

RECORD OF ORAL HEARING
U.S. PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

COMCAST CABLE COMMUNICATIONS, LLC,
Petitioner,
v.
ENTROPIC COMMUNICATIONS, LLC,
Patent Owner.

Case IPR 2024-00442 (Patent 9,825,826 B2)

Oral Hearing Held: May 15, 2025

Before JON M. JURGOVAN, SCOTT B. HOWARD, and
AARON W. MOORE, Administrative Patent Judges.

APPEARANCES:

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The above-entitled matter came on for hearing Thursday,
May 15, 2025, commencing at 1:00 p.m. EDT, at the U.S. Patent
and Trademark Office, 207 South Houston Street, Dallas,
Texas/via Video-conference.

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

12:55 p.m.

JUDGE JURGOVAN: We'll go on the record now. Okay.

This is the trial hearing for the following case: IPR 2024-00442, concerning U.S. Patent Number 9,825,826 B2. The date is May 15, 2025. It's approximately 1:00 p.m. Eastern. On the panel today are Judges Scott Howard, Aaron Moore, and myself, Jon Jurgovan. Would the parties please enter their appearances, starting with the Petitioner, please?

MR. MEEKER: Fred Meeker with the law firm of Banner & Witcoff, Your Honor, representing Comcast Cable Communications, LLC. With me are Paul Qualey, also a Banner & Witcoff -- one of my partners, and Steve Chang, another one of my partners at Banner & Witcoff. And we have, appearing remotely, Kevin Chung, who's Assistant Deputy General Counsel for Comcast Cable Communications, LLC.

JUDGE JURGOVAN: Thank you. And for Patent Owner?

MR. GALLUZZO: Good afternoon, Your Honors. This is Vince Galluzzo from K&L Gates, on behalf of Patent Owner, Entropic Communications, LLC. With me is lead counsel on this case, Jason Engel, one of my partners at K&L Gates. Also with us is Nathan Fuller, a colleague of mine at K&L Gates.

JUDGE JURGOVAN: Great. Thank you. The hearing order stated that each party will have up to 45 minutes to present their arguments for this case. The Petitioner bears the burden of proving its

1 case by a preponderance of the evidence. So the Petitioner will begin,
2 followed by the Patent Owner. Each party may reserve time for
3 rebuttal.

4 Petitioner, how much time would you like to reserve for
5 rebuttal?

6 MR. MEEKER: Five minutes, Your Honor.

7 JUDGE JURGOVAN: Five minutes, okay.

8 And Patent Owner, how much time would you like to reserve
9 for surrebuttal?

10 MR. GALLUZZO: We will also reserve five minutes, Your
11 Honor.

12 JUDGE JURGOVAN: Five minutes, okay.

13 Okay. You can work from your demonstratives. They'll show
14 up on the screens. The remote judges can see your demonstratives.
15 When referring to the demonstratives or exhibits, please identify the
16 paper, exhibit, paragraph, and page that you're referring to so that the
17 transcript will be clear as to what you're referring to in the record.

18 Please also identify yourselves as you begin speaking so that
19 the court reporter will know who you are. And then, after the hearing,
20 please remain in the room in case the court reporter has any questions
21 to ask you of terms that may not have been understood during the
22 hearing.

23 This is a public hearing. There may be third parties listening on
24 the public line. None of the information in this case was designated as
25 confidential, but if, for some reason, you need to discuss confidential

1 information, please let us know ahead of time so that we can take
2 appropriate action.

3 If at any time you experience some difficult technical
4 difficulties that impair your ability to represent your client, please let
5 us know, and we'll endeavor to resolve the issue.

6 With that, are there any questions before we begin?

7 MS. McCLOUD: No, Your Honor.

8 MR. GALLUZZO: No, Your Honor.

9 JUDGE JURGOVAN: Okay. Thank you. Hearing none,
10 Petitioner, when you're ready.

11 MR. MEEKER: Thank you, Your Honor. All of our
12 demonstratives are Exhibit 1034, so as we walk through the day, we'll
13 be talking about slide numbers or page numbers from that Exhibit
14 1034. So, for brevity, I won't reference the exhibit each time, but
15 they're each from Exhibit 1034. They're all the demonstratives.

16 Good afternoon, Your Honors. Fred Meeker on behalf of
17 Petitioner, Comcast Cable Communications.

18 Turning to slide 2, which is an overview of the '826 patent, the
19 yellow portion shows the headend, HFC, hybrid fiber coax network,
20 and the receiver. The red portion shows receiving signals S from the
21 HFC network and digitizing the signals to generate a digitized signal
22 D. The green portion shows the selection of first and second portions
23 of the digitized signal D. And the purple portion shows processing
24 the second portion of the recovered contents, like a TV signal. And
25 the blue shows analyzing the first portion to measure a characteristic

1 of the received signal and control transmission of network messages
2 back to the headend.

3 So there's a couple things important about this diagram. The
4 diagram in the '826 actually includes a broadband tuner. So the digital
5 signal coming in includes multiple channels. And then, coming out,
6 one channel goes to monitoring, and the other channel goes to a thing
7 called data processing, which can be a decoder for an MPEG network.

8 These are two separate paths. So you have one path for monitoring,
9 and you one path for processing or decoding. And the claims actually
10 claim two separate networks. This will become important later on
11 when we talk about one of their criticisms of our expert. The decoder
12 is not on the path that does the monitoring. It's not claimed. It's not
13 shown in their embodiment.

14 So, turning to slide number 3, slide 3 shows Patent Owner's
15 arguments against ground A to D. So, with respect to the
16 Kamieniecki and Konstantinos grounds, they basically, our view,
17 improper combination, failure of proof, or have various bodily
18 incorporation arguments, and lack of digital monitoring. For the
19 Renken grounds, the only argument is it doesn't show network
20 management messages being transmitted back upstream.

21 So, turning now to slide 4, slide 4 shows Claim 1 of the '826
22 patent with Konstantinos's multi-channel receiver on top of
23 Kamieniecki's signal monitoring set-top box. So Kamieniecki has a
24 headend. It connects to a set-top box with a fiber coax cable
25 connection, and it goes to two separate tuners. So there's an out-of-

1 band tuner, which is 114, and an in-band tuner 112. So those are on
2 two separate channels.

3 So, if we recall from the '826 patent, they had a wideband tuner
4 that decoded both the -- or converted or tuned to both the out-of-band
5 channel and the in-band channel simultaneously. So, Konstantinos,
6 the upper drawing, Figure 2, shown in green, shows a wideband tuner
7 that actually tunes to two channels at once and outputs that
8 information. So Kamieniecki has everything else in the claim except
9 the ability to tune to two channels at once, which is the wideband
10 tuner shown by Konstantinos.

11 Let's just see. So Kamieniecki teaches receiving in-band
12 MPEG digital data, and out-of-band also digital control data using two
13 single-channel tuners. Konstantinos shows a multi-channel receiver
14 or tuner to receive MPEG digital data and out-of-band control data.

15 Turning to slide 5, so slide 5 was taken from the Patent Owner's
16 Response. It's like an oversimplified version of the combination. So,
17 in fact, we're taking the teachings of Konstantinos. We're not like
18 wholesale, bodily incorporating it into Kamieniecki. So we're
19 basically taking the front-end, which is not shown in their drawing but
20 would be required, the ADC, which is in all of the digital tuners, and
21 then the wideband channel selector, which basically tunes to multiple
22 channels at a time, selects a number of those channels -- it could be
23 two or more of those channels; the claim only requires two -- and then
24 the monitor function, in-band and out-of-band, remains from
25 Kamieniecki.

1 JUDGE JURGOVAN: Counsel, can we go back to slide 4 just
2 for a minute?

3 MR. MEEKER: Yes, Your Honor.

4 JUDGE JURGOVAN: So the processing step, that's not
5 mapped here. What is --

6 (Simultaneous speaking.)

7 MR. MEEKER: It's not mapped. The processing step is
8 described as, for example, an MPEG decoder. That would be in one
9 of the channel selection like the -- it has a channel selection. And if
10 you look at their embodiment, their data processor can include a
11 decoder; it doesn't have to. They say their data processor, one
12 embodiment would be an MPEG decoder, but another embodiment
13 would be just processing out-of-band signals, which are typically
14 control signals, internet signals, DOCSIS signals.

15 So your modem in your house has two components. One is an
16 MPEG component that comes in. It's digital television channels.
17 That's typically on separate channels than your DOCSIS channels or
18 your control channels. So the out-of-band is typically referred to as
19 DOCSIS or out-of-band or control channels. And the in-band
20 channels are typically MPEG television channels that would then be
21 displayed to a -- displayed to a monitor. So the decoder is an MPEG
22 decoder for the television channels.

23 JUDGE JURGOVAN: So what in either Kamieniecki or
24 Konstantinos discloses that process?

1 MR. MEEKER: So they both disclosed they process MPEG
2 signals. And the way you process MPEG signals is with a decoder.
3 Both of those, both -- Kamieniecki talks about processing MPEG
4 signals.

5 Could we go to that slide, Steve?

6 MR. CHANG: We can go to slide 20.

7 MR. MEEKER: Slide 20. Okay. So, slide 20, there's a better
8 one in Kamieniecki on MPEG, right? Subscribers can be tuned to a
9 channel receiving audio or video content. There's a portion of
10 Kamieniecki that talks about MPEG.

11 MR. CHANG: Yeah, we can -- do you want to show that?

12 MR. MEEKER: Yeah. And well, for Konstantinos, they talk
13 about channel decoders and source decoders. So the channel decoders
14 would be an MPEG decoder.

15 JUDGE JURGOVAN: So you're mapping this, basically, to
16 Konstantinos there, which does disclose decoders?

17 MR. MEEKER: It does. And it's all -- Kamieniecki talks about
18 -- it talks about MPEG, which inherently --

19 Can you go to the other slide, Steve?

20 MR. CHANG: We can bring up Kamieniecki unless you need
21 to --

22 MR. MEEKER: Slide 21, I think. Okay. So here's
23 Kamieniecki, which is -- talks about MPEG-2. So, in Kamieniecki,
24 it's got its in-band receiver is receiving MPEG-2, which necessarily
25 has a decoder in that tuner portion. And it also receives digital video

1 broadcast, which is typically what's used on satellite communications.
2 MPEG-2, at the time, was typically used on cable communications.
3 DVB was the digital video equivalent used on satellite
4 communications, and it also has ATSC standard capabilities. So the
5 two decoders would be for either the DVB or MPEG-2.

6 JUDGE JURGOVAN: Okay. And then back to slide 4 again,
7 one more question and that is: is the preamble limiting here?

8 MR. MEEKER: So --

9 JUDGE JURGOVAN: Oh I'm sorry. No. The -- yeah the --
10 okay. That's not an issue here. Apologies.

11 MR. MEEKER: I don't think it's an issue in this case, but
12 whether it's limiting or not, they both involve hybrid fiber coax cables.
13 So, just, cable systems in the country use a combination of a fiber
14 typically down to a neighborhood and then coax after that. And it is
15 described in these references as well.

16 JUDGE JURGOVAN: Thank you.

17 MR. MEEKER: Okay. So that takes us to slide 6. Slide 6
18 shows Figure 1 from Kamieniecki, which is Exhibit 1009.
19 Kamieniecki is entitled Monitoring Signal Quality on Cable Network.
20 Figure 1 shows the headend 102 sending downstream signals to the
21 set-top box 110. Inside the set-top box, there is an in-band tuner (IB)
22 112 for receiving TV channels, and out-of-band tuner 114 for
23 receiving out-of-band channels that carry control information, and a
24 monitor 116, blue, that monitors the quality of one or more channels.

1 These in-band and out-of-band are single-channel tuners. Meaning,
2 they can only tune to one channel at a time.

3 Paragraphs 14 and 16, which are above on the slide, show the
4 monitor collects statistics and report back upstream channel
5 presence/absence based on those statistics. Paragraph 13 shows the
6 television and data channels are received simultaneously.

7 Turning to slide 7, slide 7 shows Kamieniecki paragraph 17
8 expressing a desire to monitor while not disturbing users who watch
9 television. So, like, if you have only one tuner, you have to either
10 monitor or display television on it. Typically, you wouldn't do both at
11 this timeframe. So, if you're going to run a whole series of tests on it,
12 typically, you wouldn't want to do it in an idle for the in-band. It does
13 say specifically though, in paragraph 27, that you can monitor out-of-
14 band, test on that, even while you're watching a television channel.
15 So those two can be separate. So the monitor can monitor either in-
16 band or out-of-band signals. Both are digital signals.

17 So, you know, once you have Konstantinos's wideband tuner
18 that can tune any number of channels, the restriction on monitoring
19 and viewing simultaneously is removed because you can use other
20 tuners to tune to the in-band channel, but none of that is claimed.
21 What's claimed is just monitoring one channel, and then receiving TV
22 communications from a different channel, which Kamieniecki
23 teaches, right? It teaches monitoring the out-of-band signal.

24 Turning now to slide 8 -- I'm sorry. Go ahead.

25 JUDGE MOORE: Counsel?

1 MR. MEEKER: Yes, sir; yes, Your Honor?

2 JUDGE MOORE: It's Judge Moore. I'm not quite clear; why
3 do you need Konstantinos in this combination? What is it supplying
4 that you don't already have in Kamieniecki --

5 (Simultaneous speaking.)

6 MR. MEEKER: Konstantinos shows the wideband tuner. If
7 you look in the claim, it's subtle, but in this claim, both in Claim 1 and
8 Claim 10, it requires receiving a signal and separating that signal into
9 two different channels. And so, one of those channels can be in-band,
10 and one of those channels can be out-of-band. But Konstantinos has
11 two separate tuners. It doesn't have one tuner going to two channels.
12 It has one tuner going to one channel, and the other tuner going to the
13 other channel. So Konstantinos is required for that wideband tuner
14 which is in the claim. I can show you that if you want.

15 JUDGE MOORE: Where is that in the claim?

16 MR. MEEKER: Okay. So, Steve, could you put up Claim 1,
17 please?

18 MR. CHANG: Yep. We have to go to slide 4.

19 MR. MEEKER: Okay. Turning to slide 4, okay. The
20 digitizing step says, digitizing said received signal to generate a
21 digitized signal.

22 So, now, from that digitized signal, I have to have two portions,
23 so selecting a first portion of the digitized signal and selecting a
24 second portion of the digitized signal. So the second portion of the
25 digitized signal is the one that goes to the decoder, an MPEG decoder.

1 That's the one; it's the processing step. So it says processing said
2 selected second portion of said digitized signal to recover information
3 carried in said plurality of channels. And then, the selecting a first
4 portion of said digitized signal, that is the one that goes to the
5 monitor.

6 And so, like, in their patent, they're claiming decoding or tuning
7 to two different channels from a signal tuner. We have taken that as a
8 multi-channel tuner. Arguably, the claim could read on something
9 else, I think, but like our combination assumes, that means a multi-
10 channel tuner.

11 And I think it's --

12 JUDGE MOORE: Okay. And has the --

13 MR. MEEKER: -- even more explicit in Claim 10. Like, in
14 Claim 10, there's a channelized --

15 Can we go to Claim 10, Steve?

16 MR. CHANG: Yeah.

17 MR. MEEKER: Like, Claim 10 has it more explicitly; it talks
18 about channelization of the signal.

19 MR. CHANG: Okay. This will be slide 49.

20 MR. MEEKER: Slide 49. So, slide 49, it talks about the front-
21 end digitizing said signal to generate a digitized signal, but then it has
22 a channelizer circuitry operable to select a first portion of said
23 digitized signal and a set -- select a second portion of said digitized
24 signal. So, even if you could argue, in Claim 1, it's broad enough to
25 read right on Kamieniecki, like, by the time you get to Claim 10, it

1 specifically claims that channelizer. So the combination with
2 Konstantinos makes sense. For some of these dependent claims, it's
3 also required.

4 JUDGE MOORE: Why isn't one channel, the channel that goes
5 to the OOB, and the other channel, the channel that goes to the other
6 system, goes to the IB?

7 MR. MEEKER: It is exactly that. One channel goes to the IB,
8 and one channel goes to the OOB. But the channelizer operates on a
9 digitized signal. So we're assuming that digitized signal is a single
10 signal that has both channels. So you could read a digitized signal as
11 like one tuner tunes the first portion of that signal and another tuner
12 tunes the second portion of that signal, but we were concerned with
13 getting a narrower construction that says, consistent with their
14 embodiment and their spec, that one A-to-D handles two channels. So
15 that's why we brought in Konstantinos.

16 JUDGE MOORE: Okay. Thank you.

17 MR. MEEKER: Okay. All right. So, returning back to slide 9,
18 so the yellow just shows the RF input signal received. This is in
19 Konstantinos. The red shows the ADC. So the RF input received has
20 multiple channels in Konstantinos, so it would have in-band and out-
21 of-band. The ADC covers both in-band and out-of-band with a single
22 ADC for that signal and digitizes it. And then the channelizer is this
23 multi-band selector and the channel selectors, which basically take
24 that ADC and divide it into different channels. So that is like a one-

1 to-one overlay with their embodiment. And so, that's why we brought
2 it in. It's basically a complete overlay.

3 And it's a good teaching. It says, like, for DOCSIS -- and
4 DOCSIS had been adopted by that time -- like the minimum number
5 of tuners or channels that you want to receive to get DOCSIS is at
6 least four channels. And it has a teaching that says, look, if you don't
7 want to just keep it, putting more and more single-channel tuners in
8 there. Like, once you get more than two, it's cheaper to go with a
9 broadband tuner that tunes to multiple tuners -- or multiple channels.
10 Rather than using, you know, three, four, five single tuner chips,
11 you're better off just using a broadband tuner. And it has a whole
12 bunch of advantages in that in Konstantinos. And that's what we
13 relied on for the combination.

14 Okay. So, turning to slide 10, and this is the motivation in
15 Konstantinos. It says -- it basically talks about DOCSIS 3.0
16 specification, and it says it requires the reception of at least four
17 channels. And it says, there's no freedom from the user's perspective
18 to select many/any channels freely out of the full cable TV band.

19 So, at this time, users wanted to watch one, record another,
20 record multiple channels, have internet while they're watching
21 television. So DOCSIS basically gave them the freedom, but with
22 that came a need for a multi-channel tuner, or a broadband tuner is
23 what it's normally called in the industry. And Konstantinos is one
24 example of a broadband tuner. And so, that's the motivation to
25 combine.

1 Turning to slide 11, additional motivation to combine,
2 Konstantinos says that a conventional approach to multi-channel
3 tuning might be to just have many single-channel tuners in parallel,
4 but it says this becomes completely impractical if the number of
5 simultaneous required channels goes beyond two, as it would with
6 DOCSIS version that Konstantinos discusses. And they say you want
7 an unrestricted multi-channel functionality that the broadband tuner
8 supplies. And then, paragraph 16, unrestricted multi-channel
9 functionality. So that's our motivation to combine.

10 Going to slide 12, again, it's just more motivation. It means the
11 set-top box can receive many channels it wants. Like MPEG, in the
12 old days, when you tuned to an MPEG channel, every time you
13 switched the channel, you'd have to wait a few seconds for the tuner to
14 sync to that channel. With a multi-band tuner, you're basically tuned
15 to every channel all at once. So, if you go up and down in the channel
16 map, you don't have those delays anymore. And so, that's one of the
17 things they mentioned. Like, so they talk about the unrestricted multi-
18 channel. You can watch a different TV channel, and it allows you to
19 monitor usage while you're watching television. So there's a lot of
20 advantages.

21 So, turning to slide 13, this is just -- there's like a shotgun
22 approach to various things that Patent Owner says is wrong with the
23 combination. We'll address some of their complaints and just hit
24 things at a high level to show our combination is proper.

1 So, turning to slide 14, slide 14 shows that while Patent Owner
2 argues that the obviousness is limited to a physical substitution, the
3 petition actually combines the teachings of Konstantinos's multi-
4 channel receiver with Kamieniecki's set-top box. So, if there are
5 portions that say, well, you substitute in the multi-channel receiver,
6 but in the actual combination, when we're laying out the
7 combinations, we're bringing in the teachings of that multi-channel
8 digital receiver from Konstantinos into Kamieniecki's set-top box.

9 So, turning now to slide 15, Patent Owner says, look, it's too
10 difficult; you wouldn't have known how to use a multi-channel tuner.
11 But Konstantinos, actually, if you look at the technical difficulties
12 which Patent Owner alleges, those are all addressed in Konstantinos
13 on its wideband tuner. And this is just one example of wideband
14 tuners. Patent Owner doesn't profess to have invented wideband
15 tuners in this patent. They're using existing wideband tuners, and
16 they're applying what we believe to be existing monitoring techniques
17 to existing wideband tuners. And that's the basis of our combination.

18 So Konstantinos describes how its interleaved ADC is used to
19 avoid pushing extremes of speed and power consumption.
20 Konstantinos paragraph -- and that's in paragraph 61. Paragraph 104,
21 Konstantinos, discusses how this approach provides benefits in power
22 consumption and reduced interference. And it's dissimilar to the same
23 solution the '826 patent teaches. So this was a known solution to a
24 known problem using a known piece of hardware supplied at that time
25 in the industry to enable DOCSIS. This is version 3.0 of DOCSIS by

1 that time, so broadband tuners were in use and known. They had
2 solutions for all the problems mentioned by Patent Owner.

3 So slide 16, now, shows Patent Owner argues Kamieniecki's
4 set-top box is base -- is a basic set-top box, and that Konstantinos's
5 multi-channel tuning would be reserved for advanced set-top boxes.

6 But -- and Kamieniecki says, well, the market is evolving; it
7 was demanding multi-channel tuning. And even what he describes as
8 a basic set-top box was an MPEG set-top box that had both in-band
9 and out-of-band data that was functional for doing exactly what their
10 invention does. It didn't use a multi -- wideband tuner to do it, but it
11 used multiple tuners. But as you wanted higher speeds, you needed
12 more channels to go into -- like DOCSIS kept wanting more and more
13 channels, and once you get above two tuners, it just is cheaper to use a
14 wideband tuner.

15 So, if we turn now to slide 17, this is another version of their
16 physical substitution. So they're arguing you would've had to have a
17 one-to-one ratio between selectors and decoders. We think this is
18 wrong. Like, if you had 200 channels, you wouldn't need necessarily
19 200 selectors or decoders. So, typically -- like, none of this is
20 claimed. All that is claimed is two channels. And we have two
21 channels shown with our in-band and out-of-band. But even so, like
22 typically, one skilled in the art would know you can have a wideband
23 tuner and not have to decode every single channel out there.

24 So, and so if you look at Konstantinos's paragraph 43, it says
25 decoding is optional. It says that a selected channel may be further

1 processed by a decoder. It's not really required. And our expert
2 confirmed that a POSITA would understand that this means the
3 selected channels may not -- like, certain channels may not be
4 decoded.

5 So, turning to slide 18, slide 18 shows Patent Owner's argument
6 that Kamieniecki already had multi-channel tuning, in-band and out-
7 of-band, and yet it still waited for idle to monitor. And so, Patent
8 Owner's argument is an admission that Kamieniecki teaches
9 monitoring out-of-band while tuning to in-band. And that's all that
10 Claim 1 requires. So this whole thing about whether or not you have
11 to wait to monitor an in-use channel is not required by their claim.
12 And so, the motivation to combine is still there, and this is just a red
13 herring. It's simply not required by the claim. And even when you
14 combine Konstantinos in, then this whole need to wait while you're
15 watching a channel to do monitoring on in-band channels goes away.

16 Okay. So then that goes to slide 19. This is another straw man
17 that Patent Owner argues that the combination with Konstantinos
18 deletes the out-of-band functionality. And they make a whole bunch
19 of arguments here about how out-of-band signals had to be limited to,
20 like, older protocols that used, you know, 1 or 2-megahertz channels.
21 The out-of-band channels grew increasingly over time.

22 So if you go back to 1996 when they first had digital set-top
23 box, the out-of-band channels were less megahertz, but over time,
24 over the next ten years, the out-of-band channel kept getting bigger
25 and bigger and bigger until today; it's like gigantic. And so, over the

1 years, they kept increasing the speed of your set-top box, and that's
2 because the out-of-band tuner is increasing in bandwidth. It, you
3 know, goes from 1 megahertz to 2, to 6, to, now, an unlimited amount
4 of megahertz. We've got 1 gigabit plus today. So it's just a natural
5 progression of that out-of-band tuner space.

6 It's -- nothing in our combination required removing of the out-
7 of-band tuner. And so, indeed, like paragraph 33 of the petition, it
8 quite clearly states, quote, in Kamieniecki/Konstantinos combination,
9 the in-band and out-of-band channels of Kamieniecki would be the RF
10 input that is received by Konstantinos's multi-channel receiver. So
11 we're clearly not deleting out-of-band.

12 Patent Owner's Sur-reply argues this argument is unrebutted,
13 but Petitioner also addressed this in its Reply at pages 5 to 6, and it's
14 described in Mr. Lett's Declaration at page 131, and the Reply
15 Declaration at page 10. So it is rebutted. We do, in fact, rebut that we
16 didn't delete the out-of-band tuner.

17 So, turning to slide 20, so Patent Owner argues that the
18 processing step 1F is not met. And slide 20 shows that the
19 combination does not -- they're alleging it doesn't show processing,
20 but both Konstantinos and Kamieniecki each show this processing and
21 recovery of information in the channels. So Kamieniecki, paragraph
22 13, states that a subscriber can use the set-top box to receive audio and
23 video content. Konstantinos says it refers to decoding the selected
24 channel. And there's the MPEG channel we referred to earlier. And
25 these citations are discussed at the Petition on 37 to 38.

1 So, turning to slide 21, slide 21 shows that Kamieniecki's set-
2 top box can receive analog or digital channels. So they're saying
3 Kamieniecki can't process any digital signals, but we saw earlier
4 Kamieniecki has MPEG; it has DVB; it has out-of-band -- all of
5 which are digital signals. So Kamieniecki can clearly process digital
6 signals. The set-top box necessarily has an analog-to-digital converter
7 to recover that digital information. And even Patent Owner's expert
8 on cross-examination said that, in order to receive MPEG-2, there
9 would have to be an analog to digital conversion somewhere.

10 Turning to slide 22 -- and that's in the quote we have up above,
11 in the slide.

12 So, turning to slide 22, Kamieniecki recites -- teaches
13 monitoring broadly. So it says you can monitor errors and dropouts
14 on the out-of-band channel -- that's the digital out-of-band control
15 channel -- so that you can monitor errors and dropouts on the
16 forward/downstream transport channel. And it's -- it says that you can
17 also look for acknowledge, ack, and negative acknowledge, nak, or
18 ping messages from the set-top box to the headend and back. So it's
19 clearly monitoring digital errors and, you know, is monitoring digital
20 signals.

21 So, now turning to slide 23, so this is a slide I'd like the Board
22 to kind of focus on. And we just want to point out one thing in the ID
23 that we feel is perhaps -- and with all due respect, we just feel like
24 perhaps there was a claim construction issue that wasn't focused on.
25 And so, the Board says, we do not agree that reporting channel

1 presence/absence or signal level estimates to the headend is equivalent
2 to reporting signal power versus frequency.

3 So, and we're going to walk you through Claim 6, but Claim 6
4 does not require reporting signal power versus frequency. So the
5 Board faulted us by saying our combination didn't show reporting
6 signal power versus frequency, but that's not required in Claim 6. So
7 Claim 6 only requires controlling the message transmission based on
8 the signal power versus frequency. So that message is different than
9 the signal power versus frequency.

10 And I can show you that in the claims. So it says, analyzing
11 said select -- this is Claim 6, lower left part of slide 23 -- analyzing
12 said selected first portion of said digitized signal to measure a
13 characteristic of said received signal, controlling the transmission of
14 network management messages back to said headend based on the
15 measured characteristic.

16 So the measured characteristic is not what's being sent to the
17 headend. We're sending network management messages to the
18 headend that are based on the characteristic, wherein the measured
19 characteristic is different than the measure -- network management
20 messages. And so, you've got to go back to Claim 1 to see what's
21 being said. And then, in Claim 6, it says, wherein the characteristic is
22 signal versus frequency.

23 So we are sending a network management message based on a
24 measured message. In this case, the measured message is the power
25 versus frequency. So the Petition states that the characteristic is the

1 level of power for each channel. So you've got a gigahertz of
2 spectrum. It's divided into 6-megahertz channels, or whatever they
3 are. And so, we look at signal level power within that 6-megahertz
4 channel. So we are, in fact, looking at a measurement, a signal
5 characteristic that is signal power versus frequency.

6 So each one of those channels is on a different frequency across
7 the whole spectrum. We're looking at signal level, and which, in this
8 art, signal level is the same as signal power. And there's a bunch of
9 testimony from Lett on that, and it's in our Declaration. But we're
10 looking at signal power versus frequency. And with that, they're
11 determining channel presence or absence, and what's being sent
12 upstream is that channel absence or presence, not the signal power.
13 And the reason I bring --

14 JUDGE JURGOVAN: Question here. So, if you're sending it
15 -- well, let me phrase the question this way. Where do the references
16 teach that signal power versus frequency is generated at the receiver?

17 MR. MEEKER: It talks about measuring signal power versus
18 frequency.

19 And so, Steve, can you find that?

20 We have a slide that has where signal power versus frequency
21 is in the -- in Konstantinos.

22 MR. CHANG: We have this slide. We can show the clip from
23 Kamieniecki with the signal level estimate and the --

24 MR. MEEKER: Can you put that up?

1 MR. CHANG: Yeah. So this is going to be in the Kamieniecki
2 reference.

3 MR. MEEKER: Yeah. I mean, ideally, we want it in our
4 Petition when we refer to it, but okay, just go to it here. What
5 paragraph is it?

6 MR. CHANG: Yeah. So there are several places where it talks
7 about the signal level estimate, so paragraph 7.

8 MR. MEEKER: Okay. And that's in our slide somewhere. So
9 okay. So it says, the information may include at least one of channel
10 absence/presence, error count, and signal level estimates.

11 But you really need to go to the Petition where we talk about
12 this. It's in Lett's Declaration.

13 MR. CHANG: So, it -- yeah. It'll be where we talk about
14 Claim 6 in the petition, so --

15 MR. MEEKER: Paul, you have that slide, point cite for us?

16 MR. CHANG: I can get the petition.

17 MR. MEEKER: Your Honor, while we're looking for that, it is
18 in Lett's declaration. He took a look at that. He references channel
19 level and says that's equivalent to channel power in this art. And then,
20 the presence or absence would be based on that. And that is what is
21 sent upstream.

22 JUDGE JURGOVAN: So here's a follow-up question, and that
23 is, if you're reporting channel absence or presence, why would you
24 need to know what the signal power over the entire frequency
25 spectrum was?

1 MR. MEEKER: So, like, typically, the adjustments can only be
2 made in two places on this network. One is in the receiver, and one is
3 in the transmitter. So there's going to be interference along that
4 network, and there could be bleed over from other channels.

5 So, at the headend, if you're not getting a good enough signal
6 that that channel has disappeared at the receiver, it's got to go back to
7 the headend. And then the headend can adjust its power levels in each
8 channel to either up that power level or maybe reduce the power level
9 in adjacent channel that's crunching the other power level. Like, it can
10 have bleed over in that, and that's why you have to go to the headend
11 to adjust that. And --

12 JUDGE JURGOVAN: Well, let me ask this. If you have -- if
13 you're reporting presence or absence of a single channel, why do you
14 need information on other channels that are not that channel?

15 MR. MEEKER: So, like, typically, if the channel is absent,
16 something has to happen in that network to fix that. So it's either
17 going to take a truck roll -- that means, somewhere, the cable is
18 messed up, or it's got, like, shielding broken -- or they've got to adjust
19 the power levels at the headend to try and boost that signal enough.
20 Like, it may just be it has a little more impedance at that particular
21 frequency range.

22 So, like, if you look -- and this is not in the record, but if you
23 look at oscilloscope, like, it's got different gain and loss at different
24 frequencies across this spectrum. And if you're too low at one point,
25 you've got to boost that spectrum, or you can't receive a signal. That

1 channel becomes inoperative. And they can't send data on it. They
2 got to go send data somewhere else where you have an operative
3 channel to that set-top box. Normally, they would try and fix it at the
4 headend, just say the channel is absent; go fix it.

5 I'm not sure I answered your question. You're still looking
6 concerned, so --

7 JUDGE JURGOVAN: Well, I'm struggling with this from the
8 standpoint of if you're reporting that one particular channel is absent
9 or present, I don't understand why you need information from any
10 other channel for that purpose.

11 MR. MEEKER: You wouldn't need information for any other
12 purpose to say it's absent. I agree with that statement. Now, once you
13 know it's absent at the headend, how are you going to fix it? Like,
14 you're going to have to get more information. You could just boost
15 the power on that channel and see if it fixes it. But normally, like, you
16 don't want to put in too much power over a band. There's like
17 -- there's power restrictions on each channel. And then, for bands of
18 channels, there's also power restrictions, like in the design of the cable
19 plan.

20 JUDGE JURGOVAN: Another question I have here is is this
21 implying OFDM on the uplink? From a receiver to --

22 MR. MEEKER: It doesn't matter how the data is transmitted on
23 the uplink. Like the uplink, all we're going to send is just error
24 information or measurement information back to -- there's a DOCSIS
25 controller that sits upstream in the headend. And -- or a QAM

1 controller, which is also, you know, is part of the DOCSIS. And in
2 that controller, they'll make decisions about how much power to put
3 on that cable plan at each node. And that's why you need to know if
4 you've lost a channel.

5 So, sometimes, when it's raining, you can see this fade out on
6 your television. You're watching; you're watching your cable channel,
7 and it's raining. All of a sudden, all your cables get wet. And it gets
8 more impedance, and you'll start to lose your channel. So your box
9 will report, I'm losing my signal. And then, the headend will decide
10 whether it can boost power to bring your signal back. That's an
11 example.

12 JUDGE JURGOVAN: I'm still struggling with the channel
13 absence or presence being equivalent to signal power versus
14 frequency. I don't want to get --

15 (Simultaneous speaking.)

16 MR. MEEKER: It's not equivalent. It's not equivalent. So one
17 is determined based on the other. So, if your signal power drops
18 below a certain level, you can no longer get that channel. Does that
19 make sense?

20 JUDGE JURGOVAN: It does, but I'm not sure that that's
21 signal power versus frequency like you have some plot or some array
22 that shows signal power versus frequency.

23 MR. MEEKER: So it has to be per channel, and what is
24 channel? Channel is a 6-megahertz frequency band. And every
25 channel across that 1-gigahertz spectrum is going to be spaced at 6

1 megahertz apart. So that signal power versus -- or level is for that
2 channel. It's for a 6-megahertz frequency channel. You're looking at
3 the power with respect to that channel. That channel is bundled up
4 and sent together. It's a signal MPEG stream. And so, that signal
5 level for that 6-megahertz band is what you're looking at. And if that
6 drops too low, you're not going to be able to decode that MPEG
7 stream. Your decode is going to be wiped out.

8 And so, that's the signal level v. power -- or signal level v.
9 frequency. And then the channel absence or presence would typically
10 be a command you'd send upstream to let them know you lost signal
11 on that channel.

12 JUDGE JURGOVAN: Okay. I think I understand your
13 argument. What you're saying is the signal power versus frequency is
14 with respect to one channel. In other words, you have sort of a --

15 MR. MEEKER: Yes. Yes. It's not a very --

16 (Simultaneous speaking.)

17 MR. MEEKER: It's not like a point frequency. It's not like 100
18 megahertz.

19 JUDGE JURGOVAN: Right, that's ascribed to it.

20 MR. MEEKER: It would be for 100 to 106 megahertz because,
21 when you send a digital stream down an MPEG stream, like in this
22 timeframe, a single MPEG stream took 6 megahertz to send. So it
23 would span that entire 6-megahertz channel, so it would run from 100
24 to 106. And so, the power would be associated with the whole thing.
25 It's all decoded at once. It comes in just -- it has 6 megahertz of speed

1 coming in, and you have to decode it all at once. And that signal level
2 gets measured upstream of the decoder, and it just says it's too low to
3 decode in this frequency band.

4 JUDGE JURGOVAN: Thank you. I understand your
5 argument.

6 MR. MEEKER: Okay. And so, now this also applies -- it's --
7 we dropped a footnote on page 17 of our Reply, but it applies to
8 Claims 3 and 12, 5 and 14, 7 and 16, and 8 and 17. So they all have a
9 very similar claim construction issue, and all are impacted by this.
10 So, like, you either go with us, or you don't. But if you go with us
11 -- against us on Claims 6 and 15, these other claims are impacted as
12 well -- or go for us, right? One way or the other.

13 Okay. And that takes us to Renken. I'm going to go through --
14 we're almost out of time, so I'm going to go through Renken very
15 quickly here.

16 So Renken incorporates a provisional application by reference.
17 And the only argument with respect to Renken is whether these
18 network management messages are sent back upstream. So that's the
19 only thing being argued by Renken is whether or not Renken sends
20 network management messages upstream. The whole rest of the
21 claim is met. And Renken, in its provisional --

22 And you could go to slide 29, Steve.

23 Renken, in its provisional, says -- and there's no doubt that all
24 of the measurement messages are sent upstream in Renken. Like,
25 Renken specifically discloses that.

1 The one thing Renken doesn't disclose is when there's a
2 problem, an error. Like, Renken, at the set-top box, determines there's
3 an error -- not only for its own set-top box but also for neighbors.
4 Like if it's getting bleed in from a neighbor, it can detect that error at
5 the set-top box, but there's no explicit disclosure in Renken that that
6 error is sent back upstream. So our expert says, one of ordinary skill
7 in the art knows that error has to go upstream because the only way to
8 fix that error on a neighboring set-top box is from the headend. And
9 our expert says it would be obvious to send it upstream.

10 Now, their expert has no opinion on this point whatsoever. And
11 in the ID, you noted that there is no explicit disclosure of sending that
12 errors message upstream. We agree with Your Honor on that, but our
13 argument is not that it's explicit -- that it would've been obvious.
14 There's only two things you can do with it when you determine an
15 error. You could not do anything with it. You could use it as a trigger
16 to send some other message upstream, or you could send the message
17 upstream. There's like a very finite number of things you can do with
18 that error. Our view is and our expert's is that error would be sent
19 upstream; that would be obvious to send it upstream.

20 And there is no evidence whatsoever from their expert on this
21 point. Their expert simply did not testify about it. It's not in their
22 Patent Owner Response. They never said anything about the
23 provisional in their Patent Owner Response. And our view is it's
24 waived.

1 So, and I would point Your Honor to three places. So there's 37
2 CFR 42.120. There's also NuVasive, 842 F.3d 1346, at 1380 to 1381;
3 that's Federal Circuit 2016. And ParkerVision, Incorporated v. Vidal
4 88 F.4th 969 and 980 to 981, Federal Circuit 2023.

5 They simply have no evidence. It's not a competing experts.
6 There is no evidence from their side. Our side is the only side that has
7 evidence, and our evidence said it would be obvious to send that error
8 indication upstream so that you could actually fix the neighboring
9 modem. The only way to fix that communication to the neighboring
10 modem is from the headend.

11 And then, we'll reserve the rest of our time, Your Honor.

12 JUDGE JURGOVAN: Thank you.

13 MR. MEEKER: Thank you.

14 JUDGE JURGOVAN: Okay. Patent Owner, when you're
15 ready.

16 MR. GALLUZZO: Good afternoon, Your Honors. Thank you
17 for your time this afternoon. My name is Vince Galluzzo from K&L
18 Gates, again, on behalf of Entropic.

19 I'm going to lay out some high-level points that I think are
20 really going to characterize this case. Then I'll get into some specific
21 rebuttals of what my friend on the other side, Mr. Meeker, said. But
22 to the extent Your Honors have specific questions, those are the ones I
23 want to answer here today. I have a planned presentation. I'll be
24 happy to present it, but I'd rather get to the heart of the issue of what's
25 interesting to you all.

1 So I'll start by -- well, high-level point number one, this is a
2 physical substitution case plain and simple. The Petition said it time
3 and time again. Mr. Lett confirmed it in his deposition time and time
4 again. And the only reference to teachings is in a paragraph that, as
5 we'll see, seems to be a copy and paste from a different petition.

6 Second high-level point is that the prior art simply doesn't
7 disclose what Petitioner says it does. And because the prior art
8 doesn't disclose what the Petitioner said it does, it had to fill in a
9 number of gaps with expert testimony from Mr. Lett.

10 High-level point number three is the problem with Mr. Lett's
11 testimony is that he really didn't think things through. For example,
12 he relies, as does Petitioner, on DOCSIS 3.0 for a motivation to
13 combine Kamieniecki and Konstantinos. That's in the Petition at 28,
14 his Declaration with the Petition at paragraph 149. But even then, in
15 issuing that -- issuing that in his declaration, he didn't review
16 DOCSIS. It's not an exhibit to the Petition. It wasn't something he
17 reviewed in coming to his opinions in this case. He hadn't reviewed it
18 by the time I deposed him post-institution decision. So, even though
19 DOCSIS 3.0 apparently informs some motivations to combine, and
20 Mr. Lett is not familiar with its contents.

21 So, at base, what the issue is here, if I could sum it up, is that
22 Petitioner and Mr. Lett, they operate at a real surface level with the
23 combination, operate at a real surface level with the art, without
24 having really thought through the details of what it would mean to do
25 what it is they're proposing here, which is replace the in-band and out-

1 of-band tuners of Kamieniecki with the multi-channel receiver of
2 Konstantinos. But once you do think about those issues, there's a
3 cascade of other issues the Petitioners -- the Petitioner and Mr. Lett
4 don't address.

5 Before I move on to some specifics and rebuttals. I just want to
6 note that the Institution Decision did find a likelihood of success on
7 Kamieniecki and Konstantinos but not on Renken. Since the
8 Institution Decision -- I'll start with Renken -- the factual record has
9 only confirmed what the Institution Decision found, which is that
10 there is no likelihood of success. There is no reason to modify
11 Renken in the way that the Petitioners have proposed. And so, the
12 Board should maintain its original decision on Renken.

13 But we suggest that the Board should change its view on
14 Kamieniecki and Konstantinos. And we don't ask that lightly, but
15 why do we here? We ask it here because the Institution Decision
16 found a likelihood of success on factual findings that have since been
17 determined, based on agreement of both experts and in some cases,
18 the parties, not to be accurate anymore. This is one of those rare cases
19 where, on the fundamental aspects of the case, we really don't have a
20 battle of the experts. We have agreement of the experts, and that
21 agreement leads directly to a denial of a finding that the claims in this
22 case are unpatentable.

23 So let me give the two examples of the factual findings that I
24 think have been found incorrect based on the experts' testimony since.
25 Example one is that the Institution Decision found Kamieniecki need

1 not wait for idle to do its monitoring. But since then, both parties
2 have acknowledged, and both experts have indeed testified that
3 Kamieniecki must wait for idle in all circumstances. There's some
4 good reasons for that, and we'll talk about those.

5 The second example is that the Institution Decision found that
6 Kamieniecki receives digitized signals. Now, both parties and both
7 experts have acknowledged that Kamieniecki receives analog carrier
8 signals, just like all set-top boxes. And maybe it's a matter of
9 semantics, but for purposes of this combination, it matters what the
10 carrier signal is being received and what the content on it is, which
11 Kamieniecki may receive digitized content, such as an MPEG
12 transport stream like Mr. Meeker was referring to. Just like all set-top
13 boxes, though, it still receives an analog carrier signal.

14 Now, before I move on, I want to address some specific points
15 that Mr. Meeker raised. And I thought it was interesting that he ended
16 on a waiver argument. A lot of what was said here today isn't in the
17 record. A lot of the representations about what the art says is not in
18 the record, hasn't been made yet.

19 So, for example, it was said toward the beginning of
20 Mr. Meeker's presentation that a decoder is not on the path that does
21 monitoring in their combination. Well, the problem with that is --
22 essentially, what happened is that the Petition said that the -- I'm
23 sorry. I have my notes here wrong. I'm sorry.

24 Let me move on to the next issue because my notes aren't
25 aligning right now. Oh, here it is. The decoder would be in the path

1 between Konstantinos and the monitor. That's at Reply at pages 4 and
2 5. So the statement here that decoder is not on the path that does the
3 monitoring is contradictory to the Reply Brief at pages 4 and 5 where
4 Petitioner said the decoder would be in the path between
5 Konstantinos's receiver and the monitor.

6 The second thing that is different than was presented in the
7 papers is that Petitioner was relying on the RF input from
8 Konstantinos. That's not how the challenge was presented in the
9 Petition. If you go to slide 16, please, essentially, what Petitioner has
10 said here very clearly at Petition at 31, at 33, in the Reply at 11, and I
11 think maybe the clearest, unfortunately, isn't represented here on the
12 slide, but it's at page 33, is that Petitioner relies on Kamieniecki's
13 input signal, not Konstantinos's. That's really important because of
14 the in-band and out-of-band channel distinction in Kamieniecki.

15 So what Kamieniecki is is it's a set-top box that has two tuners:
16 an NBN tuner for receiving television channels, an out-of-band tuner
17 for receiving signaling information on that channel, on that bandwidth
18 of channels. And so, we know that because Kamieniecki has those
19 two tuners, Kamieniecki's headend, which sends the signal to
20 Kamieniecki's set-top box, is also sending those types of channels.

21 Well, why does that matter? That matters because there are two
22 out-of-band standards that have been identified in this record: SCTE
23 55-1 and 55-2. Both of those say that out-of-band channel bandwidth
24 is somewhere between 1 and 2 megahertz. That still keeps the actual
25 television channels that are in-band at 6 megahertz. So, basically,

1 what we have is a headend from Kamieniecki, a transmission from
2 Kamieniecki, and a set-top box of Kamieniecki that receives two
3 different bandwidths of channels.

4 And Petitioner doesn't propose modifying the headend of
5 Kamieniecki to transmit anything other than in-band and out-of-band.

6 And, you know, as we'll talk about later, that's not something a
7 person of skill in the art of the low level that Petitioner has proposed
8 would be able to do anyway. But --

9 JUDGE JURGOVAN: Counsel, does the claim -- do the claims
10 recite anything to do with the bandwidth of the out-of-band tuner?

11 MR. GALLUZZO: No, Your Honor. And the -- what you'll
12 see today is that most of the arguments that we are raising are directly
13 in response to the combination proposed by the Petitioner as
14 proposed. And so, because this is a physical substitution case,
15 because Petitioner is saying use the input of Kamieniecki but use the
16 channel selectors of Konstantinos, unless there is some modification,
17 those two aren't going to go together. And so, it's not that the claims
18 require that a certain bandwidth of the -- of the input signal or
19 selections necessarily. It's that the combination as proposed simply
20 wouldn't jive.

21 JUDGE JURGOVAN: How do you respond to Petitioner's
22 noting of its Petition as stating that the teachings of Konstantinos are
23 combined with Kamieniecki?

24 MR. GALLUZZO: Yeah. Thank you, Your Honor. And so,
25 what I'll -- let's go straight to that, and that'll be our slide 10, please.

1 So this is -- at the top, there's a quote from the Petition at page
2 27 that the proposed combination replaces the in-band and out-of-
3 band tuners in Kamieniecki's set-top box with Konstantinos's multi-
4 channel receiver. We've tried to depict that here. I understand
5 Counsel believes it was a bit simplified, but I think it's still accurate.
6 And this isn't the only quote though. Petition at 28, the Petition uses
7 the phrase in place of. The Petition uses the phrase apply receiver to
8 STB of Kam -- Kamieniecki. Uses the quote again, replaced. Page 29
9 uses the phrase combined system and in place of.

10 Now, if we go to -- and Your Honors, I don't have an electronic
11 copy for you, but if you have your paper copies of Petitioner's slides,
12 and we go to their slide 14, they have taken a portion of the Petition at
13 page 29 that says combining Konstantinos with Kamieniecki also
14 would be merely using known techniques. And they highlight another
15 word; that's teachings.

16 Well, if you actually read what it says here, it says merely using
17 known techniques. And then in parentheses, it says a multi-channel
18 digital receiver. I don't understand a component like a digital receiver
19 to be understood as a technique. And so, I would submit that this is,
20 as you might see often in petitions being filed, this is a copy and paste
21 from a different petition, or some sort of different motivation to
22 combine where techniques is still included, but the parentheses, as
23 opposed to it referring to a technique, refers to a multi-channel digital
24 receiver.

1 But even if you don't agree with me there, these two words on
2 Petition, page 29, are the only two places where techniques or
3 teachings are referred to. And given the weight of all of the other
4 references about replacement, combine system, in place of, replacing
5 throughout the Petition, it's pretty clear that this is a physical
6 substitution case.

7 There are also a number of places where Mr. Lett confirmed
8 that this was a case where he had taken, in his mind, the in-band and
9 out-of-band tuners of Kamieniecki and replaced them with the multi-
10 channel selector of Konstantinos. So, to the extent that this was not a
11 physical substitution case, it was presented exactly like a physical
12 substitution case was.

13 And there's a case that we cite in our Sur-reply, Precision
14 Planting. It's actually a really close case to this one in a few regards.
15 First is that it deals with how to deal with the fact that physical
16 substitution cases are somewhat rare, and usually, it's a teachings case.
17 And what do you do in light of the case In re Mouttet that everybody
18 cites from the Federal Circuit?

19 Well, Precision Planting goes through it and says, the Petitioner
20 proposed their combination in this very specific way. It could have
21 done it a different way. It didn't. But because it did, we have to
22 analyze the petition and the combination as proposed. And so, here,
23 what we are doing is analyzing the combination as proposed. And as
24 it was proposed, it is a replacement of the in-band and out-of-band
25 tuners with the multi-channel receiver.

1 I also think that Precision Planting is interesting because it went
2 through, essentially, a physical combination of elements analysis for
3 -- it was a seeding device, you know, for spreading seed on a farm, for
4 example. And it talked about how these two engaging members just
5 simply wouldn't work together. That's basically what we're doing here
6 is arguing that the two members, or the Kamieniecki's set-top box and
7 the Konstantinos's multi-channel receiver, simply couldn't work
8 together based on the way the petitioner has argued it.

9 And then finally, I think the Precision Planting case is really
10 good for a question that I believe it was Judge Moore had asked about
11 what do you need Konstantinos for. To be clear, Petitioner relies on
12 Konstantinos for the digitizing element of Claim 1, for the selecting
13 elements of Claim 1, and maybe for the processing element of Claim
14 1, though it's unclear whose decoders they're relying on.

15 But regardless, even if there could be some combination or
16 some argument constructed that relied solely on Kamieniecki, that's
17 not the challenge that was presented. And Precision Planting speaks
18 to that because there, it was a combination of three different pieces of
19 prior art. And essentially, the Board asked, well, do you really need
20 the third? The third really seems to complicate things.

21 And petitioner seemed to be arguing at the oral hearing to
22 forget about the third. While petitioner's counsel did confirm, no,
23 we're arguing the combination as proposed, the Board was very clear
24 that even if other ways could be thought of to construct a
25 combination, the Board and the parties are still constrained to the

1 challenge that was presented, based on the arguments made in the
2 petition.

3 Okay. So, the question of whose decoders are we using, both
4 Petitioner and Mr. Lett say it could be either. Either Kamieniecki's
5 decoders could be used for the processing or Konstantinos's decoders
6 could be used for the processing. Patent Owner will submit that could
7 be is not enough for -- to meet the burden of proof. A petitioner needs
8 to show that a person of skill in the art would be motivated to do
9 something, not just they could do one of two different things. And I'll
10 reference the Belden v. Berk-Tek case, 805 F.3d, pin cite 1073; that's
11 out of the Federal Circuit 2015.

12 JUDGE JURGOVAN: So does the claims -- did the claims
13 require decoding per se?

14 MR. GALLUZZO: The claims require processing, Your
15 Honor. And the way that -- I'll just read it exactly. So Claim 1, for
16 example, after you've selected the first and second portions of the
17 digitized signal, the claim requires processing said selected second
18 portion of said digitized signal to recover information carried in said
19 plurality of channels.

20 So there is no explicit requirement of decoding, but what
21 Petitioner has argued here is that the processing step would be met by
22 a decoding of a selected channel. So what Petitioner is arguing is that
23 after the combination, there would be some selection, as done in
24 Konstantinos. It would output to some decoder that would happen

1 somewhere downstream of there. So we're responding to the petition
2 challenges as they placed it.

3 Okay. Let's actually talk about Kamieniecki because I think it's
4 good to go back to basics. Slide 5, please. So Kamieniecki is
5 essentially a basic set-top box. It has a single in-band tuner and has a
6 single out-of-band tuner. And I heard today that Kamieniecki can
7 monitor the out-of-band channel at the same time it's providing
8 television channels to a user on the in-band channel. And I heard
9 reference paragraph 27 of Kamieniecki. I just -- I want to say I don't
10 think that's what Kamieniecki's paragraph 27 says.

11 So, if we could turn to paragraph 27 of Exhibit 1009, and I
12 apologize to Your Honors; I don't have a slide on this, but I'll read it
13 for the record. It says, in full, "for example, in systems where the
14 network has not been upgraded to support a cable return path, a
15 telephone modem may be included in the set-top box for sending
16 signal quality reports from the STB to the headend."

17 So far, completely irrelevant to the point. Here's the sentence I
18 think Petitioner was relying on: "Moreover, the STB could monitor
19 only one channel, such as the OOB channel, without tuning through
20 the channel map."

21 What that says to me is, if you just want to tune to one channel,
22 and you just want to monitor one channel instead of the whole
23 spectrum, you can do that. But what it doesn't say is it doesn't say that
24 you can select an OOB channel for monitoring at the same time that
25 you can select an in-band channel for providing -- for use for a user.

1 And that's because Kamieniecki says, as the -- as both experts agree,
2 that Kamieniecki has to wait for idle before gathering channel
3 diagnostics.

4 Now, you say, well, the user is really only watching the in-band
5 channel; what do they really care about monitoring in the out-of-band
6 channel? As Dr. Lett tells us, Patent Owner's expert, the out-of-band
7 channel is pretty important too.

8 Out-of-band channel contains, for example, information to let
9 you watch HBO or premium channels if you've been subscribed to
10 them. Without the out-of-band channel, if you go to turn to HBO,
11 your set-top box isn't going to let you turn to it. It's going to signal to
12 the set-top box, yes, this user is authorized; no, this user is not
13 authorized. And so, Kamieniecki has made the affirmative decision
14 not just to allow monitoring -- I'm sorry -- not to permit monitoring
15 just when the in-band tuner is idle but also when the out-of-band tuner
16 is idle, too.

17 Now, both experts have testified that a person of skill in the art
18 would understand this from reading Kamieniecki, even though,
19 theoretically, if you look at Kamieniecki, you say it could be done; a
20 person of skill in the art would look at it and say, yes, it could be
21 done. But that's what makes it even more striking that Kamieniecki --
22 and important, I think -- that Kamieniecki says, and both experts
23 agree, that a person of ordinary skill in the art would understand that
24 you still must wait for idle anyway. A person of skill in the art

1 wouldn't disagree -- wouldn't disregard the deliberate choice of
2 Kamieniecki to wait to monitor until the entire set-top box is idle.

3 JUDGE MOORE: But Counsel, this is Judge Moore. Why do
4 we care if it's simultaneous or idle time only? What -- how does that
5 play into this? I think I'm missing the big picture.

6 MR. GALLUZZO: Yeah. So they -- the big picture is that
7 that's part of -- that's wrapped up in Petitioner's motivation to
8 combine. Petitioner says that one of the downfalls of Kamieniecki is
9 that it couldn't wait for idle -- I'm sorry -- couldn't monitor before idle
10 because it had too few of channels -- channel selectors, so just add
11 some more channel selectors, and then it can monitor whenever it
12 wants.

13 What we say is, even if you were to put more channel selectors
14 into Kamieniecki, you still wouldn't disregard the fundamental
15 principle of operation of Kamieniecki, which is to wait for idle to
16 monitor. And so, therefore, the combination wouldn't make sense and
17 wouldn't be able to meet the challenged claims, which require the
18 selection of the first and second portions and then the monitoring and
19 the processing. So that's what the big deal is there, Your Honor.

20 JUDGE MOORE: Okay. Thank you.

21 MR. GALLUZZO: So one of the things I think I want to skip
22 ahead to that has come up a few times today -- if you could, go to
23 slide 34, please -- is a question of what happens between the out-of-
24 band and in-band tuners of Kamieniecki and the monitor, and then

1 what happens when you combine with Konstantinos as proposed. So
2 let's talk about analog-to-digital converters.

3 All -- both experts and both parties agree on two things. The
4 first thing they agree on is that Kamieniecki receives an analog carrier
5 signal that can have but need not have digital video content encoded
6 on that analog signal. The second thing that everybody agrees on is
7 that Kamieniecki does not digitize anything about the signal before
8 the out-of-band and in-band tuning happens. So it would happen, if at
9 all, to the right of the tuners. Now, petition -- and Petitioner
10 confirmed this; it's Reply at 13.

11 So because Kamieniecki could conceivably have either analog
12 video content or digital video content, there are essentially two
13 possibilities here. One is that there is no digitization in Kamieniecki
14 at all. It receives an analog carrier signal with analog video data. It
15 tunes in analog. It monitors in analog. Everything is analog, so
16 there's no ADC needed. The second possibility is that there is digital
17 content that needs to be recovered, and therefore, there's an ADC after
18 those in-band and out-of-band tuners. The problem is that those two
19 possibilities still mean the combination fails.

20 Next slide, please. This is slide 35. The problem is that if it's
21 analog video content, then the selection of the analog channel is
22 output to the monitor, and the monitor is designed to analyze an
23 analog signal. And therefore, it wouldn't work when you put the
24 Kamieniecki multi-channel receiver in which outputs a digital signal.
25 Because Petitioner doesn't argue a change to the monitor of

1 Kamieniecki to allow it to monitor a digital signal, that's the -- the
2 references won't work together that way.

3 Slide 38, please. So we're going to skip ahead to slide 38, and
4 we're going to see possibility number 2. This is the one where
5 Kamieniecki receives the analog carrier signal containing the digital
6 data stream, such as MPEG-2. The combination still doesn't work,
7 though. Why? Petitioner, at pages 32 to 33, has made very clear that
8 it's Konstantinos's ADC that's the one that's being used. That's the one
9 shown above, number 204. And that's at the front-end. That's before
10 any channel selection. That's before any tuning. The problem is that
11 Kamieniecki's ADC, if it has one, because it's receiving analog carrier
12 signal with digital content, it's going to be at the back-end, after the
13 tuners.

14 Petitioner doesn't propose removing those ADCs. It doesn't
15 propose combining Kamieniecki's ADCs with Konstantinos's ADC.
16 Thus, a digital video signal selected by Konstantinos's multi-channel
17 selector, which outputs a digital signal, would then go to an analog-to-
18 digital converter. Outputting a digital signal to an analog-to-digital
19 converter makes no sense.

20 Now, why is it that the ADC might be in two different places?
21 Historically, this actually makes a lot of sense. Dr. Russ tells us about
22 this in his background. He says that early single-tuner set-top boxes
23 designed -- designs, they would digitize, if they digitized at all, after
24 tuning. It kind of makes sense. You have a multitude of channels
25 coming in. You've selected one in the analog domain, and you're

1 going to digitize just that single 6-megahertz channel. Why would
2 you digitize an entire spectrum if you're only going to select one
3 channel because you have a single-tuner set-top box? And if you
4 want to check, check me on that, that's Exhibit 2013 at paragraph 66.

5 Now, interestingly, that's also shown in Konstantinos's Figure
6 1. And again, we don't have a slide on this, but if Your Honors go to
7 Exhibit 1010, at Figure 1, this is what Konstantinos describes as the
8 prior art that it's distinguishing over. Those, you know, single-
9 channel selectors that aren't going to work anymore. And what we see
10 is we see an RF input coming in. There's some filtering and mixing
11 that the -- that Konstantinos says is where the channel selection is
12 done. And then, after that channel selection is done, there's ADC 116.

13 So both Dr. Russ and the prior art of record shows that for these older
14 single-tuner style set-top boxes, the ADC is going to be after the
15 tuning. And again, that makes sense.

16 But what Dr. Russ tells us is that later multi-channel tuners,
17 they flipped the traditional order. We see that in Konstantinos.
18 Because you're going to be selecting a bunch of channels, why don't
19 you -- why don't you digitize at the front-end? And so, they would
20 digitize first. That's Exhibit 2013 at paragraph 72.

21 So basically what we have here is we have a combination of
22 two set-top boxes from two different eras. And because they are from
23 two different eras, they have their ADCs in two different places. And
24 so, it just has too many ADCs.

1 This is actually a similar issue to another case involved with my
2 client: IPR 2023-00391. In the decision denying institution, paper 10
3 at page 24, the board essentially found that moving the point of
4 digitization in a reference couldn't just be done a whim. It couldn't be
5 done on a whim because when you move the ADC, it has downstream
6 and upstream effects in the processing chain because if you have the
7 ADC at the front-end, then you're going to be processing in the digital
8 domain. If you have the ADC in the back-end, you're going to be
9 processing in the analog domain. So you can't just move it without
10 changing other things.

11 Let's talk about claim --

12 JUDGE JURGOVAN: Counsel, I don't understand why you
13 need to have ADCs on the back-end if Konstantinos is teaching an
14 ADC on the front-end.

15 MR. GALLUZZO: I don't either, Your Honor, but the problem
16 for Petitioner is that this is what their combination would result in,
17 and they haven't argued for removal of those ADCs or addressing
18 them whatsoever. There's nothing in the Petition about removing the
19 ADCs from Kamieniecki. And so, essentially what we're stuck with is
20 we're stuck with the combination as argued.

21 And Petitioner has relied in their Reply on Kamieniecki itself
22 having ADCs. That's one of the things they rely on to say that
23 Kamieniecki of course can receive a digitized signal, and therefore, its
24 monitor of course can monitor a digitized signal. Having relied on
25 Kamieniecki's ADCs, the question of where they are and where they

1 would exist in the combination is a good one and one that should have
2 been thought through more thoroughly to meet Petitioner's burden.
3 Had Petitioner said something else, maybe we'd be in a different
4 world, but where we are, we're stuck with too many ADCs.

5 JUDGE HOWARD: I'd like to talk about Kamieniecki. Is the
6 monitor receiving a digital or an analog signal?

7 MR. GALLUZZO: So it -- I think what both parties agree is
8 that it could be either depending on the circumstance. It depends on
9 what the headend is sending to Kamieniecki. Because Kamieniecki
10 said it can receive an MPEG transport stream that Dr. Lett, Mr. Russ
11 -- I'm sorry -- Dr. Russ, Mr. Lett, they've both talked about this in
12 their depositions. An MPEG transport stream is a digital content on
13 an analog carrier signal, has to be recovered somehow, it would be
14 recovered, and then maybe it would be processed by the monitor. But
15 it's going to depend on what that, the content is on the signal being
16 received. Kamieniecki is also --

17 JUDGE HOWARD: But if the signal being received was a
18 digital signal, then wouldn't the substitution of what's being shown on
19 your slide 38 be just fine because it's getting a digital signal going to
20 the monitor?

21 MR. GALLUZZO: So, Your Honor, I think this might be a
22 semantics issue, but if not, there is not a set-top box in the world that
23 receives a digital signal. They all receive analog signals. Some of
24 them receive analog with digital content.

1 JUDGE HOWARD: Right. My point is, doesn't if the -- that
2 the out-of-band tuner and the in-band tuner, at the end of that, if it has
3 an ADC in it, then at the end of it, it does -- to me, it seems to make
4 no difference if you're just replacing it with a multi-tuner that has the
5 ADC in front. You actually can do that physical substitution, and it's
6 going to work just fine as it receives -- as it gets to the monitor.

7 MR. GALLUZZO: That --
8 (Simultaneous speaking.)

9 JUDGE HOWARD: -- which had an ADC in it, and you're
10 replacing it with another black box that has an ADC. Although the
11 location of the ADC in the different black boxes have changed, does
12 that really make a difference?

13 MR. GALLUZZO: Yeah. I understand the question, Your
14 Honor. Thank you. In the proposed combination as proposed by
15 Petitioner, the ADCs of Kamieniecki would not be in the black box.
16 What is replaced are the in-band and out-of-band tuners. The ADCs
17 are downstream of there.

18 So, if Petitioners had argued differently, we might be in a
19 different world, but as they have argued, the ADCs would not be in
20 the black box and, therefore, would not have been replaced by the
21 combination, therefore leaving too many ADCs.

22 So let's turn --

23 JUDGE HOWARD: Thank you. I understand your point.

24 MR. GALLUZZO: Yeah. Thank you, Your Honor.

1 Let's turn to slide 42. This deals with Claims 6 and 15 on the
2 Kamieniecki/Konstantinos, which Your Honor, Judge Jurgovan --
3 Jurgovan -- apologies -- had raised. And the Institution Decision
4 found that Petitioner had not had a reasonable likelihood of success
5 here. I think that conclusion should remain. But there's really two
6 issues underlying all of this, and I think Your Honor had addressed it
7 right.

8 The Petitioner says the reporting, the network management
9 message, is the channel presence or absence. That's at Petition at page
10 46. But the problem for Petitioner on Claims 6 and 15 is that the
11 measured characteristic has to be signal power versus frequency.
12 Well, Claim 1 requires that the network management message be
13 based on -- let me get the language right -- be based on said measured
14 characteristic. And there's nothing in the record from Petitioner about
15 how the channel presence or absence message that goes upstream is
16 based on signal power versus frequency. There's nothing linking
17 those two things together. So because of that, it's essentially a failure
18 of proof.

19 JUDGE JURGOVAN: Just to -- so I think Petitioner's
20 argument is that the channel absence/presence is based on signal
21 power versus frequency for that just one -- at that one channel. Is
22 there some claim construction issue here with respect to what it
23 means, that signal power versus frequency? In other words, does that
24 -- can that be for just one channel, or is that talking about the whole
25 spectrum of channels?

1 MR. GALLUZZO: That's a claim construction issue that hasn't
2 come up in this proceeding, and I also don't think that the Board needs
3 to address it in order to resolve the case here. The lack of linking
4 between the measured -- the channel presence or absence in the signal
5 power versus frequency is lacking in the record. I don't believe that
6 what I've heard today is in the record about it being for a single
7 channel. I could be mistaken. I looked quickly, but I don't remember
8 having seen that. If I'm wrong, we will say so in my surrebuttal time.

9 JUDGE JURGOVAN: Thank you.

10 MR. GALLUZZO: With -- because I want -- I do want to
11 reserve my -- actually, if I could get a point of clarification, Your
12 Honors, about reserving time. I know my friend on the other side
13 went over. Should I still reserve time for surrebuttal, or will there be
14 no rebuttal?

15 JUDGE JURGOVAN: You can use as much time as you want
16 into your surrebuttal. We'll just take away time from your surrebuttal
17 time.

18 MR. GALLUZZO: Understood. So then let's talk about
19 Renken.

20 If we go to slide 44, please, Mr. Fuller.

21 So the issue with Renken, Mr. Meeker was right; it's on the
22 controlling the transmission element of the claims. And I put the
23 whole claim up here because Petitioner has identified the MCCM, the
24 measurement-capable cable modem, of Renken as being the receiver.

1 And so, because Petitioner has done that, the MCCM must be the
2 component that meets the controlling the transmission element.

3 Petitioner, at pages 65 to 66 of the Petition, says that at least
4 some of the results generated by the MCCM are network management
5 messages. And in fact, they identify two specific examples. This is at
6 page 66. They identify error reports and alarms. The problem is that
7 Renken says that those things are generated by the central
8 measurement controller. So a centralized device, not the distributed
9 MCCMs. So the challenge simply doesn't meet the plain language of
10 the claims.

11 Petitioner says, okay, well, let's flip the system architecture,
12 turn the centralized system of Renken into a decentralized or
13 distributed system, and allow the MCCMs to send error reports or
14 alarms. But Renken discloses throughout its entire disclosure, and in
15 the provisional, especially at page 15, that the CMC is still always in
16 control of analysis and measurement.

17 Why is that? It's because the CMC has what's called a DAAP.
18 And the DAAP, the data analysis and processing module, is a critical
19 part of the CMC of Renken. What it does is it ingests all of the
20 measurements across the network. It looks at all of them, and it tries
21 to figure out system-wide impairments and other issues. MCCMs do
22 not have a DAAP because it is not a distributed system; it's a
23 centralized one.

24 Now, let's talk about provisional at page 15, and I believe that
25 Petitioner's slide 29 has that, so I will borrow one of their slides again.

1 I seem to be missing it, but I know what it says. Petitioner's slide 29
2 says that the MCCM could detect a problem. Okay. Well, the claim
3 requires controlling the transmission -- controlling the transmission,
4 not simply detecting a problem. And so, the fact that there can be
5 some problem detected isn't enough to meet the claims.

6 Also, if you look at item number 2, listed on the top right of
7 Petitioner's slide 29, there's a discussion of how the CMC is still in
8 charge: multiple MCCMs working together, as directed by the CMC.
9 So that indicates that the CMC is still in charge, just like the Renken
10 non-provisional disclosure discusses.

11 And in any event, even if you were to read all this provisional
12 and give Petitioner the benefit of every doubt on its meaning, there's
13 still nothing about transmitting an error report or an alarm based on
14 any of this information. Now, remember, that's what Petitioner relied
15 on to say this is what is transmitted: error reports and alarms. So
16 whatever is in Renken provisional page 15 needs to support the
17 transmission of an error report or an alarm, and that's just not there.

18 Slide 46, please, Mr. Fuller.

19 Now, what about what Petitioner relies on? They rely on
20 something called error thresholds to show that you could send things
21 from the MCCMs to the CMC. Well, as Renken discloses it, the error
22 thresholds are part of the measurement plan that the CMC sends to the
23 MCCMs. It's listed as something the measurement plan can contain.
24 There is literally nothing else in the disclosure of Renken about it

1 other than the fact that it's at the end of a long list of things the
2 measurement plan can contain.

3 So we can interpret it by looking at context, though. The
4 context is it's called a measurement plan. It's not called an analysis
5 plan. It's not called a management plan, and it's a prompt for the
6 MCCM to send a measurement to the CMC.

7 So, based on that, what Dr. Russ tells us -- this is Exhibit 2013,
8 paragraph 138 -- is that error thresholds are going to tell the MCCM
9 when to report measurements, so they don't overwhelm the CMC with
10 good measurements. Remember, this is a centralized system in taking
11 in measurements from all over the network. If you get a measurement
12 every second from every MCCM on the network, it's going to take an
13 incredible amount of processing power to determine where you have
14 problems and not.

15 But even past all that, at base, the issue here is we have a single
16 reference obviousness challenge with nothing in the reference to teach
17 or suggest that the change that's proposed be made. And Mr. Lett, to
18 his credit, says that a person of skill in the art could do it. He says
19 that in his paragraph 280. But the debate in obviousness cases isn't
20 could. The debate, as I said earlier, is would.

21 And then, finally, as to Mr. Lett's testimony, he says the
22 selection of sending the results from the MCCM or the CMC is just a
23 selection of two finite possibilities. But that's true in every
24 obviousness case. Two finite possibilities, one, what the reference
25 discloses, and two, what Petitioner wishes the reference disclosed.

1 Here, we have to be stuck with what the reference discloses, teaches,
2 and reasonably suggests to one of skill in the art. I don't think we've
3 met that here.

4 Your Honors, I see I have two minutes left. I'd be happy to
5 answer any questions outstanding from you all before I cede my time.

6 JUDGE JURGOVAN: No further questions. Thank you,
7 Counsel.

8 MR. GALLUZZO: Thank you, Your Honors.

9 JUDGE JURGOVAN: I understand that Petitioner ran over --
10 maybe not, according to my clock here. So it looks like you have
11 about three minutes left for rebuttal.

12 MR. MEEKER: I think three minutes should be just fine, Your
13 Honor.

14 JUDGE JURGOVAN: Okay.

15 MR. GALLUZZO: Your Honor, if I just may?

16 JUDGE JURGOVAN: Please.

17 MR. GALLUZZO: To be a stickler, Mr. Meeker took the full
18 45 and then several minutes after that.

19 JUDGE JURGOVAN: Okay. That's Judge Howard's
20 understanding as well.

21 MR. MEEKER: Okay.

22 JUDGE JURGOVAN: So we'll make the time up to Patent
23 Owner here, but let's -- we'll give you two minutes. And then we'll
24 add that time back to Patent Owner for surrebuttal.

1 MR. MEEKER: Okay. I think I'll do my best in two minutes,
2 Your Honor.

3 JUDGE JURGOVAN: Okay.

4 MR. MEEKER: One thing, there was some comments about
5 Mr. Lett's credentials. Mr. Lett was vice president of engineering at
6 Scientific Atlanta during the creation of the set-top box, the first
7 original digital set-top box that had MPEG. He worked with
8 CableLabs. He worked at Cisco. Like, there is very few people who
9 understand cable television any better than doctor -- I mean, Mr. Lett.
10 Their expert actually was on Mr. Lett's team at Scientific Atlanta. So
11 I think just -- I had to comment on that. His expertise, there's just
12 very few people in this country that have more expertise in Mr. Lett.
13 And I've worked with both of them over the years, and so, okay.

14 And then the other thing is, a lot of their stuff is straw men that
15 are not combinations we made. The thing with the two ADCs, they're
16 using a piece of prior art from Konstantinos and trying to combine it
17 with Konstantinos in a manner. We just didn't make that combination.
18 So they can't come up with a straw man and then use that to attack
19 our stuff.

20 And the claims just don't have many of the limitations they're
21 arguing in. They cited another IPR and talked about a board decision
22 in another IPR. I can't find that in their papers. Like, maybe that is
23 cited in their papers, but I just, I don't recall seeing that. So I think
24 that's a new argument and outside the scope, but if they could provide

1 a cite for that, I would be fine with that. But I could not find that cite
2 in the little bit of time I had here in the hearing.

3 And then they cited a case. And the case, Precision Planning, is
4 a motivation to combine case. There is no doubt that in this case, we
5 have a clear motivation to combine. In that case, there wasn't a
6 motivation to combine. Our case has the motivation to combine.

7 So that's all I have. Like, if there's any questions, happy to
8 answer them.

9 JUDGE JURGOVAN: None from me.

10 MR. MEEKER: Okay. Thank you, Your Honors. Really
11 appreciate the time.

12 JUDGE JURGOVAN: Thank you, Counsel.

13 PO, for surrebuttal and -- let's see here. We'll give you -- you
14 have five minutes. You had two left. So we'll give you up to ten
15 minutes.

16 MR. GALLUZZO: I won't need that long, Your Honor.

17 JUDGE JURGOVAN: Okay. Understood. You can go ahead
18 and start it.

19 MR. GALLUZZO: Thank you, Your Honor, and thank you for
20 the additional time.

21 Just one thing, to the extent it sounded like I was criticizing
22 Mr. Lett's experience, I wasn't. I want to make that clear. But I think
23 Mr. Meeker's point actually reinforces why there is no motivation to
24 combine here. And even more importantly, why there is no
25 reasonable expectation of success.

1 Mr. Lett is a very qualified, very impressive individual who
2 worked a very long time in the industry. But yet, when pressed on
3 details about his opinions about how things would work and go
4 together in the way he proposed, a number of times, as we've laid out
5 in our briefing, he said he hadn't thought about it, or he didn't know.
6 And what's striking about that is if Mr. Lett, an industry veteran with
7 over 30 years of experience, who is an extremely impressive
8 individual, doesn't know and can't figure it out, how could a person of
9 skill in the art, barely out of college, with three to four years of
10 experience, figure it out? Thank you, Your Honors.

11 MR. MEEKER: Your Honor, can I make just one comment on
12 that?

13 JUDGE JURGOVAN: No, sir. The hearing is concluded.

14 MR. MEEKER: Okay. All right.

15 JUDGE JURGOVAN: I want to thank you all for your
16 presentations. They're very helpful to us in resolving the issues in this
17 case, and again, thank you. We'll go off the record now. Please still
18 remain in the room in case the court reporter has any questions to ask
19 you. We appreciate your time. Thank you.

20 MR. MEEKER: Thank you.

21 MR. GALLUZZO: Thank you, Your Honor.

22 (Whereupon, the above-entitled matter went off the record at
23 2:36 p.m.)