

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.,
Petitioner,

v.

BARCO N.V.,
Patent Owner.

IPR2024-01439
Patent 11,422,951 B2

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

LANEY, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining All Challenged Claims Unpatentable
35 U.S.C. § 318(a)

I. INTRODUCTION

A. *Background and Summary*

Yealink (USA) Network Technology Co., Ltd., and Yealink Network Technology Co., Ltd. (collectively, “Petitioner”) and Barco N.V. (“Patent Owner”) are identified as the real parties in interest for this matter. Paper 2 (“Pet.” or “Petition”), 1; Paper 14, 1. The parties identify *Barco, Inc. et al. v. Yealink (USA) Network Technology Co., Ltd. et al.*, 2:23-cv-521 (ED Tex.) (filed Nov. 14, 2023) as a related court proceeding. *Id.* And Patent Owner identifies additional patents, applications, and IPRs that it contends are related, including IPR2024-01436 (“1436-IPR”), IPR2024-01437 (1437-IPR), and IPR2024-01439 (“1439-IPR”). *See* Paper 14, 1–3.

On September 16, 2024, Petitioner filed a Petition requesting *inter partes* review of claims 1–11 and 13–21 of U.S. Patent No. 11,422,951 B2 (Ex. 1001, “the ’951 patent”), along with a supporting declaration from Kevin C. Almeroth, Ph.D. Pet. 1; Ex. 1002. After institution (Paper 12, “Institution Decision”), Patent Owner filed a Response to the Petition (Paper 20, “PO Resp.”) and likewise included its own supporting declaration from Michael C. Brogioli, Ph.D. (Ex. 2004). Petitioner filed a Reply (Paper 28 (“Pet. Reply”)) and a supplemental declaration from Dr. Almeroth (Ex. 1083), and Patent Owner filed a Sur-reply (Paper 45 (“PO Sur-reply”)). An oral hearing with the parties was held on January 21, 2026, and the transcript is of record. Paper 58 (“Tr.”).

We have jurisdiction under 35 U.S.C. § 6. This is a Final Written Decision under 35 U.S.C. § 318(a) as to the patentability of the challenged claims of the ’951 patent. For the reasons discussed below, we determine Petitioner establishes by a preponderance of the evidence that the challenged claims are unpatentable.

B. The '951 Patent

The '951 patent, titled “Electronic Tool and Methods for Meetings Between Two Users,” relates to electronic tools for meetings that provide connection to a communications network for use in displaying media content. Ex. 1001, code (54), 1:17–22. The '951 patent describes problems “holding a face-to-face meeting using advanced electronic tools,” including complexity of the network infrastructure, high demands on technical expertise of users, great variety of possible collaborative software solutions, time taken to prepare presentations for meetings, and lack of standards for audio, among other problems. *Id.* at 4:41–60.

The '951 patent describes an electronic meeting tool for communicating arbitrary media content from users at a meeting that includes a node configuration adapted to operate a display node of a communications network, the display node being coupled to a first display. Ex. 1001, code (57). The node configuration is adapted to receive user selected arbitrary media content and to control display of the user selected arbitrary media content on the first display. *Id.* at 14:66–15:9. A peripheral device adapted to communicate the user selected arbitrary media content via the communications network is a connection unit including a connector adapted to couple to a port of a processing device having a second display, a memory and an operating system, and a transmitter. *Id.* at 15:33–63, 16:20–24. The tool allows a user to trigger a transfer of the user selected arbitrary media content to the transmitter.” *Id.* at 16:30–41.

C. Illustrative Claims

Petitioner challenges claims 1–11 and 13–21 of the '951 patent. Pet. 1. Of the challenged claims, claims 1, 9, 16, and 21 are independent.

Ex. 1001, 27:42–30:46. Claims 2–8 depend from claim 1; claims 10, 11 and 13–15 depend from claim 9; and claims 17–20 depend from claim 16. *Id.*

Claim 1 is illustrative and is reproduced below.

1. An electronic meeting tool for communicating user selected arbitrary media content from users at a meeting comprising:

a base node, the base node being coupled to a first display, the base node being adapted to receive user selected arbitrary media content from at least one peripheral device via a wireless communications network, and to control display of the user selected arbitrary media content on the first display; and

the at least one peripheral device being adapted to communicate the user selected arbitrary media content to the wireless communications network;

wherein the at least one peripheral device is a connection unit comprising:

- a) a connector adapted to couple to a port of a user processing device, the user processing device having a second display and a memory,
- b) a transmitter for transferring user selected arbitrary media content to the wireless communications network, and
- c) an input device configured to allow the user to carry out a user action on the input device that triggers transfer of said user selected arbitrary media content from the transmitter to the wireless communications network and to the base node through the wireless communications network for display on the first display, the input device being a physical actuator coupled to the at least one peripheral device.

Ex. 1001, 27:42–28:2.

D. Evidence and Asserted Grounds

Petitioner asserts that claims 1–11 and 13–21 of the '951 patent would have been unpatentable on the following grounds:

Ground	Claim(s) Challenged	35 U.S.C. §	Basis
1	1–4, 6–11, 13–21	103(a) ¹	Ono, ² Corbett ³
2	1–10, 14–21	103(a)	Uchida, ⁴ Grimshaw ⁵
3	1, 2, 6–10, 13, 15–17, 19–21	103(a)	Ichieda ⁶

II. ANALYSIS

A. Legal Standards

Petitioner bears the burden of establishing the unpatentability of the challenged claims by a preponderance of the evidence. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d). This burden of persuasion never shifts to Patent Owner. *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015).

A claim is unpatentable under § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of

¹ The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112–29, 125 Stat. 284 (Sept. 16, 2011), includes revisions to Sections 102 and 103 that became effective on March 16, 2013. Because the challenged claims issued from an application claiming priority to an application filed before March 16, 2013, we apply pre-AIA law.

² U.S. Patent Application Publication No. US 2005/0210390 A1, published September 22, 2005 (Ex. 1005) (“Ono”).

³ U.S. Patent Application Publication No. 2006/0069840 A1, published March 30, 2006 (Ex. 1007) (“Corbett”).

⁴ JP 2008-165007 A, published July 17, 2008 (Ex. 1009) (“Uchida”).

⁵ U.S. Patent Application Publication No. US 2011/0096138 A1, published April 28, 2011 (Ex. 1008) (“Grimshaw”).

⁶ U.S. Patent Application Publication No. 2008/0074560 A1, published March 27, 2008 (Ex. 1006) (“Ichieda”).

obviousness is resolved on the basis of underlying factual determinations, including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) when in evidence, objective indicia of non-obviousness (i.e., secondary considerations). *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

The Supreme Court explained in *KSR International Co. v. Teleflex Inc.* that

[o]ften, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.

550 U.S. at 418 (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” (alteration in original))). This search for answers about whether the claimed subject matter would have been obvious to a skilled artisan at the time of the invention applies “an expansive and flexible approach.” *Id.* at 415. Whether a patent claiming the combination of prior art elements would have been obvious is determined by whether the improvement is more than the predictable use of prior art elements according to their established functions. *Id.* at 417. Reaching this conclusion, however, requires more than a mere showing that the prior art includes separate references covering each separate limitation in a claim under examination. *Unigene Labs., Inc. v. Apotex, Inc.*, 655 F.3d 1352, 1360 (Fed.

Cir. 2011). Rather, obviousness requires the additional showing that a person of ordinary skill at the time of the invention would have selected and combined those prior art elements in the normal course of research and development to yield the claimed invention. *Id.*

“Whether an ordinarily skilled artisan would have been motivated to modify the teachings of a reference is a question of fact.” *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1327 (Fed. Cir. 2016) (citations omitted).

“[W]here a party argues a skilled artisan would have been motivated to combine references, it must show the artisan ‘would have had a reasonable expectation of success from doing so.’” *Arctic Cat Inc. v. Bombardier Recreational Prods. Inc.*, 876 F.3d 1350, 1360–61 (Fed. Cir. 2017) (quoting *In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Patent Litig.*, 676 F.3d 1063, 1068–69 (Fed. Cir. 2012)).

Reasonable expectation of success of the proposed combination is also a question of fact. *Intelligent Bio-Systems, Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1366 (Fed. Cir. 2016). “The reasonable expectation of success requirement refers to the likelihood of success in combining references to meet the limitations of the claimed invention.” *Id.* at 1367. In evaluating reasonable expectation of success, we must consider the appropriate scope of the “claimed invention.” *Id.* (emphasis omitted).

B. Level of Ordinary Skill in the Art

Petitioner contends that a person having ordinary skill in the art would have had at least a Master’s Degree in Electrical Engineering with . . . five years of work experience in computer science and embedded systems, or Master’s Degree in Computer Science with . . . five years of work experience in electrical and computer engineering and embedded systems. Additional educational experience could substitute for some of the work experience.

Pet. 10 (citing Ex. 1002 ¶¶ 36–37). “Patent Owner does not dispute this level of skill in the art.” PO Resp. 10.

We adopt Petitioner’s proposed definition of a person of ordinary skill in the pertinent art, as it is consistent with the ’951 patent and the asserted prior art. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001).

C. Claim Construction

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

Petitioner proposes constructions for “arbitrary media content,” “coupled,” and “wireless communications network,” which cite to and adopt the express constructions provide in the ’951 patent. Pet. 11–12 (citing Ex. 1001, 11:43–50, 13:17–24, 11:60–65). Patent Owner counters with its own constructions for those terms, but cites to the constructions adopted by the District Court. PO Resp. 8–9. There is no meaningful difference between the parties proposed constructions and our decision in this matter does not turn on resolving any differences that may exist between the parties’ constructions. Because only those terms in controversy need to be construed, and only to the extent necessary to resolve the controversy, we determine that none of the claim terms the parties provide constructions for require an express construction in this

proceeding. *See Realtime Data LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019).

The parties do appear to disagree on the meaning of “trigger,” however. Although neither party actually identifies that term as needing interpretation and neither party actually provides a claim construction analysis to support its respective position, the parties do dispute whether the evidence presented shows a “trigger,” both presumably giving that term its plain and customary meaning. In other words, while both parties appear to agree “trigger” carries its plain meaning, in application, the parties’ dispute regarding the particular limitations including that term appears to turn, not over what the evidence discloses, but only on whether the disclosure satisfies the plain meaning of “trigger” (*see infra* § II.E.2). Accordingly, while we apply the plain meaning of “trigger” in this proceeding, and in doing so, we address which party has properly applied the plain meaning and, in doing that, we address the scope properly afforded to “trigger.” That analysis, however, is done below in the context of the limitation in which this issue arises (*see id.*).

D. Overview of the Prior Art

1. Ono (Ex. 1005)

Ono is titled “Image Display Apparatus, Image Display System, and Image Display Method,” and seeks to provide an image display apparatus that is capable of switching among a plurality of networked information terminal apparatuses to display on a display section image information from the desired information terminal apparatus. Ex. 1005, code (54), ¶ 7.

Figure 1 of Ono, reproduced below, illustrates an exemplary embodiment of the disclosed image display system. Ex. 1005 ¶ 18.

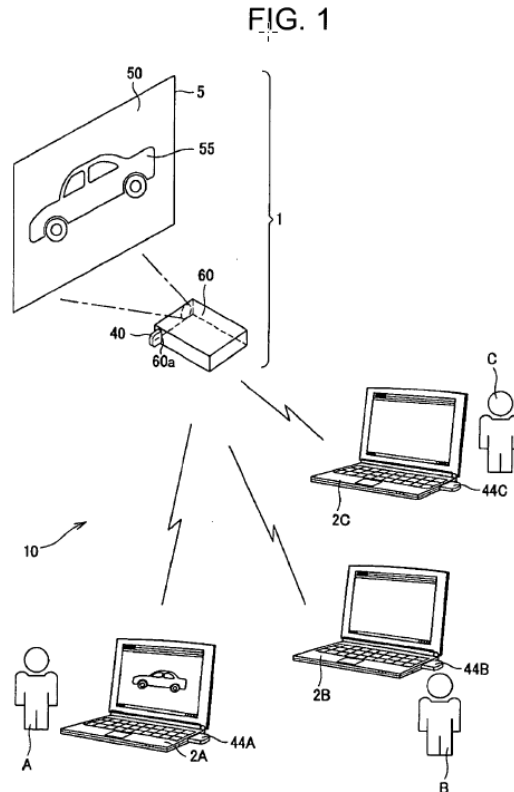


Figure 1 illustrates an image display system that makes up a wireless network “by connecting an image display apparatus 1 and three information terminal apparatuses 2A, 2B, and 2C to a wireless communications channel.” *Id.* ¶ 36. Image display apparatus 1 is comprised of screen 5, image projection apparatus (projector) that projects an image 55 onto a display screen 50 of screen 5, and communications module 40, such as a wireless connection module inserted into slot 60a on projector 60. *Id.* ¶ 38. Communications module 40 is for communicating with the three information terminal apparatuses 2A, 2B, and 2C, and is used for transmitting and receiving request signals, response signals, rejection signals, and the like for connecting or disconnecting, as well as, for receiving image information that is sent from the three information terminal apparatuses 2A, 2B, and 2C via the wireless network. *Id.* Information terminal apparatuses 2A, 2B, and 2C are personal computers (PCs) that include connected communications

modules 44A, 44B, and 44C, such as wireless connection modules. The communications modules 44A, 44B, and 44C are also used for transmitting and receiving request signals, response signals, rejection signals and the like for the connection and disconnection of communications with the communications module 40 of projector 60, as well as, for transmitting image information to projector 60. *Id.* ¶ 39.

In addition, Ono teaches that image display system 10 may have remote controller 69 for selecting one information terminal apparatus from a displayed list to perform operations such as switching the connection and disconnection with the plurality of information terminal apparatuses. Ex. 1005 ¶ 66.

2. *Corbett (Ex. 1007)*

Corbett is titled “Universal Serial Bus Device,” and “relates to a peripheral device, and more specifically, to a universal serial bus device.” Ex. 1007, code (54), ¶ 2. Corbett relates to a “Universal Serial Bus (USB) flash drive comprising a controller including a USB interface and a nonvolatile computer readable medium interface.” *Id.* at code (54). Corbett describes the versatility of its USB flash drive as capable of including: “a nonvolatile computer readable medium in communication with the nonvolatile computer readable medium interface”; and “a transmitter for transmitting at least a portion of data from the nonvolatile computer readable medium to an external device external to the USB flash drive.” *Id.*

3. *Grimshaw (Ex. 1008)*

Grimshaw is titled “Communication System,” and discloses a communication system to provide presentation functions for conferences. Ex. 1008, code (54), ¶ 2. Grimshaw’s system includes individual user modules 14–20 that each connect to a laptop computer and allow them to

send content to display module 22. Ex. 1008 ¶ 12. The user modules include a button that lets a user to take control over the content of display module 22 and switch the displayed content to the content on their respective laptop. *Id.* ¶ 19.

4. *Uchida (Ex. 1009)*

Uchida is titled “Remote control device and image projection system that remotely control the image projection device,” and seeks to “facilitate communication connection between a computer device and an image projection device.” Ex. 1009, codes (54), (57).

Uchida discloses a method for wirelessly connecting an image projection device to a computer device. Ex. 1009 code (57). A wireless USB dongle (wireless device 1) couples to computer device 4 through a USB connector 105. *Id.* ¶¶ 4, 39. Wireless device 1 “transmits image data [from the computer device 4] to the image projection device 3” where, thereafter, the image projection device “projects an image corresponding to the image data onto the screen.” *Id.* An image transfer stop switch 140 may halt or allow image transfer. *Id.* ¶¶ 70–72.

5. *Ichieda (Ex. 1006)*

Ichieda is titled “Image Display Device, Image Display System, And Network Connection Method,” and “relates to an image display device, an image display system, and a network connection method” that “allow[s] the user to easily perform the procedure for establishing the network connection to the image display device such as a projector.” Ex. 1006, code (54), ¶¶ 2, 8.

E. *Ground 1 (Ono and Corbett): Claims 1–4, 6–11, and 13–21*

For Ground 1, Petitioner, supported by its expert declarant, provides a thorough element-by-element analysis of challenged claims 1–4, 6–11, and

13–21 that maps each element to support from Ono and explains why any differences would have been obvious modifications of old elements, as evidenced by Corbett, rearranged with each performing the same function it had been known to perform to yield no more than what a skilled artisan would have expected from such an arrangement. *See* Pet. 18–45.

Patent Owner argues that three deficiencies exist with Petitioner’s analysis of the claims challenged in Ground 1, but otherwise Petitioner’s contentions are left uncontested. *See* PO Resp. 16–28. The three alleged deficiencies are as follows: (1) Petitioner failed to establish an appropriate reasoning for why a skilled artisan would have modified Ono in view of Corbett (*id.* at 19–26); (2) Petitioner failed to establish that Ono and/or Corbett disclose or suggest triggering the transfer of the user selected arbitrary media content, as recited by claims 1, 9, 16, and 21 (*id.* at 26–27); and (3) Petitioner failed to establish that Ono and/or Corbett disclose or suggest that the base node is integrated in the first display, as recited by claims 2, 10, 17, and 21 (*id.* at 27–28).

Now having a complete record and having studied all of the parties’ evidence and arguments, we find Petitioner to have shown persuasively that claims 1–4, 6–11, and 13–21 are unpatentable because Ono and Corbett establish the claims recite nothing more than what would have been at the time of the invention a predictable use of prior art elements according to their established functions. For those uncontested elements, we adopt in full Petitioner’s contentions regarding the specific evidence identified from Ono and/or Corbett to disclose or suggest the respective element, including how a skilled artisan would have understood the evidence to disclose or suggest the element, as support by Petitioner’s expert. Pet. 23–30, 35–45; Ex. 1002 ¶¶ 70–72, 77–78, 101–120. For the contested elements and reasons for

combining Ono and Corbett, we address each in turn below to explain why we find Petitioner's contentions persuasive and sufficient to carry their burden in this proceeding.

1. The Reasons for Modifying Ono in the Manner Claimed

For context and frame of reference, Petitioner provides annotated versions of Ono's Figures 1, 6, and 8, reproduced below.

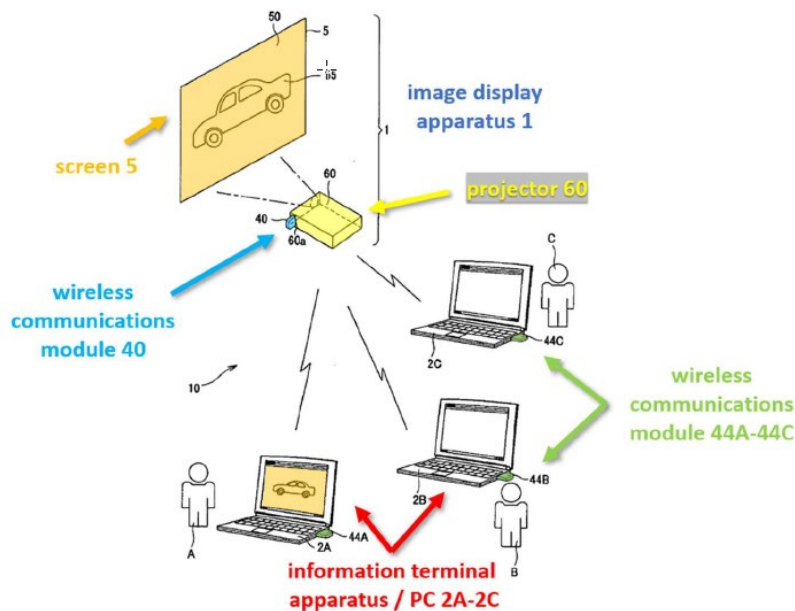


FIG. 8

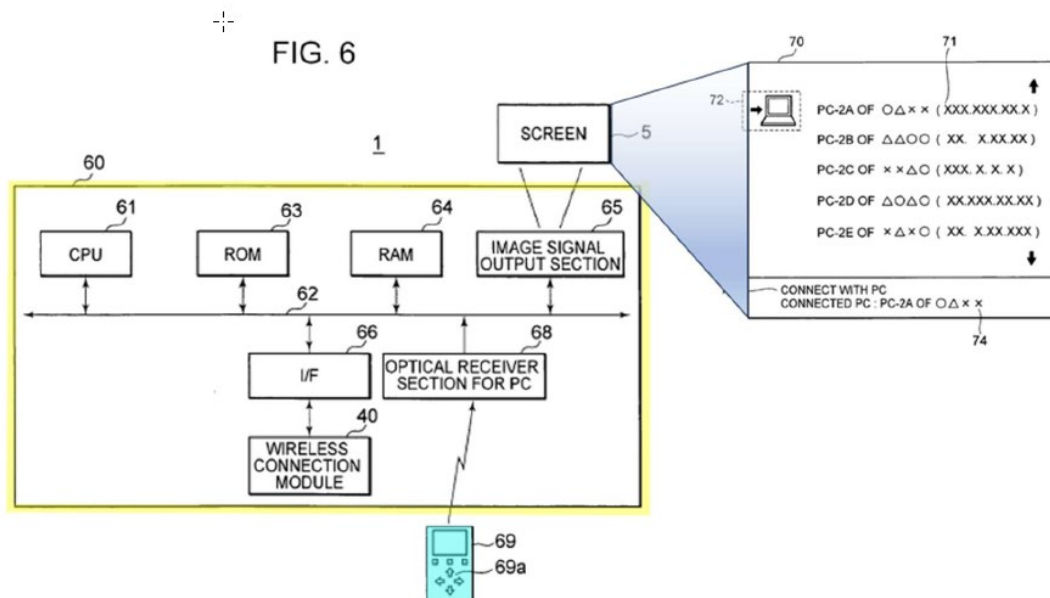


Figure 1 is a basic configuration diagram of Ono's image display system and Figures 6 and 8 show a hardware configuration of the image display apparatus (projector 60 and screen 5) presenting a personal computer (PC) selection screen. Ex. 1005 ¶¶ 18, 22, 24. In Figure 1, the peripheral device (communication module 44, (green)) couples to a PC (informational terminal apparatus 2) to wirelessly transfer through the wireless communications network the image information to image display apparatus 1 (yellow). *Id.* ¶¶ 36, 38–39. Figure 6 illustrates remote control 69 interacting with image display apparatus 1 through the keys on operation section 69a of remote control 69 to select the PC whose image is to be transferred to projector 60 for display on screen 5. *Id.* ¶¶ 7, 144.

Although Ono's configuration discloses a peripheral device that is a connection unit for transferring image data from its transmitter through the wireless communications network to projector 60 (i.e., the base node) for display on screen 5 (i.e., the first display), Petitioner concedes that the peripheral device differs from the one recited in claims 1, 9, 16, and 21 because it does not include the recited "an input device" to allow a user to transfer the image data. Pet. 19. Petitioner contends that "it would have been obvious to a [skilled artisan] to include input device/physical actuator (providing functionality like Ono's remote controller device) with a peripheral device (like communications module 44) for the following reasons." *Id.* (citing Ex. 1002 ¶¶ 85–100).

Petitioner offers as a first rationale for modifying Ono's peripheral device to include the structure (i.e., input device/actuator (e.g., keys)) and functionality (i.e., send a signal to control the transfer of image data from a user's PC to the base node's display) of Ono's remote control: to a skilled artisan, the modification would have been simply arranging old elements

with each performing the same function it had been known to perform to yield a predictable result. Pet. 19–20. Given that input devices and physical actuators “were ubiquitous and commonly incorporated into electronic devices” at the time of the invention, Petitioner contends “[c]ombining Ono’s user input device (remote controller) with Ono’s peripheral device (wireless communications module) could have been accomplished according to known methods (e.g., physically joining remote controller and communications module).” *Id.* at 20 (citing Ex. 1002 ¶¶ 86–92). As combined, Petitioner asserts, each component performs the same function as it did separately—“namely wireless transmission/reception by the communication module and PC selection by the remote controller.” *Id.*

Referring to the background knowledge of a skilled artisan, Petitioner points out that Grimshaw and Uchida demonstrate there was a recognized benefit “to provide a user of an electronic meeting tool with a local input device that would allow control over sharing the content of the user’s computer screen to a shared display.” Pet. 20 (citing Ex. 1002 ¶¶ 87–91); *see also* Ex. 1008 ¶¶ 4, 19–20, 27–28; Ex. 1009 ¶¶ 10–13, 39–40, 70–72. In particular, Petitioner highlights that Grimshaw and Uchida “describe an input device located on a peripheral device, where the input device is a physical actuator that triggers transmission of the user’s computer screen content to a shared display, and thus provide a function like Ono’s remote controller.” *Id.* Petitioner contends that this background knowledge shows that a skilled artisan “would have found it obvious to provide such an input device with the peripheral device in light of this known design incentive.” *Id.* at 20–21 (citing *KSR*, 550 U.S. at 417 (“[I]f a technique has been used to improve one device, and a person of ordinary skill in the art would recognize

that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.”).

Petitioner’s second rationale for why a skilled artisan would have known to modify Ono’s peripheral device in the manner claimed relies on Corbett. *See* Pet. 21–23. “Corbett illustrates that the particular placement of the input device would have been an obvious matter of design choice” because it “discloses a wireless USB flash drive 100 with a transmitter 122 a transmission initiation button 134 to trigger transfer of information to an external device 150.” *Id.* at 21 (citing Ex. 1007 ¶¶ 6, 18, 20, 22–23, 26, 28, 46, Fig. 1; Ex. 1002 ¶¶ 92–100). That configuration, Petitioner asserts, “illustrates similar functionality of a user input device to trigger transmission on a similar wireless peripheral device.” *Id.* (citing Ex. 1007 ¶¶ 22–23; Ex. 1002 ¶ 93). According to Petitioner, the combination demonstrates a “known design option in implementing a similar input device on a similar USB peripheral device.” *Id.* (citing Ex. 1002 ¶¶ 92–97).

Petitioner adds that Ono and Corbett identify a finite number of locations known to be suitable for the kind of input devices involved here, which trigger a transmission from a peripheral device: the host computer, the peripheral device itself, and a remote controller. Pet. 23 (Ex. 1002 ¶¶ 98–100; Ex. 1005 ¶ 66, Ex. 1007 ¶¶ 22–23). As a result, Petitioner contends that “[i]t would have been a ‘predictable variation’ of Ono’s system, using a technique that was known to a [skilled artisan], particularly since the location of the input device solves no stated problem in the art.” *Id.* (citing *KSR*, 550 U.S. at 417; *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1238 (Fed. Cir. 2010) (finding obviousness when “it is simply a matter of common sense” to combine known elements of the prior art to solve a known problem); *In re Kuhle*, 526 F.2d 553, 555 (C.C.P.A. 1975) (relocating

electrical connection “solves no stated problem and would be an obvious matter of design choice”)).

In response, Patent Owner argues that two flaws exist with Petitioner’s contention: (1) Petitioner fails to “consider the implications of this combination on the actual operation of the system as described in Ono; and (2) Petitioner fails to establish sufficiently that a skilled artisan “would be motivated to arrive at the Ono-Corbett combination.” PO Resp. 19–20 (citing Ex. 2004 ¶ 74).

First, Patent Owner asserts “Ono ‘seeks to provide an image display system including a plurality of information terminal apparatuses connected to a wire or wireless network and an image display apparatus, wherein switching among the plurality of networked information terminal apparatuses and selecting a desired information terminal apparatus therefrom can be performed from the side of the image display apparatus, and image information from the desired information terminal apparatus can be displayed on a display section of the image display apparatus.’” PO Resp. 20 (citing Ex. 1005 ¶ 8). Patent Owner notes that, in Ono, once the information terminal apparatus is selected using remote controller 69, the control section of projector 60 generates a connection request for the selected information terminal apparatus, which is transmitted to the apparatus. *Id.* at 21 (citing Ex. 1005 ¶ 46; Ex. 2004 ¶ 77). That connection request signal is then either accepted or denied based on if connection is possible; if denied, then no image data is transmitted and, if accepted, then the image data is transmitted. *Id.* at 21–22 (citing Ex. 1005 ¶¶ 47, 96; Ex. 2004 ¶ 78).

Patent Owner argues that “[i]mplementing the functionality of Ono’s remote control device into each of Ono’s PC communication modules (as

proposed by the Petition) would not result in a predictable or workable solution.” PO Resp. 22 (citing Ex. 2004 ¶ 80). Because each communication module would perform the functions of the selecting section of projector 69, Patent Owner asserts, “[t]his would require selecting which information terminal device should share content, as well as controlling the display of the content.” *Id.* (citing Ex. 1005 ¶¶ 66, 68, 70; Ex. 2004 ¶ 81). Petitioner’s contention is deficient, Patent Owner asserts, because there is “no articulation of how the projector would navigate multiple competing or conflicting commands from the different communication modules.” *Id.* (citing Ex. Pet. 19–23; Ex. 1002 ¶¶ 85–100; 2004 ¶ 81).

Patent Owner additionally argues that “the proposed modification ignores the objective of Ono: to provide a system where ‘selecting a desired information terminal apparatus therefrom can be performed *from the side of the image display apparatus*’ by forcing the functions of the selector section into the communications module.” PO Resp. 23 (Ex. 1005 ¶ 8; Ex. 2004 ¶ 82). “Rather than allow the image display apparatus to provide the selection functionality, which is the primary objective of Ono,” Patent Owner argues that Petitioner “proposes eliminating that functionality, which . . . a [skilled artisan] would not have been motivated to do.” *Id.* (citing Ex. 2004 ¶ 82).

“Solutions to these issues are also not suggested by Corbett,” according to Patent Owner. PO Resp. 23 (citing Ex. 2004 ¶ 83). Patent Owner argues that “Corbett does not contemplate multiple devices capable of sharing content to the same device (in fact, it’s entirely focused on a single device connecting to a single USB).” *Id.* (citing Ex. 2004 ¶ 83; Ex. 1007). “Not only does Corbett not describe more than one USB flash device, it does not describe presenting content but instead is just for sharing

a generic data signal.” *Id.* (citing Ex. 1007, code (57); Ex. 2004 ¶ 83). And despite Petitioner’s belief “that any kind of data can be used with any kind of connection in any setting,” Patent Owner states that a skilled artisan “would not find this to be true.” *Id.* (citing Ex. 2006, 101:1–5; Ex. 2004 ¶ 83). Because Petitioner fails to provide solutions to these identified problems with the proposed combination, Patent Owner concludes, a skilled artisan “would not be motivated to make the Ono-Corbett combination.” *Id.* at 24.

Second, regarding modifying Ono to include an input device on its connection modules, Patent Owner argues that “the input device in Corbett does not perform the same function as the input device in the ’951 Patent” because “[t]he button in Corbett does not transfer arbitrary media content to be used for display on a base node.” PO Resp. 24 (citing Ex. 1007 ¶ 23; Ex. 2004 ¶ 85). “In Corbett, ‘[u]pon selection of the transmission initiation selector, the transmitter 122 may transmit all or a portion of the data stored in the computer readable medium 112 to the external device 150.’” *Id.* (citing Ex. 1007 ¶ 23). Patent Owner argues that “[t]here is no discussion of presenting arbitrary media content, rather than the already defined media content based on what is stored in the flash driver 112.” *Id.* (citing Ex. 2004 ¶ 85; Ex. 1007). And “implementing the input devices and control functions of Ono’s remote into Ono’s PC communication module is not simply the same components performing the same function.” *Id.* at 24.

Regarding the background knowledge shown by Grimshaw and Uchida, Patent Owner argues that the supporting evidence “in no way explain[s] why such implementation is more desirable than the system already used by Ono.” PO Resp. 25 (citing Ex. 1002 ¶¶ 87–91; Ex. 2004 ¶ 86). In fact, according to Patent Owner, Petitioner “completely ignores

that Ono sought a system ‘wherein switching among the plurality of networked information terminal apparatuses and selecting a desired information terminal apparatus therefrom can be performed from the side of the image display apparatus,” and “fails to explain how there was a ‘known desirability,’ much less explain how this known desirability outweighs the stated goals explained in Ono.” *Id.* (citing Ex. 1005 ¶ 8; Ex. 2004 ¶ 86).

Lastly, Patent Owner argues that Petitioner’s representation that “[b]uttons and other physical actuators were conventionally located any place reasonably convenient to the user” (Ex. 1002 ¶ 92), “does nothing to establish any design need or market pressure that supports his alleged combination.” PO Resp. 25 (citing *Virtek Vision Int’l ULC v. Assembly Guidance Sys., Inc.*, 97 F.4th 882, 888 (Fed. Cir. 2024) (reversing the PTAB where the petition provided “nothing other than an assertion that because two coordinate systems were disclosed in a prior art reference and were therefore ‘known,’ that satisfies the motivation to combine analysis.”)). “Other than baseless conclusions,” Patent Owner asserts that Petitioner fails to present a motivation to combine various prior art references in order for a skilled artisan to make the claimed invention. *Id.* at 26.

Patent Owner concludes, “[a]n alteration to Ono to move the input device from the remote to the communications unit is not a simple design choice, but instead a hindsight-based decision, amounting to nothing more than selecting exactly what was claimed out of an innumerable list of alternatives that are also ‘reasonably convenient’ to the user.” PO Resp. 26 (citing Ex. 2004 ¶ 88).

In its Reply, Petitioner states that it did explain “how and why the [skilled artisan] would have combined Ono and Corbett” as follows:

- Ono discloses a remote control or buttons on a projector to select the source of data to be transmitted. Ex. 1005 ¶¶ 83, 161.
- Corbett discloses a similar peripheral device that transmits data to an external device and recognizes that a user input device for triggering data transmission could be displayed on a host computer or a physical actuator. Ex. 1007 ¶¶ 17–20, 22–23.
- Corbett is from the same field of endeavor of peripheral devices for wireless data transmission as the '951 patent and is pertinent to the problem of improving the wireless transfer of data purportedly being solved by the '951 patent.

Pet. Reply 7–8. Petitioner contends, “[i]t would have been obvious to transfer media content data using either method because there were a finite number of identified, predictable solutions for triggering media content transfer, each with the predictable result of transmitting media content data for display.” *Id.* (citing Ex. 1008 ¶ 19; Ex. 1009 ¶¶ 70–72; Ex. 1083 ¶¶ 6–10).

Petitioner notes “Ono acknowledges that it would be possible ‘for each presenter to carry out output on/off operations at each information terminal apparatus,’” and teaches that those operations are “unnecessary” when the remote control is used. Pet. Reply 8 (citing Ex. 1005 ¶¶ 161, 144). Petitioner contends that “[t]his is not a teaching away from having each user trigger transfer of media content because the fact that better alternatives exist in the prior art does not mean that an inferior combination is inapt for obviousness purposes.” *Id.* at 9 (internal quotation marks omitted).

Patent Owner’s attacks on the combination of Ono and Corbett because Corbett does not disclose transferring arbitrary media content are misplaced, Petitioner argues, because “nothing in Corbett prevents the data stored in the peripheral device from being arbitrary media content that a user wishes to share for display,” and Corbett modifies Ono, which does disclose

transmitting arbitrary media content triggered by a user action on an input device. Pet. Reply 10 (citing Ex. 1083 ¶ 8; Ex. 1007 ¶¶ 17–20, 22–23). And Petitioner states that Patent Owner incorrectly argues that “there was no design need to modify Ono’s ‘peripheral device’ to include the ‘input device’” because “Grimshaw and Uchida both illustrate the desirability in the art and thus provide a specific design incentive to make the proposed modification to Ono’s wireless communications module.” Pet. Reply 11 (citing Ex. 1008 ¶ 19; Ex. 1009 ¶¶ 70–72).

In its Sur-reply, Patent Owner highlights that Ono unambiguously states—“*wherein switching among the plurality of networked information terminal apparatuses and selecting a desired information terminal apparatus therefrom can be performed from the side of the image display apparatus.*” PO Sur-reply 8 (citing Ex. 1005 ¶ 8). “Despite the clear objective described in Ono,” Patent Owner criticizes Petitioner advocating that a skilled artisan would have “abandon[ed] Ono’s system where the image display apparatus manages the selection of the displayed content, in favor of one where the communications modules connected to the information terminal apparatuses control image display.” *Id.* at 8–9 (citing Ex. 2033, 44:11–18 (Dr. Almeroth opining that there is no motivation to combine when “there is a particular objective of the primary reference that would be undermined by considering – by trying to combine it with a secondary reference”), 45:7–15, 59:16–60:4).

Furthermore, Patent Owner criticizes Petitioner’s failure to “provide an explanation for how Ono could be modified in this way and still enable ‘switching among the plurality of networked information terminal apparatuses.’” *Id.* at 9 (citing Ex. 1005 ¶ 8). Patent Owner’s position regarding Ono’s statement that its remote controller 69 makes it unnecessary

for the user to carry out output on/off operations to control the transmission and display of image data (Ex. 1005 ¶ 161) is that, rather than “support the conclusion that Ono’s system could manage communications from this terminal,” “it confirms the opposite.” *Id.*

And regarding Petitioner’s reliance on Grimshaw and Uchida to shown a recognized desire to locate Ono’s selection input device on its peripheral device, Patent Owner states that the cited Grimshaw/Uchida passages (Ex. 1008 ¶ 19; Ex. 1009 ¶¶ 70–72) “amount to nothing more than a disclosure that buttons and switches in presentation systems exist, which, with nothing more (as is the case in the Petition), cannot be the basis for unpatentability.” *Id.* at 10. Patent Owner concludes, “[t]here is no basis (articulated or otherwise) to modify Ono based on these disclosures when Ono itself renders it ‘unnecessary for each presenter to carry out output on/off operations at each information terminal apparatus in accordance with the order.’” *Id.* at 11 (citing Ex. 1005 ¶ 161).

After studying and weighing the evidence of the complete record that has now been developed, and in view of both parties’ arguments, we find Petitioner has persuasively shown that modifying Ono’s peripheral device (i.e., communications module 44) to include an input device/physical actuator like the one described for Ono’s remote controller 69 to control the display of image data from a particular user’s computer would have been obvious to a skilled artisan at the time of the invention. More specifically, Petitioner has shown persuasively Ono shows that the use of an input device/physical actuator to send a signal that causes a participant’s computer to transmit and control the image data presented on a shared display in an image display system was a known technique (*see* Ex. 1005 ¶¶ 7, 44–48, 66–71, 77–78, 80–89, 144, Figs. 3, 6, 8, 9; Ex. 1002 ¶¶ 85–100, 121–127) and

that Corbett demonstrates that a peripheral device was known to be an available location for such an input device/physical actuator to initiate the transmission of data (*see* Ex. 1007 ¶¶ 6, 18, 20, 22–23, 26, 28, 46, Fig. 1; Ex. 1002 ¶¶ 92–100). Petitioner has also persuasively shown that a skilled artisan recognized benefits to giving a participant the ability to locally control the display of their computer’s image data. *See* Ex. 1002 ¶¶ 87–91; Ex. 1008 ¶¶ 4, 19–20, 27–28; Ex. 1009 ¶¶ 10–13, 39–40, 70–72.

When Ono and Corbett are considered together as a whole from the perspective of a skilled artisan, therefore, it is clear that applying a similar input device/physical actuator to Ono’s peripheral device would have been recognized to result in the benefit of providing a participant with the same ability to send a signal that causes a participant’s computer to transmit and control the image data presented on a shared display from their computer within an image display system. As a result, a motivation has been established because the combination is an application of a known technique to derive a known benefit using prior art elements according to their established functions. *Intel Corp. v. PACT XPP Schweiz AG*, 61 F.4th 1373, 1380 (Fed. Cir. 2023).

Patent Owner’s alleged deficiency, that Petitioner failed to articulate how the projector would navigate multiple competing or conflicting commands from the different communication modules, is not moving because it relies on an unclaimed feature—no recited limitation requires “the projector [to] navigate multiple competing or conflicting commands from the different communication modules.” PO Resp. 22. In fact, the challenged claims do not even require “multiple different communication modules;” instead, the challenges claims recite either “at least one peripheral device” or “a peripheral device” indicating the scope of the claims covers a

system with a single peripheral device. Ex. 1001, 27:51, 28:51, 29:34–35, 30:24. Patent Owner’s argument is therefore not commensurate with the scope of the claims. Furthermore, Patent Owner’s argument lacks a basis to find that navigating multiple competing or conflicting commands from different peripheral devices would have presented a significant obstacle to a skilled artisan’s implementation of the proposed combination, and that Grimshaw/Uchida suggest resolution of those conflicts was well within the abilities of a skilled artisan. *See* Ex. 1008 ¶¶ 4, 19–20, 27–28; Ex. 1009 ¶¶ 10–13, 39–40, 70–72; Ex. 1002 ¶¶ 87–91.

Patent Owner’s criticism of Petitioner’s rationale as being inconsistent with Ono’s intention to provide control from the side of the image display apparatus is equally unavailing because, under the correct analysis, any need known in the field of endeavor at the time of invention can provide a reason for combining the elements in the manner claimed. *KSR*, 550 U.S. at 420 (“Under the correct analysis, any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed.”). Applying the correct analysis, we find Petitioner has shown there was a recognized need for image display systems to provide display controls to a user at their location and that providing an input/actuator device on a peripheral device coupled to the user’s computer to provide that control would have been a known solution. *See* Ex. 1008 ¶¶ 4, 19–20, 27–28; Ex. 1009 ¶¶ 10–13, 39–40, 70–72; Ex. 1002 ¶¶ 87–91. Put another way, the fact that Ono was motivated by a different goal than the goal motivating the skilled artisan under Petitioner’s proposed rationale is not disqualifying because the law does not require uniformity of intent. *Kahn*, 441 F.3d at 990.

Furthermore, we do not agree with Patent Owner that Ono teaches away by stating that the remote control makes it *unnecessary* to initiate and control image data transmission from the participant's computer. Even accepting that statement as true, it does not suggest that it would *never* be necessary for a participant to initiate and control the transmission image data. Common sense suggests that there would be times that all participants would be located at their respective computers without anyone at the side of the projector to operate Ono's remote control, and, thus, there would be a necessity for the participants to have local control. Moreover, we find a skilled artisan would view Ono's "unnecessary" remark to suggest a belief that the functionality of the disclosed remote control provides a benefit, rather than discouraging against *also* providing participants with the ability to control and initiate the transmission of their image data to a shared display. We are not persuaded that the two functionalities cannot coexist and be workable together, even accepting there may be some drawbacks are created by their coexistence in some instances.

Finally, Patent Owner's argument against Petitioner's reliance on Corbett because it includes no discussion about presenting arbitrary media content, rather what is already stored in the flash driver, has little weight because it focuses on Corbett individually. *See* PO Resp. 24. "Where, as here, the grounds for obviousness are based on a specific combination of references, arguments that attack the disclosures of the two references individually lack merit." *Palo Alto Networks, Inc. v. Centripetal Networks, LLC*, 122 F.4th 1378, 1386 (Fed. Cir. 2024) (internal quotation marks omitted)

In conclusion, for the foregoing reasons, we determine that Petitioner has shown compelling reasons why a skilled artisan would have included an

input device/physical actuator (providing functionality like Ono's remote controller device) with a peripheral device (like communications module 44), as recited by each independent claim. And after weighing Petitioner's showing against Patent Owner's objective evidence, which we discuss in detail below, we are persuaded that Petitioner has carried its burden and shown that it would have been obvious to modify Ono's peripheral device in the manner claimed.

2. *Ono Discloses or Suggests an Input Device Triggering the Transfer of the User Selected Arbitrary Media Content*

Each of the independent claims in this proceeding recite substantially the same following limitation:

an input device configured to allow the user to carry out a user action on the input device that triggers transfer of said user selected arbitrary media content from the transmitter to the wireless communications network and to the base node through the wireless communications network for display on the first display

Ex. 1001, 27:62–28:1 (claim 1), 28:62–67 (claim 9), 29:42–46 (claim 16), 30:36–44 (claim 21). Petitioner contends Ono discloses the above input device limitation:

Ono . . . discloses *an input device* (remote controller 69) *configured to allow the user to carry out a user action* (e.g., pressing up or down selection key on the operation section of the remote controller 69 and pressing the confirm (enter) key) *on the input device that triggers transfer of said user selected arbitrary media content* (image information) *from the transmitter to the wireless communications network and to the base node* (e.g., wireless communications module 40 and control section 61) *through the wireless communications network for display on the first display* (e.g., an image display apparatus 1 including, e.g., an image signal output section 65 and screen 5).

Pet. 31 (citing Ex. 1005 ¶¶ 44–48, 66–71, 77–78, 80–89, Figs. 3, 6, 8, 9; Ex. 1002 ¶¶ 121–127); *see also id.* at 32. Petitioner identifies additionally that “Ono discloses that, once the desired PC is connected, remote controller 69 may fast-forward/rewind images on the PC screen and, in conjunction therewith, the images projected on screen 5” and concludes that a skilled artisan “would have understood this fast-forwarding/rewinding to trigger additional transmissions of image information.” *Id.* at 33 (citing Ex. 1005 ¶ 70; Ex. 1002 ¶ 127).

Patent Owner responds by arguing that Ono’s remote controller 69 does not “trigger” the transfer of the arbitrary media content because it merely causes projector 60 to generate a connection ***request signal*** for the transfer of media content, and that request can be either accepted or rejected by the user’s computer. PO Resp. 27 (citing Ex. 1005 ¶¶ 45, 83, 91; Ex. 2004 ¶ 90–91). In Patent Owner’s words, remote controller 69 “does not trigger the transfer of content, it requests the transfer of content, with intervening steps involved until the content is either transferred or not transferred;” “[m]erely opening the door for further decision trees, some of which may and some of which may not lead to the transfer of content cannot be said to ‘trigger’ the transmission of anything.” *Id.* (citing Ex. 1005, Figs. 9–15; Ex. 2004 ¶¶ 91–93).

In its Reply, Petitioner counters that Figure 9 of Ono “indisputably illustrates a process that begins with and thus is triggered by a user pressing a button followed by an ‘image transfer’ from a PC to a projector.” Pet. Reply 11–12. Petitioner argues that “[t]he fact that a connection might fail in some circumstances is irrelevant” because “the claims of the ’951 patent do not require 100% reliability when actuating the input device to trigger a transfer.” *Id.* at 12.

In its Sur-reply, Patent Owner refers to the Institution Decision in this matter and highlights that “the Board recognized that [Patent Owner’s] argument with respect to this limitation had merit.” PO Sur-reply 12 (citing Paper 12, at 20). Patent Owner adds that it is “a strawman argument” to suggest Patent Owner is suggesting a connection may never fail. *Id.* Ono does not show the recited “trigger,” Patent Owner argues, “not because its transmissions may fail,” but because the disclosed remote controller 69 “generates a connection request signal that requires subsequent action to occur to before content can be transferred”—“It does not trigger the transfer of content. It merely requests a process that has multiple subsequent steps that ultimately could lead to the transfer of content.” *Id.* (citing Ex. 1005 ¶¶ 45, 83; Ex. 2004 ¶ 91).

After studying and weighing the evidence of the complete record that has now been developed, and in view of both parties’ arguments, we find Petitioner has persuasively shown Ono discloses an input device configured to allow a user to carry out a user action on an input device that triggers the transfer of user selected arbitrary media content from the peripheral device’s transmitter to the wireless communications network and to a base node through the wireless communications network for display by the projector’s screen. *See* Ex. 1005 ¶¶ 44–48, 66–72, 77–78, 80–89, Figs. 3, 6, 8, 9; Ex. 1002 ¶¶ 121–127.

Starting where we left off in the Institution Decision, Patent Owner is correct that *at the preliminary stage of this proceeding* we found Patent Owner’s argument regarding “trigger” to have merit, but we also clearly indicated we wanted the parties to “further address with more specificity why, or why not, Ono’s description of a connection request signal is within the scope of the recited trigger.” Paper 12, at 20. Neither party actually

complied with that request, however. At most, Petitioner added some clarity that, from their perspective, the plain meaning of the term “trigger” does not exclude intervening steps between a user’s action on an input device and the ultimate transfer of the user selected arbitrary media content. Pet. Reply 11–12 (indicating that “trigger” encompasses “a process that begins with and thus is triggered by a user pressing a button followed by an ‘image transfer’ from a PC to a projector”). For its part, Patent Owner maintains (at least implicitly) that intervening steps are excluded from the plain meaning. Neither party addresses with more specificity why, or why not, the scope of “trigger” supports their positions, however. Having now the complete record before us, we find that our preliminary assessment was wrong because the plain meaning of the term “trigger” *does not* exclude intervening steps between the cause-and-effect relationship of the trigger and the result it is intended to cause.

Take, for example, a simple gun. Pulling the “trigger” to fire a gun necessarily includes intervening steps to occur: the trigger releases a hammer that, in turn, contacts a blasting cap within a bullet casing, which is what actually causes the gunpowder to ignite (i.e., fire) and expel the bullet. And there is no evidence in this record to suggest that this customary understanding of the word “trigger” is any different in the electrical arts, other than the trigger and result are generally electrical in nature, rather than mechanical. We find no clear disavowal of claim scope within the intrinsic record of the ’951 patent to indicate that the term “trigger” was intended to be understood any differently to exclude any intervening steps between a user’s action on an input device and the resulting transfer of user selected arbitrary media content.

The context in which “trigger” is used in the claims actually suggests intervening steps would exist because the input device does not actually do the transferring of the media content; instead, the claims recite the transferring is “*from the transmitter to the wireless communications network and [then] to the base node.*” See Ex. 1001, 11:3–48, 27:62–28:1 (claim 1), 28:62–67 (claim 9), 29:42–46 (claim 16), 30:36–44 (claim 21) (emphasis added). A skilled artisan would have recognized that there would be intervening steps between the input device being acted upon and the content being displayed by base node’s display. See Ex. 1083 ¶¶ 11–12. In the claims, the input device is analogous to a gun’s trigger, the user carrying out a user action on the input device is analogous to pulling a gun’s trigger, and the transfer of user selected arbitrary media content is analogous the gun expelling a bullet. In both cases, there can be, and usually are, intervening steps, moreover, in both cases, inadvertent things can happen that may prevent the intended result (e.g., in the case of a gun, the hammer can jam; in the case of an input device, a connection can be rejected). Nevertheless, in both cases, the trigger is the thing that *initiates* an automated process that leads to a particular result, unless a conditional error occurs.

Turning to the evidence presented from Ono, Patent Owner does not contest that Ono shows an input device configured to allow a user to carry out a user action on an input device that *initiates a process intended to cause* the transfer of user selected arbitrary media content from the peripheral device’s transmitter to the wireless communications network and to a base node through the wireless communications network for display by the projector’s screen. See PO Sur-reply 12 (describing Ono’s remote controller 69 as “merely request[ing] a process that has multiple subsequent steps that ultimately could lead to the transfer of content”). We likewise find that

Petitioner’s evidence shows persuasively that Ono’s remote controller 69 discloses an input device configured to allow a user to carry out a user action on an input device that *initiates a process intended to cause* the transfer of user selected arbitrary media content, as recited. *See* Ex. 1005 ¶¶ 44–48, 66–72, 77–78, 80–89, Figs. 3, 6, 8, 9; Ex. 1002 ¶¶ 121–127.

Therefore, because the plain meaning of the term “trigger” does not exclude intervening steps and because there is no dispute that the input device Ono discloses initiates an automated process to cause the transfer of user selected arbitrary media content, we are persuaded that Petitioner has carried its burden to show Ono discloses the recited input device.

3. *Ono Discloses or Suggests a Base Node Integrated in the Display*

Claims 2, 8, 10, 17, and 21 each recite “a base node integrated into the display.” Ex. 1001, 28:3–4; 28:40–41; 10:1–2; 30:18–19. Petitioner contends that “Ono discloses *said base node* (‘wireless communications module 40’ and ‘control section 61’) *is integrated in the first display* (‘image display apparatus 1’).” Pet. 33 (citing Ex. 1005 ¶¶ 42–43, 50–52, 89, Figs. 1–3, 6, 7, 9; Ex. 1002 ¶¶ 128–130). Petitioner contends that its position is reenforced “because the ’951 patent describes a similar example base node-display arrangement as ‘integrated.’” *Id.* at 33–34 (citing Ex. 1002 ¶¶ 128–130).

Petitioner adds that a skilled artisan “would have also known that integration of components was a common design choice that would have reduced complexity by eliminat[ing] the need for a separate wireless communications module and the need to couple it to the projector.” Pet. 34 (citing Ex. 1002 ¶¶ 128–130). The motivation “to integrate a base node (like Ono’s communications module 40 and control section 61) with a display (e.g., Ono’s projector 60)” comes from the wanting to have “reduced

complexity and eliminate the need for the wireless module as a separate device.” *Id.* Petitioner contends that a skilled artisan would have had a reasonable expectation of success in achieving such integration because “it would have involved the use of known components and known techniques that were within the conventional knowledge and abilities of a [skilled artisan].” *Id.*

In response, Patent Owner argues that Petitioner failed to present “any evidence of a base node integrated into a display” because all Petitioner’s evidence shows is that the “base node is part of a **projector** 60, but the projector is not a display.” PO Resp. 27–28. Patent Owner states, “[i]ndeed, a projector projects an image onto a screen, like screen 5 in Fig[ure] 6.” *Id.* at 28 (citing Ex. 1005 Fig. 6; Ex. 2004 ¶¶ 94–95).

In its Reply, Petitioner dispels Patent Owner’s argument that Ono fails to disclose “a base node integrated into the display” because, to a skilled artisan, a “projector is not a display,” by pointing to the representation made in the 951 patent, which states “[t]he display 44 may be a projector and screen.” Pet. Reply 13 (citing Ex. 1001, 14:37–38; Ex. 1083 ¶¶ 13–14). Petitioner directs attention to the ’951 patent and its explanation that “the base node is not realized as a separate physical box, but [is] **integrated into the processing unit inside a display or projector,**” regarding one of its preferred embodiments. *Id.* at 14 (citing Ex. 1001, 24:51–54 (emphasis added by Petitioner)). “Based on this, a [skilled artisan] would have understood that, when the display is a projector and a screen and the ‘base node is integrated in the first display,’ the base node is integrated in the projector without requiring the base node to also be integrated into the screen.” *Id.*

In its Sur-reply, Patent Owner counters:

The '951 Patent indicates that in an unclaimed embodiment, “a display 44 may be a projector and screen.” Ex. 1001, 14:37–38. This embodiment is not claimed in Claims 2, 8, 10, 17, and 21, which require the integration of a base node into the display. In Claims 2, 8, 10, 17, and 21, the base node is integrated into the display, not a portion of the display. In other words, Claims 2, 8, 10, 17, and 21 are directed towards displays such as TVs or other similar devices with integrated base nodes. A base node integrated into a projector does not render obvious this limitation.

PO Sur-reply 13–14.

After studying and weighing the evidence of the complete record that has now been developed, and in view of both parties' arguments, we find Petitioner has persuasively shown Ono discloses “a base node integrated into the display.” *See* Ex. 1005 ¶¶ 42–43, 50–52, 89, Figs. 1–3, 6, 7, 9; Ex. 1002 ¶¶ 128–130. Patent Owner concedes Ono discloses a base node that is part (i.e., integrated) of projector 60, which, with screen 5, comprises a display. Patent Owner's argument—base node integrated into a projector does not disclose this limitation—is unavailing. The '951 patent specification is unambiguous that “a display 44 may be a projector and screen” (Ex. 1001, 14:37–38) and a skilled artisan would understand, in this context, that the recited display in claims 2, 8, 10, 17, and 21 encompasses the projector 60/screen 5 combination that Ono discloses. Patent Owner's argument therefore is not commensurate with the scope of its claims.

Therefore, we are persuaded that Petitioner has carried its burden to show Ono discloses “a base node integrated into the display.”

4. *Conclusion*

For the foregoing reasons, we find Petitioner has shown persuasively by a preponderance of the evidence that claims 1–4, 6–11, and 13–21 are unpatentable because Ono and Corbett demonstrate that each of those claims

challenged recite nothing more than what at the time of the invention would have been a predictable use of prior art elements according to their established functions.

F. Ground 2 (Uchida and Grimshaw): Claims 1–10, and 14–21

For Ground 2, Petitioner, supported by its expert declarant, provides a thorough element-by-element analysis of challenged claims 1–10 and 14–21 that maps each element to support from Uchida and explains why any differences would have been an obvious modification of old elements, as evidenced by Grisham, rearranged with each performing the same function it had been known to perform to yield no more than what a skilled artisan would have expected from such an arrangement. *See* Pet. 46–67.

Patent Owner argues that three deficiencies exist with Petitioner’s analysis of the claims challenged in Ground 2, but otherwise Petitioner’s contentions are left uncontested. *See* PO Resp. 35–47. The three alleged deficiencies are as follows: (1) Petitioner failed to establish an appropriate reasoning for why a skilled artisan would have modified Uchida in view of Grimshaw (*id.* at 39–43); (2) Petitioner failed to establish Uchida and/or Grimshaw disclose or suggest triggering the transfer of the user selected arbitrary media content, as recited by claims 1, 9, 16, and 21 (*id.* at 44–46); and (3) Petitioner failed to establish Uchida and/or Grimshaw disclose or suggest that the base node is integrated in the first display, as recited by claims 2, 10, 17, and 21 (*id.* at 46–47).

Now having a complete record and having studied all of the parties’ evidence and arguments, we find Petitioner has shown persuasively that claims 1–10 and 14–21 are unpatentable because Uchida and Grimshaw establish that the claims recite nothing more than what at the time of the invention would have been the predictable use of prior art elements

according to their established functions. For those uncontested elements, we adopt in full Petitioner's contentions regarding the specific evidence identified from Uchida and/or Grimshaw to disclose or suggest the respective element, including how a skilled artisan would have understood the evidence to disclose or suggest the element, as support by Petitioner's expert. Pet. 49–57, 60–67; Ex. 1002 ¶¶ 79–84, 169–179. For the contested elements and reasons for combining Uchida and Grimshaw, we address each in turn below to explain why we find Petitioner's contentions persuasive and sufficient to carry their burden in this proceeding.

1. The Reasons for Modifying Uchida in the Manner Claimed

Uchida discloses a method to facilitate wireless communication connection between an image projection device to a computer device. Ex. 1009, code (57); Ex. 1002 ¶¶ 161–168. For context and frame of reference, Petitioner provides annotated versions of Uchida's Figures 1 and 3, reproduced below.

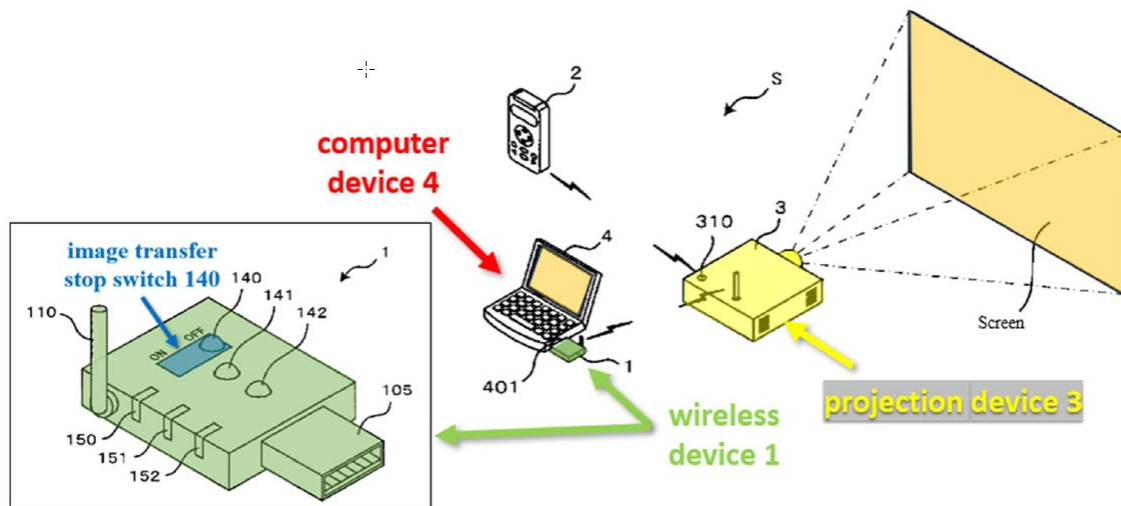


Figure 1 is a basic configuration diagram of Uchida's image display system S and Figure 3 shows an embodiment of wireless device 1. Ex. 1009 ¶ 195. As illustrated in annotated Figure 1, wireless device 1 (green), which is

shown more clearly in annotated Figure 3 to include a USB connector 105, wireless communication unit 107, and an image transfer stop switch 140 (blue), couples to computer device 4 to wirelessly transfer image information through the wireless communications network to image projection device 3 (yellow). *Id.* ¶¶ 66–72. “And although Uchida contemplates multiple computers and wireless devices connected to the image projection device, for example in a conference setting,” Petitioner concedes that “Uchida does not specifically address a scenario where multiple users are vying for control over the display to project images from their individual computers.” Pet. 46 (citing Ex. 1009 ¶¶ 3–12, 36–37, 58, 112, 122, 186; Ex. 1002 ¶¶ 161–168). Petitioner contends, however, that Grimshaw “specifically addresses such a scenario and provides suitable solutions.” *Id.* at 47 (citing Ex. 1002 ¶¶ 161–168).

Grimshaw discloses a communication system for conferencing purposes. Ex. 1008, code (57). For context and frame of reference, Petitioner also provides an annotated version Grimshaw’s Figure 1, reproduced below.

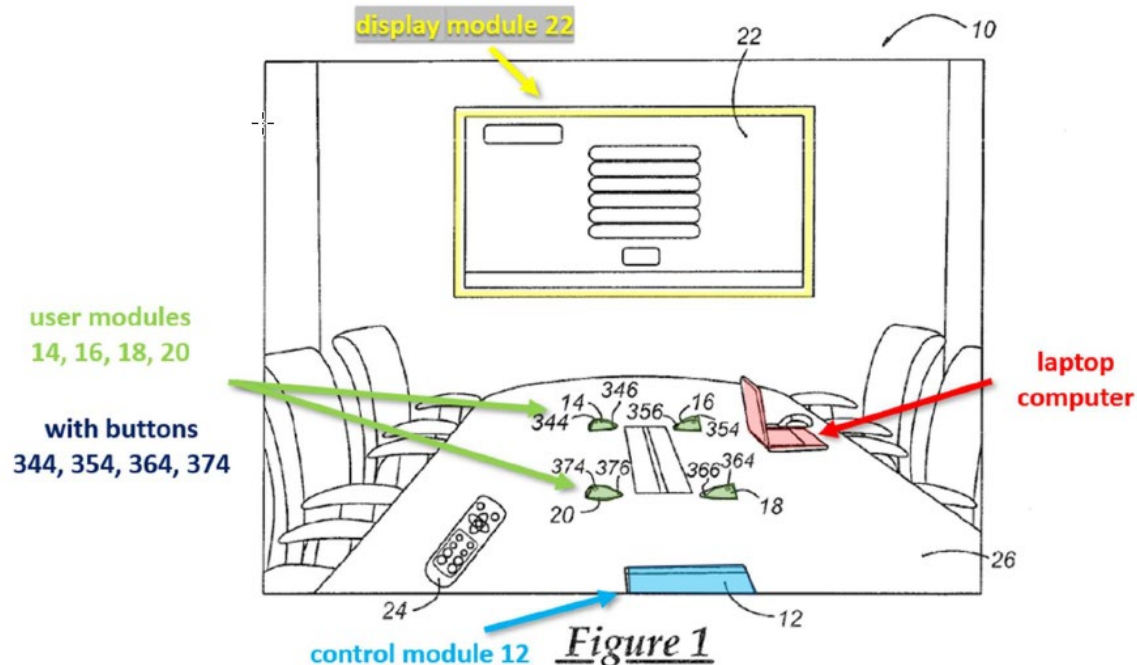


Figure 1 shows an “exemplary embodiment of [Grimshaw’s] communication system that is integrated within a conference table” (*id.* ¶ 8), which Petitioner annotated to identify the user modules 14, 16, 18, 20 (green), including their actuator buttons 344, 354, 364, 374, that connect to each of the respective users’ computers around the table to allow a user to take control of a common display module 22 and display the contents of the user’s computer screen. *Id.* ¶ 8. In a scenario where multiple users having separate computers are connected to their respective user modules 14, 16, 18, 20 and vying for control of the display module 22, Grimshaw explains, “a user may engage or push a button 344, 354, 364, 374 on their user module in order to take control of display module 22 (e.g., display module 22 could show whatever is currently being displayed on the screen of the laptop computer connected to the selected user module).” Pet. 48 (citing Ex. 1008 ¶¶ 19–20). Petitioner contends that this shows there was at the time of the invention a recognized “desire for attendees at a meeting to have individual

control over sharing the content from their laptop and to present it on the shared display, by pushing a button on their user module to trigger transmission of the image data from the laptop to the display.” *Id.* (citing Ex. 1008 ¶¶ 19–20, 27–28, Figs. 1–3; Ex. 1002 ¶¶ 164–166).

Petitioner contends, in view of the background knowledge Grimshaw evidences, a skilled artisan “would have found it obvious to implement a wireless device (like that of Uchida) with a physical actuator (input device) that triggers transfer of media content from a wireless device to an image projection device through the wireless communications network, as recited in claims 1, 9, 16, and 21.” Pet. 48 (citing Ex. 1002 ¶¶ 164–168). Petitioner contends that “[s]uch a modification would have been desirable to address the scenario where multiple users wish to take control of a shared display to present image data from their computer (i.e., share their screen with the group).” *Id.* at 48–49. Petitioner contends that, because “Uchida’s wireless device 1 already provides much of this functionality,” “any modification to Uchida’s wireless device would have been relatively minor and straightforward”; for example, “[t]he takeover functionality described by Grimshaw could have been implemented according to known methods.” *Id.* at 49. Therefore, Petitioner concludes, a skilled artisan “would have had a reasonable expectation of success in achieving the claimed combination given the relatively simple modification to a wireless device like that of Uchida.” *Id.*

In response, Patent Owner criticizes Petitioner’s reliance on a scenario for Uchida’s disclosed image display system in which users are “vying for control” because that scenario “does not exist based on the operation of Uchida, nor would a [skilled artisan] consider Uchida to be applicable to such a situation, due to the pairing teachings of Uchida.” PO Resp. 39–40

(citing Ex. 2004 ¶ 131). Patent Owner asserts that “[t]he control functions of the projector in Uchida are managed by the remote control [2].” *Id.* at 40 (citing Ex. 1009 ¶¶ 13 (“[T]he present invention provides . . . a remote control device that remotely controls the operation of the image projection device.”), 92, Fig. 4; Ex. 2004 ¶ 132). Pointing to the functionality of start-up control button 231 on Uchida’s remote control device 2, which issues start and stop instructions to the image projection device to control its operation, Patent Owner asserts that “[t]he actual control of presentation information [in Uchida] is centralized.” *Id.* at 41 (citing Ex. 1009 ¶¶ 13, 45; Ex. 2004 ¶ 134).

Patent Owner explains that, “[w]hen transmission from multiple computer devices is desired, the same wireless setting information is shared to the multiple wireless devices before they are connected to the computer devices.” PO Resp. 41 (citing Ex. 1009 ¶ 58). “[T]here is no issue involving ‘multiple users vying for control,’” Patent Owner argues, because “the same start-up control button 231 on a single remote would be use[d] to start and stop the image projection system, such that there is centralized control.” *Id.* (citing Ex. 1009 ¶¶ 13, 45; Ex. 2004 ¶ 134). According to Patent Owner, “[u]sers cannot vie for control when only one person has control—the person holding the remote control device.” *Id.* at 41–42 (citing Ex. 1009 ¶ 45). As a result, Patent Owner argues that “[t]he problem which allegedly motivates a [skilled artisan] to combine the references is fabricated by [Petitioner] and cannot be the basis to modify Uchida.” *Id.* at 42.

Patent Owner reasons that “this centralization is consistent with Uchida’s intention to avoid inadvertent transmission of image data.” PO Resp. 42 (citing Ex. 2004 ¶ 136; Ex. 1009 ¶ 31 (“Thus, even if an image projection device is used for a conference such as a presentation, and

computer devices of an unspecified number of participants are used, it is possible to prevent image data from being mistakenly sent from a computer device that has previously used the image projection device and then sent from the image projection device”)). Patent Owner argues that a skilled artisan “would not consider decentralizing the image sharing process, but instead would have maintained this centralized control at the remote control device.” *Id.* (citing Ex. 2004 ¶ 137). Patent Owner argues that “[a]llowing any other user to override a presenter, as Grimshaw is designed to do, would counteract the steps taken by Uchida to avoid erroneous image transmission from unintended users.” *Id.* (citing Ex. 1009 ¶¶ 12–13, 28; Ex. 2004 ¶ 137). Therefore, Patent Owner concludes, “there is no motivation to combine Uchida and Grimshaw.” *Id.* (citing Ex. 2004 ¶ 137).

In its Reply, Petitioner accuses Patent Owner of failing to address the modification actually presented in the Petition by focusing on features of Uchida’s remote control that relate to updating wireless setting information, which Patent Owner suggests is removed via a combination of Uchida and Grimshaw. Pet. Reply 14. But Petitioner asserts that was not the modification presented in the Petition. *Id.*

Petitioner argues that it is not correct that “centralization of the image sharing process is critical to Uchida.” Pet. Reply 15. This is so, according to Petitioner, because “Uchida merely indicates that ‘wireless setting information can be updated every time the image projection device is used’ without providing any indication or suggestion that control of media content transfer must be centralized.” *Id.* (citing Ex. 1009 ¶ 31). Petitioner asserts that Patent Owner’s cited evidence from Uchida “describes updating wireless setting information for new conferences to prevent image sharing from devices that participated in a previous conference,” but “[t]he proposed

modification of Uchida based on Grimshaw does not remove the ability to update wireless connection information for new conferences.” *Id.* (citing Ex. 1083 ¶¶ 15–17). Petitioner asserts that “[t]rigging the transfer of media content is a separate consideration from updating the wireless setting information for a new conference.” *Id.*

In its Sur-reply, Patent Owner counterclaims that Petitioner “improperly argues that features of the cited references not relied on in the as-petitioned Ground should not be considered by the Board,” which is contrary to the established law of obviousness because it fails to consider the references in their entirety. PO Sur-reply 18. In addition, Patent Owner claims Petitioner “misses the point of Patent Owner’s argument as to why a [skilled artisan] would not combine Uchida and Grimshaw.” *Id.* Patent Owner’s point is that, through start-up control button 231, “[t]he remote control device 2 controls which device shares content and when,” therefore, “[i]t is not that Uchida has a ‘general preference for an alternative’ . . . but that the problem allegedly solved by the combination does not even exist in Uchida.” *Id.* at 18–19 (citing Ex. 1009 ¶¶ 13, 45). Lastly, Patent Owner claims that Petitioner “seemly argues for a combination in which the wireless communication module of Uchida performs control functions already performed by the remote control device,” but “it is unclear what, if any benefits, could be accomplished through such modification, and whether such system could even navigate conflicting or redundant control signals from competing devices.” *Id.* at 19.

After studying and weighing the evidence of the complete record that has now been developed, and in view of both parties’ arguments, we find Petitioner has persuasively shown that modifying the operation of the input device/physical actuator (i.e., image transfer stop switch 140) in Uchida’s

peripheral device (i.e., wireless device 1) to control the display of image data from a particular user's computer would have been obvious to a skilled artisan at the time of the invention. More specifically, Petitioner has shown persuasively Uchida shows that the use of an input device/physical actuator on a peripheral device to send a signal that causes a participant's computer to transmit the image data presented on its display to a shared display in an image display system was a known technique. Ex. 1009 ¶¶ 10–13, 39–40, 70–72, 134, 139, 176, Figs. 1–3; Ex. 1002 ¶¶ 161–168, 180–182) and that Grimshaw demonstrates further that configuring the input device/physical actuator to take control of the shared display when transmitting the image data (i.e., forcing the shared display to show whatever is currently being displayed on the screen of the laptop computer connected to the peripheral device) would have been a technique known to skilled artisans for configuring the input device/physical actuator on the peripheral device (*see* Ex. 1008 ¶¶ 2–6, 12, 19–20, 27–28, Figs. 1–3; Ex. 1002, ¶¶ 164–168). Furthermore, Petitioner has also shown persuasively that a skilled artisan would have recognized benefits to giving a participant the ability to locally control the display of their computer's image data. *See* Ex. 1002 ¶¶ 87–91, 164–168; Ex. 1008 ¶¶ 4, 19–20, 27–28.

When Uchida and Grimshaw are considered together as a whole from the perspective of a skilled artisan, therefore, it is clear that applying the “take control” functionality of Grimshaw's to the similar input device/physical actuator on Uchida's peripheral device would have been recognized to result in the benefit of providing a participant with the same ability to send a signal that causes a participant's computer to transmit and control the image data presented on a shared display from their computer within an image display system. As a result, a motivation has been

established because the combination is an application of a known technique to derive a known benefit using prior art elements according to their established functions. *Intel Corp.*, 61 F.4th at 1380.

We disagree with Patent Owner that a skilled artisan would not have been motivated to provide the benefit of giving participants local control over the shared display, as taught by Grimshaw, in Uchida’s disclosed image display system because the “scenario of users ‘vying for control’ does not exist based on the operation of Uchida.” PO Resp. 40. We find Patent Owner’s reliance on Uchida’s start-up button 231 to be misplaced for the proposition that “control of presentation information is centralized to the remote control device” and, therefore, “[u]sers cannot vie for control.” *Id.* at 41–42. We find no persuasive support in Uchida for the notion that start-up button 231 on remote control device 2 must “control *which* device shares content and *when*” (PO Sur-reply 18 (emphasis added), and Patent Owner provides none. Although Uchida does state generally that the remote control can “remotely control[] the operation of the image projection device” (Ex. 1009 ¶ 13), we do not find that statement to provide much supportive weight to Patent Owner’s narrow interpretation that control over which device shared content, and when, is strictly limited to the operator of the remote control.

Nor does Uchida’s description of start-up button 231 on the remote control lend much weight to Patent Owner’s position. Uchida describes start-up button 231 as “a button for issuing start and stop instructions to the image projection device,” which initiate a process that relates to either (1) shutting down image projector device 3, (2) starting up image projector device, or (3) updating the wireless setting information. *See* Ex. 1009 ¶¶ 45, 50, 57, 87, 114–115, 120–121, 123, 177. Petitioner correctly observes that

the evidence cited by Patent Owner from Uchida “merely indicates that ‘wireless setting information can be updated every time the image projection device is used’ without providing any indication or suggestion that control of media content transfer *must* be centralized.” Pet. Reply 15. We also agree with Petitioner that Patent Owner’s reliance on Uchida’s statement in paragraph 31 (i.e., in relevant part, “it is possible to prevent image data from being mistakenly sent from a computer device that has previously used the image projection device”) is misplaced because, when considered in context, it is clear Uchida is referring to the prevention created by “updating wireless setting information for new conferences to prevent image sharing from devices that participated in a previous conference,” rather than strictly limiting the control over *which* device shares content, and *when*, to a centralized location. *Id.* (citing Ex. 1009 ¶ 31).

Another failing we find with Patent Owner’s criticism of Petitioner’s rationale is that it appears to limit the obviousness analysis to what Patent Owner perceives to be Uchida’s intentions for how the disclosed image display system should be used (i.e., with centralized control). Under the correct analysis, any need known in the field of endeavor at the time of invention can provide a reason for combining the elements in the manner claimed. *KSR*, 550 U.S. at 420 (“Under the correct analysis, any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed.”). Applying the correct analysis, we find Petitioner has shown there was a recognized benefit for image display systems to provide display controls to a user at their location and that providing an input/actuator device on a peripheral device with that control would have been a known solution. *See* Ex. 1002 ¶¶ 87–91, 164–168; Ex. 1008 ¶¶ 4,

19–20, 27–28. The fact that Uchida was motivated by a different goal than the goal motivating the skilled artisan under Petitioner’s proposed rationale is not disqualifying because the law does not require uniformity of intent. *Kahn*, 441 F.3d at 990. And here, because Patent Owner’s arguments are singularly focused on Uchida, Patent Owner never actually disputes that Grimshaw demonstrates a known technique to address a known problem and that, when applied to Uchida, the resulting combination does nothing more than use prior art elements according to their established functions.

In conclusion, for the foregoing reasons, we determine that Petitioner has shown compelling reasons why a skilled artisan would have been motivated to modify Uchida, in view of Grimshaw, to have an input device/physical actuator on a peripheral device that, when activated, takes control of the shared display when transmitting the image data to be presented on that display. And after weighing Petitioner’s showing against Patent Owner’s objective evidence, we are persuaded that Petitioner has carried its burden and shown that it would have been obvious to modify the input device/physical actuator on Uchida’s peripheral device in the manner claimed.

2. *Uchida Discloses or Suggests an Input Device Triggering the Transfer of the User Selected Arbitrary Media Content*

Each of the independent claims in this proceeding recite substantially the same following limitation:

an input device configured to allow the user to carry out a user action on the input device that triggers transfer of said user selected arbitrary media content from the transmitter to the wireless communications network and to the base node through the wireless communications network for display on the first display

Ex. 1001, 27:62–28:1 (claim 1), 28:62–67 (claim 9), 29:42–46 (claim 16), 30:36–44 (claim 21). Petitioner contends Uchida discloses the above input device limitation:

Uchida . . . discloses the wireless device 1 includes *an input device* (image transfer stop switch 140) *configured to allow the user to carry out a user action* (e.g., sliding switch 140) *on the input device that triggers transfer of said user selected arbitrary media content* (image data) *from the transmitter* (wireless communication unit 107) *to the wireless communications network* (WLAN) *and to the base node* (e.g., control unit 303 and wireless unit 306) *through the wireless communications network for display on the first display* (e.g., LCD 323 of the image projection unit), *the input device being a physical actuator* (slide switch) *coupled to the at least one peripheral device* (wireless device 1).

Pet. 57–58 (citing Ex. 1009 ¶¶ 10–13, 39–40, 70–72, 134, 139, 176, Figs. 1–3; Ex. 1002 ¶¶ 161–168, 180–182). Regarding Uchida’s image transfer stop switch 140, Petitioner explains that a skilled artisan “would have understood that moving the switch to the ‘ON’ position stops image transfer, while sliding it back to the ‘OFF’ position resumes (and thus triggers) image data transmission.” Pet. 58 (citing Ex. 1009 ¶¶ 70–72; Ex. 1002 ¶¶ 162, 180–182). In addition, in view of Grimshaw, Petitioner contends it would have been obvious to a skilled artisan to configure Uchida’s image transfer stop switch 140 to take control of the shared display when transferring the image data for display. *Id.* at 58–59 (citing Ex. 1008 ¶¶ 5, 19 (“[T]he users of modules 14, 16, 18, 20 can take control of the display module 22 by respectively engaging buttons 344, 354, 364, 374, which causes switch controller 318 to pass the data signals from the selected user module on to the display module.”), 20, 27–28, Figs. 1–4; § X.B.1).

In response, Patent Owner argues that neither Uchida nor Grimshaw, individually or combined, discloses an input device “that triggers transfer of said user selected arbitrary media content.” PO Resp. 44–46. Starting with Uchida’s image transfer stop switch 140, Patent Owner asserts that, when in the “ON” position, “[i]nstead of stopping the transfer of image data, the image projection device is instructed to project a specific image (‘a black screen image’).” *Id.* at 44 (citing Ex. 1009 ¶ 71; Ex. 2004 ¶ 139). Patent Owner states, “[w]hile it inhibits the presentation of data from the laptop, it has no impact on whether data is transmitted from wireless device 1 to projector 3”—“[t]he transfer stop switch is a safety, not a trigger.” *Id.* at 44–45 (citing Ex. 1009 ¶ 71; Ex. 2004 ¶ 140). And “[e]ven if the image transfer stop switch stops all signal transfer from the wireless device,” Patent Owner asserts that “there is no evidence in Uchida that the image display would automatically resume when the signal transfer stop switch is turned off.” *Id.* at 45 (citing Ex. 2004 ¶ 141).

Turning to Grimshaw, Patent Owner points to Grimshaw’s teaching that “[w]hen separate devices are vying for control of the display module, ‘each of the connecting computers is outputting data signals through data connections 342, 352, 362, 372 for presentation on the display module . . . [B]y respectively engaging buttons 344, 354, 364, 374 which causes the switch controller 318 to pass the data signals from the selected user module on the display module.’” PO Resp. 46 (citing Ex. 1008 ¶ 19; Ex. 2004 ¶ 143). Patent Owner asserts that shows “the buttons do not *trigger* data transfer from the transmitter, they merely instruct the switch controller which data signal should be routed to the display”; “[t]he data arrives at the switch control regardless of whether the button has been pressed or not

(assuming there is a connection to the computer).” *Id.* (citing Ex. 2004 ¶¶ 143–144).

In its Reply, Petitioner calls out that Patent Owner’s expert testified, regarding Uchida’s image transfer stop switch 140, that “when the toggle is turned back to ‘off,’ the image data coming from the wireless device is projected again.” Pet. Reply 17 (citing Ex. 1072, 72:3–12). Petitioner further states, “Grimshaw also shows that a user can push a button on a user module to trigger transmission of image data.” *Id.* Otherwise, Petitioner largely repeats the contentions it made in the Petition. *See id.* at 17–18.

In its Sur-reply, Patent Owner accuses Petitioner of “use of the image transfer stop switch in Uchida in an overly generic manner to allege it includes teachings that it does not.” Pet. Reply 19. Patent Owner asserts that “[t]he image transfer stop switch, when used, ‘serves as an image transmission stop operation unit for instructing the image projection device 3 to stop transmitting the image data[.]’” *Id.* at 19–20 (citing Ex. 1009 ¶ 71). Patent Owner extrapolates from that teaching that Uchida’s “image transfer stop switch tells the projector to stop projecting any received content and instead share a black screen.” *Id.* at 20 (citing Ex. 1009 ¶ 71 (“When the CPU 405 of the computer device 4 receives the information, it executes an image transfer application and transmits a request to the image projection device 3 via the wireless communication unit 107 to project a specific image (here, a black screen image) on the image projection device 3.”); Ex. 2033, 58:22–59:2 (“Q. So when it’s in stop mode, it’s your opinion that that ceases or prevents the image transfer from Component 1 to Component 3? A. to image projection device 3 as it’s described”).

Regarding Grimshaw, Patent Owner asserts “[i]t is clear that ‘each of the connecting computers is outputting data signals through data connections

342, 352, 362, 372 for presentation on the display module [B]y respectively engaging buttons 344, 354, 364, 374 which causes the switch controller 318 to pass the data signals from the selected user module on the display module.” PO Sur-reply 20–21 (citing Ex. 1008 ¶ 19; Ex. 2004 ¶ 143). That evidence from Grimshaw establishes that its input device “*always* transfers the media content and the only toggle is whether or not the already received media content is displayed,” which Patent Owner concludes “is not the claimed input device that triggers.” *Id.* at 21.

After studying and weighing the evidence of the complete record that has now been developed, and in view of both parties’ arguments, we find Petitioner has persuasively shown Uchida, with and without Grimshaw, discloses an input device configured to allow a user to carry out a user action on an input device that triggers the transfer of user selected arbitrary media content from the peripheral device’s transmitter to the wireless communications network and to a base node through the wireless communications network for display by the projector’s screen. *See* Ex. 1009 ¶¶ 10–13, 39–40, 70–72, 134, 139, 176, Figs. 1–3; Ex. 1002 ¶¶ 161–168, 180–182.

Uchida alone first. Starting with what appears to be undisputed, Uchida discloses a wireless device within an image display system that can communicate user selected arbitrary media content from the wireless device’s transmitter to the wireless communications network and to a base node through the wireless communications network for display by a projector’s screen. PO Resp. 36, 38 (“With the correct wireless setting information, [Uchida’s] wireless device can communicate with the image projection device”); Ex. 1009 ¶¶ 48, 61–83, 153–162. Uchida’s wireless device includes an image transfer stop switch 140, which is an input device

configured on the wireless device to allow a user to carry out a user action to trigger, generally, *an event*. PO Resp. 38 (“While there is a toggle 140 on the wireless device 1, that toggle switch only tells the projector to project image data or a black screen, and has no impact on whether information is sent from the wireless device 1 to the image projection device.”); Ex. 1009 ¶¶ 70–73. However, those undisputed facts are where the dispute begins.

Patent Owner disputes whether the event that Uchida’s image transfer stop switch 140 triggers is “the transfer of user selected arbitrary media content.” Uchida describes two alternative exemplary operations when image transfer stop switch 140 triggered:

- 1) When the CPU 405 of the computer device 4 receives the information [that image transfer stop switch 140 is operated to the image stop ON mode side], it executes an image transfer application and transmits a request to the image projection device 3 via the wireless communication unit 107 to project a specific image (here, a black screen image) on the image projection device 3 (Ex. 1009 ¶ 70);
- 2) When the image transfer stop switch 140 is operated to the image stop ON mode side while connected to the computer device 4 via the USB connector 105, the CPU 101 may transmit a request to the image projection device 3 via the wireless communication unit 107 to project a specific image, without transmitting data input from the computer device 4 to the image projection device 3 (Ex. 1009 ¶ 71).

Patent Owner only addresses the first event.⁷ *See* PO Resp. 44–45; PO Sur-reply 19–20. For the first event, Patent Owner asserts that, while that event “inhibits the presentation of data from the laptop, it has no impact on whether data is transmitted from wireless device 1 to projector 3.” PO Resp. 44–45. Patent Owner states “[i]nstead of stopping the transfer of image data, the image projection device is instructed to project a specific image (‘a black screen image’).” *Id.* at 44.

We disagree with Patent Owner’s interpretation of Uchida. Before getting to the operation of Uchida’s image transfer stop switch 140 in the “ON” mode, it is important to first identify its operation when in the “OFF” mode, which is that CPU 405 of computer device 4 is able to “start[] transmitting the image data corresponding to the screen . . . displayed on the LCD 403, which is the display unit of the computer device 4, to the image projection device 3.” Ex. 1009 ¶ 158. Because that image data corresponding to what is on the user’s screen is user selected arbitrary media content, in the “OFF” mode, wireless device 1 is transferring user selected

⁷ Patent Owner does also rely on Uchida’s more general representation that image transfer stop switch 140 “serves as an image transmission stop operation unit for instructing the image projection device 3 to stop transmitting the image data” for the proposition that the “image transfer stop switch tells the projector to stop *projecting* any received content and instead share a black screen.” PO Sur-reply 19–20 (citing Ex. 1009 ¶ 71). That general characterization from Uchida has significantly less evidentiary value regarding how the switch actually operates, however, when it is compared to Uchida’s specific and express operating examples. And we note that in both embodiments taught by Uchida the switch never “tells the projector to stop projecting.” Moreover, Uchida’s characterization states to “stop *transmitting*,” which is not the same as to “stop projecting,” and neither of Uchida’s switch operation examples includes an instruction to the projector to stop transmitting image data (or projecting). *See* Ex. 1009 ¶ 70–71.

arbitrary media content from the peripheral device's transmitter to the wireless communications network and to a base node through the wireless communications network for display by the projector's screen.

Now, when the image transfer stop switch 140 is in the "ON" mode, the transmission of that user selected arbitrary media content is stopped (i.e., as the name suggests, the switch stops the transfer of the user's screen image), CPU 405 instead transmits a "*specific* image (here, a black screen image)," that is not "*user selected arbitrary* media content" (i.e., CPU 405 selects and provides the image it is programmed to provide). So, although Patent Owner may be correct that the "ON" mode does not stop the wireless transfer of every kind of data, even image data, to the base node, "*user selected arbitrary* media content" *is* stopped. And it naturally follows that when a user carries out a user action on image transfer stop switch 140 to place it back into the "OFF" mode, CPU 405 of computer device 4 will once again "start[] transmitting the image data corresponding to the screen . . . displayed on the LCD 403, which is the display unit of the computer device 4, to the image projection device 3"—i.e., the transfer of user selected arbitrary media will restart from wireless device 1's transmitter to the wireless communications network and to projection device 3 through the wireless communications network for display by the projector's screen.

Patent Owner's assertion that image transfer stop switch 140 "has no impact on whether data is transmitted from wireless device 1 to projector 3" is not creditable. Perhaps that assertion has some credibility regarding "data" generally, but it has no merit regarding user selected arbitrary media content data specifically, as just discussed. Reenforcing that point is the fact Uchida states *expressly* that in one embodiment, when image transfer stop switch 140 is operated to the image stop ON mode, the CPU 101 may

transmit a request to the image projection device 3 to project a specific image, “*without transmitting data input from the computer device 4 to the image projection device 3.*” Ex. 1009 ¶ 71 (emphasis added).

Lastly, for Uchida, Patent Owner’s own expert dispels any merit to its suggestion that there is no evidence in Uchida that the image display would automatically resume when the signal transfer stop switch is turned off: “when the toggle is turned back to ‘off,’ the image data coming from the wireless device is projected again.” Ex. 1072, 72:3–12.

Now Uchida and Grimshaw combined. Patent Owner’s argument against Grimshaw disclosing an input device that triggers transfer of user selected arbitrary media content is not commensurate with the scope of the claims. Patent Owner argues that Grimshaw’s input device (i.e., the display module button) does not disclose triggering the transfer of user selected arbitrary media content because user action on the input device only “causes the switch controller 318 to pass the data signals from the selected user module on the display module,” but those data signals were already transferred to switch controller 318 before the input device was acted upon by a user. PO Resp. 46 (citing Ex. 1008 ¶ 19); PO Sur-reply 20–21 (same). Patent Owner does not contest, however, that those media content data signals at switch controller 318 never get transferred to a base node for display by the projector, unless and until a user acts upon the input device. *Id.* It naturally follows therefore that the data signals do not have a path to the base node for display because the route is blocked by switch controller 318. The input device initiates the recited transfer, however, by causing switch controller 318 *to open a path* for the media content data signals and, once a pass is opened, the data signals start to transmit from the peripheral device’s transmitter to the wireless communications network and to a base

node through the wireless communications network for display by the projector's screen.

Therefore, for the foregoing reasons, we are persuaded that Petitioner has carried its burden to show Uchida, alone and with Grimshaw, discloses “an input device configured to allow the user to carry out a user action on the input device that triggers transfer of said user selected arbitrary media content from the transmitter to the wireless communications network and to the base node through the wireless communications network for display on the first display.”

3. *Ono Discloses or Suggests a Base Node Integrated in the Display*

Claims 2, 8, 10, 17, and 21 each recite “a base node integrated into the display.” Ex. 1001, 28:3–4; 28:40–41; 10:1–2; 30:18–19. Petitioner contends that “Uchida discloses that *said base node* (e.g., control unit 303 and wireless unit 306) *is integrated in the first display* (e.g., image projection device 3, including LCD 323, projection unit 308). Pet. 59 (citing Ex. 1009 ¶ 124; Ex. 1002 ¶ 183). To illustrate this point, Petitioner provides an annotated version of Uchida's Figure 14, which is reproduced below:

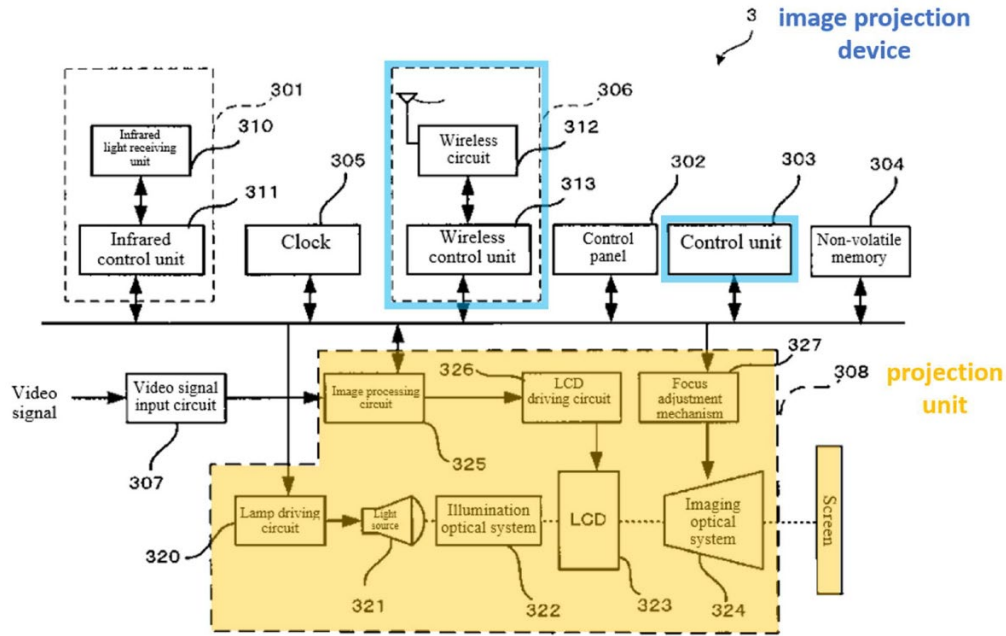


Figure 14 shows “the image projection device 3 connects a control unit 303, a wireless unit 306, and a projection unit 308, ‘all of which are built into the housing.’” *Id.* This, Petitioner concludes, a skilled artisan “would have understood to disclose a control unit/wireless unit and integrated display.” *Id.* (citing Ex. 1009 ¶¶ 124–134, Fig. 14; Ex. 1002 ¶ 183).

In response, Patent Owner argues that there is no “evidence of a base node integrated into a display” because, as shown above Figure 14, “the *projector unit* 308 does not include the screen.” PO Resp. 46. Patent Owner reasons that “[t]he projector emits light onto a screen through a liquid crystal display element; the projector is not integrated into the display.” *Id.* at 47 (citing Ex. 1009 ¶ 2; Ex. 2004 ¶¶ 145–146).

In its Reply, Petitioner states that Patent Owner’s position “is contrary to the common understanding that [the] image projection device 3 of Uchida is a display,” which is recognized expressly by the following statement in the ’951 patent: “the base node is not realized as a separate physical box, but [is] **integrated into the processing unit inside a display or projector.**”

Pet. Reply 20 (citing Ex. 1001, 14:37–38; Ex. 1083 ¶ 25). In its Sur-reply, Patent Owner simply refers to its arguments made in association with Ono in Ground 1. PO Sur-reply 21.

After studying and weighing the evidence of the complete record that has now been developed, and in view of both parties’ arguments, we find Petitioner has persuasively shown Uchida discloses “a base node integrated into the display.” *See* Ex. 1009 ¶ 124, Fig. 14; Ex. 1002 ¶ 183; Ex. 1001, 14:37–38; Ex. 1083 ¶ 25). The ’951 patent specification is unambiguous that “a display 44 may be a projector and screen” (Ex. 1001, 14:37–38) and a skilled artisan would understand, in this context, that the recited display in claims 2, 8, 10, 17, and 21 encompasses Uchida’s image projection device 3. Patent Owner’s argument therefore is not commensurate with the scope of its claims.

Therefore, we are persuaded that Petitioner has carried its burden to show Uchida discloses “a base node integrated into the display.”

4. Conclusion

For the foregoing reasons, we find Petitioner has shown persuasively by a preponderance of the evidence that claims 1–10 and 14–21 are unpatentable because Uchida and Grimshaw demonstrate that each of those claims challenged recites nothing more than what at the time of the invention would have been a predictable use of prior art elements according to their established functions.

G. Ground 3 (Ichieda): Claims 1, 2, 6–10, 13, 15–17, and 19–21

For Ground 3, Petitioner, supported by its expert declarant, provides a thorough element-by-element analysis of challenged claims 1, 2, 6–10, 13, 15–17, and 19–21 that maps each element to support from Ichieda and explains why any differences would have been an obvious modification of

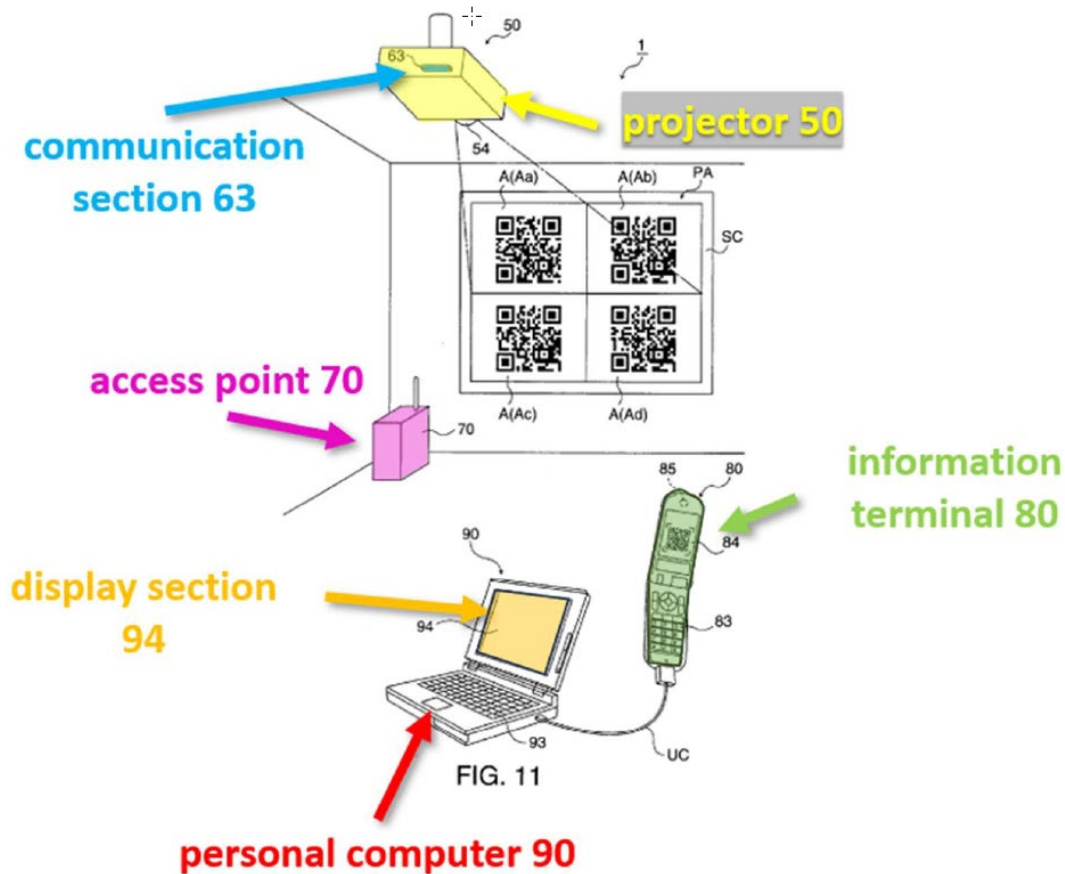
old elements rearranged with each performing the same function it had been known to perform to yield no more than what a skilled artisan would have expected from such an arrangement. *See* Pet. 67–83.

Patent Owner argues that three deficiencies exist with Petitioner’s analysis of the claims challenged in Ground 3, but otherwise Petitioner’s contentions are left uncontested. *See* PO Resp. 28–35. The three alleged deficiencies are as follows: (1) Petitioner failed to establish an appropriate reasoning for why a skilled artisan would have modified Ichieda in the manner claimed (*id.* at 30–33); (2) Petitioner failed to establish Ichieda discloses or suggests triggering the transfer of the user selected arbitrary media content, as recited by claims 1, 9, 16, and 21 (*id.* at 33–34); and (3) Petitioner failed to establish Ichieda discloses or suggests that the base node is integrated in the first display, as recited by claims 2, 10, 17, and 21 (*id.* at 35).

Now having a complete record and having studied all of the parties’ evidence and arguments, we find Petitioner has not shown persuasively that claims 1, 2, 6–10, 13, 15–17, and 19–21 are unpatentable because the second issue raised by Patent Owner is dispositive of Petitioner’s Ground 3 based on Ichieda. More specifically, as discussed below, the Petition lacks a factually supported reason for why a skilled artisan would have modified the third embodiment of Ichieda to use information terminal 80 to trigger the transfer of a user selected arbitrary media content associated with PC 90 to the wireless communications network and to projector 50, which undermines Petitioner’s unpatentability contentions of each challenged independent claim and, therethrough, the respective dependent claims. Therefore, our analysis is focused accordingly.

1. *The Petition Fails to Establish Ichieda Discloses or Suggests the Recited Input Device*

Petitioner relies on Ichieda's third disclosed embodiment (Figure 11) and provides an annotated illustration of that embodiment, reproduced below.



Pet. 68 (citing Ex. 1006, Fig. 11). Petitioner states that the above annotated figure shows “image display system 1 with projector 50, laptop personal computer (PC) 90 (i.e., an image supply device), and information terminal 80 (i.e., a cellphone).” *Id.* at 67 (citing Ex. 1006 ¶ 129, Figs. 11–13; Ex. 1002 ¶ 209). In that embodiment, as Petitioner explains,

[a]fter a pairing process between laptop PC 90 and projector 50 (which involves information terminal 80 capturing a barcode image displayed on screen SC), laptop PC 90 is connected via a

network to projector 50, which displays an image based on the image signal input from laptop PC 90 in the area of a projection screen associated with the particular captured barcode.

Id. at 67–68 (citing Ex. 1006 ¶¶ 8–17, 135, 150, 163, Figs. 11–13; Ex. 1002 ¶ 209). Petitioner contends that a skilled artisan “would have recognized the option to use a communication section of an information terminal [80] . . . to transmit an image signal from a laptop PC to a projector in much the same way as described in the first embodiment (instead of directly from the laptop).” *Id.* at 70–71 (citing Ex. 1002 ¶ 215). According to Petitioner, a skilled artisan would have elected to use a transmission technique “to free the laptop network card from use” and “would have found such a combination of familiar elements straightforward and predictable.” *Id.* at 71 (citing Ex. 1002 ¶ 215).

Relying on that modified version of the third embodiment Ichieda discloses, Petitioner contends that

Ichieda discloses *an input device (operation section 83) configured to allow the user to carry out a user action (e.g., pressing a button on operation section 83) that triggers transfer of said user selected arbitrary media content (image signal) from the transmitter (communication section 86) to the wireless communications network (LAN) and to the base node (e.g., communications section 63 and control section 55) through the wireless communications network for display on the first display (e.g., screen of projector 50), the input device being a physical actuator (connection button) coupled to the at least one peripheral device. As illustrated in processes shown in Figures 3, 7, and 13, once a connection is established, the image signal is sent.*

Ichieda suggests that input device used for transmission in the first embodiment could also be used in conjunction with the third embodiment.

Pet. 77 (citing Ex. 1006 ¶¶ 44, 60, 69, 81–83, 107, Figs. 3, 7, 13; Ex. 1002 ¶¶ 228–229).

In its Response, Patent Owner argues that “Ichieda fails to teach or suggest the claimed ‘user action on the input device that triggers transfer of said user selected arbitrary media content from the transmitter.’”

PO Resp. 29. Patent Owner adopts the reasoning provided in the Institution Decision:

Petitioner’s contention . . . lacks a factually supported reason for why a skilled artisan would have modified the third embodiment of Ichieda to use information terminal 80 to trigger the transfer of a user selected arbitrary media content associated with PC 90 to the wireless communications network and to projector 50. Ichieda teaches that, in the third embodiment, after receiving user inputs from operation section 93, “the control section 91 retrieves the image data to be projected by the projector 50 from the hard disk drive 92, and transmits the image data from the communication section 96 to the projector 50 as the image signal.” Ex. 1006 ¶¶ 133, 139, 150. Petitioner, however, relies on operation section 83 of information terminal 80 to transmit image data from PC 90 without providing any reasoned basis for such a modification.

PO Resp. 29 (citing Paper 12, at 23).

In its Reply, Petitioner explains that in its proposed modified version of Ichieda, “[a]fter data from the information terminal 80 is used to pair the laptop PC 90 to the projector 50, Ichieda indicates that the laptop PC 90 can transmit the image signal via communication section 96 to access point 70.” Pet. Reply 21 (citing Ex. 1006 ¶ 150, Fig. 12; Ex. 1083). Petitioner contends that a skilled artisan “would have recognized that it would have been obvious to employ this known option when faced with a design need, such as the example of freeing the network card of the laptop PC 90 from use described in the Petition. *Id.* at 22. Petitioner contends, in that modified

arrangement, “pressing a button on operation section 83 ‘triggers transfer of . . . media content.’” *Id.* at 23 (citing Ex. 1006 ¶¶ 44, 60, 69 (“The operation section 83 is equipped with a plurality of operation buttons for performing various instructions to the information terminal 80 [such as] ‘a connection button’ for instructing the wireless LAN connection. . . .”), 81–83, 107, Figs. 3, 7, 13; Ex. 1002 ¶¶ 228–229; Ex. 1083 ¶ 30. Petitioner contends that Figure 3, 7, and 13 show that “once a connection is established, the image signal is sent irrespective of whether the image signal is sent from the laptop PC 90 or the information terminal 80.” *Id.* at 23–24.

After studying and weighing the evidence of the complete record that has now been developed, and in view of both parties’ arguments, we remain unpersuaded Petitioner has shown Ichieda (including Petitioner’s proposed modification) discloses a peripheral device configured to include “an input device configured to allow the user to carry out a user action on the input device that triggers transfer of said user selected arbitrary media content.” We remain unpersuaded for the same reasons provided in the Institution Decision. Paper 12, at 23–24.

Furthermore, Petitioner’s cited evidence is not persuasive that its proposed modified version of Ichieda discloses or suggests that pressing the “connection button” on operation section 83 of information terminal 80 that triggers transfer of said user selected arbitrary media content. First, an important point of clarification is that Petitioner presumes, without support or explanation, that Ichieda’s use of, or reference to, “image data” and “image signal” is necessarily “user selected arbitrary media content,” as recited. We do not agree.

The ’951 patent makes clear that the recited media does not encompass “media content that is displayed by another in a meeting or

presentation.” Ex. 1001, 11:46–47. And the only “image data” and “image signal” Ichieda discloses and references are those associated with the images created by a camera, which information terminal 80 uses to capture a barcode image displayed on screen SC. *See* Ex. 1006 ¶¶ 67–68, 71. That image data is not the recited “user selected arbitrary media content” because it is media content that was displayed by another.

That fact undermines Petitioner’s contention because that camera generated image data/signal is the only image data/signal Ichieda teaches as being transferred after pressing the “connection button” on operation section 83 of information terminal 80. Ex. 1006 ¶¶ 67–68, 82, 104, 150, Figs. 2, 3, 7, 11–13. This weakens further the persuasiveness of Petitioner’s contention that Ichieda discloses a peripheral device including “an input device configured to allow the user to carry out a user action on the input device that triggers transfer of said user selected arbitrary media content.”

Petitioner’s stated rationale for why a skilled artisan would have known to modify Ichieda in the manner claimed (i.e., to “free the laptop network card from use” in PC 90) has little, if any, persuasive correlation to explaining why Ichieda’s “connection button” on operation section 83 of information terminal 80 would have been modified by a skilled artisan to transfer “user selected arbitrary media content” from PC 90.

2. *Conclusion*

Because the above deficiency is incorporated into each of the challenged dependent claims 2, 6–8, 10, 13, 15, 17, and 19–20 through their respective parent claim 1, 9, 16, and 21, we find Petitioner has not shown persuasively by a preponderance of the evidence that claims 1, 2, 6–10, 13, 15–17, and 19–21 are unpatentable.

H. Objective Evidence

Patent Owner argues that the commercial success of those products that incorporate its patented technology and its competitors' licensing activities provide objective evidence of nonobviousness. *See* PO Resp. 49–70. Patent Owner provides an element-by-element analysis mapping the challenged claims to its “Barco System.” *Id.* at 52–67. Patent Owner contends that “there is essentially no unclaimed feature in the accused products.” *Id.* at 52. Patent Owner provides “United States Net Sales Annual Totals” for 2015 up to the third quarter of 2024, which demonstrates significant sales and Patent Owner contends that those sales demonstrate “commercial success using its patented invention [and] is strong evidence that the claims of the ’676 Patent are nonobvious.” *Id.* at 67. Finally, Patent Owner identifies two licenses taken by its competitors and another competitor that allegedly “changed the design of their competing product rather than face liability for patent infringement.” *Id.* at 68–70.

Petitioner responds that Patent Owner's sales evidence for its Barco System lacks the necessary nexus to the claimed inventions at issue here because that system is “not coextensive with the claimed invention because it includes significant unclaimed features.” Pet. Reply 26–27. Petitioner highlights that it is undisputed that Patent Owner has several patents that are allegedly practiced by its Barco System and that Patent Owner concedes that each patent lays claim to significant features. *Id.* at 27–28. Petitioner notes further that Patent Owner relies exclusively on the presumption of a nexus to the claims at issue in this case and that Patent Owner offers no direct evidence showing any sale was the “direct result” of the claimed features. *Id.* at 28. Regarding Patent Owner's licensing evidence, Petitioner argues

that it is nothing more than evidence of “the mere existence of a license.”
Id. at 28–29.

After considering the parties’ arguments and the submitted objective evidence of nonobviousness, we are persuaded Patent Owner’s license evidence is entitled to little weight, but we give no weight to the product sales evidence.

*1. Nexus of the Sales Evidence to the
Commercial Success of the '951 Patent*

Patent Owner asserts that claims of the '951 patent are coextensive with Patent Owner’s ClickShare Products, which is formed of a ClickShare Button and a Barco Base. PO Resp. 49–70; PO Sur-reply 7. Patent Owner states:

Patent Owner identifies the '951 Patent as practiced by the ClickShare Products on its website. Ex. 2017, 9. The Clickshare line involves the ClickShare Button (“ClickShare Button”) and a number of components capable of receiving communications from the ClickShare including the C-5, C-10, CX-20, CX-30, CX-50, CX-50 Gen2, CB Core, and CB Pro (“Barco Bases”). Together, ClickShare Button and a Barco Base form the Barco System.

PO Resp. 49–50.

Petitioner argues that Barco’s ClickShare product is not coextensive with the claimed invention because the ClickShare product includes a significant unclaimed feature. Pet. Reply 26–28.

Considering first the product sales evidence, we are persuaded that the Barco System is not coextensive with any of the challenged claims. Perhaps the most illustrative evidence of this point comes from Patent Owner. Patent Owner has correctly identified that this proceeding is related to 1436-IPR, 1437-IPR, and 1438-IPR, which each address a different one of Patent

Owner's patents. Paper 9, 1–3. Notably, for our purposes here, in each of those proceedings Patent Owner similarly argues that there is objective evidence of nonobviousness. *See* 1436-IPR, Paper 21 at 47–66; 1437-IPR, Paper 15 at 39–56; 1438-IPR, Paper 15 at 49–71. And, in each of those related cases, Patent Owner provided an element-by-element analysis to show the exact same “Barco System” product practices the claimed invention of the respective patent at issue in the respective IPR, moreover, in each case Patent Owner likewise contends “there is essentially no unclaimed feature.” *See* 1436-IPR, Paper 21 at 49–63; 1437-IPR, Paper 15 at 41–52; 1438-IPR, Paper 15, 51–67. Furthermore, the sales evidence is identical (to the penny) in each of the related proceedings. *See* IPR2024-01436, Paper 21 at 63; IPR2024-01437, Paper 15 at 52; IPR2024-01438, Paper 15, 67.

“A patent claim is not coextensive with a product that includes a ‘critical’ unclaimed feature that is claimed by a different patent and that materially impacts the product’s functionality.” *Fox Factory, Inc. v. SRAM, LLC*, 944 F.3d 1366, 1375 (Fed. Cir. 2019). Patent Owner’s representation in the other IPRs demonstrates that the patent claims in this case are not coextensive with the Barco System product because that product indisputably includes “critical” unclaimed features claimed by a different patent that materially impacts the product’s functionality. Thus, because Patent Owner has failed to demonstrate a nexus between the sales evidence and the claims at issue here and because Patent Owner has offered no persuasive evidence directly linking the sales evidence to the claims, we do not give any patentable weight to the product sales evidence offered by Patent Owner.

2. *Acquiescence in Industry*

Patent Owner argues that industry acquiescence demonstrates secondary considerations of nonobviousness. PO Resp. 71–74.

Patent Owner first argues that licensing of the '951 patent by Creston shows industry acquiescence and shows nonobviousness of the claimed invention. PO Resp. 71–73; PO Sur-reply 6–7.

Petitioner argues that the mere existence of the Creston license is insufficient to show nonobviousness because there is no evidence that Creston entered the license because it believed that Barco's patents were valid or enforceable. Pet. Reply 28–30.

“[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). As the Federal Circuit has long recognized, it is often “cheaper to take licenses than to defend infringement suits.” *EWP Corp. v. Reliance Universal Inc.*, 755 F.2d 898, 908 (Fed. Cir. 1985)

Patent Owner provides no sufficient evidence to show that Creston licensed the '951 patent because Creston believed that that '951 patent was valid or enforceable. The Creston license involves three patent families and 20 patents total. PO Sur-reply 5; Ex. 2011, 15. The '951 patent is among the 20 licensed patents (Ex. 2011, 15) and Patent Owner provided no evidence to show the weight or importance of the '951 patent to the license. Petitioner's other evidence persuades us that, to the contrary, the Creston license was part of an agreement driven by business factors, interests, and benefits beyond the patents themselves. *See* Ex. 1091, 73:7–74:3, 105:8, 106:1; Ex. 1090, 58:7–12.

We have reviewed Patent Owner’s arguments concerning *Ancora Technologies, Inc. v. Roku, Inc.*, 140 F.4th 1351 (Fed. Cir. 2025), but find them misplaced. PO Resp. 40, 54; PO Sur-reply 2–3. Unlike here where Creston’s license covers a significant number of patents, *Ancora* analyzed a license to a single patent and held that “[l]icenses to the challenged patent . . . do not require a nexus with respect to the specific *claims* at issue.” *Ancora* at 1362 (emphasis added). We do not agree with Patent Owner that *Ancora* stands for the proposition that all licenses, regardless of the circumstances of the licensing, are strong evidence of nonobviousness. We give little weight to Creston’s license of the ’951 patent.

Patent Owner also argues that “in *Barco, Inc. et al v. Vivitek Corporation et al*, Case No. 4:19-cv-3250 (N.D. Cal. 4/27/2020), another competitor in the industry in 2019 agreed to a Consent Judgment and Permanent Injunction regarding certain patents owned by Patent Owner, including U.S. Patent No. 8,756,348, which is the parent of the ’951 Patent.” PO Resp. 73 (citing Ex. 1001, Title Page; Ex. 2020, 2; Ex. 2021). We give little weight to the Consent Judgment and Permanent Injunction, as it did not involve the ’951 patent. *See generally* Ex. 2021.

Patent Owner further argues that “Sahara Presentation Systems changed the design of their competing product rather than face liability for patent infringement.” PO Resp. 73–74 (citing Ex. 2021 (“Barco ended its case against Sahara Presentation Systems after obtaining that its Clevershare products were materially redesigned to avoid patent infringement.”)). Exhibit 2021 is a Patent Owner’s Press Release titled “Barco successfully enforces ClickShare IP against competitors in the U.S.” The Press Release asserts that because of Patent Owner’s lawsuit, certain competitors agreed to withdraw their product from the United States market. *See generally*

Ex. 2021. The Press Release does not mention the '951 patent. *Id.* We, thus, give little weight to the Press Release.

Patent Owner finally argues that Defendants' Opposed Motion for Ongoing Royalty in the related Texas Litigation (Ex. 2036) is strong evidence of nonobviousness because Petitioner asked the court for a compulsory license to the '951 patent. Paper 56. Petitioner disputes that its Motion is evidence of nonobviousness because the Motion was filed to avoid needless future litigation. Paper 57 (citing Ex. 2036, 3). The Motion indicates that "Yealink admitted that its WPP20 and WPP30 wireless presentation pods (or, dongles) infringed the asserted patents and withdrew them from the U.S. market" and that Petitioner now wishes to reintroduce dongles to the market and asks the court to determine an ongoing royalty for selling the WPP30, specifying a royalty rate for the dongle alone. *See generally* Ex. 2036. We, thus, give some weight to the Motion.

3. Conclusion as to Secondary Considerations

We have considered all of Patent Owner's arguments and evidence concerning secondary considerations. We give Patent Owner's evidence regarding its revenue and profits from the ClickShare product line little weight. We give some weight to Patent Owner's evidence of licensing. We, however, do not find the licensing evidence outweighs Petitioner's showing of obviousness.

III. CONCLUSION⁸

Based on the fully developed trial record, Petitioner has demonstrated by a preponderance of the evidence that claims 1–11 and 13–21 of the '951 patent are unpatentable.

In summary:

Claim(s)	35 U.S.C. §	Reference(s)/ Basis	Claim(s) Shown Unpatentable	Claim(s) Not Shown Unpatentable
1–4, 6–11, 13–21	103(a)	Ono, Corbett	1–4, 6–11, 13– 21	
1–10, 14– 21	103(a)	Uchida, Grimshaw	1–10, 14–21	
1, 2, 6–10, 13, 15–17, 19–21	103(a)	Ichieda		1, 2, 6–10, 13, 15–17, 19–21
Overall Outcome			1–11, 13–21	

IV. ORDER

In consideration of the foregoing, it is

ORDERED that claims 1–11 and 13–21 of the '951 patent have been shown to be unpatentable; and

⁸ Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this decision, we draw Patent Owner's attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding*. See 84 Fed. Reg. 16,654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. See 37 C.F.R. § 42.8(a)(3), (b)(2).

FURTHER ORDERED that, because this is a Final Written Decision, parties to this proceeding seeking judicial review of our decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

IPR2024-01439
Patent 11,422,951 B2

FOR PETITIONER:

Stephen Yang
Timothy Bickham
Kevin Greenleaf
Forrest Gothia
DENTON US LLP
stephen.yang@dentons.com
timothy.bickham@dentons.com
kevin.greenleaf@dentons.com
forrest.gothia@dentons.com

FOR PATENT OWNER:

Christopher Centurelli
Erik Halverson
Joshua Andrews
K&L GATES LLP
chris.centurelli@klgates.com
erik.halverson@klgates.com
joshua.andrews@klgates.com