

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.

IPR2025-00491
Patent 10,684,972 B2

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

LANEY, *Administrative Patent Judge*.

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

I. INTRODUCTION

A. *Background and Summary*

Yealink (USA) Network Technology Co., Ltd., and Yealink Network Technology Co., Ltd. (collectively, “Petitioners”) filed a Petition requesting *inter partes* review of claims 1–18 of U.S. Patent No. 10,684,972 B2 (Ex. 1001, “the ’972 patent”). Paper 2 (“Pet.”). Barco N.V. (“Patent Owner”) filed a Preliminary Response (Paper 11, “Prelim. Resp.”). Both parties identify themselves as the real party in interest. Pet. 6; Paper 12, 1.

Pursuant to the *Interim Processes for PTAB Workload Management Memorandum* (“Memorandum”) issued on March 26, 2025, Patent Owner filed its Discretionary Denial Brief and Petitioner filed its Response to Patent Owner’s Discretionary Denial Arguments. Paper 7; Paper 15. On June 25, 2025, Acting Director Stewart issued a decision determining that discretionary denial of institution is not appropriate in this case and referring the Petition to us for merits. Paper 18.

Under 35 U.S.C. § 314(a), an *inter partes* review may not be instituted unless the information presented in the petition “shows that there is a reasonable likelihood that the Petitioners would prevail with respect to at least 1 of the claims challenged in the petition.”

After considering the Petition and the evidence of record, and in the absence of any argument or evidence to the contrary, we determine the information presented shows a reasonable likelihood that Petitioners would prevail in establishing the unpatentability of at least one of the challenged claims of the ’972 patent.

Accordingly, we institute an *inter partes* review of claims 1–18 of the ’972 patent on the grounds asserted in the Petition.

B. Related Matters

The parties identify the following *Inter Partes* Reviews as related matters: IPR2024-01436, IPR2024-01437, IPR2024-01438, and IPR2024-01439. Pet. 6; Paper 4, 2.

C. The '972 Patent

The '972 patent, titled “Method and System for Making Functional Devices Available to Participants of Meetings,” relates to “methods, devices and systems for making functional devices [e.g., cameras, speakerphones, displays] available to participants of meetings, as well as software for carrying out such methods.” Ex. 1001, code (54), 1:5–8. As background, the '972 patent notes that “meetings are going digital” and, “[i]ncreasingly, people are using computer technology alone and in conjunction with broadband networks to support their meeting objectives prior to and during an actual meeting.” *Id.* at 1:31–35. “However, certain functionalities such as microphones and loud speakers tend to have a low quality if these are provided by portable devices such as laptops and mobile phones” and the '972 patent states that “[a]s meetings get larger in size there is a need for high quality audio as well as visual signals to be made available to participants at a meeting.” *Id.* at 1:37–42.

To address these concerns, the '972 patent describes a system designed to connect a user's processing device—such as a computer, laptop, PDA, or smartphone—to a base unit within a communications network via a wireless connection. Ex. 1001, 8:66–9:9. This enables users to gain access to various functional devices (e.g., microphone, speaker, display, camera) that are either attached to or part of the base unit. *Id.* at 9:10–17. The connection may be made through integrated wireless hardware or by using a first peripheral device, such as a dongle. *Id.* at 9:2–9. The functional devices are made available for shared use in group settings like meetings or

classrooms. *Id.* at 9:18–28. Connection between the base unit and the functional devices may occur over wired interfaces such as USB or wirelessly via protocols like Bluetooth or Wi-Fi. *Id.* at 9:29–35.

The '972 patent describes the base unit as a hardware box comprising a digital processor, such as an CPU, along with memory and input/output ports. Ex. 1001, 9:48–55. It connects to functional devices like cameras, microphones, speakerphones, and touchscreens. *Id.* at 9:22–26, 9:55–10:2. The base unit manages these data streams with components like encoders, decoders, mixers, and encryptors. *Id.* at 12:30–35. And the first peripheral device—such as a USB dongle—serves as a bridge between the base unit and the user's processing device. *Id.* at 17:17–56. It presents fixed or configurable endpoints, including USB audio/video, HID (Human Interface Device), or vendor-specific interfaces, enabling standard operating system recognition. *Id.* at 12:58–13:44, 16:44–17:15.

To expose the base unit's connected functional devices to the user's processing device, the '972 patent describes employing one or more of five architectural methods. Ex. 1001, 10:16–67. These methods include: (1) tunneling packets through an endpoint of the first peripheral devices, (2) “mimicking the at least one functional device, e.g. the second peripheral device at the first peripherals' end (e.g. receiver devices' end), either in software or hardware or both,” (3) “combining one or more functional devices . . . and exposing it to the one or more first peripheral devices . . . through a custom device in hardware, software or both,” (4) “combining one or more functional devices . . . and exposing its functionality through to the end user through proprietary software,” or (5) combining any of these approaches “to provide the function of the functional device e.g. the second peripheral device to the one or more first peripheral devices such as receiver devices.” *Id.* at 10:24–58. The exposure strategy may vary depending on

device availability across users, technical feasibility, and software support.
Id. at 11:37–40.

The system enables bidirectional communication between the processing device and the base unit over the wireless link, handled by firmware on the peripheral and base unit sides. During operation, data flows in both directions: signals from functional devices (e.g., cameras and microphones) are transmitted to the processing device, while user-generated data (e.g., audio output or screen sharing) is routed back to the base unit. *Id.* at 17:18–56. This includes media handling such as timestamping and lipsync synchronization between audiovisual streams. *See id.* at 13:34–41. USB endpoints on the first peripheral device may be preconfigured or dynamically set, based on the functional devices detected at the base unit. *Id.* at 16:44–17:15.

A particular application identified by the '972 patent for the described system is to provide support for unified communications (UC), such as Skype. Ex. 1001, 2:28–36. When having a Skype meeting, “the first peripheral device is connected to, e.g. plugged into a user processing device and all the functional devices connected to the base unit can be used, e.g. a better camera that gives a wide a room view, a better microphone and better speakers.” *Id.* at 11:64–12:2.

D. Illustrative Claims

Petitioners challenge claims 1–18 of the '972 patent. Pet. 5. Of the challenged claims, claims 1, 9, and 15 are independent. Ex. 1001, 22:63–24:59. Claims 2–8 depend from claim 1; claims 10–14 and 17 depend from claim 9; and claims 16 and 18 depend from claim 15. *Id.*

Claim 1 is illustrative and is reproduced below.

1. A system for connecting a processing device to a functional device connected to or in a base unit of a

communications network, the processing device having a memory, a display and an operating system, the system comprising:

- a first peripheral device being adapted 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 a configurable endpoint, where the at least one fixed or a configurable endpoint is a data source or a data sink which is able to store or emit data, of the functional device exposed or made available on the first peripheral device;
- the base unit and the first peripheral device being adapted to transmit and receive data respectively over the communications network from the functional device to the processing device via the at least one fixed or configurable endpoint using the generic communications protocol for communication between the processing device and the first peripheral device,
- wherein the processing device is adapted to host a unified communication between two or more processing devices.

Id. at 22:63–23:20.

E. Evidence and Asserted Grounds

Petitioners assert that claims 1–18 of the '972 patent would have been unpatentable on the following grounds:

Ground	Claim(s) Challenged	35 U.S.C. §	Prior Art
1	1–18	103	Beel, ¹ Dinka, ² Christison ³
2	1–18	103	Kaplan, ⁴ Van de

¹ U.S. Patent Application Publication No. 2015/0169477 A1, published June 18, 2015 (Ex. 1005) (“Beel”).

² U.S. Patent No. 8,369,498 B2, issued February 5, 2013 (Ex. 1006) (“Dinka”).

³ U.S. Patent No. 7,761,627 B2, issued July 20, 2010 (Ex. 1011) (“Christison”).

⁴ U.S. Patent Application Publication No. 2010/0295994 A1, published November 25, 2010 (Ex. 1008) (“Kaplan”).

Ground	Claim(s) Challenged	35 U.S.C. §	Prior Art
			Laar, ⁵ Christison

Petitioners also rely on the Declaration of Dr. Kevin Almeroth (Ex. 1002) to support its analysis. Additionally, Petitioners identify applicant admitted prior art (“AAPA”) to demonstrate how a skilled artisan would have understood the teachings of the prior art. *See* Pet. 25–27, 47.

II. ANALYSIS

A. *Legal Standards*

“In an IPR, the Petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d, 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)); *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (discussing the burden of proof in *inter partes* review).

A claim is unpatentable under § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). “[W]hen a patent claims a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result.” *KSR*, 550 U.S. at 416 (citing *U.S. v. Adams*, 383 U.S. 39, 50–51 (1966)).

⁵ U.S. Patent Application Publication No. 2016/0014172 A1, published January 14, 2016 (Ex. 1007) (“Van de Laar”).

The question of obviousness is resolved on the basis of underlying factual determinations, including (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) when in evidence, objective indicia of non-obviousness (i.e., secondary considerations). *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). Here, at this stage of the proceeding, the record contains no evidence of objective indicia of non-obviousness.

B. Level of Ordinary Skill in the Art

Petitioners contend that a person having ordinary skill in the art would have had “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.” Pet. 9–10 (citing Ex. 1002 ¶¶ 36–37). Patent Owner does not dispute this position at this time. *See generally* Prelim. Resp.

For purposes of this Decision, we adopt Petitioners’ proposed definition of a person of ordinary skill in the pertinent art, as it is consistent with the ’972 patent and the asserted prior art. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001).

C. Claim Construction

In an *inter partes* review, we apply the same claim construction standard that would be used in a civil action under 35 U.S.C. § 282(b). 37 C.F.R. § 42.100(b). In applying this standard, we generally give claim terms their ordinary and customary meaning as would be understood by a person of ordinary skill in the art at the time of the invention and in the context of the entire patent disclosure. *See id.*; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005) (en banc).

Petitioners and Patent Owner propose constructions for a number of claim terms. Pet. 10–19; Prelim. Resp. 7–11. Specifically, the parties propose the following constructions (the recited claim is *italicized*):

- *functional device*—“a second peripheral device connected in some way to a base unit” (Pet. 10);
- *generic communications protocol*—“is the protocol used by the pre-installed generic drivers to interface/communicate between the first peripheral device and the processing device” (*id.* at 12);
- *coupled*—“means connected through electronic communication” (*id.* at 13);
- *unified communication*—“audio or audio visual communications” (*id.* at 13);
- *means for encoding, optionally encrypting*—structure: “is software that encodes and optionally encrypts” and function: “is encoding and optionally encrypting data” (*id.* at 13);
- *at least one fixed or a configurable endpoint, where the at least one fixed or a configurable endpoint is a data source or a data sink which is able to store or emit data, of the functional device exposed or made available on the first peripheral device*—“[a] data source or sink that is fixed or configurable and used to transfer data between the peripheral device and the functional device” (*id.* at 19);
- *Endpoint*—“[is] interpreted broadly as data sources or sinks. Hence data can be stored at an endpoint or emitted” (Prelim. Resp. 7);
- *Fixed or a configurable endpoint*—“refers to the process of setting up the characteristics and operational parameters of each endpoint within a device, e.g., using descriptor fields, e.g., specific data elements, such that the processing device can correctly interpret and utilize the data of this endpoint” (*id.* at 9); and
- *Exposed*—“That is, exposing endpoints means that the endpoints are configured and made available so that external entities (such as a host computer or network services) can interact with them, e.g., by configuring with descriptor fields” (*id.* at 11).

The proposed constructions are either undisputed or not distinguishable in a way that would impact whether the Petitioners have established their burden to for *inter partes* review of the '972 patent.

Patent Owner does not refute Petitioners' proposed construction for "functional device," "generic communications protocol," "coupled," "unified communication," and "means for encoding, optionally encrypting." See Prelim. Resp. 7–11. And Petitioners' construction of the entire phrase "at least one fixed or a configurable endpoint, where the at least one fixed or a configurable endpoint is a data source or a data sink which is able to store or emit data, of the functional device exposed or made available on the first peripheral device" appears consistent with Patent Owner's construction of the particular terms found within that phrase ("endpoint," "fixed or a configurable endpoint," and "exposed").

For example, the parties' constructions require the "endpoint" to be a data source or a data sink, which is consistent with what the claim language and specification state expressly. Although Petitioners' construction does not state expressly that data is stored or emitted by the endpoint, as Patent Owner proposes (again consistent with the express claim language and representations made in the specification), we understand such a requirement to exist nevertheless because Petitioners' construction requires the endpoint to be used for transferring data, which would necessarily involve data being stored and/or emitted in the transfer.

Regarding the endpoint being "fixed" or "configurable," we do not find the differences in the parties' constructions to be determinative at this stage of the proceeding. Petitioners basically argue that an endpoint is necessarily either fixed or configurable because, in operation, it either can be configured (i.e., configurable) or it cannot be configured (i.e., fixed)— "[t]here are no other options." Pet. 17–18. Patent Owner, on the other hand,

argues that “fixed” or “configurable” refers *to the process of setting up* the characteristics and operational parameters of the endpoint to allow the processing device to correctly interpret and utilize the data of the endpoint. Prelim. Resp. 8–9. In other words, the process either fixes the settings or it allows the settings to be configured. As such, the parties appear to agree “fixed” or “configurable” connotes that the characteristics and operational parameters of the endpoint are either set prior to operation or can be set during operation.

However, there appears to be a point of distinction between the parties’ interpretations because Patent Owner’s construction would additionally require the endpoint “to allow the processing device to correctly interpret and utilize the data of the endpoint.” As support for this added requirement, Patent Owner points to the ’972 patent’s description of why “fixed endpoints” are provided, which is “for the basic functionality,” and its description of how “configurable endpoints” are configured to expose second peripheral devices, which is “either when pairing a first peripheral device 130 with a base unit 100 or over the wireless connection 127 between the processing device 130 and the base unit 100.” Prelim. Resp. 8–9 (citing Ex. 1005, 16:49–51, 16:57–67). Patent Owner also represents that “[t]he ’972 patent describes the term ‘fixed or a configurable endpoint’ as being defined by a number of descriptive fields of the endpoint.” *Id.* at 8 (citing Ex. 1005, 8:5–6).

As an initial matter, we do not find the distinction between the parties’ interpretations to be determinative of whether the Petitioners have established their burden for instituting *inter partes* review of the ’972 patent, but we address it anyway to provide some guidance going forward.

We do not agree with Patent Owner that “fixed” or “configurable” requires more than what is agreed to by the parties—i.e., the characteristics

and operational parameters of the endpoint are either set prior to operation or can be set during operation. We disagree that the '972 patent defines “fixed or a configurable endpoint” as “a number of descriptive fields of the endpoint.” Rather column 8, lines 5–6, of the '972 patent states that “[a]n endpoint is defined by a number of descriptive fields,” which speaks more about the mechanism used to establish the characteristics and operational parameters of the endpoint than it does about how “fixed” or “configurable” would be understood by a skilled artisan. And the fact that an endpoint may be defined by descriptive fields does not inform a skilled artisan that “fixed” or “configurable” requires the endpoint to *allow the processing device* to correctly interpret and utilize the data from the endpoint. Correctly interpreting and utilizing data may be the goal, but that goal is not turned into a requirement of the claims because the recited endpoint is fixed or configurable.

Similarly, there is no basis for making that goal a requirement simply because a fixed endpoint is described as providing basic functionality and a configurable endpoint is described as being configurable by the base unit either while pairing or via the processing device. As a result, we find little merit in Patent Owner’s contention that the language “fixed or a configurable” requires a process for setting up the characteristics and operational parameters of an endpoint within a device so that the processing device can correctly interpret and utilize the data of this endpoint. Patent Owner, however, will have an opportunity during trial to further develop this contention.

Another point of contention relates to the clarity of the phrase “at least one fixed or a configurable endpoint, where the at least one fixed or a configurable endpoint is a data source or a data sink which is able to store or emit data, of the functional device exposed or made available on the first

peripheral device.” Although Petitioners were able to propose a construction for that phrase, they also contend it is ambiguous. Pet. 14–15, 31–32.

Petitioners contend that it is unclear whether it requires “the endpoint be of the ‘peripheral device’ or ‘functional device’” because it “can be interpreted in two ways, i.e., ‘first peripheral device having . . . at least one . . . endpoint’ or ‘at least one . . . endpoint . . . of the functional device.’” *Id.* at 14–15 (citing Ex 1002 ¶ 82); *see id.* 31–23 (stating that the limitation is unclear about whether it requires “the peripheral device having [an] endpoint,” or an “endpoint of the functional device”) (citing Ex. 1002 ¶ 123).

“Patent Owner, however, submits that the claimed feature is unambiguous and specifically recites the at least one fixed or a configurable endpoint providing the functionality of the functional device exposed or made available on the first peripheral device.” Prelim. Resp. 24. “Patent Owner submits that one having ordinary skill in the art would have understood that the features recited in Claim 1 (and similarly recited in Claims 9 and 15) are clearly directed to end points of the functional device(s) that are exposed or made available on the first peripheral device, e.g., such that data is transmitted and received from the functional device to the processing device via the at least one fixed or configurable endpoint on the peripheral device.” *Id.*

This is another claim construction issue that we do not have to resolve at this stage of the proceeding because Petitioners offer sufficient evidence and analysis under either interpretation. *See* Pet. 15 (“Petitioner considers both possibilities”). The parties are invited to further develop this issue during trial, including, more specifically, the parties’ positions regarding (1) whether the intrinsic record supports limiting the peripheral device to having an endpoint uniquely associated with the functional device that is

communicating with the processing device and (2) for a peripheral device that is connected to a processing device and actually operates as an intermediary for communicating data between the processing device and a functional device (which is connected to a base unit), explain what delineates the line between the peripheral device having or not having an endpoint of the functional device exposed or made available on the first peripheral device.

We need only construe those terms in controversy and only to the extent necessary to resolve the controversy being addressed. *Realtime Data LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019). Beyond the undisputed constructions identified, which we adopted because the intrinsic record supports them, and the clarifications discussed above, we determine no further language needs to be expressly construed for the purposes of determining whether instituting *inter partes* review of the '972 patent is appropriate.

D. Ground 1—Obviousness in View of Beel, Dinka, and Christison

Petitioners contend that claims 1–18 are obvious over Beel, Dinka, and Christison. Pet. 26–46. For independent claims 1, 9, and 15, Petitioners rely on the same evidence and reason (*id.* at 26–38, 44–45); similarly, Patent Owner's arguments are addressed to claim 1 with the understanding that the arguments apply equally to claims 9 and 15 (Prelim. Resp. 20–38). Accordingly, we also focus on claim 1 in our analysis below.

1. Overview of Beel (Ex. 1005)

Beel is titled “Electronic Tool and Methods with Audio for Meetings” and relates to a network-based electronic meeting system and method that allows users to share arbitrary media content—including audio, video, and screen content—across a communications network with minimal setup. Ex. 1005, codes (54), (57), ¶¶ 40, 44, 73. To facilitate this, Beel describes

an electronic meeting tool to addresses problems in meeting collaboration by communicating arbitrary media content from users at a meeting through a “zero-footprint” architecture. *Id.* ¶¶ 113–116, 122, 138. The system comprises a node configuration adapted to operate a display node of a communications network, with the display node being coupled to a first display. *Id.* ¶¶ 44, 64, 123, 119. Beel describes the node configuration as being adapted to receive user selected arbitrary media content from multiple meeting participants and to control display of the user selected arbitrary media content on the first display through automatic composition functionality. *Id.* ¶¶ 123, 132–134.

Beel discloses a peripheral device (e.g., “USB dongle”) adapted to communicate the user selected arbitrary media content via the communications network that serves as a connection unit comprising a connector adapted to couple to a port of a processing device having a second display, a memory and an operating system, and a transmitter. Ex. 1005 ¶¶ 44, 49, 58, 68, 70, 124–125, 128. Internally, the peripheral device contains executable code divided into functional components: (1) setup of communication channels using generic drivers, (2) connection to the network via an internal transceiver, (3) capture of screen content, (4) routing of that content to a display node, (5) GUI presentation to the user, (6) encoding, compression, and optional encryption of transmitted data, and (7) management of visual indicators and input handling. *Id.* ¶¶ 64–65, 67.

Beel describes the peripheral device as presenting itself as a composite device comprising a mass storage device, a Human Interface Device (HID), and a virtual audio device, utilizing pre-installed generic drivers of the operating system to eliminate installation requirements and administrative privileges. *Id.* ¶¶ 41–42, 50, 60–62, 65, 69, 205, 208. Beel teaches that the peripheral device may use a virtual audio device that

presents itself as an audio output device to the processing device, enabling audio capture through generic USB audio drivers (UAC1/UAC2) without requiring specialized audio driver installation. *Id.* ¶¶ 43, 50, 312–313, 319. Both audio and video streams are time-stamped synchronously to ensure lip synchronization at the receiving end. *Id.* ¶¶ 43, 50, 314, 319.

Beel discloses using a portable program that is adapted to obtain user selected arbitrary media content through screen scraping techniques that read video frame buffers from the graphics card, enabling capture of full real-time content including full HD videos. Ex. 1005 ¶¶ 47–48, 51, 127, 320. Beel teaches that the program leaves a zero footprint on termination, meaning all temporary files, registry entries, and system changes exist only while the program is running and are completely removed upon exit. *Id.* ¶¶ 47, 56, 138. And, Beel describes the system as operating without requiring software installation or configuration changes on the client processing device. *Id.* ¶¶ 62, 65, 69, 171, 173, 182. According to Beel, the disclosed system operates across multiple platforms providing plug-and-play functionality that bypasses network interface complications and firewall restrictions while maintaining the client processing device’s independent networking capabilities for other applications. *Id.* ¶¶ 176, 179, 205.

Beel describes interacting with the system in a simple multi-step process. First, they connect the peripheral to the host device. Then, the embedded application is launched—either manually or automatically—and finally, the user triggers content transmission to the display by activating an input device (either physical or virtual). Ex. 1005 ¶¶ 58–59, 68. For automated operation, Beel teaches that the system may include a lightweight service (or daemon) pre-installed on the host that detects the peripheral and initiates the client software automatically. *Id.* ¶ 59. Beel teaches that the system supports “democratic screen sharing,” allowing any participant to

share content directly to the main display without mediation by a central presenter or moderator, which fosters a more dynamic and equitable meeting experience. *Id.* ¶ 55. Beel teaches that content is routed automatically to the appropriate network node (e.g., display node or base station) without user configuration, using pre-paired devices to define routing destinations. *Id.*

2. *Overview of Dinka (Ex. 1006)*

Dinka is titled “Television Set,” and relates to “a television apparatus having an embedded processing apparatus for conducting voice or video calls via a packet-based network.” Ex. 1006, code (54), 1:13–15. Dinka discloses a media appliance system comprising integrated video processing apparatus configured for signal output to a display interface, a network interface module providing access to packet-switched communication networks, non-volatile memory storage containing an embedded communication client application, and a processing unit operatively coupled to execute the client application software. *Id.* at 5:49–51, 6:14–17, 7:22–31.

Dinka disclose a communication client application that implements bidirectional session establishment protocols enabling local terminal users to engage in real-time multimedia communication sessions with remote network endpoints via packet-based network infrastructure. Ex. 1006, 6:23–39. The client application incorporates an automated session management subsystem configured to: receive network signaling messages containing invitation signals from remote terminal endpoints, where such invitation signals encapsulate trigger condition parameters that specify predetermined event criteria for automated session initiation; implement continuous monitoring functionality for the specified trigger condition parameters; and execute automated session joining procedures contingent upon detection of the specified event occurrence. *Id.* at 2:44–64, 11:5–15.

Dinka teaches that this architecture enables event-driven communication session scheduling that synchronizes session initiation with user-defined temporal or activity-based trigger events, thereby providing non-intrusive integration of real-time communication capabilities within media consumption workflows. Ex. 1006, 2:64–3:5, 11:5–15.

3. *Overview of Christison (Ex. 1011)*

Christison is titled “Wireless USB Hub” and discloses a wireless USB (“WUSB”) system addressing critical performance limitations in existing wireless USB systems while enabling seamless integration of legacy wired USB devices. Ex. 1011, code (54), 1:20–24. Christison describes “improving the throughput of WUSB Wire Adapter systems” by, in one embodiment, “streamlining the Wire Adapter Protocol to improve the throughput of WUSB Wire Adapter systems” and, in another embodiment, “presenting wired USB devices plugged into a WUSB hub as if they are ‘native’ WUSB devices.” *Id.* at 3:18–25. Christison indicates that the technical problem solved stems from the inherent inefficiencies of existing WUSB Wire Adapter protocols, which suffer from excessive control message overhead (“chatty” communication patterns) and poor data flow pipelining, resulting in unacceptably low throughput in wireless USB environments. *Id.* at 2:8–17

Christison describes the system disclosed as “provid[ing] a Wireless USB hub that includes a first port configured to communicate with a wired USB enabled device, a second port configured to communicate with a first wireless USB enabled device, and a controller that detects the wired USB enabled device and presents the wired USB enabled device as a native wireless USB enabled device to the first wireless USB enabled device.” Ex. 1011, code (57). “The WUSB hub acts as a proxy for the wired USB devices and presents them to the host system as if they were native WUSB

devices. The WUSB hub presents an attached wired USB device as a unique WUSB device with its own device address or as a separate function on an already existing device (the WUSB hub for instance, which may enumerate as a Device Wire Adapter).” *Id.* at 2:60–67.

Christison teaches that the Wire Adapter Protocol implements intelligent automatic segmentation of data transfers, “cut-through” transmission that begins downstream transfer upon receiving minimum data thresholds rather than waiting for complete segments, and eliminates explicit Transfer Complete messages in favor of downstream polling mechanisms. Ex. 1011, 3:5–15, 5:17–23. In Christison, the system “includes an Enhanced Wire Adapter Protocol that improves throughput by reducing the number of messages that are exchanged as a part of data transfer, thereby reducing processing time and transfer time of the messages over the wired USB interfaces and wireless medium. Throughput is also increased by improving ‘pipelining’ of data flow through the system, which reduces transfer latency.” *Id.* at 4:52–59.

4. *Independent Claim 1*

Petitioners contend that claim 1 is unpatentable as obvious over Beel, Dinka, and optionally Christison. Pet. 26–38. Petitioners provide a detailed mapping of the teachings of these references to the elements of claim 1. *Id.* Patent Owner at this time largely does not dispute that mapping, except as it relates to the disclosure of a first peripheral device having at least one fixed or configurable endpoint of the functional device exposed or made available on the first peripheral device. *See* Prelim. Resp. 20–38.

A) 1. *A system for connecting a processing device to a functional device connected to or in a base unit of a communications*

network, the processing device having a memory, a display and an operating system, the system comprising:

a first peripheral device being adapted to be coupled to the processing device via a generic communications protocol

To the extent that claim 1's preamble is limiting,⁶ Petitioners contend that Beel discloses a setup where a processing device (processing device 31) is connected through a communication network to a functional device (cameras 39, 40, 41; microphone 38; display 44; speaker) by way of a base node 36. Pet. 28 (citing Ex. 1005 ¶¶ 41, 88, 120, 310, claim 92, Figs. 1a, 1b; Ex. 1002 ¶¶ 112–115). Petitioners identify that Beel states expressly that processing device 31 has “a memory, a display and an operating system.” *Id.* at 29 (citing Ex. 1005 ¶¶ 41, 45, 56, 64, 68, 71, 94, 125, 196, 310, claims 82, 92; Ex. 1002 ¶ 116).

Regarding the first peripheral device, Petitioners note that, like the '972 patent, Beel discloses “a USB dongle,” which is a “peripheral device comprising a connector adapted to couple to a port of a user processing device 31.” Pet. 29 (citing Ex. 1005 ¶¶ 58, 125, 195; Ex. 1002 ¶¶ 117–118; Ex. 1001, 7:56–57, 9:10–22). Petitioners contend that Beel discloses that its peripheral device is adapted to be coupled to the processing device via a generic communications protocol— “the processing device having . . . at least one preinstalled generic driver providing a generic communications protocol for communication between processing device and a standard class of peripheral devices.” *Id.* at 30 (citing Ex. 1005 ¶ 56; Ex. 1002 ¶¶ 119–120).

⁶ At this stage of the proceeding, we do not need to determine whether or not the preamble is limiting because we determine that Beel sufficiently discloses the preamble.

Patent Owner does not dispute Petitioners' contentions. *See generally* Prelim. Resp. 20–38. On this record, having reviewed Petitioners' contentions and the evidence cited in support thereof, we find Petitioners have made a showing that is sufficiently persuasive at this stage of the proceeding for these limitations of claim 1.

B) the base unit having a transmitter and the first peripheral device having a receiver and at least one fixed or a configurable endpoint, where the at least one fixed or a configurable endpoint is a data source or a data sink which is able to store or emit data, of the functional device exposed or made available on the first peripheral device;

Petitioners contend that Beel discloses the transmission and reception capabilities of both the base unit and the peripheral device. Pet. 30–31 (citing Ex. 1005 ¶¶ 120, 125, 128–129; Ex. 1002 ¶¶ 121–122). In particular, Petitioners highlight paragraphs 128 and 129 of Beel where it describes the base node as including a transceiver, and even states that this may be a wireless transmitter/receiver; on the other side of the connection, the peripheral device is described as also including a transceiver. *Id.*

Petitioners contend “Beel discloses the ‘endpoint’ irrespective of whether it must be on the ‘peripheral device’ or ‘functional device.’” Pet. 32 (citing Ex. 1002 ¶ 127). For the “the first peripheral device,” Petitioners identify “Mass storage device 12,” “USB audio device 14,” and “USB HID device 13.” *Id.* at 31 (citing Ex. 1005 ¶¶ 320–323, Fig. 11; Ex. 1002 ¶ 124). Petitioners note that “the ’972 patent discloses the identical figure illustrating the same endpoints.” *Id.* (citing Ex. 1001, 4:28–33, 16:44–67, Fig. 4; Ex. 1005, Fig. 11; Ex. 1002 ¶ 124). For the “functional device,” Petitioners identify, as an example, “A/V components connected to the base unit.” *Id.* (citing Ex. 1001, 4:5–11, 12:60–13:8, 16:44–67, claim 2; Ex. 1005 ¶¶ 43, 50, 313–317; Ex. 1002 ¶ 125). And Petitioners represent that “the use

of USB devices are known to include ‘endpoints’ to transfer data.” *Id.* at 32 (citing Ex. 1002 ¶ 125).

For “the at least one fixed or a configurable endpoint is a data source or a data sink which is able to store or emit data, of the functional device exposed or made available on the first peripheral device,” Petitioners highlight Beel’s teaching that:

In an embodiment audio data is captured through a virtual sound card interface added as a logical device over the physical interface provided in the peripheral device. On the processing device only a generic sound driver such as a USB sound driver is required which is generally standard on any modern processing devices such as a PC (UAC1 or UAC2).

* * * *

The peripheral device preferably acts as a composite device comprising for instance a (virtual) audio speaker device. However instead of operating like a speaker the audio is channeled over the communications network. The peripheral device can preferably capture the audio stream with a device driver, for instance a built in ALSA UAC1, and stream the audio to the base unit. . . . The peripheral device then encodes this time stamp into the audio stream (for instance RTP audio stream) that is streamed to the base unit. At the receiving end, the audio and video streams are then preferably recombined taking into account the time stamp to reach lip synchronization.

Pet. 32–33 (citing Ex. 1005 ¶¶ 43, 317); *see also* Ex. 1005 ¶¶ 313–316; Ex. 1002 ¶ 128. Petitioners contend that “Beel’s endpoints allow the ‘functional device,’ such as an A/V components connected to the base unit, to be ‘exposed or made available on the first peripheral device.’” *Id.* at 33 (citing Ex. 1005 ¶¶ 43, 50, 56, 71, 75, 93, 119–122, 126, 298, 310–311; Ex. 1002 ¶ 129). In addition, Petitioners reason that

The disclosure of the peripheral device acting as a “virtual audio device” using a USB Audio Class (UAC) indicates that endpoints of the functional device are “exposed or made available on the first peripheral device” because, for example,

Beel states, “[A]udio data is captured at this interface 8–11 internally in the peripheral device 32. This data is then optionally re-encoded and streamed to the communications network to which the peripheral device 32 has access.” Accordingly, the peripheral device of Beel can have a composite device able to store and emit virtual audio/visual data to endpoints, such as a speaker or display.

Id. at 33–34 (citing Ex. 1005 ¶ 319; Ex. 1002 ¶ 130).

Finally, Petitioners contend, “[t]o the extent the Patent Owner argues that ‘*exposed or made available*’ means . . . ‘configuring one or more endpoints with descriptor fields’ . . . Petitioner relies optionally on Christison, which renders obvious configuring descriptor fields, which is applicable to USB devices.” Pet. 34 (citing Ex. 1011, 6:66–7:5; Ex. 1002 ¶¶ 131–132). Petitioners rely, in particular, on Christison’s disclosure of a controller configured to

- intercept a device descriptor request from said first wireless USB enabled device;

- read a device descriptor from said wired USB enabled device;

- modify said device descriptor so that it is consistent with a device descriptor for any wireless USB enabled device as specified by a predetermined wireless USB standard; and

- present said wired USB enabled device as said native wireless USB enabled device by providing said modified device descriptor to said first wireless USB enabled device.

Id. (citing Ex. 1011, 9:21–32, 9:36–38). Petitioners contend that a skilled artisan would have recognized that Christison teaches one efficient example of presenting wireless USB devices as “native devices” and suggests a known technique of presenting a remote device as native to improve the way Beel implements its disclosed virtual devices. Pet. 27 (citing Ex. 1005 ¶¶ 43, 50, 313–314; Ex. 1011, code (57), 6:13–19; Ex. 1002 ¶¶ 110–111). Petitioners contend that “[t]he combination would create the predictable

result of a web conferencing system that used USB protocols to present remote functional devices as local or ‘native’ functional devices to host a unified communication call, such as Skype, wherein the system could utilize one or more functional devices’ capabilities.” *Id.* at 27–28 (citing Ex. 1002 ¶ 111).

Patent Owner contends that reliance on Beel is misplaced because Beel does not disclose, or even suggest, the exposure of a functional device’s endpoint *on the first peripheral device*. Prelim. Resp. 27–33. Patent Owner argues that, while Beel discusses USB communication, virtual devices, and generic drivers, it does so only in the context of presenting applications or transferring content to displays. *Id.* at 27–28. Beel’s peripheral devices, according to Patent Owner, transmit data to a processing device using standard interfaces, but they do not act as proxies for functional devices connected to a base unit. *See id.* Patent Owner argues that even where Beel mentions a “virtual audio device” or use of USB Audio Class (UAC) protocols, it fails to establish that a functional device’s endpoints—e.g., from a base-connected microphone or speaker—are configured and exposed on the peripheral device. *See id.*

Patent Owner argues that Petitioners further mischaracterize the ’972 patent by citing its incorporation of Beel’s Figure 11 as evidence that Beel discloses the claimed endpoint architecture. Prelim. Resp. 28–30. This argument, according to Patent Owner, ignores the clear language in the ’972 patent that Figure 11 (presented as Figure 4 in the patent) is enhanced with additional functionality not present in Beel, specifically including the exposure of fixed or configurable endpoints for conferencing applications. *Id.* at 30. Patent Owner argues that, while Beel’s figure may illustrate standard USB interfaces, it is the added layers of configuration, exposure,

and proxying disclosed in the '972 patent that meet the claim limitations—features that are wholly absent from Beel. *Id.* at 30–31.

Patent Owner argues that Petitioners also attempt to fill this critical gap through expert declarations and generic references to USB specifications. *See* Prelim. Resp. 32–33. Petitioners' expert states that because USB requires endpoints for data transfer, and functional devices have endpoints, then the peripheral device must also have corresponding endpoints; but, Patent Owner argues, this argument is “improperly characterizing the claimed features to a gist or thrust, in which neither Petitioners nor Petitioners' expert establish that the teachings of Beel includes the specific teaching of an endpoint of the functional device exposed or made available on the first peripheral device, as required by Claim 1.” *Id.*

Patent Owner argues that Christison and Dinka also fail to remedy the deficiencies of Beel. *See* Prelim. Resp. 33–38. Dinka describes scheduling communication sessions and enabling bidirectional conferencing, but it does not address endpoint exposure or peripheral device architecture. *Id.* at 33–35. Patent Owner argues that Christison, meanwhile, discusses wireless USB hubs that proxy descriptor information from wired USB devices to hosts, but again does not teach or suggest that the endpoint of a functional device connected to a base unit is configured or exposed on a separate peripheral device. *Id.* at 34–35. Rather, according to Patent Owner, Christison describes a fundamentally different architecture with no teaching or suggestion of the low-latency, endpoint-level proxying required by the '972 claims. *Id.* at 35.

Furthermore, Patent Owner argues that Petitioners offer no persuasive motivation to combine the teachings of Beel and Christison in a manner that would produce the claimed system. Prelim. Resp. 36–38. Patent Owner

argues that Petitioners merely assert that combining Christison’s known technique of presenting USB descriptors with Beel’s system would have produced the claimed result, but they fail to provide a reasoned explanation, supported by evidence, of why or how a person of ordinary skill would have implemented such a combination—particularly in the context of supporting unified communications applications with stringent bandwidth and latency requirements. *Id.* Ultimately, Patent Owner contends, Petitioners rely on impermissible hindsight and expert opinion to fill in the missing limitations; Petitioners’ arguments lack sufficient evidentiary support and reduce the claims to their perceived “gist,” which is contrary to established Federal Circuit precedent. *Id.*; *see also id.* at 28, 33.

Having considered the arguments and evidence presented by both parties at this stage of the proceeding, we are persuaded that there is a reasonable likelihood Petitioners would prevail in showing that Beel discloses or suggests to a skilled artisan a base unit having a transmitter and a first peripheral device having a receiver and at least one fixed or a configurable endpoint, where the at least one fixed or a configurable endpoint is a data source or a data sink which is able to store or emit data, of the functional device exposed or made available on the first peripheral device.

Petitioners’ offers evidence, supported by its expert declarant, that the endpoints disclosed in Beel are either fixed, such as a mass storage unit with predefined characteristics, or configurable, such as a virtual audio interface that may change configuration based on driver instructions or use context. Pet. 32–33. As Petitioners point out, the ’972 patent itself acknowledges that Beel’s Figure 11 illustrates a system comprising a combination of vendor-specific and standard endpoints, and further interprets these endpoints to correspond to drivers and host applications used for

functionality like screen sharing and audio streaming, which demonstrates a direct conceptual and structural alignment between the '972 patent and Beel. *Id.* Furthermore, Petitioner's evidence demonstrates sufficiently that Beel describes a peripheral device acting as a virtual composite device capable of emulating different functions—such as a USB audio speaker—while rerouting the data stream (e.g., RTP audio stream) over the network. *Id.* For instance, Petitioners' evidence demonstrates sufficiently Beel discloses or suggests that audio data can be captured by a virtual sound card interface implemented within the peripheral device, re-encoded, and transmitted to the base unit for playback or synchronization with video content. *Id.*

In addition, Petitioners have demonstrated sufficiently that Beel's architecture supports the requirement that the endpoint of the functional device—whether it is a camera, microphone, or speaker—is made available through or exposed on the peripheral device. *Id.* The functional device's capabilities are effectively rendered accessible to the processing device by way of the peripheral device, which acts as an intermediary. *Id.* Petitioners' evidence demonstrates sufficiently that this exposure can occur via logical interfaces, such as USB Audio Class (UAC) virtual drivers, that allow the processing device to recognize and interact with these endpoints using standard protocols. *Id.* Furthermore, Petitioners show sufficiently Beel discloses that the peripheral device may include software that facilitates communication with and presentation of media content on the processing device, further demonstrating that the endpoints are not only present but also actively used for data transmission. *Id.*

Patent Owner's arguments, at least at this stage of the proceeding, fail to undermine Petitioners' showing because they are largely just that—attorney arguments—without sufficient evidentiary backing and because

they lack sufficient clarity regarding how the recited claim language distinguishes Beel's disclosed system.

First, Patent Owner makes several representations that Petitioners misplace its reliance on certain teachings or suggests found in Beel and that Beel does not support the contention Petitioners make, but Petitioners' positions are backed the testimony of Dr. Almeroth and Patent Owner offers no contradictory evidence for why a skilled artisan would understand Beel differently. And, suffice it to say that, when the declaration of Dr. Almeroth is considered in juxtaposition with the cited evidence from Beel, we have found declarant Dr. Almeroth sufficiently persuasive to demonstrate Petitioner is reasonably likely to prevail on the point.

For example, Patent Owner simply argues that "there is no indication in Beel of using any fixed or a configurable endpoint of the functional device exposed or made available on the first peripheral device" (Prelim. Resp. 31), but declarant Dr. Almeroth states that "Beel discloses that a peripheral device can act as a 'virtual audio device' using a USB Audio Class (UAC) interface," which "*indicates* that endpoints of the functional device are 'exposed or made available on the first peripheral device'" (Ex. 1002 ¶ 130 (emphasis added); *see also id.* ¶¶ 128–129). Patent Owner's argument, without any evidentiary support, does little to undermine the opinion testimony from Dr. Almeroth about what Beel's teachings would indicate to a skilled artisan.

Second, although Patent Owner repeatedly states that Beel fails to disclose or suggest using a fixed or a configurable endpoint of the functional device exposed or made available on the first peripheral device (*see* Prelim. Resp. 20–33), Patent Owner never clearly delineates how specifically the recited claim language distinguishes Beel's disclosed system. For example, Patent Owner never states specifically what a system configuration must

include to have a fixed or a configurable endpoint of the functional device exposed or made available on the first peripheral device and how that is different from what Beel (and the other references) discloses. During trial, Patent Owner is invited to explain more clearly the distinguishing features that are required by that limitation and why the specific evidence Petitioners provide is deficient.

Finally, to the extent Petitioner needs to rely on the Beel/Christison combination, we do not agree with Patent Owner that Petitioners have not established any reasoned analysis and evidentiary support that would have prompted one having ordinary skill in the art to have modified the teachings of Beel in view of Christison. *See* Prelim. Resp. 36. As Petitioner contends, Christison teaches one efficient example of presenting wireless USB devices as “native devices” and, because Beel teaches connecting remote virtual devices to a client computer, Christison suggests to a skilled artisan a known technique for Beel to implement its disclosed virtual devices and present a remote device as native. *See* Pet. 27. We find this sufficient at this stage of the proceeding to demonstrate sufficiently that, to a skilled artisan, the proposed modification would have been a predictably beneficial variation of Beel’s system and within that artisan’s capabilities.

Therefore, based on the record as it stands now, we find Petitioners have made a showing that is sufficiently persuasive that Beel, either alone or with Christison, disclose these limitations of claim 1.

C) the base unit and the first peripheral device being adapted to transmit and receive data respectively over the communications network from the functional device to the processing device via the at least one fixed or configurable endpoint using the generic

communications protocol for communication between the processing device and the first peripheral device,

Petitioners contend Beel discloses that the base unit and peripheral device are adapted to transmit and receive data over the communications network using generic protocols. Pet. 35–36 (citing Ex. 1005 ¶¶ 39–41, 50, 56, 71, 75, 85, 88–89, 93, 118–121, 126, 253–271, 298, 310–311; Ex. 1002 ¶¶ 134–136). Specifically, Petitioners contend that Beel describes the capture and transmission of media content (audio and video) through endpoints such as microphones and cameras connected to the base node and that these streams are then made available to processing devices through the peripheral device. *Id.* (citing Ex. 1005 ¶¶ 71, 120). Petitioners contend that Beel describes how the peripheral device receives media from the network and displays it on the processing device using software that relies on a generic communications protocol. *Id.* at 36.

Additionally, Petitioners contend that Dinka reinforces this disclosure by describing bidirectional communication using webcams and client applications over a network. Pet. 36–37 (citing Ex. 1006, code (57), 6:12–13, 6:34–37; Ex. 1002 ¶¶ 137–138). Petitioners identify that Beel discloses using similar software for “electronic meeting systems,” “groupware,” and “web conferencing systems” and contends that a skilled artisan would have been motivated to build on Beel’s data sharing technology using the unified communication call software Dinka discloses to “create the predictable result of a web conferencing system using a unified communication call, such as Skype, wherein the system could utilize one or more functional devices’ capabilities. *Id.* at 26–27 (citing Ex. 1005 ¶¶ 85–89, 215–248; Ex. 1002 ¶¶ 108–109).

Patent Owner does not dispute Petitioners’ contentions. *See generally* Prelim. Resp. 20–38. On this record, having reviewed Petitioners’

contentions and the evidence cited in support thereof, we find Petitioners have made a showing that is sufficiently persuasive at this stage of the proceeding for these limitations of claim 1.

D) wherein the processing device is adapted to host a unified communication between two or more processing devices.

Petitioners contend that Beel describes a unified communication environment where processing devices (e.g., PCs or tablets) host and participate in media exchanges with other users. Pet. 37–38 (citing Ex. 1005 ¶¶ 13, 44, 50, 56, 71, 75, 87–88, 113, 119, 122, 126, 253–258, 298, 310–311; Ex. 1002 ¶¶ 139–141; Ex. 1001, 7:8–13). In particular, Petitioners highlight Beel’s paragraph 122 teaching that users can communicate through a shared meeting space that incorporates displays or projectors, which aligns with the ’972 patent’s concept of a unified communication system that enables video conferencing between different user endpoints. *Id.* In addition, Petitioners contend that Dinka offers corroborating evidence by disclosing systems that enable users to engage in two-way audio and video communication via a client application, such as a Skype conference. *Id.* at 38 (citing Ex. 1006, code (57); Ex. 1002 ¶ 143).

Patent Owner does not dispute Petitioners’ contentions. *See generally* Prelim. Resp. 20–38. On this record, having reviewed Petitioners’ contentions and the evidence cited in support thereof, we find Petitioners have made a showing that is sufficiently persuasive at this stage of the proceeding for this limitation of claim 1.

5. *Conclusion*

After considering Petitioners’ evidence and argument, we determine the information presented shows a reasonable likelihood that Petitioners would prevail in establishing the unpatentability of claim 1 based on the combination of Beel, Dinka, and, optionally Christison (Ground 1). As

noted above, both parties rely on substantially the same evidence and arguments to address independent claims 9 and 15. *See* Pet. 44–45. Therefore, our determination for claim 1 applies equally to claims 9 and 15.

E. Remaining Claims and Grounds

“When instituting post-grant review, the Board will authorize the review to proceed on all of the challenged claims and on all grounds of unpatentability asserted for each claim.” 37 C.F.R. § 42.208(a). We must “either (1) institute as to all claims challenged in the petition and on all grounds in the petition, or (2) institute on no claims and deny institution.” Patent Trial and Appeal Board Consolidated Trial Practice Guide (Nov. 2019),⁷ 5–6, 64; *see also* 37 C.F.R. § 42.108(a), *PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1359–60 (Fed. Cir. 2018) (stating a decision to institute is “a simple yes-or-no institution choice respecting a petition, embracing all challenges included in the petition”).

Because we have decided to grant institution on Ground 1 with respect to claim 1, we must do the same for the remaining claims for Ground 1. Patent Owner at this stage does not raise any arguments specifically directed to the remaining dependent claims of Ground 1. Further, because we have decided to institute *inter partes* review based on Ground 1, we must do the same for Grounds 2 as well, as institution must include all challenged claims under all asserted grounds. Consequently, we need not address the substance of Petitioners’ Ground 2 in this Decision. *See* 35 U.S.C. § 314(a); *SAS Inst.*, 138 S. Ct. 1348, 1356 (2018); 37 C.F.R. § 42.108(a).

⁷ Available at <https://www.uspto.gov/sites/default/files/documents/tpgnov.pdf?MURL=TrialPracticeGuideConsolidated>

III. CONCLUSION

For the reasons discussed above, Petitioners have shown a reasonable likelihood it will prevail in demonstrating that at least one of claims 1–18 of the '972 patent are unpatentable under 35 U.S.C. § 103. We, therefore, institute an *inter partes* review as to claims 1–18 on all grounds set forth in the Petition. 35 U.S.C. § 314(a); 37 C.F.R. § 42.108(a).

This Decision does not reflect a final determination on the patentability of any claim. We further note that the burden remains on Petitioners to prove unpatentability of each challenged claim. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015).

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review is instituted for claims 1–18 of the '972 patent on the unpatentability grounds asserted in the Petition; and

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

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