

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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

v.

BARCO NV,  
Patent Owner.

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IPR2025-00598  
Patent 11,966,347 B2

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Before MEREDITH C. PETRAVICK, DAVID C. McKONE,  
and LISA A. MURRAY, *Administrative Patent Judges*.

McKONE, *Administrative Patent Judge*.

DECISION  
Granting Institution of *Inter Partes* Review  
35 U.S.C. § 314

## I. INTRODUCTION

Yealink (USA) Network Technology Co., Ltd., and Yealink Network Technology Co., Ltd. (collectively, “Petitioner”) filed a Petition (Paper 1, “Pet.”) requesting *inter partes* review of claims 1–31 of U.S. Patent No. 11,966,347 B2 (Ex. 1001, “the ’347 patent”). Barco, N.V. (“Patent Owner”) filed a Preliminary Response to the Petition (Paper 10, “Prelim. Resp.”).

We have authority to determine whether to institute an *inter partes* review. *See* 35 U.S.C. § 314; 37 C.F.R. § 42.4(a). The standard for instituting an *inter partes* review is set forth in 35 U.S.C. § 314(a), which provides that an *inter partes* review may not be instituted “unless . . . there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” For the reasons explained below, we institute an *inter partes* review of the ’347 patent.

## II. BACKGROUND

### *A. Related Proceedings*

The parties identify IPR2024-01436 (involving US 10,762,002), IPR2024-01437 (involving US 11,403,237), IPR2024-01438 (involving US 11,258,676), IPR2024-01439 (involving US 11,422,951), IPR2025-00491 (involving US 10,684,972), and IPR2025-00597 (involving US 11,966,346) as related to this proceeding. Pet. 2; Paper 6, 1–2. Patent Owner states that the ’347 patent is not presently asserted in any matter. Paper 6, 1.

*B. The '347 Patent*

The '347 patent relates to making functional devices available to participants of a meeting. Ex. 1001, 1:15–17. A functional device is a peripheral device connected to a base unit. *Id.* at 9:15–16. A functional device can be “a better camera that gives a wide . . . room view, a better microphone and better speakers.” *Id.* at 13:27–32. Figure 5 is reproduced below:

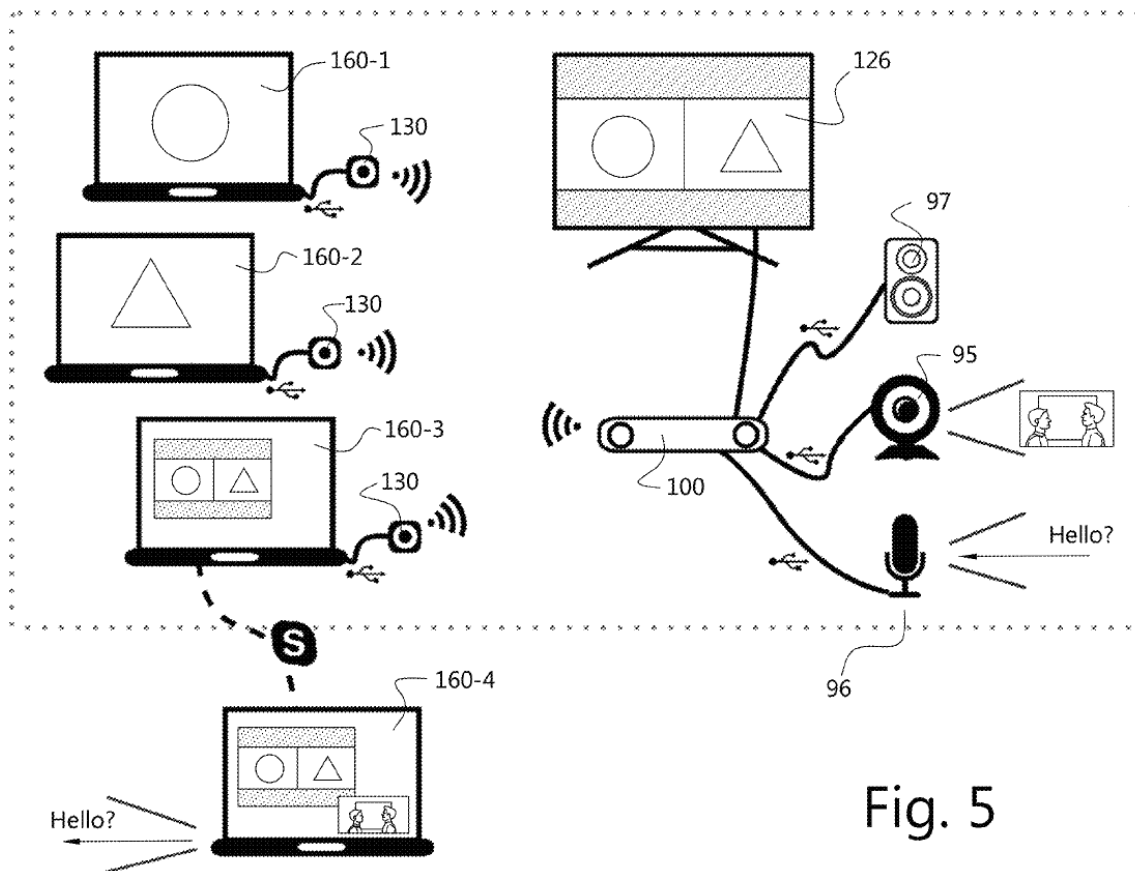


Fig. 5

Figure 5 is a drawing of an arrangement of processing devices as used in a meeting with a unified communication in progress. *Id.* at 5:53–55.

According to the '347 patent,

“Unified Communications system or tools” refers to audio or audio visual communications such as provided by “Skype™” or “Skype™ for business”. Such software can take over audio

and/or visual data provided from a host processing device. Unified communication tool can be described as a collection of tools to do VOIP, (web) conferencing, shared whiteboarding, message exchange (e.g. chat), file transfer, or presence.

*Id.* at 8:12–19.

Configurable USB endpoints are configured when pairing first peripheral device 130 with base unit 100 or over a wireless connection between processing device 160 and base unit 100. *Id.* at 18:10–13.

Configured USB endpoints expose second peripheral devices (e.g., functional devices 91–93), which can be interpreted as custom drivers, vendor specific drivers, or default OS drivers. *Id.* at 18:13–16.

Data for display on display 126 from a second peripheral device (functional devices 91–93) can flow into base unit 100 or can be captured in base unit 100, and can be interpreted, processed, enhanced, encoded, and/or encrypted using firmware of base unit 100 to generate processed data. *Id.* at 18:39–45. These processed data are sent to first peripheral device 130 through the wireless link. First peripheral device 130, if necessary, decodes, decrypts, processes, and/or interprets the data and makes them available through one or more USB endpoints of first peripheral device 130. *Id.* at 18:45–51. These data are then captured by the operating system of processing device 160 and made available through a custom or standard driver to either the host application or a 3rd party application running on processing device 160 or to other processing devices 160 of other participants of the meeting. *Id.* at 18:51–57.

Data from the host application and/or 3rd party applications running on processing device 160 are sent to a USB endpoint of first peripheral device 130 through the system (standard generic) drivers and the USB port.

*Id.* at 18:58–64. First peripheral device 130 receives these data via firmware of first peripheral device 130, which processes, enhances, encodes, and/or encrypts the data and sends them through the wireless link to the base unit 100, which receives the data via firmware. *Id.* at 18:64–19:2. Base unit 100 decrypts, processes, decodes, and/or enhances the data and forwards them to the appropriate functional device connected to base unit 100. *Id.* at 19:2–7.

Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A method for connecting a processing device to a functional device, the functional device being connected to or in a base unit of a communications network, the processing device having a memory, a display and an operating system, wherein the processing device hosts a host application, further comprising: a first peripheral device being configured to be coupled to the processing device via a generic communications protocol, the base unit having a transmitter and the first peripheral device having a receiver and at least one fixed or configurable endpoint of the functional device is exposed on the first peripheral device, the method further comprising:

the base unit being configured to transmit and the first peripheral device being configured to receive first processed video data over the communications network,

the functional device being configured for first video data to flow into the base unit or first video data is captured in the base unit, the first video data being processed in the base unit to generate the first processed video data, wherein the first processed video data is sent to the first peripheral device, the first peripheral device being configured to process the first processed video data received by the first peripheral device to generate second video data, the first peripheral device being configured to make the second video data available through the

at least one fixed or configurable endpoint of the first peripheral device, the operating system of the processing device being configured to capture the second video data and to make it available through a custom or standard driver to either the host application or a 3<sup>rd</sup> party application running on the processing device or to other processing devices,

wherein third video data, received from the host application and/or from the 3<sup>rd</sup> party application running on the processing device, is sent to an endpoint of the first peripheral device via a standard generic driver, the first peripheral device receiving the third video data and processing the third video data to form second processed video data, and

wherein the base unit receives the second processed data, and decodes and/or enhances the second processed data and forwards it to a functional device which is connected or attached to the base unit through a serial connection.

*C. Evidence*

Petitioner relies on the references listed below (Pet. 3).

	<b>Reference</b>	<b>Date</b>	<b>Exhibit No.</b>
Beel	US 2015/0169477 A1	June 18, 2015	1005
Dinka	US 8,369,498 B2	Feb. 5, 2013	1006
van de Laar	US 2016/0014172 A1	Jan. 14, 2016	1007
Kaplan	US 2010/0295994 A1	Nov. 25, 2010	1008
Christison	US 7,761,627 B2	July 20, 2010	1011

Petitioner also relies on alleged Applicant Admitted Prior Art (AAPA) to demonstrate how a skilled artisan would have understood the teachings of the prior art. Pet. 16 (citing Ex. 1001, 5:47–52, 8:4–9, 8:12–16, 8:65–9:12).

Petitioner also relies on the Declaration of Kevin C. Almeroth, Ph.D. (Ex. 1002).

*D. The Asserted Grounds of Unpatentability*

Petitioner contends that claims 1–31 are unpatentable under the following grounds. Pet. 3.

<b>Claims Challenged</b>	<b>35 U.S.C. §</b>	<b>References</b>
1–31	103 <sup>1</sup>	Beel, Dinka
1–31	103	Beel, Dinka, Christison
1–31	103	van de Laar, Kaplan
1–31	103	van de Laar, Kaplan, Christison

III. ANALYSIS

*A. Level of Ordinary Skill in the Art*

Petitioner, relying on the testimony of Dr. Almeroth and alleged admissions by Patent Owner in litigation, contends that a person of ordinary skill in the art would have had “a Master of Science (M.S.) degree in electrical engineering or computer science, and five years of work experience in a related field” and that “[a]dditional educational experience could substitute for some of the work experience.” Pet. 5 (citing Ex. 1002

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<sup>1</sup> The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284, 287–88 (2011), amended 35 U.S.C. § 103. Because the ’347 patent was filed after March 16, 2013, the effective date of the relevant amendment, the AIA version of § 103 applies.

¶¶ 36–37). “Patent Owner does not dispute Petitioner’s proposed level of skill in the art at this time.” Prelim. Resp. 6. For purposes of this Decision, we adopt Petitioner’s description of the level of ordinary skill in the art, as it is consistent with the technology described in the ’347 patent and the asserted prior art. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001).

### *B. Claim Construction*

We construe a claim

using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. [§] 282(b), including construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.

37 C.F.R. § 42.100(b); *see also Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). Petitioner proposes constructions of several claim terms. Pet. 6–11. “Patent Owner accepts the Petition’s claim construction for the purposes of” the Preliminary Response. Prelim. Resp. 6.

Based on the record before us, we do not find it necessary to provide express claim constructions of any claim terms. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (noting that “we need only construe terms ‘that are in controversy, and only to the extent necessary to resolve the controversy’”) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

*C. Alleged Obviousness over Beel, Dinka, and (optionally)  
Christison*

Petitioner contends that claims 1–31 would have been obvious over Beel, Dinka, and, optionally, Christison.<sup>2</sup> Pet. 16–42.

A claim is unpatentable under 35 U.S.C. § 103 “if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains.” We resolve the question of obviousness on the basis of underlying factual determinations, including (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) objective evidence of nonobviousness, i.e., secondary considerations.<sup>3</sup> *See Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

For the reasons explained below, we are persuaded that Petitioner has made a sufficient showing as to at least one claim.

*1. Overview of Beel*

Beel is directed to electronic tools for meetings. Ex. 1005 ¶ 1. Figure 1A, reproduced below, illustrates an example:

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<sup>2</sup> Because we determine that Petitioner’s allegations are sufficient as to Beel and Dinka, we do not, at this stage of the proceeding, address Petitioner’s additional allegations as to Christison.

<sup>3</sup> The record does not include allegations or evidence of objective indicia of nonobviousness.



device 48. *Id.* ¶ 117. Base node 36 is connected to network 50 via connection unit 49. *Id.* ¶ 118. Base node 36 is coupled to display 44 (e.g., a projector and/or screen). *Id.* ¶ 119. Cameras 39, 40, 41, microphone 38, and loud speakers (not shown) are attached to base node 36, and their outputs can be stored digitally in base node 36. *Id.* ¶¶ 120–121.

In one example,

The peripheral device preferably acts as a composite device comprising for instance a (virtual) audio speaker device. However instead of operating like a speaker the audio is channeled over the communications network. The peripheral device can preferably capture the audio stream with a device driver, for instance a built in ALSA UAC1, and stream the audio to the base unit.

*Id.* ¶ 317.

## 2. *Overview of Dinka*

Dinka describes a television apparatus having an embedded processing apparatus for conducting voice or video calls via a packet-based network. Ex. 1006, 1:12–14. Figure 1 of Dinka, reproduced below, illustrates an example:

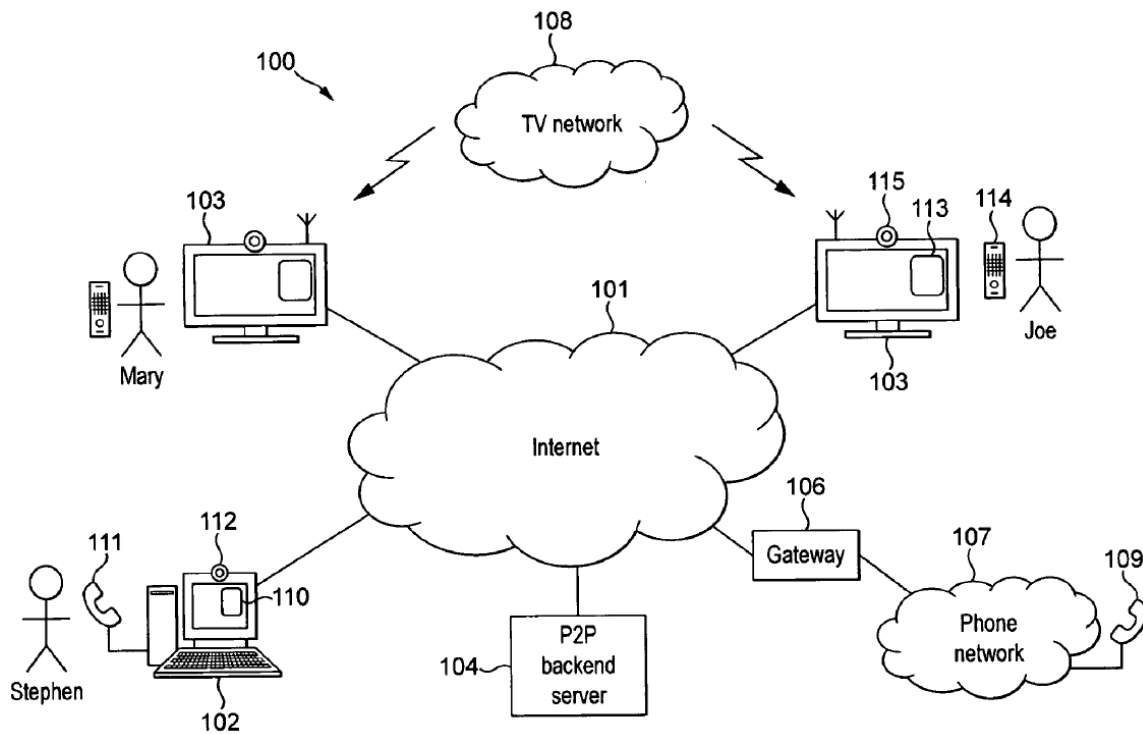


FIG. 1

Figure 1 is a schematic drawing of a communication system. *Id.* at 5:22–23. Computer terminals 102 and televisions 103 are coupled to Internet 101. *Id.* at 5:45–49. Each computer terminal 102 includes client application 110, audio transceiver 111 (speaker and microphone), and webcam 112. *Id.* at 6:7–12. Each television 103 includes a processor and memory with communication client application 113, webcam 115, and an audio transceiver. *Id.* at 6:13–22. Television 103 is a dedicated television unit in that its primary purpose is as a television, and at the same time it is provided with secondary embedded functionality such as voice-over-Internet Protocol (VoIP) calling. *Id.* at 7:17–21. Communication client applications 110 and 113 are peer-to-peer clients for setting up and conducting VoIP calls. *Id.* at 6:23–26.

3. Overview of Christison

Christison relates to improving the throughput of Certified Wireless Universal Serial Bus (WUSB) wire adapter systems. Ex. 1011, 1:20–23.

Figure 10 of Christison, reproduced below, illustrates an example:

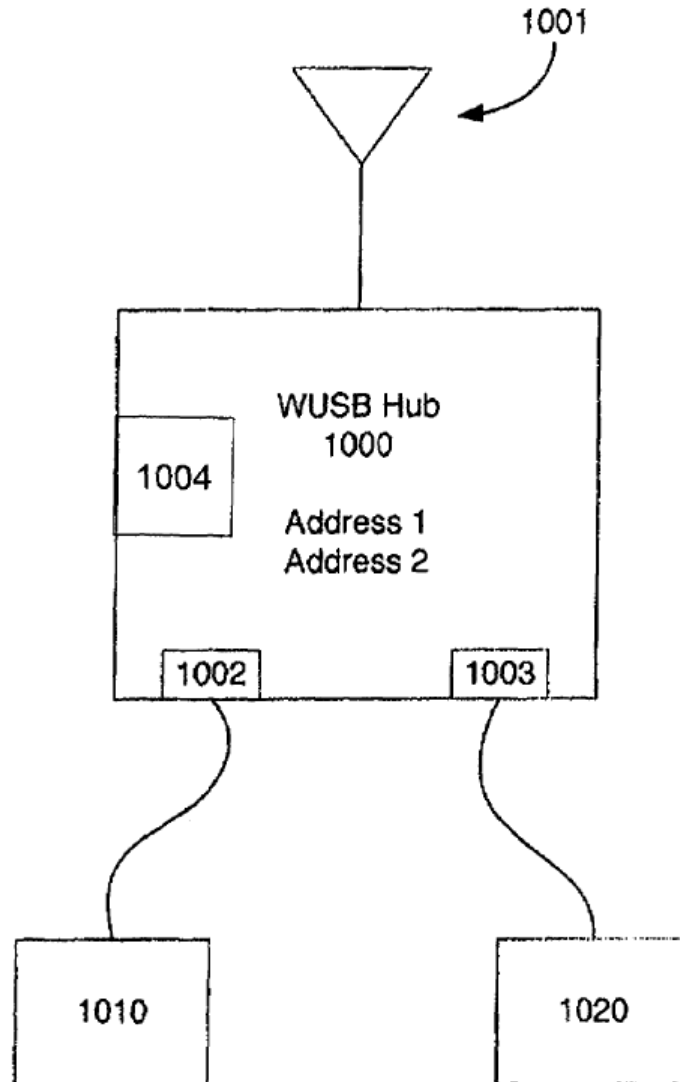


Fig. 10

Figure 10 is a block diagram of a WUSB. *Id.* at 2:52–53. Proxy WUSB Hub 1000 has wireless upstream port 1001 and one or more wired USB downstream ports 1002, 1003, wherein wired USB devices 1010, 1020 may

be plugged into the downstream wired USB ports. *Id.* at 6:20–24. Proxy WUSB Hub 1000 presents wired USB devices 1010, 1020 such that they appear to the host system as if they are “native” WUSB devices. *Id.* at 6:17–19, 6:24–26.

#### 4. Claims 1–31

- a) Claim 1 uncontested limitations: preamble, processing device, base unit, functional devices, and peripheral device

As to the preamble of claim 1,<sup>4</sup> Petitioner contends that Beel’s processing devices 31 teach “a processing device”; cameras 39, 40, 41, microphones 38, and loudspeakers are “functional device[s]”; and base node 36 is a “base unit.” Pet. 18 (citing Ex. 1005 ¶¶ 40–41, 88, 93, 117–118, 120, 194–199, 225, 288, 310, 319–323, Figs. 1a, 1b; Ex. 1002 ¶ 106). Petitioner contends that processing device 31 has “a memory, a display and an operating system” and “hosts a host application,” as recited in claim 1. *Id.* at 19 (citing Ex. 1005 ¶¶ 41, 45, 51, 56, 59, 64, 68, 71, 94, 117, 125, 142, 196, 247–248, 310; Ex. 1002 ¶¶ 107–109).

Petitioner further contends that Beel describes “a first peripheral device being configured to be coupled to the processing device via a generic communications protocol,” as recited in claim 1. *See id.* at 19–20 (citing Ex. 1005 ¶¶ 54, 58, 125, 195, Fig. 10 (showing an external USB dongle); Ex. 1002 ¶¶ 110–112, 155). Petitioner argues that base node 36 has a transmitter (transceiver 63) and that dongle/connection unit 47 (shown in

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<sup>4</sup> Because we determine that Petitioner’s allegations that Beel discloses the limitations of the preamble of claim 1 are sufficient (and, as yet, unchallenged), we need not determine whether the preamble is limiting.

Fig. 1a) includes a receiver (transceiver 62). *Id.* at 20–21 (citing Ex. 1005 ¶¶ 113–114, 12, 125, 288; Ex. 1002 ¶¶ 128–129, 157). Petitioner further contends that Beel’s peripheral device acting as a composite device to interface with mass storage device 12, USB audio device 14, and USB HID device 13 is an example of “at least one fixed or configurable endpoint of the functional device is exposed on the first peripheral device,” as recited in claim 1. *Id.* at 21–22 (citing Ex. 1005 ¶¶ 43, 50, 56, 71, 75, 93, 119–122, 126, 132, 298, 310–317, 320–323, Fig. 11; Ex. 1002 ¶¶ 115–118, 158).

Patent Owner does not challenge, at this stage of the proceeding, that Beel teaches these aspects of claim 1. We determine that Petitioner’s evidence is sufficient, at this stage, to show that Beel teaches these aspects of claim 1.

b) Claim 1: first peripheral device configured to receive first processed video data

Claim 1 recites “the base unit being configured to transmit and the first peripheral device being configured to receive first processed video data over the communications network.” Petitioner contends that Beel describes a peripheral device receiving media content from the base node over a network and causing the data to be displayed on a display of the processing device. Pet. 23–24 (citing Ex. 1005 ¶¶ 50, 56, 71, 75, 88–89, 93, 118–122, 126, 128, 298, 310–311; Ex. 1002 ¶¶ 121, 159).

Patent Owner responds that “the Petition relies on disclosure of communications from the mapped processing device to the mapped base node, that is, in the opposite direction.” Prelim. Resp. 23. For example, Patent Owner argues that Beel, at ¶¶ 71–72, “describes software that

connects a processing device to a network via a peripheral device, and provides display data from that processing device over the network to a display which is configured to display the content.” Prelim. Resp. 23.

According to Patent Owner, “[t]he Petition presents no evidence that data is communicated from the claimed functional device to the claimed processing device, and instead relies on data flowing in the opposite direction as is claimed, without explanation.” *Id.* at 23–24.

Beel describes:

a peripheral device is provided for providing communication connectivity to a processing device which is provided with memory, a display and an operating system with at least one pre-installed generic driver the peripheral device comprising a memory in which executable software code is stored for execution on the processing device, said executable software code comprising:

...

a third software code portion for receiving media content from the network and for displaying the media content on the display in accordance with a set of rules; wherein the first software code portion is adapted to use the generic communication protocol for transferring the media content between the peripheral device and the processing device.

Ex. 1005 ¶ 71. Here, consistent with Petitioner’s assertions (and contrary to Patent Owner’s), Beel describes a processing device with a display, a peripheral device connected to the processing device, the peripheral device receiving media content from a network, and displaying the media content on the display of the processing device. Beel teaches that the sources of media content, e.g., cameras and microphones, are coupled to the base node, which is coupled to the processing device via the peripheral device and the network. *Id.* ¶¶ 119–120. Thus, we determine that Petitioner’s evidence is

sufficient, at this stage, to show that Beel teaches “the base unit being configured to transmit and the first peripheral device being configured to receive first processed video data over the communications network,” as recited in claim 1.

c) Claim 1: first video data processed in the base unit

Claim 1 recites

the functional device being configured for first video data to flow into the base unit or first video data is captured in the base unit, the first video data being processed in the base unit to generate the first processed video data, wherein the first processed video data is sent to the first peripheral device.

Petitioner contends that Beel describes that video data flows into, and is captured by, base node 36 from cameras 39, 40, 41 and whiteboard 45, that base node 36 processes the video data, and that base node 36 sends the processed video data to the peripheral device attached to processing device 31. Pet. 24–25 (citing Ex. 1005 ¶¶ 41, 71–72, 88, 119–120, 310, 315–323, Figs. 1a, 1b; Ex. 1002 ¶¶ 122–123, 160).

Patent Owner responds that the disclosure in Beel identified by Petitioner is irrelevant and that Beel does not teach video data being processed in the base unit or sent to the first peripheral device. Prelim. Resp. 25 (citing Ex. 1005 ¶¶ 71–72, 119–120, 315–323). Patent Owner argues that Petitioner has only identified audio communications from the processing device to the base node, rather than video communications from the base node to the peripheral device. *Id.* (citing Ex. 1005 ¶¶ 71–72).

Beel describes sources of video data, including whiteboard 45 and cameras 39, 40, 41, coupled to base node 36. Ex. 1005 ¶¶ 119–120. Base node 36 is described as “a processing device, e.g. a host computer adapted to

receive user selected arbitrary media content.” *Id.* ¶ 123. Beel describes that data from optional equipment coupled to base node 36 “can be used to transfer audio, e.g. to the processing devices.” *Id.* ¶ 120. Although audio is mentioned specifically, we read this as an example, and understand from Beel’s description that other optional equipment, e.g., cameras, would supply video data to be transferred via base node 36 to the processing devices. *Id.* Thus, Beel is consistent with Petitioner’s arguments, and not Patent Owner’s.

Moreover, as noted above, Beel, including at paragraphs 71 and 119–120, describes sending video data from the base station to the first peripheral device for display on a display of the processing device. This, too, is consistent with Petitioner’s arguments, and not Patent Owner’s.

On the current record, we determine that Petitioner’s evidence is sufficient to show that Beel teaches

the functional device being configured for first video data to flow into the base unit or first video data is captured in the base unit, the first video data being processed in the base unit to generate the first processed video data, wherein the first processed video data is sent to the first peripheral device, as recited in claim 1.

d) Claim 1: video data from the first peripheral device to the processing device

Claim 1 recites “the first peripheral device being configured to process the first processed video data received by the first peripheral device to generate second video data.” Petitioner argues that Beel describes the peripheral device as unpacking, receiving, decrypting, and/or decoding video

data and inserting them into a composition for display. Pet. 25 (citing Ex. 1005 ¶¶72, 322; Ex. 1002 ¶¶ 124, 161).

As to “the first peripheral device being configured to make the second video data available through the at least one fixed or configurable endpoint of the first peripheral device,” as recited in claim 1, Petitioner refers to its earlier identification of exposing an endpoint of a functional device on the first peripheral device. *Id.* at 25 (incorporating *id.* at 21–22). Since the first peripheral device communicates video data from cameras to the processing device, Petitioner argues that the peripheral device makes such data available through the endpoint of the peripheral device. *Id.* at 25–26 (citing Ex. 1005 ¶¶ 56, 119–120; Ex. 1002 ¶¶ 125, 162).

Patent Owner does not challenge, at this stage of the proceeding, that Beel teaches these limitations of claim 1. We determine that Petitioner’s evidence is sufficient, at this stage, to show that Beel teaches these limitations.

e) Claim 1: 3rd party application; reasons to combine Beel and Dinka

Claim 1 recites “the operating system of the processing device being configured to capture the second video data and to make it available through a custom or standard driver to either the host application or a 3rd party application running on the processing device or to other processing devices.” Petitioner contends that Beel teaches that the processing device receives, decrypts, decodes, and makes data from cameras 39, 40, 41 available via drivers to a web conferencing system. Pet. 26–27 (citing Ex. 1005 ¶¶ 5, 14,

23, 25, 41–43, 71–72, 79, 85–89, 95, 119, 137, 174, 187, 205, 221, 252–253, 313, 317–323, Fig. 1; Ex. 1002 ¶¶ 122–128, 163).

Petitioner argues that the Skype application, as described in Dinka, is an obvious example of a 3rd party application that would have run on Beel’s system to capture audio and video on the processing device and implement the web conferencing system described in Beel. *Id.* (citing Ex. 1006, 9:40–45; Ex. 1002 ¶¶ 128–129, 163). Dr. Almeroth testifies that a skilled artisan would have recognized that Dinka’s process of making a webcam input available for a bidirectional Skype conference would have been an obvious way to integrate Beel’s wirelessly connected functional devices connected to the base unit. Ex. 1002 ¶ 129 (citing Ex. 1006, 9:40–45).

Petitioner argues that the combination of Beel and Dinka would have resulted in “using [the] well-known and widely used Skype application for bidirectional unified communications to build on Beel’s data sharing technology.” Pet. 17; *see also id.* at 16 (“Dinka is a patent directed to the commonly used Microsoft Skype platform, which is an example application for bidirectional unified communication calls, as defined by the ’347 patent.” (citing Ex. 1006, code (73) (Assignee); Ex. 1001, 3:1–9, Fig. 1C)). Appellant argues that Beel describes “electronic meeting systems” and “web conferencing systems,” Ex. 1005 ¶¶ 85–89, and that the ’347 patent admits that Skype and pre-installed generic drivers are known ways to perform such web conferencing. *Id.* at 17 (citing Ex. 1001, 8:12–33; Ex. 1002 ¶ 103). Dr. Almeroth testifies that “Skype was a well-known and established technique for improving similar systems in the same manner” and that “[t]he combination of these teachings would yield the predictable result of a web conferencing system employing software, such as Skype, for hosting unified

communication calls while also utilizing one or more functional device's capabilities." Ex. 1002 ¶ 103.

Patent Owner argues that Dr. Almeroth does not provide a reason why a skilled artisan would have been motivated to combine Beel and Dinka, and that, instead, he "summarily concludes that Skype's status as 'well-known' somehow would have motivated the combination of Dinka with Beel."

Prelim. Resp. 15–16. We disagree. Dr. Almeroth testifies that Skype, as taught in Dinka, would have been an example of the type of application that would have run on Beel's system and that applying Dinka's teachings would have improved Beel's similar system in the same manner as it improved Dinka's, with predictable results. Ex. 1002 ¶¶ 103, 129. *See also KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007) ("[W]hen a patent 'simply arranges old elements with each performing the same function it had been known to perform' and yields no more than one would expect from such an arrangement, the combination is obvious." (quoting *Sakraida v. Ag Pro, Inc.*, 425 U.S. 273, 282 (1976))). On the current record, including Dr. Almeroth's testimony, Petitioner's proposed reasons to combine the teachings of Beel and Dinka have rational underpinning.

Patent Owner also argues that Dinka teaches away from the claimed subject matter. Prelim. Resp. 18–21. Patent Owner argues that "[t]he claimed process provides for use of higher quality functional devices (e.g., the audio devices (96 and 97) and webcam (95)) as well as the display to be provided to the processing device, rather than relying on low quality options of the processing device 160-3 during the virtual meeting." *Id.* at 19 (citing Ex. 1001, 1:22–24, 1:49–52). However, Patent Owner argues, "Dinka actively criticizes, discourages, and discredits hosting unified

communications protocol on a processing device (e.g., laptop, mobile device, or computer), the very solution presented by the '347 Patent.” *Id.* at 20. Specifically, Patent Owner (Prelim. Resp. 20–21) points to Dinka’s statements that accessing packet-based communications using a personal computer “has the disadvantage that the user must be sufficiently technically competent to download, install and operate the packet-based communication client software on their personal computer, which provides a barrier to the take up,” that “personal computers are often not located in a place where the user is either familiar or comfortable with communicating,” and that “mobile devices . . . generally do not have processing resources or display screens available to offer a full range of features, such as video calling.” Ex. 1006, 2:4–18.

“A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant.” *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994). Patent Owner’s argument is unpersuasive at least because Dinka expressly describes using VoIP technology on computer terminals 102. Ex. 1006, 5:45–48 (“A plurality of computer terminals 102 are shown coupled to the Internet 101, each comprising a network interface for communicating over the Internet.”), 6:7–8 (“Each computer terminal 102 is installed with a communication client application 110.”), 6:23–26 (“The communication client applications 110 [of computer terminals 102] and 113 [of television sets 103] are preferably peer-to-peer clients for setting-up and conducting VoIP calls according to peer-to-peer principles as discussed above.”). Thus, Dinka does not lead a skilled artisan in a direction divergent

from the path taken in the '347 patent. Moreover, “[a] reference may be read for all that it teaches, including uses beyond its primary purpose.” *In re Mouttet*, 686 F.3d 1322 1331 (Fed. Cir. 2012). Thus, even though Dinka expresses a preference for conducting VoIP calls using a television set, a skilled artisan still would have considered Dinka’s teaching of using computers for such calls. *See id.* at 1334 (“This court has further explained that just because better alternatives exist in the prior art does not mean that an inferior combination is inapt for obviousness purposes.”). Patent Owner’s teaching-away argument is unpersuasive.

On the current record, Petitioner has shown sufficiently that Beel and Dinka teach “the operating system of the processing device being configured to capture the second video data and to make it available through a custom or standard driver to either the host application or a 3rd party application running on the processing device or to other processing devices,” as recited in claim 1.

f) Claim 1: undisputed remaining claim terms

Claim 1 recites “wherein third video data, received from the host application and/or from the 3rd party application running on the processing device, is sent to an endpoint of the first peripheral device via a standard generic driver.” Petitioner points to Beel’s description of software executed on processing device 31 that captures video data, such as screen scraped data, on the processing device and sends the data to the peripheral device. Pet. 28 (citing Ex. 1005 ¶¶ 40–42, 50–51, 56, 64, 66, 68, 70–71, 73–74, 161, 205, 320; Ex. 1002 ¶¶ 130, 164).

As to “the first peripheral device receiving the third video data and processing the third video data to form second processed video data,” as recited in claim 1, Petitioner points to description in Beel of transferring media content between the processing device and the peripheral device and the peripheral device unpacking received video packets and transmitting them to the network. *Id.* at 28–29 (citing Ex. 1005 ¶¶ 41–42, 56, 64, 68, 71, 73–74, 205, 321; Ex. 1002 ¶¶ 132, 165). Petitioner further argues that Dinka teaches that it would have been obvious to process video signals using encoding and decoding. *Id.* at 29 (citing Ex. 1006, 9:45–48; Ex. 1002 ¶¶ 133, 165).

As to “wherein the base unit receives the second processed data, and decodes and/or enhances the second processed data and forwards it to a functional device which is connected or attached to the base unit through a serial connection,” as recited in claim 1, Petitioner points to description in Beel that base node 36 receives media content, unpacks and decodes the content, and sends it for display on a central display device. *Id.* at 29–30 (citing Ex. 1005 ¶¶ 23, 67, 70, 72, 119, 123, 139, 142, 144, 155, 162, 169, 211, 315–317, 322–323, Fig. 11; Ex. 1002 ¶¶ 134–136, 166).

Aside from arguing that a skilled artisan would not have combined Beel and Dinka (which we find unpersuasive, as explained above) Patent Owner does not challenge, at this stage of the proceeding, that Beel and Dinka teach these aspects of claim 1. We determine that Petitioner’s evidence is sufficient, at this stage, to show that Beel and Dinka teach these aspects of claim 1.

In sum, on the current record, Petitioner has shown a reasonable likelihood that claim 1 would have been obvious over Beel and Dinka.

g) Claims 2–31

The parties present their arguments for independent claims 12, 23, and 27 along with those for claim 1. Pet. 18–30, 37–42; Prelim. Resp. 18, 22, 25. We have also analyzed Petitioner’s arguments and evidence regarding the dependent claims. Pet. 30–42. Claims 2–11 depend, directly or indirectly, from claim 1. Claims 13–22 depend, directly or indirectly, from claim 12. Claims 24–26 depend from claim 23. Claims 28–31 depend, directly or indirectly, from claim 27. Patent Owner does not present separate arguments for claims 12, 23, and 27 or for any of the dependent claims. We determine that on the current record, Petitioner has shown sufficiently that claims 2–31 would have been obvious over Beel and Dinka.

*D. Alleged Obviousness over van de Laar, Kaplan, and (optionally) Christison*

Petitioner contends that claims 1–31 would have been obvious over van de Laar, Kaplan, and, optionally, Christison.<sup>5</sup> Pet. 42–71.

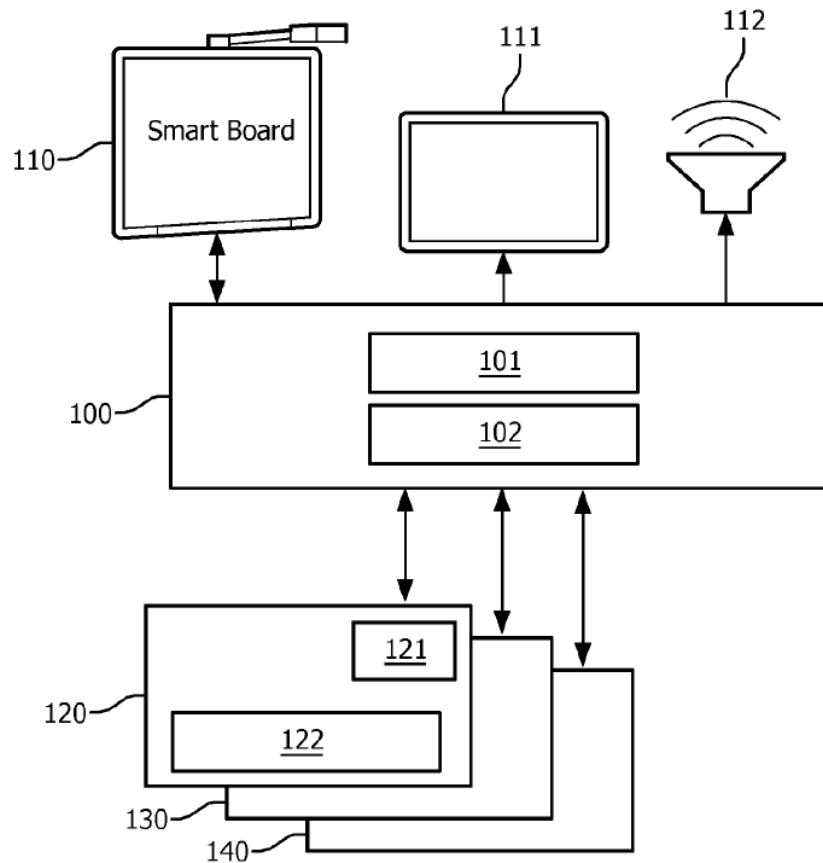
For the reasons explained below, we are persuaded that Petitioner has made a sufficient showing as to at least one claim.

*1. Overview of van de Laar*

Van de Laar describes a host device in wireless communication with multiple “dockee” devices and coupled to at least one peripheral for rendering audio or video data. Ex. 1007 ¶ 1. Figure 1 of van de Laar, reproduced below, illustrates an example:

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<sup>5</sup> Because we determine that Petitioner’s allegations are sufficient as to van de Laar and Kaplan, we do not, at this stage of the proceeding, address Petitioner’s additional allegations as to Christison.



**FIG. 1**

Figure 1 is a block diagram of a wireless docking system. *Id.* ¶ 65. Host device 100 is coupled to several peripherals, including smartboard 110, display screen 111, and loudspeaker system 112 for rendering audio or video data (AV data). *Id.* ¶ 74. Host device 100 wirelessly communicates with dockee devices 120, 130, 140. *Id.* Dockee devices can be mobile phones, laptops, or tablet computers. *Id.* Dockee device 120 includes dockee communication unit 121 to accommodate wireless communication with host 110. *Id.* ¶ 76. “The system enables multiple dockee devices (such as smartphones, laptops, tablets) to be simultaneously docked to a wireless docking host (WDH) which is connected to a set of peripherals (such as

display, mouse, shared local storage, lights/blinds controls, internet connection).” *Id.* ¶ 82. Van de Laar describes two types of dockee devices, primary dockee device 120 and secondary dockee device 130. *Id.* ¶ 77.

According to van de Laar,

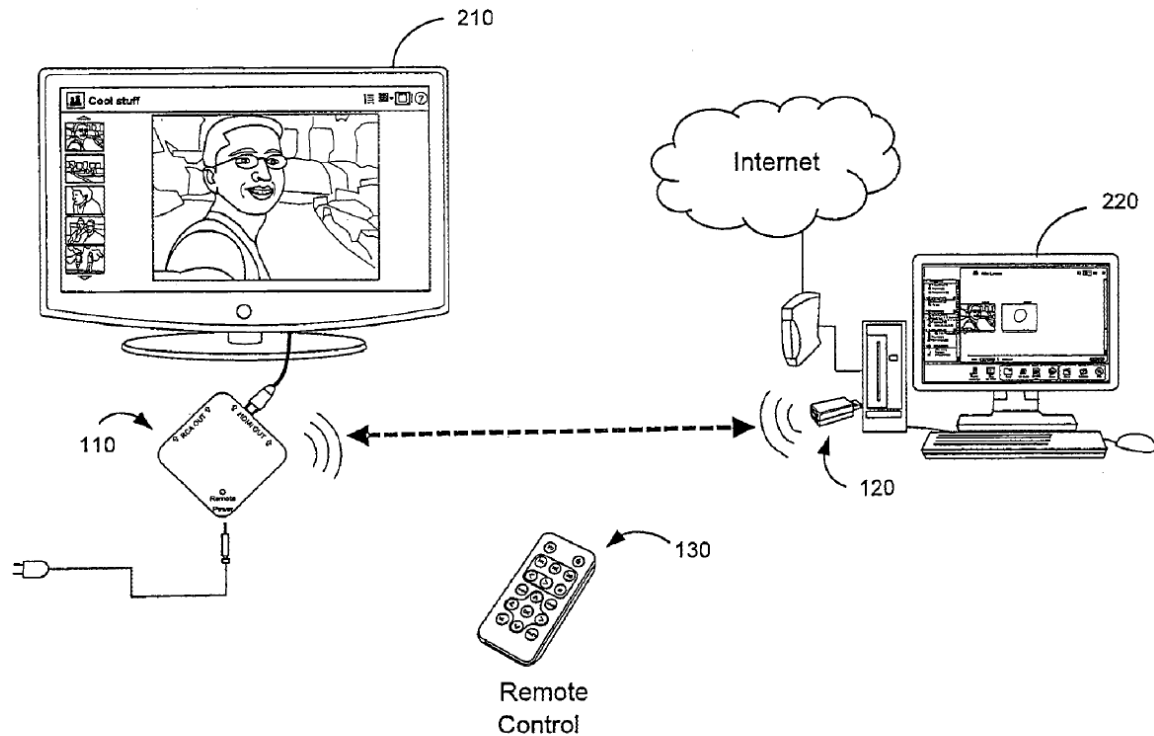
The primary and secondary dockee devices are different in that different access is established to at least one peripheral, so different sets of access rights and peripheral functions are assigned to each of said first and second dockees. In particular, to the primary dockee device, control is provided over the at least one peripheral for determining the AV data to be rendered. To the secondary dockee device, the AV data to be rendered via the at least one peripheral is additionally transferred so as to enable monitoring the AV output data locally at the secondary dockee, e.g. rendering video on the display of the dockee device.

*Id.* “Primary dockee devices will have direct access to the peripheral functions offered by the WDH, whereas the secondary dockee devices will be connected to the WDH to enable monitoring selected AV data. Hence the dockee devices docked as secondary dockee are able to monitor output (e.g. merged display output) of the primary devices to the peripherals.” *Id.* ¶ 82.

Van de Laar describes a “benefit” of the system, i.e., “it allows primary dockees to be able to present content using the peripherals connected to a WDH, such as a large screen and a USB presentation remote control, and . . . other people in the meeting/lecture room can connect to the presenter and to each other for all kinds of coll[a]b[o]ration and interaction purposes.” *Id.* ¶ 94.

## 2. Overview of Kaplan

Kaplan is directed to transmitting video footage from a source to a display device. Ex. 1008 ¶ 5. Figure 2 of Kaplan, reproduced below, illustrates an example:



**FIG. 2**

Figure 2 is a drawing of a communications system. *Id.* ¶ 11. Receiver 110 is connected to display device 210, e.g., a television or video display monitor, via an HDMI cable carrying audio and video data. *Id.* ¶ 21. Remote control 130 communicates with receiver 110 to control playback of video footage on display device 210. *Id.* ¶ 19. Display device 210 can show a user interface generated either by receiver 110, transmitter 120, computer 220, or a combination of these components. *Id.* ¶ 26. Transmitter 120 (which can be a transceiver) is connected to computer 220 via a USB connector. *Id.* ¶ 45, Fig. 4. In one example, “if video content is stored on the computer 220 at a resolution of 480p, up-scaling could be performed on

the receiver 110 to provide a 720p signal for display on the display device 210 (e.g., the television).” *Id.* ¶ 32. Or, “if the television can display 1080p video content and the content provided by the HDMI connection is 720p, then the television can upscale the content to 1080p for display.” *Id.*

### 3. Claims 1–31

#### a) Claim 1: preamble and processing device; reasons to combine van de Laar and Kaplan

The preamble of claim 1 recites “[a] method for connecting a processing device to a functional device, the functional device being connected to or in a base unit of a communications network.” Petitioner contends that van de Laar’s dockee devices are processing devices and that van de Laar’s WDH is a base unit. Pet. 44–45 (citing Ex. 1007 ¶¶ 54, 62, 73–74, 82, 92–94, 97, 106, 119, 124, 128; Ex. 1002 ¶¶ 218–219, 259).

Petitioner cites Kaplan to show additional details of a dockee device, i.e., “the processing device having a memory, a display and an operating system,” and van de Laar to show “wherein the processing device hosts a host application,” as recited in claim 1. *Id.* at 45–46. Specifically, Petitioner points to Kaplan’s computer 220 to show a processing device, the computer’s display to show “a display,” and description of Windows® to show an operating system. *Id.* at 45 (citing Ex. 1008 ¶¶ 47–49, 59, Fig. 2; Ex. 1002 ¶¶ 220, 260). Petitioner points to van de Laar’s description of an application running locally to a dockee device to show a host application. *Id.* at 45–46 (citing Ex. 1007 ¶¶ 53–54, 58–60, 73–74, 81, 93, 121–128, 164; Ex. 1002 ¶¶ 221, 260). Petitioner further points to van de Laar’s description of Skype to show that van de Laar’s dockee devices can run applications for bidirectional communication. *Id.* at 46 (citing Ex. 1007 ¶ 128).

Dr. Almeroth testifies that a skilled artisan “would have understood that Van de Laar’s system could leverage Kaplan’s known technique of using a standard operating system and data transformations to improve a similar device in the same way” and that “modify[ing] the transmission system of Kaplan with Van de Laar’s WDH . . . would improve the useability of the system to connect multiple wireless devices to access and use connected functional devices in a unified communication call.”

Ex. 1002 ¶ 215. Dr. Almeroth opines that Petitioner’s combination would “result in the use of Skype or similar prior art unified communication software as a known technique for improving similar devices,” “creat[ing] the predictable result of using a unified communication system (such as Skype) wherein the system could utilize one or more connected functional devices’ capabilities.” *Id.* ¶ 216.

Patent Owner argues that Petitioner does not articulate a reason why a skilled artisan would have combined van de Laar and Kaplan, other than a conclusory statement about improved usability. Prelim. Resp. 26. Patent Owner argues that Dr. Almeroth’s testimony regarding predictability and Skype’s status as well known is not sufficient. *Id.* at 26–27 (citing Ex. 2002 ¶ 216). Patent Owner argues that Petitioner has alleged that van de Laar and Kaplan *could* have been combined, but not that a skilled artisan *would* have combined them. *Id.* at 27–28.

Petitioner, however, has shown more than conclusory statements that van de Laar and Kaplan could have been combined. Rather, Dr. Almeroth testifies that Kaplan’s standard operating system and data transformations would have improved the usability of van de Laar’s system in a similar way to Kaplan’s. Ex. 1002 ¶ 215. *See also KSR*, 550 U.S. at 417 (“[I]f a

technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.”). Thus, we determine that, on the current record, Petitioner’s proposed reasons to combine the teachings of van de Laar and Kaplan have rational underpinning.

Patent Owner further argues that Kaplan’s system is not compatible with van de Laar’s multi-user communications system. Prelim. Resp. 28. In Kaplan, Patent Owner argues, the transmitter and receiver are pre-paired during the manufacturing process, and are ready to communicate with each other “out of the box,” providing a “‘walled garden’ approach.” *Id.* at 28–29 (quoting Ex. 1008 ¶ 21; citing Ex. 1008 ¶¶ 16–18). In contrast, Patent Owner argues, van de Laar teaches that it is important to be able to pair new devices, and that Kaplan is the “antithesis” of van de Laar. *Id.* at 29 (citing Ex. 1007 ¶¶ 76, 111, 116, Fig. 1).

Patent Owner’s argument asserts a teaching away. Patent Owner, however, does not explain why, “a person of ordinary skill, upon reading [Kaplan], would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant.” *Gurley*, 27 F.3d at 553. Petitioner does not rely on Kaplan to show which communications protocols might be used, and, thus, does not rely on the feature of Kaplan that Patent Owner argues is not compatible with van de Laar. *Cf. DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1326 (Fed. Cir. 2009) (“An inference of nonobviousness is especially strong where the prior art’s teachings undermine the very reason being proffered as to why a person of ordinary

skill would have combined the known elements.”). Rather, Petitioner relies on Kaplan to show the components of a processing device (Pet. 45 (citing Ex. 1008 ¶¶ 47–49, 59, Fig. 2)) and to demonstrate that the processing device could have been connected to a peripheral transceiver using a USB connection (*id.* at 46 (citing Ex. 1008 ¶ 17), 47–48 (citing Ex. 1008 ¶¶ 16–17, 19, 58)). *See Mouttet*, 686 F.3d at 1331 (“A reference may be read for all that it teaches, including uses beyond its primary purpose.”).

Moreover, Patent Owner does not allege (and we do not find) that the claims preclude transceivers paired out-of-the-box, or a walled garden approach. Thus, the current record does not suggest that Kaplan would have led a skilled artisan in a direction divergent from the inventors’ path. *See Gurley*, 27 F.3d at 553. Instead, Kaplan’s teachings appear consistent with the claims of the ’347 patent. Thus, we are not persuaded that Kaplan teaches away from the invention.

Patent Owner also argues that a skilled artisan would not have been able to combine Kaplan’s system with van de Laar’s with a reasonable expectation of success, since their transmission paths are different. Prelim. Resp. 30. Patent Owner argues that Kaplan’s system “cannot work” with multiple transmitters connected to a single receiver. *Id.* (citing Ex. 1008 ¶¶ 18, 21, Fig. 5). Patent Owner’s argument is unpersuasive because it assumes that Petitioner seeks to bodily incorporate Kaplan within van de Laar, while Petitioner instead seeks to combine their teachings. *See Mouttet*, 686 F.3d at 1332–33 (“It is well-established that a determination of obviousness based on teachings from multiple references does not require an actual, physical substitution of elements. . . . Rather, the test for obviousness is what the combined teachings of the references would have suggested to

those having ordinary skill in the art.”); *In re Keller*, 642 F.2d 413, 425 (CCPA 1981) (“The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference. . . .”). Also, Kaplan acknowledges that open systems, such as 802.11, were conventional, Ex. 1008 ¶ 18, contradicting Patent Owner’s argument that a skilled artisan would have lacked a reasonable expectation of success in combining the teachings of van de Laar and Kaplan because it described a “walled garden” approach to transmission paths. Moreover, Patent Owner does not point to evidence that Kaplan’s transceivers are one-to-one, preventing a single receiver from communicating with multiple transmitters. Prelim. Resp. 30 (citing Ex. 1008, Fig. 5). Thus, we are not persuaded that a skilled artisan would have lacked the skill to combine the teachings of van de Laar and Kaplan.

In sum, we determine, on the current record, that Petitioner has shown sufficiently that van de Laar and Kaplan teach the preamble and the limitation “the processing device having a memory, a display and an operating system, wherein the processing device hosts a host application,” as recited in claim 1.

b) Claim 1: peripheral device

As to “a first peripheral device being configured to be coupled to the processing device via a generic communications protocol,” as recited in claim 1, Petitioner contends that van de Laar’s dockee device 120 has dockee communication unit 121 for wireless communication with a host. Pet. 46 (citing Ex. 1007 ¶ 76). Petitioner contends that the dockee communication unit would have been implemented as a peripheral device

coupled to the dockee device via a standard USB connection, as taught in Kaplan. *Id.* (citing Ex. 1008 ¶¶ 17, 45, 58; Ex. 1002 ¶ 222). Dr. Almeroth testifies that USB is a generic communications protocol. Ex. 1002 ¶ 222.

Patent Owner argues that van de Laar’s communication unit 121 of dockee device 120 is not a peripheral device because it is not described as such, it is merely a transmitter depicted as within dockee device 120, and it is not described as connected to a port of the dockee device. Prelim. Resp. 30–32 (citing Ex. 1007 ¶ 76, Figs. 1, 5).

Petitioner, however, does not cite van de Laar alone to show that the transceiver is a peripheral device. *See Keller*, 642 F.2d at 426 (“[O]ne cannot show non-obviousness by attacking references individually where, as here, the rejections are based on combinations of references.”). Instead, Petitioner cites Kaplan to show that a transceiver would have been implemented as a dongle attached to a computer. Pet. 46 (citing Ex. 1008 ¶¶ 17, 45, 58). As stated in Kaplan, “[i]n a particular embodiment, the transmitter 120 is a dongle including a connector 122 compliant with the Universal Serial Bus (USB) standard and operable to be inserted into a USB port of a computer, for example, a personal computer.” Ex. 1008 ¶ 17. Thus, in Petitioner’s combination, the transceiver performing the function of van de Laar’s communication unit 121 would have been implemented as a standard USB peripheral device.

Patent Owner argues that Petitioner does not show that a skilled artisan would have been motivated to implement van de Laar’s communication unit as a peripheral device. Prelim. Resp. 32–33 (citing Ex. 1002 ¶ 222). However, as Dr. Almeroth testifies, Kaplan itself describes USB connections as standard and ubiquitous. Ex. 1002 ¶ 222 (citing

Ex. 1008 ¶¶ 17, 45). On the current record, we find this reasoning to provide a sufficient motivation with rational underpinning. *See KSR*, 550 U.S. at 416 (“[W]hen a patent claims a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result.”).

Thus, we determine, on the current record, that Petitioner has shown sufficiently that van de Laar and Kaplan teach “a first peripheral device being configured to be coupled to the processing device via a generic communications protocol,” as recited in claim 1.

c) Claim 1: undisputed limitations base unit, transmitter, receiver

Petitioner contends that van de Laar’s host device 100 has host communication unit 102 corresponding to “the base unit having a transmitter.” Pet. 46 (citing Ex. 1007 ¶¶ 1, 75; Ex. 1002 ¶¶ 223, 262).

As to “the first peripheral device having a receiver,” as recited in claim 1, Petitioner contends that van de Laar teaches a host device receiving wireless communications from dockee devices. *Id.* at 46–47 (citing Ex. 1007, claim 1; Ex. 1002 ¶¶ 224, 263). Petitioner also contends that Kaplan teaches USB peripheral devices with transceivers and antennas for communicating wirelessly with other transceivers. *Id.* at 47–48 (citing Ex. 1008 ¶¶ 16–17, 19, 58, Fig. 2; Ex. 1002 ¶¶ 225–226, 263).

As to “at least one fixed or configurable endpoint of the functional device is exposed on the first peripheral device,” as recited in claim 1, Petitioner points to description in van de Laar of making simulated peripherals, e.g., simulated storage and simulated webcams, available to

dockee devices. *Id.* at 48–49 (citing Ex. 1007 ¶¶ 43, 50, 54, 82, 92, 93, 106, 123–126; Ex. 1002 ¶¶ 45–47, 227–229, 264).

As to “the base unit being configured to transmit and the first peripheral device being configured to receive first processed video data over the communications network,” as recited in claim 1, Petitioner points to van de Laar’s description of dockee devices receiving video data streams from a WDH. *Id.* at 50–51 (citing Ex. 1007 ¶¶ 55, 80, 92, 123; Ex. 1002 ¶¶ 232, 265).

As to “the functional device being configured for first video data to flow into the base unit or first video data is captured in the base unit, the first video data being processed in the base unit to generate the first processed video data, wherein the first processed video data is sent to the first peripheral device,” as recited in claim 1, Petitioner points to description in van de Laar of a WDH receiving A/V streams sent by primary dockees to a display and/or audio peripheral, merging the A/V streams with A/V data from peripherals (e.g., webcams, smartboard), and creating and sending an A/V stream to dockee devices. *Id.* at 51–53 (citing Ex. 1007 ¶¶ 1, 2, 56, 59–60, 73–74, 96, 115, 123, 124, 166–167, Fig. 2; Ex. 1002 ¶¶ 233–234, 266).

As to “the first peripheral device being configured to process the first processed video data received by the first peripheral device to generate second video data,” as recited in claim 1, Petitioner cites van de Laar’s discussion of a secondary dockee device receiving A/V data and processing them for rendering. *Id.* at 53 (citing Ex. 1007 ¶¶ 56, 93, 115; Ex. 1002 ¶¶ 235, 267).

As to “the first peripheral device being configured to make the second video data available through the at least one fixed or configurable endpoint

of the first peripheral device,” as recited in claim 1, Petitioner points to van de Laar’s offering A/V output to a secondary dockee through a simulated peripheral, such as a simulated webcam. *Id.* at 53–54 (citing Ex. 1007 ¶¶ 54, 93, 115, 124–126, Fig. 3; Ex. 1002 ¶¶ 236, 268).

As to “the operating system of the processing device being configured to capture the second video data and to make it available through a custom or standard driver to either the host application or a 3rd party application running on the processing device or to other processing devices,” as recited in claim 1, Petitioner, relying on the testimony of Dr. Almeroth, argues that van de Laar’s dockee devices could capture Skype data streams and make them available using a driver, including drivers associated with standards such as Wi-Fi Serial Bus and Wi-Fi Miracast. *Id.* at 54–55 (citing Ex. 1007 ¶¶ 55, 60, 73–76, 120, 124, 128, 164, 166–167; Ex. 1002 ¶¶ 237–239, 269).

Patent Owner does not challenge, at this stage of the proceeding, that van de Laar and Kaplan teach these aspects of claim 1. We determine that Petitioner’s evidence is sufficient, at this stage, to show that van de Laar and Kaplan teach these aspects of claim 1.

d) Claim 1: standard generic driver

Claim 1 recites “wherein third video data, received from the host application and/or from the 3rd party application running on the processing device, is sent to an endpoint of the first peripheral device via a standard generic driver.” Petitioner argues that van de Laar teaches that a dockee device can provide output to the WDH and peripherals attached to it, including through 3rd party application such as Skype. *Pet.* 55–56 (citing Ex. 1007 ¶¶ 59, 60, 79–86, 123–126, 128; Ex. 1002 ¶¶ 240–241, 270).

Dr. Almeroth testifies that this would have been accomplished through a standard generic driver associated with Wi-Fi Serial Bus and Wi-Fi Miracast, which the peripherals support. Ex. 1002 ¶ 241 (citing Ex. 1007 ¶ 73).

Patent Owner argues that “[n]either Van de Laar nor Kaplan include the word driver in their disclosures,” and that Petitioner does not provide evidence as to how either teaches use of a driver. Prelim. Resp. 35. We disagree. As noted above, Dr. Almeroth testifies that a dockee device would transmit and receive A/V content using drivers associated with standards (Wi-Fi Serial Bus and Wi-Fi Miracast) that van de Laar specifies that its peripherals support. Ex. 1002 ¶¶ 239–241. We determine that Petitioner’s evidence is sufficient, at this stage, to show that van de Laar teaches this limitation of claim 1.

e) Claim 1: undisputed remaining limitations

As to “the first peripheral device receiving the third video data and processing the third video data to form second processed video data,” as recited in claim 1, Petitioner argues that van de Laar’s communication unit 121 receives shared content to generate WFM packets. Pet. 56–57 (citing Ex. 1007 ¶¶ 124–126, Fig. 3; Ex. 1002 ¶¶ 242, 271).

As to “wherein the base unit receives the second processed data, and decodes and/or enhances the second processed data and forwards it to a functional device which is connected or attached to the base unit through a serial connection,” as recited in claim 1, Petitioner argues that van de Laar’s WDH receives A/V data from a dockee device; mixes, scales, and/or splits the A/V data; and sends them to a functional device, such as a display, via a

USB interface, HDMI interface, or Wi-Fi Serial bus. *Id.* at 57–58 (citing Ex. 1007 ¶¶ 59–60, 73, 79–86, 110, 123, Fig. 2; Ex. 1002 ¶¶ 243, 272).

Patent Owner does not challenge, at this stage of the proceeding, that van de Laar and Kaplan teach these aspects of claim 1. We determine that Petitioner’s evidence is sufficient, at this stage, to show that van de Laar and Kaplan teach these aspects of claim 1.

In sum, on the current record, Petitioner has shown a reasonable likelihood that claim 1 would have been obvious over van de Laar and Kaplan.

f) Claims 2–31

The parties present their arguments for independent claims 12, 23, and 27 along with those for claim 1. Pet. 44–58, 66–71; Prelim. Resp. 31, 35. Claims 2–11 depend, directly or indirectly, from claim 1. Claims 13–22 depend, directly or indirectly, from claim 12. Claims 24–26 depend from claim 23. Claims 28–31 depend, directly or indirectly, from claim 27. Patent Owner does not present separate arguments for claims 12, 23, and 27 or the dependent claims. We have analyzed Petitioner’s arguments and evidence for claims 2–31 (Pet. 58–72) and conclude that, on the current record, Petitioner has shown sufficiently that claims 2–31 would have been obvious over van de Laar and Kaplan.

#### IV. CONCLUSION

Petitioner has established a reasonable likelihood that it would prevail with respect to at least one claim of the '347 patent. Accordingly, we institute an *inter partes* review of the '347 patent on all of the claims and grounds set forth in the Petition. *See* 37 C.F.R. § 42.108(a).

Our factual findings, conclusions of law, and determinations at this stage of the proceeding are preliminary, and based on the evidentiary record developed thus far. This is not a final decision as to the patentability of the claims for which *inter partes* review is instituted. Our final decision will be based on the record as fully developed during trial.

#### V. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that pursuant to 35 U.S.C. § 314(a), an *inter partes* review is instituted as to claims 1–31 of the '347 patent on the grounds set forth in the Petition; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial; the trial will commence on the entry date of this decision.

IPR2025-00598  
Patent 11,966,347 B2

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