

Yealink

Yealink (USA) Network Technology Co., Ltd., and Yealink Network Technology Co., Ltd. v. Barco NV

IPR2025-00491 – U.S. Patent No. 10,684,972

Summary and Key Arguments

■ **Ground 1: Beel, Dinka, and Christison**

- Beel discloses a web meeting system with endpoints.
- Dinka teaches an application consistent with Beel.
- PO Sur-Rply., 3–12; PO Resp., 7–32.

■ **Ground 2: Kaplan, Van de Laar, and Christison**

- Kaplan essentially discloses the claimed invention.
- Van de Laar has a broad disclosure of a meeting system, and the Reply raised no new motivations.
- PO Sur-Rply., 14–22; PO Resp., 38–46.

■ **Secondary Considerations**

- Alleged ClickShare commercial success and the Crestron license lack nexus to the '972 patent claims. Pet. Rply., 22–27; PO Sur-Rply., 22–26.

Ground 1 Beel in View of Dinka and Optionally Christison Render Obvious Claims 1–18

Ground 1: Beel Teaches the Claimed Architecture

Claim 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 first peripheral device having ... at least one fixed or a configurable endpoint

Ex-1001, cls. 1, 10; Pet., 7–12.

Ground 1: Beel Teaches the Same Architecture

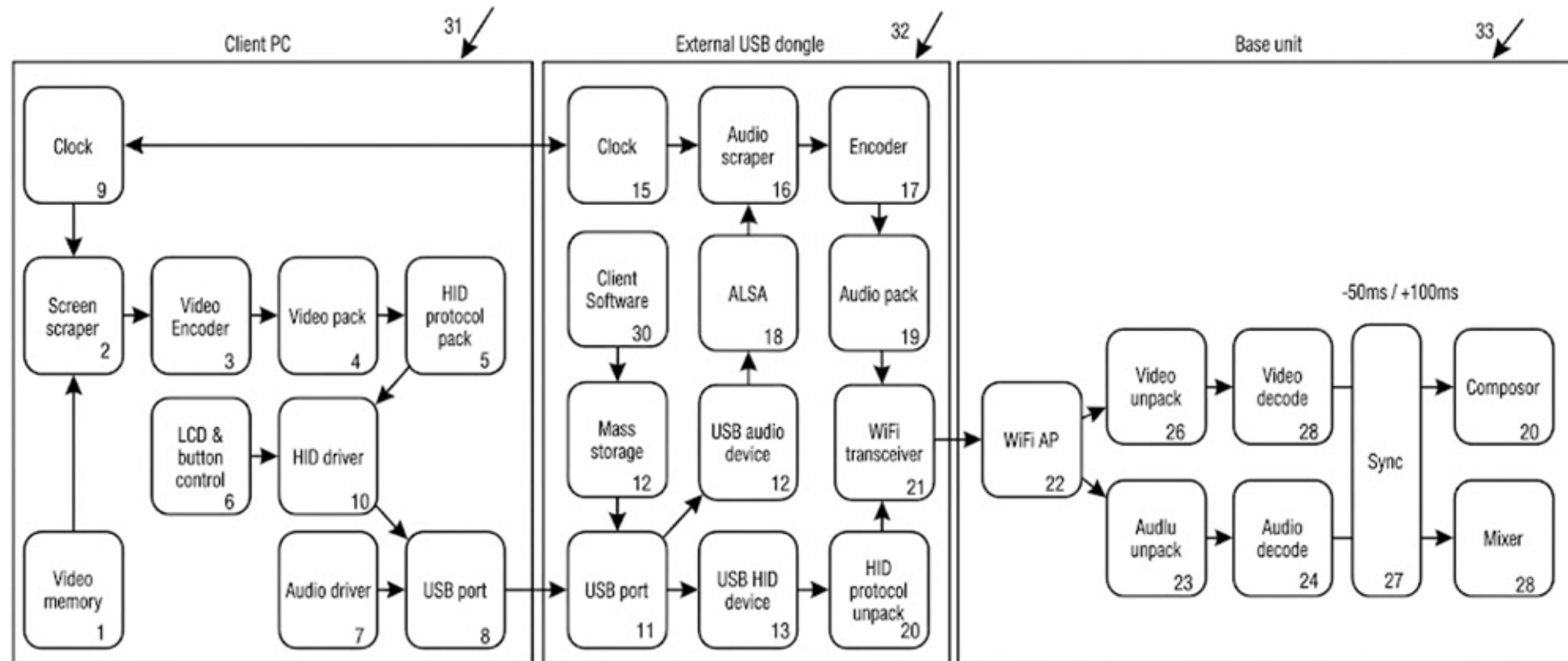
Beel teaches the **SAME** architecture and system, evidenced by the **SAME** figure, as the '972 patent.

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, 4:28–33

Ground 1: Beel Teaches the Same Architecture

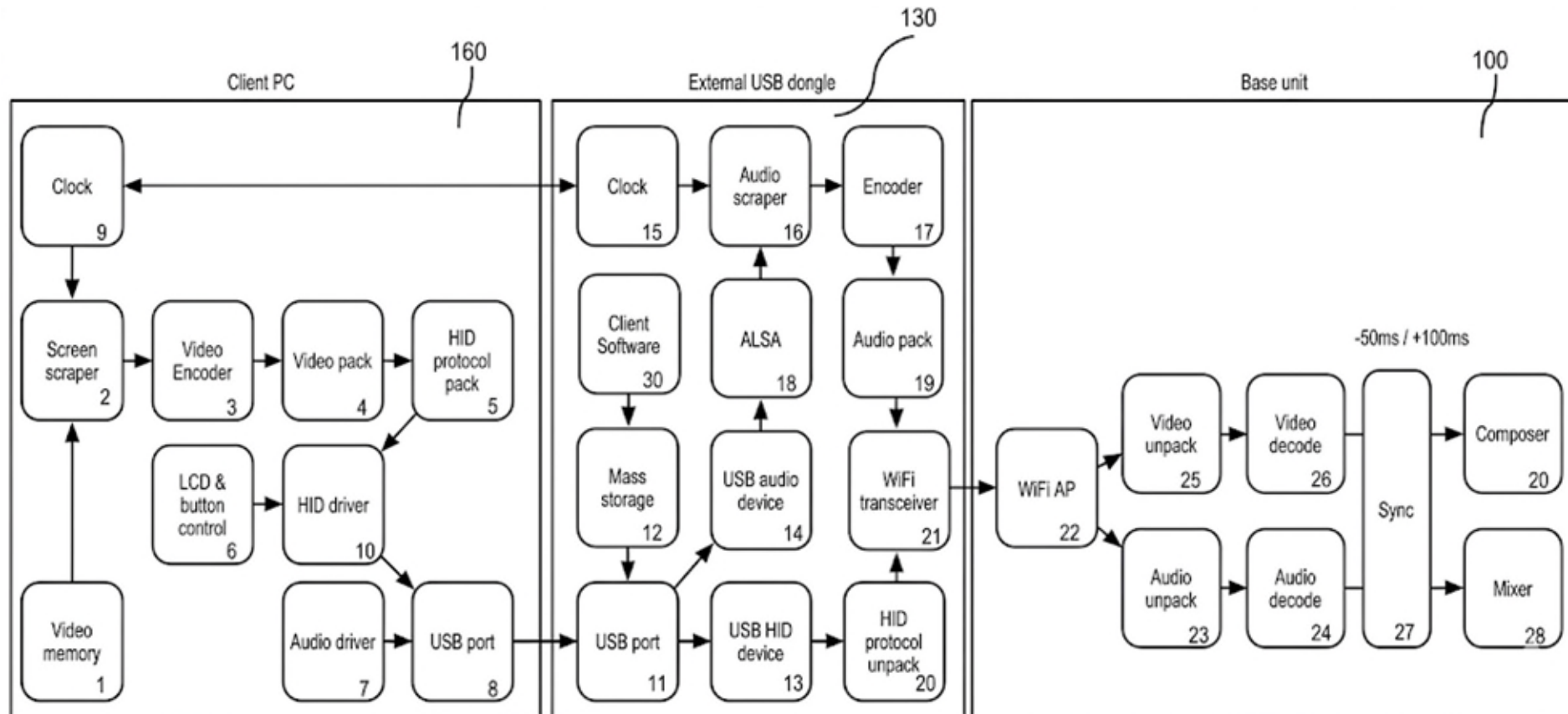
Beel teaches the **SAME** architecture and system, evidenced by the **SAME** figure, as the '972 patent.



Beel, Ex-1005, FIG. 11.

Ground 1: Beel Teaches the Same Architecture

Beel teaches the **SAME** architecture and system, evidenced by the **SAME** figure, as the '972 patent.



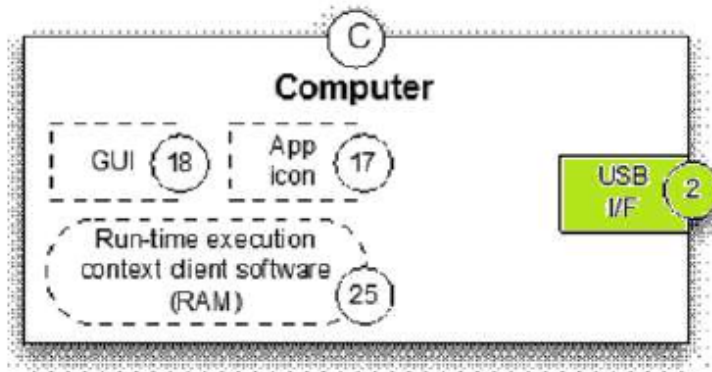
Ex-1001, FIG. 4.

Beel Discloses Receiving Media Content

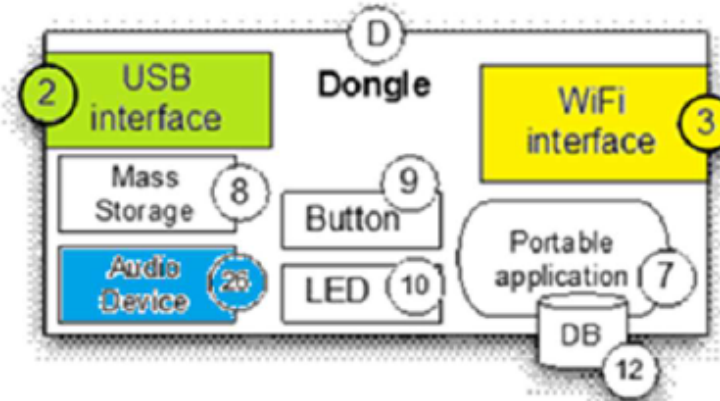
Beel expressly discloses the peripheral device receives “media content from the network” for output on the processing device, in a transceiver-based architecture, discloses the claimed data path through USB endpoints.

See Ex-1005, ¶¶71, 128–129; Ex-1002, ¶¶129–130, 135–136.

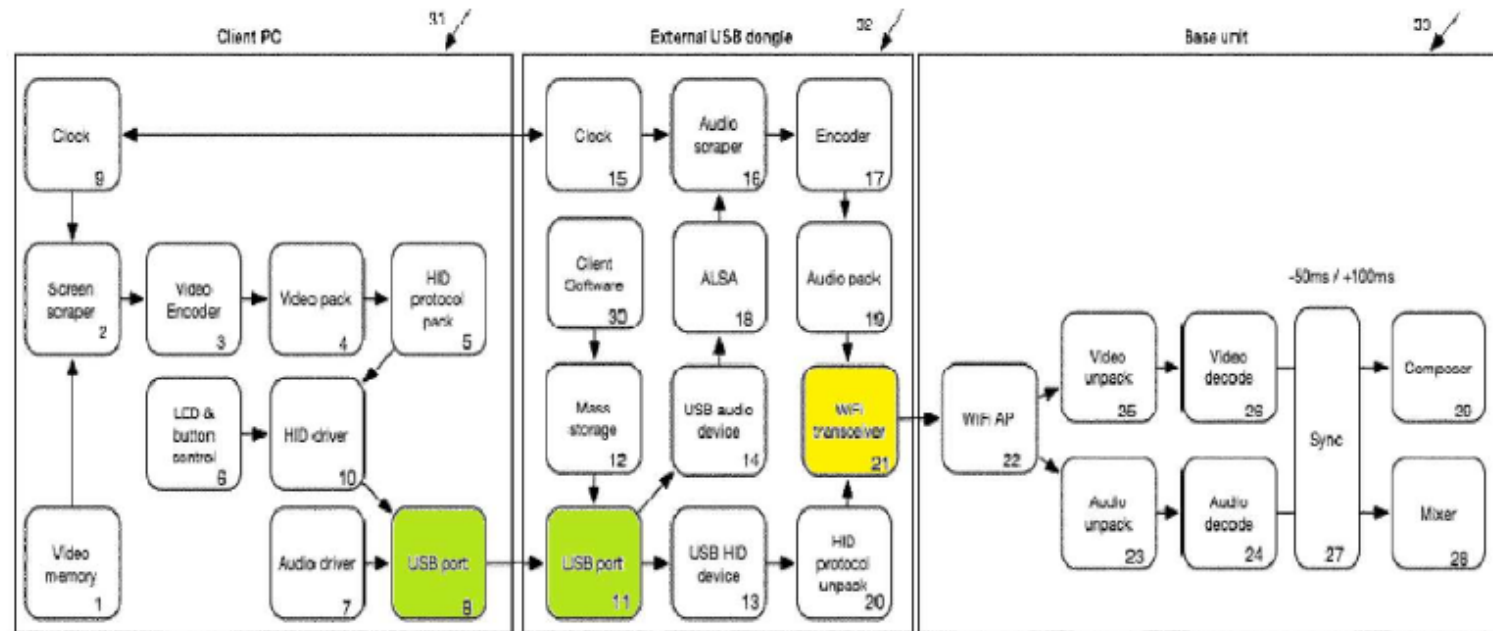
Ground 1: Beel Discloses the Claimed Architectural Capability



Ex-1005, FIG. 5



Id., FIG. 4



Id., FIG. 11

Pet. Rply., 5.

Ground 1: Beel Discloses the Claimed Architectural Capability

- **Step 1**: Functional-device media content enters the meeting network via the base node. Ex-1005, ¶120; Pet., 28.
- **Step 2**: Transceivers on both sides; WiFi is the only interface in FIGS. 4, 5, and 11. Ex-1005, FIGS. 5, 11, ¶¶128–129; Ex-1035, ¶9.
- **Step 3**: “a third software code portion for receiving media content from the network and for displaying the media content on the display” using “the generic communication protocol for transferring the media content between the peripheral device and the processing device.” Ex-1005, ¶71; Pet., 33, 35–36.

Peripheral device = composite USB endpoint (UAC, HID, MSD). Ex-1005, ¶¶43, 50, 313, 317, 319.

Endpoints = data sources or sinks. Ex-1001, 7:64–8:3; Ex-1002, ¶¶124–130. Pet., 31–35; Pet. Rply., 7–9.

Ground 1: Beel Discloses the Claimed Architectural Capability

Beel makes clear that data goes “to the processing devices.”

[0120] 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-1005, ¶120; Pet., 28.

Ground 1: Beel Discloses Receiving Media Content

PO argues: Microphone data could travel directly to processing devices without passing through the peripheral device.

PO Sur-Rply., 5–6.

But ¶71 forecloses this: The peripheral device **receives “media content from the network”** and transfers it using “the generic communication protocol.”

Ex-1005, ¶71; Pet., 33, 35–36.

PO relies on Dr. Brogioli’s ***speculation***, divorced from Beel’s disclosure, about an audio port that FIGS. 5 or 11 do not disclose.

Ex-1034, 23:15–25:20, 133:1–136:5.

See also Pet., 33, 35–36; Inst. Dec., 30; Pet. Rply., 6–7.

Ground 1: Beel and the '972 Patent Disclose the Same Endpoints

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. These endpoints can be an exact copy of the ones of the second peripheral device 91-93 connected to the Base Unit 100 or can be dedicated specified endpoints.

Ex-1001, 16:51–56; see *also* 4:28–33, FIG. 4; Ex-1005, FIG. 11.

Ground 1: Beel's Endpoints Store or Emit Data of the Functional Device

Beel discloses *“the first peripheral device having ... at least one fixed or a configurable endpoint ... of the functional device exposed or made available on the first peripheral device”*

“Audio 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.”

Ex-1005, ¶319.

“[T]he audio [of the (virtual) audio speaker device] is channeled over the communications network.”

Ex-1005, ¶317.

Bidirectional — peripheral device can “receiv[e] media content from the network.” Ex-1005, ¶71; see *also* ID, 30; Pet. 35–36; Ex-1035, ¶9; Ex-1002, ¶130.

Pet., 31–35; Pet. Rply., 7–9.

Ground 1: Beel's Endpoints Store or Emit Data of the Functional Device

Dinka complements Beel: unified communication data sent and received by endpoints.

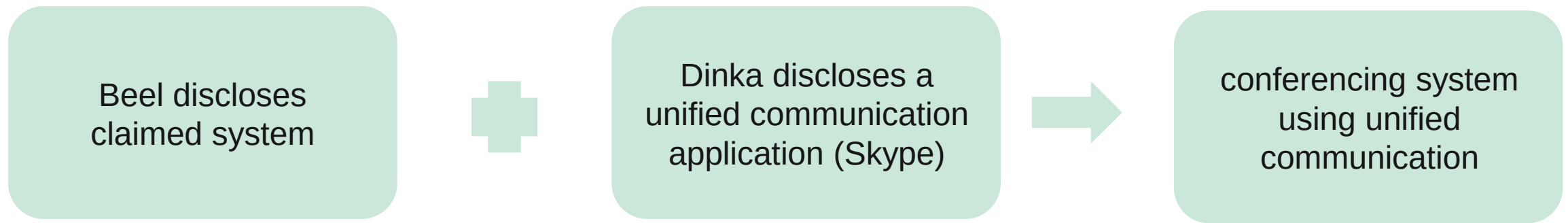
Ex-1006, 1:7–39, FIGS. 1, 3b; Pet. Rply., 8–9.

Christison: data flow in/out of USB endpoints; remote devices presented as “native.”

Ex-1011, 4:39–6:12, 9:21–32, FIGS. 6A–9; Ex-1002, ¶¶131–133.

See also Pet., 31–35; Pet. Rply., 7–9.

Ground 1: Motivation to Combine



Christison: known technique of presenting remote USB devices as native devices.
Ex-1011, 9:21–32; Ex-1002, ¶¶110–111; Pet., 19–25; Pet. Rply., 3–5.

Ground 1: Motivation to Combine — "How"

Beel and Dinka: same technological domain — electronic meeting and conferencing systems. Ex-1005, ¶122; Ex-1006, Abstract.

Christison: known technique of presenting remote USB devices as native devices. Ex-1011, 9:21–32; Ex-1002, ¶¶110–111.

Modifying Beel in view of Dinka and Christison would be a predictably beneficial variation of Beel's system and within a skilled artisan's flexible capabilities. Ex-1036, 24–25 ('346 patent institution decision).

Pet., 19–25; Pet. Rply., 3–5.

Ground 1: Motivation to Combine — "Why"

Both references address bi-directional conferencing systems.

Pet. Rply., 3–5; Ex-1035, ¶¶6–11.

Christison: ability to expose remote peripherals as native devices — a well-understood USB/wireless AV concept.

Ex-1035, ¶¶15–16; Ex-1011, 4:39–6:12.

Ground 1: Dinka Complements Beel

Dinka: “plurality of computer terminals 102” communicating via bidirectional VoIP calls. Ex-1006, FIG. 1, 5:45–46; Abstract.

Preferred embodiments ≠ teaching away. MPEP § 2123; *In re Susi*, 440 F.2d 442 (CCPA 1971). Pet. Rply., 3–5.

Board rejected this same teaching-away argument in a related IPR. Ex-1036, 19.

Ground 1: PO's Motivation-to-Combine Arguments Fail

PO argues: Petition uses only conclusory statements; Reply ignores PO's arguments. PO Sur-Rply., 10–12.

But: Teaching away $\neq$ mere preference. Pet. Rply., 4–5.

Board already agreed that a preference is not a teaching away. Ex-1036, 19.

Ground 1: PO's Teaching-Away Argument Fails

PO argues: Dinka's peripherals are only “speakers, headphones, and webcams” communicating directly to a computer without a peripheral device. PO Sur-Rply., 10.

But: Dinka complements Beel — it does not need to independently disclose the peripheral device. Pet. Rply., 7–8.

Teaching away ≠ mere preference. New case law cited in the PO Sur-Reply does not apply. Pet. Rply., 4–5; Ex-1036, 19.

Ground 1: Why ¶71 Resolves the Endpoint Question

PO argues: Beel captures audio from the processing device, not a functional device. PO Sur-Rply., 6–9.

But Beel is not limited to transmitting data; it also receives:

- ¶71: “receiving media content from the network ... for displaying ... on the display.” Ex-1005, ¶71; Pet., 33, 35–36.
- Inbound sources of media: microphones, cameras. Ex-1005, ¶120.
- WiFi transceiver = only disclosed communication path. Ex-1005, ¶71, FIGS. 4, 5, and 11.
- The '972 patent admits that Beel discloses “fixed” endpoints. Ex-1001, 16:44-56.
- Pet. Rply., 7–9; Pet., 31–35.

Ground 1: PO Cannot Point to Any Distinction

PO has not identified a concrete architectural distinction.

- Beel's USB audio, MSD, and HID = same devices in '972 Patent FIG. 4 and Beel FIG. 11.
- Endpoints defined “broadly” as “data sources or sinks.” Ex-1001, 7:64–67.

Beel discloses the same endpoints: USB audio, mass storage, and HID devices. Pet., 31–35.

Dr. Brogioli's Testimony Is Unreliable

- No opinion on whether the Petition's construction of "endpoint" was correct.

Ex-1034, 36:22–38:7

- No opinion on whether a mass storage device was an endpoint.

Ex-1034, 41:18–42:17, 50:10–15.

- No opinion on the difference between fixed and configurable endpoints.

Ex-1034, 78:22–79:4.

- Could not identify any endpoints in FIG. 4 of the '972 Patent.

Ex-1034, 72:18–74:15.

Dr. Brogioli testified he was, after all, ***only “responding to statements Dr. Almeroth made.”***

Ex-1034, 142:1–6; Pet. Rply., 1–2.

Dr. Brogioli's Testimony Is Unreliable (cont.)

Dr. Brogioli's Contradictions on "Endpoint"

11	Q.	So in the context of the '972 patent, a
12		person of ordinary skill in the art would not have
13		understood the mass storage device 132 to be an
14		endpoint; correct?
15	A.	I don't see that the patent is saying
16		that in this context, at least in these sentences
17		here.

Ex-1034, 42:11–17.

19	Q.	And so a mass storage device is a type of
20		endpoint in the USB specification; correct?
21	A.	As I recall, that's correct.

Ex-1034, 43:19–21; 46:19–47:7.

Ground 1: Christison Bridges Any Remaining Gap

Data flow in/out of USB endpoints; remote device enumeration via standard descriptors.

Ex-1011, 4:39–6:12, FIGS. 6A–9; Ex-1002, ¶¶131–133, 137; Ex-1035, ¶¶10–11.

Christison further confirms the claimed endpoints are a well-understood USB technique used by Beel's USB architecture.

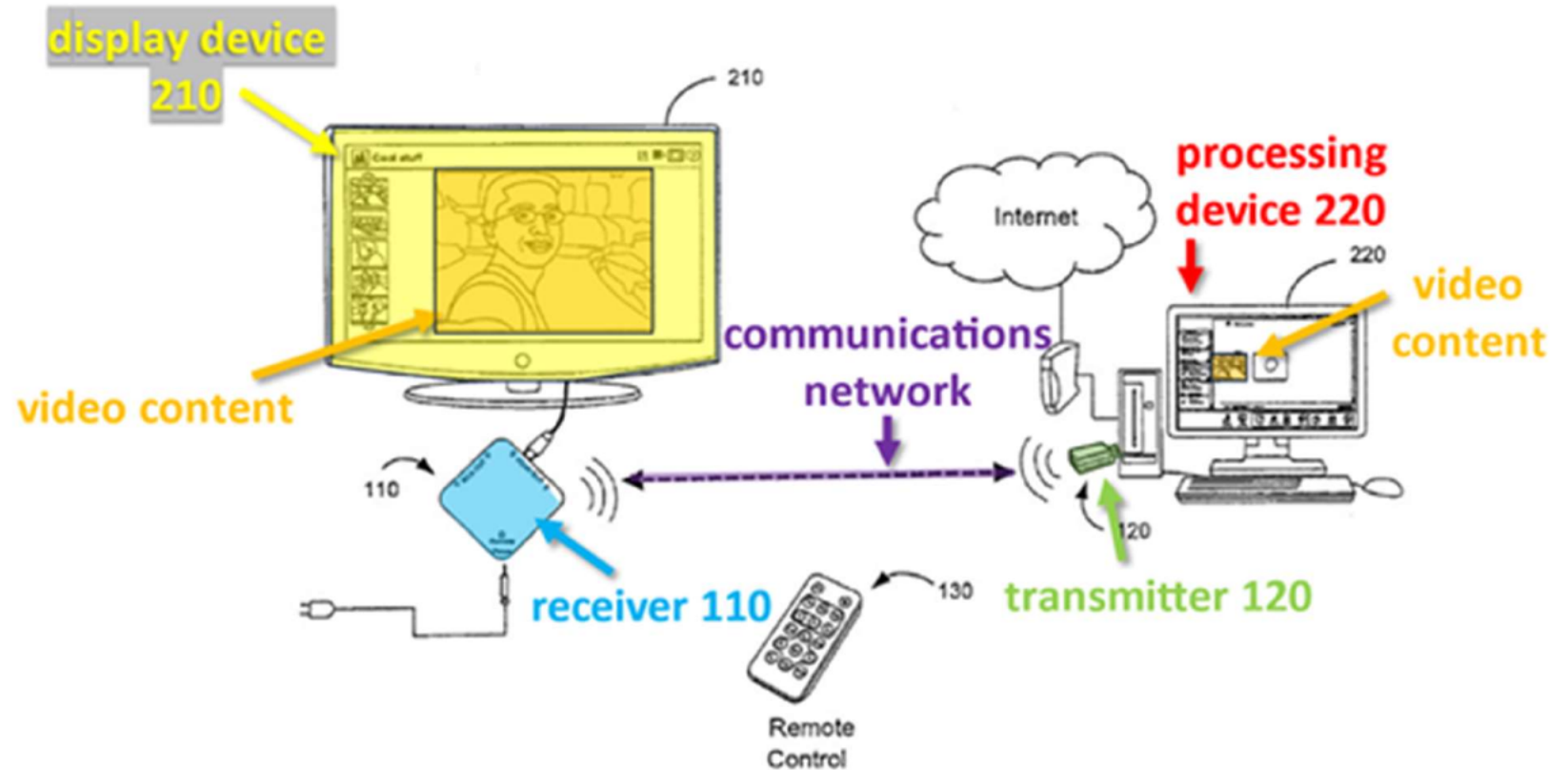
Ex-1002, ¶¶131–133; Ex-1035, ¶¶10–11. Pet., 34–35; Pet. Rply., 7–9.

Ground 2

**Kaplan in View of Van de Laar and Optionally
Christison Render Obvious Claims 1–18**

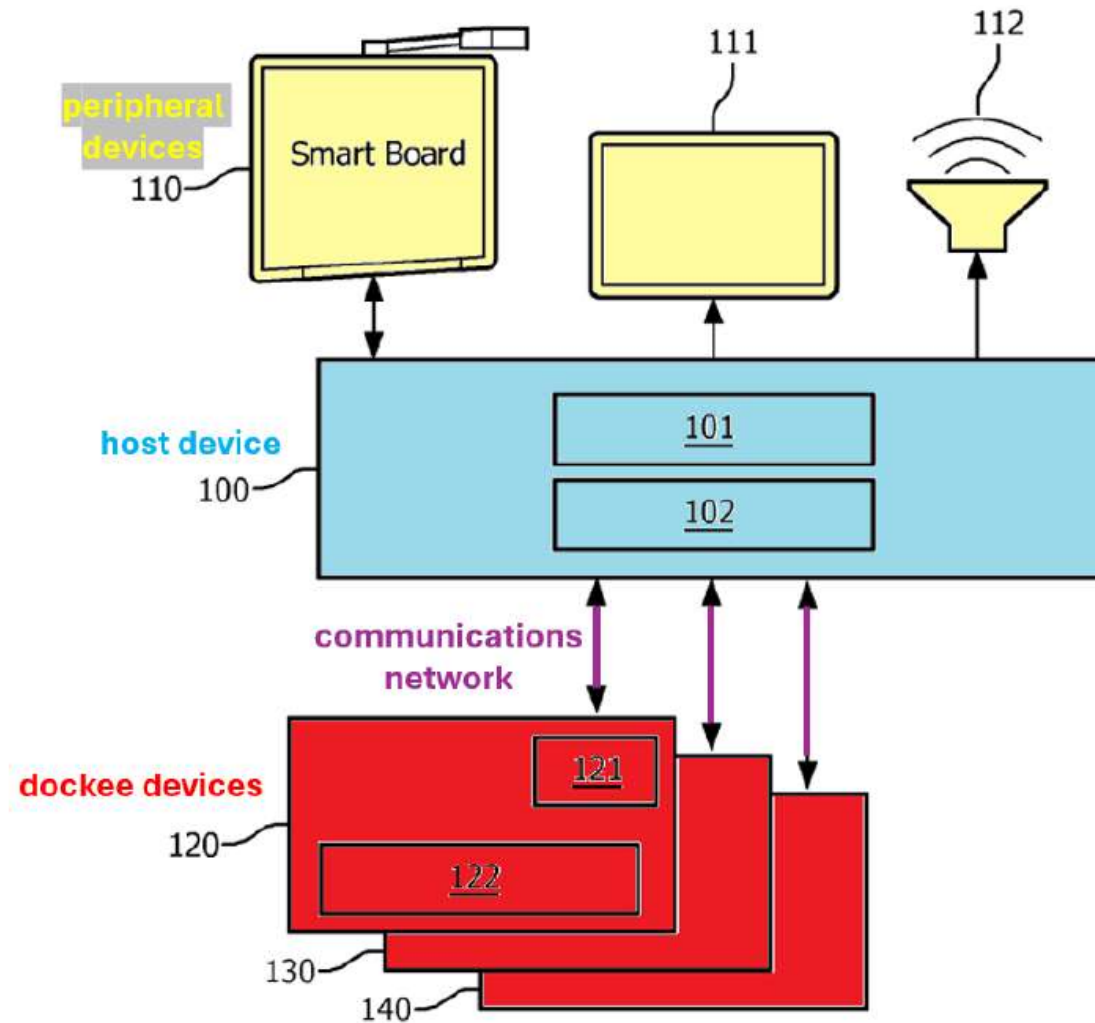
Ground 2: Kaplan

Kaplan discloses
Transmitting
screen scraping data
to a display



Pet., 22.

Ground 2: Van de Laar

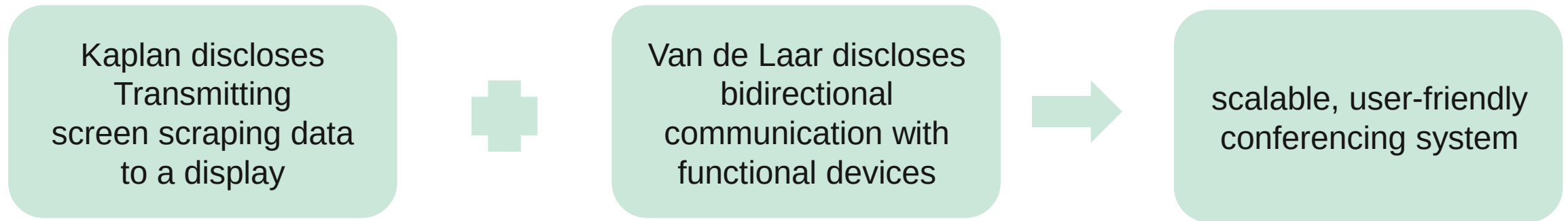


Id. FIG. 1.

Van de Laar discloses
bidirectional
communication with
functional devices

Pet. 23.

Ground 2: Motivation to Combine



Pet. Rply., 12; Ex-1035, ¶18.

Ground 2: Motivation to Combine

Both references are directed to the same domain and common protocols (USB, Wi-Fi, HDMI).

Ex-1035, ¶¶16–19.

Christison further confirms the claimed endpoints are a well-understood USB technique used by Beel's USB architecture.

Ex-1035, ¶20; Pet., 40–52; Pet. Rply., 11–14.

The POSA would have been motivated to modify the receiver 110 of Kaplan to have features of the WDH of Van De Laar to improve usability, allow use of multiple functional devices, in addition to the display of Kaplan, to access the functional device(s) in a unified communications call.

Pet., 47-48; Ex-1007, ¶9; Ex-1002, ¶182-83.

Ground 2: Prior Art Not Limited to Preferred Embodiments

Kaplan: “commercially available wireless communications standards.”

Ex-1008, ¶¶21, 31, 56, 65; Ex-1035, ¶12; Pet. Rply., 9–12.

Van de Laar: “Wi-Fi Serial Bus and Wi-Fi Miracast”; dockee communication unit need not be internal.

Ex-1007, ¶¶73–76; Ex-1035, ¶¶14–15.

Ground 2: Bi-Directional Data Communication

Kaplan: “The receiver and the transmitter are operable to perform two-way wireless communication with each other.”

Ex-1008, ¶6.

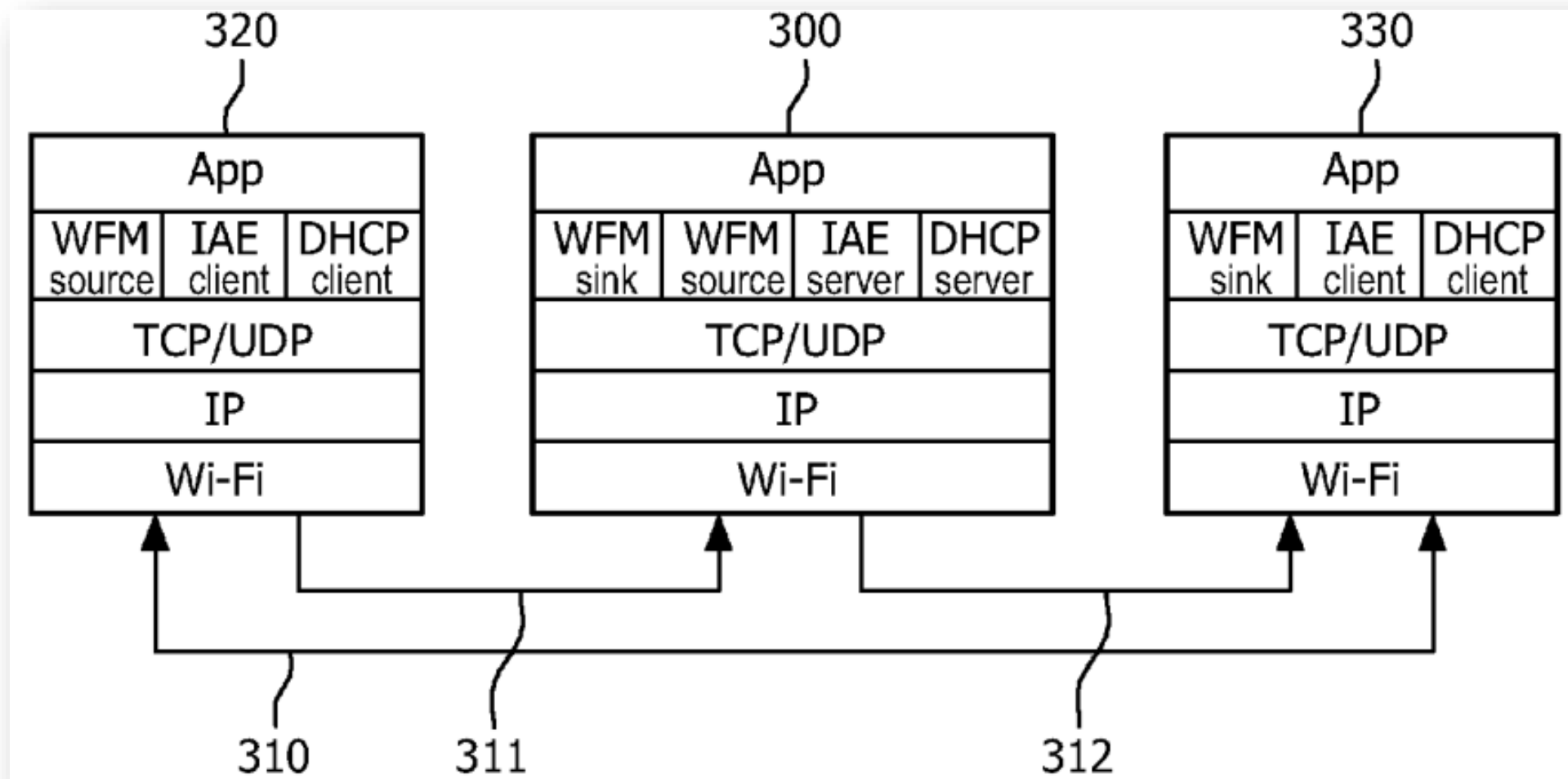
Van de Laar: primary dockees transmit and receive content.

Ex-1007, ¶¶56, 59–60, 93, 96; Ex-1035, ¶¶24–26.

Van de Laar’s peripherals (display, speakers, etc.) = mapped functional devices; dockees have read/write access.

Ex-1007, ¶¶56, 110, 115, cl. 2; Ex-1035, ¶29; Pet. Rply., 17.

Ground 2: Bi-Directional Data Communication



Ex-1007, FIG. 3.

Ground 2: Peripheral Device Endpoints

Kaplan: USB transmitter = data sink/source.

Ex-1008, FIG. 4; Ex-1037, § 5.3.1.

Van de Laar: endpoints as sinks/sources; primary dockees = both.

Ex-1007, FIG. 3, ¶¶59–60, 93, 96, 124–126.

In combination, receiver takes on WDH features — including functional device access.

Pet., 47–48, 51–52; Ex-1035, ¶¶14–15; Pet. Rply., 12–16.

Ground 2: PO's Remaining Arguments Fail

“New motivations”: Reply correctly responds to PO's incompatibility arguments because implementations details are compatible.

Pet. Rply., 13–14; Ex-1035, ¶¶16–18.

“Architectural” mismatch: Combination augments, does not abandon, Kaplan's architecture. They both use common protocols (USB, Wi-Fi, HDMI, Miracast, Wi-Fi Direct, etc.).

Ex-1035, ¶¶16–17.

There is No Nexus for Any Alleged Secondary Considerations

Barco's Product Is Not Coextensive

ClickShare includes significant **unclaimed** features.

Fox Factory, Inc. v. SRAM LLC, 944 F.3d 1366 (Fed. Cir. 2019).

Base products work **without** dongle: ClickShare app, Teams, Zoom.
Ex-1038; Ex-1039.

Three patent families covering patentably distinct inventions.
Ex-1001; Exs-1044–1046.

Barco's Technology Director: each patent is **independently valuable**.
Ex-1047, 141:20–143:18; Pet. Rply., 18–23.

Barco's Product Is Not Coextensive

Crestron's Mr. Ludke: “**surprised**” anyone would use a dongle:
“you can just join a Teams meeting from your laptop.”

Ex-1042, 100:25–101:20.

Using ClickShare without the dongle is not an insignificant feature. PO relies entirely on a presumption of nexus. No direct nexus established between the claimed features and commercial success.

Pet. Rply., 21–23.

Dr. Brogioli: could not recall ever using a dongle to share content.

Ex-1043, 91:14–23.

Barco's Analytics on Button Usage Are Flawed

85% figure = only users **who have the app installed** and use the Button.

Ex-1040, 231:1–4.

Does not capture: AirPlay, Miracast, GoogleCast, Teams, Zoom users.

Ex-1040, 231:5–11; Pet. Rply., 20–21.

“[T]he mere fact of licensing, without more, is generally not a strong indication of nonobviousness if it cannot also be shown that the licensees did so out of respect for the patent rather than to avoid litigation expense.”

Bosch Auto. Serv. Sols., LLC v. Matal, 878 F.3d 1027, 1038 (Fed. Cir. 2017).

No Nexus — Crestron License

PO must show patent covers licensee's product.

Teva Pharms. Int'l GmbH v. Eli Lilly & Co., 8 F.4th 1349, 1364. Pet. Rply., 25–27.

“[T]he mere fact of licensing, without more, is generally not a strong indication of nonobviousness if it cannot also be shown that the licensees did so out of respect for the patent rather than to avoid litigation expense.”

Bosch Auto. Serv. Sols., LLC v. Matal, 878 F.3d 1027, 1038 (Fed. Cir. 2017).

License driven by **“business” factors and “benefits” beyond patents.**

Ex-1049, 73:7–74:3, 105:8–106:1.

No Nexus — Crestron License

Ancora: single patent. **Here**: three patent families + international rights.

Ex-2011, 15.

Merck & Cie v. Gnosis S.P.A. multi-patent license = little weight.

808 F.3d 829, 838; Pet. Rply., 24–25.

Size of payment under multi-patent, multi-family, international license reflects aggregate portfolio value — not nexus to any single claim or patent.

Iron Grip Barbell Co. v. USA Sports, Inc., 392 F.3d 1317, 1324 (Fed. Cir. 2004). Pet. Rply., 24–26.

END

Ground 1: Beel Is Not Limited to a Presentation System

PO argues: Beel is a mere “presentation system” transmitting data only from processing device to base node. PO Resp., 7–9.

But: Beel discloses bidirectional communication — not merely one-way presentation. Pet., 35–36; Ex-1002, ¶¶134–136; Inst. Dec., 24, 30.

CERTIFICATE OF SERVICE (37 C.F.R. 42.6(0))

The undersigned hereby certifies that the foregoing Demonstratives are being served electronically via e-mail on April 13, 2026, in its entirety on the following counsel of record for Patent Owner:

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Dated: April 13, 2026

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