.

22 And if you would like, Mr. Angelis -- I know you
23 mentioned this in the beginning, that there's sort of
24 common themes with the claims in the '528 -- you can take
25 them in lumps, you know, groups, if you'd like, but let's

1 do it just one at a time, so you'll have to stand up and
2 sit down some more.

3 MR. ANGELIS: Just one moment to consult with
4 Mr. Ferguson.

5 JUDGE ELLIOT: Yes.

6 MR. ANGELIS: So, Your Honor, just so it's clear
7 for the record, what we'll do is we'll argue the first two
8 terms of the '582 together and then the second two terms of
9 the '582 together.

10 JUDGE ELLIOT: Very good.

11 MR. ANGELIS: Thank you, Your Honor. Now we've
12 moved on to the '582 patent.

13 As Your Honor is aware, this is a 2017 patent
14 that claims priority to a 2014 Taiwanese application. And
15 here, we've shown just for background an LC circuit that
16 the parties have been talking. So one problem with LC
17 circuits is that there was transmission losses into the
18 insulation material as part of these circuits. The other,
19 of course, is that they consume a large footprint. And so
20 as we talked about, with the inexorable command to make
21 circuits smaller, LC circuits were problematic.

22 So the problem -- the patent solves this problem
23 through an innovative positioning of carefully structured
24 capacitor component. And the claimed structure reduces
25 transmission losses, simplifies the arrangement of the

1 wire, and reduces the overall size. And Figure 1 is a
2 cartoon that essentially displays the innovative and
3 inventive changes to the ordinary LC circuit.

4 So there are four terms at issue here. We'll
5 talk in this part of the argument about two of them,
6 extension-conductor segments and coil-conductor segment.
7 And we'll leave for the next part of the argument the
8 capacitor component and the plurality of connecting
9 segments.

10 So here are the constructions for these two
11 terms together, Your Honor. And there's one common
12 dispute. So for extension-conductor segment, Realtek has
13 proposed the ordinary and customary meaning, which is
14 what's set forth in the specification. And there's a
15 dispute where the extension-conductor segments begin and
16 end. AMD, in contrast, proposes a functional limitation
17 taken from the specification.

18 And for coil-conductor segment, Realtek has
19 proposed the portion of the inductor that forms any part of
20 the coil. And AMD again likewise proposes a functional
21 limitation found in the specification.

22 And the dispute here is whether the
23 coil-conductor segment, whether the ends of it are, in
24 fact, part of the coil or part of the extension-conductor
25 segments.

1 So our argument proceeds in three steps that are
2 interrelated. The first is to talk about what the
3 intrinsic record requires. It sort of sets the stage, if
4 you will, Your Honor. And the intrinsic record requires
5 that the extension-conductor segments extend outward from
6 the coil-conductor segment and that they are perpendicular
7 to a joining portion.

8 AMD's construction is improper because it is
9 contrary to the intrinsic record. It impermissibly imports
10 limitations and unclaimed functional limitations. And it
11 doesn't resolve the parties' dispute; whereas Realtek's
12 construction does reflect the intrinsic evidence and is
13 supported by the extrinsic evidence in the form of AMD's
14 own documents.

15 So we'll talk about the claim language and the
16 intrinsic record in great detail in a moment, but I'd just
17 like to set the stage here first with this slide.

18 So as we've said, the intrinsic record requires
19 extension-conductor segments that are perpendicular to the
20 joining position. So what is the joining position? Well,
21 the joining position, the patent teaches us, is what's
22 between the end of the coil-conductor segment and the
23 extension-conductor segments. So if we look here on the
24 right, you can see the coil-conductor segment is
25 highlighted in yellow. The extension-conductor segments,

1 133 and 135, have been highlighted in green. And then
2 these red lines are the joining position. And we've
3 labeled them here.

4 In the joining position, the extension-conductor
5 segments extend outward from the coil conductor segment,
6 you can see from the arrows we've added, and they do so in
7 a way that is perpendicular to the joining position. And
8 that's what the intrinsic record requires.

9 Now, how does that link up to Realtek's proposed
10 construction and AMD's proposed construction? So let's
11 look first at Realtek's proposed construction.

12 There's a coil-conductor segment, according to
13 Realtek is the yellow. The extension-conductor segments
14 are the green, 133 and 135. The joining positions are here
15 in red, according to Realtek. And you can see from
16 Realtek's position that the joining positions are
17 perpendicular to the extension-conductor segments and that
18 the extension-conductor segments in green extend outward
19 from the coil-conductor segment in yellow.

20 For AMD's proposed construction, here's the
21 coil-conductor segment, but AMD labels what's in
22 cross-hatching there in green as part of the
23 extension-conductor segment. So it would include those
24 shaded boxes as part of the extension conductor segment.
25 And, therefore, the joining position would be between the

1 crosshatched box and the yellow.

2 And the problem with AMD's proposed construction
3 is that the joining position is not perpendicular to where
4 the extension-conductor segment extends from the end of the
5 coil and it doesn't extend outward. It extends inward from
6 the coil.

7 So the dispute, then, here is quite simple.
8 It's whether these boxes, these shaded boxes, are part of
9 the coil-conductor segment or the extension-conductor
10 segment. And we'll go through in great detail why they
11 should be considered part of the coil-conductor segment.

12 So let's start with the claim language. We
13 always start with the claim language, the Federal Circuit
14 tells us. And it requires two extension-conductor
15 segments, and they're located on a layer. Hold on one
16 second. I'll get my laser pointer here.

17 And they're coupled to the two ends of the
18 coil-conductor segment respectively. So we see the two
19 extension-conductor segments and where they're coupled.
20 And they extend outward relative to the coil-conductor
21 segment. That's what the claim teaches us.

22 Now, the other parts of the intrinsic record add
23 some additional information and explanation about this.
24 Remember we talked about the fact that the two ends of the
25 coil-conductor segment are where the extension-conductor

1 segments start. And the specification says exactly that.
2 It says -- well, remember, there are two
3 extension-conductor segments, 133 and 135, and they extend
4 outward relative to the coil-conductor segment, as the
5 claim says, from the two ends of the coil-conductor
6 segment.

7 And so what the specification tells us -- excuse
8 me, Your Honor -- is that the extending outward is assessed
9 from the two ends of the coil-conductor segment, in our
10 illustrations where green turns to yellow is where you
11 assess the extending outward.

12 So let's look at this other part of the claim
13 language, excuse me, the specification. This is column 4,
14 lines 1 to 13. And both parties rely on this in their
15 briefs.

16 This is an important part of the specification
17 relied on by both parties. So here in yellow, again, we
18 have the coil-conductor segment highlighted, and we're just
19 going to walk through this part of the specification line
20 by line. So we have the extension-conductor segment is
21 joined to the first end of the coil-conductor segment on
22 one side. The same is true on the other side. And you've
23 got the joining position we talked about marked here in red
24 on both sides. The other joining position is also marked
25 here.

1 And what the specification teaches us is that
2 the extension-conductor segment is approximately
3 perpendicular to the joining position, which is what we've
4 shown here with the arrows.

5 So in Realtek's position, all of those parts of
6 the specification and the intrinsic record are satisfied.
7 In contrast, in AMD's proposed construction, it identifies
8 the first extension-conductor as including the crosshatch
9 on both sides. It would identify the joining position as
10 being here (indicating), as a vertical line on both sides.
11 But that vertical line is not approximately perpendicular
12 to where the extension-conductor segments extend from the
13 end of the coil-conductor segment, where the yellow turns
14 to the hatch. It's parallel.

15 So if we extend out the joining position, we can
16 see the orientation of the joining position is vertical, so
17 is the extension-conductor segment. Both of those are
18 vertical. And because of that, the two are parallel. The
19 joining position is parallel to the extension-conductor
20 segment. It's not perpendicular, as the intrinsic record
21 teaches.

22 Because of that, AMD's proposed construction is
23 not correct and should be rejected.

24 JUDGE ELLIOT: Okay. I -- one of the reasons
25 that I wanted this particular term to be addressed here

1 today is that I don't know why you're saying that AMD's
2 proposed construction produces this result that you have
3 shown here because all they -- their only construction is
4 input/output parts for receiving or transmitting a signal
5 -- yeah, parts.

6 But you're saying there's another dispute, which
7 was whether the extension-conductor segments attach one way
8 rather than another?

9 MR. ANGELIS: That's right. So AMD takes the
10 position that this is within the scope of the claims, that
11 this right here (indicating) is -- that the
12 extension-conductor segment is, in fact, this area right
13 here (indicating). What AMD says is it could be either.
14 So by -- what AMD is saying is this very much is the
15 extension-conductor segment.

16 And we say this cannot be the
17 extension-conductor segment. The extension-conductor
18 segment does not include this part, the shaded boxes of the
19 coil-conductor segment. That's why there's a dispute, Your
20 Honor.

21 JUDGE ELLIOT: Okay. Hopefully, Mr. Ferguson
22 will address this because that is absolutely not captured
23 by their proposed construction. So I confess I'm really
24 baffled here.

25 Another issue, though, is that, to some extent,

1 what you're proposing as your proposed claim construction
2 is duplicative of what's in the rest of the claim language
3 because the rest of the claim language talks about
4 extending outward.

5 Now, you may interpret -- it may be your
6 position that extending outward means it has got to be
7 perpendicular to the coil-conductor segment. But, I mean,
8 if I were to take your construction that you've got in the
9 joint construction statement, or the claim construction
10 chart, and then just slot it into the claim language, it
11 would be really awkward and unwieldy. Okay? Because I'd
12 have perpendicular to a joining position and then extending
13 outwardly.

14 Both of those would have to be satisfied.

15 MR. ANGELIS: That's right, Your Honor. For the
16 reasons we talked about, we agree with that. This is one
17 of those situations -- and this comes up often in District
18 Court litigation in front of the Federal Circuit as well --
19 where resolving the dispute is much better done by picture
20 than by words. And there are plenty of cases where the
21 Federal Circuit will say here is the party's dispute issued
22 graphically, shown graphically. And this is the -- this is
23 the construction for the graphic.

24 JUDGE ELLIOT: Well, yes, I agree with you, but
25 unfortunately I have to put it in words. So, okay. Go

1 ahead.

2 MR. ANGELIS: Thank you, Your Honor.

3 Okay. So let's talk about this extending
4 outward issue. And you can see from Realtek's proposed
5 construction on the left and AMD's proposed construction on
6 the right, when we talk about extending outward, we're
7 talking about extending in a perpendicular direction. So
8 this perpendicular discussion in the specification is a way
9 of understanding the "extending outward" language in the
10 claim.

11 And Realtek's proposed construction extends
12 outward from the coil-conductor segment; whereas AMD's --
13 or at least what AMD says is fully within the scope of the
14 claim would not extend outward. As you can see here, it
15 extends inward toward the coil and, therefore, is contrary
16 to the claim language.

17 And this is a dispute -- Your Honor, I mean,
18 under Wilson Sporting Goods, it's fine for the Court to
19 understand the nature of the dispute. This is a dispute
20 that Your Honor will see again when it comes to talking
21 about 102 and 103 issues. And that's the nature of this
22 dispute. This is why this dispute comes up.

23 But it's a dispute between the parties that
24 presently exists about the scope of the claim, and we'll
25 talk about it in a moment. Under 02 Micro, it's important

1 for the judicial function in Markman to be -- to resolve
2 disputes regarding the scope of the claim as opposed to --
3 those are not factual issues; they're claim construction
4 issues.

5 And, again, because of the extending inward
6 here, you can see this is contrary to the claim language,
7 extends outwards relative to coil-conductor segment. And
8 because of that, we ask Your Honor to reject any
9 interpretation that would include these shaded boxes within
10 the extension-conductor segments.

11 JUDGE ELLIOT: Let me jump ahead. On
12 coil-conductor, so AMD's proposed construction is
13 coil-conductor segment is induction part for
14 electromagnetic induction. Are you saying that the shaded
15 section, the corner, is part of the coil because it
16 contributes to generating the induction field?

17 MR. ANGELIS: No, Your Honor. We're saying that
18 as part of the coil, because that's where the coil
19 essentially -- it's collinear with the coil and the claim
20 teaches that the extension-conductor segments are not.
21 They extend away.

22 The entire inductor performs inductance. So as
23 -- we've submitted a declaration of our expert,
24 Dr. Phinney, that explains that this is an inductor. The
25 whole thing is an inductor. All of it contributes to

1 inductance, including the extension-conductor segments.

2 They have an inductive function.

3 And so that's another problem with the
4 construction we'll talk about in a moment, is that it
5 doesn't separate the one from the other. And so that's a
6 significant problem with the functional descriptions that
7 AMD has proposed.

8 JUDGE ELLIOT: Okay.

9 MR. ANGELIS: So lest there be any confusion
10 about -- you know, that our diagrams are somehow trying to
11 trick AMD or trying to misstate its position, this is what
12 Realtek -- excuse me, what AMD puts in its expert report,
13 the personal declaration, at paragraph 102. This is its
14 discussion and its identification of the joining position.

15 And you can see here on the left, it calls
16 option A and on the right it calls option B. That's
17 Realtek's construction. And at least this is AMD's -- what
18 AMD would say is in the scope of its construction.

19 And so we look here, again, I'm just -- AMD's
20 expert created these images. AMD orients the
21 extension-conductor segments parallel to the joining
22 position, not perpendicular. So you can see that here.
23 The dotted lines show that the joining portion is parallel
24 in what we're calling AMD's construction or what at least
25 AMD admits is within the scope of its construction, and

1 Realtek's is perpendicular as the intrinsic record
2 requires.

3 But the other problem with AMD's proposed
4 construction is that the joining position is not an
5 arbitrary box. The patent teaches that it's just the line
6 between the extension-conductor segments and the coil.

7 So if we look here, we've used right angle
8 symbols to show what would it mean to extend perpendicular
9 to the joining position in both of these examples. So you
10 can see extending perpendicular from the coil in what's
11 within AMD's construction would extend inward toward the
12 other part of the coil and not extend outward as the claim
13 requires. And because of that, that's why we believe that
14 AMD's proposed construction or at least the construction
15 that's within the scope of what AMD proposes is not correct
16 and is contrary to the intrinsic record and should be
17 rejected.

18 So let's talk a little bit about the functional
19 nature of these limitations and the fact that they are
20 imported. So we talked already about why it's improper to
21 import limitations from the specification into the claims,
22 and that's exactly what AMD is doing here. These are not
23 definitions. This is not lexicography. AMD is not
24 contending they're lexicography. And so this is not a
25 situation where these functional descriptions are to be

1 imported.

2 Instead, they're just functional limitations
3 describing one set of functions. This is very similar to
4 the Toro case and the Ecolab case that we cited in our
5 briefs, where they're just describing basic functions of
6 each one of these parts. And as we talked about,
7 critically, Your Honor, and as the Phinney declaration
8 shows, these don't distinguish between the two because the
9 extension-conductor segments also are an induction part of
10 an inductor for the electromagnetic induction. So these
11 are not mutually exclusive discussions. These are just
12 discussions of some of the functions that these two can
13 have. This is very different than the cushion case that
14 AMD cited in its brief.

15 These are not fundamental characteristics that
16 are unique to either one of those microstructures. Because
17 of that, these are not proper constructions and, as we'll
18 talk about in a moment, they don't resolve the parties'
19 dispute.

20 So here again, Your Honor, I just mentioned the
21 Toro case and the Ecolab case. They say that when the
22 function is not recited in the claim, we don't import a
23 functional limitation, and functions don't become part of
24 the claimed structure unless claimed as such.

25 AMD in its reply brief cites some cases where

1 judges have used functional language for structural claim
2 terms. That certainly happens, but it's always when there
3 is already functional language in the claim term, which the
4 patentee is the master of his or her claims. Patentees,
5 obviously, can add functional language in their claims, and
6 that's when a functional construction is proper.

7 Purely structural claim terms, it's not proper
8 to add functional language to them unless that functional
9 language is fundamentally part of that structural term.
10 And that's not the case here, as we just talked about and
11 as the Phinney declaration makes clear.

12 If there are multiple possible functions and
13 they don't distinguish between multiple structures, that's
14 not a proper construction.

15 So here, as we talked about, these are
16 functional limitations. They're not part of the claims.
17 And because of that, they shouldn't be imported into the
18 construction.

19 Finally, Your Honor, as we mentioned, there's an
20 inexorable command by the Federal Circuit in *O2 Micro*, if
21 there's a dispute -- not every dispute has to be resolved,
22 that's true, but if there's a dispute about the scope of
23 the claims, which is what we have here, that's a claim
24 construction dispute. It's not a dispute -- it's not an
25 issue of fact. It's not something that should be deferred

1 to the finding of fact. It's something that should be
2 resolved during Markman.

3 And here, there's no doubt AMD has said that its
4 constructions do not require determining where the
5 coil-conductor segment ends but, instead, would correctly
6 encompass either, what it calls sort of option A and option
7 B, which are respectively Realtek's proposed construction
8 and AMD's proposed construction.

9 And so there's a genuine dispute here that needs
10 to be resolved. And the fact that AMD doesn't resolve it
11 is problematic and contrary to what is required by O2
12 Micro.

13 JUDGE ELLIOT: Okay. Let me ask you this --
14 and I'm probably not supposed to ask, but I will anyway,
15 because, again, I'm still baffled -- what difference does
16 this make?

17 MR. ANGELIS: So, Your Honor, this goes to an
18 issue of invalidity that's going to come later in the case.

19 JUDGE ELLIOT: Okay. Understood.
20 Okay. Anything else?

21 MR. ANGELIS: Yes, Your Honor.

22 JUDGE ELLIOT: Go ahead.

23 MR. ANGELIS: Just briefly, Realtek's
24 construction is supported by the extrinsic record as well.
25 So AMD's own documents, we have not put anything

1 confidential on this slide, because we don't want to have
2 to clear the courtroom for one slide, but we've put a
3 citation to the document we're relying on. And all we're
4 saying is, Your Honor, that if there were some sort of
5 label -- you know, remember the disputed issue is these two
6 shaded squares. If there were some label that identified
7 those squares as being the coil-conductor, that would be
8 probative evidence of how a person of ordinary skill in the
9 art would think about those two squares.

10 And that, Your Honor, is all we have on those
11 two terms.

12 JUDGE ELLIOT: All right. Mr. Ferguson.

13 MR. FERGUSON: Thank you, Your Honor. With
14 respect to this term, we'll go right to the proposed
15 constructions. And let's be very clear, the reason why
16 Realtek has proposed these relatively unwieldy
17 constructions is because, as Mr. Angelis mentioned, they're
18 going to try to avoid a piece of prior art that was used in
19 one of the IPRs that was filed against this particular
20 patent.

21 That neither here nor there, the point of the
22 matter is that the constructions that AMD has proposed,
23 first of all, it does resolve an O2 Micro issue, because
24 our construction allows for the claims to cover different
25 ways that the extension-conductor segment and the

1 coil-conductor segment intersect. In other words, a person
2 of ordinary skill in the art would understand that the
3 extension-conductor segment and the coil-conductor segment
4 may join at different parts, and the portion or the manner
5 in which Realtek desires to have the claim exclude one of
6 those ways is just not consistent with the intrinsic
7 evidence and it's not consistent with the way a person of
8 ordinary skill in the art would understand the claim.

9 JUDGE ELLIOT: It seems to me, though, that we
10 would have to add something to your proposed construction,
11 then, because if I were to adopt your construction, it's
12 really silent on this issue that Mr. Angelis just
13 mentioned, that, you know, is it connected here or is it
14 connected there? Right?

15 Yours doesn't say anything about that. I
16 understand your position is it really doesn't matter. It
17 encompasses both. But it doesn't -- your -- your
18 construction is really just completely oblivious to that.

19 MR. FERGUSON: So I see your point, and
20 definitely if -- for purposes of resolving this particular
21 issue, we would recommend that we would, you know, simply
22 add to our construction that the manner in which the
23 extension-conductor segment joins the coil-conductor
24 segment could read on or may read on the different
25 embodiments. I'm sure we can come up with more elegant

1 claim -- or elegant language to say that, but certainly we
2 could do that, if that would help Your Honor.

3 JUDGE ELLIOT: Understood.

4 MR. FERGUSON: So, again, our construction is
5 simply agnostic as to where they are located. But, of
6 course, we can add that, if Your Honor would prefer.

7 So, first of all, the specification is
8 consistent with our construction. And the specification --
9 this is at slide 82. Straight from the specification,
10 column 3, lines 22 to 27, the coil-conductor segment serves
11 as an induction part of the inductor for the
12 electromagnetic induction and the extension-conductor
13 segments serve as the input/output part for receiving or
14 transmitting a signal.

15 Now, these are also, as Dr. Prucnal provided in
16 his declaration, these would be understood by a person of
17 ordinary skill in the art to be the ordinary meaning of
18 what these are. The extension-conductor segments, in
19 particular, that's what they do. They allow the -- they
20 allow signals to come into or out of the inductor. And I
21 don't think anyone would dispute that.

22 And with respect to the argument that we are,
23 you know, reading a functional limitation into the claim,
24 well, we cited numerous Federal Circuit cases where
25 sometimes that's just the way terms are given meaning, by

1 what they do, as opposed to necessarily perhaps where they
2 are or the way they're constructed. There's nothing wrong
3 with providing a functional limitation or a functional
4 explanation to a claim term.

5 JUDGE ELLIOT: Well, I think there could be in
6 this case because leaving aside the preamble, this is just
7 a purely structural description, a claimed invention. I
8 mean, you can't even really call it an apparatus. It is
9 just a bunch of conducting material, shaped in a particular
10 way, right?

11 MR. FERGUSON: Or positioned.

12 JUDGE ELLIOT: So the argument that I think Mr.
13 Angelis is making is, if you just shape this conducting
14 material in a particular way, then you have practiced the
15 invention. You don't have to even operate it as an
16 inductor. You don't even have to run current through it.

17 So it doesn't have to be, in your case, in the
18 case of coil-conductor segment, your proposal is for
19 electromagnetic induction, right? So, I mean, clearly
20 that's what the point of it would be, a person of skill in
21 the art is someone who would be constructing and designing
22 and making and using these things, but, I mean, isn't this
23 really just an apparatus that you can practice without even
24 running current through it?

25 MR. FERGUSON: I'm looking at some of the

1 dependent claims, Your Honor, to see if that -- because
2 that wasn't really an issue that anyone, I believe,
3 addressed in the briefing. It certainly is, as you said,
4 described in a manner that's structural in nature. I don't
5 disagree with that.

6 But I also think that, for example, if you have
7 a claim or a claim that describes a transistor, a person of
8 ordinary skill in the art would understand a transistor
9 does certain things. Otherwise, why is it in the claim?

10 So, again, with respect to these particular
11 limitations, our construction is just what a person of
12 ordinary skill in the art would understand they are.
13 Again, to be clear, this dispute, I don't believe there's
14 going to be any dispute that any of the prior art or
15 potentially the accused products, this is not a
16 construction that is addressed towards trying to come up
17 with a non-infringement defense, for example.

18 So if the real issue is simply meeting Realtek's
19 constructions with respect to the structural aspect of
20 where these two elements meet, then we can revise our
21 constructions to just have it -- to have that be the
22 construction and then we don't need to deal with whether or
23 not, you know, they perform a particular function or not.

24 JUDGE ELLIOT: Let me throw this out. And,
25 again, I will say you don't have to respond right now, but

1 just consider the following.

2 MR. FERGUSON: Sure.

3 JUDGE ELLIOT: At least, at least for
4 coil-conductor segment, what if we just called it an
5 induction coil, okay? Or something like that. Or an
6 inductor or inductor coil or something like that, instead
7 of for a particular purpose or with a particular function?

8 The extension-conductor segments are a little
9 bit more complicated, based upon what I guess the dispute
10 is, but I would simply throw that out there as a
11 possibility because I think the parties really aren't that
12 far apart, at least on the construction of coil-conductor
13 segment.

14 MR. FERGUSON: Right. I don't disagree, Your
15 Honor.

16 I think that's a good idea. We'll think about
17 an alternative construction that will counter Realtek's
18 construction with respect to how the two segments meet to
19 make sure that that dispute is addressed.

20 JUDGE ELLIOT: Okay. So I encourage the parties
21 to do that, but, on the other hand, if you come up with
22 something that's too far afield from what you have now,
23 then it's not going to do me a whole lot of good because
24 then I'll have to have more briefing. You know, each side
25 needs to get a chance to brief the issue.

1 MR. FERGUSON: Okay.

2 JUDGE ELLIOT: So I absolutely encourage the
3 parties to talk about this afterward, but see if you can
4 reach agreement.

5 MR. FERGUSON: That's fair enough.

6 JUDGE ELLIOT: All right.

7 MR. FERGUSON: I will move on then, Your Honor.

8 So one of the criticisms that Realtek had of our
9 construction, our proposed construction, they say: Well,
10 they are reading a limitation in from the specification and
11 you're not supposed to do that.

12 But if we look at what Realtek has proposed, and
13 this is the portion of the specification that Mr. Angelis
14 talked about quite extensively, that's exactly what they're
15 doing as well, because this language that's described in
16 this portion of the specification at column 3, lines 62
17 through column 4, line 9, it discusses that the
18 extension-conductor segment is joined to a first end of the
19 coil-conductor segment and is approximately perpendicular
20 to a joining position. That's the language in the
21 specification.

22 If we go back to slide 80, that's exactly what
23 their construction is. The portions of the inductor, they
24 are joined in the end to the coil conductor segment,
25 approximately perpendicular to a joining position. So

1 it's, I believe, inconsistent with them to criticize AMD
2 for allegedly reading in a construction from the
3 specification when they are doing the exact same thing.

4 And the other part of that argument is that it's
5 very clear that this portion of the specification is only
6 describing one embodiment. It says in other embodiments,
7 referring to Figures 4 through 6, this language appears.
8 And more critically, the term "joining position" is not
9 found anywhere in the claims. This is something that
10 they're clearly reading into the specification.

11 So we would take the position that it's improper
12 to limit or to read in this joining position limitation
13 into the specification because it is not lexicography and
14 it's only with respect to a particular embodiment.

15 So let's get to the dispute. We set out the
16 dispute in our briefing and it's very similar to what
17 Realtek has done as well. Slide 84.

18 Two versions of what this looks like. Version
19 A, where the extension-conductor segment, which is in sort
20 of orange, meets the coil-conductor segment. And it meets
21 it so that it doesn't extend upwards versus version B,
22 which is simply that the extension-conductor segments could
23 also join onto a different end or there is a different
24 interpretation about where the end of the coil-conductor
25 segment is. That's -- that's what the dispute really is

1 with respect to this situation with a particular piece of
2 prior art.

3 And I was looking at this and thinking about it
4 when we were putting the slides together and, really, I
5 mean, you could also have a version C, which is where like
6 a picture frame. What if the extension-conductor segment
7 and the coil-conductor segment sort of met at 45-degree
8 angles?

9 A person of ordinary skill in the art would have
10 understood that this is simply a design choice, where you
11 say the coil-conductor segment ends and where you say the
12 extension-conductor segment begins is well within the
13 understanding of a person of ordinary skill that it could
14 be a number of different configurations. It doesn't need
15 to be limited to only version A, which is what Realtek's
16 construction is driving at.

17 And, you know, one thing that's clear is that
18 the specification does not exclude one embodiment or one
19 version over the other. There's no clear words of
20 manifestation of this is only -- this is the only way the
21 coil-conductor segment can join the extension-conductor
22 segment. And, in fact, in all 17 figures, there's nothing
23 that provides any delineation of where one ends and where
24 the other one begins.

25 And so that, again, goes to our position that a

1 person of ordinary skill in the art would understand there
2 are different ways it could be done. And there's no reason
3 to exclude one over the other.

4 And the last thing on this is that we believe
5 there is actually embodiments in the specification that
6 support our position. So this is Figure 8. And, again,
7 the specification teaches that you have this capacitor
8 component which is located underneath the inductor.

9 And the capacitor component has the connecting
10 segments, 151 and 152. We'll get to that, of course,
11 later. And these are what we have shaded here in green.

12 Now, if we look at this particular embodiment,
13 the specification, you know, states that the first
14 connecting segment may be located below the
15 extension-conductor segment 133 and is overlapped with the
16 extension-conductor segment, but it is clear that this runs
17 all the way up into what Realtek describes as only the
18 coil-conductor segment.

19 And if we look -- I will show this on slide 88.
20 So if we draw that red box, now, Realtek's position is that
21 that red box can only be part of the coil-conductor
22 segment. But the specification states that the connecting
23 segment of the capacitor runs under the extension-conductor
24 segment. It doesn't say that the connecting segments
25 overlap with both the extension-conductor segment and the

1 coil-conductor segment.

2 So at least with respect to this embodiment, you
3 know, if Realtek's position was right, the specification
4 would have stated that in this embodiment the connecting
5 segment of the capacitor runs or is overlapped by both the
6 extension-conductor segment and the coil-conductor segment,
7 because clearly that is where, you know, where it's
8 positioned, but it doesn't. It just says that it runs
9 under or overlaps with the extension-conductor segment 133,
10 so that block.

11 So that -- we think this is an example in the
12 specification which supports our position that a person of
13 ordinary skill in the art would understand that there would
14 be different ways in which the -- or different positions
15 where the coil-conductor segment would end and the
16 extension-conductor segment would begin.

17 And for that reason, we believe that our
18 construction -- well, if we come up with a modification to
19 it, what is clear with respect to our construction is that
20 the claims encompass both version A and version B, which we
21 showed back here (indicating).

22 Do you have any questions on that, Your Honor?

23 JUDGE ELLIOT: No, no more questions.

24 MR. FERGUSON: Thank you. Should we move on to
25 the next term?

1 JUDGE ELLIOT: Yes. So, yes, Mr. Angelis is up
2 next. So I guess is we're taking the last two terms now?

3 MR. FERGUSON: Yes.

4 JUDGE ELLIOT: Oh, wait a minute. Oh, it's
5 2:30. Let's take a break, yeah. So I have 2:30.

6 MR. ANGELIS: Can I have two quick rebuttal
7 points on that issue?

8 JUDGE ELLIOT: Yes, go ahead.

9 MR. ANGELIS: So just briefly, Your Honor, with
10 respect to the issue of importing a limitation into the
11 claims, that's not what Realtek is doing. As we showed in
12 our slides, we're relying on the portion of the
13 specification on our slide 47 to explain how the extending
14 away language is to be interpreted. And that's what is
15 being done. It's not talking about a specific embodiment
16 in that portion of the specification. It's talking about
17 how one of ordinary skill in the art would understand what
18 extending away means.

19 With respect to the version B that AMD points
20 to, which is what we have been calling AMD's construction,
21 there's literally nothing in the specification, there's no
22 embodiment that ever suggests that that is actually the
23 proper construction and nothing to support them.

24 And then finally on the final point about Figure
25 8, AMD's argument is that silence is some form of

1 disavowal, which doesn't make sense. The claim requires
2 overlap, requires the extension-conductor segments to
3 overlap the connecting segments.

4 So those are the connecting segments that are
5 within the scope of the claim. And we'll talk about that
6 next in great detail, but it doesn't require complete
7 overlap. So the fact that the connecting segment could
8 extend upward beyond the extension-conductor segment is not
9 any kind of disqualification because the claim doesn't
10 require complete overlap.

11 And the fact that the authors of the patent did
12 not also say in this instance it would extend up into the
13 coil-conductor segment is no disavowal and no -- it doesn't
14 change anything about the intrinsic record that we already
15 talked about in great detail.

16 JUDGE ELLIOT: All right. Okay.

17 I have 2:31. Let's take a 14-minute break and
18 come back at 2:45, 2:45.

19 (A recess was taken at 2:31 p.m., after which
20 the proceedings resumed at 2:46 p.m.)

21 JUDGE ELLIOT: All right. Next up, Mr. Angelis.

22 MR. ANGELIS: Thank you, Your Honor. So we have
23 now moved on to the final two terms, capacitor component
24 and the plurality of connecting segments.

25 The only issue that AMD has raised for both of

1 these is whether there was a disavowal when Realtek did not
2 respond to the examiner's statements in the Notice of
3 Allowance. Realtek's construction in contrast is based on
4 the language of the claims read in light of the
5 specification.

6 So Realtek's argument has three components.
7 First, AMD's construction is incorrect because there's been
8 no disavowal here. It's also contrary to the intrinsic
9 record and includes an improper negative limitation. In
10 contrast, Realtek's construction reflects the intrinsic
11 record and, therefore, should be adopted.

12 Now, the Notice of Allowance is not a disavowal,
13 we believe for two reasons. One, the examiner's statements
14 are unilateral. They're not the product of discussions
15 with Realtek. They occur only in the Notice of Allowance
16 and whatever statements were made there cannot be
17 attributed to Realtek. They are also based on some
18 fundamental errors about what the claims actually say and
19 because of that, they are not clear and unmistakable or
20 unambiguous as the Federal Circuit requires for disavowal.

21 So let's look at the case law here. I know Your
22 Honor is familiar with this case because you have included
23 it in IDs in prior investigations. But this is a situation
24 in which the Federal Circuit made clear that there's no
25 case law that it can find that stands for the proposition

1 that an examiner's unilateral statements in a Notice of
2 Allowance constitute clear and unambiguous disavowal of
3 claim scope.

4 That's because the applicants -- those are not
5 the applicant's statements. The applicant has disavowed
6 nothing and the Court will not create a rule or presumption
7 that the applicant in this case disavowed any claim scope
8 by silence.

9 Let's talk about what happened here. During the
10 interview toward the end of prosecution, the examiner
11 identified a new reference Jing. And the examiner said
12 that Figure 5 of Jing might read on the claim language that
13 was then in claim 1.

14 That claim language, let's be clear, has nothing
15 to do with the limitations currently being addressed today.
16 They're entirely different. The limitations being
17 addressed and that were discussed in the Notice of
18 Allowance related to new limitations that were added to
19 claim 1 and the examiner examined whether Figure 7 of Jing
20 addressed those, totally different issue, not addressed
21 until the Notice of Allowance, and under cases like Salazar
22 and Alfred E. Mann, none of the examiner's statements can
23 be attributed to Realtek.

24 So Realtek never agreed with or even discussed
25 the examiner's views that were addressed in the Notice of

1 Allowance. Those are not Realtek's statements. So as in
2 Salazar, Realtek disavowed nothing.

3 But there is a second reason why there's no
4 disavowal here. And now we've shown you this case law
5 before, but just to make it abundantly clear, that a
6 disavowal requires a clear and unmistakable disavowal of
7 scope during prosecution. And it won't apply where the
8 alleged disavowal of claim scope is ambiguous.

9 So, again, these statements are not statements
10 of Realtek at all. But if they could be attributed in some
11 way, they're not clear and unambiguous. In the Notice of
12 Allowance the examiner misquoted the allowed claims. The
13 examiner added language to the claims that is not present
14 in the claims.

15 The examiner then applied that language that was
16 not included in the claims. He analyzed whether there was
17 an overlap with the capacitor component and the
18 extension-conductor segments. The claims talk about the
19 connecting segments and overlap of the connecting segments.

20 This is an entirely different issue. And
21 because the examiner didn't even examine the claim language
22 at issue, his analysis cannot be a clear and unmistakable
23 scope of claim language he never even discussed. Because
24 of that, there should be no disavowal.

25 Now, a disavowal of this type would be

1 especially bizarre because the construction that AMD
2 advocates is totally contrary to the intrinsic record. It
3 would read out every preferred embodiment. And it would
4 include an unwarranted negative limitation.

5 So let's talk about the embodiments. Obviously
6 the Federal Circuit says that a claim construction is
7 rarely if ever correct if it reads out preferred
8 embodiments. And we have cited the EPOS Technologies case,
9 but Victronics is, of course, is the famous case that --
10 the rarely if ever language that is usually cited.

11 Here we see, for example, in every embodiment,
12 including, for example, this embodiment here, that's taken
13 from Figure 3, there are multiple capacitors in the
14 capacitor component. That's exactly what the specification
15 says and that's exactly what the figure shows.

16 This Figure 3 has three capacitors in it. There
17 are three electrode segments and you can see there are
18 three separate capacitors.

19 Likewise, there cannot be a disavowal of any
20 capacitor component that is more than one structure because
21 every single one of the embodiments has a multi-physical
22 structure capacitor component. So, for example, here in
23 Figure 6, there are three physical structures. And so the
24 capacitor component plainly may comprise multiple physical
25 structures.

1 As I mentioned, that's true of every single
2 embodiment. If we look at them, each one of them has
3 multiple physical structures. So because AMD's proposed
4 construction reads out every proposed -- every embodiment
5 in the claim, it should not be correct and we respectfully
6 ask that it be rejected as the construction.

7 Now, independently there's a problem with the
8 fact that there's a negative limitation in the
9 construction. Negative limitations aren't unheard of but
10 they are highly disfavored. And they should not be used
11 unless there's some hook in the claim language, some anchor
12 as it said in Omega Engineering for that negative
13 limitation.

14 Here there's nothing of the sort. The negative
15 limitation AMD proposes is as opposed to multiple capacitor
16 structures separated by switches. So capacitor structure
17 appears nowhere in the specification or the claims. Switch
18 does not appear anywhere in the specification or in the
19 claims. And so because of that, there's really no basis in
20 the claims or the specification to justify this negative
21 limitation.

22 Now, Realtek's proposed construction, in
23 contrast, reflects the intrinsic record. And so we've
24 cited here, for example, you know, this same part of column
25 4 that we relied on before that talks about there being

1 multiple capacitors with multiple structures in the
2 capacitor component.

3 So its construction is correct and consonant
4 with the intrinsic record. And because it's correct, and
5 AMD's is improper and for multiple reasons, we ask that the
6 ALJ adopt Realtek's proposed construction.

7 So let's move on to the next claim term, the
8 plurality of connecting segments. So Realtek's proposed
9 construction is just the language of the claim itself.
10 There's no need -- this is not a claim term that requires
11 construction in any way. And the only issue AMD raises is
12 disavowal.

13 Their argument proceeds in three parts. Again,
14 Realtek did not disavow any scope, AMD is improperly
15 rewriting the claim language, and AMD's changed language
16 reads out the preferred embodiments.

17 So let's look, again. We have already talked
18 about the disavowal. There was no disavowal here because
19 the examiner's statements at issue are unilateral and they
20 weren't the product of discussions with Realtek. And the
21 examiner's statements were based on obvious errors that
22 make them far from clear and unmistakable and unambiguous.

23 So AMD here for reasons that are clear, it is
24 trying to create a non-infringement defense, has added some
25 additional language to the claim. So we have put here in

1 black the original claim language and we have put here the
2 additions that AMD is proposing. And what AMD wants to do
3 is add a requirement that each and every connecting segment
4 must be overlapped by an extension-conductor segment.

5 But that's not what the claims require. So
6 let's look at the actual claim language. Here is claim 1.
7 Claim 1 requires two extension-conductor segments. We have
8 highlighted them in blue in this instance. We're taking a
9 break from the green and we've moved to blue.

10 And now we're zooming in on the claim language
11 here. And to the right is an embodiment from Figure 5.
12 And you can see here that there are three connecting
13 segments identified here. And there's nothing in the claim
14 that says how many connecting segments that the capacitor
15 component must have. So here we've shown that there are
16 three in this one.

17 What the claim says is that there must be a
18 plurality of connecting segments that are overlapped with
19 extension-conductor segments. And that's what we've shown
20 here. Remember, the blue extension-conductor segments
21 overlapped the yellow connecting segments to become green.

22 So we have two connecting segments, which is a
23 plurality, that are respectively overlapped with the two
24 extension-conductor segments. And there's no debate --
25 there should be no debate what respectively means here.

1 One or more of the connecting segments has to be overlapped
2 with one of the extension-conductor segments, and the other
3 connecting segment, one or more connecting segments, have
4 to be overlapped with the other extension-conductor
5 segments. That's all the claim requires.

6 What AMD would like to do is add this statement
7 here, which I have highlighted, wherein each connecting
8 segment of the capacitor component overlaps with a
9 respective extension-conductor segment, meaning that this
10 embodiment in Figure 5 would no longer be covered by the
11 claims because it has a connecting segment that's not
12 overlapped by an extension-conductor segment.

13 So what AMD would like is that to be within the
14 scope of the claims, there would have to be another
15 extension-conductor segment that somehow comes out of the
16 side of the coil-conductor segment and covers that
17 additional connecting segment. Well, such an
18 extension-conductor segment would be outside the scope of
19 the claims for all the reasons we have talked about, and
20 adds language that's totally unjustified.

21 And so because AMD is trying to add language to
22 the claim and modify what it actually says, when the claim
23 language itself is clear, we respectfully ask that Your
24 Honor reject AMD's proposed construction and adopt
25 Realtek's.

1 That's all we have on this claim term, Your
2 Honor.

3 JUDGE ELLIOT: Oh, very well. I have no
4 questions.

5 MR. FERGUSON: Thank you, Your Honor. So we
6 will address these terms together as well.

7 And the constructions as Mr. Angelis put on the
8 screen are up here on our slide 51. And ultimately what
9 you will see is that AMD's construction is consistent with
10 what is shown in the specification and it is confirmed by
11 what occurred during the prosecution history.

12 I will run through that because it does, I
13 believe, consistently demonstrate that AMD's construction
14 is exactly what Realtek ultimately agreed to and ultimately
15 gave up in order to get the patent allowed.

16 I did want to address one thing with respect to
17 the capacitor component. Mr. Angelis put up one of their
18 slides, slide 66, and it showed this capacitor with the
19 three different colors on it and said well, that's three
20 capacitors. That is simply not accurate. The
21 specification does not describe that as three capacitors.
22 It says at column 5, lines 27 through 30, the capacitor
23 component 150 includes three connecting segments.

24 So it is not true that these embodiments that
25 show the capacitor component as having two different or

1 three different segments indicates that that is three
2 separate capacitors. It is simply not. It is a single
3 capacitor.

4 JUDGE ELLIOT: Well, actually, that one would
5 have six, right? I think I'm counting that correctly. You
6 have -- you would have one side with a set and another side
7 with a set. So you would have -- I'm sorry, which -- tell
8 me which slide number that is?

9 MR. FERGUSON: That is Realtek's slide 66.

10 JUDGE ELLIOT: See I am counting six, three on
11 one side and three on the other.

12 MR. FERGUSON: In terms of structures with
13 respect to or segments of the capacitor itself, because you
14 have -- you have three connecting segments and then you
15 have different sets of electrodes.

16 JUDGE ELLIOT: Yes.

17 MR. FERGUSON: But that's a single capacitor.
18 That is not three separate capacitors. The specification
19 makes that clear. It says the capacitor component 150
20 includes three connecting segments, 151, 152, and 153, and
21 then the plurality of electrode segments, 155, 156, 157,
22 158.

23 So, again, that is -- that is a single
24 capacitor. Our proposed construction does not read, it is
25 not intended to read out that you can have a capacitor. A

1 single capacitor certainly has multiple electrodes. That
2 certainly is not what our construction was intended to, you
3 know, exclude.

4 JUDGE ELLIOT: I will say, though, that your use
5 of the term "capacitor structure" --

6 MR. FERGUSON: Yes.

7 JUDGE ELLIOT: -- it kind of substitutes one
8 word for another. That doesn't really help me that much
9 because if the -- if the issue is there's a dispute over
10 what a capacitor component is, then calling it a capacitor
11 structure doesn't really get me anywhere.

12 The issue about the switches, though, that I get
13 but I'm not sure -- I'm not really inclined to use the term
14 "structure" if I can just use the term "component" and it
15 means that you can physically -- if you can make a
16 capacitor out of just two slabs of metal, right?

17 MR. FERGUSON: Which you can.

18 JUDGE ELLIOT: And you can, right?

19 MR. FERGUSON: Right.

20 JUDGE ELLIOT: If you're saying that you can
21 make a capacitor component out of multiple sets of two
22 slabs of metal, then why don't I just call it a capacitor
23 component instead of capacitor structure? I think the core
24 of your argument -- tell me if I'm wrong -- is really the
25 switches part.

1 MR. FERGUSON: Fair. I agree with that. And it
2 is. And that is true. Our construction is consistent with
3 what we believe we will show in the file history with
4 respect to the prior art, that the capacitor -- the claimed
5 capacitor component cannot be multiple capacitor components
6 that are connected by switches where you have -- and this
7 happens all the time because what you end up with are you
8 make a variable capacitor bank that has multiple capacitors
9 and you switch them on and off to change the capacitance
10 across that capacitor bank.

11 That was given up during prosecution. And it's
12 also not consistent with the plain and ordinary -- or,
13 excuse me, it is the also not consistent with just the
14 language in the claim, which I will show.

15 JUDGE ELLIOT: Okay.

16 MR. FERGUSON: So, first of all, the terms
17 themselves are shown in the specification and we think
18 quite clearly. You have the first connecting segment and
19 the second connecting segments, which we have highlighted
20 in green. They are underneath, you know, the inductor
21 itself.

22 And then you have the extension-conductor
23 segments, 133 and 135. And this is just using Figure 1,
24 the embodiment that is shown in Figure 1, 2, and 3.
25 Figures 1, 2, and 3 show the same embodiment just as an

1 example.

2 And the specification states that the connecting
3 segments are located below the extension-conductor segments
4 and overlapped with the extension-conductor segments, which
5 is exactly what is shown in the specification.

6 Now, the phrase "the connecting segments are
7 respectively overlapped" with the extension-conductor
8 segments. That is not in the specification. That was
9 added during prosecution. So you don't find that term,
10 but, respectively overlapped certainly has meaning. And I
11 will explain that as I go along here.

12 So let's look at the file history. The Federal
13 Circuit has said in Phillips and also the Elkay case, which
14 we of course cited is, that the prosecution history gives
15 insight into what the applicant originally claimed and
16 often what the applicant gave up in order to meet the
17 examiner's rejections. That is precisely what has happened
18 here.

19 When we look at the file history, we will start
20 with the claims as originally filed. This is Exhibit 108
21 at the last three Bates numbers, 2340. If we look at the
22 originally-filed claim 1, it had all the structure of the
23 inductor component with the coil-conductor segment, the
24 extension-conductor segments, how the first region is
25 formed and defined. That's all there.

1 But the capacitor component was much more
2 broadly described. It is simply a capacitor component with
3 a specific arrangement with respect to the first region and
4 on the other surface of the insulation layer. And that was
5 it.

6 So a very broad description and an attempt to
7 capture a very broad LC resonance circuit. But the
8 applicants also had dependent claims. And dependent claim
9 4 depended from claim 1. And it provided much further
10 detail about the capacitor component, including having a
11 plurality of connecting segments and the plurality of
12 electrode segments with further descriptions of what they
13 are.

14 And then they also added claim 5 as originally
15 filed. And for claim 5, it depends from claim 4, and this
16 is where the language comes from. "Wherein the connecting
17 segments are overlapped with the extension-conductor
18 segments respectively." So we have these claims as
19 originally filed.

20 In the first office action, the examiner
21 rejected all the claims, claims 1 through 4 and 6 through
22 10, which there were ten total claims, and he said the
23 claims aren't rejected as being anticipated by Daley, but
24 he did say claim 5 would be allowable if it were to include
25 all of the limitations of the base claim and any

1 intervening claims.

2 So, of course, that means that they would have
3 to amend the claim to include everything in claim 1 and
4 also everything in claim 4. That's what the examiner said
5 was allowable. And the reason why he said it is he said
6 because Daley does not disclose the connecting segments
7 being overlapped with the extension-conductor segments
8 respectively. The connecting segments are disposed to
9 respective sides of the extension-conductor segments.

10 So in Daley, the capacitor had its arms or its
11 connecting segments and they were on either side of the two
12 extension-conductor segments of the inductor. So he said
13 it didn't meet the respectively overlapped language. So I
14 will give you claim 5.

15 Realtek didn't want just claim 5. So in their
16 first amendment they amended claim 1 and they added a
17 little bit with respect to the capacitor component to
18 describe that it is configured outwards relative to the
19 coil-conductor segment of the inductor. So that was the
20 only amendment that they made to claim 1.

21 They also made some changes, some amendments to
22 claim 4 and claim 5 to add specifically that the capacitor
23 component, in particular, in claim 5, that the capacitor
24 component, it is wherein the plurality of connecting
25 segments of the capacitor component are overlapped with the

1 two extension-conductor segments of the inductor
2 respectively.

3 And they said to the examiner, we've amended the
4 claims. Daley does not show the claims as amended and
5 thank you for allowing claim 5 but we think all of our
6 claims should now be allowed as amended. They didn't want
7 to take just 5.

8 The examiner in the second office action made a
9 couple of statements here that are important. First, the
10 examiner objected to claim 5 and he said, I would like you
11 to make it clear how the connecting segments are overlapped
12 with the two extension-conductor segments, specifically in
13 that vertical direction. And he said you have to change
14 the claim, appropriate correction is required.

15 And then with respect to the arguments that they
16 made about the prior art for all the other claims, he said
17 I've considered those arguments but they're not persuasive.
18 You can have claim 5.

19 Realtek did not want claim 5. They came back
20 with another amendment to claim 1. And they tried to add a
21 little bit more, "the capacitor component is not
22 substantially overlapped with the coil-conductor segment."
23 They also made that correction to claim 5, that the
24 examiner wanted.

25 They moved "respectively" so that it now says

1 "wherein the plurality of connecting segments are
2 respectively overlapped with the two extension-conductor
3 segments in a vertical direction."

4 So that's the language that ultimately ends up
5 in the issued claim. And they argued that we have amended
6 the claims again, we think the claim should be allowed, we
7 don't think that Daley anticipates the claims as amended,
8 thank you again for allowing claim 5 but we think all the
9 claims should be allowed.

10 The examiner disagreed again in the third office
11 action which he made final, said I have considered your
12 arguments, they are not persuasive, but, again, claim 5 is
13 allowable as long as it includes all the limitations of
14 claim 4 and claim 1.

15 So what happens here is after a final
16 rejection -- after a final rejection, the applicants
17 offered what's called an amendment after final, where they
18 propose to the examiner we're going to make another change
19 to claim 1, and we think it overcomes the prior art.

20 And the examiner then had an interview with
21 Realtek's prosecution attorney. This is at page 2743 of
22 the file history. And he said to Realtek's prosecuting
23 attorney that I have notified them that the amendment made
24 to claim 1 after final does not overcome the rejection. So
25 you still haven't amended the claim enough to allow it over

1 Daley.

2 And I found a new piece of prior art. I found
3 Jing. And Jing discloses an LC circuit comprising the
4 limitations recited within claim 1 as well. And so the
5 examiner told them that I will not enter the amendment
6 after final. And he says that the applicant acknowledged
7 and stated that a request for continued examination will
8 most probably be submitted.

9 So what happened? Realtek saw Jing and they
10 gave up. In the next amendment, the continuation
11 amendment, they did exactly what the examiner had wanted
12 them to do and asked them to do all along. They took all
13 the limitations of claim 4, all the limitations of claim 5,
14 and put them into claim 1.

15 And that's exactly what they told the examiner.
16 Claim 1 has been amended, claims 4 and 5 have been
17 canceled. Claim 1 is amended to incorporate the features
18 of original claims 4 and 5, and, therefore, those claims
19 are now in condition for allowance.

20 And the examiner agreed. And this is where the
21 examiner's reasons for allowance appear. And the examiner
22 pointed out once again that the claims as amended are
23 allowed. The closest prior art is Jing and it discloses
24 all the limitations of claim 1 except "wherein the
25 plurality of connecting segments of the capacitor component

1 are respectively overlapped with the two
2 extension-conductor segments."

3 And the examiner explained that in Jing, the
4 capacitor components overlap with only a single one of the
5 extension-conductor segments and not both, i.e., the two
6 extension-conductor segments as recited within the claims.

7 And, further, and this is where this language
8 comes from with respect to our construction of capacitor
9 component, each of the capacitors in Jing is its own
10 separate capacitor structure separated by switches and,
11 thus, those two capacitors together cannot be interpreted
12 as a capacitor component.

13 The examiner then told them, if you have any
14 issues with what I said, you should say so and you should
15 do them in a comments on Statement For Reasons of
16 Allowance, but Realtek didn't do that. They just paid the
17 issue fee and the patent issued.

18 Now, let's look at Jing quickly. The examiner
19 looked at claim 7. We look at what Jing shows and we look
20 at the examiner's language so Jing's Figure 7 on the left,
21 what the examiner said on the right.

22 So, first of all, this is the inductor labeled
23 710 and it certainly has the two extension-conductor
24 segments. Those are labeled 715 and 720.

25 What the examiner said is that block 725 and

1 block 730 here, those are full capacitors. Those are what
2 are called finger capacitors so two separate capacitors
3 there. And they are connected together by this block of
4 switches 735.

5 And the point the examiner is making here is
6 that because an entire capacitor is only located under one
7 of the extension-conductor segments, so 725 is only located
8 under 715, and 730 is only located under 720, there isn't a
9 situation where the connecting segments of either of those
10 capacitors are respectively overlapped with the
11 extension-conductor segments.

12 And so that is why ultimately the examiner
13 allowed the claim and also after Realtek saw Jing, they
14 agreed with the examiner that they were going to limit the
15 claim to the specific embodiment where the
16 extension-conductor segments -- or, excuse me, the
17 connecting segments of the capacitor are over --
18 respectively overlapped with the extension-conductor
19 segments.

20 Now, we believe that the file history here is
21 certainly clear. This is a situation where, again, the
22 prosecution history gives insight into what the applicant
23 originally claimed and often what the applicant gave up.
24 That's the Elkay case.

25 And the Lemelson case that we cited is very much

1 on point as well. The Federal Circuit said Lemelson
2 canceled a five-clause claim in the face of the examiner's
3 rejection and submitted for allowance a claim with
4 additional clauses as suggested by the examiner. Lemelson
5 cannot acquiesce to a rejection and to an agreed
6 alternative and now later shift the stance 180 degrees.
7 Other players in the marketplace are intended to rely on
8 that record.

9 That is exactly what happened here. The
10 examiner would not allow claim 1. He suggested that claim
11 5 would be allowable if the limitations of claim 5 and
12 claim 4 were read into claim 1, and Realtek acquiesced to
13 that when they amended claim 1 to include claims 4 and 5.

14 Now, Realtek has made much of the Salazar case
15 and the other cases that have addressed the situation of
16 examiners' comments with respect to Notices of Allowance.
17 But there are cases that have just addressed this
18 specifically like Biogen from the Federal Circuit that we
19 cited. And the Federal Circuit said we're mindful that
20 it's the applicant, not the examiner, who must give up or
21 disclaim subject matter, but this case differs markedly
22 from those raising that admonition.

23 Those cases typically involve an applicant
24 standing silent when confronted by statements made by the
25 examiner during prosecution, most often in the examiner's

1 Statement of Reasons For Allowance. And that's citing
2 Salazar. That's, again, similar, but the difference is
3 this case deals not only with the applicant's letting stand
4 an examiner's characterization of the claim term, but also
5 their adoption of that characterization to overcome the
6 examiner's rejection. That's what happened here.

7 And to be clear, while the file history is very
8 informative and we think confirms the meaning of these
9 terms, there is the limitation in the claim respectively
10 overlapped that Realtek is simply ignoring.

11 Respectively has a meaning. And it must be
12 given a meaning in the claim. We submitted dictionary
13 definitions of what respectively means. And "respectively"
14 means singly in the order indicated or mentioned. And it
15 gives as an example speaking to each camper respectively,
16 singly and in the order indicated or mentioned.

17 So on the left here you would have your camper
18 and the instructor is speaking to each camper individually,
19 respectively. That's what respectively means. It doesn't
20 mean this (indicating). It doesn't mean that you can just
21 group the two of them together and speak to them once.
22 That's not what respectively means.

23 So how does that relate to the claim? If we
24 have in green the connecting segment of the capacitor and
25 then in the light blue is the extension-conductor segments,

1 the connecting segments are respectively overlapped with
2 the two extension-conductor segments. That is exactly what
3 was claimed. And that was Realtek providing in the
4 dependent claims narrower embodiments from the broader
5 embodiment to capture the different embodiments that are
6 described in the specification. This is clearly shown in
7 the specification.

8 But this is what they ended up with because this
9 is what the examiner allowed them to have. And this is
10 what we acquiesced to. What this doesn't cover and what
11 Realtek wants it to cover is what's shown on the left or on
12 the right here, where you have a situation where you have a
13 capacitor that has two extension -- that has two connecting
14 segments and both of them are under one of the
15 extension-conductor segments but not both.

16 So that's not what respectively means. And it
17 also doesn't mean this over here (indicating), where you
18 have eight connecting segments and only two of them are
19 overlapped. That is not respectively overlapped either
20 because it is singly in the order indicated. That's what
21 respectively means.

22 And so it is for these reasons that AMD believes
23 it's constructions are the proper ones because this is
24 clearly a situation where AMD's constructions are
25 consistent with what's in the specification, because at

1 least more than one embodiment covers AMD's construction.

2 In the embodiments shown in Figures 1 through 3,
3 for example, the embodiments shown in Figures 1 through 3,
4 is covered by AMD's construction. We are not reading out
5 all embodiments.

6 And the file history record here is very clear
7 that the examiner understood what respectively overlapped
8 means and Realtek acquiesced to the examiner's rejections
9 by amending claim 1 to include those narrow limitations of
10 claims 4 and 5.

11 Can I address any questions, Your Honor?

12 JUDGE ELLIOT: Yes, could you go back to slide
13 77, please.

14 MR. FERGUSON: Yes.

15 JUDGE ELLIOT: So on the right-hand side, you
16 have, I guess, eight.

17 MR. FERGUSON: Eight.

18 JUDGE ELLIOT: Eight connecting segments. I
19 take your point on that one. But what if on the left-hand
20 side where you have two connecting segments, what if you
21 had four where two of them are as shown in slide 77, and he
22 had two more that were underneath the other extending
23 segment, okay?

24 Why wouldn't that be within the scope of the
25 claims?

1 MR. FERGUSON: I don't think that would be
2 within the scope, Your Honor, because it's singly in the
3 order indicated or mentioned. That's just the common and
4 ordinary meaning of "respectively."

5 JUDGE ELLIOT: Okay.

6 MR. FERGUSON: I think you have to have a
7 situation where you would have an extension-conductor
8 segment would cover, you know, you would effectively have
9 eight there. And, you know, to be clear, there is -- I
10 have -- sorry -- so there are embodiments in the
11 specification where there are three, arguably three
12 extension-conductor segments and then the capacitor has
13 three connecting segments. So there are embodiments shown
14 there.

15 JUDGE ELLIOT: But the claim language only calls
16 for two.

17 MR. FERGUSON: That's what they limited it to.
18 It says two. Two extension-conductor segments. And then
19 the claim says plurality of connecting segments in the
20 capacitor, that is true, but plurality just means more than
21 one. So our construction is not inconsistent with
22 plurality either because our construction is if you have --
23 if you have two extension-conductor segments, which is
24 exactly what the claim says, two, then you have to have at
25 least two connecting segments and you would have two

1 connecting segments that are respectively overlapped by
2 those two extension-conductor segments.

3 JUDGE ELLIOT: So the use of "respectively" as I
4 understand your argument, you're basically saying plurality
5 just means exactly two?

6 MR. FERGUSON: That's what they limited the
7 claim to. This, when you look at claim 5, claim 5
8 ultimately, even -- the connecting segments are overlapped
9 with the extension-conductor segments. They took the
10 claims and they narrow them down to cover the different
11 embodiments.

12 There are seven embodiments described in the
13 figures, but there's no -- certainly not a situation where
14 every claim covers every embodiment. They read claim 5 or
15 they listed and wrote claims 5 and 4 to ultimately when
16 they depend from claim 1 to cover the first embodiment,
17 which is shown in Figures 1, 2, and 3. And that is
18 perfectly consistent with case law. Every claim does not
19 cover every embodiment.

20 We have a claim -- we have some case laws here.
21 This is TIPS systems from the Federal Circuit, read in the
22 context of the specification, the claims of the patent need
23 not encompass all disclosed embodiments. Our precedent is
24 replete with examples of subject matter that's included in
25 the specification but is not claimed.

1 That's just -- that's how you write claims. You
2 start with a very broad claim and then you narrow the
3 claims to the dependent claims based on the specific
4 embodiments that you described in the specification.
5 That's typically the way people write claims.

6 And, you know, as another example, just as
7 another example, as filed, this claim 6, for example,
8 depends from claim 1, which requires a tap segment
9 electrically connected to the coil-conductor segment and
10 then the capacitor has another connecting segment that
11 extends in the same direction as that tap segment. That's
12 what's shown, for example, in the embodiment that I showed
13 you before, the third embodiment. That's what the third
14 embodiment covers.

15 But that certainly isn't covered -- that
16 certainly doesn't cover the first embodiment. Another
17 example, claim 7, I believe it is, claim 7, yes, wherein
18 the coil-conductor segment has a pair of staggered parts.
19 And the specification makes it very clear that the
20 staggered parts are an inductor like this where you have a
21 crossover region.

22 And that's shown in this embodiment as well.
23 And, in fact, the specification says that the staggered
24 parts are L5 and L6, and you can see it's the portions that
25 are crossed over. So that claim certainly doesn't read on

1 the first or the second embodiment because there are no
2 staggered parts in either of these embodiments.

3 When the examiner said I'll give you claim 5,
4 and Realtek didn't want to take it and tried and tried and
5 tried but then the examiner cited Jing, that's when it was
6 game over and Realtek said fine, we're going to take what
7 we can get and we will take claim 5. So that's why we
8 believe our constructions are the proper ones.

9 JUDGE ELLIOT: And your argument about the
10 switches, is that based upon the file history also?

11 MR. FERGUSON: It is, Your Honor, yes. It is,
12 correct. That's right out of what the examiner said with
13 respect to what was in Jing.

14 JUDGE ELLIOT: All right.

15 MR. FERGUSON: To go to your point, Your Honor,
16 if the issue about structure, the language structure, that
17 -- I have my arguments out of order -- but this is what the
18 examiner said, right? Each of the finger capacitors, 725
19 and 730, in Jing is its own separate capacitor structure
20 separated by switches. That's where the structure language
21 came from.

22 But you could just as easily substitute
23 component in there.

24 JUDGE ELLIOT: All right. Understood.

25 MR. FERGUSON: Any further questions?

1 JUDGE ELLIOT: No.

2 MR. FERGUSON: Thank you, Your Honor.

3 JUDGE ELLIOT: Yes, Mr. Angelis.

4 MR. ANGELIS: Rebuttal, Your Honor.

5 May I approach, Your Honor?

6 JUDGE ELLIOT: Yes.

7 MR. ANGELIS: One preliminary point is that the
8 center tap in Figure 8 is not an extension-conductor
9 segment. So it is very clear from this specification that
10 the center tap is not an extension-conductor segment. So
11 it is clear that AMD's proposed construction would read out
12 the vast majority of the embodiments. And let me explain
13 why that's improper based on the file history that Mr.
14 Ferguson went through.

15 So there were nine total events in the office
16 action, just with respect to Jing. And this goes to the
17 final point that Mr. Ferguson was raising with respect to
18 their repeated reliance on the Notice of Allowance. The
19 Notice of Allowance and the discussion of Jing in this very
20 puzzling discussion of overlapping of the capacitor
21 component all comes about at the very end in event 9.

22 So you have the first five events of the office
23 action that we talked about. No identification of Jing.
24 Nothing at all about Jing. Finally there's an interview
25 where the examiner cites Jing and says we think Figure 5 of

1 Jing reads on claim 1. That's all that it says in the
2 interview summary.

3 And, remember, as Mr. Ferguson was quick to
4 point out, claim 1 at this point did not have any of the
5 language we're talking about. It did not have the language
6 that is in claim 5. That's what the examiner was concerned
7 about, was concerned about whether Jing's Figure 5 read on
8 the then-language of claim 1 which had nothing to do with
9 the connecting segments and the overlapping that we've been
10 talking about and whether the connecting segments are
11 overlapped by the extension-conductor segment.

12 That doesn't come until, as Mr. Ferguson said in
13 event 8, there was an amendment where the elements of claim
14 5 were moved into claim 1 and then the examiner goes on
15 this frolic and starts talking about whether the capacitor
16 component is overlapped. So that's the only time in which
17 there were any statements about this was in the final
18 Notice of Allowance.

19 And that's why Salazar is right on point. Every
20 discussion about Jing came only in the Notice of Allowance
21 and there was no requirement for Realtek to explain to the
22 examiner why he was wrong. That's not a disavowal.

23 So let's talk about what was said about
24 overlapping because Mr. Ferguson spent a lot of time
25 talking about this. And we respectfully think that he's

1 wrong. So event 1, the examiner recognizes that Daley's
2 connecting segments are not overlapped by the
3 extension-conductor segments.

4 I don't know if Your Honor has had a chance to
5 look at Daley yet, but Daley involved, as Mr. Ferguson
6 admitted, two extension-conductor segments all the way at
7 the edge of the field that was shown. And then far, far
8 inside were the two extension-conductor segments. So there
9 was no argument that the two extension-conductor segments
10 could overlap the connecting segments that were way out far
11 afield from them in Daley.

12 There were only two at issue. So there was
13 nothing more to talk about, other than the fact that the
14 two connecting segments were not overlapped by the two
15 extension-conductor segments.

16 And thereafter, there's an amendment with no
17 relevant discussion and then in event 3 in an office
18 action, the examiner says you should add respectively to
19 claim 5 for clarity. And, again, all we're talking about
20 is the fact that there were two connecting segments in
21 Daley and two extension-conductor segments.

22 Nothing -- no scope was given up by adding the
23 word "respectively" and respectively, as we pointed out in
24 our primary argument, respectively just means when you have
25 two, one of them overlaps with one or more of the

1 connecting segments and one of the extension-conductor
2 segments overlaps with one of the other extension-conductor
3 segments. That's the sum total of what "respectively"
4 means. And it's very clear in context.

5 So then Realtek says, that's great, we will add
6 respectively and we'll also add in a vertical direction,
7 meaning up and down. That's all, just to clarify. And
8 everyone I think agrees that vertical means up and down.

9 If you look over at the top in a plan view of
10 the chip, that's what we mean. We mean, when you overlap,
11 it has to be up and down. There has got to be an overlap
12 in that direction.

13 And then nothing more is said on this limitation
14 until, remember, in event 8 we added the elements of claim
15 5 to claim 1. Notice of Allowance issues. And that's the
16 first time there's any kind of discussion about this
17 capacitor component being overlapped. That's the first
18 time that comes into play.

19 The first time unilateral by the examiner,
20 whether there's any structures that -- what constitutes
21 capacitor component and what doesn't constitute capacitor
22 component and then whether there's any kind of switch,
23 whether a switch can be in it at all. So none of these are
24 disavowals. None of these are limiting in any way. Based
25 on what the examiner said, they have to rise or fall on

1 their own.

2 And as we showed in our primary argument, all
3 that the claim requires is two extension-conductor segments
4 and that each one overlaps at least one connecting segment.
5 And the examiner got himself all turned around by examining
6 sort of a phantom of the actual claims. So here is what
7 the claim language on the left says: "Wherein the
8 plurality of connecting segments are respectively
9 overlapped with the two extension-conductor segments in a
10 vertical direction."

11 And, again, our view, respectfully, is that this
12 means that there have to be at least two
13 extension-conductor segments overlapped by the plurality of
14 connecting segments. That's the sum total of what the
15 claim requires and Realtek is entitled to the full scope of
16 its claim.

17 What the examiner said as well, the capacitor
18 components overlap with only a single one of the
19 extension-conductor segments, which is orthogonal to the
20 claim language and a bit odd. And the reason we know the
21 examiner was completely confused is that we just look at
22 Jing. Here is Figure 6 from Jing.

23 Now, remember what the claim requires. On the
24 left-hand side it requires connecting segments extending
25 corresponding to the extension-conductor segments in a same

1 direction. Jing doesn't have any connecting segments that
2 are claimed. Every single one of Jing's connecting
3 segments go the wrong direction. They don't correspond to
4 the extension-conductor segments at all.

5 Jing is totally distinguishable on that ground.
6 But the examiner didn't see that because the examiner
7 didn't look at the actual claim language that requires
8 connecting segments. The claim requires connecting
9 segments that are overlapped by extension-conductor
10 segments, that's all that it requires, and that there be at
11 least one connecting segment overlapped respectively by
12 each of the extension-conductor segments.

13 That's what the claim says. So Jing doesn't
14 have that. It doesn't have connecting segments that go in
15 the right direction. So Jing is clearly not -- it doesn't
16 read on the claims as they stood at that time when the
17 elements of claim 5 had moved into claim 1.

18 The entire predicate of AMD's argument is that
19 respectively -- they are trying to make the word
20 "respectively" do something other than what it actually
21 means or says in its plain and ordinary meaning. If you
22 have two things and they respectively overlap two other
23 things, that means one overlaps one of them and the other
24 one overlaps the other one. That's all that respectively
25 requires. It's very straightforward.

1 And the claim language couldn't be clearer on
2 this point. AMD is trying to create some issue out of the
3 word "respectively" and then shoehorn in a baffling
4 analysis in the Notice of Allowance that has nothing to do
5 with what actually is there.

6 Your Honor, may I consult with my colleague for
7 just one moment?

8 JUDGE ELLIOT: Yes.

9 MR. ANGELIS: Your Honor, I'm sorry, one final
10 point. Thank you, I appreciate the extra time.

11 I started my argument by noting that the center
12 portion 140 is not an extension-conductor segment in Figure
13 9. I just want to reiterate and point out that that is
14 element 140, which the '582 patent identifies as a tap
15 segment in contrast to elements 133 and 135, which are the
16 two claimed extension-conductor segments. So any effort to
17 try to use the tap segment to bootstrap this respectively
18 overlapped construction is incorrect and is improper. It
19 is contrary to the intrinsic record.

20 That's all I have, Your Honor.

21 JUDGE ELLIOT: So -- oh, I see. Okay. I am
22 reading this section in the specification about tap
23 segment. All right. I understand.

24 Okay. Very good. All right.

25 MR. FERGUSON: May I have one minute?

1 JUDGE ELLIOT: Yes, go ahead.

2 MR. FERGUSON: Thank you.

3 JUDGE ELLIOT: I will give you three minutes.

4 MR. FERGUSON: I appreciate it. Thank you.

5 The point, Your Honor, with respect to Jing is
6 very clear. When you look at Jing, what the examiner --
7 the examiner used a shorthand "capacitor component" to
8 describe Jing and said the capacitor component with respect
9 to how the capacitor component is overlapped with the
10 extension-conductor segments, the examiner's point is that
11 a single capacitor, no matter how many extension -- no
12 matter how many connecting segments it may have, if it's
13 only under one of the extension-conductor segments, it
14 cannot -- it cannot be respectively overlapped with both
15 connecting segments, right? Because the claim says the
16 claim requires that the connecting segments of the
17 capacitor component are respectively overlapped with the
18 two extension-conductor segments.

19 So that is why a multiple -- that is why
20 multiple capacitors and indeed multiple capacitors
21 separated by switches cannot meet this claim language
22 because there may be, you know, multiple connecting
23 segments in a single capacitor but the claim language is
24 clear. It requires respectively overlapped with the two
25 extension-conductor segments.

1 So this would have to be, you know, one
2 capacitor with one extension-conductor segment with one
3 connecting segment overlapped with 715 and another one
4 overlapped with 720. So that is why the examiner used the
5 language capacitor component. He was saying that there is
6 no way that Jing can read on claim 5 as written because
7 claim 5 requires that the connecting segments be
8 respectively overlapped.

9 JUDGE ELLIOT: The image that Mr. Angelis just
10 showed me, I think it was from Jing.

11 MR. FERGUSON: That was Figure 6 from Jing.

12 JUDGE ELLIOT: That's a different configuration,
13 though, because --

14 MR. FERGUSON: What that shows in Figure 6 is
15 the -- what Figure 6 shows is the internal makeup of the
16 capacitor block 725 and the capacitor block 730. Okay?
17 So, again, the point isn't the orientation of the
18 connecting segments. The point the examiner was making is
19 that your capacitor component has multiple connecting
20 segments but the claim requires that the connecting
21 segments be respectively overlapped with the
22 extension-conductor segments.

23 And there is simply -- they can't be because a
24 single capacitor such as 715 or such as 725 doesn't extend
25 under both of the extension-conductor segments. So, you

1 know, wherever or however they're oriented, that doesn't
2 matter for purposes of the claim.

3 And the last thing I would just point out is
4 people reading the file history, you know, don't have
5 access to the argument that Mr. Angelis just made about
6 Figure 6. If Realtek believed that was another reason why
7 the claims distinguished from Jing, they had the
8 opportunity to say that in response to the Notice of
9 Allowance and they didn't.

10 JUDGE ELLIOT: All right. Very well.

11 MR. FERGUSON: Thank you, Your Honor.

12 JUDGE ELLIOT: All right. Thank you very much.

13 MR. ANGELIS: May I have 30 seconds, Your Honor?

14 JUDGE ELLIOT: I think not. I think we're okay.
15 I have a good idea what the parties' arguments are and the
16 evidence. I may end up tracking down the Chen prior art
17 reference on my own. I will take official notice of that.

18 So now I have the Markman order and then two
19 different motions for summary determination pending and
20 that's a lot. And I also have a hearing starting in two
21 weeks. So I don't know when I'm going to get to all this
22 but I will do my best to get it out as quickly as possible,
23 keeping in mind that we're doing this rather late in the
24 process of the investigation.

25 Normally, of course, because we had a conflict,

1 I would have done this much earlier, but I'll try to get
2 this out as soon as I can.

3 Thank you very much. This matter is adjourned.

4 (Whereupon, at 3:45 p.m., the Markman hearing
5 concluded.)

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1 CERTIFICATE OF REPORTER

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3 And Products Containing the Same

4 INVESTIGATION NO: 337-TA-1350

5 HEARING DATE: June 5, 2023

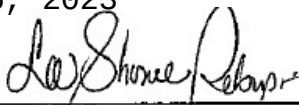
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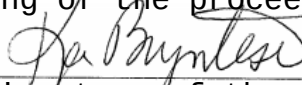


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