

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

**SAMSUNG ELECTRONICS CO., LTD. AND
SAMSUNG ELECTRONICS AMERICA, INC.,**
Petitioners,

v.

MAXELL, LTD.,
Patent Owner

Case: IPR2025-01307

U.S. Patent No. 11,026,088

**PATENT OWNER PRELIMINARY RESPONSE TO PETITION FOR
INTER PARTES REVIEW OF U.S. PATENT NO. 11,026,088**

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TABLE OF CONTENTS

	Page
I. INTRODUCTION	1
II. BACKGROUND	1
A. Overview of the '088 Patent.....	1
B. Patent Prosecution History	3
C. Summary of Petitioner’s Proposed Grounds for Unpatentability	5
1. Iwami (EX1004)	6
2. Kim (EX1006).....	6
3. Liansky (EX1012).....	7
4. Weiser (EX1008)	7
5. Kato (EX1009).....	7
6. Dowling (EX1021).....	8
III. Level of Ordinary Skill.....	8
IV. Claim Construction.....	8
V. Legal Standard	9
VI. The Petition Does Not Show a Likelihood of Prevailing with Respect to Any Challenged Claim	10
A. Grounds 1-5: Petitioner Fails to Establish That Any Challenged Independent Claim Would Have Been Obvious Based on Iwami and Kim	10
1. Petitioner Fundamentally Misconstrues Iwami	10
2. Petitioner Fails to Establish that a POSITA Would Combine Iwami and Kim.....	15
3. Petitioner Fails to Establish That Claim 1 Would Have Been Rendered Obvious In View of Iwami and Kim.....	19
4. Petitioner Fails to Establish That Claim 14 Would Have Been Rendered Obvious in View of Iwami and Kim	37

Case IPR2025-01307
Patent No. 11,026,088
Patent Owner’s Preliminary Response

5.	Petitioner Fails to Establish That Claim 15 Would Have Been Rendered Obvious in View of Iwami and Kim	39
B.	Ground 1: Petitioner Fails to Establish That Claims 5 and 13 Would Have Been Obvious Based on Iwami and Kim.....	41
C.	Ground 2: Petitioner Fails to Establish That Claims 2 and 12 Would Have Been Obvious Based on Iwami, Kim, and Liansky.....	41
D.	Ground 3: Petitioner Fails to Establish That Claims 7, 8, and 10 Would Have Been Obvious Based on Iwami, Kim, Liansky, and Weiser	42
E.	Ground 4: Petitioner Fails to Establish That Claims 9 and 11 Would Have Been Obvious Based on Iwami, Kim, Liansky, and Kato.....	42
F.	Ground 5: Petitioner Fails to Establish That Claim 6 Would Have Been Obvious Based on Iwami, Kim, and Dowling.....	43
VII.	CONCLUSION.....	44

TABLE OF AUTHORITIES

	Page(s)
 Cases	
<i>Abiomed, Inc. v. Maquet Cardiovascular, LLC</i> , IPR2017-01204, Paper 9 (P.T.A.B. Oct. 23, 2017).....	12
<i>Amazon.com v. Almondnet, Inc.</i> , IPR2022-01455, Paper 12 (P.T.A.B. Apr. 6, 2023)	12
<i>Graham v. John Deere Co. of Kansas City</i> , 383 U.S. 1 (1966).....	9
<i>Intel Corp. v. Tela Innovations, Inc.</i> , IPR2019-01521, Paper 65 (P.T.A.B. Mar. 9, 2021).....	12
<i>Intelligent Bio-Systems, Inc. v. Illumina Cambridge Ltd.</i> , 821 F.3d 1359 (Fed. Cir. 2016)	9
<i>In re Kotzab</i> , 217 F.3d 1365 (Fed. Cir. 2000)	11
<i>KSR Int’l Co. v. Teleflex Inc.</i> , 550 U.S. 398 (2007).....	9
<i>Lumenis BE Ltd., v. BTL Healthcare Techs. A.S.</i> , IPR2021-01280, Paper 8 (P.T.A.B. Mar. 9, 2022)	11, 12
<i>Medichem, S.A. v. Rolabo, S.L.</i> , 437 F.3d 1157 (Fed. Cir. 2006)	10
<i>In re Stepan</i> , 868 F.3d 1342 (Fed. Cir. 2017)	12
 Statutes	
35 U.S.C. § 103.....	5, 7, 8, 9
35 U.S.C. § 312(a)(3).....	14

Other Authorities

37 C.F.R. § 42.22(a)(2).....	14
37 CFR § 42.104(b)(4).....	8
U.S. Patent No. 11,026,088.....	1, 2, 3, 4, 5

PATENT OWNER'S EXHIBIT LIST

Description	Exhibit #
Notice Letter to Samsung (July 7, 2021)	2001
Follow-up Notice Letter to Samsung (December 29, 2021)	2002
Docket Navigator Time to Trial Statistics for the Eastern District of Texas	2003
Docket Control Order, <i>Maxell, Ltd. v. Samsung Elecs. Co., Ltd.</i> , No. 5:25-cv-00052-RWS (E.D. Tex.)	2004
Jury Trial Transcript, Vol. 4, <i>Maxell, Ltd. v. Samsung Elecs. Co., Ltd.</i> , No. 5:23-cv-00092-RWS (E.D. Tex.)	2005
Complaint, <i>Maxell, Ltd. v. Samsung Elecs. Co., Ltd.</i> , No. 5:25-cv-00052-RWS (E.D. Tex.)	2006
Follow-up Notice Letter to Samsung (April 21, 2025)	2007
Law360 Article, "Maxell Settles Patent Suit Against Apple Over Mobile Tech"	2008
Law360 Article, "Maxell Scores \$43M EDTX Jury Win In ZTE Patent Trial"	2009
Law360 Article, "Maxell, Huawei Reach Terms To End Smartphone Patent Suit"	2010
Hudson Institute Article, "Google's Loss to Sonos Settles It, Big Tech Has an IP Piracy Problem"	2011
PatentRenewal.com Article, "which-companies-hold-the-most-patents-in-the-world"	2012
Motion for Partial Summary Judgment of Validity Based on Sotera Stipulations, <i>Maxell, Ltd. v. Samsung Elecs. Co., Ltd.</i> , No. 5:23-cv-00092-RWS (E.D. Tex.)	2013

LISTING OF CHALLENGED CLAIMS¹

Claim	Claim Text
[1pre]	A communication system comprising:
[1a]	a communication device;
[1b]	an access point device;
[1c]	a first communication terminal configured to connect to the communication device via the access point device and transmit a command to remotely control a display operation on the communication device connected with the first communication terminal; and
[1d]	a second communication terminal configured to, if having permission from the first communication terminal, establish a connection with the communication device to use the communication device;
[1e]	wherein, while the communication device outputs data received from the second communication terminal that has established the connection with the communication device and upon receiving, by the communication device, the command from the first communication terminal, the communication device is configured to control how to display the data received from the second communication terminal

¹ For convenience purposes only, Patent Owner adopts for this Preliminary Response the numbering of claim elements advanced by Petitioner in the Petition (Paper 2) on page vii-xi. Patent Owner does not concede the appropriateness of such grouping and numbering of claim elements.

	while maintaining the connection with the second communication terminal, and
[1f]	wherein, when the communication device receives information to terminate the permission from the first communication terminal, the communication device is configured to terminate the connection with the second communication terminal in accordance with the information to terminate permission received from the first communication terminal.
[2pre]	The communication system according to claim 1, wherein,
[2a]	for the permission, the first communication terminal transmits, to the second communication terminal, connection information necessary for a connection through short range communication with the second communication terminal, and the second communication terminal connects to the communication device by using the connection information.
[5pre]	The communication system according to claim 1, wherein,
[5a]	the first communication terminal displays information whether to terminate the permission on a display screen, receives an input operation for terminating the permission, and transmits the information to terminate the permission to the communication device in accordance with the input operation for terminating the permission.
[6pre]	The communication system according to claim 1, wherein,
[6a]	in a case that the communication device is able to receive information from the first communication terminal, the communication device controls the communication device in accordance with information

	from the first communication terminal,
[6b]	wherein, in a case that the communication device is unable to receive information from the first communication terminal, the communication device terminates the connection with the second communication terminal.
[7pre]	The communication system according to claim 1, wherein,
[7a]	for the permission, the first communication terminal transmits, to the second communication terminal, connection information necessary for a connection through short range communication with the second communication terminal, and
[7b]	the second communication terminal transmits address information on the second communication terminal to the first communication terminal,
[7c]	the first communication terminal transmits the address information on the second communication terminal to the communication device,
[7d]	the communication device registers the address information on the second communication terminal into a permission list,
[7e]	the second communication terminal connects to the communication device by using the connection information,
[7f]	upon confirming the permission is to be terminated, the first communication terminal causes the communication device to delete the address information on the second communication terminal from the permission list of the communication device, and,
[7g]	upon the address information on the second communication terminal

	being not registered in the permission list, the communication device terminates the connection with the second communication terminal.
[8pre]	The communication system according to claim 1, wherein,
[8a]	for the permission, the first communication terminal transmits, to the second communication terminal, connection information necessary for a connection through short range communication with the second communication terminal, and
[8b]	the second communication terminal transmits address information on the second communication terminal to the first communication terminal,
[8c]	the first communication terminal registers the address information on the second communication terminal into a permission list,
[8d]	the second communication terminal connects to the communication device by using the connection information,
[8e]	upon confirming the permission is to be terminated, the first communication terminal causes the communication device to delete the address information on the second communication terminal from the permission list, and
[8f]	the communication device performs communication for confirmation with the first communication terminal and,
[8g]	upon the address information on the second communication terminal being not registered in the permission list of the communication device, terminates the connection with the second communication terminal.

[9pre]	The communication system according to claim 1, wherein,
[9a]	for the permission, the first communication terminal requests a one-time password from the communication device, and the communication device responds with the one-time password,
[9b]	the first communication terminal transmits, to the second communication terminal, connection information including the one-time password necessary for a connection through short range communication with the second communication terminal, and
[9c]	the second communication terminal connects to the communication device by using the connection information including the one-time password.
[10pre]	The communication system according to claim 1, wherein,
[10a]	for the permission, the second communication terminal performs short range communication with the communication device,
[10b]	the communication device transmits, to the second communication terminal, connection information necessary for a connection, and
[10c]	the second communication terminal transmits address information on the second communication terminal to the communication device,
[10d]	the communication device registers the address information on the second communication terminal into a permission list,
[10e]	the second communication terminal connects to the communication device by using the connection information,
[10f]	upon confirming the permission is to be terminated, the first communication terminal causes the communication device to delete

	the address information on the second communication terminal from the permission list of the communication device, and,
[10g]	upon the address information on the second communication terminal being not registered in the permission list, the communication device terminates the connection with the second communication terminal.
[11pre]	The communication system according to claim 1, wherein,
[11a]	for the permission, the second communication terminal requests a one-time password from the communication device through short range communication with the communication device, and
[11b]	the communication device transmits connection information including the one-time password necessary for a connection to the second communication terminal, and
[11c]	the second communication terminal connects to the communication device by using the connection information including the one-time password.
[12pre]	The communication system according to claim 1, wherein,
[12a]	for the permission, the first communication terminal transmits, to the second communication terminal, connection information necessary for a connection through short range communication with the second communication terminal, the second communication terminal connects to the communication device by using the connection information, and
[12b]	in the short range communication, the first communication terminal displays a bar code representing the connection information on a display screen thereof and the second communication terminal captures an image of the bar code with a camera to read the connection

	information.
[13pre]	The communication system according to claim 1, wherein,
[13a]	the second communication terminal controls the communication device while maintaining the connection with the communication device, and
[13b]	the first communication terminal controls the communication device while maintaining the connection with the communication device via the access point.
[14pre]	A communication terminal comprising:
[14a]	a wireless connection interface configured to connect to a communication device via an access point device; and
[14b]	a controller configured to control the wireless connection interface and to transmit a command to remotely control a display operation on the communication device connected with the communication terminal,
[14c]	wherein the controller is configured to transmit permission to establish a connection for the communication device and another communication terminal,
[14d]	wherein, while the communication device outputs data received from the another communication terminal that has established the connection with the communication device, the controller is configured to transmit the command to control how to display the data while the communication device and the another communication terminal are connected, and
[14e]	wherein, when the controller transmits information to terminate the

	permission from the communication terminal, the controller is configured to transmit the information to terminate the connection with the another communication terminal to the communication device.
[15pre]	A communication device comprising:
[15a]	a wireless connection interface configured to connect to a communication terminal and another communication terminal; and
[15b]	a controller configured to control the wireless connection interface,
[15c]	wherein the wireless connection interface is configured to connect to the communication terminal via an access point device,
[15d]	wherein the controller is configured to control to establish a connection with the another communication terminal, if having permission from the communication terminal, and control data received from the another communication terminal,
[15e]	wherein, while the controller controls the data received from the another communication terminal and upon receiving at the wireless communication interface, from the communication terminal, a command to remotely control how the data received from the another communication terminal is displayed, the controller is configured to control the data received from the another communication terminal in accordance with the command from the communication terminal while maintaining the connection with the another communication terminal, and
[15f]	wherein, when the wireless communication interface receives information to terminate the permission from the communication

Case IPR2025-01307

Patent No. 11,026,088

Patent Owner's Preliminary Response

	terminal, the controller is configured to terminate the connection with the another communication terminal.
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I. INTRODUCTION

Patent Owner Maxell, Ltd. ("Patent Owner") respectfully requests that the Director deny institution of the Petition filed by Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc., (hereinafter "Petitioner") challenging the patentability of claims 1, 2, and 5-15 ("challenged claims") of U.S. Patent No. 11,026,088 ("the '088 Patent") (EX1001).

Petitioner has failed to demonstrate a reasonable likelihood of success on the grounds submitted in its Petition. None of the cited references, whether taken alone or in reasonable combination, disclose or render obvious the arrangement of each limitation in the challenged claims.

For at least these reasons, Petitioner has failed to meet their burden of showing a reasonable likelihood of prevailing. Accordingly, the Director should deny Petitioner's request to institute *inter partes* review.

II. BACKGROUND

A. Overview of the '088 Patent

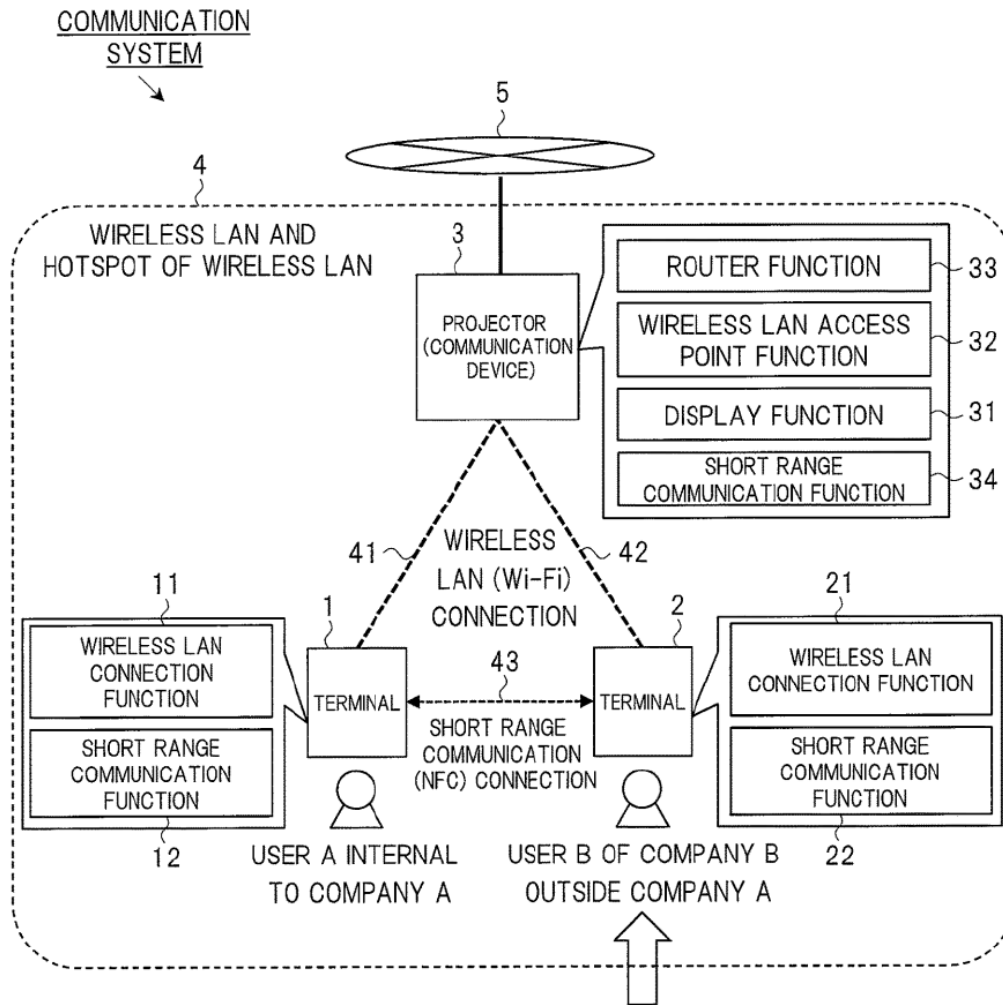
The '088 Patent, entitled "Communication System, Communication Device, and Communication Terminal Device," is generally directed to communication systems. EX1001 2:13-37. For example, the '088 Patent is directed to establishing and managing a network of devices, including, for example, a communication

device, an access point device, and/or one or more communication terminals. *See id.*

In particular, the system and apparatus disclosed in the '088 Patent ensure that communication device and communication terminals connect to each other via an access point device and enable communication terminal to permit another communication terminal to establish a connection with another communication terminal in the communication system. *See id.* Further, the system and apparatus disclosed in the '088 Patent “provide a technology pertaining to a wireless LAN communication system, a communication device in the system, and the like, which can achieve convenience for a terminal of a user who is external to an organization to temporarily use the system and ensure security in such a case.” *Id.* at 2:4-9.

Specifically, the '088 Patent discloses an exemplary communication system including “a communication device,” “a first communication terminal,” “a second communication terminal,” and “an access point device” that all work in conjunction to provide permission to a second communication terminal to establish a connection with a communication device if the first communication terminal provides the permission. *See* EX1001 2:13-37. Further, the first communication device is configured to control displaying of data received from the second communication terminal and also the first communication terminal is configured to remotely control a display operation on the communication device. *See id.* An exemplary

configuration is shown below in Figure 1 of the '088 Patent:



Id. at Fig. 1.

B. Patent Prosecution History

U.S. Patent Application No. 15/504,668, which would ultimately issue as the '088 Patent, is associated with the PCT application number PCT/JP2014/072783 that was filed on August 29, 2014.

During prosecution of the '088 Patent, the Examiner issued four office actions (two non-final office actions and two final office actions). EX1002 at 52, 109, 165, 245. In the Notice of Allowance, dated February 1, 2021, the Examiner noted the following:

The applicants' arguments filed on 30 November 2020 have been deemed persuasive. Specifically, the prior art does not disclose, teach or fairly suggest the feature of "wherein, while the communication device outputs data received from the second communication terminal that has established the connection with the communication device and upon receiving, by the communication device, the command from the first communication terminal, the communication device is configured to control how to display the data received from the second communication terminal while maintaining the connection with the second communication terminal."

Id. at 293, 296-297. The Examiner also noted that the '088 Patent claims were patentable over the following references:

A. Birkler et al US 2014/0197232 A1 directed to a server in a communications network that establishes a communication channel between a user's device and another device having a display [abstract].

B. Lieb et al US 2014/0164930 A1 directed to providing authentication information from a user of a mobile computing device to the presentation server, causing the presentation server to provide a view

of a presentation to a viewer device via view link, wherein the presentation is stored on the presentation server [1abstract].

C. Harrison et al US 2013/0143651 A1 directed to techniques and tools for controlling public output devices with client devices over a network [abstract].

Id. at 297. The prosecution history therefore demonstrates that the USPTO recognized that the interplay between the communication device, the first communication terminal, and second communication terminal of the '088 Patent as patentably distinct over the relevant art. As shown below, Petitioner's cited references fail to disclose at least the same limitations the Examiner noted as the reasons for allowance in the Notice of Allowance.

C. Summary of Petitioner's Proposed Grounds for Unpatentability

Petitioner alleges that claims 1, 2, and 5-15 of the '088 Patent would have been obvious under post-AIA 35 U.S.C. § 103 and raises five grounds of alleged unpatentability. Pet. 12. The alleged invalidity grounds are summarized as follows:

Ground	'088 Claims	Type of Challenge	References
1	1, 5, 13-15	§ 103	Iwami, Kim
2	2, 12	§ 103	Iwami, Kim, and Liansky
3	7, 8, 10	§ 103	Iwami, Kim, Liansky, and Weiser
4	9, 11	§ 103	Iwami, Kim, Liansky, and Kato

5	6	§ 103	Iwami, Kim, and Dowling
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The references relied upon by Petitioner are summarized below:

1. Iwami (EX1004)

Iwami is entitled “Information Processing Device, Information Processing System, and Information Processing Method” and directed to a many-to-one system, where there are many “source devices” and a single “display device.” See EX1004 Figs. 17-18. “[W]hen real-time image transmission is performed between the sink device and a plurality of source devices according to the Wi - Fi CERTIFIED Miracast specification, the control unit 747 [of control device 740] performs control such that the communication mode is set in the source device.” See EX1004 ¶ [0264].

2. Kim (EX1006)

Kim, entitled “Multicast Streaming Service Method and System Thereof,” is directed to managing multi-casting in relation to a one-to-many system where there is a single “source device” (described as “media server” (MS) in Kim) and multiple “display devices” (described as “media renderers” (MRs) in Kim). EX1006 Fig. 1, ¶ [0019]. Kim states that a control point facilitates the ability of a media renderer to join and leave a multicast group. See, e.g., EX1006 ¶ [0036]. The control point requests the media server to transmit media to a multicast address, and informs media renderers of the multicast address so that the media renderers can use the

multicast address to access the media. *See id.*

3. Liansky (EX1012)

Liansky is entitled “Method for Automatic Establishing Wireless Connectivity Between a Mobile Wireless Device and a Target Screen for Multimedia Data Streaming.” EX1012. Liansky discloses “displaying a QR code a receiving screen device” and states that a mobile wireless device may connect “by pointing its camera 180 to the receiving screen device 110 and capturing a picture which later on will be decoded by the QR-Code decoding software 140.” *Id.* at 4:27-33.

4. Weiser (EX1008)

Weiser is entitled “Systems and Methods for Providing Video Conferencing Services via an Ethernet Adapter.” EX1008. Weiser is directed to “systems and methods for providing video conference services via a single device installed as an Ethernet adapter on a computing device. *Id.* at Abstract.

5. Kato (EX1009)

Kato is entitled “Communication Apparatus, Communication System, and Recording Medium.” EX1009. Kato is directed to a communication apparatus including “a communication unit that connects with an external device in a one-to-one relationship.” *Id.* at Abstract.

6. Dowling (EX1021)

Dowling is entitled “Apparatus and Method for Cluster Network Device Discovery.” EX1021. Dowling is directed to “[a] group of network devices, such as Ethernet switches, [that] are logically configured as a single cluster, with one commander device and one or more member devices.” *Id.* at Abstract.

III. LEVEL OF ORDINARY SKILL

For purposes of this preliminary response only, Patent Owner does not raise an issue with the level of ordinary skill proposed by Petitioner. Pet. 18. Patent Owner reserves the right to contest Petitioner's definition of a person or ordinary skill in the art (“POSITA”) in the event of institution.

IV. CLAIM CONSTRUCTION

To minimize the disputes that the Board needs to address at this preliminary stage, for the purposes of this Preliminary Response only, Patent Owner simply applies Petitioner's own constructions to show how the Petitioner has not met its burden under 37 CFR § 42.104(b)(4). Patent Owner, however, reserves all rights to dispute Petitioner's proposed constructions with the support of expert testimony to the extent the Board decides to institute review of this Petition. Any statements made herein with respect to the lack of a claim element in a prior art reference are under Petitioner's proposed constructions and should not be construed as an admission on

behalf of Patent Owner that such construction is proper under the *Phillips* standard.

V. LEGAL STANDARD

A claim is also not patentable if the differences between the claim and the prior art are such that the subject matter as a whole would have been obvious to a person of ordinary skill in the art at the time of the invention. 35 U.S.C. § 103(a). Obviousness requires assessing (1) the “level of ordinary skill in the pertinent art,” (2) the “scope and content of the prior art,” (3) the “differences between the prior art and the claims at issue,” and (4) “secondary considerations” of non-obviousness such as “commercial success, long felt but unsolved needs, failure of others, etc.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007) (quoting *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17-18 (1966)).

It is a petitioner’s burden “to demonstrate both ‘that a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success in doing so.’” *Intelligent Bio-Systems, Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1367-68 (Fed. Cir. 2016) (quotations and citations omitted). However, a petitioner must first show that all of the claimed elements are disclosed in the prior art. *See Medichem, S.A. v. Rolabo, S.L.*, 437 F.3d 1157, 1164 (Fed. Cir. 2006) (considering motivation to combine and reasonable expectation of

success only “if all the elements of an invention are found in a combination of prior art references”).

VI. THE PETITION DOES NOT SHOW A LIKELIHOOD OF PREVAILING WITH RESPECT TO ANY CHALLENGED CLAIM

A. Grounds 1-5: Petitioner Fails to Establish That Any Challenged Independent Claim Would Have Been Obvious Based on Iwami and Kim

Grounds 1-5 all depend on the combination of Iwami and Kim. Pet. 12. The Petition only sets forth challenges to the independent claims (claims 1, 14, and 15) in Ground 1. *Id.* Therefore, failure of Ground 1 leads to failure of all remaining grounds in the Petition.

Therefore, the following discussions on deficiencies in Iwami and Kim in relation to the independent claims apply to each of Grounds 1-5.

1. Petitioner Fundamentally Misconstrues Iwami

Petitioner mischaracterizes the teachings of Iwami by improperly combining features of different embodiments of Iwami with no explanation for how or why these different embodiments should be combined. Petitioner fails to point to any teaching in Iwami or other reference that suggests such a combination of different embodiments.

Iwami teaches different ways to establish connection between source devices and sink devices. *See, e.g.*, EX1004 ¶¶ [0066]-[0070]. For example, paragraphs

[0409] and [0413] (cited by Petitioner on page 34) are directed to Figures 29 and 30 and a process for setting up connection between a source device and sink device **via an access point**. See EX1004 ¶¶ [0409], [0413], Figs. 29-30. On the other hand, paragraphs [0448]-[0455] (also cited by Petitioner on page 34) are directed to Figure 31 and a process for setting up a direct connection between a source device and sink device **without an access point**. See *id.* EX1004 ¶¶ [0448]-[0455], Fig. 31.

Petitioner never acknowledges that the disclosures in Iwami relate to separate embodiments and cites to at least three different embodiments of Iwami with no explanation for how or why these embodiments should be combined. See, *e.g.* Pet. 34 (citing to second embodiment (*e.g.*, EX1004 ¶¶ [0409], [0413]) and third embodiment (*e.g.*, EX1004 ¶¶ [0448]-[0455] of Iwami), 49 (citing to first embodiment of Iwami “EX1004, [0103]”).

This is improper. “Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference.” *In re Kotzab*, 217 F.3d 1365, 1370 (Fed. Cir. 2000); see *Lumenis BE Ltd., v. BTL Healthcare Techs. A.S.*, IPR2021-01280, Paper 8 at 20 (P.T.A.B. Mar. 9, 2022) (“Given that Petitioner’s obviousness assertions rely on combining the teachings from multiple embodiments, Petitioner was required to provide some explanation of how those teachings fit together to teach or suggest a

method employing all of the steps recited in the claims. This, Petitioner has not done.”); *see also In re Stepan*, 868 F.3d 1342, 1346 n.1 (Fed. Cir. 2017). Petitioner provides various citations to Iwami without identifying that these paragraphs relate to different embodiments and without articulating any motivation to combine the different embodiments. *See, e.g.*, Pet. 34. Accordingly, the Petition fails as a matter of law. *See Intel Corp. v. Tela Innovations, Inc.*, IPR2019-01521, Paper 65, at 25 (P.T.A.B. Mar. 9, 2021) (“It is not sufficient to demonstrate that each of the components in a challenged claim is known in the prior art; Petitioner must also explain why a POSITA would have combined the elements disclosed in the separate embodiments described in [the reference]. . . . That the elements are disclosed in separate embodiments of the same reference does not excuse this requirement.”); *see also Lumenis BE Ltd*, Paper 8 at 20; *Amazon.com v. Almondnet, Inc.*, IPR2022-01455, Paper 12, at 18 (P.T.A.B. Apr. 6, 2023); *Abiomed, Inc. v. Maquet Cardiovascular, LLC*, IPR2017-01204, Paper 9, at 11 (P.T.A.B. Oct. 23, 2017).

The deficiencies of Petitioner's combination based on different embodiments of Iwami is further highlighted by the fact that these embodiments of Iwami are directed to distinct processes and as such cannot be combined. For example, Figures 29-30 describe outdoor use permission in relation to the second embodiment, which is directed to giving permission when an access point is being used. *See, e.g.* EX1004

¶ [0407] (“The outdoor use information is permission information indicating whether or not the connection with the information processing device 730 via the access point other than the access point 701 or the base station is permitted and is irrelevant to establishing connection via touch manipulation, which occurs via a direct connection without an access point.”). Outdoor use permission is therefore irrelevant to the third embodiment, which discusses initiating a connection **without** an access point. *See, e.g.*, EX1004 [0069] (discussing that third embodiment involves starting connection “between source device and sink device **using near field communication**”) (emphasis added)); *see also* Fig. 31 (S1071: “Has touch manipulation been performed on sink device?”). Petitioner fails to address how and why outdoor use permission would be relevant in a scenario where touch manipulation is used to start a direct connection between a source device and sink device, when outdoor use permission is specific to connecting via an access point. *See, e.g.*, Pet. 34.

Further, initiating connection via an access point (and using outdoor use information) via the second embodiment begins a flow composed of different steps than initiating connection via near field communication. *Compare, e.g.*, EX1004 Fig. 27 *with id.* Fig. 31. Initiating connection via an access point requires disconnection via an access point and start of a new direct connection before image transmission

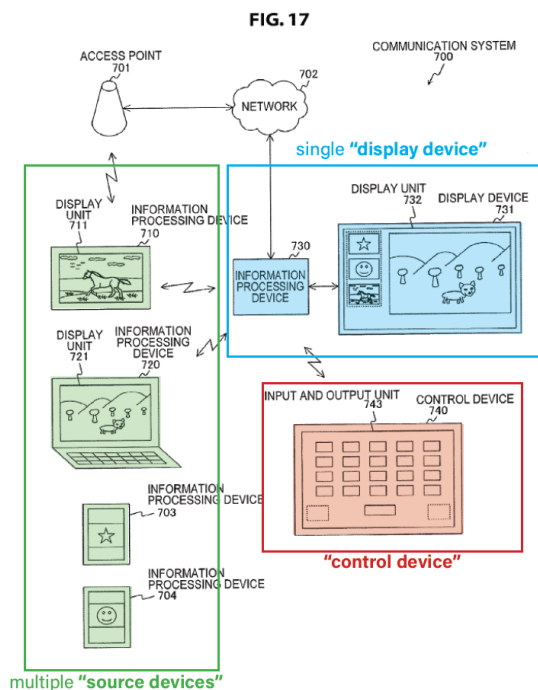
begins. *See* EX1004 Fig. 27 (“Disconnect connection with AP” (S1038), “Start direct connection with sink device”(S1039)). The third embodiment does not disclose such a procedure—there is no need to disconnect connection with an access point before image transmission because connection was initiated via direct connection rather than with an access point. *See id.* Fig. 31. This is pertinent because the independent claims recite particularity with “having permission” and “establish[ing] a connection with the communication device.” *See infra* Section VI.A.3.a.

Moreover, because Petitioner has failed to articulate the manner in which it asserts a combination of different embodiments of Iwami, Petitioner has failed to satisfy 35 U.S.C. § 312(a)(3). Petitions must “identif[y], in writing and **with particularity**, each claim challenged, the grounds on which the challenge to each claim is based, and the evidence that supports the grounds for the challenge to each claim.” 35 U.S.C. § 312(a)(3). Furthermore, the Petition must include “[a] full statement of the reasons for the relief requested, including **a detailed explanation of the significance of the evidence** including material facts, and the governing law, rules, and precedent.” 37 C.F.R. § 42.22(a)(2). The Petition lacks detailed explanation and should not be instituted because it is unclear how Petitioner seeks to combine embodiments of Iwami to result in the claimed invention.

2. Petitioner Fails to Establish that a POSITA Would Combine Iwami and Kim

Petitioner's motivation to combine rationale is based on a mischaracterization of Kim. *See, e.g.*, Pet. 20-23. Further, Iwami and Kim are directed to two fundamentally different systems and a POSITA would not be motivated to combine the two references in the manner suggested by Petitioner.

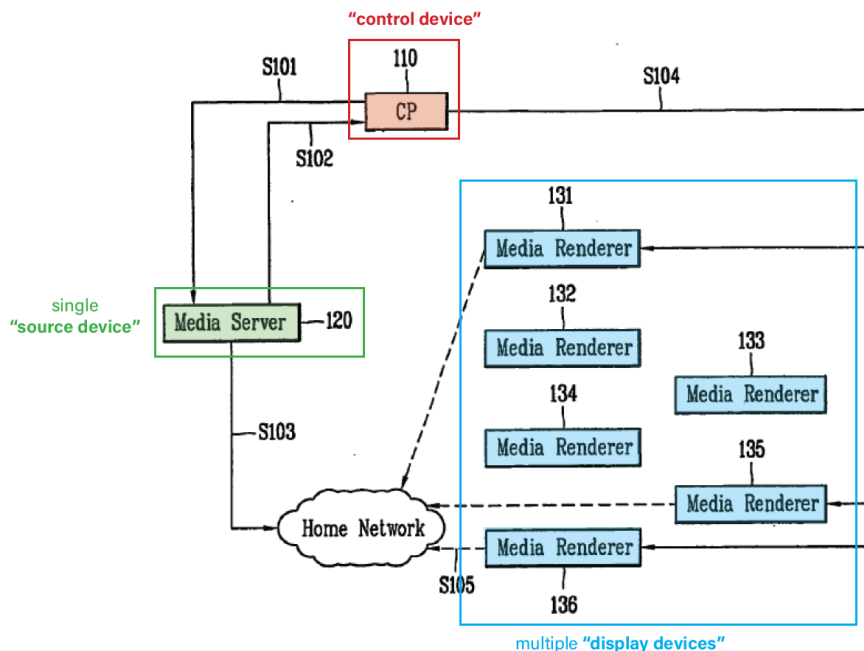
Iwami is directed to a **many-to-one system**, where there are many "source devices" and a single "display device." EX1004 Figs. 17-18; Pet. 21. An annotated image of Figure 17 of Iwami is below.



In Iwami, a control device asserts control over multiple source devices. *See* EX1004 ¶ [0250] ("The control device 740 is a connection control device that

manages the information processing devices [] in the communication system 700 and controls the connection of the information processing devices.”). The control device controls what is displayed on the display device by selecting specific source devices (*i.e.*, information processing devices) to cause a particular image to be displayed on the display device. *See id.* ¶ [0255] (“The teacher can sequentially select the information processing devices of the students who have to cause the image to be displayed on a display unit 732 of the display device 731 by manipulating the control device 740.”). To take part in such a system, the source device communicates with the sink device to start connections. *See, e.g., id.* Fig. 27.

Kim, on the other hand, is directed to managing multi-casting in relation to a **one-to-many system** where there is a single “source device” (described as “media server” (MS) in Kim) and multiple “display devices” (described as “media renderers” (MRs) in Kim). EX1006 Fig. 1, ¶ [0019]; Pet. 21-22.



In Kim, a control point facilitates the ability of a media renderer to join and leave a multicast group. *See, e.g.*, EX1006 ¶ [0036]. The control point requests the media server to transmit media to a multicast address, informs media renderers of the multicast address so that the media renderers can use the multicast address to access the media. *See id.*

Kim does not disclose a system of permissions. The control point simply facilitates as an intermediary to allow media renderers to join or leave a multicast group. *See id.* ¶¶ [0042], [0045]. There is nothing in Kim to suggest that the control point will block access to media renderers or the media server based on revoking permission. *See, e.g., id.* ¶¶ [0043]-[0046].

Petitioner's characterization of Kim is thus flawed and unsupported by Kim. *See* Pet. 21-22 ("Kim describes specific systems, messages, and signal sequences by which the control point 110 can grant and/or revoke permission for connections between the media server 120 sends media data to one or more media renderers 131-136."). None of Petitioner's cited paragraphs support the assertion that Kim is directed to a system of **permission** in which a control point grants or revokes permission for connection. *See, e.g.*, EX1006 ¶¶ [0037]-[0045]. Kim fails to recite "permission" once in its disclosure. *See, e.g., id.*

It is therefore unclear why a POSITA would turn to Kim as suggested by Petitioner. While Petitioner states that "A POSITA would have been motivated to implement elements of the Kim permission technique as one mechanism by which the control device 740 of Iwami can manage connections between source devices 703, 704, 710, and/or 720 and sink device 730," Kim fails to recite any "permission techniques" at all.

Further, Kim and Iwami are directed to different systems. As described above, it can be seen that in Iwami, "source devices" request to join a group, while in Kim, the display devices request to receive a multicast stream. *Compare, e.g.*, EX1004 Fig. 27 *with* EX1006 ¶ [0036]. The information flows and processes in Kim and Iwami are fundamentally different and different devices send and receive

information to start connection. As another example, in Kim, a display device joins a multicasting group and obtains the media stream by accessing a multicast address. *See, e.g.*, EX1006 ¶ [0036]. On the other hand, Iwami teaches that a source device must establish a **direct** connection with a sink device for image transmission. *See, e.g.*, EX1004 Fig. 27 (showing a P2P connection is necessary for image transmission). Petitioner thus fails to address how disclosure in Kim, which is directed to facilitating viewing of media by sharing a multicast address and allowing the multiple display devices to render media via a **network**, are relevant to establishing **direct** connection in Iwami that are needed for image transmission from the source device to the sink device. *See, e.g.*, EX1004 Fig. 27. A POSITA would thus not be motivated to combine Iwami and Kim in the manner suggested by Petitioner and Grounds 1-5 should fail for this reason alone.

3. Petitioner Fails to Establish That Claim 1 Would Have Been Rendered Obvious In View of Iwami and Kim

a. Petitioner Fails to Establish That Claim Limitation [1d] Would Have Been Rendered Obvious In View of Iwami and Kim

Claim limitation [1d] recites “a second communication terminal configured to, if having permission from the first communication terminal, establish a connection with the communication device to use the communication device.” Petitioner fails to establish that claim limitation [1d] would be rendered obvious in

view of Iwami and Kim. Pet. 32-37.

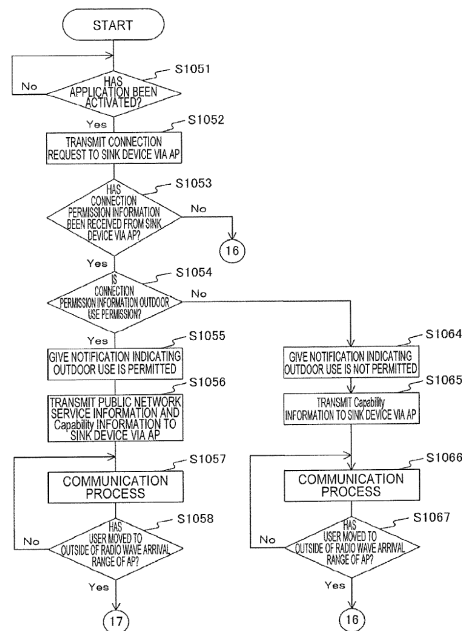
Petitioner's discussion of limitation [1d] is flawed because it fails to properly address the causal component of the claim: "a second communication terminal configured to, **if having permission** from the first communication terminal, **establish a connection with the communication device to use the communication device.**" *See id.* Petitioner solely addresses what constitute the alleged permission, and how the permission is allegedly "**from** the first communication terminal" but fails to provide any explanation of if such permission establishes the connection with an alleged communication device to use the communication device. *See id.*

Petitioner explicitly maps "use [of] the communication device" to using a display device to **display video**. Pet. 33 ("As such, the first communication terminal enables the second communication terminal (the student's source device) to use sink device 730/display device 731 to display video."). Petitioner also explicitly maps Iwami's "outdoor use permission" to the "permission from the first communication terminal such that if the second communication terminal has the permission, it establishes a connection with the communication device to use the communication device [to display video]." *See, e.g.,* Pet. 35-36. Based on Petitioner's own mapping, a gap remains—outdoor use permission cannot satisfy the permission recited in limitation [1d], because there is no relationship provided between the transmission

of outdoor use permission and establishment of connection with the alleged communication device to use the communication device to display video.

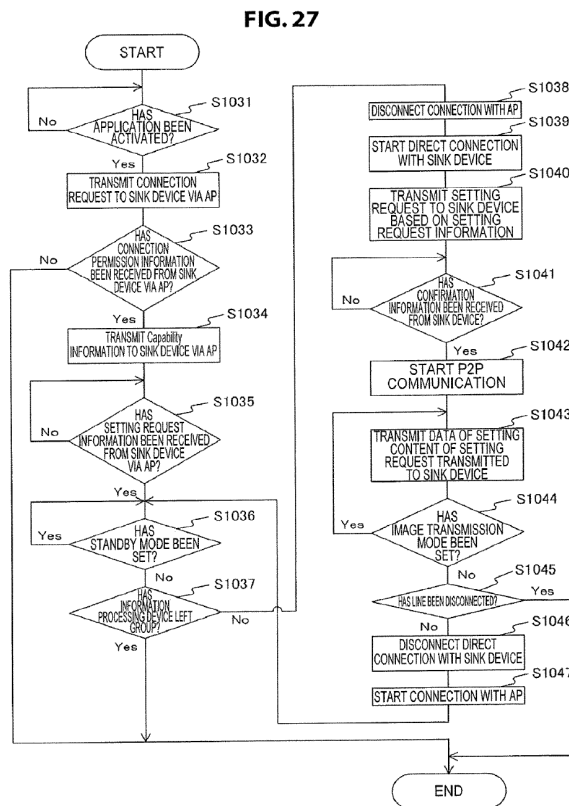
Outdoor use permission is included in “connection permission information” used by source device in communication with the sink device via an access point. See EX1004 Fig. 29 (S1054: “Is connection permission information outdoor use permission?”). As shown in Figure 29, once a notification indicating outdoor use is permitted is received in S1055, public network service information and capability information is transmitted to the sink device via the access point (S1056) and a communication process begins (S1057). See *id.* Figure 29 of Iwami is reproduced below for reference.

FIG. 29



EX1004 Fig. 29.

The communication process of S1057 includes additional steps that are not depicted in Figure 29, but are portrayed in Figure 27. EX1004 ¶ [0417] (“Then, the control unit of the information processing device 710 performs a communication process (step S1057). In the communication process, the process (steps 1035 to S1047) illustrated in FIG. 27 is performed.”). Figure 27 of Iwami is thus reproduced below for reference.



EX1004 Fig. 27.

As shown in Figure 27, once the communication process has initiated, several additional steps are performed including, for example, at least setting request information must be received (S1035), connection with the access point is disconnected (S1038), a direct connection with sink device is started (S1039), P2P communication must be started (S1042), and data of setting content of setting request transmitted to sink device must be transmitted (S1043), and image transmission mode must be set (S1036). *See* EX1006 Fig. 27. As shown in the above diagram, connections are started and severed and new connections are started to begin transmission of video. *See id.* Petitioner has mapped the permission to outdoor use information and “use” to the ability to transmit video. Based on Petitioner’s own mapping, there is no relationship between having “outdoor use” permission and establishing a connection with the communication device to “use the communication device.” The Petition itself fails to provide any such explanation tying specific permission by a specific terminal to subsequent establishment of connection. *See id.*

Petitioner also argues that:

To the extent Iwami’s outdoor use permission is not unambiguously permission from the first communication terminal such that if the second communication terminal has the permission, it establishes a connection with the communication device to use the communication device, a POSITA would have found it obvious to send all connection

permission information (not only outdoor use permission) from control device 740 to sink device 730. . . .

To the extent this feature is not explicit in Iwami, a POSITA would have found it obvious to modify control device 740 to also accept user input of connection permission generally, meaning that any and all connection permission information would originate with control device 740 and be passed to source device 710 via sink device 730.

Pet. 35-36.

These arguments are only directed to addressing whether connection permission information originates from the alleged control device and fail to cure the deficiencies stated above. As described above, the receipt of **connection permission information** that includes outdoor use permission does not allow the source device to send video to the sink device (*i.e.*, to allegedly **use** the sink device). Petitioner has failed to establish any relationship between having “outdoor use” permission and establishing a connection with the communication device to “use the communication device.” See EX1006 Fig. 27. Thus, based on Petitioner’s own mapping, **connection permission information is insufficient to allow a source device to establish a connection with the communication device to use the communication device.** See *id.*

The Petition does not cite to Kim to cure the deficiencies of Iwami. Pet. 32-37. For at least the foregoing reasons, Petitioner fails to show a reasonable likelihood of success in establishing that claim limitation [1d] would have been rendered obvious based on Iwami and Kim. Accordingly, the Petition should be denied.

a. Petitioner Fails to Establish That Claim Limitation [1e] Would Have Been Rendered Obvious In View of Iwami and Kim

Claim limitation [1e] recites “wherein, while the communication device outputs data received from the second communication terminal that has established the connection with the communication device and upon receiving, by the communication device, the command from the first communication terminal, the communication device is configured to control how to display the data received from the second communication terminal while maintaining the connection with the second communication terminal.” Petitioner fails to establish that claim limitation [1e] would be rendered obvious in view of Iwami and Kim. Pet. 37-38; *see also* Pet. 27-32.

Petitioner states that “Iwami discloses this limitation, and to the extent not disclosed by Iwami, the combination of Iwami and Kim renders it obvious.” Pet. 37. Regarding Iwami, Petitioner argues that:

Iwami describes that a teacher using control device 740 can sequentially select students' devices (e.g., 710, 720) and thereby cause control device 740 to transmit a command to sink device 730 that causes the image of the selected source device to be displayed in a selected region. . . . Causing the image from the selected source device to be moved from the peripheral channel region 734 to the middle channel region 733 constitutes controlling how to display the data received from the second communication terminal by the communication device in accordance with a command received from the first communication device while the communication device outputs data received from the second communication terminal while maintaining the connection with the second communication terminal as required by limitation [1e].

Pet. 37-38. Here, Petitioner makes conclusory assumptions that Iwami teaches that control device 740 transmits a command to sink device 730 that causes an image to be moved from the peripheral channel region 734 to the middle channel region 733. *See id.* Iwami's deficiencies in this regard are reflected in the Petition: Petitioner fails to cite to Iwami a single time in relation to limitation [1e]. *See id.* Instead, Petitioner only cites to its expert declaration and earlier discussion of limitation [1c] in relation to Iwami's alleged disclosures. *See, e.g., id.*

Iwami fails to disclose a transmission of a command by the control device 740 to the sink device 730 to change an image from peripheral channel region to middle

channel region (or vice versa). *See, e.g.*, EX1004 ¶ [0264]. Instead, Iwami explicitly teaches that when changing communication modes, control device 740 sets the communication mode **in the source device**, *i.e.*, transmits information to the source device, rather than the sink device 730. *See* EX1004 ¶ [0264] (“[W]hen real-time image transmission is performed between the sink device and a plurality of source devices according to the Wi - Fi CERTIFIED Miracast specification, **the control unit 747** [of control device 740] **performs control such that the communication mode is set in the source device.**”). Iwami fails to disclose that a command is sent from the control device to the sink device to change the communication mode in the sink device.

Iwami also states that triggers (referred to as (B1) to (B3) in Iwami) can be used to switch communication modes of the source device. *See, e.g.*, EX1004 ¶ [0296]. However, the use of switching using the control device (B2/B3²) as a trigger fails to satisfy claim limitation [1e] for the following reasons.

First, Iwami only describes the use of switching in the context of switching between two modes: standby mode and image transmission mode. *See, e.g.*, EX1004

² As Petitioner notes, Iwami first describes switching using the control device as (B2), but then refers to switching using the control device as (B3). *See* EX1004 ¶¶ [0299], [0304].

¶¶ [0296]-[0297] (“Here, a switching method **when the communication modes (the standby mode and the image transmission mode) of the source device are switched** will be described. . . . For example, the following (B1) to (B3) can be used as triggers for switching of the communication modes of the source device.” (emphasis added)); *see also id.* ¶¶ [0305]-[0306] (only describing switch between standby mode and image transmission mode), Fig. 21 (only showing option to drag and drop into a standby mode (“To Standby” (749)) or presentation mode (“To Presentation” (748))). Iwami never states that the trigger can be used to change between two different image transmission modes.

Second, the use of a switching using the control device as a trigger to switch communication modes does not mean that the control device sends a command to the sink device. Iwami does not state that the manipulation of the user in the control device results in the control device transmitting a command to the sink device. Iwami simply states:

In (B3), for example, the manipulation of the user in the control device 740 can be used as the switching trigger. For example, when the switching manipulation of the source device is performed in the control device 740, **information** (for example, the terminal identification information) related to the source device in which the switching manipulation has been performed **is transmitted** to the sink device (the

information processing device 730). **When the information is received**, the sink device (the information processing device 730) performs control such that the band of the source device in which the switching manipulation has been performed is increased or decreased while performing control for the other bands.” (emphasis added)).

EX1004 ¶ [0304]. As reflected above, Iwami fails to state that the control device itself transmits a command to the sink device. *See id.* Instead, the context of Iwami makes clear that the control device of Iwami performs control such that the communication mode is set **in the source device**, and as a result, the source device communicates with the sink device to perform image transmission. *See, e.g.*, EX1004 ¶ [0264], Fig. 27.

Petitioner tacitly recognizes the gap in Iwami and additionally relies on Kim. *See* Pet. 38 (“A POSITA would have found it obvious to implement the commands from Iwami’s control device 740 discussed above using a message like the MulticastStart() action message disclosed by Kim for the reasons discussed above for limitation [1c].”).

But such a combination fails to make sense. Kim is directed to a one-to-many system, where there is a single source device and multiple display devices, while Iwami is directed to a many-to-one system, where there is a multiple source devices and a single display device. *See supra* Section VI.A.2; EX1004 Fig. 17; EX1006

Fig. 1; ¶ [0019]. Further, Kim is directed to describing that a control point facilitates the ability of a media renderer to join and leave a multicast group. *See supra* Section VI.A.2; EX1006 ¶ [0036]. Kim therefore does not contemplate how to manage **how** a media renderer displays information, and only discloses the sending of information that allows a media renderer to display media from a multicast stream. *See, e.g.*, EX1006 ¶ [0036].

Because of this, Kim fails to disclose any command related to controlling **how** to display the data received from the second communication terminal.” Such a command is missing from both Iwami and Kim. This deficiency pervades both Iwami and Kim, and as such, neither can cure each other's deficiencies.

For at least the foregoing reasons, Petitioner fails to show a reasonable likelihood of success in establishing that claim limitation [1e] would have been rendered obvious based on Iwami and Kim. Accordingly, the Petition should be denied.

b. Petitioner Fails to Establish That Claim Limitation [1f] Would Have Been Rendered Obvious In View of Iwami and Kim

Claim limitation [1f] recites “wherein, when the communication device receives information to terminate the permission from the first communication terminal, the communication device is configured to terminate the connection with

the second communication terminal in accordance with the information to terminate permission received from the first communication terminal.” Petitioner fails to establish that claim limitation [1f] would be rendered obvious in view of Iwami and Kim. Pet. 38-41.

Petitioner states that: “Based on Kim’s teachings, a POSITA would have found it obvious to modify the system 700 of Iwami to send an explicit message from first communication terminal 740 to sink device 730 to terminate permission for a second communication terminal 710 to connect with sink device 730.” Pet. 40.

This rationale fails because neither Iwami or Kim teaches any alleged communication device receiving “information to terminate the permission” from an alleged first communication terminal.

Petitioner concedes that Iwami fails to disclose this limitation and instead relies on Kim to meet this limitation. Pet. 39 (“Iwami does not disclose a mechanism by which control device 740 terminates the permission of source device 710 to connect to sink device 730”). Petitioner specifically relies on the “Leave() action” in Kim to satisfy this limitation. Pet. 40 (“The Leave() action is information to terminate the permission, sent from the first communication terminal to the communication device, that configures the communication device to terminate the connection with the second communication terminal in accordance with the Leave()

command.””).

The Leave() action is described in Kim as an action that can be used by a media renderer (*e.g.*, a display device) to leave a multicast group. EX1006 ¶ [0045]. The Leave() action stems from the core of the invention: enabling efficient multicasting so that multiple displays can dynamically join or leave a multicast group to view the same content, which facilitates simultaneous viewing across rooms and continuation of viewing when a user moves from one location to another:

In the conventional UPnP AV standards, however, the media renderer is operated based on the concept that one media renderer is operated based on the concept that **one** media renderer plays one content sent from the media server. But in case that the media server receives a TV signal and sends it to the media renderer, you might want to see the same channel on a number of displays simultaneously. . . . Besides, in case where the person having watched the TV in the living room moves to another place, when TV contents are sent by multicasting, another media renderer in the another place joins the multicast group, thereby making him or her not to miss but watch the program he or she watched a little while ago. **To realize the aforementioned scenarios, the UPnP AV device must be able to send contents to the multicast group, and to join[] and leave the multicast group.**

EX1006 ¶ [0013]–[0016].

Therefore, the purpose of Kim is to enable the **UPnP devices** (*e.g.*, media renderers)³ to join or leave a multicast group. *See id.* As further support for this, Kim states the object of the invention is to define UPnP actions. *See, e.g.*, EX1006 ¶¶ [0018], [0032] (“In a preferred embodiment of the present invention, **UPnP actions** required for transmitting/receiving multicast data on an UPnP **will be defined** and the procedure of performing multicast transmission and reception using these actions will be described.”).

The control point does not send information to terminate a connection to the UPnP device/media renderer. *See* EX1006 ¶¶ [0019], [0037], [0045]. Instead, the control point facilitates media renderers joining and leaving a multicast group by sending information to enable the media renderers to leave the multicast group. *See, e.g.*, EX1006 ¶¶ [0019], [0037], [0045]. The media renderer uses the Leave() action received from the control point to leave the multicast group. EX1006 ¶ [0045]. When

³ UPnP devices are defined in Kim to include devices such as the media renderers, and are distinguished from devices that serve as the control point. EX1006 ¶ [0005] (“That is, the control point (CP), as the controller controlling a variety of devices (for example, UPnP devices), discovers various kinds of UPnP devices, finds out the descriptions of the discovered UPnP devices and controls the UPnP devices according to a user's key input.”).

the media renderer uses the Leave() action to leave the multicast group, the media renderer transmits information to the control point and the control point invokes the Leave() action to stop the data reception. EX1006 ¶ [0037]; *see also* Figs. 2-3.

The use of the Leave() action therefore fails to satisfy claim limitation [1f] for the following reasons.

First, Kim describes the **use** of the Leave() action is based on use by the media renderer and not the control point. Kim ¶ [0045] (“Afterwards, in order to leave the multicast group, **the corresponding media renderer uses ‘Leave()’ action** received from the control point 110.”). In other words, Kim discloses a system in which the media render (the alleged “communication device”) is the device that determines to leave by **using** the ‘Leave()’ action. *See id.* This goes to the objective of Kim—to defining UPnP actions such as Leave() to allow the UPnP device/media renderer to leave a multicast group. EX1006 ¶ [0018], *see also id.* ¶¶ [0016], [0032], [0033]. Therefore, the information to terminate comes from the media renderer itself and is not received from the control point (the alleged “first communication terminal”). In other words, the media renderer therefore does not “**receive[]** information to terminate the permission **from the first communication terminal.**”

Second, Kim fails to disclose that “**when** the communication device receives information to terminate the permission from the first communication terminal, **the**

communication device is configured to terminate the connection with the second communication terminal in accordance with the information to terminate permission received from the first communication terminal.” The sending of the Leave() action from the control point to the media renderer fails to satisfy this limitation. This is because when the control point sends the Leave() action to the media renderer, Kim fails to disclose that the media renderer (the alleged “communication device”) is configured to terminate the connection. Instead, the communication device must **use** the Leave() action. EX1006 ¶ [0045] (“Afterwards, in order to leave the multicast group, the corresponding **media renderer uses Leave() action** received from the control point 110.”).

This goes to the function of Kim, which is to **enable the UPnP device to ...joint[sic] and leave the multicast group**. EX1006 ¶ [0016]. In other words, the media renderer (*i.e.*, the UPnP device) determines when to leave the multicast group by using the Leave() action, and information received from the control point fails to trigger termination of the connection. The sending of information from the control point thus fails to satisfy this limitation, because when the control point sends information, termination does not result. In other words, the control point does not send information to terminate a connection to the media renderer, but rather sends information that enables the media renderer to leave the multicast group. *See id.*; *see*

also EX1006 ¶¶ [0018], [0032], [0033].

Third, Kim fails to disclose “wherein, when the communication device receives **information to terminate the permission** from the first communication terminal, the communication device is configured to terminate the connection with the second communication terminal in accordance with the **information to terminate permission** received from the first communication terminal.” Kim is not directed to a system of permissions. *See supra* Section VI.A.2. Instead, Kim is directed to a system facilitating a display device (or “media renderer,” as described in Kim) that wants to join or leave a multicast group. EX1006 ¶¶ [0016], [0018]. Media renderers can join or leave a multicast group absent “permissions” granted by the control point or another device. *See, e.g.*, EX1006 ¶ [0046]. The role of a control point is to facilitate the joining and leaving of a media renderer by giving address information to a media renderer that wants to play contents of the multicast group. EX1006 ¶ [0042] (“At this time, the control point 110 informs a plurality of media renderers 131 to 136 wanting to play the contents of the RTSP URL provided from the media server 120 through SetAVTrans portURI action.”).

Therefore, Kim’s disclosures cannot satisfy limitation [1f]. Kim is not directed to terminating permission because Kim fails to disclose permission in any context. *See* EX1006 ¶ [0046]. For example, Kim states that a media renderer

can simply rejoin after the Leave() action is invoked. *Id.* (“If the user wants to view the existing contents again after the contents are over, the user has to rejoin the multicast group after leaving the multicast group.”).

For the reasons above, Kim fails to disclose limitation [1f]. Petitioner concedes that Iwami does not disclose limitation [1f]. Pet. 39. Since limitation [1f] is missing from both Iwami and Kim, neither can cure the other's deficiencies. Limitation [1f] is therefore not obvious based on Iwami, Kim, or any reasonable combination of Iwami and Kim.

For at least the foregoing reasons, Petitioner fails to show a reasonable likelihood of success in establishing that claim limitation [1f] would have been rendered obvious based on Iwami and Kim. Accordingly, the Petition should be denied.

4. Petitioner Fails to Establish That Claim 14 Would Have Been Rendered Obvious in View of Iwami and Kim

a. Petitioner Fails to Establish That Claim Limitation [14c] Would Have Been Rendered Obvious in View of Iwami and Kim

In relation to this limitation, Petitioner merely cites back to limitations [1c] and [1d]. Pet. 48. Therefore, for the reasons provided above in relation to limitation [1d], Petitioner fails to establish that claim limitation [14c] would have been rendered obvious in view of Iwami and Kim.

a. Petitioner Fails to Establish That Claim Limitation [14d] Would Have Been Rendered Obvious in View of Iwami and Kim

In relation to this limitation, Petitioner merely cites back to limitation [1e]. Pet. 48. Therefore, for the reasons provided above in relation to limitation [1e], Petitioner fails to establish that claim limitation [14d] would have been rendered obvious in view of Iwami and Kim.

b. Petitioner Fails to Establish That Claim Limitation [14e] Would Have Been Rendered Obvious in View of Iwami and Kim

Claim limitation [14e] recites “wherein, when the controller transmits information to terminate the permission from the communication terminal, the controller is configured to transmit the information to terminate the connection with the another communication terminal to the communication device.” Petitioner fails to establish that claim limitation [14e] would be rendered obvious in view of Iwami and Kim. Pet. 48.

In relation to this limitation, Petitioner merely cites back to limitation [1f]. Pet. 48. Therefore, for the reasons provided above in relation to limitation [1f], Petitioner fails to establish that claim limitation [14e] would have been rendered obvious in view of Iwami and Kim. For example, the combination of Iwami and Kim fail to teach that an alleged controller transmits information to terminate the

permission **from the communication terminal** and fails to teach transmitting of information to terminate **permission**.

For at least the foregoing reasons, Petitioner fails to show a reasonable likelihood of success in establishing that claim limitation [14e] would have been rendered obvious based on Iwami and Kim.

5. Petitioner Fails to Establish That Claim 15 Would Have Been Rendered Obvious in View of Iwami and Kim

a. Petitioner Fails to Establish That Claim Limitation [15d] Would Have Been Rendered Obvious in View of Iwami and Kim

In relation to this limitation, Petitioner merely cites back to limitations [1c] and [1d]. Pet. 49. Therefore, for the reasons provided above in relation to limitation [1d], Petitioner fails to establish that claim limitation [15d] would have been rendered obvious in view of Iwami and Kim.

Further, claim limitation [15d] recites limitations that are not recited in limitation [1c] and [1d]. For example claim limitation [15d] recites: “wherein the controller is configured to control to establish a connection with the another communication terminal, **if having permission from the communication terminal, and control data received from the another communication terminal.**” Therefore, claim limitation [15d] recites at least two different requirements: (a) the communication device is the device that needs permission from

the communication terminal, and (b) control data received from the another communication terminal.

Claim limitation [1d], on the other hand, recites: “a second communication terminal configured to, if having permission from the first communication terminal, establish a connection with the communication device to use the communication device.” Claim limitation [1d] does not recite control data as recited in limitation [15d] and also requires the second communication terminal to have permission, rather than the communication device. Claim limitation [1c] similarly does not recite control data or requiring the communication device to have permission from the first communication terminal.

Therefore, Petitioner cannot simply cite to limitation [1c] and [1d] to meet limitation [15d]. Petitioner has failed to provide any explanation for how these additional requirements of limitation [15d] are met. Pet. 49. For example, Petitioner has made no indication of how it has mapped “control data” to Iwami or Kim. Pet. 49.

For at least the foregoing reasons, Petitioner fails to show a reasonable likelihood of success in establishing that claim limitation [15d] would have been rendered obvious based on Iwami and Kim.

a. Petitioner Fails to Establish That Claim Limitation [15e] Would Have Been Rendered Obvious in View of Iwami and Kim

In relation to this limitation, Petitioner merely cites back to limitation [1e]. Pet. 49-50. Therefore, for the reasons provided above in relation to limitation [1e], Petitioner fails to establish that claim limitation [15e] would have been rendered obvious in view of Iwami and Kim.

b. Petitioner Fails to Establish That Claim Limitation [15f] Would Have Been Rendered Obvious in View of Iwami and Kim

In relation to this limitation, Petitioner merely cites back to limitation [1f]. Pet. 49-50. Therefore, for the reasons provided above in relation to limitation [1f], Petitioner fails to establish that claim limitation [15f] would have been rendered obvious in view of Iwami and Kim.

B. Ground 1: Petitioner Fails to Establish That Claims 5 and 13 Would Have Been Obvious Based on Iwami and Kim

Claims 5 and 13 depends on claim 1. Therefore, for at least the same reasons presented above in relation to claim 1 in Ground 1, Petitioner fails to establish that claims 5 and 13 would have been rendered obvious based on Iwami and Kim.

C. Ground 2: Petitioner Fails to Establish That Claims 2 and 12 Would Have Been Obvious Based on Iwami, Kim, and Liansky

Claims 2 and 12 both depend from claim 1. Therefore, for at least the reasons

provided above in relation to claim 1 in Ground 1, Petitioner fails to establish that claims 2 and 12 would have been rendered obvious based on Iwami and Kim.

Because Ground 2 is only asserted against dependent claims, Ground 2 inherently relies on Ground 1. Because Ground 1 fails, Ground 2 similarly fails for the reasons provided above in relation to Ground 1.

D. Ground 3: Petitioner Fails to Establish That Claims 7, 8, and 10 Would Have Been Obvious Based on Iwami, Kim, Liansky, and Weiser

Claims 7, 8, and 10 depend from claim 1. Therefore, for at least the reasons provided above in relation to claim 1 in Ground 1, Petitioner fails to establish that claims 7, 8, and 10 would have been rendered obvious based on Iwami and Kim.

Because Ground 3 is only asserted against dependent claims, Ground 3 inherently relies on Ground 1. Because Ground 1 fails, Ground 3 similarly fails for the reasons provided above in relation to Ground 1.

E. Ground 4: Petitioner Fails to Establish That Claims 9 and 11 Would Have Been Obvious Based on Iwami, Kim, Liansky, and Kato

Claims 9 and 11 depend from claim 1. Therefore, for at least the reasons provided above in relation to claim 1 in Ground 1, Petitioner fails to establish that claims 9 and 11 would have been rendered obvious based on Iwami and Kim.

Because Ground 4 is only asserted against dependent claims, Ground 4 inherently relies on Ground 1. Because Ground 1 fails, Ground 4 similarly fails for the reasons provided above in relation to Ground 1.

F. Ground 5: Petitioner Fails to Establish That Claim 6 Would Have Been Obvious Based on Iwami, Kim, and Dowling

Claim 6 depends from claim 1. Therefore, for at least the reasons provided above in relation to claim 1 in Ground 1, Petitioner fails to establish that claim 6 would have been rendered obvious based on Iwami and Kim.

Because Ground 5 is only asserted against dependent claims, Ground 5 inherently relies on Ground 1. Because Ground 1 fails, Ground 5 similarly fails for the reasons provided above in relation to Ground 1.

VII. CONCLUSION

For at least the foregoing reasons, the Director should deny institution of the Petition.

Dated: November 10, 2025

Respectfully submitted,

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Case IPR2025-01307
Patent No. 11,026,088
Patent Owner's Preliminary Response

CERTIFICATE OF SERVICE

I hereby certify that on this 10th day of November, 2025, a copy of the attached **PATENT OWNER'S PRELIMINARY RESPONSE** was served by electronic mail to the attorneys of record, at the following addresses:

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Case IPR2025-01307
Patent No. 11,026,088
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CERTIFICATION PURSUANT TO 37 C.F.R. § 42.24(d)

Pursuant 37 CFR 42.24(d), the undersigned certifies that this Preliminary Response and complies with the type-volume limitation of 37 CFR § 42.24(a). The word count application of the word processing program used to prepare this Patent Owner's Preliminary Response indicates that the Preliminary Response contains 8,619 words, excluding the parts of the brief exempted by 37 C.F.R. § 42.24(a).

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