

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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

v.

Barco NV  
Patent Owner.

US Patent No. 10,684,972  
Filing Date: December 29, 2017  
Issue Date: June 16, 2020

Title: Method and System for Making Functional Devices Available to Participants  
of Meetings

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*Inter Partes* Review No.: IPR2025-00491

**PETITIONER'S RESPONSE TO  
PATENT OWNER'S  
DISCRETIONARY DENIAL ARGUMENTS**

## TABLE OF CONTENTS

|             |                                                                                                                                                                     |           |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| <b>I.</b>   | <b>INTRODUCTION .....</b>                                                                                                                                           | <b>2</b>  |
| <b>II.</b>  | <b>THE <i>ADVANCED BIONICS</i> FACTORS WEIGH AGAINST<br/>DISCRETIONARY DENIAL.....</b>                                                                              | <b>3</b>  |
| <b>A.</b>   | <b>FACTOR (A): THE SIMILARITIES AND MATERIAL DIFFERENCES<br/>BETWEEN THE ASSERTED ART AND THE PRIOR ART INVOLVED DURING<br/>EXAMINATION.....</b>                    | <b>3</b>  |
| <b>B.</b>   | <b>FACTOR (B): THE CUMULATIVE NATURE OF THE ASSERTED ART AND<br/>THE PRIOR ART EVALUATED DURING EXAMINATION. ....</b>                                               | <b>6</b>  |
| <b>C.</b>   | <b>FACTOR (C): THE EXTENT TO WHICH THE ASSERTED ART WAS<br/>EVALUATED DURING EXAMINATION, INCLUDING WHETHER THE<br/>PRIOR ART WAS THE BASIS FOR REJECTION. ....</b> | <b>6</b>  |
| <b>D.</b>   | <b>FACTOR (D): THE EXTENT OF THE OVERLAP BETWEEN THE<br/>ARGUMENTS MADE DURING EXAMINATION AND THE MANNER IN<br/>WHICH PETITIONER RELIES ON THE PRIOR ART. ....</b> | <b>7</b>  |
| <b>E.</b>   | <b>FACTOR (E): WHETHER PETITIONER HAS POINTED OUT SUFFICIENTLY<br/>HOW THE EXAMINER ERRED IN ITS EVALUATION OF THE ASSERTED<br/>PRIOR ART. ....</b>                 | <b>8</b>  |
| <b>F.</b>   | <b>FACTOR (F): THE EXTENT TO WHICH ADDITIONAL EVIDENCE AND<br/>FACTS PRESENTED IN THE PETITION WARRANT RECONSIDERATION OF<br/>THE PRIOR ART OR ARGUMENTS. ....</b>  | <b>8</b>  |
| <b>III.</b> | <b>THE BOARD FOUND SUBSTANTIALLY SIMILAR GROUNDS<br/>PRESENTED A REASONABLE LIKELIHOOD OF PREVAILING....</b>                                                        | <b>9</b>  |
| <b>IV.</b>  | <b>THIS PETITION IS THE SOLE CHALLENGE TO THE '972<br/>PATENT. ....</b>                                                                                             | <b>9</b>  |
| <b>V.</b>   | <b>THE GROUNDS ARE STRONG AND TEACH THE ENDPOINT<br/>LIMITATIONS.....</b>                                                                                           | <b>10</b> |

## I. INTRODUCTION

Discretionary denial factors weigh towards institution for two primary reasons. First, ground 2 relies on new, non-cumulative prior art that renders obvious the *de minimus* reason for allowance: “*hosting a unified communication*,” such as Skype. Second, ground 1 relies on Beel, a previously cited reference, which Patent Owner admits includes features of the “present invention.” Paper 7, 12 (citing Ex-1001 at 4:28–33).<sup>1</sup> Ground 1 similarly relies on cited but never-considered art in combination with new art to demonstrate that the allegedly allowable subject matter—“*hosting a unified communication*,” such as Skype—was obvious. Therefore, discretionary denial is inappropriate.

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<sup>1</sup> The “applicant-admitted prior art” (AAPA) itself forms no basis for the grounds of unpatentability; rather, the AAPA binds the Patent Owner to admitting that Beel and Dinka—prior art patents and printed publications—disclose certain claim limitations. *Qualcomm Inc. v. Apple Inc.*, 24 F. 4th 1367 (Fed. Cir. 2022) (citing *PharmaStem Therapeutics, Inc. v. ViaCell, Inc.*, 491 F.3d 1342, 1362 (Fed. Cir. 2007)).

## **II. THE *ADVANCED BIONICS*<sup>2</sup> FACTORS WEIGH AGAINST DISCRETIONARY DENIAL.**

The Petition applied the *Advanced Bionics* factors to both grounds. Pet. (Paper 2), 68–74. First, it demonstrated that the examiner erred by failing to consider Beel in combination with well known “*unified communication*” software, such as Skype. *Id.*, 70–74. Second, it discussed new, never-before-considered prior art. *Id.* 68–74. The process for discretionary denial has evolved since the Petition's filing date, with an increased word-count and greater focus on factors from the Board's *Becton, Dickinson* decision. *Advanced Bionics*, 9–11 (citing *Becton, Dickinson & Co. v. B. Braun Melsungen AG*, IPR2017-01586, Paper 8, 17–18 (PTAB Dec. 15, 2017) (precedential as to § III.C.5, first paragraph)).

### **A. Factor (a): the similarities and material differences between the asserted art and the prior art involved during examination.**

#### **1. Ground 1: Beel in view of Dinka and Optionally Christison.**

Dinka was not of record during prosecution and renders obvious the allegedly patentable subject matter of “*unified communication*”; however, Beel and Christison were of record during prosecution. The Examiner never discussed Beel nor the admissions that it teaches components that can be used in embodiments of the

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<sup>2</sup> *Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6 (PTAB Feb. 13, 2020) (precedential).

claimed invention. Pet., 25 (citing Ex-1001, 4:28–33). Barco only overcame Christison by adding the “*unified communication*” limitation that Dinka renders obvious.

There are material differences between Beel and the prior art considered on the record, in addition to the fact that the Examiner never applied prior art like Dinka to the “*unified communication*” limitation. Beel includes, for example, FIG. 4, which the '972 patent admits “shows an arrangement of components that can be used in embodiments of the present invention.” Ex-1001, 4:28-33 (discussing the related WIPO publication no. 2013/037980). Beel also discloses a “virtual audio device” that is analogous to the claimed “*configurable endpoint*,” which Barco added to the claims to overcome the applied prior art, Brands and Leete. Pet., 31, 72; Ex-1004, 309, 315–19. The '972 patent even admits that Beel includes fixed and configurable endpoints. Ex. 1001, 4:28–33, 16:44–67. Patent Owner's discretionary denial arguments never discuss these material differences and instead focus on obvious similarities that exist in all IPR petitions because the prior art relied on in prosecution and post-grant proceedings is necessarily in the same field of endeavor. The Board has already rejected similar arguments in a related institution decision. *Yealink Network Technology Co., Ltd., et al. v. Barco N.V.*, IPR2024-01439, Paper 12, 8 (finding similar prior art to be non-cumulative).

Regarding Christison, the examiner simply stated that there was no prior art teaching the well-known “*unified communication*” limitation, despite Barco never separately arguing the patentability of that limitation. Ex-1004, 335 (finding claims 5 and 14 to recite allowable subject matter). Unified communication is a term of art referring to unifying voice, video, messaging and data communications, and corresponds to an evolving set of products from as early as the 1990’s through today, including products such as Skype. Ex-1002, ¶58; Exs-1009 and 1013. Moreover, Dinka teaches unified communication. Pet. 37–37 (citing Ex-1006, abstract; Ex-1002, ¶¶142–43).

Finally, Petitioner only optionally relied on Christison as teaching a narrow construction of “*exposed or made available*,” which Barco argues can mean, *e.g.*, “configuring with descriptor fields.” POPR, Paper 11, 11. Therefore, Christison teaches a known way of configuring Beel’s functional devices using standard USB descriptor fields.

## **2. Ground 2: Kaplan in view of Van de Laar and optionally Christison.<sup>3</sup>**

Kaplan and Van de Laar are similarly distinct from the prior art discussed on the record. First, they were not of record. Second, the teachings are materially different because they teach the precise limitations (1) that led to allowance the unified communication and (2) the endpoints limitations that the POPR focuses on. Pet., 35–38; *see also* § V, below.

### **B. Factor (b): the cumulative nature of the asserted art and the prior art evaluated during examination.**

*See* factor (a).

### **C. Factor (c): the extent to which the asserted art was evaluated during examination, including whether the prior art was the basis for rejection.**

The file history shows no written evaluation from the examiner of the prior art presented in the Petition. The examiner never evaluated Beel on the record, but Barco admitted that Beel is an example of a system that is consistent with the claims. (citing Ex-1001 at 4:28–33). The Examiner did rely on Christison for all limitations of the independent claims; however, the Petition does not rely on

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<sup>3</sup> Petitioner inadvertently left off the “optionally Christison” text from the heading on page 46, but it is included on page 7, and ground 2 includes arguments about optionally including Christison.

Christison for that purpose. Rather, the Petition relies on Christison as an example teaching of how to “*expose*” a “*functional device*.” The other references teach the limitation, but Christison may be necessary if Barco argues a narrow construction of “*expose*.” POPR, 11.

**D. Factor (d): the extent of the overlap between the arguments made during examination and the manner in which petitioner relies on the prior art.**

The Petition demonstrates that Dinka, which discloses an example means of unified communication, in combination with other prior art renders obvious the allegedly novel “*hosting a unified communication*” limitation. There was no argument during prosecution concerning similar prior art. Barco argues its admission that “[t]he unified communication can be a Skype<sup>TM</sup> call or a Skype<sup>TM</sup> or a Skype<sup>TM</sup> for Business call” means the subject matter was “extensively discussed.” Paper 7, 24. But this admission is not duplicative of the arguments in the Petition. Importantly, the Examiner never discussed any unified communication software, and only *sua sponte* found the prior art did not teach that limitation. Ex-1004, 335. There is nothing in the record demonstrating that the Examiner considered Beel or Barco’s admission regarding Skype-related art, such as the new Dinka reference. Therefore, the Office never considered the new arguments in the Petition.

**E. Factor (e): whether petitioner has pointed out sufficiently how the examiner erred in its evaluation of the asserted prior art.**

The Petition explained how the examiner erred by not citing any examples of well-known unified communication systems and software. Pet. 68–74. Nothing in the record demonstrates that the examiner considered any of the prior art unified communication systems or Barco's admission that unified communication systems, such as that disclosed in Dinka, are known prior art. The record also does not indicate that the examiner considered Barco's admissions that Beel's system is contains features of the claims of the '972 patent. The examiner, therefore, erred by not evaluating the prior art and by not evaluating Patent Owner's admissions concerning that prior art.

**F. Factor (f): the extent to which additional evidence and facts presented in the petition warrant reconsideration of the prior art or arguments.**

Dinka is new, never-before-considered prior art that directly addresses the subject matter that the examiner found allowable, *i.e.*, “*hosting a unified communication.*” Ground 2 also contains entirely new references and only optionally relies on Christison in a new way for a potentially narrow construction of “*expose*” that Patent Owner tacitly proposed in the POPR, stating,

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.

POPR, 11 (emphasis added). Patent Owner never made this argument prior to this IPR, but the argument is like arguments made during a European opposition that led to cancelation of the corresponding EPO patent. Pet., 10 (citing UPC\_CFI\_582/2024, concerning European Patent No. 3,732,827 B1, which is related to the '972 patent). Barco's appeal is pending. Therefore, the Petition presents additional evidence and facts warranting reconsideration not least because the Unified Patent Court found related claims invalid.

### **III. THE BOARD FOUND SUBSTANTIALLY SIMILAR GROUNDS PRESENTED A REASONABLE LIKELIHOOD OF PREVAILING.**

The Board instituted four IPRs with similar art and grounds of unpatentability: IPR2024-01436, -01437, -01438, and -01439. The priority date of the '972 patent is six years later than the patents in the four instituted IPRs and does not include patentably distinct limitations, such as the allegedly allowable "*hosting a unified communication*" limitation. The grounds presented in this IPR present a reasonable likelihood of success like the grounds in the four instituted IPRs.

### **IV. THIS PETITION IS THE SOLE CHALLENGE TO THE '972 PATENT.**

The fact that this is the sole case challenging the validity of the '972 patent weighs against the Board using its discretion to deny institution. There is no issue under *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential), because there is no other proceeding involving the '972 patent.

Therefore, this proceeding provides the only potential to review the patentability of the '972 patent.

## **V. THE GROUNDS ARE STRONG AND TEACH THE ENDPOINT LIMITATIONS.**

Patent Owner did not dispute that the prior art does not have endpoints, *e.g.*, Beel's A/V components and Kaplan's display 210, but argues that the prior art does not teach, "*exposing or making available the fixed or configurable endpoints on the first peripheral device.*" POPR, 28–33. This argument is wrong for at least two reasons. First, Patent Owner concedes "*expose*" is a broad, loosely defined term meaning, "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." POPR, 11. Second, the claim limitation recites "*exposed or made available,*" so the claim is broader than the word "*expose*," which itself is not a well-defined term. Patent Owner provides no support for why transmitting audio/visual data to/from a base unit is not "*interacting*" with "*endpoints*," as Patent Owner construes the term. They simply make the conclusion untethered from their own claim construction.

The prior art references expressly disclose users "*exposing or making available the fixed or configurable endpoints,*" *i.e.*, peripheral devices interacting with A/V components connected to base stations. Beel, for example, discloses A/V components, including speakers and displays, that allow "for streaming the screen

scraped video content to the network and hence to a base unit and a display.” Ex-1005, ¶50; *see also* ¶317 (“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”); Pet. 31–34. Beel’s displays and speakers (*i.e.*, “*functional devices*”) are therefore “*exposed or made available*” to the peripheral device because the peripheral device interacts with them.

Kaplan discloses the “*exposed or made available*” limitation for similar reasons. Kaplan discloses, “transmitting the video content from the transmitter to the receiver.” Ex-1008, ¶61; *see also* Pet., 52–56; Ex-1002, ¶200–08. The Petition goes into further detail regarding how Christison and Van de Laar disclose different known ways functional devices can be “*exposed or made available*” by, for example, modifying device descriptors, which is the same example Patent Owner gives for exposing. Ex-1011, 6:66–7:5, 9:21–32, 9:36–38; POPR, 11. There is no reason to construe “*exposed or made available*” as narrowly as Patent Owner suggests, and importantly, the prior art *still* renders obvious an improperly narrow construction of this term.

Patent Owner alleges that the “*exposed or made available*” limitation somehow yields improvements over the prior art:

exposing or making available at least one fixed or configurable endpoint of the functional device on the first peripheral device, as in the present claims, allows

accessing a functional device, such as, a speakerphone, high quality cameras, etc. connected to or in a base unit, in low bandwidth/latency environment and makes the functional device available to the unified communication, e.g., Teams, Skype, etc., in a non-intrusive / generic manner which poses very different challenges compared to sharing content to a display, as in Beel.

POPR, 31. Ye the claims do not include these benefits. The Patent Owner also never explains why “*exposed or made available*,” *i.e.*, “interacting,” yields these benefits. The cited prior art contains all the claimed features and provides the same results as the patented claims. Therefore, the Petition presents a reasonable likelihood of success.

Dated: May 28, 2025

Respectfully submitted,

/Stephen Yang/  
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*Lead counsel for Petitioner*

**CERTIFICATE OF COMPLIANCE**

Pursuant to 37 C.F.R. § 42.24(d), the undersigned hereby certifies that the word count for the foregoing response totals 2,084 as counted by Word Count feature of Microsoft Word, which is less than 14,000 allowed under 37 C.F.R. § 42.24(a)(1)(i), excluding the parts of the paper exempted by 37 C.F.R. § 42.24(a).

Dated: May 28, 2025

By: /Stephen Yang/  
Reg. No. 70,589  
Attorney for Petitioner

### **CERTIFICATE OF SERVICE**

I hereby certify that on May 28, 2025, I caused a true and correct copy of the foregoing response to be served via Federal Express mail on the Patent Owner at the following correspondence addresses of record:

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