

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

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

Petitioners,

v.

MAXELL, LTD.,
Patent Owner

Case: IPR2025-01308

U.S. Patent No. 11,277,650

**PATENT OWNER RESPONSE TO PETITION FOR *INTER PARTES*
REVIEW OF U.S. PATENT NO. 11,277,650**

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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
Declaration of Radostin Pachamanov, Ph.D.	2014
P.R. 4-3 Joint Claim Construction and PreHearing Statement	2015
Deposition Transcript of Dr. Joseph A. Paradiso dated March 13, 2026	2016

I. INTRODUCTION

Patent Owner Maxell, Ltd. (“Patent Owner”) submits this Response to the Petition filed by Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc. (hereinafter “Petitioners” or “Samsung”) challenging the patentability of claims 1-4 (“challenged claims”) of U.S. Patent No. 11,277,650 (“the ’650 Patent”) (EX1001). The Petition fails to show by a preponderance of the evidence that Claims 1–4 are unpatentable. None of the cited references alone or in combination disclose the arrangement of each element of claims 1–4.

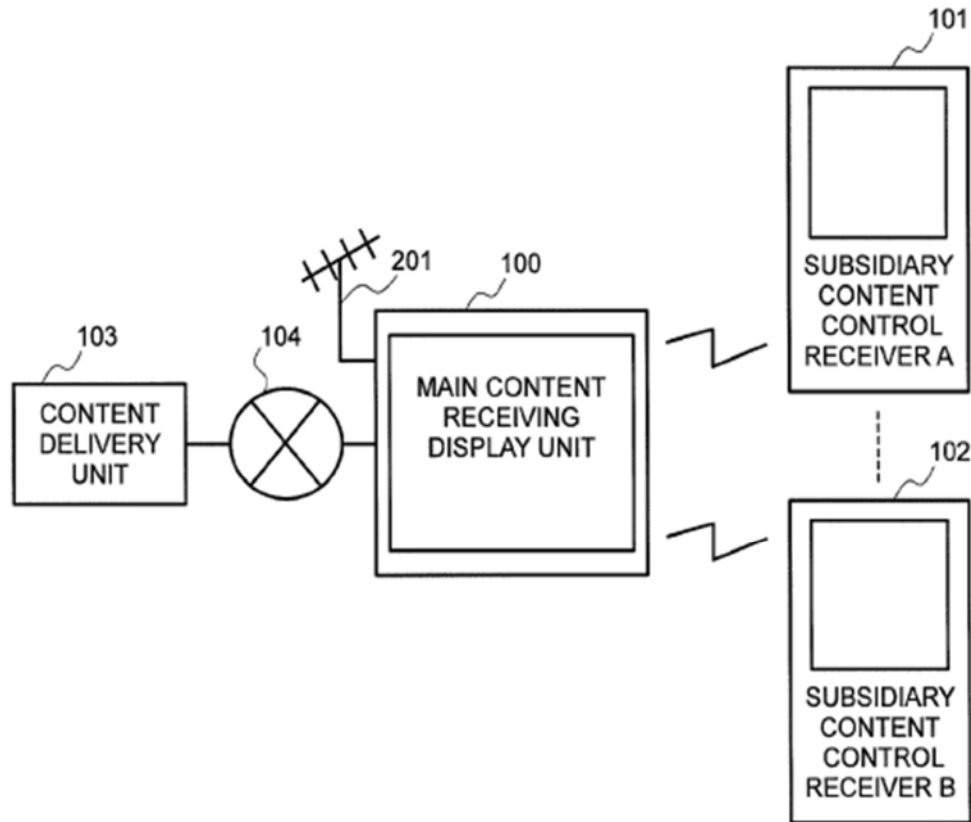
II. SCOPE OF THE PROCEEDING

A. U.S. Patent No. 11,277,650 Patent

The ’650 Patent is directed to coordinating the transmission of subsidiary contents to a plurality of subsidiary terminals from contents stored in a main terminal by providing a system to coordinate and synchronize display tasks between a main terminal and subsidiary terminals using subsidiary terminal specific ID information. EX2014, ¶47.

As an exemplary embodiment, Figure 1 of the ’650 Patent is a block diagram illustrating the structure of a contents receiving system:

FIG.1



Id., 50

From Fig. 1, a content delivery unit 103 sends main content receiving display unit 100 a video stream including a main content multiplexed with various subsidiary contents via broadband Internet 104. *Id.*, ¶51. The main content receiving display unit 100 also receives television broadcast signals (digital and/or analog broadcasting) using broadcast receiver 201 where content delivery unit 103 and

broadcast receiver 201 send a plurality of video streams including a plurality of main contents respectively multiplexed with various subsidiary contents. *Id.*

Further, as an example, the subsidiary contents include multilanguage audio data, an electronic program guide, an electronic content table or Electronic Contents Guide, subtitle data, commercial information, resolution information, encoding information of contents, and/or home page data on internet or metadata. *Id.*, ¶52.

Moreover, as an example, the subsidiary content control receiver A 101 and/or B 102 receive desired subsidiary content or main content from among contents in the main content receiving display unit 100 via a wireless or wired network. *Id.*, 53. For example, specific ID information related to each subsidiary content control receiver A 101 and B 102 is stored in each and used to receive subsidiary contents from main content receiving display unit 100. *Id.*

From an acquisition request, including the specific ID information, the main content receiving display unit 100 constructs and stores communication packets for transmission to subsidiary content control receiver A 101 and/or B 102. EX2014, ¶¶54–55. HDD 315 in main content receiving display unit 100 stores a plurality of main contents, respective subsidiary contents, and the communication packets, which also include specific ID information. *Id.*, ¶55.

For example, the subsidiary content control receiver A 101 or B 102, in Fig. 2, generates the acquisition request to acquire subsidiary content using CPU 401, which reads out specific ID information stored in main memory 402. EX2014, ¶56–57. For example, CPU 401 outputs the specific ID information to a communication control unit 405 where an association between the acquisition request and the specific ID information is made and sent to main content receiving display unit 100 via radio interface unit (sub) 420 and radio interface unit 320. *Id.* In another embodiment, the association can also be constructed and stored in main content receiving display unit 100 when the subsidiary content control receivers A 101 or B 102 communicates specific ID information to broadcast wave I/F 308 or network I/F 311. EX2014, ¶57.

Hence, the '650 Patent discloses a novel contents distribution and receiving system, which includes a main terminal including contents for transmission to a plurality of subsidiary terminals according to a user's taste or preference. The delivery of content based on a user's preference was ahead of its time in 2006 because consumers were accessing content either from a cable provider or brick and mortar stores like Blockbuster or mail-order DVD rental service like Netflix. EX2014, ¶¶58–63.

B. Patent Prosecution History

U.S. Patent Application No. 16/855,012—which ultimately issued as the '650 Patent—was filed on April 22, 2020. This application is the latest in a long chain of continuation applications dating back to U.S. Application No. 11/861,390, filed on September 26, 2007. EX2014, ¶48. The '650 Patent claims foreign priority to Japanese Patent Application No. 2006-261645, filed on September 27, 2006. *Id.*

The '650 Patent is the result of a thorough examination where the Examiner considered prior art analogous to that in the Petition and found the invention patentable. EX2014, ¶¶64–65. The Examiner noted that the “art of record did not teach or suggest the claims as a whole and particular[ly]” claim limitations [1f]–[1l] and [4g]–[4p]. EX1003, 22–25. The Petition now asks the Office to review the very same arguments using similar art that the Office already reviewed and found the claims patentable. As explained below, the prior art relied upon in the Petition clearly does not disclose those limitations.

C. Instituted Grounds

The Director instituted review of three grounds:

Ground	'650 Claims	Type of Challenge	References
1	1–4	§ 103	Shindo
2	1–4	§ 103	Sasaki
3	1–4	§ 103	Futa in review of McClellan

The three grounds are based on the following four references: WO 2005/094080 (“Shindo”) (EX1004), Japanese Patent Appl. Pub. No. 2003-208375 (“Sasaki”) (EX1006), U.S. Patent Appl. Pub. No. 2004/0010687 (“Futa”) (EX1009), and U.S. Patent No. 5,619,250 (“McClellan”) (EX1010).

D. Level of Ordinary Skill

A person of ordinary skill in the art (POSITA) would have had a Bachelor of Science degree in Computer Science or Electrical Engineering or equivalent degree and at least two years of experience in the field of content distribution and delivery to a plurality of devices over a network. EX2014, ¶¶40–44.

III. CLAIM CONSTRUCTION

A. “a [second/third] display displaying the content” (Claims 1, 4).

Petitioners assert that it is unclear what “the content” is referring back to in the limitation “a [second/third] display displaying the content.” EX1002, 81 n.2. Petitioners, further, assert that “the content” refers to both “one of the contents” and

“the contents.” *Id.* This interpretation is incorrect. EX2014, ¶69. Moreover, Petitioners propose the following construction for this term:

Plain and ordinary meaning, which is “displaying a content on the second/third display, where the content displayed on the second/third display (i) need not be displayed concurrently with any content on the first display or (ii) need not be related to content displayed concurrently on any other subsidiary terminal.

EX2015, 22.

Petitioners proposed construction unnecessarily introduces confusion by breaking up the term into a two-part test that is far from the plain and ordinary meaning of the term. EX2014, ¶69. Petitioners’ construction appears to be driven by litigation strategy—not by actually defining the term. *See SRI Int’l*, 775 F.2d at 1118 (“[a] claim is construed in the light of the claim language, the other claims, the prior art, the prosecution history, and the specification, *not* in light of the accused device.”) (emphasis in original); *see also Orion IP*, 406 F. Supp. 2d at 738 (“[M]any of Defendants’ constructions seemed geared to their future non-infringement arguments. The Court realizes that claim construction may prove to be crucial to parties’ infringement and invalidity cases, but those issues are best left for summary judgment and jury arguments.”).

To be clear, “the content” is “one of the contents”; however, “the content”

does not include “the contents.” EX2014, ¶69. It appears that either construction seeks to read out antecedent basis when arguing that “the content” refers back to “the contents,” “(i) need not be displayed concurrently with any content on the first display or (ii) need not be related to content displayed concurrently on any other subsidiary terminal.” *Id.*

The term “displaying the content” as appearing in Claims 1 and 4 would be understood by a POSITA as displaying the **same** “one of the contents” on the main terminal—not “the contents.” *Id.*, ¶70. For example, Claim 1 of the '650 Patent recites:

A **contents** reproducing system comprising:

a **main terminal**; and

a **plurality of subsidiary terminals**,

wherein the **main terminal** comprises:

a storage **storing the contents**;

a first display **displaying the contents**; and

a first controller . . .

wherein the first controller is configured to:

. . . wherein the association information defines that **one of the contents** identified by the content information is associated with one

of the device specific ID information,

Wherein the **plurality of subsidiary terminals** comprise: a second display **displaying the content** . . .

EX1001, Claim 1; *see also id.*, Claim 4. The claim language clearly indicates that “second display displaying the content” derives its antecedent basis from “**one** of the” multiple “contents” stored and displayed on the main terminal. *Id.* (emphasis added). Petitioners’ proposed construction cannot be reconciled with this plain and ordinary claim language. EX2014, ¶70 “[D]isplaying the content” does not exist in isolation—it is expressly linked to the preceding claim limitations. *Id.* Petitioners are asking the PTAB to read the claim term divorced from its context, effectively rewriting what the patentee deliberately claimed. *K-2 Corp.*, 191 F.3d at 1364 (“Courts do not rewrite claims; instead, we give effect to the terms chosen by the patentee”). Further, by virtue of antecedent basis, a POSITA would understand from the context of the claim that “the content” displayed on the subsidiary terminal includes the entire “one of the contents” displayed in the main terminal. EX2014, ¶70; *Harris Corp. v. Fed. Express Corp.*, 502 F. App’x 957, 963 (Fed. Cir. 2013) (holding that the phrase “transmitted the accumulated, stored generated aircraft data” required transmitting all of the accumulated data, not some representative portion;

therefore, using antecedent basis, “the” served to refer back to the same data set recited earlier in the claim).

Patent Owner's construction is consistent with the disclosures of the '650 Patent. EX2014, ¶71. For example, the '650 Patent discloses, for example, that “contents” includes “main content [that] is, for example, moving picture content such as television program” “displayed on the main content receiving display unit 100.” EX1001, 3:11–16. Further exemplars of “contents” include “subsidiary content from the main content display receiving unit 100 . . . being selected from among streams received by the main content display receiving unit 100.” *Id.*, 3:17–24. Moreover, “subsidiary content includes, for example, multilanguage audio data . . . , an electronic program guide [EPG]. . . , an electronic content table . . . , and additional information (including subtitle data and commercial information).” *Id.*, 3:25–33, 3:33–47, 5:51–56.

The '650 Patent discloses that “main content and subsidiary content are simultaneously displayed on a television receiver,” which is the main content receiving display unit 100. *Id.*, 1:37–39, 3:5–6. Furthermore, subsidiary content receiver control receivers A 101, B 102 “display the subsidiary content on the display unit” where the subsidiary content is “one of the contents” displayed on main

content receiving display unit 100. *Id.*, 3:17–22. As such, Petitioners inconsistent and incorrect construction of the term should be rejected. EX2014, ¶72.

IV. DR. PARADISO'S FINANCIAL INTEREST IN THE MIT MEDIA LAB SHOWS BIAS THAT UNDERMINES HIS CREDIBILITY

Dr. Paradiso cannot serve as a credible expert witness in this Petition due to his bias to Samsung.

Dr. Paradiso serves as the Academic Head for the Massachusetts Institute of Technology's (MIT) Media Arts and Sciences department. EX1002, ¶7. This is a position of institutional authority with direct visibility into, and responsibility for, the financial health and sponsor relationships of his department. In addition, Dr. Paradiso serves as “a co-director of the Things That Think Consortium—a group of MIT Media Lab researchers and industrial partners focused on the future of embedded computation and sensing.” *Id.*

Dr. Paradiso testified that Samsung is a “member company” of the Media Lab—a designation that Dr. Paradiso acknowledged means Samsung “fund[s] research at the Media Lab as a whole.” EX2016, 13:23–15:10. Samsung's funding of the Media Lab is not a recent or incidental development because Dr. Paradiso testified that Samsung has been a member company for approximately ten to fifteen

years. *Id.* In fact, Samsung annually contributes a standard member fee between \$250K to \$500K for being a member company. EX2016, 17:21–18:19. This longstanding financial relationship is not a one-time payment or a trivial sum. Samsung has been funneling a significant and recurring revenue stream to the very institution Dr. Paradiso has built his career, and over which he now presides as department head and co-director of the MIT Media Lab.

These facts demonstrate that Dr. Paradiso holds a conflict of interest by virtue of the continuous and ongoing financial relationship with Samsung as it relates to the Media Lab. Dr. Paradiso's opinion in this Petition are colored by this financial entanglement, which is bias, unreliable, and goes to the core of his credibility. *See United States v. Hankey*, 203 F.3d 1160, 1171 (9th Cir. 2000) ("Bias, of course, covers all variety of favor."). Indeed, the Supreme Court has made it abundantly clear that "[p]roof of bias is almost always relevant because the jury, as finder of fact and weigher of credibility, has historically been entitled to assess all evidence which might bear on the accuracy and truth of a witness' testimony." *United States v. Abel*, 469 U.S. 45, 52 (1984); *id.* at 51 ("[a] successful showing of bias on the part of a witness would have a tendency to make the facts to which he testified less probable in the eyes of the jury than it would without such testimony."); *Barnard v.*

United States, 342 F.2d 309, 317 (9th Cir. 1965) (“[e]vidence tending to show a substantial reason for bias or interest in an important witness is never collateral or irrelevant.”).

As such Dr. Paradiso's declaration should be given little to no weight.

V. ANALYSIS OF THE INSTITUTED GROUNDS

The Petition failed to show by a preponderance of the evidence that any of Grounds 1–3 renders obvious Claims 1–4. EX2014, ¶84. Therefore, Patent Owner respectfully submits that the Board should confirm the patentability of all Challenged Claims.

The '650 Patent is not just generally disclosing a main device communicating with and distributing content with a plurality of subsidiary devices. EX2014, ¶85. Instead, the '650 Patent discloses the achievement of delivering personalized content to various specific users' devices from contents displayed on a main terminal. EX1001, 11:57–65. The '650 Patent achieves this personalized content delivery system using a specific **content-to-device mapping** architecture (*e.g.*, one to one mapping) that is not disclosed in the prior art. EX2014, ¶85.

For example, A POSITA, reading Claim 1 of the '650 Patent, would understand from claim elements [1.f] thru [1.i] that the contents delivery system

discloses a specific **content-to-device mapping** architecture for content personalization. EX2014, ¶86. Specifically, “the first controller” in the main terminal stores (1) “a plurality of device specific identification (ID) information” regarding the subsidiary terminals, (2) “a plurality of content information” for identification of each stored contents, and (3) “association information for transmitting” one of the stored contents to one of the subsidiary terminals. *Id.* (referring to claim elements [1.f] thru [1.g]).

The **content-to-device mapping** architecture is facilitated via the association information, which is defined in claim element [1.i] as being “one of the contents identified by the content information is associated with one of the device specific ID information.” *Id.*, ¶87. Using this **content-to-device mapping** architecture, the main terminal sends personalized content to subsidiary terminals. *Id.* Claim 4 of the '650 Patent further underscores this **content-to-device mapping** where the system is capable of sending a first content to a first subsidiary terminal and a second content to a second subsidiary terminal, and even reversing the delivery of the contents to the terminals. *Id.* (referring to claim elements [4o]–[4p]).

In contrast, Shindo discloses a different system that is not based on a **content-to-device mapping** architecture (one to one mapping). *Id.*, ¶88. Instead, it is

centered around a **trigger information-to-mode** for blindly transmitting portioned content to multiple terminals requesting a certain mode. *Id.* For example, Shindo discloses a main display device displaying a live broadcast program content and one or more mobile information terminals for playing replays or highlights. *Id.* The main display device receives a broadcasted program content and trigger information for special playback of the program content on the mobile information terminals. *Id.* The program content includes index information regarding the broadcasted program being played, and the trigger information includes mode information for special playback (*e.g.*, highlights or replays) of the program content. *Id.* Using the combination of index information and trigger information, the main display device distributes in a wholesale fashion a specific highlight (*i.e.*, reconstructed extracted partial program content) of the content to all mobile information terminals having selected the same mode information contained in its trigger information. *Id.*

A POSITA would not associate Shindo's **trigger information-to-mode** with the '650 Patent's **content-to-device mapping** architecture (one to one mapping) because Shindo is a completely different system not interested in using the claimed device specific identification (ID) information in association information for distribution of content to mobile information terminals. *Id.*, ¶89. Shindo's **trigger**

information-to-mode is not the same thing as storing association information that defines how one identified content is associated with one identified device specific identification (ID). *Id.* A POSITA would not have been motivated to redesign Shindo's **trigger information-to-mode** for reconstructing content for purposes of replays or highlights output into one for storing and using association information for mapping identified content to device specific identification (ID) information because Shindo's solution would completely destroy the intent of the '650 Patent for subsidiary terminals playing replays or highlights based on having a similar mode information as the main terminal. *Id.*

Sasaki also discloses a different system from the '650 Patent. *Id.*, ¶90. Specifically, Sasaki centers around a **segmented/portioned content delivery system using a bookmark** due to a personal device assistant (PDA) limited storage capacity. *Id.* For example, Sasaki teaches dividing content into portions according to the free storage capacity in a PDA. *Id.* Sasaki's system uses a PC home server device that transmits segments of stored content to a PDA upon a request. *Id.* To achieve the delivery of segmented content to the PDA with limited capacity, Sasaki teaches that the PC home server device stores in memory a previous delimiter information or progress marker, which identifies the last part of the transmission

segmented content for the determination of the **delimiter position**—in other words **a bookmark**. *Id.* Even Dr. Paradiso agreed that Sasaki's PDA had limited capacity, so they could only show segments using a delimiter. EX2016, 115:7–116:13. A POSITA would not collapse the '650 Patent's **content-to-device mapping** architecture using the claimed association information to any random distributed system such as Sasaki's **segmented/portioned content delivery system using a bookmark** architecture. *Id.*, ¶90. The '650 Patent's **content-to-device mapping** architecture using the claimed association information is specific and not a generality whereas Sasaki's **segmented/portioned content delivery system using a bookmark** architecture is concerned with managing the limited storage capacity of its receiving PDA through the use of a delimiter position—they are very different architectures. *Id.* A POSITA would not be motivated to use or modify Sasaki to arrive at the '650 Patent's **content-to-device mapping** architecture using the claimed association information because the goal of the '650 Patent is to deliver personalized content to specific subsidiary terminals regardless of their storage capacity. *Id.*

The '650 Patent is in the field of transmitting digital broadcast wave and/or network content for reception using association information to subsidiary terminals

together with a main terminal. *Id.*, ¶91. The '650 Patent solves the pertinent particular problem of delivering content to specific subsidiary terminals based on association information managed by a main terminal, while the main terminal concurrently displays the content. *Id.*

Futa is not seeking to solve the same pertinent particular problem as the '650 Patent. *Id.*, ¶92. **For example, Futa addresses the problem of controlling transmission or authorization of a content using category information indicating a category of device for copyright protection—**simply put, a **permission/authorization filter.** *Id.* In addition, while the content distribution system 1 includes a broadcast receiving device 10, TV 20, PC 30, and data-communication controlling device 40, only data-communication controlling device 40 controls the reception and transmission of a single content to TV 20 and PC 30 using **category information.** *Id.* Furthermore, **category information is not the claimed “association information”** because it simply serves as permission/authorization filter (*e.g.*, a value of “0,” “1,” or “2”). *Id.* As such, Futa does not address the problem of providing personalized content for specific users based on association information defined between content and device IDs. *Id.* It verifies whether a user has permission to receive content. *Id.*

McClellan is not analogous art to either the '650 Patent or Futa. *Id.*, ¶93. **McClellan is directed to an “improved operating system which accommodates system upgrades in real time” for “set top boxes.”** *Id.* Its teachings concern on the internal software architecture of a set top box for managing system modules to facilitate updates, a field distinct from content transmission using association information. *Id.* Furthermore, McClellan is not solving the same pertinent particular problem as the '650 Patent because it aims to improve the efficiency of updating set-top box software and hardware. *Id.*

Therefore, a POSITA seeking to solve the problem addressed by the '650 Patent would not have been motivated to combine Futa and McClellan to render obvious the claimed invention. *Id.*, ¶94. McClellan is non-analogous art, and neither reference addresses the pertinent particular problem solved by the '650 Patent. *Id.* **Futa teaches category-based authorization, while McClellan teaches OS modularity for upgrades.** *Id.* Combining these disparate teachings would not have logically led a POSITA to the claimed invention. *Id.* Even if a POSITA were somehow motivated to combine these references, the resulting system would merely be Futa's authorization system operating on McClellan's upgradeable OS. *Id.* Even Dr. Paradiso testified that the '650 Patent is not concerned with OS upgrades.

EX2016 at 79:3–6.

In light of the glaring deficiencies in Shindo or Sasaki, the knowledge of a POSITA would not fill in any gaps to have any reasonable expectation of success to render obvious Claims 1–4 of the '650 Patent. EX2014, ¶95. Similarly, the combination of Futa-McClellan still fails to disclose or suggest Claims 1–4 of the '650 Patent, nor is the combination providing a reasonable expectation of success.

Id.

A. Ground 1: The Petition Fails to Establish That Claims 1-4 Would Have Been Obvious Based on Shindo

The Petition fails to show by a preponderance of the evidence that Claims 1–4 are unpatentable under Ground 1 because Shindo fails to disclose or suggest key features of the '650 Patent's invention. *See* EX2014, ¶96. It should be noted that this Petition fails to provide an obviousness analysis when using Shindo and the knowledge of a POSITA. Indeed, Dr. Paradiso testified that Shindo was used for anticipation purposes, and as such the Petition fails to provide a basis for why certain limitations would have been obvious in light of Shindo, if not explicitly disclosed. EX2016, 79:25–80:4. Dr. Paradiso treats ground 1 as an anticipation ground where he frequently states Shindo discloses, *e.g.*, claim limitation [1i] or [1j], but he never

explains how [1i] or [j] would have been obvious in view of Shindo. EX2014, ¶96.

1. The Petition Fails to Establish That Claim Limitation [1i] Would Have Been Obvious In View of Shindo

Claim limitation [1i] recites “wherein the association information defines that one of the contents identified by the content information is associated with one of the device specific ID information.” This limitation recites the specific definition of the “association information,” which Shindo lacks; therefore, the Petition fails to establish that claim limitation [1i] would be obvious in view of Shindo. EX2014, ¶97.

Shindo discloses or suggest a **trigger information-to-mode** system that is different from the '650 Patent's personalized **content-to-device mapping** architecture. *Id.*, ¶98. For example, Shindo is primarily concerned with mobile information terminal management 106 responding to an inquiry made by metadata interpretation unit 103 requesting “**the capabilities and connection information**” of the mobile information terminals. EX1004, ¶40. Moreover, according to Fig. 3 in Shindo, the mobile information terminal management 106 inquires whether a mobile information terminal's management information 19 includes the same “**mode information**” as in trigger information 15 for partial program distribution. EX1004,

¶28; *id.*, Fig. 7 (showing “Mode information 16”) and Fig. 9 (showing “Mode information 25”). Therefore, stand alone display device 1 is primarily interested in identifying mobile information terminals according to their **capabilities, connections, and mode information**. EX2014, ¶98.

The Petition alleges that the claimed “association information” is, collectively, the trigger information 15, the index information 10, and management information 19. Pet. at 17. The Petition fails to show how index information 10 is used for any association purposes, let alone the claimed “association information”—it is not. EX2014, ¶99. The Petition has identified metadata interpretation unit 103 extracting and comparing “mode information 16” in trigger information 15 and “mode information 25” in management information 19 for the existence of a corresponding mode (*i.e.*, mode information 16 and 25 being “Replay”). Pet. at 19. The Petition’s assertions do not point to the collective use of index information 10, trigger information 15, and management information 19; instead, a comparison is made solely using mode information 16 and mode information 25. *Id.* In contrast, “association information” requires there to be an association that “defines that one of the contents identified by the content information is associated with one of the device specific ID information.” EX2014, ¶99. There is no such association between

content and device specific ID information defined by trigger information 15, index information 10, and management information 19. *Id.* Indeed, the fact that the Petition relies on three different types of information to allegedly map to the claimed “association information” plainly demonstrates that the Petition tacitly admits that there is no piece of information disclosed in Shindo that defines such an association. *Id.*

The Petition agrees that Shindo discloses metadata interpretation unit 103 extracting and comparing “mode information 16” in trigger information 15 and “mode information 25” in management information 19 for the existence of a corresponding mode (i.e., mode information 16 and 25 being “Replay”) for the transmission of rearranged partial program content to mobile information terminal. Pet. at 19–20. However, the Petition mischaracterizes Shindo’s systems when alleging that an association is performed between program ID 11 in trigger information 15 and terminal ID 1 in management information 19. Pet. at 21. Contrary to the Petition’s allegations, terminal ID in management information 19 is never referred to in any association functions performed by metadata interpretation unit 103, neither is terminal ID referred to in any linking association functions performed by accumulation video processing unit 104—this is because terminal ID is irrelevant

to any association. EX1004, ¶¶28, 33–38; *id.*, Fig. 1. Moreover, the Petition mischaracterizes Shindo when alleging that “[t]he terminal ID 20 is invoked when display device 1 sends content to mobile information terminals A-B in accordance with the mode information associated with the terminal ID,” or “terminal ID 20 is used by display device 1 for identifying the correct playback mode when sending content to the terminal associated with a given terminal ID.” Pet. at 13; EX2014, ¶100. While mobile information terminal management unit 106 makes an inquiry regarding mobile information terminal A or B, it is only interested in extracting mode information 25 in management information 19 to compare against mode information 16 in trigger information 15—terminal ID 20 is not used for any comparison and has no significance. *Id.*

Furthermore, the Petition alleges that the metadata interpretation unit 103 detecting the index information 10 based on specified index ID 17 in trigger information 15 together with accumulation video processing unit 104 rearranging partial program content for transmission to mobile information terminal using linked trigger information 15, index information 10, and partial program content is the claimed “association information.” Pet. at 19–20. The Petition is forcing the use of different disclosures in Shindo about information that have completely different

functions *i.e.*, triggering or indexing—in an attempt to provide conclusory assertions of obviousness. EX2014, ¶101.

As such, detection of specified index ID 17 in trigger information 15 and rearranging partial program content based on linked index information 10, trigger information 15, and partial program content do not meet the claimed “association information” because—beyond conclusory assertions—the Petition provides no evidence that the collection of disparate pieces of information each having disparate functions in Shindo correspond to the claimed association information whose function—as claimed—is to define an association between “contents identified by the content information” and “device specific ID information.” EX2014, ¶102.

A POSITA would understand that **Shindo is solely interested in verifying that a match exists** with the mode information in both trigger information 15 and management information 19—not terminal ID—for a blind transmission of replays or highlights to multiple mobile terminals once each mobile information terminal management unit 106 accepts a connection request. EX1004, ¶¶5–6, 33–38, 40, 42; *id.*, Figs 1, 9. A POSITA would not be motivated to utilize terminal ID, owner's name, and/or the user's name in management information 19 in Shindo as the claimed “device specific identification (ID) information” let alone in “association

information” with any reasonable expectation of success because terminal ID is irrelevant in Shindo. EX2014, ¶103. The terminal ID is incidental in Shindo’s **trigger information-to-mode** system. *Id.* Similarly, a POSITA would not have any reasonable expectation of success in using management information, index information, and trigger information to arrive at the claimed “association information” because Shindo solely relies on a mode match to broadly transmit replays or highlights to mobile terminal devices, which is very different from “association information.” *Id.*

Further, the Petition fails to disclose or suggest “association information” definition used in the “first controller” even if the Petition alleges that “first controller” stores terminal ID (*i.e.*, a plurality of device specific identification (ID) information) for Claim limitation [1.f] (Pet at 12), stores content and index information (*i.e.*, “a plurality of content information) for claim limitation [1.g] (Pet. at 14), and stores collectively trigger information, index information, and management information (*i.e.*, “association information) for claim limitation [1.h] (Pet. at 17). Specifically, the same “first controller” in Claim limitations [1.f], [1.g] and [1.h] is used in Claim limitation [1.i]. EX2014, ¶104. Therefore, if Shindo does not disclose or suggest “association information,” then the “first controller” is also

not disclosed or suggested. *Id.* Simply, Shindo's trigger information, index information, and management information including terminal ID and content are used for a **trigger information-to-mode** system for display of replays or highlights, which is not the claimed "one of the contents identified by the content information [] associated with one of the device specific ID information." *Id.*

The Petition alleges that the claimed "one of the contents" is one or more scenes of content, "content information" is content ID, and "device specific ID information" is terminal ID. Pet. at 20. However, a POSITA would understand that any alleged association information stored in HDD 105 cannot define one or more scenes of content from management information 19 because the data structure in HDD 105 only includes program content, index information 10 (*e.g.*, program ID 11, index ID 12, starttime 13, finishtime 14, and content ID), trigger information 15 (*e.g.*, program ID 11, mode information 16, specified index ID list 17 including index ID 12 or partial program content, totalTime 18, and content ID), and program information—nothing from management information 19 or any data therein. EX2014, ¶105.

Moreover, Claim limitation [1.i] is clear when referring to "one of the contents" because it relies on antecedent basis to refer back to "one of the contents" in claim

limitation [1.h], “the contents” in Claim limitations [1.c] and [1.d], and “[a] contents” in the preamble. EX2014, ¶106. Since the Petition alleges that “contents” is program contents, and content is a program in Shindo (Pet. at 17), “one of the contents” is one **concurrently displayed** program content—not an **after the fact** shortened version. EX2014, ¶106. Even Dr. Paradiso agrees that “highlights” or “replays” are played after the fact and are portions of the live program content, which are not concurrently displayed on a main terminal. EX2016, 82:5–15, 84:11–17, 95:9–17, 96:17–23, 97:19–24, 98:18–25, and 99:12–14, 102:5–12. Therefore, the Petition has failed to disclose or suggest that mobile terminal A or B receive one of the program content, as required by the claimed “one of the contents” in Claim limitation [1.h], which is also “associated with one of the device specific identification (ID) information” in Claim limitation [1.i]. EX2014, ¶106. For example, mobile information terminal A or B do not receive one of the program contents; instead, it receives rearranged **after the fact partial** program content or reconstructed program content (*i.e.*, replays or highlights being **portions** from one program content), which is not **concurrently displayed** program content being the claimed “one of the contents.” See EX1004, ¶¶20, 28, 33–37. The Petition agrees that the claimed “contents” are program contents; therefore, “one of the contents” is

not one or more **after the fact** scenes of content (*i.e.*, replays or highlights), but it is a **concurrently displayed** program content—one out of many program contents. Pet. at 17. The Petition appears to construe “one of the contents” as a portion of the content (Pet. at 17), but they have provided no support for their proposed construction of the claimed “one of the contents.” *Id.*

For at least the foregoing reasons, the Petition fails to show that claim limitation [1i] would have been rendered obvious in view of Shindo and the knowledge of a POSITA. EX2014, ¶107.

2. The Petition Fails to Establish That Claim Limitation [1j] Would Have Been Obvious In View of Shindo

Claim limitation [1j] recites “wherein the plurality of subsidiary terminals comprise: a second display displaying the content.” The Petition fails to establish that claim limitation [1j] would be obvious in view of Shindo. EX2014, ¶108.

The Petition has not demonstrated how the second display in the mobile information terminal A or B displaying reconstructed program content meets the claimed “displaying **the** content.” Pet. at 22. There is no explanation provided by the Petition on how the **after the fact** reconstructed program content correspond to **the** program content identified in the Petition for claim limitation [1d]. EX2014, ¶109.

Instead, in claim limitation [1j], the Petition points to **after the fact** snippets (*e.g.*, starttime and finishtime) of the program content as replays or highlights (*e.g.*, specific scenes of a program), which are described as “rearranged,” “partial,” or “reconstructed” by Shindo. EX1004, ¶¶21–22, 26, 28, 34, 37. There is no analysis provided on how “plurality of subsidiary terminals [of Shindo]” include “a second display displaying **the** content” that the Petition identifies as program content displayed on display unit 107 of stand alone display device 1. EX2014, ¶109.

For example, Shindo discloses that a reception unit receives program content currently being broadcast together with trigger information for special playback of the program content using mode information. EX1004, ¶¶6–7. An accumulation image processing unit, then, extracts part of the accumulated program content using the mode information from trigger information and outputs a reconstructed program content. *Id.* Similarly, Shindo discloses that trigger information 15, index information 10, and partial program content linked to the index information 10 are used as inputs to metadata interpretation unit. EX1004, ¶34. Then, accumulation video processing unit 104 rearranges the partial content based on contents of trigger information 15 to send to as reconstructed program content to mobile information terminal A or B. *Id.* Moreover, the reconstructed program content can be a plurality

of replays from different program contents that are rearranged as reconstructed program content for transmission to mobile information terminal A or B. EX1004, ¶37, Fig. 4; EX2014, ¶110.

As such, the program content displayed on display unit 107 of stand alone device 1 is **not the same** as time snippets, replays or highlights displayed of the program content on display unit 109 of mobile information terminal A or B. EX2014, ¶111. Either a portion of the program content or an amalgamation of highlights from different program contents (*i.e.*, reconstructed program content) is displayed on display unit 109, which is **not one of the contents** displayed on display unit 107. *Id.* The claimed “displaying **the** content” is first introduced in claim limitation [1h] (*i.e.*, “one of the contents”), and the claimed “contents” is stored on the main terminal and displayed on the “first display,” as required by claim limitations [1c] and [1d], respectively. *Id.* Therefore, “the content” displayed on the “second display” is the **same** as what is displayed on the first display. *Id.*

The Petition, instead, points to different pieces of content, *i.e.*, program content in [1d] and snippets in [1j], without ever addressing the antecedent basis in claim 1. Pet. at 21–22; EX1004, ¶¶5–8. Thus, the Petition fails to show that mobile information terminal A or B displays the program content displayed on stand alone

display device 1, as required by the claimed “content” of claim 1. EX2014, ¶112. Shindo’s reconstructed program content displayed on mobile information terminal A or B is not obvious in view of the knowledge of a POSITA since the entire and same program content is not shown on stand alone display device 1, as required by claim limitation [1j]. *Id.* Furthermore, to the extent Petitioner argues that **an after the fact** “highlight” or “replay” of a file can be considered “the content,” a POSITA would understand that this limitation is not merely governed by file size or completeness, but by the integrity of the system’s routing logic. *Id.* In the ’650 Patent, the main terminal receives a plurality of contents, separates them, and the subsidiary terminal displays “the content” because that specific, discrete data stream was explicitly mapped and routed to that specific device using the claimed “association information.” *Id.* In contrast, this prior art relies on generic broadcast triggers. *Id.* Because this alleged prior art system does not rely on the claimed personalized content-to-device mapping architecture to route received data, it does not disclose a subsidiary terminal displaying a routed “one of the contents.” *Id.*

For at least the foregoing reasons, the Petition fails to show that claim limitation [1j] would have been rendered obvious in view of Shindo and the knowledge of a POSITA. *Id.*, ¶113.

3. The Petition Fails to Establish That Claim Limitation [1k] Would have Been Obvious In View of Shindo

Claim limitation [1k] recites “[wherein the plurality of subsidiary terminals comprise: . . .] a second controller controlling transmission/reception with the main terminal, the second controller storing device specific ID information . . . and transmitting the device specific ID information to the main terminal when connecting to the main terminal.” The Petition fails to establish that claim limitation [1k] would be obvious in view of Shindo. EX2014, ¶114.

The Petition alleges that collectively reception unit 108 and instruction unit 111 as second controller control transmission/reception with the main terminal even though Shindo is completely silent as to the presence of a “controller.” Pet. at 23. Specifically, the Petition alleges that reception unit 108 controls the reception of information from stand alone display device 1. *Id.* at 23–24; *id.*, Fig. 1. However, contrary to instruction unit 111 sending a connection request—indicative of control—to mobile information terminal management unit 106 in stand alone display device 1 to connect and only send management information 19, reception unit 108 makes no such control of reception. EX1004, ¶¶42, 45; *id.*, Fig. 1. This is because Shindo only discloses that it receives the input of the reconstructed program content

from the accumulation video processing unit 104. *See id.* It is, rather, accumulation video processing unit 104 that controls the reception of partial program content to reception unit 108. *Id.*, ¶¶34, 37, 40, 42; *id.*, Fig. 1; sEX2014, ¶115.

A POSITA would not have found the second controller obvious in view of the collective reception unit 108 and instruction unit 111 because the stand alone display device 1 controls transmission via accumulation video processing unit 104 to mobile information terminal A or B—reception unit 108 does not control any reception. EX2014, ¶116. A POSITA would not be motivated to modify Shindo's **trigger information-to-mode** system to arrive at this claim limitation because stand alone display device 1 controls the blind transmits replays or highlights to multiple mobile terminals matching mode information—not the controller in the mobile terminals. *Id.* A POSITA looking at Fig. 1 of Shindo would be deterred from changing components or swapping functionalities to successfully arrive at claimed limitation [1k] because it would defeat the purpose of Shindo's simple **trigger information-to-mode** system blindly transmitting replays or highlights to mobile terminals matching mode information. *Id.* As such, the Petition fails to disclose or suggest that the collective reception unit 108 and instruction unit 111 control reception with stand alone display device 1. *Id.*

For at least the foregoing reasons, the Petition fails to show that claim limitation [1k] would have been rendered obvious in view of Shindo and the knowledge of a POSITA. EX2014, ¶117.

4. The Petition Fails to Establish That Claim 2 Would Have Been Obvious In View of Shindo

Because Claim 2 depends from Claim 1, the Petition fails for at least these same reasons. EX2014, ¶¶118–120.

5. The Petition Fails to Establish That Claim 3 Would Have Been Obvious In View of Shindo

Because Claim 3 depends from Claim 1, the Petition fails for at least these same reasons as Claim 1. EX2014, ¶¶121–23.

6. The Petition Fails to Establish That Claim Limitation [4j] Would Have Been Obvious In View of Shindo

Claim limitation [4j] recites “wherein the association information defines that one of the first content or the second content is associated with one of the first device specific ID information or the second device specific ID information.” For, at least, the same reasons provided in *supra* §VI.A.1 (claim limitation [1i]), the Petition fails to show that this limitation is obvious in view of Shindo and the knowledge of a POSITA. EX2014, ¶¶124–25.

7. The Petition Fails to Establish That Claim Limitation [4k] Would Have Been Obvious In View of Shindo

Claim limitation [4k] recites “wherein the first subsidiary terminal comprises: a second display displaying the content.” For, at least, the same reasons provided in *supra* §VI.A.2 (claim limitation [1j]), the Petition fails to show that this limitation is obvious in view of Shindo and the knowledge of a POSITA. EX2014, ¶¶126–27.

8. The Petition Fails to Establish That Claim Limitation [4l] Would Have Been Obvious In View of Shindo

Claim limitation [4l] recites that the first subsidiary terminal includes “a second controller controlling transmission/reception with the main terminal, the second controller storing the first device specific ID information . . . and transmitting . . . to the main terminal when connecting to the main terminal.” For, at least, the same reasons provided in *supra* §VI.A.3 (claim limitation [1k]), the Petition fails to show that this limitation is obvious in view of Shindo and the knowledge of a POSITA. EX2014, ¶¶128–29.

9. The Petition Fails to Establish That Claim Limitation [4m] Would Have Been Obvious In View of Shindo

Claim limitation [4m] recites “wherein the second subsidiary terminal comprises: a third display displaying the content.” For, at least, the same reasons

provided in *supra* §VI.A.2 (claim limitation [1j]), the Petition fails to show that this limitation is obvious in view of Shindo and the knowledge of a POSITA. EX2014, ¶¶130–31.

10. The Petition Fails to Establish That Claim Limitation [4n] Would Have Been Obvious In View of Shindo

Claim limitation [4n] recites “[wherein the second subsidiary terminal comprises . . .] a third controller controlling transmission/reception with the main terminal, the third controller storing the second device specific ID information . . . and transmitting . . . to the main terminal when connecting to the main terminal.” For, at least, the same reasons provided in *supra* §VI.A.3 (claim limitation [1k]), the Petition fails to show that this limitation is obvious in view of Shindo and the knowledge of a POSITA. EX2014, ¶¶132–33.

11. The Petition Fails to Establish That Claim Limitation [4o] Would Have Been Obvious In View of Shindo

Claim limitation [4o] recites “when the association information defines that the first content is associated with the first device specific ID information and the second content is associated with the second device specific device ID information, the main terminal transmits the first content to the first subsidiary terminal and transmits the second content to the second subsidiary terminal.” The Petition fails to

show that this limitation is obvious in view of Shindo and the knowledge of a POSITA. EX2014, ¶¶134–35.

Shindo discloses or suggests a **trigger information-to-mode** system where replays or highlights are blindly sent to multiple mobile terminals according to a matching mode—not terminal ID. EX1004, ¶¶5–6, 33–38, 40, 42; *id.*, Figs 1, 9. This is not the specific one to one mapping disclosed in this claim limitation “the first device specific ID information and the second content is associated with the second device specific device ID information, the main terminal transmits the first content to the first subsidiary terminal and transmits the second content to the second subsidiary terminal.” None of the Petition’s citations address how the deficiencies in Shindo in view of the knowledge of a POSITA would render obvious this claim limitation. Pet. at 36. A POSITA would understand that Shindo fails to render obvious the claimed “association information” because Shindo’s terminal ID is not used for any comparison; therefore, it fails to render obvious the claimed “first device specific ID information” and “second device specific ID information.” Additionally, the claimed “first content” and “second content” cannot be a reconstructed program content or partial program content (*i.e.*, replays or highlights of the program content). EX2014, ¶135.

For at least the foregoing reasons, the Petition fails to show that claim limitation [4o] would have been rendered obvious in view of Shindo and the knowledge of a POSITA. *Id.*, ¶136.

12. The Petition Fails to Establish That Claim Limitation [4p] Would Have Been Obvious In View of Shindo

Claim limitation [4p] recites “when the association information defines that the second content is associated with the first device specific ID information and the first content is associated with the second device specific device ID information, the main terminal transmits the second content to the first subsidiary terminal and transmits the first content to the second subsidiary terminal.” The Petition fails to show that this limitation is obvious in view of Shindo and the knowledge of a POSITA. EX2014, ¶¶137.

For, at least, the same reasons provided in *supra* §V.A.11 (claim limitation [4o]), the Petition fails to show that this limitation is obvious in view of Shindo and the knowledge of a POSITA. *See* EX2014, ¶138. More specifically, Shindo's **trigger information-to-mode** system fundamentally lacks the dynamic and concurrent routing matrix required by this limitation. *Id.* This limitation mandates an architecture capable of dynamically reversing its routing; directing the “second

content” to the “first subsidiary terminal” and “the first content” to the “second subsidiary terminal” based on association information. *Id.* Shindo cannot achieve this because it relies on broadcasting identical highlights to all devices sharing a viewing mode. *Id.* A POSITA would recognize that a broadcast architecture is technically incapable of executing the centralized dynamic cross-routing of discrete contents to specific devices as required by this claim limitation. Furthermore, A POSITA would understand that Shindo fails to disclose or suggest the claimed “association information” because Shindo’s terminal ID is not used for any comparison; therefore, it fails to meet the claimed “first device specific ID information” or “second device specific ID information.” *Id.* Additionally, the claimed “first content” and “second content” cannot be a reconstructed program content or partial program content (*i.e.*, replays or highlights of the program content). *Id.*

Furthermore, the Petition relies on Shindo’s disclosure of multiple terminals watching the same broadcast meeting claim limitation [4p]. Pet. at 36–37. However, Shindo only discloses that mobile information terminal A receives part of baseball broadcast. EX1004, ¶49. Separately, Shindo discloses that mobile information terminal B receives highlights of a broadcast as a replay. *Id.*, ¶50. Petitioners have

not specifically explained how the claimed “association information” defining that “the second content” is associated with the “first device specific ID information” or that “the first content” is associated with the “second device specific ID information.” EX2014, ¶139.

For at least the foregoing reasons, the Petition fails to show that claim limitation [4p] would have been rendered obvious in view of Shindo and the knowledge of a POSITA. *Id.*, ¶140.

B. Ground 2: The Petition Fails to Establish That Claims 1-4 Would Have Been Obvious Based on Sasaki

The Petition fails to show by a preponderance of the evidence that Claims 1–4 are unpatentable under Ground 2 because Sasaki fails to disclose or suggest key features of the '650 Patent's invention. *See* EX2014, ¶141.

1. The Petition Fails to Establish That Claim Limitation [1h] Would Have Been Obvious In View of Sasaki

Claim limitation [1h] recites that the first controller is configured to “store association information for transmitting one of the contents to one of the subsidiary terminals.” The Petition fails to establish by a preponderance of the evidence this limitation. EX2014, ¶142.

As an initial matter, while there is disclosure of a “display controller” in

Sasaki, the Petition does not point to any evidence of a **controller** that is configured to store association information. *Id.*, ¶143.

The Petition alleges that the claimed “association information” is delimiter information. *Id.* at 46. Sasaki discloses or suggest a **segmented/portioned content delivery system using a bookmark** due to a PDA limited storage capacity; this is not a persistent **content-to-device mapping** architecture. *Id.*, ¶144. For example, Sasaki discloses that PDA 2 does not have the same memory capacity as PC home server device 1; therefore, only **segments** (*e.g.*, article, paragraphs, chapters) of the electronic newspaper are transmitted to PDA 2. EX1006, ¶71 (emphasis added). Specifically, CPU 101 refers to the display information from the PDA 2 to match its capabilities, and CPU 101 calculates and generates the **content segment** such that the free memory capacity of PDA 2 is not exceeded. *Id.*, ¶132 (emphasis added). The **last part of the content segment** transmitted (*e.g.*, paragraph, chapter, article, or one to several lines) is recorded as “previous delimiter information.” *Id.*, ¶139. PDA 2 provides PC home server device 1 content ID, terminal ID, its free memory capacity at the time of request, and display information, **but none of this information functions as the claimed “association information”** because they are not **used to determine delimiter information** since only **delimiter position**—a

bookmark indicating where the process left off—is used. *Id.*, ¶104.

A POSITA would not be motivated to modify Sasaki to arrive at the claimed “association information” because a delimiter position or bookmark is used to transmit portions of the content PDA 2. EX2014, ¶145. Indeed, a POSITA would not recognize that Sasaki’s **segmented/portioned content delivery system using a bookmark** to be analogous or solving the same problem as the **content-to-device mapping** architecture in the ’650 Patent because delimiter information or delimiter position is simply used to resume or progress at a specific point for segmented content—the focus is not about transmitting “one of the contents” to PDA 2 based on delimiter information. *Id.*

The Petition alleges that the claimed “the contents” is electronic newspapers. Pet. at 40. In addition, the Petition alleges that the claimed “plurality of content information” is content identification information. Pet. at 45. Moreover, the Petition alleges that “one of the contents” is lines of an electronic newspaper, the last paragraph, chapter, or last few lines of transmission information segment (*i.e.*, portions of the content). *Id.* Sasaki discloses or suggests that content segment (*i.e.*, portions of the content or content part) is stored in data memory 214 of PDA 2, and when the user requests the continuation of the previously requested content segment,

data memory 214 is erased so that PDA 2 frees up memory capacity for PC home server device 1 to send the next content segment (*e.g.*, one or several lines of information) according to a new content distribution request. EX1006, ¶¶101–104. As such, PDA 2 does not receive electronic newspaper in PC home server device 1 since it, instead, receives segments of the electronic newspaper after which the segments are erased to accept a new segment according to the display and memory capacity of PDA 2. EX2014, ¶146; EX2016, 115:7–116:13. However, portions of content do not render obvious the required “one of the contents” displayed on PDA 2 because the same entire electronic newspaper as PC home server device 1 is required to be displayed on PDA 2, and a POSITA would not have found it obvious to use Sasaki’s **segmented/portioned content delivery system using a bookmark** due to PDA 2 limited storage capacity. EX2014, ¶146. The Petition agrees that “the contents” is electronic newspapers; therefore, “one of the contents” is not lines, paragraph, or chapter of the electronic newspaper, but it is an **entire** electronic newspaper—one of out of many electronic newspapers. *See* Pet. at 40 and 46. A POSITA would not have found it obvious to use Sasaki’s **segmented/portioned content delivery system using a bookmark** to display the entire electronic newspaper because of the limited capacity of PDA 2. EX2014, ¶146.

The Petition appears to construe “one of the contents” as a portion of the content (Pet. at 46), but the Petition provides no support for their proposed construction of the claimed “one of the content.” *Id.* Claim limitation [1h] is clear when referring to “one of the contents” because it relies on antecedent basis to refer back to “the contents” in claim limitations [1c] and [1d] and “[a] contents” in the preamble. EX2014, ¶147. Since the Petition alleges that “contents” is electronic newspapers, and content is lines of an electronic newspaper in Sasaki (Pet. at 40 and 46), “one of the contents” is one electronic newspaper in its entirety—not a shortened version. *Id.* The Petition has failed to show that PDA 2 receives one of the electronic newspaper, as required by the claimed “one of the contents.” EX2014, ¶147. Since the claimed “association information” requires the transmission of one of the contents being one electronic newspaper, delimiter information cannot be an “association information” because it only transmits a segment of the content (*e.g.*, lines of an electronic newspaper). Pet. at 72 (citing EX1006, ¶¶57, 72, 78). It would not have been obvious to a POSITA to use delimiter information as association information in view of the storage capacity restriction in PDA 2. *Id.*, ¶147.

A POSITA would not have found it obvious that segments of the electronic newspaper in Sasaki are the claimed “one of the contents” since a segment falls short

of the entire electronic newspaper, and the memory constraints of the Sasaki system would not allow for storage of the entire electronic newspaper. *Id.*, ¶148. A POSITA would not be motivated to increase the storage capacity in PDA 2 to arrive at the claimed limitation because portions of the content would still be displayed on PDA 2. Moreover, a POSITA would not find it obvious to use delimiter information as the claimed “association information” because it is only a bookmark pointing to a segment of the electronic newspaper, and it has nothing to do with an association map with PDA 2. *Id.*

For at least the foregoing reasons, the Petition fails to show that claim limitation [1h] would have been rendered obvious in view of Sasaki and the knowledge of a POSITA. EX2014, ¶149.

2. The Petition Fails to Establish That Claim Limitation [1i] Would Have Been Obvious In View of Sasaki

Claim limitation [1i] recites “wherein the association information defines that one of the contents identified by the content information is associated with one of the device specific ID information.” The Petition fails to establish this limitation by a preponderance of the evidence. EX2014, ¶150.

As an initial matter, for the same reasons provided in *supra* §VI.B.1, the

Petition fails to establish the claimed “association information.” *Id.*, ¶151. Indeed, the Petition has provided no explanation how “portion of content” meets the claimed “one of the contents.” Pet. at 48. In addition, delimiter information is just a bookmark for identifying the last part of the transmission information segment (*i.e.*, the last lines of the newspaper). EX1006, ¶¶57, 72. In addition, the Petition does not point to a **controller** that is configured to store association information. EX2014, ¶151.

The Petition is incorrect in attempting to equate Sasaki’s “delimiter information” with the claimed “association information.” Pet. at 48. While a POSITA may acknowledge that Sasaki’s PC home server device 1 uses distribution request source information to identify the terminal and determine which content is being requested, a POSITA would recognize that this session-management step is fundamentally different from the ’650 Patent’s routing architecture. EX2014, ¶152. In Sasaki, the delimiter information itself contains no mapping data; the server does not extract content identification or terminal identification from the delimiter. *Id.* Instead, the delimiter is strictly a memory-management tool. *Id.*

For example, the Petition alleges that the claimed “one of the contents” is a portion of electronic newspaper or book, “content information” is content identification information, and “device specific ID information” is device-specific

terminal identification information. *See* Pet. at 48. This claim limitation requires that “the association information defines that one of the contents . . . is associated with one of the device specific ID information.” EX2014, ¶169. The delimiter information, however, does not define how a portion of the electronic newspaper is linked or associated with the device-specific terminal identification information because it only provides the position for subsequent lines of a newspaper and makes no use of terminal ID, which is not a one to one mapping or content-to-device mapping architecture required by the claimed association information. EX1006, ¶57. That is, Sasaki’s delimiter information only defines a stopping point of an electronic newspaper. *See id.*

Sasaki is focused on portion of content resumption due to the limited storage capacity of the PDA 2. EX1006, ¶¶101–104. Sasaki’s system is designed to solve the problem of distributing large files to devices with limited memory. *Id.* The PC home server device 1 sends a chunk of data, and the delimiter marks where it left off. EX1006, ¶¶71–74, 124–139. This is functionally different from the claimed “association information,” which defines a persistent link between a content and a device specific ID information for the purpose of determining a destination for content. EX2014, ¶154. A POSITA would not be motivated to increase Sasaki’s

PDA storage to display the complete contents of the newspaper because it would completely eviscerate Sasaki's goal for **segmented/portioned content delivery system using a bookmark** due to limited storage capacity of PDA 2. *Id.* Further, a POSITA would not find it obvious to use Sasaki's delimiter as association information because it has a limited functionality incapable of achieving the claimed "association information." *Id.*

For at least the foregoing reasons, the Petition fails to show that claim limitation [1i] would have been rendered obvious in view of Sasaki and the knowledge of a POSITA. *Id.*, ¶155.

3. The Petition Fails to Establish That Claim Limitation [1j] Would Have Been Obvious In View of Sasaki

Claim limitation [1j] recites "wherein the plurality of subsidiary terminals comprise: a second display displaying the content." The Petition fails to establish this limitation by a preponderance of the evidence. EX2014, ¶156.

All the Petition has done is identify display 205. Pet. at 49. The Petition has not demonstrated how display 205 in the PDA 2 displays "the content," which cannot be a segment of the content. *Id.* There is no explanation provided by the Petition on how portions of or segmented content correspond to electronic newspaper identified

in claim limitation [1d], let alone how the segmented electronic newspaper on display 205 is the same as what is displayed as one of the electronic newspapers on PC home server device 1. EX2014, ¶157. Instead, in claim limitation [1j], the Petition points to segmented content being displayed on display 205. *Id.* There is no analysis provided on how “plurality of subsidiary terminals [of Sasaki]” include “a second display displaying **the** content or why it would have been obvious in view of Sasaki. *Id.*

The claimed “displaying **the** content” is first introduced in claim limitation [1h] (*i.e.*, “one of the contents”), and the claimed “contents” is stored on the main terminal and displayed on the “first display,” as required by claim limitations [1c] and [1d], respectively. *Id.*, ¶158. Therefore, “the content” displayed on the “second display” is the **same** as what is displayed on the first display. *Id.* The antecedent basis simply requires that the second display of the subsidiary terminals displays **the** content that is displayed on the main terminal. *Id.* “[T]he content” (*i.e.*, electronic newspaper in PC) is not being displayed on display 205. *Id.* A POSITA would not be motivated to display the entire newspaper on PDA 2 to arrive at the claimed limitation of “the content” because of the limited storage capacity of PDA 2. *Id.* A POSITA would not find it obvious to display portions of the content on display 205

to arrive at the claimed “a second display displaying the content” because Sasaki’s segmented electronic newspaper on PDA 2 is not the entire and same electronic newspaper shown on PC home server device 1, as required by claim limitation [1j]. *Id.* Furthermore, to the extent Petitioner argues that a “portion” of a file can be considered “the content,” a POSITA would understand that this limitation is not merely governed by file size or completeness, but by the integrity of the system’s routing logic. *Id.* In the ’650 Patent, the main terminal receives a plurality of contents, separates them, and the subsidiary terminal displays “the content” because that, specific, discrete data stream was explicitly mapped and routed to that specific device using the claimed “association information.” *Id.* In contrast, this prior art relies on generic broadcast triggers. *Id.* Because this alleged prior art system does not rely on the claimed personalized content-to-device mapping architecture to route received data, it does not disclose a subsidiary terminal displaying a routed “one of the contents.” *Id.*

For at least the foregoing reasons, the Petition fails to show that claim limitation [1j] would have been rendered obvious in view of Sasaki and the knowledge of a POSITA. *Id.*, ¶159.

4. The Petition Fails to Establish That Claim Limitation [1l] Would Have Been Obvious In View of Sasaki

Claim limitation [1l] recites “wherein, the main terminal determines whether it is possible to connect to the subsidiary terminal... and transmits the content... based on the association information.” The Petition fails to establish by a preponderance of the evidence this limitation. EX2014, ¶160. For the same reasons provided *supra* §VI.B.1–3 (claim limitations [1h], [1i], and [1j]), the Petition fails to establish claim limitation [1l] because no association information is disclosed or suggested. *Id.*, ¶161. Therefore, Sasaki’s main terminal cannot perform the function required by claim limitation [1l], which is to determine a connection with PDA 2 and transmit a portion of or segmented content based on the Petition’s non-existent association information because the delimiter information does not associate the device-specific terminal identification information with the portion of or segmented content. *Id.* A POSITA would not find it obvious to use Sasaki’s system to arrive at claim limitation [1l] because delimiter information is not the claimed “association information,” as delimiter position is not terminal ID. *Id.*

Even if “‘the content’ can refer to both ‘the contents’ . . . or ‘one of the contents’” according to Dr. Paradiso (*see* EX1002, p. 81 n.2), Sasaki would still not

render obvious the claimed “contents” because PDA 2’s limited storage capacity can only display segments of electronic newspaper—not an entire newspapers. EX2014, ¶162.

For at least the foregoing reasons, the Petition fails to show that claim limitation [11] would have been rendered obvious in view of Sasaki and the knowledge of a POSITA. *Id.*, ¶163.

5. The Petition Fails to Establish That Claim 2 Would Have Been Obvious In View of Sasaki

Because Claim 2 depends from Claim 1, the Petition fails for at least the same reasons as Claim 1. EX2014, ¶¶164–66.

6. The Petition Fails to Establish That Claim 3 Would Have Been Obvious In View of Sasaki

Because Claim 3 depends from Claim 1, the Petition fails for at least these same reasons as Claim 1. EX2014, ¶¶167–69.

7. The Petition Fails to Establish That Claim Limitation [4i] Would Have Been Obvious In View of Sasaki

Claim limitation [4i] recites “[wherein the first controller is configured to . . .] store association information for transmitting one of the first content or the second content to one of the first subsidiary terminal or the second subsidiary terminal.”

For, at least, the same reasons provided in *supra* §VI.B.1 (claim limitation [1h]), the Petition fails to show that this limitation is obvious in view of Sasaki and the knowledge of a POSITA. EX2014, ¶¶170–71.

8. The Petition Fails to Establish That Claim Limitation [4j] Would Have Been Obvious In View of Sasaki

Claim limitation [4j] recites “wherein the association information defines that one of the first content or the second content is associated with one of the first device specific ID information or the second device specific ID information.” For, at least, the same reasons provided in *supra* §VI.B.2 (claim limitation [1i]), the Petition fails to show that this limitation is obvious in view of Sasaki and the knowledge of a POSITA. EX2014, ¶¶172–73.

9. The Petition Fails to Establish That Claim Limitation [4k] Would Have Been Obvious In View of Sasaki

Claim limitation [4k] recites “wherein the first subsidiary terminal comprises: a second display displaying the content.” For, at least, the same reasons provided in *supra* §VI.B.3 (claim limitation [1j]), the Petition fails to show that this limitation is obvious in view of Sasaki and the knowledge of a POSITA. EX2014, ¶¶174–75.

10. The Petition Fails to Establish That Claim Limitation [4m] Would Have Been Obvious In View of Sasaki

Claim limitation [4m] recites “wherein the second subsidiary terminal comprises: a third display displaying the content.” For, at least, the same reasons provided in *supra* §VI.B.3 (claim limitation [1j]), the Petition fails to show that this limitation is obvious in view of Sasaki and the knowledge of a POSITA. EX2014, ¶¶176–77.

11. The Petition Fails to Establish That Claim Limitation [4o] Would Have Been Obvious In View of Sasaki

Claim limitations [4o] recites “when the association information defines that the first content is associated with the first device specific ID information and the second content is associated with the second device specific device ID information, the main terminal transmits the first content to the first subsidiary terminal and transmits the second content to the second subsidiary terminal.” For, at least, the same reasons provided in *supra* §VI.B.4 (claim limitation [1l]), the Petition fails to show that this limitation is obvious in view of Sasaki and the knowledge of a POSITA. EX2014, ¶¶178–79.

Sasaki discloses or suggests a **segmented/portioned content delivery system using a bookmark** to identify the last position of portioned content—not terminal

ID. EX1006, ¶¶57, 72. This is not the specific one to one mapping disclosed in this claim limitation “the first device specific ID information and the second content is associated with the second device specific device ID information, the main terminal transmits the first content to the first subsidiary terminal and transmits the second content to the second subsidiary terminal.” None of the Petition’s citations address how the deficiencies in Shindo in view of the knowledge of a POSITA would render obvious this claim limitation. Pet. at 62. A POSITA would understand that Sasaki fails to render obvious the claimed “association information” because Sasaki’s terminal ID is not used for any comparison; therefore, it fails to render obvious the claimed “first device specific ID information” and “second device specific ID information.” Additionally, the claimed “first content” and “second content” cannot be a portion of the content (*i.e.*, line or lines of an electronic newspaper). EX2014, ¶180.

For at least the foregoing reasons, the Petition fails to show that claim limitation [40] would have been rendered obvious in view of Sasaki and the knowledge of a POSITA. *Id.*, ¶181.

12. The Petition Fails to Establish That Claim Limitation [4p] Would Have Been Obvious In View of Sasaki

Claim limitations [4p] recites “when the association information defines that the second content is associated with the first device specific ID information and the first content is associated with the second device specific device ID information, the main terminal transmits the second content to the first subsidiary terminal and transmits the first content to the second subsidiary terminal.” For, at least, the same reasons provided in *supra* §VI.B.4 (claim limitation [1l]) and *supra* §IX.B.11 (claim limitation [4o]), the Petition fails to show that this limitation is obvious in view of Sasaki and the knowledge of a POSITA. EX2014, ¶¶182–83.

More specifically, Sasaki’s **segmented/portioned content delivery system using a bookmark** system fundamentally lacks the dynamic and concurrent routing matrix required by this limitation. *Id.*, ¶183. This limitation mandates an architecture capable of dynamically reversing its routing; directing the “second content” to the “first subsidiary terminal” and “the first content” to the “second subsidiary terminal” based on association information. *Id.* Sasaki cannot achieve this because its system acts as a sequential server, answering individual PDA memory requests one at a time using byte-offset bookmarks. *Id.* A POSITA would understand that managing

sequential file transfers to handle local storage limits is technically distinct from, and incapable of, executing the dynamic cross-routing of multiple contents to multiple devices. *Id.* Additionally, the claimed “first content” and “second content” cannot be a portion of the content (*i.e.*, line or lines of an electronic newspaper). *Id.* A POSITA would understand that Sasaki’s PC home server device 1 cannot perform the function required by claim limitation [4p] because Sasaki’s system only determines a connection with PDA 2 to transmit a portion or segmented content based on a non-existent association information. *Id.* A POSITA understand that the delimiter information does not associate the claimed “first device specific ID information” (*e.g.*, device-specific terminal identification information) with “the second content” (*e.g.*, portion or segmented content). *Id.* The same is true for “second device specific ID information” (*e.g.*, device-specific terminal identification information) with “the first content” (*e.g.*, portion or segmented content). *Id.*

For at least the foregoing reasons, the Petition fails to show that claim limitation [4p] would have been rendered obvious in view of Sasaki and the knowledge of a POSITA. *Id.*, ¶184.

C. Ground 3: The Petition Fails to Establish That Claims 1-4 Would Have Been Obvious Based on Futa and McClellan

The Petition has not shown fails to show by a preponderance of the evidence that Claims 1–4 are unpatentable under Ground 3 because Futa alone does not disclose or suggest key features of the '650 Patent's invention, and the deficiencies of Futa cannot be filled with McClellan since a POSITA would not be motivated to combine those references to disclose Claims 1–4. EX2014, ¶185.

1. The Petition Fails to Establish that a POSITA Would Combine Futa and McClellan

The Petition fails to show that a POSITA seeking to use association information to transmit content, as claimed in the '650 Patent, would have been motivated to combine Futa with McClellan. Pet. 64–65. As detailed *supra* §V and below, such a combination still fails to disclose or suggest by a preponderance of the evidence the key limitations of the challenged claims. EX2014, ¶186.

2. The Petition Fails to Establish That Claim Limitation [1h] Would Have Been Obvious In View of Futa and McClellan

Claim limitation [1h] recites that the first controller is configured to “store association information for transmitting one of the contents to one of the subsidiary terminals.” The Petition fails to establish this limitation by a preponderance of the

evidence. EX2014, ¶187.

The Petition alleges that Futa's "judgment tables" constitute the claimed "association information." Pet. at 73. Futa discloses storing judgment tables A430 and B440 within the communication controlling unit 407. EX1009, ¶169; *id.*, Figs. 8A and 8B.

FIG.8A

FREE CONTENT
ADDITIONAL INFORMATION = 1

JUDGMENT
TABLE A430

1	PERMITTED DEVICE ID
	IDA
	IDB
	IDC

FIG.8B

HIGH-VALUE CONTENT
ADDITIONAL INFORMATION = 2

JUDGMENT
TABLE B440

2	PERMITTED DEVICE ID
	IDA
	IDC

EX2014, ¶223.

These tables, however, store authorization rules, mapping content categories (represented by “additional information” values 1 or 2) to lists of device IDs belonging to categories permitted to receive that type of content—essentially a permission filter. EX1009, ¶172. For example, table B440 indicates devices IDA and IDC are permitted to receive high-value content via additional information “2” (e.g., high-value content). *Id.*, ¶¶146, 172; *id.*, Fig. 8B. A POSITA would understand that the claimed “first controller” storing the judgment table alone can only ascertain that device ID “IDA” or “IDB” have copyright protection level set for additional information “2.” *Id.* This structure facilitates an access control check: “Is device IDA allowed to receive content type 2?.” *Id.*, ¶181. A POSITA would not find obvious to use Futa’s judgment table to disclose or suggest the claimed “association information” because Futa’s judgment table is a permission to view content blindly controlled based on a permission filter whereas the “association information” is a one to one specific link for transmission of personalized content to a specific subsidiary terminal (*e.g.*, content-to-device mapping architecture). EX2014, ¶189. A POSITA would not have had any reasonable expectation to use Futa’s tables to render obvious the claimed “association information” because Futa’s judgment table

defines group permissions based authorization, which is not specific content-to-device mapping transmission scheme. *See* EX1009, ¶172.

Furthermore, McClellan, relied upon by the Petition for discussing operating system module descriptions, provides no teachings on storing content to device transmission information based on association information. EX1010, 1:25–30. The combination thus lacks the claimed stored association information. EX2014, ¶190.

For at least the foregoing reasons, the Petition fails to show that limitation [1h] would have been rendered obvious by Futa in view of McClellan. *Id.*, ¶191.

3. The Petition Fails to Establish That Claim Limitation [1i] Would Have Been Obvious In View of Futa and McClellan

Claim limitation [1i] recites “wherein the association information defines that one of the contents identified by the content information is associated with one of the device specific ID information.” The Petition fails to establish this limitation by a preponderance of the evidence. EX2014, ¶192.

As an initial matter, for, at least, the same reasons provided *supra* §VI.C.1–2 (claim limitation [1h]), the Petition fails to establish claim limitation [1i] because Futa nor McClellan disclose the claimed “association information.” EX2014, ¶193.

The Petition again alleges that Futa’s judgment tables provide this definition.

Pet. at 74–76. Futa's judgment tables define that devices have copyright protection level permitting to reception of content using "additional information." EX1009, ¶¶146, 169, 171-172, and 212. This does not disclose or suggest that the stored information defines an association linking one specific content to one specific device (*e.g.*, content-to-device mapping architecture), but it suggests a broadly applied permission filter for content authorization. EX2014, ¶194. The Petition conflates Futa's category-based permission structure with the specific content to device association defined in the claim. *Id.*

McClellan provides no relevant disclosure regarding the claimed association information for curing Futa's deficiency. Pet. 74–76. The combination fails to teach association information that defines the specific relationship required by the claim. EX2014, ¶195. A POSITA would not find the combination of Futa and McClellan's judgment table in an improved operating system for accommodating system upgrades to render obvious the claimed limitation "association information" because Futa's blind permission authorization filter in an improved operating system is not the same as transmitting personalized content to a specific device based a content-to-device mapping architecture. *Id.*

For at least the foregoing reasons, the Petition fails to that limitation [1i]

would have been rendered obvious by Futa in view of McClellan. EX2014, ¶196.

4. The Petition Fails to Establish That Claim Limitation [1l] Would Have Been Obvious In View of Futa and McClellan

Claim limitation [1l] recites “wherein, the main terminal determines whether it is possible to connect to the subsidiary terminal... and transmits the content... based on the association information.” The Petition fails to establish by a preponderance of the evidence this limitation. EX2014, ¶197.

For the same reasons provided *supra* §VI.C.1–4 (claim limitations [1h] and [1i]), the Petition fails to establish claim limitation [1l] because no “association information” is shown. *Id.*, ¶198.

The Petition alleges Futa transmits based on its judgment tables. Pet. at 80–81. The Futa-McClellan combination lacks the claimed “association information.” Consequently, the combined system cannot transmit content based on association information. Futa’s system transmits content based on the result of its authorization check using the judgment tables—whether copyright permission is granted or denied. EX1009, ¶¶207, 212. Specifically, communication controller unit 407 performs a judgment (step S306) to see if the target device’s ID is included in the relevant judgment table for the content’s category information or additional information. *Id.*,

¶¶211–212. Transmission proceeds (steps S208-S210) only if this check is affirmative; otherwise, it is prohibited (step S207). *Id.*, ¶¶207–208. The basis for transmission is the permission status derived from the category-based rule check, not a lookup in a association information defining the specific content to device link (content-to-device mapping architecture). McClellan adds no relevant transmission logic. EX1010, 1:25–30. Because the combination lacks the claimed “association information,” it cannot perform the claimed step of transmitting based on “association information.” EX2014, ¶199.

A POSITA would not have used the combination of Futa and McClellan to render obvious this claim limitation because the judgment table is not “association information” for transmitting personalized content based on a one to one content to device mapping. *Id.*, ¶200.

For at least the foregoing reasons, the Petition fails to show that limitation [11] would have been rendered obvious by Futa in view of McClellan. *Id.*, ¶201.

5. The Petition Fails to Establish That Claim 2 Would Have Been Obvious In View of Futa and McClellan

Because Claim 2 depends from Claim 1, the Petition fails for at least the same reasons as Claim 1. EX2014, ¶¶202–4.

6. The Petition Fails to Establish That Claim 3 Would Have Been Obvious In View of Futa and McClellan

Because Claim 3 depends from Claim 1, the Petition fails for at least the same reasons as Claim 1. EX2014, ¶¶205–7.

7. The Petition Fails to Establish That Claim Limitation [4i] Would Have Been Obvious In View of Futa and McClellan

Claim limitation [4i] recites “[wherein the first controller is configured to . . .] store association information for transmitting one of the first content or the second content to one of the first subsidiary terminal or the second subsidiary terminal.” For, at least, the same detailed reasons provided in supra §VI.C.1–2 (claim limitation [1h]), The Petition fails to show that this limitation is obvious by the Futa-McClellan combination. EX2014, ¶¶208–9.

8. The Petition Fails to Establish That Claim Limitation [4j] Would Have Been Obvious In View of Futa and McClellan

Claim limitation [4j] recites “wherein the association information defines that one of the first content or the second content is associated with one of the first device specific ID information or the second device specific ID information.” For, at least, the same detailed reasons provided in supra §VI.C.1 and 3 (claim limitation [1i]), the Petition fails to show that this limitation is obvious by the Futa-McClellan

combination. EX2014, ¶¶210–11.

9. The Petition Fails to Establish That Claim Limitation [4o] and Would Have Been Obvious In View of Futa and McClellan

Claim limitation [4o] recites “when the association information defines that the first content is associated with the first device specific ID information and the second content is associated with the second device specific ID information, the main terminal transmits the first content to the first subsidiary terminal and transmits the second content to the second subsidiary terminal.” For, at least, the same reasons provided in *supra* §VI.C.1 and 4 (claim limitation [1l]), the Petition fails to show that this limitation is obvious by the Futa-McClellan combination. EX2014, ¶¶212–3.

The combination of Futa and McClellan discloses or suggest **permission/authorization filter** via judgment table or category information in an improved operating system for accommodating system upgrades. EX1009, ¶¶10, 12, 146, 169-171; *id.*, Fig. 9 and Claim 1; EX1010, 1:26-29. This is not the specific one to one mapping disclosed in this claim limitation “the first content is associated with the first device specific ID information and the second content is associated with the second device specific device ID information, the main terminal transmits

the first content to the first subsidiary terminal and transmits the second content to the second subsidiary terminal.” A POSITA would understand that Futa and McClellan fail to render obvious the claimed “association information” because Futa’s judgment table is a blind permission filter not concerned with personalizing two contents for two devices; therefore, it fails to render obvious the claimed “first content is associated with the first device specific ID information,” “the second content is associated with the second device specific ID information,” and transmitting “the first content to the first subsidiary terminal” and “the second content to the second subsidiary terminal.” EX2014, ¶213.

10. The Petition Fails to Establish That Claim Limitation [4p] Would Have Been Obvious In View of Futa and McClellan

Claim limitation [4p] recites “when the association information defines that the second content is associated with the first device specific ID information and the first content is associated with the second device specific ID information, the main terminal transmits the second content to the first subsidiary terminal and transmits the first content to the second subsidiary terminal.” For at least the same reasons provided in *supra* §VI.C.1 and 4 (claim limitation [1l]), the Petition fails to show that this limitation is obvious by the Futa-McClellan combination. EX2014, ¶¶214–

5.

The combination of Futa and McClellan discloses or suggest **permission/authorization filter** via judgment table or category information in an improved operating system for accommodating system upgrades. EX1009, ¶¶10, 12, 146, 169-171; *id.*, Fig. 9 and Claim 1; EX1010, 1:26-29. This is not the specific reverse one to one mapping disclosed in this claim limitation. EX2014, ¶215. More specifically, the combination of Futa and McClellan fundamentally lacks the dynamic, concurrent routing matrix required by this limitation. *Id.* This limitation mandates an architecture capable of dynamically reversing its routing, directing the “second content” to the "first subsidiary terminal" and the "first content” to the “second subsidiary terminal” based on the stored association information. *Id.* Futa cannot achieve this because its judgment table functions strictly as a static permission filter (*e.g.*, checking if a device category is authorized for a content category). *Id.* A POSITA would recognize that a static access-control gatekeeper cannot be equated with a centralized routing configuration to dynamically cross-route specific contents to specific devices. Therefore, it fails to render obvious the claimed “the second content is associated with the first device specific ID information,” “the first content is associated with the second device specific ID

information,” and transmitting “the second content to the first subsidiary terminal”
and “the first content to the second subsidiary terminal.” *Id.*

VI. CONCLUSION

For at least the foregoing reasons, Claims 1–4 are patentable.

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Case IPR2025-01308
Patent No. 11,277,650
Patent Owner's Response

CERTIFICATE OF SERVICE

I hereby certify that on this 9th day of April, 2026, a copy of the attached
PATENT OWNER'S RESPONSE was served by electronic mail to the attorneys
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Case IPR2025-01308
Patent No. 11,277,650
Patent Owner's Response

CERTIFICATION PURSUANT TO 37 C.F.R. § 42.24(d)

Pursuant 37 CFR 42.24(d), the undersigned certifies that this Patent Owner's Response 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 Response indicates that it contains 13,954 words, excluding the parts of the brief exempted by 37 C.F.R. § 42.24(a).

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