

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 IPR2025-00491
Patent No. 10,684,972

**PATENT OWNER'S REQUEST TO THE DIRECTOR FOR
DISCRETIONARY DENIAL OF INSTITUTION¹**

¹ Pursuant to the Director's March 26, 2025 memorandum regarding Interim

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EXHIBIT NUMBER	DESCRIPTION
Ex. 2001	U.S. Publication 2015/0121466 (“Brands”)
Ex. 2002	U.S. Publication 2014/0362161 (“Leete”)
Ex. 2003	Memorandum re “Interim Processes for PTAB Workload Management” of March 26, 2025

I. INTRODUCTION

The Board should exercise its discretion to deny institution under 35 U.S.C. 325(d) because the same or cumulative prior art and substantially the same arguments advanced in the Petition to allege obviousness of claims 1-18 (“Challenged Claims”) were previously presented to the Patent Office during prosecution of the application that was granted as U.S. Patent 10,684,972 (“the ‘972 patent”).

Specifically, the primary reference Beel (U.S. Publication 2015/0169477) used in Ground I of the Petition and secondary reference Christison (U.S. Patent 7,761,627) used optionally in Grounds I and II were previously presented and considered during examination of the application granted as the ‘972 patent, and the combination of Beel, Dinka (U.S. Patent 8,369,498), AAPA, and optionally Christison in Ground I and the combination of Kaplan (U.S. Publication 2010/0295994), Van De Laar (U.S. Publication 2010/0295994), AAPA, and optionally Christison in Ground II of the Petition are used in the substantially the same way as Brands (U.S. Publication 2015/0121466) and Leete (U.S. Publication 2014/0362161), which were cited by the Examiner during prosecution of the application granted as the ‘972 patent.

Furthermore, the addition of Dinka, Van De Laar, and Christison to the obviousness combination does not address the deficiencies of Beel and Kaplan in either Ground I or Ground II.

Thus, under the *Advanced Bionics* framework, the Board should exercise its discretion and deny institution because Petitioners have not provided anything new from consideration from what was already known and considered during prosecution of the application granted as the ‘972 patent to show that the Office erred in determining the patentability of the Challenged Claims, and does not present a strong unpatentability challenge. See Ex. 2003 at 2-3.

II. THE ‘972 PATENT

The ‘972 patent relates to a system to enhance the quality, in general, of meetings, e.g., unified communications, with several participants having their own devices and using their own conferencing platforms, such as Teams or Zoom, e.g., “by providing high quality audio as well as visual signals to be made available to participants at a meeting.” See Ex. 1001 at 1:39-42. In a world where hybrid meetings, i.e. with some participants in the same room and others participating online, have become the standard, increasing the quality of such meetings is of crucial importance.

In order for the meeting participants using their own devices to be able to use the high-quality cameras, speakerphones, microphones, etc. available in a meeting room during the unified communications (“UC”) meeting hosted from their own device, a connection is needed between the camera, speakerphone, microphone, etc. of the meeting room and the processing device of the meeting participant. Additionally, when a meeting participant hosts a UC meeting on their own device, a connection needs to be made with the high-quality conferencing equipment in a flexible and convenient manner to burden the user as little as possible.

The peripheral device, as described in the ‘972 patent, provides this flexibility as it allows for any meeting participant in the meeting room to easily plug in the peripheral device to their own device, e.g., processing device, such as a laptop, computer, PDA, smartphone, etc. (“plug-and-play”). See *Id.* at 14:22-35. When doing so, a high-quality audio-video connection with the conferencing equipment, e.g., functional device, connected to or in the base unit is setup with minimal burden to the user. Moreover, the peripheral device can expose the functional device functionality in a way that abstracts from the specific features of a particular meeting setup by exposing endpoints of the functional device on the peripheral device to the user processing device.

Specifically, the ‘972 patent describes peripheral devices which “allow users, e.g., participants in a meeting room, to make use of at least one functional device, some functional devices or all functional equipment attached to the base unit whereby the at least one functional device has an electronic output such as a digital electronic output and can co-operate with other devices plugged into, coupled, connected or attached in some way to the base unit...” *Id.* at 9:10-17. For example, the ‘972 patent discusses that “When having a VOIP call such as a Skype™ call in a 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). This is especially beneficial when there are multiple people in the room that want to attend the conference call such as a VOIP or Skype™ call.” *Id.* at 11:64-12:5. That is, as an improvement to existing systems, the ‘972 patent states that:

“Embodiments of the present invention can include the features discussed with respect to FIGS. 1 to 4 to provide additional functionality which can be shared, for example, by all participants of a meeting who have a processing device 160 optionally with a plug-in first peripheral device 130. In embodiments of the present invention,

fixed USB endpoints on the first peripheral device 130 are provided for the basic functionality. These are fixed and are a combination of vendor specific endpoints and a number of standard endpoints and can be interpreted or understood as a custom Driver, a default OS driver and/or a host application as has been described with reference to FIG. 4 do screen sharing and audio. The configurable USB endpoints are configured either when pairing a first peripheral device 130 device with a base unit 100 or over the wireless connection 127 between the processing device 130 and the base unit 100. Once configured, the USB endpoints will expose second peripherals devices 91-93 which can be interpreted as custom drivers, vendor specific drivers or default OS drivers. These can be used by either a host application or third party applications.”

Id. at 16:44-67.

Thus, the ‘972 patent describes an invention that allows participants in a meeting (whatever their device and whatever their conferencing platform might be) to use the functionalities of the functional devices (e.g. audio and video equipment) that are present in the meeting room, e.g., connected to or in a base unit, on their own device in an easy and user friendly manner. These combinations of features

provide high-quality audio and video signals with low latency, while at the same time providing a consistent and simple user experience.

III. RELEVANT FACTUAL BACKGROUND

A. Prosecution History of the Application granted as the ‘972 patent

During prosecution, claims 1-20 of U.S. Application No. 15/858668, from which the ‘972 patent issued, were rejected in a Non-Final Office Action dated March 28, 2019 as being anticipated by Brands et al. (U.S. publication 2015/0121466) and Leete, III (U.S. publication 2014/0362161). See Ex. 1004 at 174-183.

Specifically, the Examiner indicated that paragraphs 121-123 and 125-128 of Brands taught “at least one fixed or a configurable endpoint of the functional device exposed on the first peripheral device.” *Id.* at 179. The Examiner further suggested that paragraph 32 and FIG. 3 of Leete taught “at least one fixed or a configurable endpoint of the functional device exposed on the first peripheral device.” *Id.* at 181.

In response, the claims were amended to include “where the at least one fixed or a configurable endpoint is a data source or a data sink which is able to store data” and that “of the functional device exposed or made available.” It was

then argued that “the skilled person would have understood that the exposed endpoints for functional devices allow these devices to be controlled by the peripheral device and to appear as if they were local to the processing device, e.g., the laptop. That is, such a hardware solution allows the base unit to expose and make available any functional device such as a second peripheral device that is connected to the base unit, to one or more first peripheral devices (e.g., receiver devices) such as to expose and make available simultaneously with a plurality of first peripheral devices (page 16, lines 3-7), e.g., the exposure of the endpoint is a specific hardware solution.” See *Id.* at 316.

Subsequently, a Final Office Action was issued on October 11, 2019 where claims 1-3, 7-12, 16-19, and 21 were rejected as being anticipated by Christison et al. (U.S. Patent 7,761,627), while claims 4, 5, 6, 13, 14, and 15 were found to have allowable subject matter. See *Id.* at 329-337. In response, independent Claims 1 and 10 were amended to include the allowable subject matter of claims 5 and 14 to recite “wherein the processing device is adapted to host a unified communication between two or more processing devices” and “further comprising hosting a unified communication between two or more processing devices on the processing device.” See *Id.* at 354-367.

Based on such amendments to the claims, a Notice of Allowance was issued

on January 29, 2020, and the application subsequently issued as U.S. patent 10,684,972 on June 16, 2020. See *Id.* at 368-372, 401.

B. Overview of Brands

The Examiner relies on paragraphs 121-123 and 125-128 of Brands as teaching the “at least one fixed or a configurable endpoint of the functional device exposed on the first peripheral device. Ex. 1004 at 179. Brands at least discloses that “Optional equipment can be cameras 39, 40, 41 for recording the progress of the meeting. These cameras can be linked by a network 51, e.g. a cable network to the router 42 and/or the base node 36. Another optional item is a microphone or microphones 38 that can be used to transfer audio, e.g. to the processing devices 31 and to loud speakers (not shown) attached to the base node 36 or part of the display 44.” Ex. 2001 at [0121]. Brands further discloses that “Summarising the above, the present invention provides an electronic meeting tool for communicating arbitrary media content between different users 37 (with their own processing devices 31, e.g. PC, mobile phone, or tablet) and one display or projector or multiple displays or projectors 44 in the meeting room 30.” *Id.* at [0123]. Additionally, Brands describes that “The user processing devices 31, the connection units 47, (optionally 49 or 52) and the base node 36 co-operate to form a communication network 50 for linking between at least one of the plurality

of processing devices 31, 36 and the central display device 44. The communication network 50 is adapted to receive arbitrary media content from at least one of the plurality of processing devices 31 and to transmit the arbitrary media content of at least one of the plurality of processing devices to the central display device 44.” *Id.* at [0128]. That is, Brands generally describes providing arbitrary media content to one display or projector in the meeting room, e.g., via a base node.

C. Overview of Leete

The Examiner relies on paragraph [0032] of Leete as teaching the “at least one fixed or a configurable endpoint of the functional device exposed on the first peripheral device. Ex. 1004 at 181. Leete teaches that:

“In practice, when a collaborative team enters the meeting room, each individual obtains a remote connection device 22 and connects it to their user devices 18 by either a wireless connection (e.g. WiFi, NFC, Bluetooth, IR, 60 GHz WiGig, etc.) or by a tethered wired connection (i.e. a high speed serial connection like USB) depending upon the capabilities of the particular user device 18. The designated source remote connection device 22, when connected to a user device 18 generates a menu 34 on the user device 18 allowing for the direct

control of the peripheral devices connected to the hub 16 through the 60 GHz wireless network. The designated source remote connection 22 transmits multimedia content stored directly on and from the user device 18 to the hub 16 and then to one or more selected multimedia devices 20 by selecting indicia 36 corresponding to the multimedia devices 20. For example, selection of indicia on the menu 34 of the user device 18 corresponding to a television screen 20A or whiteboard directs the multimedia content to the corresponding multimedia devices 20. The switching logic processor in the hub 16 then selectively multiplexes the multimedia content to direct, for example, the graphical or video data to television screen 20A, an electronic whiteboard or monitor and the audio data to speakers 20. In this way, multimedia content may be shared with any combination of multimedia devices 20 and user devices 18 in the meeting room. Additionally, when the multimedia content includes telephony, video and audio data relating to a conference call may be directed to appropriate multimedia devices 20 including a monitor and speakers 20D.”

Ex. 2002 at [0032]. That is, Leete is directed to a remote connection device that allows for the direct control of the peripheral devices connected to the hub.

D. Overview of Beel

Initially, Petitioners erroneously allege that “Beel was not considered on the record during prosecution of the ‘972 patent, except for admissions that related publication ‘shows an arrangement of components that can be used in embodiments of the present invention.’” See Petition at 20. Rather, as acknowledged by Petitioners on page 69 of the Petition, “Beel was cited during prosecution,” in which Beel is the national stage entry of PCT/EP2012/068167, which was published as WO2013/037980, which was cited and considered by the Examiner. See Ex. 1004 at 186 (showing “ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH”). Moreover, Beel was extensively discussed in the ‘972 patent. For example, as pointed out by Petitioners, the ‘972 patent indicates that “FIG. 4 shows an arrangement of components that can be used in embodiments of the present invention. This figure is FIG. 11 of WO 2013/037980 entitled “Electronic tools and methods with audio for meetings” which is incorporated herein by reference with respect to FIG. 11 thereof and also in its entirety.” Ex. 1001 at 4:28-33. Thus, not only was Beel explicitly acknowledged and considered by the Examiner, but Beel was also considered as an arrangement of components that can be used with the invention disclosed in the

‘972 patent.

Beel at least describes “a method and a system for connecting a processing device, e.g. a digital processing device such as a laptop, smartphone, PDA, computer, tablet and suchlike to a communications network, the processing device having a memory, a display and an operating system with pre-installed generic drivers providing a generic communications protocol for communication between processing device and a standard class of peripheral devices.” Ex. 1005 at [0041]. For example, Beel discusses 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).” *Id.* at [0043].

Beel further discusses that “On the peripheral device in embodiment of the present invention one can implement a virtual audio device. This peripheral device can present itself as an audio out device to the processing device such as a laptop, PDA, laptop, smartphone, tablet, PC, etc it is connected to. As soon as the peripheral device is plugged in, the user of the processing device will see an additional audio out interface displayed on the processing device display to which

it can stream the audio.” *Id.* at [0313]. Beel also states that “With reference to the audio data on the processing device 31 such as a client PC, the audio is sent over a port using generic drivers such as over a USB port 8 using the standard built-in generic audio driver such as UAC driver 7. On the peripheral device 32, the audio packets are read from the generic port, e.g. USB port 11 by a dedicated audio device 14. These packets are then processed by any of a mixer a rate converter, an echo canceller, noise canceller or similar. Any of the mixing, rate conversion, echo cancelling, noise cancelling can be executed using an ALSA driver 18.” *Id.* at [0323]. That is, Beel is generally directed to providing a solution for presenting audio and video data from a processing device to a room display, e.g., via a base unit.

E. Overview of Dinka

Dinka is directed to “a media appliance comprising: video apparatus for outputting signals to a screen; a network interface for accessing a packet-based network; a memory storing a communication client application; and processing apparatus coupled to the memory, network interface and video apparatus, and arranged to execute the communication client application; wherein the client application is configured so as when executed to allow a local user of the media appliance to participate in bidirectional communication sessions with other remote

users via the network interface and packet-based network; and the client application is further configured so as when executed: to receive an invitation signal from a remote user terminal over the packet-based network, the received invitation signal comprising a trigger condition specifying a future event for triggering participation of the media appliance in a proposed one of said communication sessions with said remote user terminal; to monitor the received trigger condition at said media appliance; and to join the proposed session in dependence on an occurrence of said event.” Ex. 1006 at 2:44-63. As such, Dinka describes “a mechanism for planning calls or other such communication sessions around the times of viewing activities such as television programmes, DVD or video games.” *Id.* at 2:64-67. That is, Dinka relates to a television apparatus having an embedded processing apparatus for conducting voice or video calls via a packet-based network that does not interfere with the user’s viewing activity.

F. Overview of Kaplan

Kaplan describes that the communications system 100 includes a receiver 110 and a transmitter 120, in which the transmitter 120 is a dongle including a connector 122 compliant with the Universal Serial Bus (USB) standard and operable to be inserted into a USB port of a computer, and that the transmitter 120 includes a wireless transceiver 450 that is operable to transmit data from the

computer to the receiver 110, for example, the data may include video and audio data for display on the display device. See Ex. 1008 at [0016]-[0017]. Kaplan further states that “In some embodiments, when the transmitter 120 is connected to computer 220 for the first time, the transmitter may identify itself to the computer 220 as a mass storage device, such as a removable disk drive. In one embodiment, for instance, after the transmitter 120 is coupled to the computer 220, the transmitter 120 may identify itself as a removable disk drive to an operating system executing on the computer 220. The operating system can then treat the internal non-volatile memory 420 of the transmitter 120 like any other removable disk.” *Id.* at [0046]. As stated at [0022] of Kaplan, however, “the transmitter 120 may includes software that is configured to access video footage stored on a computer or on a web server accessible through the internet.” *Id.* at [0022]. That is, Kaplan only generally describes a dongle having a connector compliant with the USB standard in which files are stored on the dongle, e.g., as media files in static storage.

G. Overview of Van De Laar

Van De Laar is directed to providing “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 at [0009]. Van De Laar describes that “The docking process is arranged for docking as a primary dockee device or a secondary dockee device, as described above. In particular, when docked as the primary dockee device, the dockee processor executes control over the at least one peripheral for determining the AV data to be rendered. When docked as the secondary dockee device, the dockee processor receives the AV data to be rendered via the at least one peripheral. So the AV data which is rendered via the peripheral coupled to the host is also transferred to the secondary dockee so as to enable rendering on the dockee device, and so monitoring the AV data that is rendered via the host peripheral.” *Id.* at [0078]. Van De Laar also discusses that “The benefit of doing this is that it allows primary dockees to be able to present content using the peripherals connected to a WDH, such as a large screen and a USB presentation remote control, and that other people in the meeting/lecture room can connect to the presenter and to each other for all kinds of collobaration and interaction purposes.” *Id.* at [0094]. That is, Van De Laar is directed to a docking/hub system with peripherals for rendering AV content, in which the primary dockee has control over a peripheral and secondary dockee gets a different restricted access to the peripheral.

IV. CLAIM CONSTRUCTION

In an *inter partes* review proceeding, a claim of a patent shall be construed using the same claim construction standard that would be used to construe the claim in a civil action. *See* 37 C.F.R. § 42.100(b); *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005). Under *Phillips*, claims must be construed so as to sustain their validity, if possible. The specification is the “best source for understanding a technical term,” to be supplemented, “as needed, by the prosecution history.” *Id.* at 1315.

Patent Owner reserves the right to assert alternative claim constructions to those proposed by Petitioners, and to provide constructions for those terms that Petitioners have not construed, should any trial be instituted.

V. THE BOARD SHOULD EXERCISE ITS DISCRETION TO DENY INSTITUTION

The Board has discretion to deny review when “the same or substantially the same prior art or arguments previously were presented to the Office.” 35 U.S.C. § 325(d). Specifically, § 325(d) provides that the Director may elect not to institute trial if the challenge to the patent is based on matters previously presented to the Office. *Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*,

IPR2019-01469, Paper 6, 7-9 (PTAB 2020) (precedential) (“*Advanced Bionics*”).

When evaluating matters under § 325(d), the Board uses the following two-part framework outlined in *Advanced Bionics*: (1) determining whether the same or substantially the same art previously was presented to the Office, or whether the same or substantially the same arguments previously were presented to the Office; and (2) if either condition of the first part of the framework is satisfied, determining whether the petitioner has demonstrated that the Office erred in a manner material to the patentability of the challenged claims.

In applying this two-part framework, the Board considers the following non-exclusive factors:

(a) the similarities and material differences between the asserted art and the prior art involved during examination;

(b) the cumulative nature of the asserted art and the prior art evaluated during examination;

(c) the extent to which the asserted art was evaluated during examination, including whether the prior art was the basis for rejection;

(d) the extent of the overlap between the arguments made during examination and the manner in which Petitioner relies on the prior art or Patent Owner distinguishes the prior art;

(e) whether Petitioner has pointed out sufficiently how the Examiner erred in its evaluation of the asserted prior art; and

(f) the extent to which additional evidence and facts presented in the Petition warrant reconsideration of the prior art or arguments.

See Becton, Dickinson & Co. v. B. Braun Melsungen AG, IPR2017-01586, Paper 8, 17-18 (PTAB 2017) (precedential as to Section III.C.5, first paragraph). If, after review of factors (a), (b), and (d), the Board determines that the same or substantially the same art or arguments were previously presented to the Office, then factors (c), (e), and (f), which relate to whether the petitioner demonstrates that the Office erred in a manner material to the patentability of the challenged claims, is considered in determining whether trial should be instituted. *See Advanced Bionics* at 10.

Here, the Board should exercise its discretion under §325(d) to deny institution of inter partes review of the '972 patent because the same subject matter of the prior art was already considered during prosecution by the Patent Office and the Petitioners fail to add anything new from what was already known and considered by the Examiner to show that the Office erred in determining the patentability of the Challenged Claims, and Petitioners do not show a strong unpatentability challenge.

A. Discretionary Denial is Appropriate because Beel was Previously Presented and Considered during Prosecution

Beel was previously presented to the Examiner during prosecution of the application granted as the '972 patent. Petitioners erroneously allege that Beel was not evaluated during examination and then erroneously assert that “the only discussion of Beel on the record were in admission that it ‘shows an arrangement of components that can be used in embodiments of the present invention.’”

Petition at 70. As discussed above, however, the '972 patent clearly discusses that “Embodiments of the present invention can include the features discussed with respect to FIGS. 1 to 4 to provide additional functionality...In embodiments of the present invention, fixed USB endpoints on the first peripheral device 130 are provided for the basic functionality...The configurable USB endpoints are configured either when pairing a first peripheral device 130 device with a base unit 100 or over the wireless connection 127 between the processing device 130 and the base unit 100. Once configured, the USB endpoints will expose second peripherals devices 91-93 which can be interpreted as custom drivers, vendor specific drivers or default OS drivers.” Ex. 1001 at 16:44-67. That is, while Petitioners allege that “the Examiner materially erred during examination of the '972 patent...by not fully considering Beel” and that “Beel also includes

substantial additional disclosure explaining how to use “a virtual audio device,” which the ‘972 patent admits is a type of endpoint. Ex-1005, ¶313-17; Ex-1001, 7:64-8:3. Therefore, Patent Owner’s admissions about Beel’s additional disclosure demonstrates that the examiner materially erred in not rejecting the issued claims as obvious over Beel” (Petition at 72), not only is there no actual admission in the ‘972 patent that Beel teaches the features recited in the claims, Petitioners have not established error in the Examiner’s consideration of Beel.

Rather, the disclosures of Beel are discussed in detail throughout the specification of the ‘972 patent. For example, the ‘972 patent indicates that FIG. 4 of the ‘972 patent is “FIG. 11 of WO 2013/037980 entitled “Electronic tools and methods with audio for meetings” which is incorporated herein by reference,” the ‘972 patent further states that:

“Embodiments of the present invention can include the features discussed with respect to FIGS. 1 to 4 to provide additional functionality which can be shared, for example, by all participants of a meeting who have a processing device 160 optionally with a plug-in first peripheral device 130. In embodiments of the present invention, fixed USB endpoints on the first peripheral device 130 are provided for the basic functionality. These are fixed and are a combination of

vendor specific endpoints and a number of standard endpoints and can be interpreted or understood as a custom Driver, a default OS driver and/or a host application as has been described with reference to FIG. 4 do screen sharing and audio. The configurable USB endpoints are configured either when pairing a first peripheral device 130 device with a base unit 100 or over the wireless connection 127 between the processing device 130 and the base unit 100. Once configured, the USB endpoints will expose second peripherals devices 91-93 which can be interpreted as custom drivers, vendor specific drivers or default OS drivers. These can be used by either a host application or third party applications.”

Ex. 1001 at 4:28-33, 16:44-67 (emphasis added). That is, the ‘972 patent does not merely refer to Beel in passing, but rather incorporates Beel by references and discusses that the improvements of the invention discussed in the ‘972 patent can be used to provide additional functionality with respect to some of the teachings of Beel. Furthermore, MPEP § 2103 specifies that during examination, “[e]xaminers will review the complete specification, including the detailed description of the invention,” and therefore Beel was presented to the Examiner during prosecution due to the extensive discussion of Beel in the ‘972 patent specification, which the

Examiner was required to review. Moreover, the Examiner acknowledged that he considered Beel, which was cited in an Information Disclosure Statement. See Ex. 1004 at 186 (showing “ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH”).

Thus, it is clear from the record that Beel was “previously...presented to the Office” and considered by the Examiner. See *Monolithic Power Systems, Inc. v. Volterra Semiconductor LLC*, 2021 Pat. App. LEXIS 3228, IPR2020-01348, Paper 19, 12-13 (PTAB 2021) (“The incorporation by reference of Schultz into the '408 Patent (*see* Section II.C) is clear and unambiguous. As Patent Owner notes, Schultz is discussed at multiple points in the '408 Patent specification (PO Sur-reply 7), and it is difficult to suggest that the Examiner merely “overlooked it.”... Additionally, the nature of incorporation by reference connotes that all of Schultz would have been considered to be part of the '408 Patent specification and would have been considered by the Examiner.”).

Beel serves as the primary reference with respect to Ground I, in which the teachings of Dinka, AAPA, and optionally Christison are used by Petitioners to further allege unpatentability of the claims. For example, Petitioners rely on Dinka as allegedly teaching “bidirectional online conferencing,” while Christison is optionally relied on as allegedly teaching configuring descriptor fields. See

Petition at 34, 36-37. While Dinka, which is assigned to Skype (see Ex. 1006 at 1), was not specifically considered during prosecution, as admitted by Petitioners (see Petition at 25 (“known web-conferencing tools, such as Skype”)), it is clear that the bidirectional online conferencing was considered during examination, since “The unified communication can be a SkypeTM call or a SkypeTM for Business call” was extensively discussed in the specification of the ‘972 patent. Ex. 1001 at 2:30-31 (e.g., Skype is mentioned 20 times in the specification of the ‘972 patent). Nevertheless, the Examiner still allowed the specific combination of features of the claims in the Notice of Allowance issued on January 29, 2020. See Ex. 1004 at 368-372. Moreover, Christison was evaluated during examination and used for a basis for rejection, but was also successfully overcome by amendments made by the Patent Owner as to the combination of features recited in the claims. See *Id.* at 333-335, 368-372.

Thus, since the Examiner considered the teachings of Beel, bidirectional online conferencing, and the teachings of Christison during prosecution of the application granted as the ‘972 patent, Petitioners fail to add anything new from what was already known and considered by the Examiner and fail to fulfill its burden to show that the Examiner erred in determining the patentability of the Challenged Claims. That is, as discussed above, Petitioners have failed to

demonstrate that the Examiner materially erred by not considering Beel, Dinka, and optionally Christison, in view of the prior art already considered with respect to the patentability of the Challenged Claims. Therefore, Becton Dickinson factors (a), (b), (c), (e), and (f) strongly favor discretionary denial.

B. Discretionary Denial is Appropriate because Kaplan and Van De Laar are cumulative of the Prior Art Previously Presented and Considered during Prosecution

The resulting combination of Kaplan, Van De Laar, AAPA, and optionally Christison is relied upon by Petitioners in the same manner as Brands and Leete, which were previously presented and considered by the Examiner, and therefore discretionary denial of the Kaplan-Van De Laar based grounds is appropriate as the combination of Kaplan, Van De Laar, AAPA, and optionally Christison represents “substantially the same prior art...previously were presented to the Office.” The precedential *Advanced Bionics* case establishes that even when a specific reference was not considered during prosecution, when such a reference “disclos[es] substantially the same information already considered by the Office,” it represents “substantially the same art” as that already considered, making discretionary denial under § 325(d) appropriate. Here, the resulting combination of Kaplan, Van De Laar, AAPA, and optionally Christison proposed by Petitioners

closely resembles the relied upon portions of Brands and Leete.

First, during the prosecution of the application granted as the ‘972 patent, the Examiner considered both Brands and Leete as teaching the “at least one fixed or a configurable endpoint of the functional device exposed on the first peripheral device,” as recited in independent Claims 1 and 10. Specifically, the Examiner suggested that paragraphs [121]-[123] and [125]-[128] of Brands and paragraph [32] of Leete taught the “at least one fixed or a configurable endpoint of the functional device exposed on the first peripheral device.” Ex. 1004 at 179, 181. As discussed above, independent Claims 1 and 10 were subsequently found allowable when amended to recite, respectively, “wherein the processing device is adapted to host a unified communication between two or more processing devices” and “further comprising hosting a unified communication between two or more processing devices on the processing device.” See *Id.* at 354-367.

Turning first to Brands, Brands at least describes at [0121] that “Optional equipment can be cameras 39, 40, 41 for recording the progress of the meeting. These cameras can be linked by a network 51, e.g. a cable network to the router 42 and/or the base node 36. Another optional item is a microphone or microphones 38 that can be used to transfer audio, e.g. to the processing devices 31 and to loud

speakers (not shown) attached to the base node 36 or part of the display 44.” Ex. 2001 at [0121]. Brands further suggests that “communication network 50 is adapted to receive arbitrary media content from at least one of the plurality of processing devices 31 and to transmit the arbitrary media content of at least one of the plurality of processing devices to the central display device 44.” *Id.* at [0127]. That is, the portions of Brands relied on by the Examiner during prosecution are generally directed to providing a solution for presenting audio and video data from a processing device to a room display, e.g., via a base node.

Similarly, Leete at [0032] describes “designated source remote connection device 22, when connected to a user device 18 generates a menu 34 on the user device 18 allowing for the direct control of the peripheral devices connected to the hub 16 through the 60 GHz wireless network. The designated source remote connection 22 transmits multimedia content stored directly on and from the user device 18 to the hub 16 and then to one or more selected multimedia devices 20 by selecting indicia 36 corresponding to the multimedia devices 20...In this way, multimedia content may be shared with any combination of multimedia devices 20 and user devices 18 in the meeting room.” Ex. 2002 at 10-11. That is, Leete is directed to a structure for transmitting multimedia content from the user device to

multimedia devices and user devices in a meeting room via a hub.

Likewise, the resulting combination of Kaplan, Van De Laar, AAPA, and optionally Christison is relied upon by Petitioners in the same manner as Brands and Leete. Specifically, Petitioners allege paragraphs [0005], [0006], [0008], [0016]-[0017], [0021]-[0022], [0028]-[0034], [0057], [0059], [0061] of Kaplan teaches “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.” Petition at 52-53. Kaplan, however, describes that the communications system 100 includes a receiver 110 and a transmitter 120, in which the transmitter 120 is a dongle including a connector 122 compliant with the Universal Serial Bus (USB) standard and operable to be inserted into a USB port of a computer, and that the transmitter 120 includes a wireless transceiver 450 that is operable to transmit data from the computer to the receiver 110, for example, the data may include video and audio data for display on the display device. See Ex. 1008 at [0016]-[0017]. As such, while Kaplan states that “In some embodiments, when the transmitter 120 is connected to computer 220 for the first time, the transmitter may identify itself to the computer 220 as a mass storage device, such

as a removable disk drive,” Kaplan further describes that “the transmitter 120 may identify itself as a removable disk drive to an operating system executing on the computer 220. The operating system can then treat the internal non-volatile memory 420 of the transmitter 120 like any other removable disk.” *Id.* at [0046]. In other words, Kaplan only generally describes a dongle having a connector compliant with the USB standard in which files are stored on the dongle, e.g., as media files in static storage.

As such, in view of the above, Petitioners use Kaplan in Ground II of the Petition in the same way as the Examiner’s consideration of Brands and Leete during prosecution of the application granted as the ‘972 patent with respect to “at least one fixed or a configurable endpoint of the functional device exposed on the first peripheral device,” as recited in the claims. That is, all of Brands, Leete, and Kaplan are directed to the same or similar technological use, in which a device is inserted into a processing device such that the system can present video and audio data, e.g., to a display device connected to a room. For example, Brands discusses using connection units [or peripheral devices] for forming a communications network between the processing device and the base node, e.g., connected to a display device, for example, in an embodiment, as shown in FIG. 1b (below):

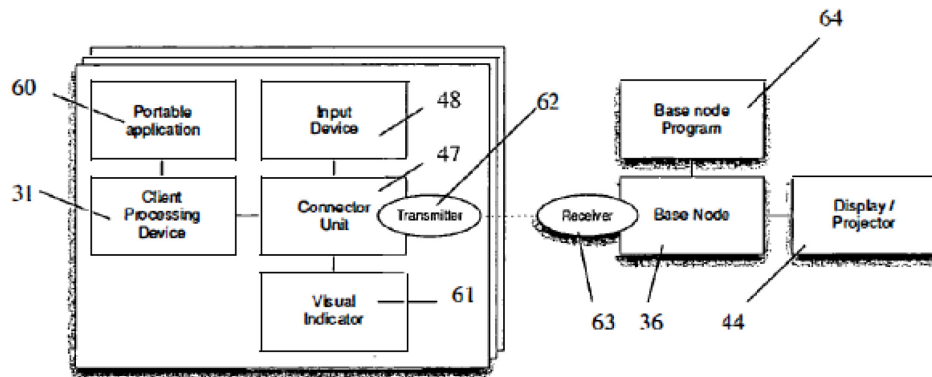


Fig. 1b

Leete discusses using a remote connection device connected to a user device, in which the remote connection device transmits multimedia content stored directly on and from the user device to the hub and then to one or more selected multimedia devices, for example, as shown in FIG. 1 (reproduced below):

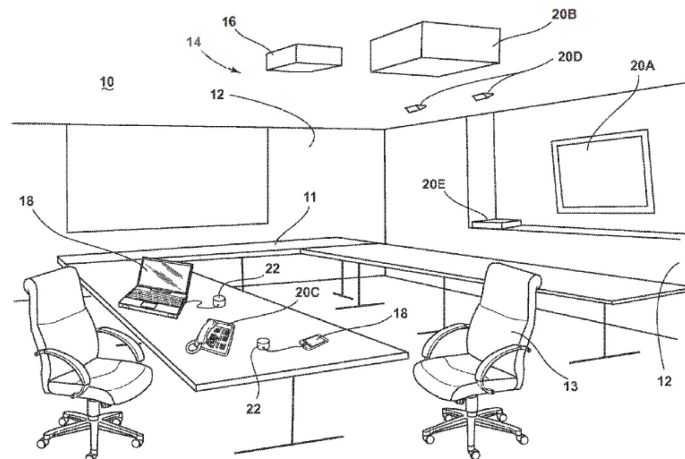


FIG. 1

Similarly, Kaplan is directed to a transmitter inserted into a USB port of a computer, in which the transmitter is operable to transmit data from the computer to the receiver, for example, the data may include video and audio data for display on the display device, as illustrated in FIG. 2 (reproduced below):

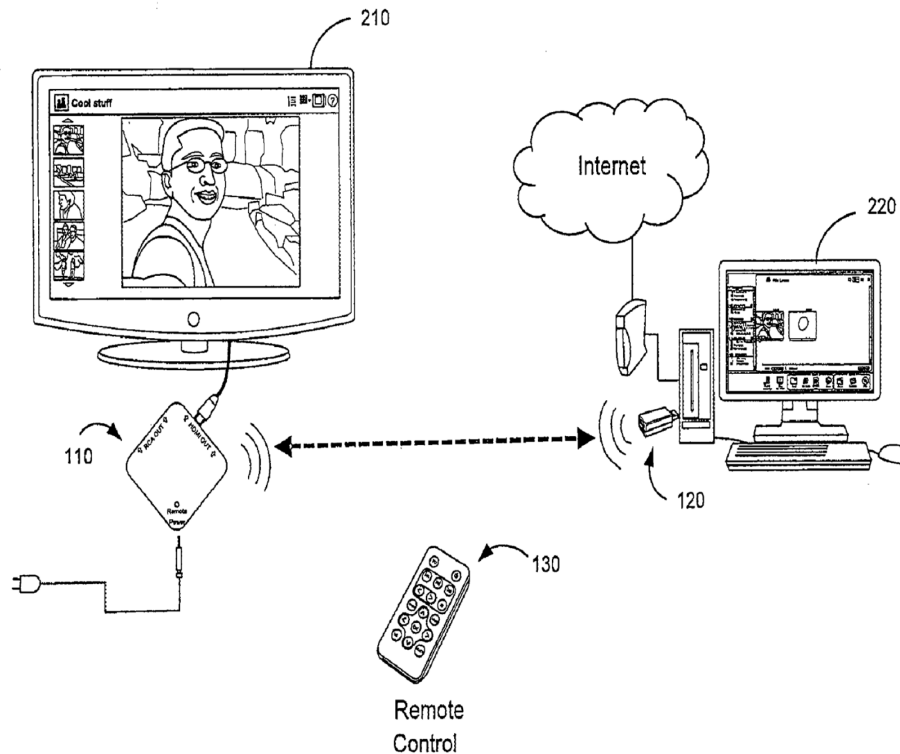


FIG. 2

Thus, while there are some differences in Kaplan from the teachings of Brands and Leete, e.g., Kaplan teaches using a remote control (see Ex. 1008 at [0019]), at least in view of the similarities of the devices and functions discussed in

Kaplan, as relied on by the Petitioners, with the devices and functions as discussed in Brands and Leete, e.g., devices plugged into a processing device for sending audio and video data, e.g., to a room display, Petitioners are not relying on anything new in view of the art already considered during examination of the application granted as the '972 patent, and Petitioners have not shown that the Examiner erred by not considering the teachings of Kaplan.

While Kaplan serves as the primary reference with respect to Ground II, Petitioners further allege unpatentability of the claims based on the teachings of Van De Laar, AAPA, and optionally Christison. For example, Petitioners rely on Van De Laar as allegedly teaching “an endpoint acting as a ‘data source or data sink which is able to store or emit data of the functional device,” while Christison is optionally relied on as allegedly teaching configuring descriptor fields. See Petition at 53-56. Similar to the deficiencies of Kaplan, however, Van De Laar simply discloses substantially the same information already considered by the Office. For example, Van De Laar is directed to a docking/hub system with peripherals for rendering AV content, in which the primary dockee has control over a peripheral and secondary dockee gets a different restricted access to the peripheral. That is similar to the art already considered during examination, Van

De Laar is merely cumulative of the previously considered art in that Van De Laar is directed to a docking/hub system which has devices attached thereto, which is similar to the art already considered, such as Brands which discusses communicating arbitrary media content between different users 37 (with their own processing devices 31, e.g. PC, mobile phone, or tablet) and one display or projector or multiple displays or projectors 44 in the meeting room 30” (Ex. 2001 at [0123]) and Leete which is directed to “a collaborative team enters the meeting room, each individual obtains a remote connection device 22 and connects it to their user devices 18 by either a wireless connection (e.g. WiFi, NFC, Bluetooth, IR, 60 GHz WiGig, etc.) or by a tethered wired connection (i.e. a high speed serial connection like USB) depending upon the capabilities of the particular user device 18” (Ex. 2002 at [0032]). Moreover, Christison was evaluated during examination and used for a basis for rejection, and thoroughly considered by the Examiner. See Ex. 1004 at 333-335.

Thus, Petitioners are not relying on anything new in view of the art already considered during examination of the application granted as the ‘972 patent, and have not shown that the Examiner erred by not considering the teachings of Kaplan, Van De Laar, and optionally Christison.

Moreover, Petitioners are not presenting a strong unpatentability challenge, since the combination of Kaplan, Van De Laar, AAPA, and optionally Christison fails to disclose each and every feature recited in the Challenged Claims. For example, Petitioners are not able to identify anywhere in the teachings of Kaplan of the specific term “endpoint” and specifically, at least one fixed or a configurable endpoint...of the functional device exposed or made available on the first peripheral device, required by Claim 1 (and similarly recited in Claims 9 and 15), but rather summarily conclude that “Kaplan’s endpoints allow the ‘functional device’ to be ‘exposed or made available on the first peripheral device,’ i.e., display data transmitted to or from the endpoint of the peripheral device.” See Petition at 53. Instead, Petitioners rely the Ameroth Declaration to show that Kaplan somehow discloses an endpoint. See Petition at 52. As discussed above, Petitioners then rely on Van De Laar as allegedly teaching “an endpoint acting as a ‘data source or data sink which is able to store or emit data of the functional device,” while Christison is optionally relied on as allegedly teaching configuring descriptor fields. See Petition at 53-56. That is, Petitioners have not shown that any of Kaplan, Van De Laar, AAPA, and optionally Christison, taken alone or in combination discloses or suggests a fixed or a configurable endpoint of the functional device exposed or made available on the first peripheral device, as

required by Claim 1 (and similarly recited in Claims 9 and 15), and thus, do not present a strong unpatentability challenge to the claims of the '972 patent.

Thus, since Kaplan, Van De Laar, and optimally Christison, are merely cumulative of the art already considered by the Examiner during examination, and the Petitioners are not presenting a strong unpatentability challenge, Petitioners have not established how the Examiner erred in not considering the teachings of Kaplan, Van De Laar, and optionally Christison, in view of the cumulative nature of the art already considered. Thus, Petitioners fail to add anything new from what was already known and considered by the Examiner in Ground II of the petition based on Kaplan, Van De Laar, AAPA, and optionally Christison, and fail to fulfill its burden to show that the Examiner erred in determining the patentability of the Challenged Claims. Therefore, Becton Dickinson factors (a), (b), (e), and (f) favor discretionary denial.

C. Discretionary Denial is Appropriate because Beel and Dinka are cumulative of the Prior Art Previously Presented and Considered during Prosecution

Moreover, assuming arguendo that Beel was not properly evaluated by the Examiner as asserted in the Petition, Patent Owner submits that Petitioners reliance of Beel is cumulative of the teachings of Brands and Leete as relied on by

the Examiner during prosecution.

Specifically, Petitioners allege paragraphs [0043], [0050], [0313]-[0317] of Beel teaches a fixed or a configurable endpoint of the functional device exposed or made available on the first peripheral device. Beel at least describes 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).” Ex. 1005 at [0043]. Beel further discusses that “On the peripheral device in embodiment of the present invention one can implement a virtual audio device. This peripheral device can present itself as an audio out device to the processing device such as a laptop, PDA, laptop, smartphone, tablet, PC, etc it is connected to. As soon as the peripheral device is plugged in, the user of the processing device will see an additional audio out interface displayed on the processing device display to which it can stream the audio.” *Id.* at [0313]. That is, Beel is generally directed to providing a solution for presenting audio and video data from a processing device to a room display, e.g., via a base unit.

As such, in view of the above, Petitioners use Beel in Ground I of the

Petition in the same way as the Examiner's consideration of Brands and Leete during prosecution of the application granted as the '972 patent with respect to "at least one fixed or a configurable endpoint of the functional device exposed on the first peripheral device," as recited in the claims. That is, all of Brands, Leete, and Beel are directed to the same or similar technological use, in which a device is used for presenting video and audio data to a display device connected to a room. For example, Brands discusses using connection units [or peripheral devices] for forming a communications network between the processing device and the base node, e.g., connected to a display device, while Leete discusses using a remote connection device connected to a user device, in which the remote connection device transmits multimedia content stored directly on and from the user device to the hub and then to one or more selected multimedia devices, whereas, Beel at least describes "a method and a system for connecting a processing device, e.g. a digital processing device such as a laptop, smartphone, PDA, computer, tablet and suchlike to a communications network, the processing device having a memory, a display and an operating system with pre-installed generic drivers providing a generic communications protocol for communication between processing device and a standard class of peripheral devices." Ex. 1005 at [0041].

While Petitioners allege in the Petition that “Beel also includes substantial additional disclosure explaining how to use ‘a virtual audio device’” (Petition at 72), Patent Owner submits that Brands also discloses “[a]n audio device that acts as a virtual sound card to a client PC over USB” (see Ex. 2001 at [0041]). As such, while there are differences in Beel from the teachings of Brands and Leete, at least in view of the similarities of the devices and functions discussed in Beel, as relied on by the Petitioners, with the devices and functions as discussed in Brands and Leete, e.g., devices plugged into a processing device for sending audio and video data, e.g., to a room display, Petitioners are not relying on anything new in view of the art already considered during examination of the application granted as the ‘972 patent, and Petitioners have not shown that the Examiner erred by not considering the teachings of Beel.

Beel serves as the primary reference with respect to Ground I, in which the teachings of Dinka, AAPA, and optionally Christison are used by Petitioners to further allege unpatentability of the claims. For example, Petitioners rely on Dinka as allegedly teaching “bidirectional online conferencing,” while Christison is optionally relied on as allegedly teaching configuring descriptor fields. See Petition at 34, 36-37. While Dinka, which is assigned to Skype (see Ex. 1006 at 1), was not specifically considered during prosecution, as admitted by Petitioners

(see Petition at 25 (“known web-conferencing tools, such as Skype”)), it is clear that the bidirectional online conferencing was considered during examination, since “The unified communication can be a SkypeTM call or a SkypeTM for Business call” was extensively discussed in the specification of the ‘972 patent. Ex. 1001 at 2:30-31 (e.g., Skype is mentioned 20 times in the specification of the ‘972 patent). Nevertheless, the Examiner still allowed the specific combination of features of the claims in the Notice of Allowance issued on January 29, 2020. See Ex. 1004 at 368-372. Moreover, Christison was evaluated during examination and used for a basis for rejection, but was also successfully overcome by amendments made by the Patent Owner as to the combination of features recited in the claims. See *Id.* at 333-335, 368-372.

Furthermore, Petitioners are not presenting a strong unpatentability challenge, since the combination of Beel, Dinka, AAPA, and optionally Christison fails to disclose each and every feature recited in the Challenged Claims. For example, Petitioners are not able to identify anywhere in the teachings of Beel of at least one fixed or a configurable endpoint...of the functional device exposed or made available on the first peripheral device, required by Claim 1 (and similarly recited in Claims 9 and 15), but rather summarily conclude that since Beel teaches a virtual sound card, Beel somehow

must “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.” See Petition at 31-35. Instead, Petitioners erroneously rely on an alleged admission in the ‘972 patent and on the Ameroth Declaration to show that Beel somehow discloses the recited features. See *Id.* As discussed above, Petitioners then rely on Dinka as allegedly teaching “bidirectional online conferencing,” while Christison is optionally relied on as allegedly teaching configuring descriptor fields. See Petition at 34, 36-37. That is, Petitioners have not shown that any of Beel, Dinka, AAPA, and optionally Christison, taken alone or in combination discloses or suggests a fixed or a configurable endpoint of the functional device exposed or made available on the first peripheral device, as required by Claim 1 (and similarly recited in Claims 9 and 15), and thus, do not present a strong unpatentability challenge to the claims of the ‘972 patent.

Thus, since the Examiner considered the teachings of bidirectional online conferencing and the teachings of Christison during prosecution of the application granted as the ‘972 patent, while Beel is cumulative of the art already considered during examination, Petitioners fail to add anything new from what was already known and considered by the Examiner and fails to fulfill its burden to show that the Examiner erred in determining the patentability of the Challenged Claims.

That is, as discussed above, Petitioners have failed to demonstrate that the Examiner erred by not considering Beel, Dinka, and optionally Christison, in view of the prior art already considered with respect to the patentability of the Challenged Claims, and are not presenting a strong unpatentability challenge. Therefore, Becton Dickinson factors (a), (b), (e), and (f) strongly favor discretionary denial.

D. The Cumulative Factors Discussed Herein Favor Discretionary Denial

As discussed above, discretionary denial under 35 U.S.C. § 325(d) is warranted because the combination of Beel, Dinka, AAPA, and optionally Christison, in Ground I and Kaplan, Van De Laar, AAPA, and optionally Christison, in Ground II represent “the same or substantially the same prior art or arguments previously...presented to the Office.”

Therefore, since most of the *Becton Dickinson* factors weigh in favor of denying institution, the Board should exercise its discretion under the *Advanced Bionics* framework and deny institution as to all the Challenged Claims.

VI. CONCLUSION

For the reasons discussed above, the Director should exercise his discretion under 35 U.S.C. § 325(d) and deny institution of *inter partes* review.

Respectfully submitted,

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CERTIFICATION UNDER 37 CFR §42.24(d)

Under the provisions of 37 CFR §42.24(d), the undersigned hereby certifies that the word count for the foregoing Patent Owner's Request for Discretionary Denial of Institution totals 8,724, which is less than the 14,000 allowed under 37 CFR §42.24(b)(1).

Respectfully submitted,

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CERTIFICATE OF SERVICE

Pursuant to 37 CFR §§ 42.6(e)(4) and 42.205(b), the undersigned certifies that on April 28, 2025, a complete and entire copy of this Patent Owner's Request for Discretionary Denial of Institution were provided via electronic service, to the Petitioners by serving the correspondence address of record as follows:

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