

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: IPR2025-00598

U.S. PATENT NO. 11,966,347

PATENT OWNER'S PRELIMINARY RESPONSE

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TABLE OF EXHIBITS

Exhibit	Description
Ex. 2001	U.S. Publication No. 2015/0121466 (“Brands”)

I. INTRODUCTION

U.S. Patent No. 11,966,347 (the “’347 Patent”) describes and claims a method and system from making functional devices available to participants of meetings. *See e.g.*, Ex. 1001, Title, Abstract, Cls. 1, 12, 23, 27. The Petition attempts to invalidate claims of the ’347 Patent with two grounds that each rely on *three*¹ references without providing sufficient motivation or coherent combinations.

Rather than explain any modifications or changes a POSITA would make to a system, the Petition posits that certain aspects being “known” somehow results in a motivation to combine those different aspects. Instead of proving that a POSITA *would* combine the cited references in a manner that would arrive at the claimed subject matter, the Petition simply alleges that a POSITA *could* make the proposed combination for each Ground. While denial of institution is warranted for these reasons alone, the Petition also fails to reconcile key differences in the cited reference that would *actively discourage* a POSITA from combining the references.

Even if there was a proper motivation to combine, the Petition fails to establish all aspects of the claimed invention existed in the cited references. For example,

¹ In addition to the three references described with respect to each ground, the Petition also relies on inapplicable AAPA, which was addressed in Patent Owner’s Discretionary Denial Paper.

cited references are relied on in each ground without considering their actual teachings. Based on hindsight, the Petition alleges they teach features not disclosed under any reasonable interpretation. Due to the Petition's failure to show that a POSITA would be motivated to combine the cited references to arrive at the claimed invention, institution should be denied.

II. THE '347 PATENT

A. Overview

The inventors of the '347 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 cameras, microphones, and speakers. Ex. 1001, 1:47-49. When ad hoc groups of people communicate with each other, it is desirable to provide access to higher quality audio devices and video devices in addition to allowing use of display devices when such devices are available. *Id.*, 1:22-24, 1:49-52. The '347 Patent addresses this by making functional devices available to participants of a meeting and provides the necessary software for accomplishing these goals. *Id.*, 1:56-59.

The '347 Patent enables users to communicate with the in-room participants as well as over a unified communication protocol as depicted in Fig. 5:

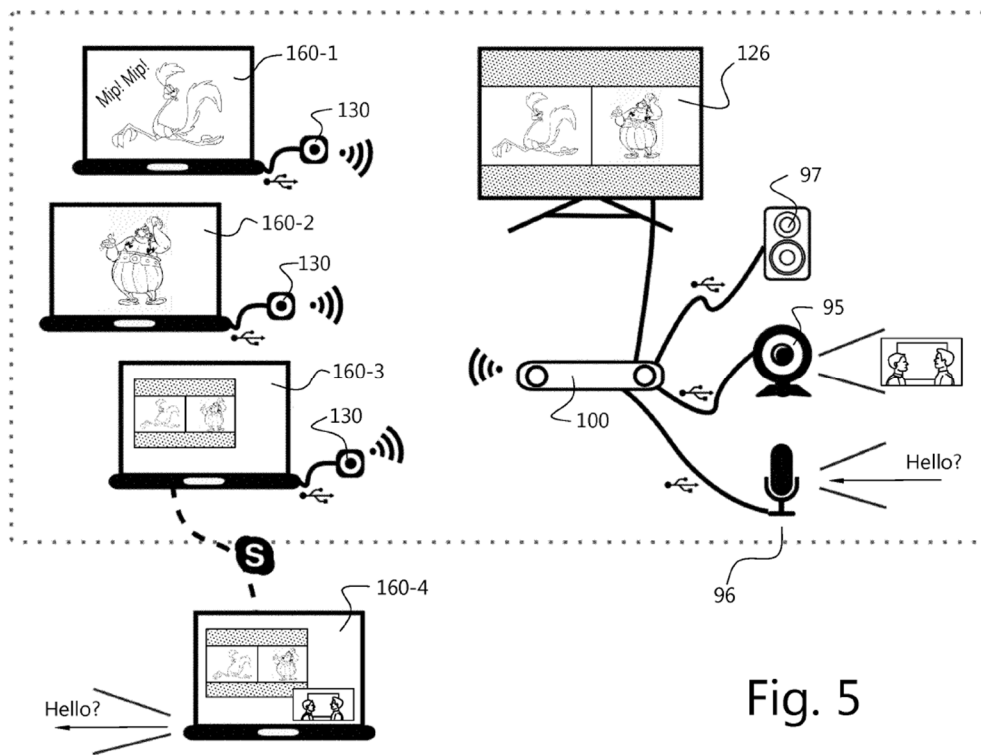


Fig. 5

Id., Fig. 5.

Fig. 5 depicts four processing devices (e.g., laptops) 160-1, 160-2, 160-3, and 160-4, where one processing device 160-4 is participating 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. *Id.*, 19:8-21. Additionally, the processing devices 160-1, 160-2, 160-3 are connected to peripheral devices 130 and through such connection are capable of communication with base unit 100, including the sharing of media to the screen 126. *Id.*, 19:15-18. The data from the second peripheral device or functional devices, like the camera 95 and microphone 96 connected to the base unit 100 send the data the functional devices capture to the base unit, which then processes the data and communicates the data via the

peripheral device 130 to the processing device 160-3. *Id.*, 18:39-51, 19:22-29. Once captured, the data can be used in a host application or third party application use (like Skype for example). *Id.*, 18:51-57. Likewise, data from the third party applications received on the processing device 160-3 can be sent to the appropriate USB endpoint on the peripheral device 130 and communicated to the base unit 100. *Id.*, 18:58-19:1. Base unit 100 can share the data with connected peripheral devices, like a speaker 97. *Id.*, 19:1-7, 19:22-29. The processing devices connected to a peripheral device 130 can access the room camera 95 wireless and the device connected to the base unit 100 are exposed natively. *Id.*, 19:58-61.

The '347 claims these features, for example:

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 3rd 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 3rd 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.

Id., Cl. 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). *Apple Inc. v. Firstface Co.*, No. 2021-1001, 2021 WL 4156323, at *1 n.1 (Fed. Cir. Sept. 13, 2021). As the Claims of the '347 Patent are valid under any reasonable interpretation of the claim language, Patent Owner accepts the Petition's claim construction for the purposes of this paper. Patent Owner reserves the right to later offer competing claim constructions.

C. Level of Ordinary Skill in the Art

Petitioner states that a POSITA “would likely 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. Additional educational experience could substitute for some of the work experience.” Petition, 5. Patent Owner does not dispute Petitioner's proposed level of skill in the art at this time.

III. OVERVIEW OF THE CITED REFERENCE

A. Beel (Ex. 1005)

Beel was cited by the examiner during prosecution. Ex. 1004, 512. *Beel* is also assigned to Patent Owner. Ex. 1005, Assignment. *Beel* recognized a need to improve presenting and collaboratively working on content in a meeting-setting. *Id.*, ¶¶113-116; *see also id.*, ¶¶15-38. Prior presentation systems relied on cabled

Id., ¶¶117, 119, 124, Fig. 1a. The user processing device 31, peripheral devices 47 and base node 36 form a communication network for linking to the central display 44. *Id.*, ¶126.

The peripheral device may include various components such as a portable application, a processing engine, a wireless transmitter, a plug and play interface and a button. *Id.*, ¶¶198, 200, 202-204. A user can connect the peripheral device to a port of its processing device to connect to a central display. *Id.*, ¶208. The connection unit may present itself as various devices, such as a USB composite device, audio device, mass storage device, or human interface device. *Id.*, ¶313.

When the peripheral device is connected to the processing device, the user can share audio data to the peripheral device's audio device, which is then streamed to the base node. *Id.*, ¶316. This audio sharing is done with only standard drivers and does not require special software installation. *Id.*, ¶317. The audio data is then transmitted over a communication network to the base node. *Id.* Once received, the audio data can be shared in the meetings from the base node. *Id.*, ¶319.

The peripheral device is also capable of sharing display data. A software application that is stored on the peripheral device and run on the processing device captures video data available on the processing device. *Id.*, ¶320. The software application is stored on the peripheral device and implemented as a portable application, so it leaves a zero-footprint on the processing device once disconnected.

Id., ¶¶159, 320. The video signal is encoded, packeted and shared to the peripheral device using another pre-installed generic driver, like a human interface device (HID) driver. *Id.*, ¶320. The video data is then unpacked and transmitted over the communications network with the audio data. *Id.*, ¶321.

The base node receives the audio and video data, completes any necessary decoding or unpacking, synchronizes the data and shares it over the display and other output devices. *Id.*, ¶323.

Beel does not teach, at least, “the first peripheral device being configured to receive first processed video data over the communications network,” or “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[.]”

B. *Dinka* (Ex. 1006)

Dinka, which is assigned to Skype, is directed to a television set capable of hosting bidirectional communication sessions with remote users via the network. 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 make a packet-based communication on a television set or set box plugged into a television. *Id.*, 2:1-4, 2:19-24. *Dinka* proposes a television

which is designed to provide a secondary embedded functionality of VoIP calling. *Id.*, 7:20-21. The television includes a processing apparatus, RAM, non-volatile storage, flash memory, magnetic storage medium, one-time writable ROM, a video frame buffer, user interface frame buffer, video hardware, a screen, an external speaker, a receiver, an external audio-video input, a webcam input, a network interface, a first remote interface, and a Bluetooth transceiver. *Id.*, 7:22-27, 7:44-56.

Dinka does not teach numerous claimed limitations.

C. Kaplan (Ex. 1008)

Kaplan describes transmitting video content between a computer and display device using a transmitter and a receiver. Ex. 1008, Abstract. The transmitter is a USB connector and connects to a port of a computer. *Id.*, ¶17. The receiver includes one or more video and audio outputs (such as HDMI) and connects to a display. *Id.*, ¶16. The system also includes a remote control which controls the playback of video footage on the display device. *Id.*, ¶19. Together, these components provide a system to provide video footage accessible on a computer to a display device. *Id.*, ¶19. Figure 2 below shows the remote control 130, receiver 110 connected to a display device 210, and transmitter 120 connected to a computer 220:

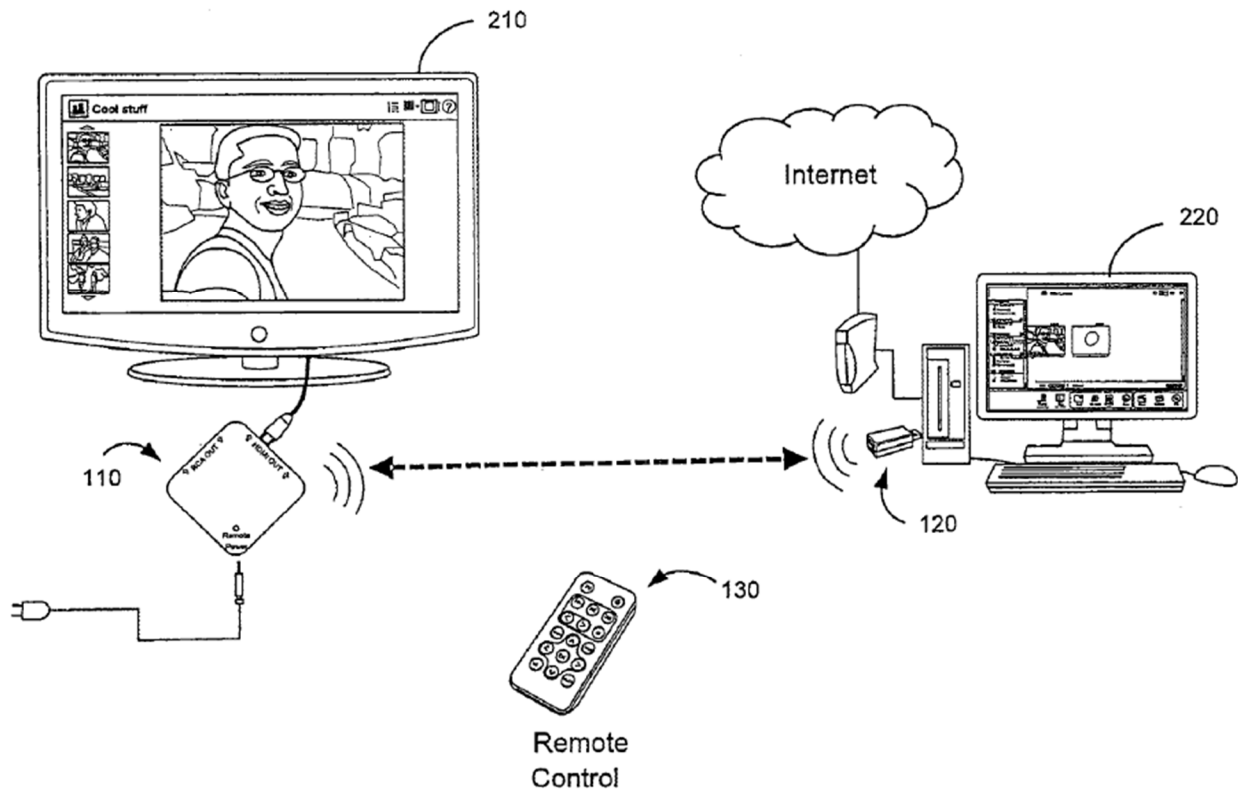


FIG. 2

Ex. 1008, Fig. 2, ¶21.

To enable content sharing, when first connected the transmitter (120) installs software onto the computer, and through the use of this installed software, the user is able to share media from computer 220, through transmitter 120 to receiver 110 and ultimately to display device 210 where content is displayed. *Id.*, ¶22. Alternatively, instead of installing the software from the transmitter, the software may be downloaded from the internet. *Id.*, ¶22. However, in all embodiments, only once the software is installed, can the video content be shared on the display. *Id.*, ¶23 (“After the installation of software resident on the transmitter, typically only requiring an acceptance of a click-through license agreement by the family member,

the family member is able to receive videos from the user and then watch them on their television.”). *Kaplan* specifically notes that a benefit of its system is the availability of metadata associated with the video content stored on the computer or the internet, which is available, in contrast to conventional media extenders, due to the custom software solution which makes proprietary features available. *Id.*, ¶29 (“Additionally, since embodiments of the present invention provide *custom software solutions*, the methods and systems described herein make available proprietary features such as user-defined channels that are not available using conventional techniques.”) (emphasis added)². *Kaplan* indicates that this metadata and user-defined channels are not available using other techniques. *Id.*, (“The availability of this metadata contrasts with conventional media extenders in which only video content is available.”).

Kaplan does not teach numerous claimed limitations.

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. A

² All emphasis is added unless otherwise noted.

“dockee” in *Van De Laar* is a mobile device (e.g., a laptop, phone, tablets, portal media players, cameras, and electronic watches). *Id.*, ¶¶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. *Id.*, ¶74. 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. *Id.*

The docking process provides for connections to primary dockee devices and secondary dockee devices. *Id.*, ¶78. 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. *Id.*, ¶¶78, 82.

Van de Laar does not teach at least the claimed “a first peripheral device being configured to be coupled to the processing device” and many of its claimed functions.

E. Christison (Ex. 1011)

Christison was relied on by the examiner during prosecution. Ex. 1004, 249-230. *Christison* is directed towards a wireless USB hub and improving throughout

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.

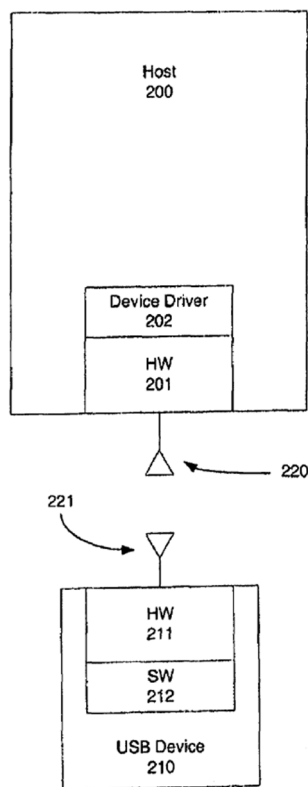


Fig. 2

Ex. 1011, 3:34-39, Fig. 2. The wireless adapters communicate a wireless signal provided by antennae 220, 221, rather than through a wireless cable. *Id.*, 3:39-41.

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, 3:48-43, Fig. 3.

Christison does not teach numerous claimed limitations.

IV. GROUND 1

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

The Petition presents a fundamentally flawed challenge. The Petition fails to present any reasonable motivation to combine or provide for a coherent combination. Further, *Beel* and *Dinka* provide for fundamentally different modes of operation which would not be combined by a POSITA.

1. The Petition's Arguments Fail

Beel alone does not teach all elements of the claims of the '347 Patent. *See* Petition, 22-23, 27, 29 (elements where the Petition relies on the teachings of *Dinka* and *Christison*). The Petition fails, however, to identify sufficient motivation to combine the three disparate references, based substantially on disclosure of the '347 Patent itself, 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).

First, the Petition describes general similarities between *Beel* and *Dinka* which is insufficient to provide a motivation to combine. Petition, 16-17.

Second, the Petition notes that the '347 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, 17. Indeed, Dr. Almeroth's cited opinions also fail to provide any reason why a POSITA would be *motivated* to combine the references to arrive at the claimed invention. Ex. 1002, ¶103 ("Since Skype was well-known and established technique for improving similar systems in the same manner, a POSA would have been motivated to combine the teaching of *Beel* and *Dinka*, resulting in the use of Skype or a similar prior art software for bidirectional unified communication calls with *Beel*'s technique for connecting multiple users to a separate base node and functional device."). Instead, Dr. Almeroth summarily concludes that Skype's status as "well-known" somehow would have motivated the combination of *Dinka* with *Beel*.

Third, 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, 17. 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* 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. *Compare* Petition, 17-18 (“Beel, Dinka, and Christison *could have* been combined by using Christison’s known technique of presenting a remote device as a native to *improve or suggest* one way for Beel to implement its disclosed virtual devices.”); *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 LLC 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 may be combined to render the claims of the ’347 Patent obvious. *E.g.*, Petition, 22-23 (“Petitioner relies *optionally* on Christison”). This lack of clarity is emblematic of the Petition’s overall allegation

that each limitation was *known* not that the claims of the '347 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 made the proposed combination

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

The '347 Patent recognized that certain functionalities on portable devices (e.g., laptops and mobile devices) often rely on low quality microphones and speakers. Ex. 1001, 1:47-49. When ad hoc groups of people communicate with each other, it is desirable to provide access to higher quality audio devices in addition to allowing use of display devices. *Id.*, 1:22-24, 1:49-52. The present invention is directed to providing higher quality functional devices that may be available to ad hoc groups of people meeting and the software for carrying out such methods. *Id.*, 1:56-59.

The '347 Patent Claims are directed to “[a] method for connecting a processing device to a functional device connected to or in a base unit of a wireless connection[.]” Ex. 1001, Cl. 1, *see also id.*, Cls. 12, 23, 27. A processing device is, for example, a laptop, computer, PDA, smartphone, etc. *Id.*, 10:28-31. An example implementation is depicted in Fig. 5:

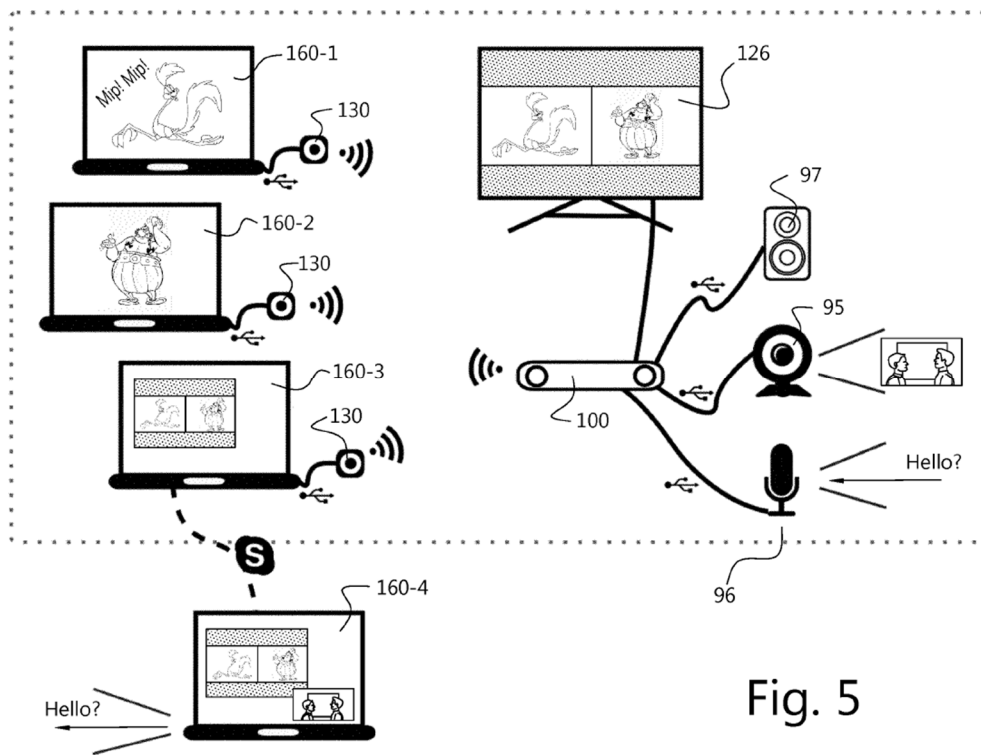


Fig. 5

Id., Fig. 5.

Here, processing devices 160-3 and 160-4 are sharing the unified communications call while the processing devices 160-4 is not in the same room. *Id.*, 19:18-21. The Unified Communication protocol on the processing devices 160-3 and 160-4 can interact with the USB endpoints available on the first peripheral device 130 like the microphone 96 and speaker 97 connected to the base node 100. *Id.*, 19:30-37. The claimed process provides for 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.*, 1:22-24, 1:49-52.

Dinka is not combinable with *Beel* and *Christison* as proposed by Petitioner.

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. *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).

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.”). Further, “while

packet-based communication systems can be accessed via certain mobile devices, these generally do not have processing resources or display screens available to offer a full range of features, such as video calling.” *Id.*, 2:15-18, *see also id.*, 11:35-50.

Dinka therefore is focused on providing 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. *Dinka*’s television has the primary purpose of a television but is also designed to provide a secondary embedded functionality such as VoIP calling. *Id.*, 7:17-21. Rather than providing better resources and display screens to mobile devices, (e.g., a PC) *Dinka* discourages the use of processing devices such as those of the ’347 Patent on VOIP calls and instead implements this functionality into a television, a special purpose device. Accordingly, *Dinka* teaches away from the claimed subject matter of the ’347 Patent.

3. 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*. As described *supra* Section IV.A.2, *Dinka* teaches away from systems that host unified communications calls on a mobile device or laptop. *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 greater features to laptops or mobile devices. *Compare* Ex. 1006, 2:15-18; Ex. 1005, ¶40.

Beel and *Dinka* provide competing and diametrically opposed solutions to address the limited functionality of laptops and computers. 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.

B. The Petition Cites to Portions of *Beel* Without Consideration of What is Taught.

The Petition consistently cites to teachings of *Beel* alone for specific limitations of the '347 Patent. However, in its arguments, the Petition does not explain how the cited portions of *Beel* render the claim limitation obvious, or what the cited portions of *Beel* proposit to teach. The Petition's conclusory analysis is incoherent, and fails to illustrate how each reference is known in the art.

1. “the first peripheral device being configured to receive first processed video data over the communications network,”

This limitation is included in each independent claim. Ex. 1001, Cls. 1, 12, 23, 27. The limitation is clear, the peripheral device *receives* video data over the communications network. *Id.* For example, the '347 Patent indicates that the electronic signal comes *from* the functional device and is exposed on the first peripheral device or the user processing device. *Id.*, 11:63-65 (“By interpreting, processing and translating the electronic signal coming from the at least one

functional device”), 12:21-29 (“a functional device, e.g., a second peripheral device is exposed natively or as a mimic... on the first peripheral device or the user processing device”), 14:49-50 (“is sent to the vendor specific software running on the processing device”), 18:39-57 (“Data from a second peripheral device connected to the Base Unit 100 can flow into the Base unit.... This data will then be capture by the operating system of the processing device 160 and will be 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 160 of other participants of the meeting”).

However, the Petition relies on disclosure of communications from the mapped processing device to the mapped base node, that is, in the opposite direction. *Beel* 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. Ex. 1005, ¶¶71-72. Indeed, as the “functional device” relied on by the Petition is a display, there is not functional data that is received. Said otherwise, the display data would originate from the processing device which shares its screen, not the display itself (where no data originates). The 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. Petition, 23 (citing Ex. 1005, ¶71).

Indeed, each paragraph of *Beel* cited in this section describes communication from the peripheral device to the base node, or generic conferencing definitions. Ex. 1005, ¶¶50 (“for streaming the screen scraped video content to the network and hence to the base unit and a display”) 56 (“routing screen scraped data between the processing device and communication network”), 75 (“transmitting the media content from the peripheral device to the communications network”), 88-89 (defining “Data conferencing” and “Application sharing”), 93 (defining “Wireless” and “wireless communication network”), 118-122 (“Summarizing the above, the present invention provides an electronic meeting tool for communicating arbitrary media content between different users... and one display or projector”); 126 (“The communication network 50 is adapted to receive arbitrary media content from at least one of the plurality of processing devices”), 128 (“The connection unit 47 for communicating with said base node”), 298 (“This means that there is at least one channel from the peripheral device to the base node.”), 310-311 (“routing audio data between the processing device and the communication network... transferring the audio data between the processing device and the peripheral device”).

Rather than actually establish this limitation is known, the Petition string cites numerous portions of a reference without contemplating whether they are actually

relevant to the claimed limitation. As a result, the Petition fails to identify any “first peripheral device being configured to *receive* first processed video data over the communications network.”

2. “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”

Similar limitations are found in each independent claim. Ex. 1001, Cls. 1, 12, 23, 27. The Petition again identifies irrelevant disclosure or disclosure referencing entirely different communications with regard to this limitation. For example, *Beel* discloses optional equipment (e.g., cameras) to record the progress of the meeting. Ex. 1005, ¶120. However, there is no disclosure of that video data being processed, let alone processed in the base unit, nor is there any disclosure in *Beel* of that video data being sent to the first peripheral device. *Id.* The same is true for the other cited portions. *Id.*, ¶¶71-72, 119, 315-323.

Moreover, many of these portions irrelevantly describe communication of *audio* data (*id.*, ¶¶315-317) or communications originating in a processing device to the base node via a peripheral device (*id.*, ¶¶71-72, 318-323). Neither renders obvious the claimed video data being processed in the base unit, or that processed video data being sent *to* a peripheral device.

V. GROUND 2

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

Much like with Ground 1, the Petition does not provide sufficient motivation to combine the cited references. In fact, as set forth below, a POSITA would not be motivated to combine the cited references.

1. The Petition's Arguments Fails to Identify Sufficient Motivation to Combine the Prior Art

Kaplan alone does not teach all elements of the claims of the '347 Patent. *See* Petition at 44-45, 46, 48, 49-58 (elements where the Petition relies on the teachings of *Van de Laar* and *Christison*). Much like with Ground 1, the Petition fails to provide a sufficient motivation to combine the references of Ground 2. The Petition improperly relies substantially on disclosure of the '347 Patent itself, to arrive at the *Kaplan-Van de Laar-Christison* combination.

First, the Petition concludes a POSITA would be motivated to combine *Kaplan's* system of data transmission with *Van de Laar's* system without articulating a reason why such combination would be made beyond conclusory statements about "improved usability[.]" Petition, 43.

Second, 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 beyond apparent predictability. Petition, 43. Indeed, Dr. Almeroth's cited opinions also fail to provide any reason why a

POSITA would be *motivated* to combine the references. Ex. 1002, ¶216 (“Combining Kaplan, Van de Laar, and AAPA would therefore result in the use of Skype or similar prior art unified communication software as a known technique for improving similar devices.”). Again, Dr. Almeroth’s conclusion that Skype’s status as “well-known” does not provide a motivation to combine.

Third, 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, 44. Such 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 provide an actual motivation to combine, the Petition merely alleges that certain things were known, and conclude they *could* be predictably combined. These arguments amount to nothing more than allegations that the

limitations of the '347 Patent were each known in isolation. As described with respect to Ground 1 (*see supra* Section IV.A.1), these arguments have been rejected by the Federal Circuit. *Virtek*, 97 F.4th at 888. The Petition therefore fails to demonstrate that a POSITA would have made the proposed combination.

2. *Kaplan and Van de Laar Cannot be Predictably Combined*

The Petition fails to address fundamental differences between *Kaplan* and *Van de Laar*. In light of these differences, a POSITA would not have combined the references to result at the claimed invention. Not only do *Kaplan* and *Van de Laar* communicate to the (allegedly) equivalent base node through different means (which is not addressed in the Petition's combination), but *Kaplan's* system is not compatible with multi-user communications which is relied upon to support *Van de Laar's* alleged teaching of a virtual device and second video data and third video data. Petition, 48, 53, 54, 55.

Kaplan's system includes a receiver connected to a display device and capable of receiving data from a matched transmitter. Ex. 1008, ¶16. The transmitter connects to a port of a computer and communicates audio data and display data from the computer to the display device via the receiver. *Id.*, ¶17. The receiver and transmitter are pre-paired during the manufacturing process, in a 1-to-1 basis. *Id.*, ¶18. *Kaplan* suggests this is advantageous because there is no need for the user to pair or define settings associated with the communication that occurs between the

receiver and the transmitter, instead they are ready out of the box. *Id.* (“As a result, the user is provided with a fully functioning communication system straight ‘out-of-the-box.’”). The receiver and transmitter are described as a dedicated solution which benefits from not being capable of interacting/interfering with other, non-system components and devices. *Id.*, ¶21. In other words, the wireless communication system of *Kaplan* provides a “walled garden” approach. *Id.*

In contrast *Van de Laar* provides for a system where a dockee device (e.g., a laptop or comparable mobile device) communicates to its wireless docking host (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). In a practical implementation, the WDH is a Wi-Fi Direct Group Owner. *Id.*, ¶111. Indeed, *Van de Laar* teaches that the ability to pair new devices is “an important technology for wireless docking, a technology to enable a portable device to connect to a multitude of wireless peripheral.” *Id.*, ¶116. The entirety of *Kaplan* is the antithesis of *Van de Laar*.

The Petition relies on these disparate modes of communication indiscriminately without providing a true motivation to combine. *See e.g.*, Petition, 49, 53, 57-58. Indeed, the Petition states “[t]he wireless communication [of Van De Laar] would obviously use a transmitter similar to the one that Kaplan discloses” despite the clear differences in the ways which the systems are intended to operate.

Petition, 50; *see also* Ex. 1002, ¶193. There is no basis to conclude a POSITA could combine *Kaplan's* system with *Van De Laar* with a reasonable expectation of success, especially given the clear differences in transmission paths.

Likewise, the ability to pair multiple dockees, including secondary dockees, is relied on throughout the Petition. *See e.g.*, Petition, 48, 53-55. Indeed, the only element alleged to teach the claimed “virtual device” is used by a secondary dockee. *Id.*, 48, 53-54. However, *Kaplan* provides no disclosure of connecting multiple transmitters to a single receiver, and due to the pre-programming at manufacture (*see e.g.*, Fig. 5), the system cannot work with additional transmitters. *See generally*, Ex. 1008. Such an implementation conflicts with *Kaplan's* pre-paired, walled-garden approach that was intended to simplify the process for a user and ensured devices outside the system are not interfered. *Id.*, ¶¶18, 21. The Petition fails to even acknowledge these substantial differences, and much less reconcile them to provide for a coherent combination. Therefore, a POSITA would not consider the proposed combination.

B. *Van De Laar's* Dockee Communication Unit is Not “a first peripheral device being configured to be coupled to the processing device”

The Petition relies on *Van de Laar's* dockee communication unit as allegedly rendering the first peripheral device obvious. Petition, 46. The claimed “first peripheral device” is referenced in each independent claim of the '347 Patent. Ex.

1001, Cls. 1, 12, 21, 27. However, the dockee communications unit is not a peripheral device. This fundamental misunderstanding of *Van de Laar* infects numerous arguments presented by the Petition.

A dockee device 120 has a dockee communication unit 121 which provides wireless communication with the host. Ex. 1007, ¶76. The dockee communication unit is described as being capable of communicating on Bluetooth, Wi-Fi, or 60 GHz. *Id.* The dockee communication unit 121 is never described as being a peripheral device, or being connected to a port of the dockee device. *See generally, id.*

The dockee communication unit 121 is merely a transmitter on the dockee device. *Id.* As shown in Fig. 1, the dockee communication 121 unit is shown as incorporated into the dockee device 120:

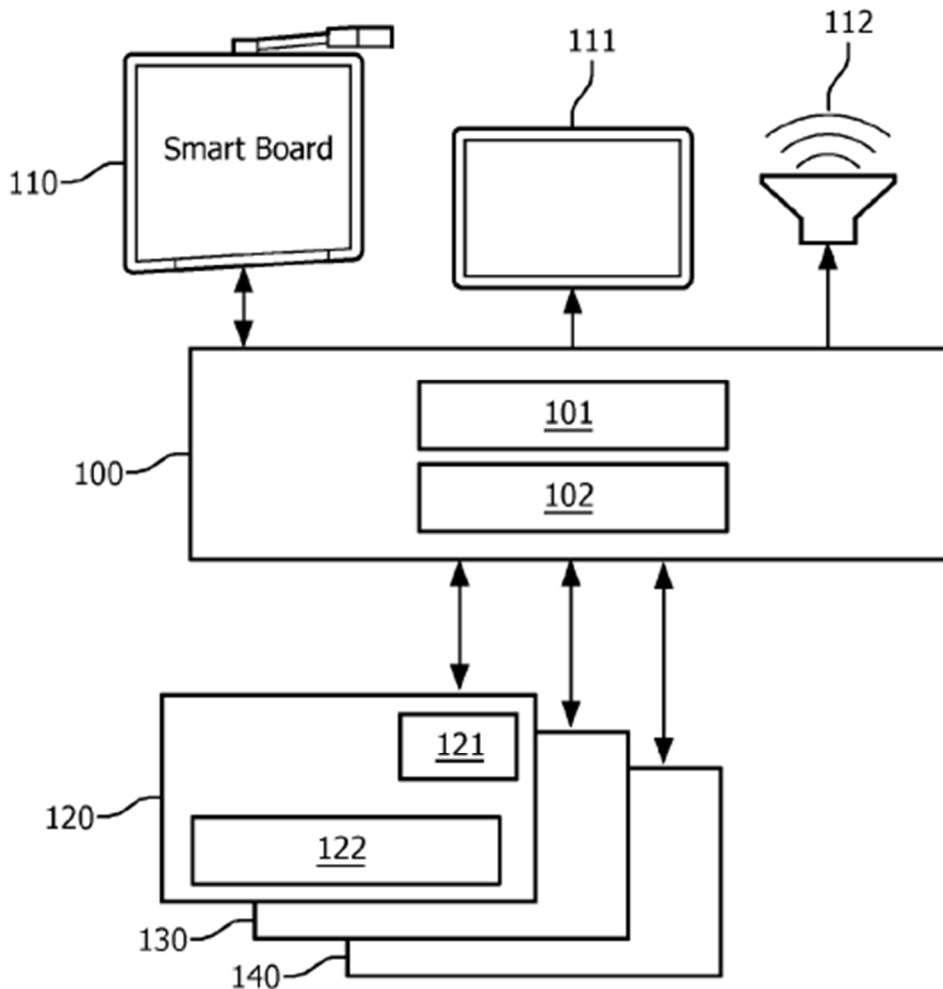


FIG. 1

Id., Fig. 5. The depiction of the dockee communication unit 121 within the dockee device 120, is just like the dockee processor 122, which would be understood *as part of the dockee device*. *Id.*

The Petition also provides no argument that a POSITA would be motivated to implement the dockee connection unit as a peripheral device. Petition, 43-44. Instead, the Petition advocates for modifying *Kaplan* with *Van de Laar's* WDH. *Id.* Likewise, Dr. Almeroth provides no opinions as to why the dockee connection unit

would be implemented as a peripheral device. Ex. 1002, ¶222. Therefore, Ground 2 fails with each independent claim for at least failing to disclose “a first peripheral device being configured to be coupled to the processing device[.]” Ex. 1001, Cl. 1, 12, 21, 27.

The Petition’s failure to accurately identify the claimed “first peripheral device” cannot be remedied with disclosures in *Kaplan*. For example, the Petition relies on disclosures in *Van de Laar*, not *Kaplan* for claim limitations relating to the peripheral device including:

- “at least one fixed or configurable endpoint of the functional device is exposed on *the first peripheral device*,” (Petition, 48-50);
- “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” (Petition, 50-51);
- “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*,” (Petition, 51-53);

- “the first peripheral device being configured to process the first processed video data received by the *first peripheral device* to generate second video data,” (Petition, 53);
- “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,” (Petition, 53-54);
- “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,” (Petition, 55-56); and
- “the *first peripheral device* receiving the third video data and processing the third video data to form second processed video data, and” (Petition, 56-57).

This non-exhaustive list of elements only scratches the surface of the elements the Petition fails to actually and sufficiently map to the claim limitations.

For example, the Petition improperly attributes functions to the dockee communication unit that are not taught in relation to that element. For “the first peripheral device being configured to process the first processed video data received by the first peripheral device to generate a second video data” and “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 Petition and Dr. Almeroth rely on *Van de Laar* as allegedly teaching this limitation. Petition, 53-54 (citing Ex. 1007, ¶56); Ex. 1002, ¶¶235-236 (citing Ex. 1007, ¶56).

The cited portion of *Van de Laar* describes functions of the **docking** processor. Ex. 1007, ¶56 (“the **docking processor is arranged for providing**”). The docking processor 101 is a part of the host device 100. Ex. 1007, ¶75, Fig. 1 (showing the docking processor 101 inside the host device 100). This is not the dockee connection unit the Petition alleges is the first peripheral device. *See* Petition, 46. The Petition fails to explain how the limitation of the ’347 Patent can be found in the prior art based on the referenced portions.

C. **Kaplan-Van De Laar-Christison Does Not Teach “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,”**

Each independent claim of the ’347 Patent provides driver-level-specific limitations. Ex. 1001, Cls. 1, 12, 23, 27. Neither *Van de Laar* nor *Kaplan* include the word driver in their disclosures. *See generally*. Ex. 1007; Ex. 1008. Neither the Petition nor opinions of Dr. Almeroth provide any evidentiary support for how either *Van de Laar* or *Kaplan* teach use of a driver. Accordingly, the Petition has not met its burden with this limitation.

VI. CONCLUSION

Patent Owner requests that the director exercise discretion and deny institution of the Petition.

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

The undersigned hereby certifies that the foregoing contains 7,192 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 July 9, 2025, 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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