

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

YEALINK (USA) NETWORK TECHNOLOGY CO., LTD., AND
YEALINK NETWORK TECHNOLOGY CO., LTD.,
Petitioner,

v.

BARCO N.V.,
Patent Owner

IPR2025-00491
Patent 10,684,972

Record of Oral Hearing
Held: April 16, 2026

Before MEREDITH C. PETRAVICK, DAVID C. MCKONE, and
FREDERICK C. LANEY, *Administrative Patent Judges*.

IPR2025-00491
Patent 10,684,972

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P R O C E E D I N G S

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JUDGE PETRAVICK: Good afternoon. We're here for oral arguments in IPR2025-00491. I'm Judge Petravick and with me on the bench remotely is Judge McKone and Judge Laney. Could we please have appearances now from the Petitioner? Maybe you could approach the podium so the other Judges could hear you.

MR. YANG: Good afternoon, Your Honors. Stephen Yang, Lead Counsel for Petitioner Yealink. With me today is Mr. Kevin Greenleaf, also from the same law firm, Dentons US LLP. Mr. Greenleaf will present oral arguments on behalf of Petitioner today.

JUDGE PETRAVICK: Great. Thank you. And for the Patent Owner?

MR. HALVERSON: Good afternoon, Your Honors. Erik Halverson from K&L Gates on behalf of Patent Owner Barco. With me today at Counsel table is our LEAP practitioner, Joshua Andrews, and also in attendance today is Lead Counsel, Chris Centurelli.

JUDGE PETRAVICK: Great. Thank you. As you know, we have two remote Judges today, so please make sure that when you are speaking, you stand at the podium and speak into the microphone at the podium so that they can hear you. And please don't wander too far from the podium.

We do have the record in front of us and your demonstratives, so it would be very helpful if you could say the name of the slides or the slide number when you flip, so the Judges can follow along.

As we previously discussed, we're going to start with a non-confidential portion and then go to a confidential portion, and the order of

1 argument will be in the non-confidential portion. The Petitioner will have
2 their main arguments, then we will hear from the Patent Owner, and then
3 from the Petitioner and the Patent Owner again.

4 And as I understand it, we have allotted 25 minutes to the
5 Petitioner for the non-confidential portion, and we have 30 minutes to the
6 Patent Owner. We will then close the public line for the confidential
7 portion, at which time the Patent Owner will speak as to the confidential
8 information and be allotted 15 minutes for that time. And the Petitioner has
9 allotted five minutes at that portion, and then we will hear from the Patent
10 Owner again at any remaining of the time of the 15 minutes.

11 So with that squared away, I think we can finally begin. Petitioner,
12 if you'd like to approach the podium and begin when you are ready.

13 MR. GREENLEAF: Would Your Honor like a paper copy?

14 JUDGE PETRAVICK: No, I have the electronic copy in front of
15 me.

16 MR. GREENLEAF: May it please the Board. My name is Kevin
17 Greenleaf, representing Petitioner Yealink in the IPR proceeding today.

18 Moving to Slide 2, we have three sections of argument, Grounds 1,
19 2, and secondary considerations.

20 Let's look at Claim 1 on Slide 4. There are five basic elements of
21 the claim, a processing device, which is basically a laptop. Then there is a
22 functional device, which is something like a speaker, a microphone, a
23 camera, or a TV in a presentation system. A base unit that connects to the
24 functional device. A peripheral device, such as a dongle, that connects to
25 the processing device or laptop. And then finally, at least one fixed or
26 configurable endpoint that is an element of the peripheral device according

1 to the Patent Owner.

2 Moving to Slide 5, the '972 Patent at issue today admits that Figure
3 4 of the '972 Patent is identical to Figure 11 of Beel. On Slide 5, you see a
4 portion of the specification of the '972 Patent that identifies the WIPO
5 publication number of Figure 11 of Beel and says that it shows an
6 arrangement of components that can be used in embodiments of the present
7 invention. So both Beel and the '972 Patent have the same architecture.

8 Slide 6 illustrates Beel's Figure 11. Slide 7 illustrates the '972
9 Patent's Figure 4. They're identical, except for some numbering at the top.
10 They each illustrate a client PC connected to a dongle, and then the dongle
11 communicating with the base unit of Claim 1.

12 On to Slide 8, a major issue of this IPR that Patent Owner has
13 raised is whether the peripheral device receives media content. Paragraph
14 71 of Beel states expressly that the peripheral device receives media content
15 from the network for display on the display of the processing device. And I
16 have on the screen -- I don't know if Your Honors who are remote can see it.

17 JUDGE LANEY: I can see -- I can see your demonstratives.

18 MR. GREENLEAF: Okay. Well I have paragraph 71 up
19 highlighted, illustrating the peripheral device connected to the processing
20 device. The processing device having a display, and that's in the first
21 portion of paragraph 71. At the bottom of paragraph 71 is a third software
22 code portion in the peripheral device for receiving media content from the
23 network and for displaying the media content on the display of the
24 processing device. So the -- Beel expressly discloses receiving media
25 content.

26 On to Slide 9. Illustrates further information about the architecture

1 and the flow of data in the system. So the peripheral device or dongle is
2 illustrated in Figure 4 as a Wi-Fi transceiver, and you see that both in Figure
3 11 and Figure 4. And that's for communicating between the dongle and the
4 Wi-Fi access point of the base unit. And then the dongle can communicate
5 with the computer or processing device via the USB interface illustrated in
6 green.

7 Note that there are also endpoints. Mass storage device 12 in
8 Figure 11, mass storage device 8 in Figure 4. There's also the audio --USB
9 audio device 14 and --

10 JUDGE LANEY: Counsel --

11 MR. GREENLEAF: Yes.

12 JUDGE LANEY: -- are all mass storage devices endpoints?

13 MR. GREENLEAF: According to the USB specification, it
14 defines endpoints as devices with descriptors. So yes, the answer is yes.
15 According to the USB specification of mass storage device, this is a USB
16 mass storage device. So in this context, the answer is yes. I think even in
17 the context of other mass storage devices that are non-USB, such as serial
18 ATA or maybe a network-attached storage would be an endpoint too
19 because the '972 Patent states that it defines the endpoint broadly to include
20 any data source or sink. And --

21 JUDGE LANEY: So what -- help me understand better what a
22 data source and a data sink is. So is a data sink just anything that can store
23 data and a data source is just anything that is -- where sort of data originates
24 from?

25 MR. GREENLEAF: I think, yeah, a data source is something that
26 you can read from and a data sink is something that you could write to. So

1 for instance, this display is a sink. I'm writing -- my computer is writing
2 data to the display and therefore it is a sink.

3 JUDGE LANEY: So if you have something, for example, that it
4 says just transient, it's going from A then to B and then to C, is that still a
5 data source? If the data started somewhere at A, went to B, and then from B
6 went to C, would that still -- at C, even if it goes into memory, it's stored
7 there for whatever period of time it needs to in order to make the transaction
8 then go forward, would that be considered a data source? Or does a source
9 have to be where the data originates from?

10 MR. GREENLEAF: I believe there could be several sources and
11 sinks in a pipeline. Buffers, for example, could be both a data source and a
12 data sink. Slide 34 illustrates an example in the context of Miracast, in
13 which we have a primary dockee in the context of Van de Laar 320 that is a
14 data source. And then we have a base unit or what Van de Laar calls a
15 WHD 300, and 300 has a sink and a source. And the secondary dockee has
16 a sink.

17 So I think Your Honor is -- what Your Honor is talking about is
18 this arrow 311 goes from the source 320, and then 300 has a sink and then a
19 source, and then it goes to the secondary dockee 312. So that would be an
20 example of the intermediate device being both a sink and a source.

21 JUDGE LANEY: So in other words, what dictates whether
22 something is a sink or a source is how it's being used? Is that fair?

23 MR. GREENLEAF: Yeah. For example, network-attached
24 storage, you can either read or write to it. So it's both a sink and a source.
25 And sometimes you use it as a sink when you write data to it and sometimes
26 you use it as a source when you read data from it.

1 JUDGE LANEY: Okay. And the endpoints in this case that are at
2 issue are the claims required to be on the dongle, the peripheral device,
3 right?

4 MR. GREENLEAF: That is the Patent Owner's contention. I
5 think the claim was a bit vague, but --

6 JUDGE LANEY: Well, what's Petitioner's contention on that
7 question?

8 MR. GREENLEAF: It could be either. And the prior art teaches
9 both implementations because the endpoint of the display, for example, is an
10 endpoint, and the functional device -- the peripheral device also has an
11 endpoint, so they both have endpoints. Just in the scenario that we were just
12 looking at, the intermediate device has an endpoint and the destination
13 device has an endpoint.

14 JUDGE LANEY: Okay.

15 MR. GREENLEAF: So we talked about the data flow from the
16 functional device to the base node on Slide 10. That's step 1. And then the
17 transceivers, we talked about those, transmitting data between the base node
18 and the peripheral device. And then finally, step 3 is the peripheral device
19 receives media content and transmits it to the processing device, and that's
20 paragraph 71 that we've been discussing.

21 Moving on to Slide 11, it discusses two different types of
22 functional devices, a camera at the top of paragraph 120, and then it also
23 talks about a microphone. And both are connected to the base node. The
24 cameras are for recording progress in the meeting. The cameras can be
25 linked to the network.

26 Additionally, the microphones can be used to transfer audio data,

1 e.g. to the processing devices and to loudspeakers attached to the base node.
2 So the microphones transmit data to the processing devices and to the
3 loudspeakers attached to the base node, so the microphone data also goes
4 through the base node.

5 JUDGE LANEY: How do we know the microphones are sending
6 data through the network? Because it -- I mean, obviously when it talks
7 about cameras, it's saying that goes to the network. But the microphones, it
8 says it's just transferring the audio straight to the processing devices. And so
9 how do we -- I mean, what in Beel suggests -- well, I don't want to go to the
10 literature, I guess. I'm just trying to figure out from Beel, why, and am I
11 wrong, but why is it that that suggests that it's going from the dongle to the
12 processing device versus going straight to the processing device?

13 MR. GREENLEAF: There is no disclosure in Beel supporting
14 Patent Owner's contention that there is an audio port on the computer
15 attached to the microphones that Beel discloses. The only data path
16 disclosed in Beel for data to get to the processing device is the data path
17 we've just been discussing. The data comes from the base unit to the dongle
18 and then the processing device. That is the only way that Beel discloses data
19 getting to the client PC.

20 Now, could the PC have an audio port? It could be a different
21 embodiment of Beel, but Beel doesn't talk about that. It does talk about a
22 pathway of media content getting from the base unit to the external -- the
23 dongle peripheral device and then to the client PC. So yes, there could be
24 different embodiments, but the claimed embodiment is expressly disclosed
25 by Beel.

26 JUDGE LANEY: So Beel doesn't really describe or discuss

1 sending data from the base unit to the processing devices of the participants,
2 right? I mean Beel -- and I mean it seems like you're trying to tease out a lot
3 of that one little statement that seems somewhat ambiguous. If you could
4 just close that gap a little bit better for me, it would be helpful.

5 MR. GREENLEAF: So I don't agree with Your Honor that the
6 statement is ambiguous. Let's look at a third software code portion for
7 receiving media content from the network. The only media content from the
8 network is data such as the camera that we just looked at. The camera sends
9 data to the network. We also looked at microphone data being sent to the
10 network. Both of those are types of media content that is received by the
11 peripheral device here as described in paragraph 71.

12 So there's no other media content disclosed in Beel that could
13 possibly be other than the camera data or the microphone data to establish
14 the conferencing system that Beel talks about and that Dinka talks about.

15 JUDGE LANEY: Yeah, but we know the microphone isn't
16 necessary -- I mean the microphone isn't a microphone that's on the dongle,
17 right? I mean it says that it's a lapel microphone. Presumably a lapel
18 microphone is something that's going to be on somebody's lapel, such as an
19 announcer or participant speaker with a microphone that's attached to them.
20 So that's not a microphone and that's particularly what that statement is
21 talking about, right?

22 I mean it says 38 -- and the Figure 38 is an example of a lapel
23 microphone or maybe it doesn't say 38. Maybe it just says a microphone,
24 but the figure describes microphones that aren't necessarily part of the
25 dongle.

26 MR. GREENLEAF: Yeah. I mean Beel doesn't say whether it's

1 part of the dongle or not, but I think Your Honor is, you know, correctly
2 assuming that it wouldn't make sense for it to be part of the dongle. It would
3 be wired to the lapel or maybe it's wireless, and then it terminates
4 somewhere. But the data -- Beel does say the data is communicated to the
5 loudspeakers connected to the base node, and the only path for doing that is
6 via this Wi-Fi access point of the base unit.

7 So the microphone data gets to the base unit and to the loudspeaker
8 and it gets to the processing device. The only way to get to the processing
9 device is via the wireless transceiver of the USB dongle.

10 JUDGE LANEY: Well, we have the cameras that are going to the
11 base node through the network, right? So that's -- okay, never mind. I'll
12 figure it out.

13 MR. GREENLEAF: Okay.

14 JUDGE LANEY: Let's move on.

15 MR. GREENLEAF: All right. So I'd like to talk about endpoints
16 on Slide 13. Slide 13 is an omission from the '972 Patent about configurable
17 USB endpoints of the first peripheral device 130. Remember both Beel and
18 the '972 Patent illustrate the identical peripheral devices and it explains that
19 these endpoints can be an exact copy of the ones of the second peripheral
20 devices.

21 Again, we talked about the second peripheral devices having
22 endpoints too. The display, the speakers, the microphones are all also
23 endpoints. And so the endpoints of the peripheral device can be identical to
24 the endpoints of the functional devices. So the peripheral device and the
25 endpoint have identical endpoints.

26 And on to Slide 14. I'd like to point to this quote from paragraph

1 317 of Beel that talks about a virtual, Beel says virtual audio device in the
2 context of a virtual audio speaker. So virtual audio device is an example of
3 copying an endpoint because the PC is treating the peripheral device as a
4 virtual audio device such as you have a speaker or a microphone attached
5 directly to your laptop via the peripheral device, but it's really far away. It's
6 virtual. The true device is remote, but to the PC, the PC doesn't know that.
7 That's what Beel's talking about in paragraph 317.

8 On to Slide 15. Dinka and Christison reinforce the idea of
9 endpoints and how Beel's system could be used for data conferencing.
10 Dinka discloses -- and we'll move to Slide 16. So Beel essentially discloses
11 the plain system, the same exact architecture of the '972 Patent. The '972
12 Patent was issued because of the unified communication, which Dinka
13 discloses. The '972 Patent admits that Skype is an example of unified
14 communication, and that's what Dinka is using to communicate data in a
15 video conferencing system like Beel's.

16 And the combination would yield the predictable result of a
17 conferencing system using unified communication. And Christison
18 reinforces one way that the person of ordinary skill in the art would have
19 implemented the endpoints of Beel and Dinka.

20 If there are no questions on those issues, I'm going to move to
21 Slide 23. The Board asked in the institution decision for Patent Owner to
22 explain more clearly the distinguishing features that are required by the
23 endpoint limitations. Patent Owner has not done that. There are no
24 distinguishing features. The architecture is identical. Each has the same
25 endpoints, the USB audio, the mass storage, and the human interface
26 devices, the HID devices.

1 Dr. Brogioli does not provide much clarity on these issues. He
2 would not provide a construction of endpoint on Slide 24. He had no
3 opinion on whether the mass storage device that we were talking about
4 earlier was itself an endpoint. He had no opinion on the difference between
5 fixed or configurable endpoints. He could not identify any endpoints in
6 Figure 4 of the '972 Patent that claimed endpoints.

7 His rationale for not being able to answer these questions was that
8 he was only responding to the statements Dr. Almeroth made. So he would
9 not answer any questions beyond what he stated in his declaration. Page 25
10 is an example of him not answering questions about endpoints and then flip-
11 flopping, and later when presented with contrary evidence, agreeing that a
12 USB -- a mass storage device is an endpoint.

13 On to Slide 27. We'll talk about Ground 2 if there are no further
14 questions on Ground 1. Kaplan too essentially discloses the claimed
15 architecture. It has a processing device, it uses the same term 220, has a
16 peripheral device, a USB transmitter 120. It has a base unit, receiver 110,
17 and it has a functional device, display 210.

18 On to Slide 23. Van de Laar discloses bidirectional
19 communication with functional devices. One example is the SmartBoard
20 110 illustrated on page 29 -- Slide 29. So again, Kaplan discloses essentially
21 the claimed invention on Slide 30. You have Van de Laar --

22 JUDGE LANEY: Can I ask a just a more general broad question?
23 Why did Petitioner choose this second ground? In other words, why wasn't
24 it a one ground petition? What is it that this second ground adds or provides
25 that the first ground doesn't?

26 MR. GREENLEAF: One example is Van de Laar uses the term

1 sink and source. So one of Dr. Brogioli's arguments was that Beel doesn't
2 use the word endpoint and therefore does not disclose endpoint. So Van de
3 Laar uses the term sink and source which the patent defines as an endpoint.

4 So to answer Your Honor's question, both grounds are strong and
5 we can't anticipate what Patent Owner is going to argue, so we try to use
6 multiple grounds in case something unanticipated comes up.

7 JUDGE LANEY: Well, I can appreciate that. I'm just trying to
8 figure out what you think, okay, what you think the strength of one is over
9 the other and why it is you chose -- I mean, what are the strengths and the
10 weaknesses of each ground? I mean, you chose to do multiple grounds.

11 And presumably, just as you confirmed, you did it because you
12 can't anticipate everything, so you're doing two grounds to address different
13 issues. And I'm just trying to better understand your thinking as far as why
14 you thought it was necessary to have these different grounds in this case.
15 Because we have to address all the grounds. I'm just trying to figure out
16 what's the strength and the weaknesses of the different grounds.

17 MR. GREENLEAF: Yeah, I think they're both strong. They use
18 different terminology. But Patent Owner makes arguments saying that the
19 word endpoint is not there and therefore there's no endpoint. So I
20 understand. I'm sorry to make Your Honor's life more complicated by
21 having to address two grounds instead of one. But, you know, in my --

22 JUDGE LANEY: Well, that's not -- I mean, that's not the issue.
23 I'm just trying to figure out, I mean, why you chose, just on a fundamental
24 level, why you chose these different grounds to make sure I'm not -- I mean,
25 sometimes when you see different grounds, it's easy to understand why they
26 did the different grounds. I'm just trying to understand, you know. And so,

1 that's fine. You can move on. I just --

2 MR. GREENLEAF: Yeah. I've never seen, and I don't think I've
3 ever filed a one-ground re-exam or IPR, so I would just inherently be
4 reluctant to do that. And I've never seen one either. Your Honors have
5 probably seen a lot more than I have. It's just common practice. I think
6 there's a lot of prior art we could have used because this is so commonly
7 done.

8 So on to Slide 31. Your Honors talked about Kaplan and its walled
9 garden approach in some IPRs recently and found that Kaplan was not
10 limited to its walled garden embodiment and it could be combined with
11 other references. So the combination here with Van de Laar is similar to
12 other IPRs, and the motivation to combine Kaplan with Van de Laar is to
13 improve usability and allow multiple functional devices in addition to
14 display of Kaplan.

15 We saw Kaplan connects through display. Van de Laar connects
16 to additional functional devices, and Kaplan -- sorry, Van de Laar teaches
17 that there are advantages in doing that. And so that would be why somebody
18 would combine the two.

19 And how they would combine them, Kaplan uses commercially
20 available wireless communication standards on Slide 32, Van de Laar does
21 too. These are plug-and-play common off-the-shelf protocols and devices
22 that are cross-compatible so that the combination is straightforward. There
23 is also no dispute that Van de Laar teaches bidirectional data via the primary
24 dockees at least. And the primary dockees can also be secondary dockees.
25 They transmit and receive data in a videoconferencing system just like the
26 '972 Patent that's discussed on Slide 33.

1 Slide 34, we discussed. And I'll save the rest of my time for
2 rebuttal.

3 MR. HALVERSON: Good afternoon, Your Honors. Erik
4 Halverson from K&L Gates on behalf of Patent Owner Barco. I'm going to
5 be addressing Ground 1, the Beel Ground, as well as the secondary
6 considerations. My colleague, LEAP practitioner Josh Andrews, is going to
7 be addressing Ground 2, and I will do my best to make sure that we save
8 enough time for him.

9 So fundamentally, what the '972 Patent is is an advancement over
10 prior presentation technology. So the Beel reference, which we've talked
11 about a lot today, is an earlier iteration of a product where users could arrive
12 at a conference room where they didn't have access to the internet, didn't
13 have access to reconfigure the presentation situation in the room, plug in a
14 dongle, just like this, push the button, and start their presentation.

15 The '972 Patent is about wireless conferencing systems. And both
16 Beel and the '972 Patent differentiate wireless meetings -- excuse me,
17 wireless presentations from wireless conferencing.

18 And what this very specific claims of the '972 are directed towards
19 is a portion of the wireless conferencing situation where you have the ability
20 to utilize higher-quality technology in a conferencing room, like the cameras
21 in this room, where the data from that camera goes into a base unit, that
22 camera being a functional device, passing functional data of the camera, so
23 the video feed of the camera, into a base unit, that base unit communicating
24 to a peripheral, to a dongle, and then that dongle passing that functional data
25 back into a processing device or a laptop.

26 And when Petitioner was characterizing what the claims are, they

1 didn't really get into that last step, from the dongle back into the laptop. And
2 this is very important that we understand that this four-box three-hop system
3 is an information flow that doesn't exist in any of the prior art references.
4 What we have in the prior art is we have a series of other ways of
5 communicating other data in different directions.

6 And I want everybody to be on the same page as we go through
7 today's presentation about how we have a functional device communicating
8 functional data into a base unit, onto a peripheral, and then back to the
9 laptop. Now the '972 Patent describes different kinds of functional devices,
10 but not all functional devices send functional data in that direction. Speakers
11 and displays are not passing functional data back to the laptop. The kinds of
12 functional devices that are doing that are things like the microphones in this
13 room or the cameras in this room.

14 JUDGE LANEY: So just an overview question for you. I mean,
15 there's no doubt that the Beel, I mean, it's from the same company as the
16 patent at issue in this case. And there's no dispute that there's a great deal of
17 similarities between the two, right?

18 MR. HALVERSON: Correct, Your Honor. The same dongle, the
19 same hardware there is present, yes.

20 JUDGE LANEY: So is there anywhere in the patent at suit in this
21 case, where they describe or in general discuss what obstacles or hurdles or
22 what would have to be overcome to do what they do versus what was done
23 in the Beel patent?

24 MR. HALVERSON: Well, the Beel patent only discloses one
25 direction of that information flow. So as far as do what they do or the
26 hurdles there, I think if we look at, for example, in column 10 of the '972

1 Patent, there are some enumerated steps that are taken in order to get that
2 functional data from that functional device back into the processing device.
3 And that's the kind of thing that's not part of Beel.

4 JUDGE LANEY: Okay. And that's describing what it's doing. I
5 guess I'm -- I guess the part that I'm struggling with a little bit is, I do see the
6 architecture very, very similar. As I pointed out, was it Figure 11 is pretty
7 much -- Figure 11 from Beel is very similar to Figure 4. Yeah, Figure 4 in
8 the patent at issue. And so the structure's there. We're just talking about
9 operation. And it seems to be that Patent Owner's saying the big distinction
10 in operation is that data's flowing basically two directions and not just one.

11 MR. HALVERSON: Well, I think fundamentally I don't agree
12 with that.

13 JUDGE LANEY: Okay.

14 MR. HALVERSON: So Figure 4 has three of the four boxes. It
15 doesn't have a functional device in it. And that's the advancement of the
16 '972 Patent, is the ability to incorporate in functional devices that are not part
17 of the other Barco communication system. So you can incorporate this
18 camera or the mic in the room. And when you look at Figure 4 of the '972
19 Patent or Figure 11 of Beel, you don't have a functional device. You have
20 three of the four boxes.

21 JUDGE LANEY: You have three of the four boxes. So I have
22 Figure 4 in front of me.

23 MR. HALVERSON: So you've got a PC on the left, 160.

24 JUDGE LANEY: Yeah.

25 MR. HALVERSON: We've got the external dongle 130 in the
26 middle, and we have a base unit 100 on the right. We don't have a

1 functional device. We don't have a camera, and we don't have any
2 information flowing back in the other direction. We've got --

3 JUDGE LANEY: And that's my point, I mean, I understand the
4 direction of flow, but I guess in Beel, in Figure 11, where's the -- I mean, I
5 guess Figure 4, where's the functional device in Figure 4?

6 MR. HALVERSON: It's not in Figure 4. It's in Figure 5.

7 JUDGE LANEY: Correct. It's in Figure 5. I mean, Figure 5 -- so
8 the functional device, again, it's another device like the camera you pointed
9 out in the room. It's just communicating with it.

10 MR. HALVERSON: Correct, Your Honor.

11 JUDGE LANEY: Okay. Well, I guess that's the thing that I'm
12 struggling with. It seems as though Beel discloses a communication device.
13 It's designed to communicate, to allow participants to communicate during a
14 presentation. I understand it's different than a conference, but during a
15 presentation, it's communicating with a base node so everybody can share
16 that -- that screen, and you can -- anyone, any participant can be a presenter,
17 right?

18 MR. HALVERSON: Yeah.

19 JUDGE LANEY: And I don't think there's any dispute from you
20 or anybody that -- okay, so we're looking from the presenter's perspective,
21 the presenter's computer. He can send -- he can communicate all day long
22 with a base note. What I understand is what the dispute is here, what
23 everybody's -- the advancement that's being claimed by the '972 Patent is
24 that, okay, we're going to add two directions now. So now with that
25 communications, we're going to make it so that it can communicate back to
26 the presenter.

1 And why doesn't Beel lay the ground -- I guess what I'm trying to
2 better understand and would be helpful would be, not to necessarily show
3 me all the technical differences, because we're talking about obviousness,
4 right? And who's not an automaton, he's not some mindless techie who
5 doesn't think outside the box at all. This is supposed to be somebody with
6 ordinary skill.

7 And he's looking at a device that's already set up for
8 communication with generic protocols and can communicate over wireless
9 communications. I mean, where is that step that makes this non-obvious? I
10 mean, what is it, the barrier? What is the thing that made it so, hey, you
11 would have -- it's not intuitive. It's not something you would expect a
12 reasonable skilled person to do to take something that's designed for
13 communication and communicate two ways versus one.

14 MR. HALVERSON: So I don't want to oversimplify it down to
15 just communicating two ways versus one. But what it sounds like Your
16 Honor's question is, is there some evidence of unexpected results? And I
17 don't have evidence of unexpected results. But what I --

18 JUDGE LANEY: No, I --

19 MR. HALVERSON: Go ahead. I'm sorry.

20 JUDGE LANEY: Yeah, I'm not looking -- I don't mean to lead
21 you that direction. I'm just trying to be helpful for you in the sense that, just
22 pointing out technical differences isn't super persuasive at this stage. I
23 understand the burdens. I understand what they have to show. But I'm
24 asking -- what it seems like you're relying upon a lot is technical differences.
25 And I'm asking you to get more into some of the meat of explaining why it is
26 that their position's weak beyond just saying, well, it just says this, and that

1 doesn't say everything I want, or that it needs to say.

2 It doesn't leave room. I guess I don't want the argument just to
3 leave -- I want to leave some room for the fact that a reasonably skilled
4 artisan would look at it differently than, say, somebody on the street.

5 MR. HALVERSON: And I guess what we really have to do is
6 orient ourselves at that point in time and not with the aid of the '972. I don't
7 have a specific portion of the '972 Patent that I can point to and say, this is
8 the overly difficult aspect of this patent, and this is why it is a leap of
9 advancement beyond the Beel reference. But what I do have is a highly
10 sophisticated competitor in the marketplace, and in fact, the only other
11 competitor in the marketplace who has a license to this. And so --

12 JUDGE LANEY: And we'll get into that in the off section when
13 we separate, when we get into the confidential portion. Okay. In that case,
14 just -- I have nothing further.

15 MR. HALVERSON: Yes, Your Honor. So there were two aspects
16 of Beel that came up that I want to make sure that we do address. One of
17 which is Petitioner cited on Slide 14 of their demonstratives to paragraph
18 317 of Beel, and has a quote in there that I want Your Honors to go back and
19 look at what paragraph 317 is actually talking about.

20 317 stems off of 315 and 316 and again is talking about
21 embodiments of the invention that are passing audio packets from the
22 processing device to the base unit. It's not coming back. There's simply no
23 disclosure in Beel of anything coming back, let alone functional data of an
24 undisclosed functional device in Beel.

25 JUDGE LANEY: Now would a skilled artisan look at that and
26 say, well, that's because of the context in which we were describing it? A

1 skilled person would understand communications can go both ways, but
2 because the tool in which they're using to describe what they're disclosing is
3 in the context of a presentation, yes, they describe it in that direction. But a
4 skilled artisan would recognize that communication could likewise go the
5 other way.

6 (Off-microphone comments.)

7 JUDGE PETRAVICK: Excuse me. We can hear somebody
8 talking. Sorry.

9 MR. FAVOR: Whoever is speaking currently, could you please
10 mute? I don't know if it's you, Chuck, but we can hear you talking, if that
11 was you.

12 JUDGE PETRAVICK: My apologies.

13 MR. HALVERSON: Judge Laney, I apologize. There was a
14 question. I got the gist of it, but my understanding of it before I answer is, is
15 there something about the skilled artisan's knowledge or interpretation of
16 Beel that would not have led Beel into the claims of the '972. Is that right?

17 JUDGE LANEY: I guess I was more asking you, you're focusing
18 on the fact that the paragraph that he referred to, if looked in context, it's
19 clear that the direction of the communication is to the base station, not from
20 the base station to the processing device. And my question for you is, isn't
21 that -- for a person of skill in the art, wouldn't that be just simply a function
22 of the fact that what's being described is in the context of using this dongle,
23 using the system to present information?

24 So on that particular setup, yeah, you're going to describe it in a
25 way in which the information travels from the presenter to the base station.
26 However, a skilled artisan would recognize once you have the

1 communications established, that communication can go both directions.
2 And I'm not saying that's what it is. I'm just, I'm positing for you so that you
3 can respond to why isn't that just as reasonable of an interpretation.

4 MR. HALVERSON: So certainly, the communications could go
5 in both directions. Nobody is denying that that is a possibility based on the
6 disclosure there of a Wi-Fi-based hop from those three devices. But the
7 lacking disclosure in Beel is, is there that fourth device? And is there any
8 motivation to add a fourth device into a reference, into a combination where
9 there is no fourth device? So neither Beel -- yes, sir.

10 JUDGE LANEY: And that fourth device, you're referring to the
11 fact that the speaker or a camera or something that's at the base node that the
12 presenter, say, may want to take advantage of. Is that -- am I correct?

13 MR. HALVERSON: So there's a difference, I think, between the
14 speaker, which would be the ultimate recipient of audio data from the
15 processing device, from the laptop during a presentation, and a functional
16 device like a camera, which would send stuff back. The speaker is not going
17 to send functional data back to the processing device. There's just no reason
18 for it. And that's fundamentally where the issue sits with the Petitioner's
19 challenge is why are you doing it? Not could it be done, but why --

20 JUDGE LANEY: But the claims aren't limited to audio, are they?

21 MR. HALVERSON: They are not limited to audio, but they do
22 explicitly require functional data of the functional device to be sent back in
23 that other direction.

24 JUDGE LANEY: Right. But a camera with a functional data of
25 the camera in the room is to send data to me.

26 MR. HALVERSON: I agree.

1 JUDGE LANEY: Okay. So I guess --

2 MR. HALVERSON: That camera is not in Beel, though. And
3 that's our point.

4 JUDGE LANEY: Okay.

5 MR. HALVERSON: I want to make sure Mr. Andrews has
6 enough time. I will reserve the rest for after that other stuff happens.

7 MR. ANDREWS: Good afternoon, Your Honors. So my name is
8 Joshua Andrews, and I'm going to be addressing our arguments with respect
9 to Ground 2. And as I skip forward. Perfect. So again, the challenge
10 presented in the petition in Ground 2 does not identify this claimed
11 communication path where data is transmitted from a functional device
12 connected to or in a base unit back to the base unit, then to the first
13 peripheral device, and then to the PC or the processing device that's
14 connected to the peripheral device.

15 So taking first a look at Kaplan. As you see on the left, Kaplan
16 provides a transmitter, 120, a receiver, 110, and these devices provide
17 communication from a processing device or a computer, a desktop
18 computer, to a display. But the fact of the matter is that Kaplan's focus is
19 entirely on presentation. Its desire is to take some image or some video
20 that's on the laptop computer or the PC and communicate that to the
21 receiver. There's no discussion of communications in the opposite direction.

22 The Petitioners identified disclosure describing the transmitter and
23 the receiver as transceivers, but that's still not sufficient to provide
24 communication in the opposite direction.

25 JUDGE PETRAVICK: What's a transceiver for then if you're not
26 getting transmitting and receiving?

1 MR. ANDREWS: Yeah. So the --

2 JUDGE PETRAVICK: I mean, otherwise, that makes no sense,
3 because it's a transceiver. It's a transmitter-receiver, so it obviously is
4 transmitting something and receiving something.

5 MR. ANDREWS: Yeah. So let me clarify that there's no
6 transmission of functional data along that path. So the system in Kaplan,
7 again, it's a presentation. It's actually designed so the proprietary streams, as
8 you see on Slide 23, Table 1, so that no access is granted to the computer
9 from the transmitter. And that's the fundamental difference here is that the
10 system in Kaplan doesn't include a functional device that's providing data
11 over this claimed communication path.

12 And Van de Laar provides the same insufficiency. So Van de
13 Laar, just to work through some of the nomenclature here, we have a
14 wireless docking host, which is the -- the Petition had said you implement
15 features of the wireless docking host into the receiver of Kaplan in their
16 combination. Then you have these devices called dockees. So you have a
17 primary dockee and a secondary dockee. You can think of these devices as
18 mobile devices, laptops, computers.

19 And Van de Laar is pretty clear about the distinction between a
20 primary dockee and a secondary dockee. If you look at Figure 2 of Van de
21 Laar, you'll see there's a primary dockee labeled A -- labeled P. It's the
22 presenter. The primary dockee is sending content. Then you have a
23 secondary dockee.

24 The secondary dockee are receivers. They're receiving content.
25 You can think of it as like in a lecture setting. You have a professor.
26 They're the primary dockee. They're providing their PowerPoint

1 presentation. And then you have attendees. You have students who come
2 in. They're maybe running a little late. They want to be able to see the
3 display right on their screen rather than having to look all the way down the
4 lecture hall.

5 So the wireless docking host provides the opportunity for
6 information from the primary dockee that's being presented to be broadcast
7 to an individual's computer so they can better pay attention and better take
8 notes during the meeting.

9 And again here, we're talking about communication from a
10 computer, not from a functional device, being communicated wirelessly with
11 no peripheral device -- no first peripheral device as claimed in the '972
12 Patent to a wireless docking host, and then other groups of laptops that
13 receive information from the wireless docking host. And so, in this
14 challenge, there's no identification of the claimed communication path in
15 either Van de Laar or in Kaplan.

16 Now there's been an argument from the Petitioner that the primary
17 dockee, so the presenter, and the secondary dockee, which are the attendees,
18 are really interchangeable. That the primary dockee, the presenter, has both
19 control to the peripheral, and they can also receive data from the peripheral.
20 But that's not supported by Van de Laar's disclosure. If you look to
21 paragraph 60, which is on Slide 25, paragraph 60 explains that you have to
22 transform the primary dockee, the presenter, into a secondary dockee for
23 attending.

24 JUDGE LANEY: Counsel, is it your position that if it does not
25 expressly say it in the exact words used in the claims or the specification of
26 the challenged patent, that it's not disclosed to a skilled artisan? I mean, it

1 seems as though you may be reading some of these things a little bit too
2 narrow and I'd like to hear your position on that.

3 MR. ANDREWS: So I disagree that we're reading the claims too
4 narrow. I think the difference here is that we're relying on communications
5 more generally in the petition. There is communications from one device to
6 another device to another device in very different architectures. And when
7 you actually take a look at what these architectures are disclosing, it's not
8 communications that are in the way that the petition is characterizing it.

9 I think, for instance, if you think about the data that's actually
10 being communicated in the primary dockee, in the presenter, that's screen-
11 scraped data. Van de Laar describes using, on Slide 27, that's using
12 Miracast. So it's taking data from the processing device and communicating
13 it. And the fact of the matter is that there would be no reason to take a
14 screen-scraped data that's on a user's personal device that's sent to the
15 wireless docking host and then brought back to the processing device. The
16 user already has that information.

17 JUDGE LANEY: So tie this to what specific claim language do
18 you think is the point of distinction between what Petitioner has provided
19 and what's claimed?

20 MR. ANDREWS: So the distinction between the Ground 2
21 combination and what's claimed in the '972 Patent, there's really two points
22 of distinction. The first is on Slide 22. You have a base unit and a first
23 peripheral device being adapted to transmit and receive data respectively
24 over the communication network. So that's, again, the claimed
25 communication path that myself and Mr. Halverson have been describing.

26 And then the other difference, the other limitation, is with respect

1 to the claimed endpoint. So taking a step back and putting the fixer
2 configurable aspect to the side, the endpoint of the peripheral device is not
3 communicating data of the functional device. In, for example, Van de Laar
4 or in Kaplan --

5 JUDGE LANEY: So just -- hold on one second, just so I can
6 narrow this down so I can focus on it. You don't dispute that they have
7 endpoints. What you dispute is that they have endpoints that function as
8 claimed. Is that a fair characterization?

9 MR. ANDREWS: So I think the best way to describe it would be
10 that the references don't disclose endpoints. Now, to a person of skill in the
11 art, they may have understanding of endpoints that are inherent or disclosed
12 in those systems. But the endpoints --

13 JUDGE LANEY: No, no, no, hold on. Wait. You're saying they
14 don't disclose endpoints at all. What is your understanding of what an
15 endpoint is? Because, I mean, the patent describes and says -- instructs that
16 we should be applying it broadly. So if you could help me put some
17 boundaries on something that your patent tells me that I should put a broad
18 fence around, but help me build that fence. What is inside the fence, this
19 broad fence, and what's outside the fence?

20 MR. ANDREWS: Yes. And I think, again, we have to look back
21 to the claim language, and it's not the existence of endpoints. Endpoints
22 have existed in systems. It's the specific --

23 JUDGE LANEY: That's why I'm trying to narrow it down, and
24 you told me it doesn't have an endpoint. And that's where -- I mean, it
25 makes it confusing, because I understand the need not to give, but it helps to
26 focus me on what is really the crux of the dispute. And where I get lost is

1 you say it doesn't have an endpoint, but then your patent tells me an
2 endpoint is just a, you know, a source or a store, right? And it tells me I
3 should look at it broadly. So I do. I look at it as instructed.

4 And I'm looking at the prior art and it sure seems like -- just for the
5 initial question that I asked myself, does it have an endpoint? It sure seems
6 like it has an end point. Now that brings us to, you know, there's more to it.
7 And that's really what I'm trying to get you to help with. But I guess if
8 you're telling me that I have to start at the point of saying, you know, your
9 position is, no, it doesn't even have an endpoint. Okay.

10 MR. ANDREWS: So, no, we don't mean to be taking the position
11 that there is no endpoint in these prior art systems. I think the distinguishing
12 factor here is that the endpoint is, one, it's on the peripheral device. And,
13 two, that it's communicating data of the functional device. So looking at
14 Van de Laar, the relied on endpoints here, the Wi-Fi Miracast endpoints.
15 First, these are not endpoints of the peripheral device because there's no first
16 peripheral device involved in Figure 3 shown on Slide 27. And then the
17 second --

18 JUDGE LANEY: How would you characterize what Figure 3
19 -- help me understand how -- further develop that argument so I can ask
20 Petitioner about what exactly you're saying. Because it is more of a, you
21 know, abstract drawing. So why do you say what you just said --

22 MR. ANDREWS: Yes.

23 JUDGE LANEY: -- which is, it doesn't show peripheral device.

24 MR. ANDREWS: Yes. So in Figure 3, you'll see box 300. That's
25 the wireless docking host. 320, that's going to be the primary dockee, and
26 330, that's the secondary dockee. So in this figure, you don't have the

1 dongles that are connected to a computer. This is all occurring over the Wi-
2 Fi interface that Van de Laar utilizes. And so --

3 JUDGE LANEY: So analogize it to what, say, Beel shows, or
4 something. I mean, analogize it why this -- bring me a real world of what
5 exactly it's showing and where the dongle would go, but it's not.

6 MR. ANDREWS: Right. So in the '972 Patent, you have a dongle
7 that's connected to a processing device. And that processing device is the
8 device that communicates data, rather than it being the Wi-Fi transceiver
9 320 to 300. Or, really, it's three -- it's really the opposite direction of 320 to
10 300. You have a -- it's the opposite communication. So instead of having
11 information going from 320 to 300, you have information coming from a
12 functional device connected to 300 to 320.

13 JUDGE LANEY: So is 300 -- in Figure 3, are you saying -- you're
14 saying that 300 would be analogous to the processing device? I mean, in
15 300, what -- that's what I'm trying to figure out. In 300, what are you saying
16 would be, say, the node? What would be the processing device? And I
17 understand you're saying it doesn't have a dongle.

18 MR. ANDREWS: Yes.

19 JUDGE LANEY: I'm trying to -- what is the node? What is the
20 processing device in Figure 3 --

21 MR. ANDREWS: Yes. So --

22 JUDGE LANEY: -- on Slide 27 of Patent Owner's
23 demonstratives?

24 MR. ANDREWS: Yes. So 300, the petitions relied on 300 as
25 implementing features into the receiver of Kaplan. And I'm running a little
26 bit short on time, but 110, the petitions argue that features of 300 are being

1 implemented into 110 on Slide 23 of Figure 2. And unless there are any
2 further questions, I'm going to pass my time back to Mr. Halverson.

3 JUDGE LANEY: Okay.

4 MR. HALVERSON: I want to make sure that, Judge Laney, you
5 get an answer to your question on Figure 3. So 300 is the base unit. 320 is
6 the source of information. It could be considered something like a second
7 processing device. There's no disclosure in there of it having a functional
8 device. What it is, is it's a laptop of a professor. And then 330 is a
9 processing device, it's a laptop of a student. So in order for Figure 3 of Van
10 de Laar to map to the '972 Patent, you'd have to have a dongle that sat
11 between 330 and 300. And there's no dongle in Van de Laar.

12 And the issue with Kaplan is you have a one-to-one pre-paired
13 situation for that network, and that's on purpose. Kaplan's security protocols
14 require there to be only one receiver and one transmitter, and that's so that
15 you don't have this outside influence coming in. It doesn't work in a lecture
16 hall setting like what Van de Van de Laar is.

17 JUDGE LANEY: And so, in our analysis -- I appreciate the
18 security parameter. But wouldn't a skilled artisan recognize that that's just a
19 parameter and not something necessary? I mean, it's something that can be
20 adjusted. And so, it's not --

21 MR. HALVERSON: It's a core and exclusive --
22 (Simultaneous speaking.)

23 JUDGE LANEY: -- barrier to the combination they are trying to
24 make.

25 MR. HALVERSON: I'm sorry, Your Honor. It's a core and
26 exclusive embodiment. There is no disclosure of any other way of doing it.

1 JUDGE LANEY: Do they say that particular attribute is critical to
2 their invention operating the way they want it to operate? And by they, I'm
3 referring to Kaplan.

4 MR. HALVERSON: The pre-pairing aspect of Kaplan?

5 JUDGE LANEY: Yeah.

6 MR. HALVERSON: I don't have an answer for that. I will get it
7 to you the next time I come up. I do want to make sure that we have time
8 for the sealed portion of the hearing before I --

9 JUDGE LANEY: Okay. I'll leave you be then.

10 JUDGE PETRAVICK: Are you finished with your presentation?

11 MR. HALVERSON: I am. But I don't know if I should go in or
12 let them come up.

13 JUDGE PETRAVICK: I need to ask them. Thank you. You have
14 about five minutes -- five and a half minutes, we'll round it up to six, left. If
15 you'd like to use it now or during the confidential portion, it's up to you. I'm
16 sure Judge Laney would enjoy it if you could talk more about endpoints.

17 MR. GREENLEAF: All right. I think a big component of my
18 friend's discussion a moment ago was Beel does not have the --

19 MR. FAVOR: I'm sorry to interrupt, panel. Are we cutting the
20 public line?

21 JUDGE PETRAVICK: Not yet. We'll let you -- we will definitely
22 let you know exactly when to cut the public line.

23 MR. FAVOR: Thank you.

24 MR. GREENLEAF: I'm looking at Slide 16 of Patent Owner's
25 demonstratives. The camera is right there in Patent Owner's own
26 demonstratives from Beel, Figure 1A. Figure 1B also illustrates the camera

1 that is allegedly -- well, it illustrates additional functional device as the
2 display. Van de Laar, on paragraph 93, discloses the primary dockee having
3 read and write access to the display, while the secondary dockee may only
4 have read access. And this is discussed further in the Petitioner's reply,
5 pages 15 and 16, so that you can have multiple primary dockees each
6 sharing data with each other.

7 And then regarding the discussion about Van de Laar's multiple
8 ways of communicating data, Patent Owner pointed to Figure 3, illustrating
9 two embodiments. One was processing device to base unit back to another
10 processing device, or processing device to processing device directly. A
11 third is illustrated in Figure 1 of Van de Laar of the smart board transmitting
12 data to the base unit/host device and to all of the dockees, primary or
13 secondary, both. So there is no evidence that the '972 Patent is different
14 architecturally from any of the prior references, Beel in particular.

15 And regarding the locked IP address embodiment, I have an
16 answer for Your Honor regarding that question. In paragraph 21 of Van de
17 Laar, it talks about -- sorry. Paragraph 21 of Kaplan, it states, embodiments
18 of the present invention provide a walled garden approach in which no
19 configuration actions on the part of the user are needed.

20 And that walled garden approach was the argument Your Honors
21 rejected recently in additional IPRs that only one receiver and one
22 transmitter can exist. So that is only limited to some of Kaplan's
23 embodiments. It is not a requirement, to answer Your Honor's question.
24 And if there are no other questions, I'll reserve the rest of my time.

25 MR. HALVERSON: And I will have one short non-sealed portion
26 before we dive in.

1 JUDGE PETRAVICK: You can begin when you're ready.

2 MR. HALVERSON: Your Honor, before I sat down you asked
3 about disclosures from Kaplan, about whether or not Kaplan has any
4 disclosure of broader non-one-to-one pairings. And I would direct Your
5 Honors to the claims, which expressly recite, establishing a data connection
6 between a transmitter unit and the computing device, wherein the transmitter
7 unit includes a second wireless transceiver and a memory, and is configured
8 to perform two-way communications with only the receiver unit, and is
9 configured to not perform two-way communications with any other devices.
10 That's what Kaplan exists to do. And with that, Your Honor, I'm ready to go
11 into the sealed part.

12 JUDGE PETRAVICK: All right. Okay. So because we've asked
13 you quite a bit of questions during the main, we'd like to extend both of your
14 times by three minutes to give you a little bit more time during the
15 confidential portion. So I'm going to move time to 14:16. And Petitioner,
16 that'll give you about seven minutes.

17 MR. GREENLEAF: Thank you, Your Honor.

18 JUDGE PETRAVICK: Could you now please seal the public line
19 and let me know when it is sealed?

20 MR. FAVOR: Please stand by. Public line has been disconnected.
21 Thank you.

22 (Whereupon, the above-entitled matter went off the record at 2:34
23 p.m.)

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