

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.,

Petitioners,

v.

BARCO N.V.

Patent Owner.

CASE: IPR2025-00597

U.S. PATENT NO. 11,966,346

PATENT OWNER'S RESPONSE

TABLE OF CONTENTS

I.	Introduction	1
II.	The '346 Patent	5
A.	Overview	5
B.	Claim Construction	8
C.	Level of Ordinary Skill in the Art.....	9
III.	Overview of The Cited Reference	9
A.	<i>Beel</i> (Ex. 1005).....	9
B.	<i>Dinka</i> (Ex. 1006)	11
C.	<i>Kaplan</i> (Ex. 1008).....	12
D.	<i>Van de Laar</i> (Ex. 1007).....	13
E.	<i>Christison</i> (Ex. 1011).....	14
IV.	Ground 1	15
A.	Claim 1	16
B.	Claim 11	25
C.	Claims 2 and 12.....	25
D.	Claims 3 and 13.....	26
E.	Claim 5	27
F.	Claim 6.....	27
G.	Claims 10 and 20.....	27
H.	There is No Motivation to Combine <i>Beel</i> , <i>Dinka</i> , and <i>Christison</i>	28
V.	Ground 2	36
A.	Claim 1	37
B.	Claim 11	45
C.	There is No Motivation to Combine <i>Kaplan</i> , <i>Van de Laar</i> , and <i>Christison</i> 45	
VI.	Evidence Establishes Non-Obviousness of the Invention	58
A.	Acquiescence of Market Competitors.....	60
VII.	Conclusion	62

TABLE OF EXHIBITS

Exhibit	Description
Ex. 2001	U.S. Publication No. 2015/0121466 (“Brands”)
Ex. 2002	June 30, 2025 Deposition Transcript of Kevin C. Almeroth
Ex. 2003	Reserved
Ex. 2004	Declaration of Dr. Michael Brogioli
Ex. 2005	Curriculum Vitae of Dr. Michael Brogioli
Ex. 2006	September 22, 2025 Deposition Transcript of Kevin C. Almeroth in IPR2025-00491
Ex. 2007	December 12, 2025 Deposition Transcript of Kevin C. Almeroth in IPR2025-00597
Ex. 2008	December 15, 2025 Deposition Transcript of Kevin C. Almeroth in IPR2025-00598
Ex. 2009	Reserved
Ex. 2010	Reserved
Ex. 2011	Crestron License Agreement (<i>Confidential and Redacted Versions Filed</i>)
Ex. 2012	<i>Barco and Crestron announce patent license agreement regarding a set of essential ClickShare patents</i> , BARCO (Sept. 12, 2023) https://web.archive.org/web/20240810204702/https://www.barco.com/en/about/press-releases/barco-and-crestron-announce-patent-license-agreement-regarding-a
Ex. 2013	Reserved
Ex. 2014	Reserved
Ex. 2015	Reserved

Exhibit	Description
Ex. 2016	Reserved
Ex. 2017	Reserved
Ex. 2018	<i>Patent</i> , CRESTRON (June 12, 2025) https://www.crestron.com/legal/patents?page=1
Ex. 2019	Crestron Electronics Private Company Profile, PITCHBOOK
Ex. 2020	Declaration of Dr. Kevin Almeroth in IPR2025-00491
Ex. 2021	Reserved
Ex. 2022	Reserved
Ex. 2023	Excerpts from April 18, 2025 Deposition Transcript of Andrew Ludke (<i>Confidential and Redacted Versions Filed</i>)
Ex. 2024	Reserved
Ex. 2025	Reserved
Ex. 2026	Reserved
Ex. 2027	Reserved
Ex. 2028	Reserved
Ex. 2029	Reserved
Ex. 2030	Reserved
Ex. 2031	Reserved
Ex. 2032	Modified Protective Order

I. INTRODUCTION

U.S. Patent No. 11,966,346 (the “’346 Patent”) describes and claims a novel conferencing system, allowing a user to connect a processing device (e.g., laptops or mobile devices) to functional devices (e.g., a camera or microphone in a conference room), by enabling wireless communication directly between the processing device and a base unit connected to the functional device. *See e.g.*, Ex. 1001, Independent cls. 1, 11. This allows for a user to access higher quality functional devices in a meeting context while still managing and sharing content from the user’s processing device. *Id.*, 1:37-42. Prior technology, including Patent Owner’s own *Beel* reference, was presentation focused: teaching unidirectional communication from a processing device to a display. In contrast, the ’346 Patent provides a system that relies on communications in the opposite direction, where the base unit is used “to transmit data over the wireless connection to the processing device”. *Id.*, cl. 1; *see also* cl. 11. This claimed configuration allows for users to utilize a variety of different conferencing systems (software like Teams or Zoom, and hardware such as Logitech or Cisco), without the need for reconfiguration of the user’s processing device (laptop) hardware. Said otherwise, the ’346 Patent allows a user to join video conferences without regard for the specific hardware or conferencing platform of the conferencing system.

The Petition fundamentally misunderstands the invention of the ’346 Patent,

focusing on discrete teachings from disparate technologies in an effort to arrive at the claimed invention of the '346 Patent. This failure is underscored by the strong secondary considerations of non-obviousness ascribed to Patent Owner's patent. Notably, controlling Federal Circuit law requires strong consideration of Patent Owner's evidence of acquiescence in the industry further supports the non-obviousness of the Challenged Claims.

The '346 Patent, unlike other patents Petitioner has challenged, claims a specific embodiment of making functional devices available to processing devices *without* use of a first peripheral device 130. Ex. 1001, Cls. 1, 11; *see also*, Ex. 1001, 10:20-23, 10:36-40, 10:54-60, 12:19-23, 16:29-35, 22:1-23:41, 23:45-47; IPR2025-00491 (Paper 2); IPR2025-00597 (Paper 1). Both independent claims of the '346 Patent recite a client application, which, when executed by or on the processing device, causes the processing device to “*interact directly* with the base unit over a wireless connection[.]” Ex. 1001, Cls. 1, 11 (emphasis added)¹.

The Petition relies on two fundamentally flawed grounds, both of which fail to establish that any claim of the '346 Patent is obvious. Notably, the Petition relies on systems that teach using a peripheral device for wireless communication, necessarily different than the direct communication of the '346 Patent. *See* Ex. 1005;

¹ All emphasis added unless otherwise noted.

Ex. 1008. The Petition, incredulously, expressly relies on these peripheral-device teachings. *See Supra* Sections IV.A.1; V.G.1. The Petition's insufficiencies do not end there.

In Ground 1, the Petition relies on *Beel*, which is a continuation of the very publication cited, and overcome, during prosecution of the '346 Patent. The Petition relies on limited disclosures in *Beel* and extrapolates them far beyond the reference's actual teachings, stretching *Beel* beyond what can be reasonably suggested. While *Beel*'s third and fourth embodiments (which amount to less than a single page of *Beel*'s disclosure) discloses wireless communications without using a peripheral device (Petition, 23-24; Ex. 1005, ¶¶215-250), the Petition also **expressly** relies on the capabilities of the peripheral device to allege obviousness of the '346 Patent. *See* Petition, 29 (limitation 1f), 31 (limitation 1g), 33 (limitation 1i), 34-35 (limitation 1k), 38 (Claim 5), 40-43 (Claims 10 and 20), 43-44 (Claims 21 and 22). There is no suggestion that these other peripheral-based disclosures from *Beel* would or could be implemented in a peripheral-less embodiment.

The Petition also attempts to supplement *Beel* with teachings from *Dinka*. *Dinka*, unlike the '346 Patent, is not directed towards providing functional devices to a processing device at all. *Dinka* provides the necessary features of the processing device to a special purpose piece of hardware for a special conference system, obviating the need for a processing device to host web conferencing calls. *Dinka*'s

fundamentally different direction provides no basis to make any changes to *Beel* to arrive at the claims of the '346 Patent and would have instead led a POSITA in a different direction than the '346 Patent.

Ground 2 fares no better. In Ground 2, the Petition alleges a combination of *Kaplan* (which provides a simple peripheral transmitter for wireless presentation) with *Van de Laar* (which provides a wireless docking station that communicates directly with a user processing device). The Petition provides no explanation of which transmission technique is relied upon, and relies on both *Kaplan* and *Van de Laar* architecture for different limitations, making it difficult for Patent Owner to even respond. Petition, 50 (“The wireless communication would obviously use a transmitter similar to the one that Kaplan discloses”), 59 (“The data is sent ‘*directly*’ because there is no peripheral device between the dockee and the host device.”); Ex. 2007, 40:3-19 (confirming the '346 Patent does not require a peripheral device). Petitioner’s inconsistent application of the prior art to the claims confirms the ad-hoc hindsight riddled process that resulted in the Petition.

Ground 2 also indiscriminately and improperly relies on two separate components, the primary dockee and the secondary dockee. Petition, 56-57; *infra* Section V.A.1.a; Paper 11 (“ID”) 26, 32 (“Patent Owner has raised a legitimate concern as to whether Petitioner is likely to show obviousness of any claim pursuant to these grounds” because the Petition “draws upon the primary dockee and

secondary dockee indiscriminately.””).

In addition, both Grounds “optionally” rely on *Christison*, a reference used during prosecution to reject the ’346 Patent, for the limited purpose of alleging the limitation “virtual functional device” was known. Petition, 32-33, 57. References to *Christison* fail to remedy the deficiencies of the Grounds. In summary, both Grounds rely on combinations a POSITA would not be motivated to make, with each combination failing to disclose the claimed limitations of the ’346 Patent.

Moreover, the non-obviousness of each claim is strongly supported by undisputable objective indicia of non-obviousness, such as the licensing of the patented technology by those in the industry. Accordingly, the Board should uphold the patentability of each challenged claim.

II. THE ’346 PATENT

A. Overview

The inventors of the ’346 Patent recognized that certain functionalities such as audio and video on portable devices (e.g., laptops and mobile devices) often rely on lower quality integrated functional devices (cameras and microphones) for conferencing needs. Ex. 1001, 1:37-39; Ex. 2004, ¶49. The ’346 Patent recognized a desire to provide access to higher quality audio and video devices in addition to allowing use of display devices when such devices are available. Ex. 1001, 1:12-15, 1:39-42. The ’346 Patent system addresses this by making functional devices

available (regardless of the manufacturer) to participants of a meeting (regardless of the meeting platform) and provides the necessary software and hardware for accomplishing these goals. Ex. 1001, 1:46-49, Fig. 5; Ex. 2004, ¶49.

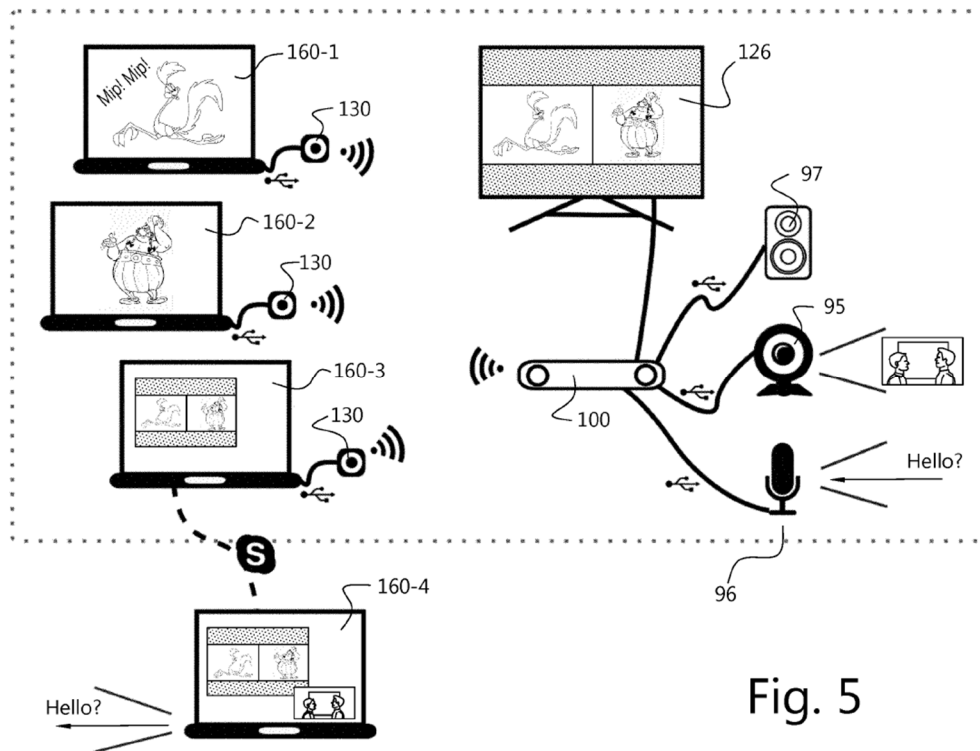


Fig. 5

Ex. 1001, Fig. 5.

The Patent Family of the '346 Patent describes systems and methods for making functional devices available to processing devices. One such example of using these functional devices in a unified communication call is shown in Fig. 5 reproduced above. Ex. 1001, 4:41-43. Fig. 5 depicts four processing devices (e.g., laptops) 160-1, 160-2, 160-3, and 160-4, where processing device 160-4 is participating in the meeting over a unified communications call with processing device 160-3 that is residing in the same location as processing devices 160-1 and

160-2. Ex. 1001, 19:3-16; Ex. 2004, ¶50. Both processing devices 160-3 and 160-4 share a unified communications call client, which may require additional device configurations. Ex. 1001, 19:3-16; Ex. 2004, ¶50. The processing devices 160-1, 160-2, 160-3 are connected to respective peripheral devices 130 which enable communication with base unit 100. Ex. 1001, 19:10-13; Ex. 2004, ¶50. The data from, for example, camera 95 and microphone 96 connected to the base unit 100, is sent to the base unit 100, which processes and communicates the data via the peripheral device 130 to the processing device 160-3. Ex. 1001, 18:34-46, 19:17-24; Ex. 2004, ¶50. Once captured, the data can be used in an application (like Skype for example). Ex. 1001, 18:46-52; Ex. 2004, ¶51. So, the laptops 160 can access the functional devices connected to the base unit 100 wirelessly through peripheral device 130, and these functional devices are exposed natively via an endpoint created at peripheral device 130. Ex. 1001, 19:54-57, Fig. 5; Ex. 2004, ¶51.

The '346 Patent claims a specific embodiment of making functional devices available to processing devices *without* the use of the first peripheral device 130. Ex. 1001, Cls. 1, 11; Ex. 2004, ¶52; *see also*, Ex. 1001, 10:20-23, 10:36-40, 10:54-60, 12:19-23, 16:29-35, 22:1-23:41, 23:45-47. Both independent claims recite a client application, which, when executed by or on the processing device, causes the processing device to “*interact directly* with the base unit over a wireless connection[.]” Ex. 1001, Cls. 1, 11. In these claimed embodiments, the processing

device simulates virtual functional devices that can be presented to the processing device. Ex. 1001, 22:54-65, 23:17-20, 23:24-30; Ex. 2004, ¶53. Webcams, speakerphones, microphones, and speakers are example functional devices which may be simulated as virtual functional devices. Ex. 1001, 23:17-19, 23:33-38. Then, the virtual functional devices can be utilized on third party software, such as software used for hosting Unified Communication calls. Ex. 1001, 23:20-22, 23:38-41; Ex. 2004, ¶53.

Notwithstanding the delineation of the '346 Patent from other related Patents as *excluding* use of a peripheral device, the Petition relies on identical references with near-identical motivations to combine (and cited portions of the references) to allege obviousness as used in other proceedings. *See*, IPR2025-00491 (Paper 2), IPR2025-00598 (Paper 1).

B. Claim Construction

The Petition was filed after November 13, 2018, and, as such, the proper claim construction standard to be applied is articulated in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc), in accordance with its regulation, 37 C.F.R. § 42.100(b). *Immunex Corp. v. Sanofi-Aventis U.S. LLC*, 977 F.3d 1212, 1216 (Fed. Cir. 2020). For the purposes of this proceeding, the claims of the '346 Patent require no construction as they are valid under their plain and ordinary meaning. Ex. 2004, ¶54.

C. Level of Ordinary Skill in the Art

Patent Owner does not dispute Petitioner's proposed level of skill in the art (Petition, 8) at this time. Dr. Brogioli qualifies as a POSITA with respect to the '346 Patent. Ex. 2004, ¶¶1-48; Ex. 2005.

III. OVERVIEW OF THE CITED REFERENCE

A. *Beel* (Ex. 1005)

Beel is assigned to Patent Owner and is a continuation of U.S. App. No. 13/270,659 which issued as U.S. Patent No. 8,756,348. Ex. 1005, Title Page. U.S. Patent No. 8,756,348 was disclosed in an IDS, cited during prosecution, and the challenged claims were already allowed over *Beel* and the challenges raised by the Petition. Ex. 1004, 90, 680-685, 837-842. *Beel* recognized a need to improve presenting and collaboratively working on content in an in-person meeting-setting and provides for presentation capabilities. Ex. 1005, ¶¶113-116; *see also id.*, ¶¶15-38; Ex. 2004, ¶¶55-56.

Beel Figure 1a depicts a meeting room 30 where multiple participants 37 with processing devices (e.g., laptops) 31 are coupled to peripheral devices (or "connection units") 47 adapted to communicate media content to a base node 36 connected to a display 44:

device 31 or a loud speaker attached to the base node 36 or part of the display 44. Ex. 1005, ¶120; Ex. 2004, ¶60. These outputs can be recorded and stored to provide a complete record of the events of the meeting. Ex. 1005, ¶121; Ex. 2004, ¶60.

The user can share audio data from the processing device to the peripheral device and stream the audio data over a channel to the base node. Ex. 1005, ¶316; Ex. 2004, ¶¶57, 59. This audio sharing is done with standard drivers and does not require special software installation. Ex. 1005, ¶317; Ex. 2004, ¶59. Once received, the audio data can be shared in the meetings from the base node. Ex. 1005, ¶319; Ex. 2004, ¶59.

Additionally, a software application that is stored on the peripheral device and run on the processing device captures display data available on the processing device and displays it on the base node. Ex. 1005, ¶¶320-323; Ex. 2004, ¶61.

B. *Dinka* (Ex. 1006)

Dinka, assigned to Skype, is directed to a television set capable of hosting bidirectional communication sessions with remote users via the network. *Dinka*, lacks any disclosure making any functional devices available to a processing device as claimed in the '346 Patent. Ex. 1006, Title, Assignee, Abstract. *Dinka* recognized that packet-based communications were most commonly used on a personal computer and argued that it would be desirable to utilize packet-based communication on a television set or set box plugged into a television. Ex. 1006,

2:1-4, 2:19-24; Ex. 2004, ¶62. *Dinka* proposes a television designed to provide a secondary embedded functionality of VoIP calling. Ex. 1006, 7:20-21; Ex. 2004, ¶63. *Dinka* removes the claimed processing device completely, relying instead on special-purpose hardware in the form of its television. Ex. 1006, 2:20-24.

C. *Kaplan* (Ex. 1008)

Kaplan, like *Beel*, describes transmitting video content from a computer to a display device via a peripheral device. Ex. 1008, Abstract; Ex. 2004, ¶67. The transmitter is a USB connector and connects to a port of a computer. Ex. 1008, ¶17. Notably, the intervening USB transmitter does not provide for direct communications between the processing device and base unit as claimed. Ex. 1001, Cls. 1, 11. The receiver includes one or more video and audio outputs (such as HDMI) and connects to a display for presenting transmitted device. Ex. 1008, ¶16. The system also includes a remote control which controls the playback of video footage on the display device. Ex. 1008, ¶19; Ex. 2004, ¶68. Together, these components provide a system to provide video footage accessible on a computer to a display device. Ex. 1008, ¶19; Ex. 2004, ¶¶68-69. Figure 2 below shows the remote control 130, receiver 110 connected to a display device 210, and transmitter 120 connected to a computer 220:

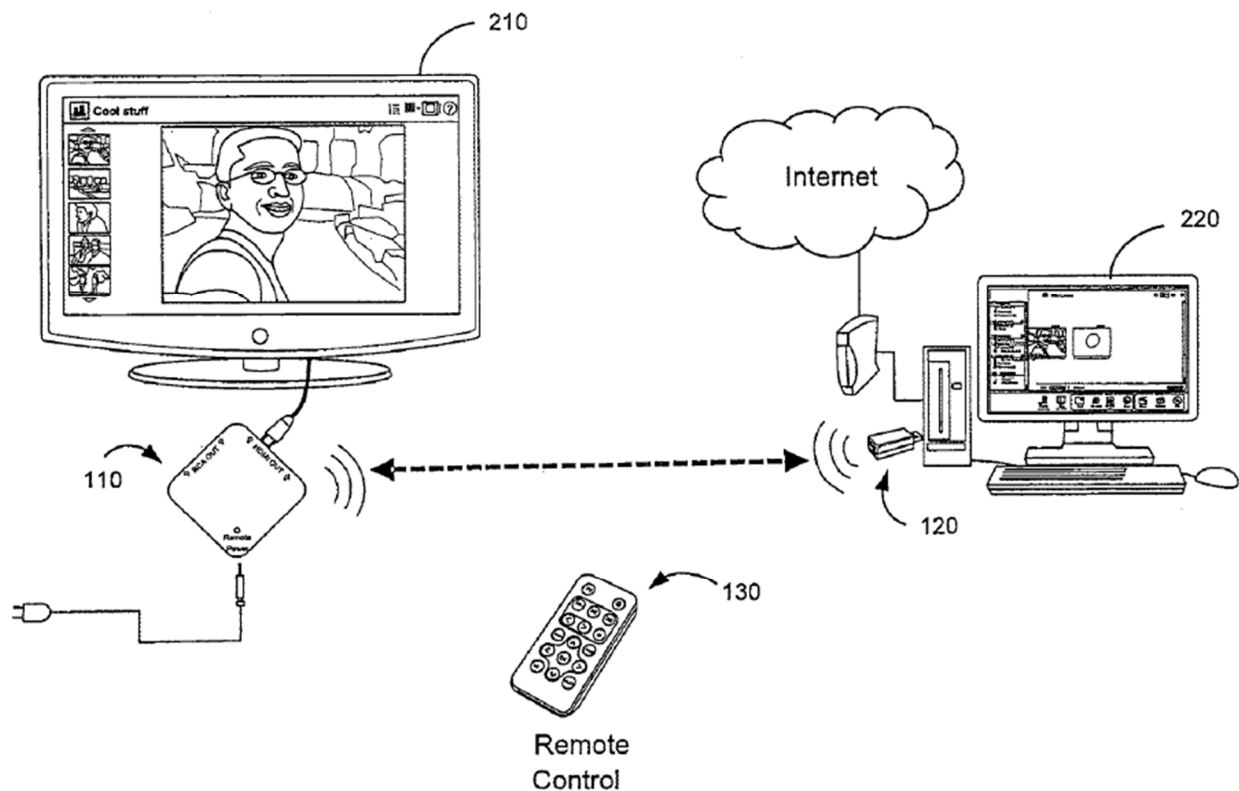


FIG. 2

Ex. 1008, Fig. 2, ¶21.

A key benefit identified in *Kaplan* is its “walled-garden” approach. Ex. 1008, ¶¶21, 53. The transmitter and receiver in *Kaplan* are pre-paired prior to shipment from the manufacturer so no configuration is required by the user before first use. *Id.*, ¶21. This “walled-garden” approach streamlines *Kaplan*’s system from the first use, alleviating risks of unwanted wireless interaction between system components with non-system components. *Id.*; Ex. 2004, ¶70.

D. *Van de Laar* (Ex. 1007)

Van de Laar provides a system for wireless docking that enables multiple “dockees” to wirelessly dock to a host device in an easy-to-use manner, enabling

shared usage of A/V peripherals without causing interference. Ex. 1007, ¶9; Ex. 2004, ¶64. A “dockee” in *Van de Laar* is a mobile device. Ex. 1007, ¶¶6, 72.

The wireless docking station includes a host device coupled to a number of peripherals for rendering audio or video data, and the host device is capable of wireless communication with a dockee device. Ex. 1007, ¶74; Ex. 2004, ¶65. The peripherals may include a display, graphical input/output devices like smartboards or touch screens, audio output devices like loudspeakers, headphones, or control devices, like a mouse or room control unit, and data processing devices like data storage units or a printer. Ex. 1007, ¶74; Ex. 2004, ¶65.

The docking process provides for connections to primary dockee devices and secondary dockee devices. Ex. 1007, ¶78; Ex. 2004, ¶66. Primary dockee devices gain access to control of at least one peripheral device for determining the AV data to be rendered, while secondary dockee devices only receive the AV data rendered on the peripherals without gaining control. Ex. 1007, ¶¶78, 82; Ex. 2004, ¶66.

E. *Christison* (Ex. 1011)

Christison was identified in applicant’s IDS and was also relied on by the examiner during prosecution. Ex. 1004, 89, 511-516, 980-985. *Christison* is directed towards a wireless USB hub and improving throughput for devices in USB systems containing both wired and wireless USB devices. Ex. 1011, Title, 2:18-20. *Christison*’s system includes a host 200 and external USB device 210 with built-in

wireless adapters 201, 211.

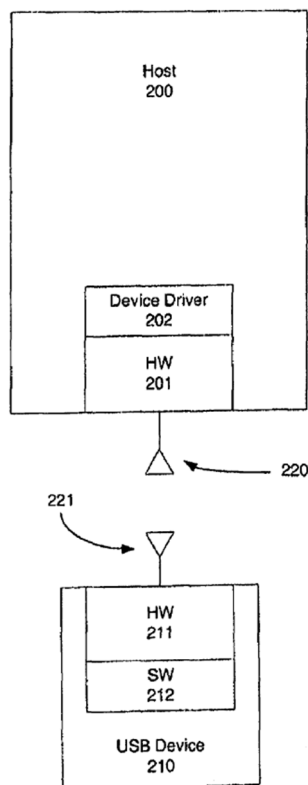


Fig. 2

Ex. 1011, 3:34-39, Fig. 2; Ex. 2004, ¶71.

Christison also described that wired USB devices 310, 320 can be plugged into a device wire adapter (DWA) to be compatible with the USB host. Ex. 1011, 3:48-53, Fig. 3; Ex. 2004, ¶71.

IV. GROUND 1

The *Beel-Dinka-(Christison)* combination relies on two reference's disclosures which were already considered and cited during prosecution (*Beel* and *Christison*) and fails to adequately appreciate the subject matter the '346 Patent claims. *Beel* is directed to a system which relies on "[a] peripheral device adapted to

communicate [] user selected arbitrary media content” between a processing device and a base node. Ex. 1005, Abstract. In contrast, the ’346 Patent claims a system where “the processing device interact[s] *directly* with the base unit over a wireless connection[.]” Ex. 1001, Cls. 1, 11.

The Ground 1 challenge improperly emphasizes two fringe *Beel* embodiments—which amount to less than one page collectively—to alleged obviousness of the ’346 Patent claims. Ex. 1006, ¶¶215-250. Despite *Beel* clearly delineating its third and fourth embodiments from its remaining disclosure, the Petition and Dr. Almeroth indiscriminately and without justification rely on functionality of a peripheral device specifically excluded from the systems and methods claimed by the ’346 Patent. As a result, Ground 1 fails with respect to numerous limitations of the ’346 Patent claims. *See supra* Section IV.A.1.

Moreover, the cited references involve fundamentally different modes of operation. There is no motivation to combine the cited references. Both the Petition and Dr. Almeroth provide conclusory statements (including Dr. Almeroth routinely parroting back the Petition’s analysis) unsupported by sufficient factual predicate that do not substantiate its argument that the ’346 Patent is obvious. *See e.g.*, Ex. 1002, Accordingly, Ground 1 fails.

A. Claim 1

1. “the processing device having... a third party software for a Unified Communication call, a driver, a client software, when

executed on the processing device, is configured to have the processing device interact directly with the base unit over a wireless connection.”

Ground 1 does not render this limitation obvious. Ex. 2004, ¶¶75, 97-103. *Beel*’s system describes a peripheral device that connects to a processing device to facilitate communication of content from the processing device to a base node. See e.g., Ex. 1005, Abstract, ¶¶40, 117; Ex. 2004, ¶98. Notably, the Petition and Dr. Almeroth identify a peripheral device as **central** to *Beel*’s disclosure. Petition, 16 (“Beel discloses systems and methods of wirelessly communicating media content between an electronic device and display via a **peripheral device** and a base node.” (citing Ex. 1005, ¶¶40-41, cls. 82-102)); Ex. 1002, ¶101 (“Beel discloses systems and methods for wirelessly transmitting media content between an electronic device, or multiple devices, and one or more display devices, **specifically, by using peripheral devices** connected to the electronic devices and a base node which is connected to the display device” (Ex. 1005, ¶¶23, 40, 48)); Ex. 2004, ¶98. There is no explanation provided as to why this core tenant of *Beel* would be removed or modified.

Systems that rely on communication between a processing device and a base unit facilitated by the peripheral device (also called a connection unit in *Beel* (Ex. 1005, ¶¶44-46)) cannot render this limitation, requiring no intervening device between the base and processing device or **direct communication**, obvious. Ex.

2004, ¶99. In such systems, the processing device does not “interact directly with the base unit over a wireless connection” as claimed because there is an intervening device, i.e., the connection device, that sits between the base unit and the processing device. Ex. 1001, Cl. 1. The ’346 Patent specification expressly identifies this direct communication through its disclosure of embodiments which do not rely on a peripheral device. *See e.g.*, Ex. 1001, 22:54-60 (“the processing device 160’ **has no first peripheral device** 130, e.g, none is available. In such a case client software 70’ can be adapted to **interact directly** with base unit 100 over a wireless connection 127...”).

The teachings of these embodiments of *Beel*, which rely on the use of the peripheral device cannot be attributed to *Beel*’s embodiments which specifically **exclude** using a peripheral device. Ex. 2004, ¶101. In a glaring deficiency, the Petition does not even attempt to allege a POSITA would be motivated to combine peripheral device embodiments in *Beel* with the peripheral device-less embodiments in *Beel*. Petition, 23-25; *Virtek Vision Int’l ULC v. Assembly Guidance Sys., Inc.*, 97 F.4th 882, 886 (Fed. Cir. 2024) (finding no motivation to combine two different embodiments of the same prior art reference). This burden is Petitioner’s and is not met.

The Petition does cite to *Beel*’s third and fourth embodiment as having direct communication between the processing device and the base node. Petition, 27

(citing Ex. 1005, ¶¶215-248). The third embodiment involves a USB memory stick which stores a portable application that is used to screen scrape data that can be transferred to a communications network via a network connection of the processing device. Ex. 1005, ¶¶215-246; Ex. 2004, ¶100. The fourth embodiment directly installs the software onto the processing device rather than using a USB memory stick. Ex. 1005, ¶¶247-250; Ex. 2004, ¶100. These two embodiments do not rely on a peripheral device, but still fail to establish the obviousness of the claimed subject matter. *See* Ex. 1005, ¶¶215-250.

The Petition, however, indiscriminately relies on embodiments which do include peripheral device transmitters. This scattergun approach to the different embodiments of *Beel* infects significant portions of the Petition's argument for other claim limitations, where the Petition explicitly quotes or references the peripheral device features included in these embodiments. *See* Petition, 29 (limitation 1f), 31 (limitation 1g), 33 (limitation 1i), 34-35 (limitation 1k), 38 (Claim 5), 40-43 (Claims 10 and 20), 43-44 (Claims 21 and 22); Ex. 2004, ¶102. The Petition also cites to peripheral device-based embodiments in *Beel* through its practice of aimlessly citing to several paragraphs with no factual development. *See e.g.*, Petition, 25 (citing Ex. 1005, claim 92, ¶¶40, 93, 112-114, 117-119, 194-99, 288, 319, 321, 323). Notably, the Petition cites to the very features of the peripheral device transmitters for the “*interact directly*” limitation itself. Petition, 27, (citing Ex. 1005, ¶¶205, 208, 213-

214); *see* Ex. 2007, 40:3-19 (confirming the '346 Patent does not require a peripheral device), 41:1-17 (Dr. Almeroth testifying that a system that communicates via a peripheral device falls within the scope of Claim 1).

Communications that occur via a peripheral device are not the claimed direct communications. Ex. 1001, 22:54-60, 23:1-8, 23:23-30, Fig. 12 (User 2 Laptop), Fig. 13 (User 2 Laptop), Fig. 14 (User 2 Laptop); Ex. 2004, ¶103. And the Petition's failure to clearly rely on an embodiment of *Beel* is fatal, as it indiscriminately relies on distinct and discrete embodiments of *Beel*, without articulating *any* reason to combine embodiments which expressly require a peripheral device, with those that do not rely on a peripheral. Accordingly, Ground 1 fails.

2. “wherein the base unit, via the transmitter, is configured to transmit data over the wireless connection to the processing device”

Ground 1 does not render this limitation obvious. Ex. 2004, ¶¶76, 104-106. The Petition fails to identify any communications *from* the base unit “to the processing device.” The Petition cites a 27-paragraph portion of *Beel* to allege the transmission of data over the wireless connection. *See* Petition, 29 (citing Ex. 1005, ¶¶221-248). However, there is no disclosure in *Beel* of data being transmitted *from the base unit to the processing device*. Ex. 2004, ¶105. Instead, *Beel* discloses a client software running on the processing device which routes screen scraped data from the processing device to the base unit. Ex. 1005, ¶¶221, 225-226; Ex. 2004,

¶106. While visual feedback after a user triggers content sharing is shown on the GUI displayed on the user's processing device (e.g., laptop) in one specific embodiment, there is no disclosure of the base unit providing any data transmissions to the processing device relating to this function. Ex. 1005, ¶227; Ex. 2004, ¶106. The other citations to *Beel* pertain to embodiments involving peripheral devices, which are inapplicable to the '346 Patent's claims. Petition, 29 (citing Ex. 1005, ¶¶71, 120, 129, 288); Ex. 2004, ¶105; *see supra* Section IV.A.1. These citations make no reference to transmission of data from the base unit to the processing device (e.g., Ex. 1005, ¶¶71, 120, 129, 288) and rather make explicit reference to a peripheral device (or connection unit) (e.g., Ex. 1005, ¶¶71, 129, 288). Ex. 2003, ¶105. As such, the claimed path and direction of communication is not disclosed by the prior art.

3. “and wherein the client software and the driver, when executed on the processing device, are configured to present the at least one functional device to the operating system of the processing device as a virtual functional device,”

Ground 1 does not render this limitation obvious. Ex. 2004, ¶¶77, 107-109. First, the Petition again relies on disclosures which make explicit reference to a peripheral device. Petition, 31-32 (citing Ex. 1005, ¶¶71-72, 313-317); Ex. 2004, ¶108. Petitioner implicitly argues that because *Beel* discloses an embodiment without a peripheral device, this peripheral device-less embodiment provides all the same functions. Petition, 32 (citing Ex. 1005, ¶¶247-250). Such argument is

improper. *See supra* Section IV.A.1.

Christison does not disclose this limitation. Ex. 2004, ¶109. The Petition relies on *Christison* for teachings of a virtual functional device. Even if *Christison*'s disclosure were sufficient, there is no attempt by Petitioner to relate *Christison*'s features to the client software and the driver of the processing device. *Christison*'s WUSB Hub presents a wired USB device as if it was “native,” not software or an application running on the processing device as claimed. Ex. 1011, 6:17-19, 6:26-31; Ex. 2004, ¶109. In other words, neither of the relied on references disclose a client software and a driver that presents a functional device as a virtual functional device.

4. “wherein the client software is further configured to provide data transformations based on a type of functional data from the at least one functional device to the processing device.”

Ground 1 does not render this limitation obvious. Ex. 2004, ¶¶78, 110-112. The Petition states “audio and video data is obviously decoded/decrypted based on the particular encoding/encryption used, e.g., ‘optionally encoded into for instance Orgg/Vorbis, optionally encrypted using for instance CryptoPP.’” Petition, 35 (citing Ex. 1005, ¶¶314, 320-323; Ex. 1002, ¶143). First, the identified data communications are not “from the at least one functional device to the processing device” where “the at least one functional device is connected to or in the base unit” as claimed. Ex. 1001, Cl. 1. Instead, the identified communications are from the

processing device to the base node. Ex. 1005, ¶¶314 (“If audio is received, the *peripheral device* preferably will initiate an additional TCP/IP socket connection *to the base unit and communications network*.”), 315 (“the base unit is *adapted to receive* the audio stream packets”), 321 (“On the peripheral device 32 the video packets are *received* at the corresponding plug and play port... and *then transmitted* to the communications network by a transmitter 21.”). Second, the Orgg/Vorbis or CryptoPP protocols are only described with respect to the virtual audio device, there is no disclosure of a competing encryption method used for other data, like screen scraped data (which, again, are not from the functional device). Ex. 1005, ¶¶314, 320-323; Ex. 2004, ¶111. In other words, the Petition shows that encryption occurs with audio data, but not that data transformations are performed based on a type of functional device. Ex. 2004, ¶111. Similarly, the Petition relies on *Dinka* to show a specific engine is used to encode voice or video data, but does not show that other data transformations are performed based on the type of functional data. Petition, 36 (citing Ex. 1006, 9:32-50); Ex. 2004, ¶112. Moreover, the argument that something would “obviously” be done is insufficient to establish it is present in a given prior art reference.

The Petition’s allegation that it would be obvious to provide data transformations based on functional device data is unsupported absent Dr. Almeroth’s testimony. However, Dr. Almeroth’s expert testimony regarding this

point should not be given credible weight when it comes to this element. Dr. Almeroth has provided testimony that all data may be treated the same regardless of data type despite opining, at Ex. 1002, ¶143, that *Beel* includes data type specific encoders/decoders, packetizers/unpackers. When questioned regarding the data communications involved in *Beel* and other cited references. Dr. Almeroth stated “Data is data; right? So whether it’s real-time audio/video, whether it’s audio/video from a file, whether it’s video scraped off a screen, its source doesn’t affect the use of the transfer channels that can be created.” Ex. 2002, 101:1-5. Likewise, Dr. Almeroth further explained “It’s kind of what I described earlier, a way of using a basic interface or a mode and then data is data and you can send it. And once it’s received, the device can do anything it wants with it.” *Id.*, 121:15-19.

Moreover, Dr. Almeroth’s declaration frequently restates the conclusory statements provided in the Petition, without providing any additional analysis or factual support. *Compare* Petition, 34-36; Ex, 1002, ¶¶143-146. Rather than provide analysis supported by evidence and expert reasoning, Dr. Almeroth’s declaration merely acquiesces to the conclusions offered in the Petition. Such analysis cannot substantiate Petitioner’s burden that a claim is obvious. *Bell Semiconductor LLC v. NXP B.V.*, No. 2023-1260, 2024 WL 4984053, at *3 (Fed. Cir. Dec. 5, 2024) (confirming the Board properly rejecting an “expert’s declaration that parrots the language of the petition.”).

Given Dr. Almeroth's inconsistent testimony that "data is data" but also that a POSITA would also find it obvious to perform different transformations based on the type of data, in addition to his tendency to merely parrot conclusions of the Petition, his testimony regarding this limitation should be given little weight. Dr. Almeroth's inconsistent application and interpretation of the type of data confirms his hindsight-driven analysis.

B. Claim 11

The Petition cites its arguments regarding Claim 1 for Claim 11. Accordingly, the arguments as to Claim 11 are insufficient for the same reasons as for Claim 1. *Supra* Sections IV.A.1-IV.A.4; Ex. 2004, ¶¶72-79.

C. Claims 2 and 12

Beel does not disclose that the client software and drivers are configured to present a simulated speakerphone. The Petition improperly extends limited disclosure in *Beel* to allege obviousness of Claims 2 and 12. For example, the Petition relies on disclosure of a microphone, client software, pre-installed generic drivers, and a "peripheral device preferably act[ing] as a composite device comprising for instance a (virtual) audio speaker device" across three unrelated sections of *Beel* to allege obviousness. Petition, 36, (citing Ex. 1005, ¶317). **First**, reliance on a peripheral device is improper, as both Claims 1 and 11 require *direct* communication between the processing device and base unit. *See supra* Sections

IV.A.1, 0. **Second**, there is no disclosure in *Beel* of a virtual microphone. Ex. 2004, ¶113. The cited disclosure of a microphone describes using “microphones 38 that can be used to transfer audio, e.g., to the processing devices 31 and to loud speakers (not shown) attached to the base node 36 or part of the display 44). Ex. 1005, ¶120. The Petition’s citation to Dr. Almeroth’s declaration provides nothing more to support its position—in fact, the declaration merely provides the same exact statement. See Ex. 1002, ¶147; *Bell Semiconductor*, 2024 WL 4984053, at *3 (confirming the Board properly rejecting an “expert’s declaration that parrots the language of the petition.”). Accordingly, this conclusory argument is unpersuasive.

D. Claims 3 and 13

Beel does not disclose that the client software and drivers are configured to present a simulated videocam. As with Section IV.C, the Petition cites to disclosure of cameras, but does not identify any disclosure of presenting a simulated videocamera to create a virtual videocamera. Ex. 2004, ¶114. Likewise, the cited portions of Dr. Almeroth’s declaration provide nearly identical language without any development. Petition, 36 (citing Ex. 1002, ¶¶148, 173); *Bell Semiconductor*, 2024 WL 4984053, at *3 (confirming the Board properly rejecting an “expert’s declaration that parrots the language of the petition.”). Accordingly, this conclusory argument is unpersuasive.

E. Claim 5

Beel does not disclose that the functional data includes video data received from the base unit via the transmitter over a wireless connection. Claim 5 depends from Claim 1, which requires the processing device to communicate directly with the base unit. *See* Section IV.A.1. Despite this limitation, the Petition here argues that “[t]he *peripheral device* includes a transceiver able to receive the video data.” Petition, 38. Communication via a peripheral device is not direct communication, so *Beel* does not render Claim 5 obvious. Ex. 2004, ¶115.

F. Claim 6

Beel does not disclose that the data transformations of the video data comprise decoding and compositing or decrypting the video data. Claim 6 depends from Claim 1, which requires the processing device to communicate directly with the base unit. *See* Section IV.A.1. Despite this limitation, the Petition again relies on communications and functions of a peripheral device. Petition, 38. Communications via a peripheral device are not direct communications, so they do not render Claim 6 obvious. Ex. 2004, ¶116.

G. Claims 10 and 20

Beel does not disclose at least one fixed or configurable endpoint of the virtual functional device, wherein the at least one fixed or configurable endpoint is a data source or a data sink which is configured to store or emit data of the virtual functional device. Claims 10 and 20 depends from Claims 1 and 11 respectively, which

requires the processing device to communicate directly with the base unit. *See* Sections IV.A.1, 0. Despite this limitation, the Petition again relies on communications and functions of a peripheral device. Petition, 40-43. Communications via a peripheral device are not direct communications, so they do not render Claims 10 or 20 obvious. Ex. 2004, ¶117.

H. There is No Motivation to Combine *Beel*, *Dinka*, and *Christison*

The Petition fails to present any reasonable motivation to combine the relied upon art. Rather, the Petition simply identifies various discrete teachings and alleges that if combined, the references would teach the '346 Patent claimed invention. Contrary to the Petition's allegations, *Beel* and *Dinka* provide for fundamentally different modes of operation that would not, and in fact could not, be combined by a POSITA. The Petition also fails to identify any persuasive motivation to combine the three disparate references to arrive at the *Beel-Dinka-Christison* combination. *Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1073 (Fed. Cir. 2015) (“[O]bviousness concerns whether a skilled artisan not only *could have made* but **would have been motivated to make** the combination or modification of prior art to arrive at the claimed invention.”) (emphasis in original).

1. *Dinka* Teaches Away From the Claimed Subject Matter

The '346 Patent recognized that portable devices (e.g., laptops and mobile devices) are disadvantaged by relying on low quality functional devices such as

integrated microphones and speakers during virtual meetings. Ex. 1001, 1:12-14, 1:31-34, 1:37-42; Ex. 2004, ¶81. The system disclosed in the '346 Patent provides higher quality functional devices to these portable devices by wirelessly communicating to a base unit connected to higher quality functional devices. Ex. 1001, 1:46-49; Ex. 2004, ¶81. In contrast, *Dinka* **actively discourages** and therefore teaches away from, the use of portable devices (such as the claimed processing device) for virtual meetings and instead advocates for packet-based communications to be integrated in a television or set-top box, creating the special hardware device that Dr. Almeroth is familiar with. Ex. 1006, 2:4-30; Ex. 2006, 26:1-27:9; Ex. 2004, ¶82.

Rather than host communications on a television with integrated functional devices, the '346 Patent claims systems and methods that make functional devices connected to a base unit available to processing devices through direct communications over a wireless connection. Ex. 1001, Cls. 1, 11; Ex. 2004, ¶¶83-84; *See also*, Ex. 1001, 10:20-23, 10:36-40, 10:54-60, 12:19-23, 16:29-35, 22:1-23:41, 23:45-47. Both independent claims recite a client application, which, when executed by or on the processing device, causes the processing device to “**interact directly** with the base unit over a wireless connection[.]” Ex. 1001, Cls. 1, 11. In these claimed embodiments, the processing device simulates virtual functional devices that can be presented to the processing device. Ex. 1001, 22:54-65, 23:17-

20, 23:24-30; Ex. 2004, ¶84. Webcams, speakerphones, and microphones, are example functional devices which may be simulated as virtual functional devices. Ex. 1001, 23:17-19, 23:33-38; Ex. 2004, ¶84. Then, the virtual functional devices can be utilized on third party software, such as software used for hosting Unified Communication calls. Ex. 1001, 23:20-22, 23:38-41.

Dinka actively criticizes, discourages, and discredits hosting unified communications protocol on a processing device (e.g., laptop, mobile device, or computer), the solution presented by the '346 Patent, and cannot be properly combined with *Beel*. Ex. 2004, ¶¶73, 80, 85; *See e.g., Polaris Indus. v. Arctic Cat Inc.*, 882 F.3d 1056, 1068-69 (Fed. Cir. 2018) (reversing a rejection of a teaching away theory because the inquiry is not “what a skilled artisan would have been **able** to do, [but] rather than what a skilled artisan would have been **motivated** to do at the time of the invention”); *Chemours Co. FC, LLC v. Daikin Indus., Ltd.*, 4 F.4th 1370 (Fed. Cir. 2021) (holding that the prior art reference teaches away when it explicitly discourages a skilled artisan from modifying a prior art reference in the manner necessary to reach the claimed invention.); *Spectralytics, Inc. v. Cordis Corp.*, 649 F.3d 1336 (Fed. Cir. 2011) (teaching away does not require a prior reference to foresee and explicitly reject the applicant’s invention); Ex. 2004, ¶79.

Dinka expressly teaches that while packet-based communications “are most commonly accessed using a personal computer[,] [t]his 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.” Ex. 1006, 2:4-8; *see also id.*, 2:8-12 (“Even when the communication client is installed and executed on a personal computer, its use may be limited because personal computers are often not located in a place where the user is either familiar or comfortable with communicating.”); Ex. 2004, ¶85.

Dinka, seeking to overcome the problems with users using their own laptop device, provides voice or video calls on a central device (e.g., television set or set-box), and addresses problems associated with these implementations. Ex. 1006, 2:19-25, 2:34-38; Ex. 2004, ¶86. *Dinka*’s television includes embedded VoIP calling functionality, thereby removing the need for a user to rely on its own laptop to participate in VoIP calls. Ex. 1006, 7:17-21. Rather than providing better resources (conferencing cameras and microphones) and display screens to consumer devices, *Dinka* discourages the use of such devices (the very devices that are used by ’346 Patent to host VoIP calls) and instead teaches implementing this functionality directly into a special purpose television. Ex. 2004, ¶87. Accordingly, *Dinka* teaches away from the claimed subject matter of the ’346 Patent.

2. The Petition Fails to Establish a POSITA Would Have Been Motivated to Combine *Beel* and *Dinka*

A POSITA would not consider implementing teachings of *Dinka* into *Beel*. Ex. 2004, ¶¶74, 88-96. As described *supra* Section IV.H.1, *Dinka* teaches away from

systems that host unified communications calls on a laptop computer or mobile device. *Spectralytics, Inc. v. Cordis Corp.*, 649 F.3d 1336, 1343-44 (Fed. Cir. 2011) (pervasive general preference can amount to teaching away). *Beel*, however, is solely directed towards providing additional features to laptops or mobile devices, like wirelessly presenting audio and display data in a meeting room. *Compare* Ex. 1006, 2:15-18; Ex. 1005, ¶40; Ex. 2004, ¶89. *Beel* and *Dinka* provide competing, and diametrically opposed, solutions to address the limited functionality of laptops and computers. Ex. 2004, ¶90.

The Petition fails to articulate why a POSITA would combine references with fundamentally different approaches, never mind, establishing what combination between the two competing references would result, or why. Accordingly, there is no motivation for a POSITA to make the offered combination.

3. The Petition's Proffered "Motivation" Arguments Fail

Notwithstanding the previously articulated issues in arriving at the *Beel-Dinka-Christison* combination, the Petition's proffered motivations are also insufficient. Ex. 2004, ¶91.

With respect to *Beel* and *Dinka* the Petition's motivation to combine fails. Reliance on general similarities between *Beel* and *Dinka* is insufficient to provide a motivation to combine. Petition, 26-27; *William Wesley Carnes, Sr., Inc. v. Seaboard Int'l Inc.*, IPR2019-00133 Paper 10, 18 (PTAB May 8, 2019) ("That

statement of similarity, however, does not constitute an articulate reasoning with rational underpinning as to why a POSITA would combine elements of one reference with another, and why a POSITA would modify the teachings of the references to arrive at the claimed invention.”). The Petition concludes that a POSITA would have been motivated to combine *Beel* and *Dinka* to “improve similar systems in the same manner” without articulating what the alleged improvement would be, why that improvement would be desired, or whether that change would be made with any expectation of success. *See* Petition, 24. Such conclusory statements regarding an unknown improvement are especially unpersuasive given *Dinka* itself teaches away from the claimed subject matter. *supra* Section IV.H.1; Ex. 2004, ¶¶92-93.

Dr. Almeroth also fails to articulate any specific improvement that would motivate a POSITA to combine the references in the claimed configuration. Ex. 2004, ¶92. Instead, Dr. Almeroth appeals to general similarities between systems and concludes they would be combined without any relation between the combination and the apparent improvement. Ex. 1002, ¶119; Ex. 2004, ¶92.

Additionally, the Petition draws a false equivalence from the fact that the ’346 Patent references Skype as a Unified Communications system or tool in its definitions section and concludes that a POSITA would be motivated to combine *Beel* (a Barco-owned patent) with *Dinka* (a Skype-owned patent) without explanation. Petition, 24. The fact that the Skype application is referenced in

disclosure of the '346 Patent does not explain why a POSITA would modify “electronic tools with audio for meeting as well as device for providing connections to a communications network” which does not reference Skype (*Beel*) and “a television apparatus having an embedded processing apparatus for conducting voice or video calls via a packet-based network.” Ex. 1005, ¶¶39, 41; Ex. 1006, 1:13-15, 7:17-21; Ex. 2004, ¶93. Rather, this is evidence of classic, impermissible, hindsight-driven analysis that should doom Petitioner’s challenge.

Likewise, the proposed motivation to combine *Christison* with either *Beel* or *Dinka* is insufficient. Ex. 2004, ¶94. The Petition alleges that “[a] POSA would recognize that connecting wireless functional devices to computers was well known in the art, and would recognize that Christison teaches one efficient example of presenting wireless USB devices as ‘native devices.’” Petition, 24. Yet again, merely alleging that content or elements were known independently is not sufficient to establish obviousness. *KSR Int. Co. v. Teleflex Inc.*, 550 U.S. 398, 418-19 (2007) (“[A] patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.”).

The Petition does not provide a single explanation of *how* or *why* this combination would be motivated. In fact, the Petition does not even conclude that a POSITA *would* actually make the combination to *improve* the primary reference, rather it simply alleges that the combination *could have* been made. Petition, 25

(“Beel, Dinka, and Christison **could have** been combined by...”); *Belden*, 805 F.3d at 1073 (Fed. Cir. 2015) (“[O]bviousness concerns whether a skilled artisan not only **could have made** but **would have been motivated to make** the combination or modification of prior art to arrive at the claimed invention.”) (emphasis in original). Such arguments are insufficient to establish a motivation to combine. *Virtek Vision International ULC v. Assembly Guidance Systems, Inc.*, 97 F.4th 882, 888 (Fed. Cir. 2024) (“The mere fact that these possible arrangements existed in the prior art does not provide a reason that a skilled artisan **would have substituted** [an element of one reference with the elements of another].”).

Further, the Petition does not articulate any coherent combination that teaches the claimed invention, but instead attempts to rely indiscriminately on various distinct prior art elements that supposedly could be combined to argue the claims of the ’346 Patent are obvious. Petition, 32 (“Christison, optionally, complements the disclosure of Beel and Dinka with regard to the ‘virtual functional device.’”), 33 (“Optionally, it would have been obvious to combine Christison’s disclosure of remotely connecting USB device to processing device as a native USB device”); *see* Ex. 1002, ¶¶139, 141; Ex. 2004, ¶¶95-96.

Most egregiously, the Petition also provides nearly identical motivation to combine sections in its challenge of the ’346 Patent as in its challenge of the ’972 Patent. As explained in Section II.A, unlike other patents in its family, the ’346

Patent is directed to a system that requires *direct communication* between the processing device and base node. The '346 Patent excludes embodiments of the specification which use a peripheral device. *See* Ex. 1001, Cls. 1, 11. Notwithstanding the fundamental difference in systems, the Petition relies on identical grounds, with almost *verbatim* repetition of the motivation to combine. *Compare* Petition, 23-25; IPR2025-00491 (Paper 2) 26-28; *compare* Ex. 1002, ¶¶115-119; Ex. 2020, ¶¶107-111. Inexplicably, the Petitioner asserts combinations based on the same underlying (and insufficient) rationale and alleges two diverging systems. Ex. 2004, ¶96. The make-work nature is also evident from the consistent reliance on a “peripheral device” throughout the Ground. *See e.g., supra* Section IV.A.1.

The Petition’s hindsight, outcome driven approach is emblematic of the Petition’s overall allegation that each limitation was *known*, not that the claims of the '346 Patent were *obvious*. *Virtek*, 97 F.4th at 888 (“That is an error as a matter of law. It does not suffice to simply be known. A reason for combining must exist.”). The Petition thus fails to demonstrate that a POSITA would have been motivated to make the proposed combination and must be rejected.

V. GROUND 2

In its Institution Decision, the Board found “Patent Owner has raised a legitimate concern as to whether Petitioner is likely to show obviousness of any

claim pursuant to these grounds” because the Petition ““draws upon the primary dockee and secondary dockee indiscriminately.”” Paper 11, 26, 32. The Ground 2 combination fails for this indiscriminate use and its failure to teach all limitations of the challenged claims.

A. Claim 1

1. “and wherein the client software and the driver, when executed on the processing device, are configured to present the at least one functional device to the operating system of the processing device as a virtual functional device,”

- a. The Petition inappropriately relies on *Van De Laar’s* Primary Dockee and Secondary Dockee Indiscriminately

In its Institution Decision, the Board found “Patent Owner has raised a legitimate concern as to whether Petitioner is likely to show obviousness of any claim pursuant to these grounds” because the Petition ““draws upon the primary dockee and secondary dockee indiscriminately.”” Paper 11, 26, 32. Accordingly, Ground 2 fails. Ex. 2004, ¶¶120, 148-152.

Van de Laar’s system includes two distinct dockees: a primary dockee and a secondary dockee. Ex. 1005, ¶77; Ex. 2004, ¶149. The primary and secondary dockee devices have different access levels and capabilities with respect to the WDH and peripheral devices. Ex. 1005, ¶77; Ex. 2004, ¶149. These two distinct components are relied on indiscriminately by the Petition, without rationale for modifying or moving functionality across devices.

For example, the Petition relies on the secondary dockee with respect to teachings of the virtual functional device of limitation h. Petition, 55-56; Ex. 2004, ¶150. The WDH does not provide simulated peripherals, (what is relied on as virtual devices) to the primary dockee. Ex. 1007, ¶54; Ex. 2004, ¶150. Despite this difference, the Petition relies on the primary dockee's use of Skype with respect to limitation i. Petition, 56-57, 66 (citing pages 55-57 for claims 11). The primary dockee cannot present the Unified Communication call with "the virtual functional device" when that device is only provided to the secondary dockee. Ex. 1007, ¶54; Ex. 2004, ¶150. Likewise, Dr. Almeroth did not take a specific position as to whether the primary dockee or the secondary dockee or both participate in the Skype call. Ex. 2008, 40:9-19. The Petition provides no evidence to reconcile these differences, but instead relies upon the primary dockee and secondary dockee indiscriminately. Ex. 2004, ¶151.

Further, the Petition points to *Christison* as "optionally" teaching a "virtual functional device." Petition, 57. However, the Petition provides *no* explanation of how *Christison*'s teachings would be implemented, and which element (the WDH, primary dockee, or the secondary dockee) would be changed in view of *Christison*. Ex. 2004, ¶151. Accordingly, Ground 2 fails.

b. The references do not describe a driver

Ground 2 provides no teachings of a driver whatsoever. The word "driver"

does not appear in either *Kaplan* or *Van de Laar*. See generally Ex. 1007; Ex. 1008. Ex. 2004, ¶152. The Petition does not cite another reference (beyond the '346 Patent) for this limitation. In fact, neither the Petition, nor Dr. Almeroth, mention the word *driver* in their arguments with respect to this limitation, confirming that not only is there no teaching of a driver for this element, but there's no argument that a driver is implicitly used to provide the recited function or otherwise rendered obvious by the cited teachings of the art for this element. Petition, 55-56; Ex. 1002, ¶¶204-205. Rather, the Petition simply failed to identify any argument regarding the claimed driver. As it is Petitioner's burden to establish where the prior art discloses each claim element, and it has not done so, this failure is fatal to this Ground.

For a separate limitation, the Petition asserts that *Van de Laar* "necessarily or at least obviously includes drivers." Petition, 53 (citing Ex. 1002, ¶199). This allegation relies on disclosure of drivers in the '346 Patent, and their association with operating systems. Ex. 2004, ¶52. Moreover, it is not enough to merely conclude that "drivers exist" to render the challenged limitation is obvious. Accordingly, the Petition fails with respect to both Claims 1 and 11. Ex. 1001, Cls. 1.

2. “the processing device being configured to host the Unified Communication between two or more other processing devices, and”

The Petition relies only on *Van de Laar* to disclose this limitation. Petition, 57. However, *Van de Laar* does not utilize Skype in a manner to render the challenged limitation obvious. Ex. 2004, ¶¶121, 153-159.

Van de Laar discloses a system where a wireless docking station or wireless docking host enables a mobile device (a dockee) to access a set of peripherals locally attached to the wireless docking host. Ex. 1007, ¶6; Ex. 2004, ¶154. Figure 3 (reproduced below) shows an example of the communication structure in the wireless docking system. Ex. 1007, ¶67. The wireless docking host (WDH or host) 300 has wireless communications with a primary dockee 320 and a secondary dockee. Ex. 1007, ¶124; Ex. 2004, ¶155. The WDH receives AV data via a unicast link 311 from the primary dockee 320 and transfers the AV data via a broadcast link 312 to the secondary dockee 330. Ex. 1007, ¶124; Ex. 2004, ¶155. The primary and secondary dockees also communicate directly via a unicast link 310. Ex. 1007, ¶124. The host 300 has a layer that includes a Wi-Fi Miracast (WFM) sink, a WFM source, an interactive activity engine (IAE) server, and a DHCP server function. Ex. 1007, ¶124; Ex. 2004, ¶155. The host's 300 WFM sink receives data from primary dockee's 320 WFM source, and the host's 300 WFM source provides data to the secondary dockee's 330 WFM sink(s). Ex. 1007, ¶124; Ex. 2004, ¶155. The WFM

source of the host 300 represented as a peripheral device to the secondary dockee 330 WFM sink. Ex. 1007, ¶124.

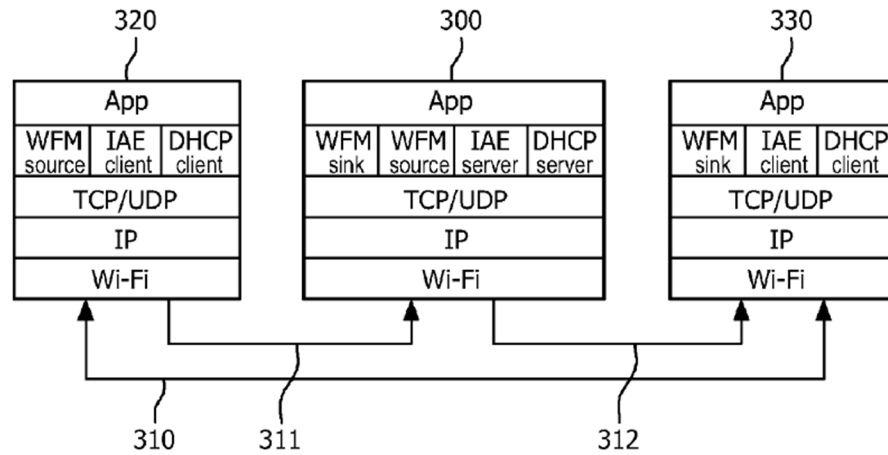


FIG. 3

Ex. 1007, Fig. 3.

So, the primary dockee 320 runs a docking application using WFM over IP and connects to the host, and the primary dockee functions as a WFM source. Ex. 1007, ¶126; Ex. 2004, ¶156. The host 300 functions as a WFM source and sink, and forwards the packets in broadcast modes to the secondary dockee(s) 330. Ex. 1007, ¶126; Ex. 2004, ¶156. The secondary dockee(s) receive the packets as a WFM sink. Ex. 1007, ¶126. In this way, the data from the primary dockee 320 is shared to the secondary dockee 330 via the wireless docking host.

Van de Laar goes on to explain that:

In another embodiment, the WDH may enable primary dockees to provide output to the WDH and/or its audio peripherals through an audio stream between the dockee and the WDH. This may be based

on... *Skype*... or other audio streaming mechanisms. The WDH can mix this with the audio output for the audio peripherals so that all people in the room can hear it.

Ex. 1007, ¶128. In other words, rather than sharing communicating AV data from the WFM source of the primary dockee 320 to the WFM sink of WDH 310 via Miracast, a Skype protocol can be used instead. Ex. 1007, ¶12; Ex. 2004, ¶158. There is no other disclosure of Skype in *Van de Laar*.

So, the use of Skype as taught by *Van de Laar* is to communicate between the primary dockee (an alleged processing device) to the WDH (the alleged base node) which then transmits that data to a secondary dockee (a separately alleged processing device) and not between the primary and secondary dockees. Ex. 1007, ¶128; Ex. 2004, ¶158. Moreover, there is no disclosure of secondary dockees ever sending audio or audiovisual data to communicate on the unified communications call—the secondary dockee is a data sink. Ex. 1007, ¶128. To the extent this use of Skype even constitutes as a unified communication call anymore, it is “hosted” by the WDH, not a processing device. Accordingly, *Van de Laar* does not teach “the processing device being configured to host the Unified Communication between two or more other processing devices[.]” Ex. 1001, Cl. 1.

Moreover, the use of Skype is an alternative to using Miracast. *See* Ex. 1007, ¶128 (“In another embodiment, the WDH may enable primary dockees to provide output to the WDH... through an audio stream between the dockee and WDH. This

may be based on...Skype”); Ex. 2004, ¶159. The Petition seemingly relies on Miracast as a “client software” in its obviousness challenge. Petition, 51-52; *see* Ex. 1007, ¶¶124-126, 128. There is no explanation why *Van de Laar* would be implemented to use Skype to “enable primary dockees to provide output to the WDH and/or its audio peripherals” and simultaneously use WiFi Miracast “to make [the peripherals’] functionality available through the wireless network to other devices” to communicate AV data Ex. 1007, ¶¶73, 124, 128. Skype and Miracast are different protocols. Ex. 2004, ¶159.

3. “wherein the client software is further configured to provide data transformations based on a type of functional data from the at least one functional device to the processing device.”

The Petition fails to show that Ground 2 teaches this limitation. Ex. 2004, ¶¶122, 160-161. The Petition concludes “Data is conventionally scaled, transcoded, or mixed *based on a type of functional data*, such on whether the data is audio data, visual data, or another type of data.” Petition, 47 (emphasis in original) (citing Ex. 1002, ¶212). The only support for this statement is Dr. Almeroth’s testimony, which is provided without any support:

I note that a POSA would recognize and find it obvious in the art that data is conventionally scaled, transcoded, or mixed based on a type of functional data it represents, such on whether the data is audio data, visual data, or another type of data. A POSA would understand that different data types require different methods of scaling, transcoding, or mixing, and therefore, must be based on the type of data it is.

Ex. 1002, ¶212.

The fact that data transformations can occur based on the type of functional data received does not render obvious that data transformations *are* performed based on the type of functional data. Ex. 2004, ¶161. Moreover, the Petition makes no attempts to tie this function to the claimed client software. Petition, 57; Ex. 2004, ¶161. In the cited disclosures, of *Van de Laar*, the data is scaled, transcoded, or mixed by the WDH. Ex. 1007, ¶¶56, 59-60, 123, 126. Likewise, *Kaplan* discloses video processing occurring “at the receiver.” Ex. 2004, ¶32.

Further, the conclusory statement that something would “obviously” be done is insufficient to establish it is present in a given prior art reference. *Apple Inc. v. MPH Technologies Oy*, 28 F.4th 254, 262 (Fed. Cir. 2022) (“The Board was free to reject [Petitioner’s] expert testimony based on a lack of factual support”). Dr. Almeroth’s expert testimony regarding this point should not be given much, if any weight, in particular when it comes to this element.

Dr. Almeroth stated “Data is data; right? So whether it’s real-time audio/video, whether it’s audio/video from a file, whether it’s video scraped off a screen, its source doesn’t affect the use of the transfer channels that can be created.” Ex. 2002, 101:1-5. Likewise, Dr. Almeroth further explained “It’s kind of what I described earlier, a way of using a basic interface or a mode and then data is data and you can send it. And once it’s received, the device can do anything it wants with

it.” *Id.*, 121:15-19. Given Dr. Almeroth’s inconsistent testimony regarding how a POSITA would interpret the data transmissions, his interpretations at least regarding this limitation should be given little weight.

B. Claim 11

The Petition cites to its arguments for Claim 1 for Claim 11. Accordingly, the arguments as to Claim 11 are insufficient for the same reasons as for Claim 1. *See supra* Sections IV.A.1-IV.A.4; Ex. 2004, ¶¶118-122.

C. Claims 2, 3, 12 and 13

Van de Laar does not disclose that the client software and the driver are configured to present as a simulated speakerphone or simulated videocam. The Petition first relies on communication of audio data via audio streams between the primary dockee and the WDH. Petition, 58 (citing Ex. 1007, ¶128.); Ex. 2004, ¶162. This disclosure is insufficient to teach these challenged claims. *See* Ex. 1001, Cls. 2, 3, 12, 13. Second, the Petition identifies that simulated devices may be offered to the secondary dockee. Petition, 58 (citing Ex. 1007, ¶¶54, 93, 124). *Van de Laar* distinguishes between the primary dockee and secondary dockee with respect to the way peripherals are rendered. Ex. 1007, ¶¶52-54, 93, 124; Ex. 2004, ¶162. The Petition improperly relies on the primary dockee and secondary dockee indiscriminately, which is improper. *Supra* Section V.A.1.a.

D. Claim 5

Van de Laar does not disclose that functional data includes video data

received from the base unit via the transmitter over the wireless connection. The Petition again relies on the features of the secondary dockee, which is improper. Petition, 60 (citing Ex. 1007, ¶77); Ex. 2004, ¶163; *supra* Section V.A.1.a..

E. Claims 7 and 16

Van de Laar does not disclose that the functional device disclosed to the processing device is one or more of a data capturing device, a microphone, a speakerphone, a speaker, another display, a touchscreen, a projector, a camera, a video camera, and a webcam. The Petition again relies on the features of the secondary dockee, which is improper. Petition, 60 (citing Ex. 1007, ¶93); Ex. 2004, ¶164; *supra* Section V.A.1.a..

F. Claims 9 and 18

The Petition cites to its arguments for Claim 1 for Claims 9 and 18. The arguments as to Claim 9 and 18 are insufficient due to their improper reliance on *Van de Laar*'s disclosure of Skype as explained in Section IV.A.1. Ex. 2004, ¶165.

G. There is No Motivation to Combine *Kaplan*, *Van de Laar*, and *Christison*

In Ground 2, the Petition alleges a combination between *Kaplan*, *Van de Laar*, and *Christison*. However, the Petition provides no explanation of what actual modification, or combination, would be made. Without clarity into what elements from each system are even relied upon, it is clear that the Petition has failed to

establish that a POSITA would be motivated to combine the cited references. Ex. 2004, ¶¶119, 124-147.

1. The Petition does not elect a transmission technique

Van de Laar and *Kaplan* teach systems for wireless connectivity through very different protocols to extract different benefits. Ex. 2004, ¶¶126-130. *Kaplan* describes transmitting video content between a computer and display device using a transmitter and a receiver. Ex. 1008, Abstract; Ex. 2004, ¶126. The transmitter is a USB connector and connects to a port of a computer. Ex. 1008, ¶17; Ex. 2004, ¶126. The receiver includes one or more video and audio outputs (such as HDMI) and connects to a display. Ex. 1008, ¶16; Ex. 2004, ¶126.

The system also includes a remote control which controls the playback of video footage on the display device. Ex. 1008, ¶19; Ex. 2004, ¶126. Together, these components provide a system to provide video footage from a computer to a display device. Ex. 1008, ¶19; Ex. 2004, ¶127. Figure 2 (reproduced below) shows the remote control 130, receiver 110 connected to a display device 210, and transmitter 120 connected to a computer 220:

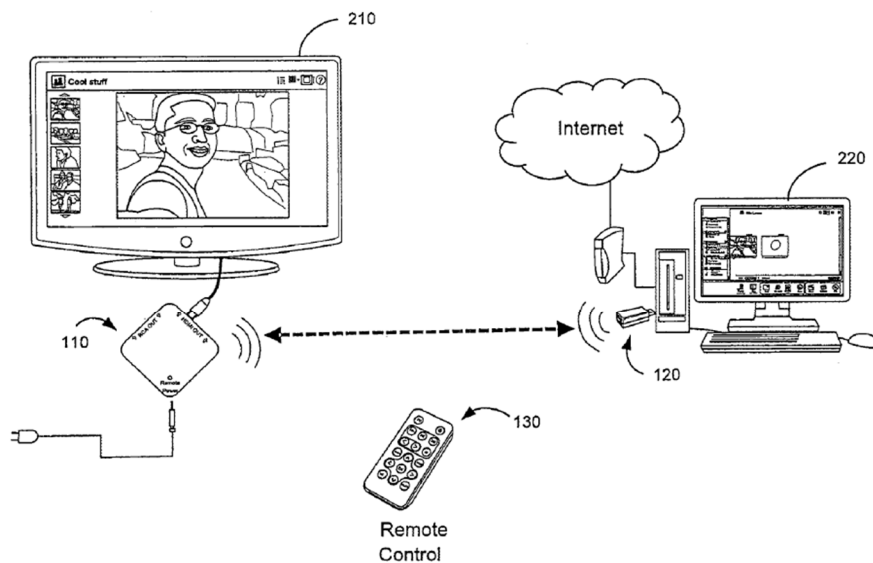


FIG. 2

Ex. 1008, Fig. 2, ¶21.

Van de Laar, conversely, provides a system for wireless docking that enables multiple “dockees” to wirelessly dock to a host device, enabling shared usage of A/V peripherals. Ex. 1007, ¶9; Ex. 2004, ¶128. A “dockee” in *Van de Laar* is a mobile device (e.g., a laptop, phone, tablets, portal media players, cameras, and electronic watches). Ex. 1007, ¶¶6, 72; Ex. 2004, ¶128. The wireless docking station includes a wireless docking host (WDH) coupled to a number of peripherals for rendering audio or video data, and the host device is capable of wireless communication with a dockee device. Ex. 1007, ¶¶72, 74; Ex. 2004, ¶128. The systems provides connection to primary dockee devices and secondary dockee devices. Ex. 1007, ¶78; Ex. 2004, ¶129. Primary dockee devices gain access to control of at least one peripheral device for determining the AV data to be rendered, while secondary dockee devices do not gain control but only receive the AV data rendered on the

peripherals. Ex. 1007, ¶¶78, 82; Ex. 2004, ¶129. *Van de Laar* does not include a peripheral device that connects to a laptop or other user processing device to provide communications over the wireless communications network, instead it uses the dockees integrated transmitter. Ex. 1007, ¶76, Fig. 1; Ex. 2004, ¶130.

The Petition does not articulate what transmission technique (the peripheral device transmitter of *Kaplan* or integrated transmitter of *Van de Laar*) is used to communicate between the alleged processing devices and the alleged base node in the Ground. Ex. 2004, ¶131. The Petition states a “POSA would have been motivated to modify Kaplan’s system of data transmission and display with Van de Laar’s system to connect multiple user processing devices together...” Petition, 47. However, it is unclear how *Kaplan*’s system would be modified by *Van de Laar*’s system, if at all. Such lack of clarity is also evident throughout the Petition. For example, the Petition references *Christison*’s use of a wireless peripheral device and use of a USB protocol, which suggests wired communication from a peripheral device. Petition, 48; Ex. 2004, ¶132. Likewise, the Petition states that “The wireless communication *would obviously use a transmitter similar to the one that Kaplan discloses*” and provides the following annotation:

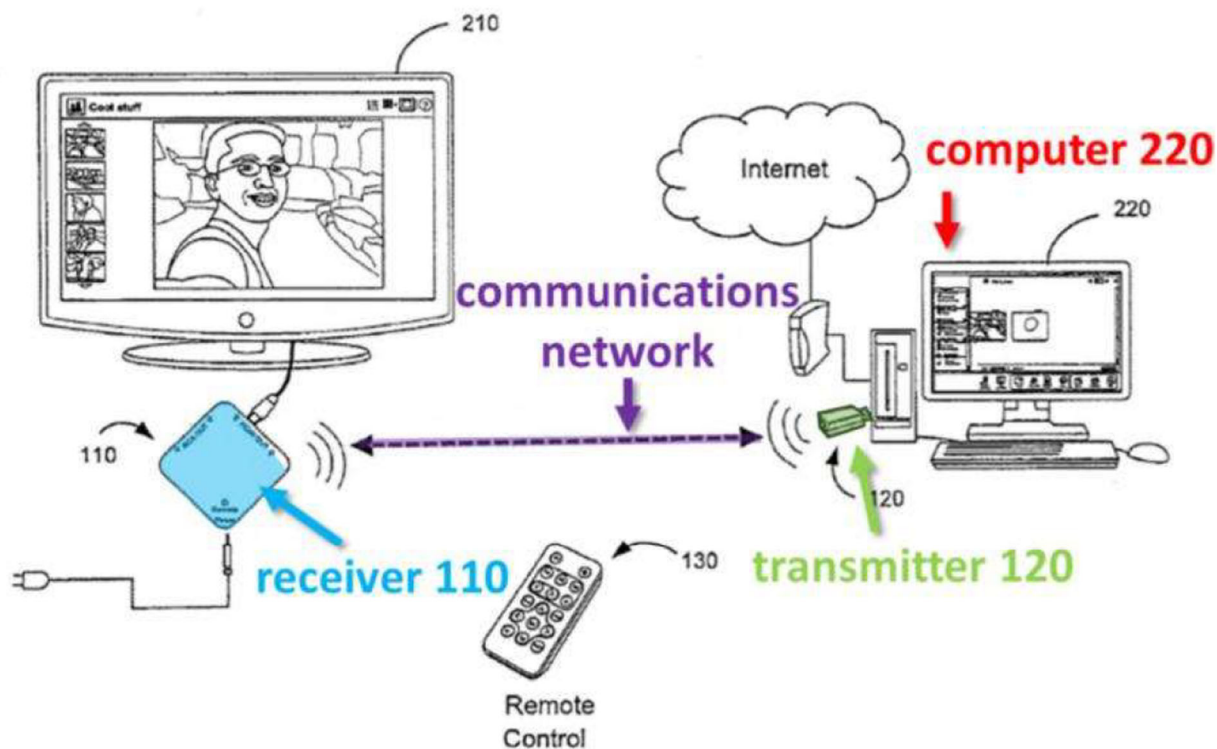


FIG. 2

Petition, 50 (citing Ex. 1008, ¶¶6, 16, 42, Fig. 2, Fig. 3).

However, for certain limitations, the Petition relies on transmission techniques described in *Van de Laar*. See, Petition 51-52 (citing Ex. 1007, abstract, ¶¶1-2, 53, 74, 124, 126, 166-167). The Petition states “data is sent ‘*directly*’ because there is no peripheral device in between the dockee and the host device.” Petition, 59 (emphasis in original); Ex. 2004, ¶133. This suggests that *Van de Laar*’s Wi-Fi direct communication technique with integrated transmitters is used. However, Dr. Almeroth also testified that, while the ’346 Patent does not require a peripheral device, a system which relies on a peripheral device to communicate to the base node falls within the scope of the ’346 Patent claims. Ex. 2007, 40:3-19 (confirming the

'346 Patent does not require a peripheral device), 41:1-17 (Dr. Almeroth testifying that a system that communicates via a peripheral device falls within the scope of Claim 1).

The Ground 2 combination is at best unclear and at worst inconsistent. *Even if* the Petitioner alleges a POSITA would modify *Kaplan* with *Van de Laar*'s communication technique, there is no articulation of *why* a POSITA would be motivated to make the change. Ex. 2004, ¶134. The type of communication path is central to the claims of the '346 Patent. *See* Ex. 1001, Cls. 1, 11 (requiring direct communication). As explained in Section II.A, unlike other patents in its family, the '346 Patent is directed to a system that requires ***direct communication*** between the processing device and base node. Ex. 2004, ¶135. It excludes embodiments of the specification which use a peripheral device. *See* Ex. 1001, Cls. 1, 11. Notably, the Petition also provide nearly identical Ground 2 combinations in its challenge of the '346 Patent as in its challenge of the '972 Patent. Notwithstanding the fundamental difference in systems, the Petition relies on identical references. *Compare* Petition, 23-25; IPR2025-00491 (Paper 2) 26-28; *compare* Ex. 1002, ¶¶182-186; Ex. 2020, ¶¶182-186. The Petition's failure to elect a communication protocol or establish a motivation to use one over another, especially in light of the claims of the '346 Patent, renders Ground 2 unworkable. Therefore, the Petition has not met its burden.

2. A POSITA would not be motivated to reconcile the divergent communication methods of *Van de Laar* and *Kaplan*

In addition to failing to identify the communication mode of the combination, a POSITA would not be motivated to combine the cited references due to their competing approaches. Ex. 2004, ¶136.

One key benefit taught by *Kaplan* is its “walled garden” approach. “In order to associate the receiver and the transmitter with each other as a matched pair, a programming or learning process is performed to pair the devices together.” Ex. 1008, ¶53. By being paired, they form a walled garden system where exactly one transmitter is paired with exactly one receiver. Ex. 1008, ¶53. *Kaplan* proposes a number of benefits of this approach. Ex. 1008, ¶21. By being pre-paired prior to shipment, the user does not need to configure the devices and the user experience is more streamlined. Ex. 1008, ¶21 (“the present invention provides a ‘walled garden’ approach in which no configuration actions on the part of the user are needed.”); Ex. 2004, ¶137. Instead, “the user just plugs-in the devices and [they] operate as intended[.]” Ex. 1008, ¶21; Ex. 2004, ¶137. This is a key benefit of *Kaplan* and “***contrasts sharply with conventional wireless networking system*** setup procedures.” Ex. 1008, ¶21; Ex. 2004, ¶137.

In *Van de Laar* the dockees are able to connect to the WDH using Wi-Fi direct where the WDH is designed to be the Wi-Fi Direct Group Owner (GO). Ex. 1007, ¶138. Wi-Fi Direct, in contrast to *Kaplan*’s system, is a conventional wireless

networking system with a setup procedure, the very type of system that Kaplan “*contrasts sharply*” with. Ex. 1008, ¶21; Ex. 2006, 41:2-5 (“I think it's really, at least in paragraph 6, just a reference to the Wi-Fi standard, and that includes the various ways in which device can be connected to each other.”). By providing separate groups, the primary dockee can use the WDH peripherals to give presentations to attendees and the secondary dockees can broadcast the presentation or the users can follow along on the WDH peripherals. Ex. 1007, ¶¶112-115. To establish this Wi-Fi Direct network, a user pairing step is needed for every new Wi-Fi Direct connection and such a pairing is performed in real time, rather than before shipment as is required by *Kaplan*. Ex. 1007, ¶116; Ex. 2004, ¶138; Ex. 2006, 41:2-5 (“I think it's really, at least in paragraph 6, just a reference to the Wi-Fi standard, and that includes the various ways in which device can be connected to each other.”).

A POSITA would not be motivated to reconcile *Kaplan's* and *Van de Laar's* transmission techniques. *Van de Laar* does not include a peripheral device that connects to a laptop or other user processing device to provide communications over the wireless communications network. Ex. 2004, ¶139. The dockee device (e.g., a laptop or comparable mobile device) communicates to its WDH via the integrated Wi-Fi or Bluetooth transceiver *of the dockee device*. Ex. 1007, ¶¶76, 111, Fig. 1 (showing the communications unit within the dockee). While the Petition advocates modifying the receiver of *Kaplan* with *Van de Laar* to allegedly improve usability

and allow for multiple functional devices in a unified communications call, these alleged improvements are merely the trade-offs between *Kaplan's* approach and *Van de Laar's* approach, they do not motivate a combination between the two references to arrive at the claimed subject matter. Ex. 1007, Abstract; Ex. 2004, ¶139. A POSITA would not consider combining these two references without the benefit of hindsight in an effort to meet the claim limitations of the '346 Patent (*see, e.g.*, Petition, 47-48). Ex. 2004, ¶139.

Van de Laar's WDH provides connections to multiple dockee devices. Ex. 1007, Abstract, ¶¶1, 9 (“It is an object of the invention to provide a system for wireless docking that enables multiple dockees to wirelessly dock to a host device”), 74; Ex. 2006, 43:5-11 (Dr. Almeroth indicating he did not consider *Van de Laar's* multiple dockee functionality in his combination). Multiple connections are enabled by communication networks, like Wi-Fi Direct, which require a user pairing for each new device. Ex. 1007, ¶116. *Kaplan's* receiver and transmitter do not connect to multiple devices wirelessly, but instead include a “walled garden” approach where a transmitter is pre-paired to a receiver and therefore only function in a 1-to-1 relationship. Ex. 1008, ¶¶18, 21; Ex. 2004, ¶140. There is no way to reconcile the pre-paired transmitter-receiver system of *Kaplan*, with the flexible and adaptable Wi-Fi Direct network of the WDH, and primary and secondary dockees. Ex. 2004, ¶140.

Further, *Kaplan* provides no discussion or teachings of using more than one transmitter. Ex. 2004, ¶140; *see generally*, Ex. 1008. There is no evidence that *Kaplan* could even manage multiple transmitters given its requirement that the transmitter be pre-paired with the base before the package leaves the manufacturing facility, nor that it would be able to manage or organize separate classes of dockees (primary/secondary), or be able to adjust devices moving between these classes as described in *Van de Laar*. Ex. 2004, ¶141; *See* Ex. 1007, ¶121. Based on *Kaplan*'s teachings, utilizing more than one transmitter would require using more than one receiver (which would significantly impact usability). There would also need to be as many transmitters as users, which is impractical in the lecture/classroom context that *Van de Laar* is designed to operate in. *See*, Ex. 1007, ¶53; Ex. 2004, ¶141.

All of these alterations would abandon *Kaplan*'s "walled-garden" approach which was specifically designed to streamline the user experience and would be a reason why a POSITA would not have been motivated to make any change to the transmission technique of *Kaplan* in view of *Van de Laar*. Ex. 1008, ¶21; Ex. 2004, ¶142. Thus, a POSITA would see no motivation and no reasonable expectation of improved usability to make such a substitution, let alone any change to *Kaplan* in view of *Van de Laar*.

3. The Petition's Arguments Fail to Identify Sufficient Motivation to Combine the Prior Art

Much like with Ground 1, the Petition fails to provide any sufficient

motivation to combine the references of Ground 2. Ex. 2004, ¶¶143-147. Instead, the Petition improperly relies substantially on disclosure of the '346 Patent itself, to arrive at the *Kaplan-Van de Laar-Christison* combination.

The Petition concludes that, due to the existence of Skype noted in alleged AAPA, a combination of *Kaplan* and *Van de Laar* would result in using Skype, without explaining any reason why the two disparate systems would be used beyond alleged predictability. Petition, 47-48. This hindsight is glaring, especially in light of *Van de Laar*'s very limited use of Skype for a completely different function. Ex. 2004, ¶145; *Supra* Section V.A.2. The mere fact that the '346 Patent and *Van de Laar* acknowledge the existence of Skype hardly provides for a motivation to combine *Kaplan* and *Van de Laar*, especially for the reasons advocated in Sections V.G.1-V.G.2. See *William Wesley Carnes, Sr., Inc. v. Seaboard Int'l Inc.*, IPR2019-00133 Paper 10, 18 (PTAB May 8, 2019) ("That statement of similarity, however, does not constitute an articulate reasoning with rational underpinning as to why a POSITA would combine elements of one reference with another, and why a POSITA would modify the teachings of the references to arrive at the claimed invention."). That Skype was purportedly "well known" does not provide a motivation to combine *Kaplan* and *Van de Laar*. Ex. 2004, ¶144.

Further, the Petition argues that "Kaplan, Van de Laar, and Christison *could* have been combined by using Christison's known technique of presenting a remote

device as native to *improve or suggest* one way for Kaplan to implement its disclosed functional devices” Petition, 48. Such an argument is insufficient. *See Belden*, 805 F.3d at 1073 (Fed. Cir. 2015) (“[O]bviousness concerns whether a skilled artisan not only *could have made* but *would have been motivated to make* the combination or modification of prior art to arrive at the claimed invention.”) (emphasis in original). Yet again, merely alleging that content or elements were known independently is not sufficient to establish obviousness. *KSR v. Teleflex*, 550 U.S. 398, 418-19 (2007) (“[A] patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.”).

Rather than providing evidence of an actual motivation to combine, the Petition merely alleges that certain things were known and concludes they *could* be predictably combined. These arguments amount to nothing more than allegations that the limitations of the ’346 Patent were each known in isolation. Ex. 2004, ¶¶144-146. As described with respect to Ground 1 (*see supra* Section IV.H.3), such arguments are improper, and routinely rejected by the Federal Circuit. *Virtek*, 97 F.4th at 888.

Further, the Petition does not articulate any coherent combination that teaches the claimed invention, but instead attempts to rely indiscriminately on various distinct prior art elements that supposedly could be combined to argue the claims of

the '346 Patent are obvious. Petition, (“Christison, optionally, complements the disclosure of Beel and Dinka with regard to the ‘virtual functional device.’”), 56 (“Optionally, it would have been obvious to combine Christison’s disclosure of remotely connecting USB device to processing device as a native USB device”); *see* Ex. 1002, ¶208; Ex. 2004, ¶147; *supra* Section V.G.1. The Petition therefore fails to demonstrate that a POSITA would have made the proposed combination.

VI. EVIDENCE ESTABLISHES NON-OBVIOUSNESS OF THE INVENTION

A determination of obviousness requires consideration of (1) the scope and content of the prior art; (2) the difference between the claims and the prior art; (3) the level of ordinary skill in the art; and (4) the presence of evidence of secondary considerations. *See Graham v. John Deer Co. of Kan. City*, 383 U.S. 1, 17-18 (1966). Secondary considerations include commercial success, industry praise, unexpected results, copying, industry skepticism, licensing, and long-felt but unsolved need. *Transocean Offshore Deepwater Drilling, Inc. v. Maersk Drilling USA, Inc.*, 699 F.3d 1340, 1349 (Fed. Cir. 2012). When evidence of secondary considerations is present, it must be considered by the Board. *Nike, Inc. v. Adidas AG*, 812 F.3d 1326, 1340 (Fed. Cir. 2016) (“We must therefore remand for the Board to examine Nike’s evidence and its impact, if any, on the Board’s analysis under the first three *Graham* factors.”). Patent Owners must show a sufficient nexus between the objective evidence and the claimed invention, but objective evidence “need only

be reasonably commensurate with the scope of the claims[.]” *Rambus Inc. v. Rea*, 731 F.3d 1248, 1256, 1257 (Fed. Cir. 2013) (internal quotation marks and citation omitted).

“Licenses to the challenged patent then, unlike products or other forms of objective evidence of nonobviousness, do not require a nexus with respect to the specific claims at issue, nor does our nexus law require that a particular patent be the only patent being licensed or the sole motivation for entering into a license.” *Ancora Techs., Inc. v. Roku, Inc.*, 140 F.4th 1351, 1361 (Fed. Cir. 2025). Moreover, “the fact that a license concerns rights to more than one patent does not detract from the fact that each patent is a subject of the license.” *Id.* at 1363. Where “other patents may have also been part of the license [it] does not detract from the nexus inquiry. These licenses, taken by substantial parties paying substantial royalties to secure the right to practice the [challenged] patent, should have been given more, *if not controlling*, weight in the Board’s obviousness determination” *Id.* at 1364.

Here, the proffered secondary considerations are based on both Patent Owner’s and Petitioner’s competitor’s licensing activities. The ’346 Patent is licensed by a sophisticated technology company in the videoconferencing space, providing compelling evidence confirming the technological value provided by the ’346 Patent.

A. Acquiescence of Market Competitors

Crestron, a sophisticated engineering company, licensed the '346 Patent. Ex. 2011, 15. Crestron is, and has been, a leading innovator in the commercial and residential control and automation solutions for over 40 years. Ex. 2019. Crestron's sophistication relating to intellectual property is evidenced by their ownership of 460 separate patents in numerous fields including the following CPC codes: electric digital data processing, fixed or movable closures for openings in buildings, vehicles, fences or like enclosures in general, loudspeakers, microphones, gramophone pick-ups or like acoustic, electromechanical transducers, printed circuits, and transmission of digital information. Ex. 2019. Crestron is a competitor of both Patent Owner and Petitioner. Ex. 2023, 28:22-29:16.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

“Licenses to the challenged patent then, unlike products or other forms of objective evidence of nonobviousness, do not require a nexus with respect to the specific claims at issue, nor does our nexus law require that a particular patent be the only patent being licensed or the sole motivation for entering into a license.” *Ancora Techs.* 140 F.4th at 1361. The fact that Crestron is an industry leader in the

videoconference space, further strengthens the evidentiary value of the Crestron license for the purpose of proving nonobviousness. *RCA Corp. v. Data General Corp.*, 701 F. Supp 456, 471 (D. Del. 1988), *aff'd*, 887 F.2d 1056 (Fed. Cir. 1989); *B&H Manufacturing Inc. v. Foster-Forbes Glass Co.*, 26 USPQ2d 1066, 1070 (N.D. Ind. 1993) (the Licensees represented major industry players, which was found to be evidence that “they would not have bowed to pressure to take a license without first reaching the conclusion that ultimately litigation would prove futile.”); *see also Columbia Broadcasting Sys. v. Sylvania Elec. Prods., Inc.*, 415 F.2d 719, 728 (1st Cir. 1969), cert denied, 396 U.S. 1061 (1970).

Crestron also prominently marks its products with the Barco licensed patents listed on its website and expressly praises Barco for its patented innovations. Ex. 2018; Ex. 2012.

Upon agreeing to the license, Andrew Ludke, the Senior Director of Project Management at Crestron, praised Barco’s patented inventions stating that “Our customers expect fully integrated solutions that make workplace collaboration simple. With this agreement we will bring robust wireless conferencing ***based on Barco’s ClickShare intellectual property*** to our popular digital workplace technologies to meet the growing demand for BYOM solutions[.]” Ex. 2012. The license agreement, by Mr. Ludke’s own admission, has been “mutually beneficial[.]” Ex. 2023, 76:12-18. These facts, including that Crestron has already paid more than

the cost of litigation in licensing, it has publicly praised and acquiescence to the validity of Barco's patent portfolio, including the '346 Patent, are strong, indisputable evidence of the non-obviousness of the '346 Patent claims.

VII. CONCLUSION

For the reasons set forth above, the patentability of all claims of the '346 Patent should be upheld.

Dated: January 15, 2026

Respectfully submitted,

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Certification of Word Count Under 37 C.F.R. § 42.24(d)

The undersigned hereby certifies that the foregoing contains 13,484 words according to the word count of the word-processing software used to prepare the foregoing.

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CERTIFICATE OF SERVICE

I hereby certify that on January 15, 2026, a true and correct copy of the foregoing was caused to be served on the following counsel of record for Petitioner by electronic mail at the following addresses:

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