

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

HEWLETT PACKARD ENTERPRISE COMPANY
Petitioner

v.

SOVEREIGN PEAK VENTURES, LLC
Patent Owner

U.S. Patent 7,796,512
Issue Date: Sept. 14, 2010

Title: SWITCHING SOURCE DEVICE, SWITCHING DESTINATION
DEVICE, HIGH SPEED DEVICE SWITCHING SYSTEM, AND
SIGNALING METHOD

Inter Partes Review No. 2023-01260

**PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT 7,796,512
UNDER 35 U.S.C. §§311-319 and 37 C.F.R. §§42.1-.80, 42.100-.107**

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PETITIONER’S EXHIBIT LIST

Ex. No.	Brief Description
1001	U.S. Patent No. 7,796,512 to Komiya et al (“the ’512 Patent”)
1002	Prosecution History for U.S. Patent No. 7,796,512
1003	Japanese-language Version of Ohta, K., Yoshikawa, T., Nakagawa, T., Isoda, Y., Sugimura, T., “Mobile Multimedia Middleware for Seamless Service”, Mobile Computing and Wireless Communication No. 18-35, Intelligent Handoff System No. 6-35, IPSJ SIG Technical Report, Information Processing Society of Japan, Sep. 7, 2001 (“Ohta in Japanese”)
1004	Certified English Translation of Ohta, K., Yoshikawa, T., Nakagawa, T., Isoda, Y., Sugimura, T., “Mobile Multimedia Middleware for Seamless Service”, Mobile Computing and Wireless Communication No. 18-35, Intelligent Handoff System No. 6-35, IPSJ SIG Technical Report, Information Processing Society of Japan, Sep. 7, 2001 (“Ohta”)
1005	Bluetooth Audio Video Working Group, “AUDIO/VIDEO REMOTE CONTROL PROFILE”, published by Bluetooth SIG on May 22, 2003 (“AVRCP”)
1006	Kumar, C., Kline, P., Thompson, T., <i>Bluetooth Application Programming with the Java APIs</i> , Morgan Kaufmann Publishers, 2004, ISBN 1-55860-934-2 (“Kumar”)
1007	Expert Declaration of Dr. Kevin Negus for <i>Inter Partes</i> Review of U.S. Patent No. 7,796,512
1008	Expert Declaration of Dr. Sylvia Hall-Ellis with respect to <i>Inter Partes</i> Review of U.S. Patent No. 7,796,512
1009	Plaintiff’s Preliminary Infringement Contentions, <i>Sovereign Peak Ventures, LLC v. Hewlett Packard Enterprise Company</i> , Case No. 2:23-cv-00009 (E.D. Tex.), served on Feb. 28, 2023
1010	Plaintiff’s Complaint, <i>Sovereign Peak Ventures, LLC v. Hewlett Packard Enterprise Company</i> , Case No. 2:23-cv-00009 (E.D. Tex.), filed on January 10, 2023

Ex. No.	Brief Description
1011	Amended Docket Control Order, <i>Sovereign Peak Ventures, LLC v. Hewlett Packard Enterprise Company</i> , Case No. 2:23-cv-00009 (E.D. Tex.), filed on April 13, 2023

I. INTRODUCTION

Hewlett Packard Enterprise Company (“Petitioner”) petitions for *Inter Partes* Review (“IPR”) under 35 U.S.C. §§ 311-319 and 37 C.F.R., Part 42 of claim 1 of U.S. Patent No. 7,796,512 (“the ’512 Patent”, Ex. 1001) and shows herein that there is a reasonable likelihood that it will prevail by proving this claim is invalid.

Claim 1 purports to claim a method of switching a media session from one device (think, watching a movie on a smartphone) to another device (like a smart television), but the ’512 Patent readily admits that this is not new. To the contrary, the ’512 Patent explicitly states that it is building on earlier work trying to solve the very same problem—a seamless transition between devices. And, indeed, the ’512 Patent admits that that earlier work got *very* close to true seamlessness, requiring only “several hundreds milliseconds” to complete the switch. That work is memorialized in a paper titled “Mobile Multimedia Middleware for Seamless Service” (referred to as “Ohta” in this Petition) that was discussed at some length in the ’512 Patent. Taking the ’512 Patent applicants at their word, their “invention” consists of a handful of modest differences from Ohta, only one of which even arguably appears in challenged claim 1.

Despite the indisputable evidence of Ohta’s importance, the applicants did not provide to the patent examiner an English translation that examiner could independently review. Instead, the copy of Ohta presented to the U.S.P.T.O. was in

Japanese, including most aspects of Ohta's figures. If the Patent Office had been able to review Ohta in English, such as in the form presented in the certified translation attached as Exhibit 1004, it would have reached the same conclusion presented in this Petition: that Ohta in fact discloses or renders obvious every element of claim 1, and claim 1 as a whole. It was only by obscuring the full scope of Ohta's disclosure through its selective description in the specification that the applicant was able to hide the obviousness of claim 1.

Further, even if the applicant were correct that claim 1 includes minor differences over Ohta—namely a “media output notification” that is effectively a “play” instruction—such a feature was already known in the Bluetooth space, which is the very connection protocol that Ohta used for its seamless device switching method. Indeed, well before the claimed priority date of the challenged claim, the Bluetooth working group had released an Audio/Video Remote Control profile that included precisely the functionality that applicant claimed was missing from Ohta: namely the ability of a user's device to remotely direct a different device to output or ‘play’ media content.

In short, the applicant did not give the U.S.P.T.O a chance to consider fully Ohta—the key reference that applicant claimed to be building on. Had it done so, challenged claim would not have issued. Petitioner requests that the Board institute trial and cancel claim 1 of the '512 Patent.

II. GROUNDS FOR STANDING

Petitioner certifies that the '512 Patent is available for IPR. Petitioner does not own the '512 Patent and is not estopped from challenging it. Neither Petitioner nor a privy of the Petitioner filed a civil action challenging the validity of a claim in the '512 Patent. This Petition has been filed less than one year after the date on which the Petitioner or a privy of the Petitioner was served with a Complaint alleging infringement of '512 Patent. Ex. 1010

III. SUMMARY AND TECHNICAL BACKGROUND OF THE '512 PATENT

A. Summary of the '512 Patent

The '512 Patent relates to the “device switching,” meaning a process in which media playback on one device (such as a smartphone) can be moved to another device (such as a car sound system or television). According to the '512 Patent, this involves “moving a session held between a switching source device and a communication counterpart to a switching destination device.” Ex. 1001, Abstract. The '512 Patent purports to build on an opportunity introduced by the near-ubiquity of internet connections in modern society: the ability to switch between networks, devices, and media formats under appropriate circumstances, and to do so “seamlessly” without interrupting the user experience. The '512 Patent explains that, as more devices with different capabilities become connected, “[t]here has been a strong demand for a seamless service capable of providing continuous services by

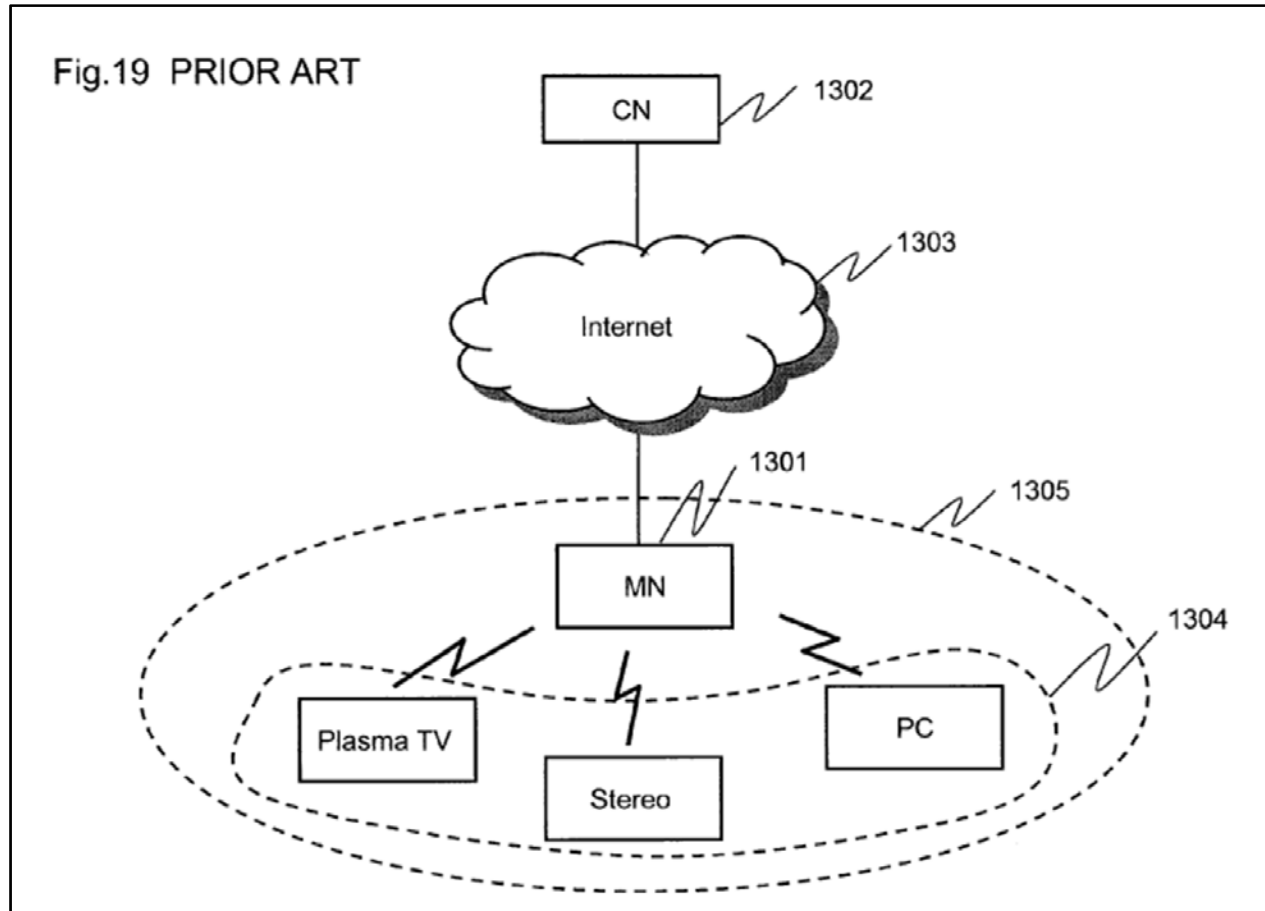
freely switching various access networks and devices having various capabilities in a ubiquitous network environment.” Ex. 1001, at 1:28-31; Ex. 1007, ¶46.

The ’512 Patent describes three technologies that facilitate “seamless” service: network seamless, device seamless, and contents seamless (or media adaptive). Ex. 1001, at 1:32-53; Ex. 1007, ¶¶47-49. In “network seamless” setups, a device can “switch between different networks seamlessly in accordance with the movement” of the device. Ex. 1001, at 1:32-40. In “device seamless” setups, a “session used in one terminal can be continuously used in another terminal.” Ex. 1001, at 1:41-46. In “contents seamless” setups, a “media format, a media type, and the like, can be switched seamlessly” to adapt to the capabilities of the device. Ex. 1001, at 1:47-53.

The ’512 Patent is directed to “device seamless” technology, which it calls “device switching.” As an example of device switching, the ’512 Patent describes a user watching a streaming movie on a “portable telephone.” Ex. 1001, at 58-65; Ex. 1007, ¶50. When the user “enters the living room of his/her house, he/she instantly switches the display to a large size television display and views the continuation of the movie.” Ex. 1001, at 58-65; Ex. 1007, ¶50.

The ’512 Patent admits that prior art devices were capable of device switching for “satisfying such a demand,” which the ’512 Patent calls “conventional device

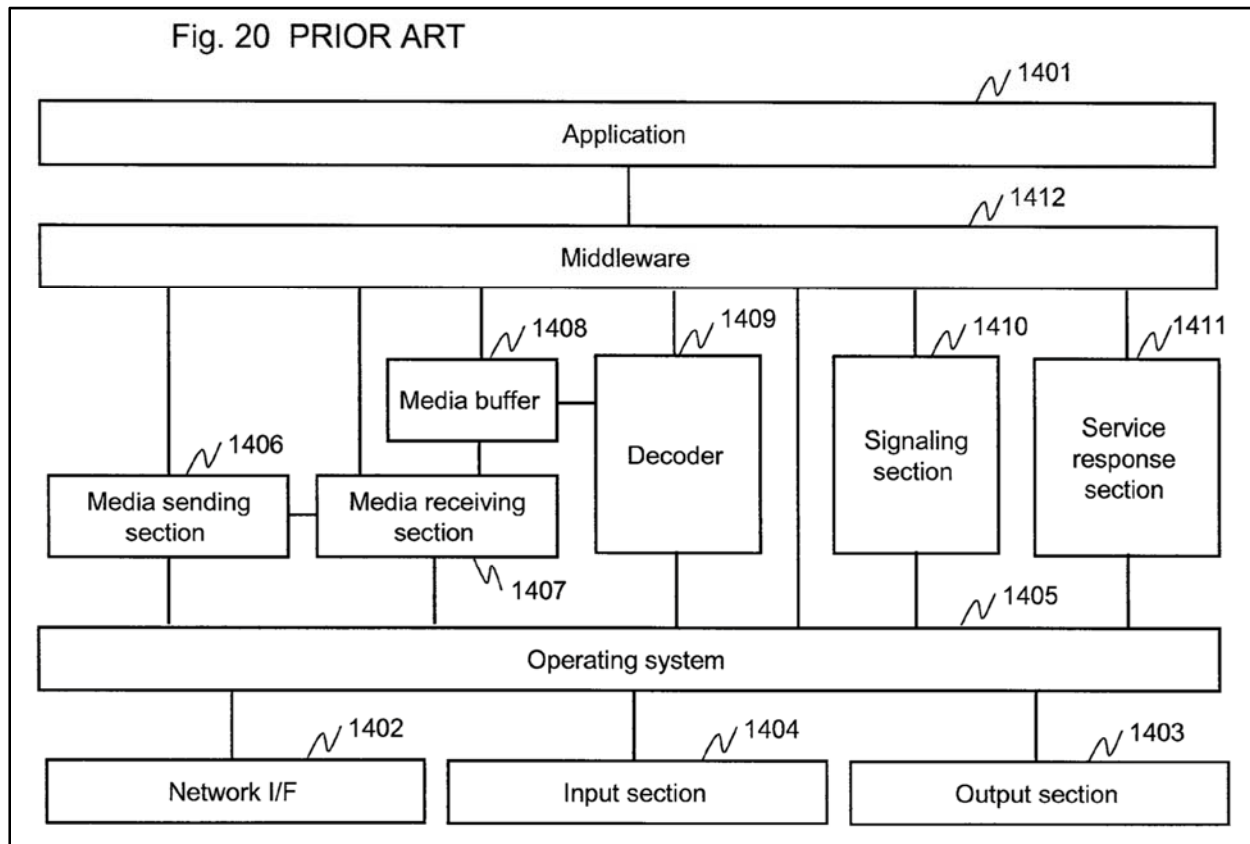
switching system[s].” Ex. 1001, at 2:5-8. An illustration of such a “conventional system” is included as Figure 19 of the ’512 Patent and labeled “Prior Art”:



Ex. 1001, Fig. 19; Ex. 1007, ¶¶51-53. In this illustration, the “MN” (“Mobile Node”) is the “switching source device,” such as a smartphone that enters a room with a set of candidate “switching destination devices,” such as a “plasma TV, stereo, and PC” (collectively referred to as “device group 1304.” Ex. 1001, at 2:20-29; Ex. 1007, ¶¶52-53. In Figure 19, the “switching source device” communicates with the source of the media to be switched labelled CN 1302 (for Counterpart Node) via the Internet, while the switching source device communicates with the various candidate

“switching destination devices” via “personal area network (hereinafter, referred to as ‘PAN’) 1305.” Ex. 1001, at 2:20-38; Ex. 1007, ¶¶52-53.

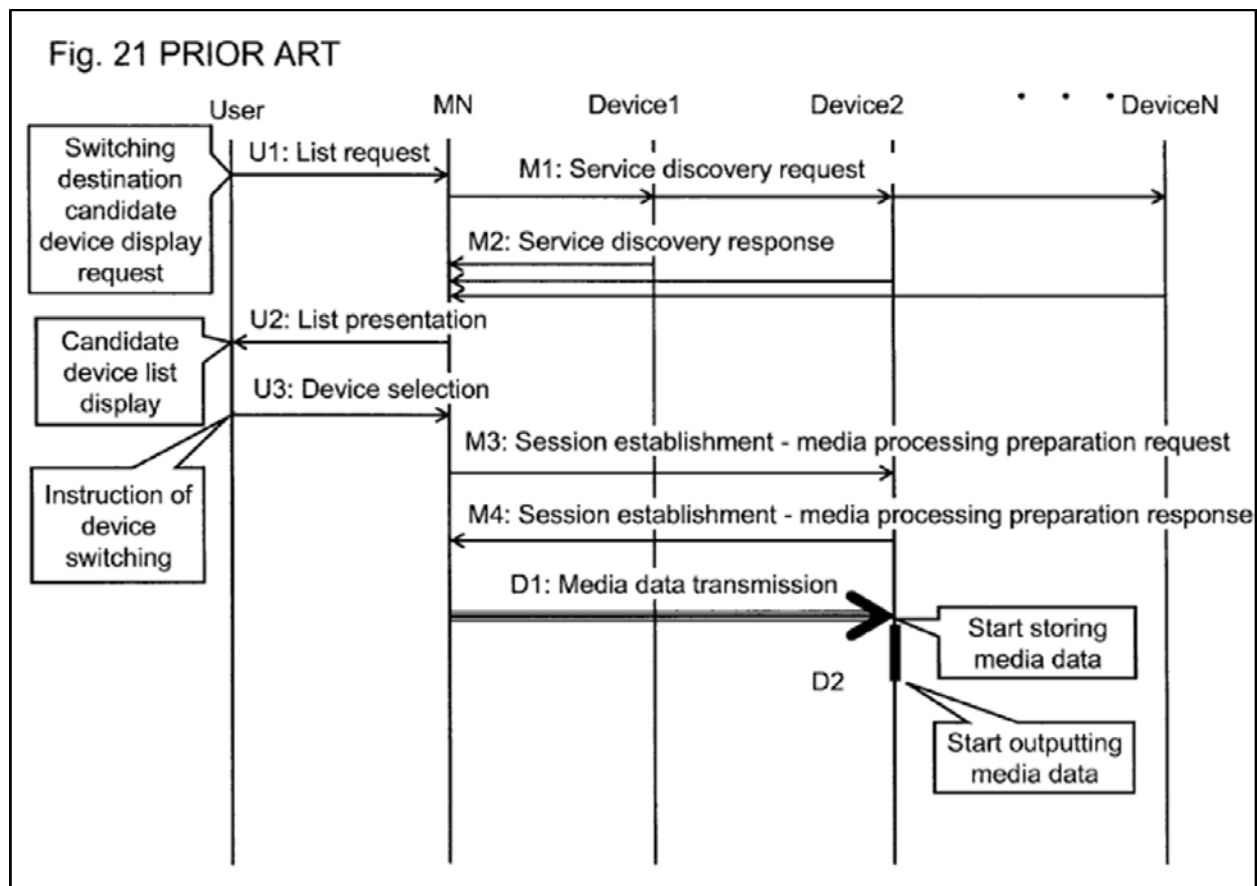
The ’512 Patent also describes a prior art “configuration inside the device of MN 1301” (*i.e.*, a switching source device), the components of which are illustrated in Figure 20 (also labeled “Prior Art”):



Ex. 1001, Fig. 20; Ex. 1007, ¶¶54-56. The components include “application 1401, at least one network I/F 1402, output section 1403 for outputting a display, input section 1404 as an interface (I/F) with respect to a user, operating system 1405, media sending section 1406 communicating with an external device (not shown) via operating system 1405, media receiving section 1407, media buffer 1408 for storing

media data received by media receiving section 1407, decoder 1409 for decoding data when media data are compressed, signaling section 1410 for controlling a session, service discovery section 1411 for discovering a service provided by an external switching destination device (not shown), and middleware 1412 for controlling so that media sending section 1406 transfers received media data to the switching destination device.” Ex. 1001, at 2:42-55; Ex. 1007, ¶55.

This conventional system switches a session from the switching source device to a switching destination device by a series of user commands coupled with certain communication between the source and destination devices. The '512 Patent illustrates that interaction through Figure 21:



Ex. 1001, Fig. 21. The illustration shows several steps: (i) requesting a list of switching destination candidate devices (U1); (ii) the switching source device makes service discovery requests to other devices and receives service discover responses (M1 & M2); (iii) the list of available switching destination devices is presented to the user (U2); (iv) selecting a device to switch the session to (U3); (v) the switching source device establishes a session with the chosen destination device, makes a media processing preparation request, and receives a media processing preparation response (M3 & M4); (vi) the switching source device begins transmitting media data to the switching destination device (D1); and (vii) the switching destination

device begins storing and outputting media data (D2). Ex. 1001, at 2:63-4:13. The component responsible for a number of these steps in the conventional technology is the “middleware,” labeled as element 1412 in Figure 20. Ex. 1001, at 3:15, 29, 42, 50, 58, 62, 67, 4:8.

The ’512 Patent acknowledges that it is “possible to realize device switching” in the conventional method, but identifies an alleged problem: “several seconds” are required for steps M1 and M2 (making service discovery requests and receiving responses) and another “several seconds” for M3 and M4 (session establishment). Ex. 1001, at 4:26-35. The result is that the switching process “becomes considerably long” and may result in the user missing parts of the media that he or she was enjoying (such as missing a goal in a soccer game). Ex. 1001, at 4:33-38.

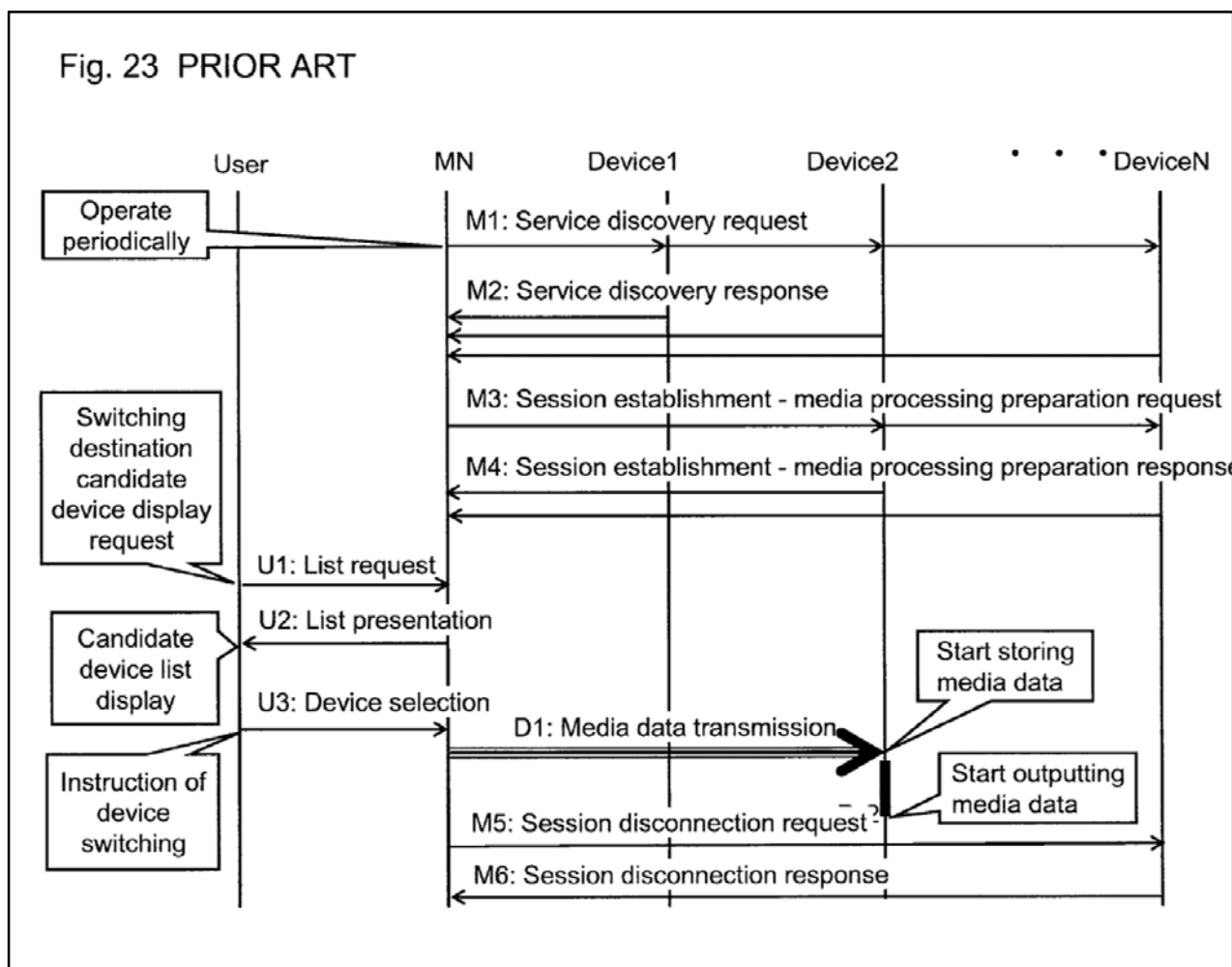
The ’512 Patent further admits that solutions were known to “reduce the time necessary for switching devices,” and that those solutions were disclosed in a paper titled “Mobile Multimedia Middleware for Seamless Service” by Ken Ohta, et al. (“Ohta”). Ex. 1001; Exs. 1003 & 1004¹; Ex. 1007 ¶57. The ’512 Patent further admits that Ohta proposes reducing device switching time in two ways: “a technology in which service discovery has been periodically carried out in advance (technology A) and a technology in which session establishment and media

¹ Exhibit 1003 is a copy of Ohta in its original Japanese. Exhibit 1004 is a copy of a certified English translation of Ohta. As explained below, the examining attorney received only a copy of Ohta in Japanese.

processing preparation have been carried out previously with respect to all devices obtained as a result of the service discovery (technology B).” Ex. 1001, at 44-49; Ex. 1007, ¶57. According to the applicant, this technology speeds up switching in two ways: (i) service discovery is carried out *before* a user requests a device switching list, the list can be presented immediately upon the user’s request;² and (ii) the switching source device establishes a session and makes media processing preparation requests/responses before the user selects a device to switch to, the switching itself is instantaneous because the selected device can immediately begin outputting media. Ex. 1001, at 6:64-7:9 (“the time necessary to start an output of media data at the selected switching device can be reduced” to “zero”).

The ’512 Patent illustrates Ohta’s two updates to “conventional” device switching in Figure 23 (labeled “Prior Art”), which in contrast to Figure 21 (the “conventional” technology) shows steps M1-M4 occurring *before* the user makes a “[s]witching destination candidate device display request”:

² Ex. 1001, at 6:54-63 (“with respect to the display request of a switching destination candidate device from a user, a substantial operation time at the time of switching can be made to zero”).



Ex. 1001, Fig. 23; Ex. 1007, ¶59. The '512 Patent further illustrates Ohta's improvements over conventional technology with two flowcharts presented as Figure 24 (for a switching source device) and Figure 25 (for a switching destination device). Ex. 1001, Fig. 24; Ex. 1001, at 4:64-65 ("FIG. 24 is a flowchart showing an operation of a switching source device in [Ohta].") FIG. 25 shows a flowchart of an operation of a switching destination device."); Ex. 1007, ¶¶59-60.

The '512 Patent recognizes that Ohta's improvements "significantly reduce" the amount of time needed to switch devices. Ex. 1001, at 7:10-16; Ex. 1007, ¶68.

However, according to the '512 Patent, “from the time the selected switching destination device starts to receive media data to the time when the output section of the switching destination device starts outputting media data (step S1905 to step S1909), about several hundreds milliseconds are required” and also that “media data that have been stored in the media buffer of the switching source device and that have not yet output at switching source device are not transferred to the switching destination device”, thereby “resulting in generating discontinuous output.” Ex. 1001, at 7:10-34; Ex. 1007, ¶69. The '512 Patent allegedly is directed to eliminating this “several hundreds milliseconds delay” and the problem of discontinuous playback:

An object of the present invention is to provide a switching source device, a switching destination device and a high speed device switching system capable of reducing a time necessary for switching a device in communication of media data to another device, *that is*, a time that elapses from the time when a user intends to switch devices and inputs a device switch request to a switching source device to the time when media data are output to an output section of the selected switching destination device.

Another object of the present invention is to provide a switching source device, a switching destination device and a high speed device switching system capable of realizing device switching in which the disconnection between media data of the switching source device and media data output at the switching destination device is prevented.

Ex. 1001, at 7:38-52 (emphasis added); Ex. 1007, ¶70.

The '512 Patent makes clear that it is building on existing “conventional” systems and, specifically, on the existing “high speed middleware” of Ohta. *See* Ex.

1001, at 12:9-14 (“The configuration of the high speed device switching system of the first exemplary embodiment of the present invention is the same as that shown in FIG. 19, and mobile node (MN) 1301 and device group 1304 correspond to a switching source device and a switching destination device in accordance with the present invention, respectively.”), 12:41-43 (“Herein, high speed device switching section 101 corresponds to a conventional high speed middleware and includes modified and added functions.”), 13:13-15 (“Unless otherwise specified, the operation is the same as that of the conventional switching source device shown in FIG. 24.”).

As Dr. Negus explains, the invention of the ’512 Patent explains its claimed improvements on Ohta in relation to three exemplary embodiments. Ex. 1007, ¶¶71-87. With respect to the “First Exemplary Embodiment,” Ex. 1001, at 12:1-22:37 & Figs. 1-9, the ’512 Patent acknowledges that its device switching system is identical to Ohta’s device switching system, Ex. 1007, ¶¶76-82, with three exceptions:

- First, the ’512 Patent claims that the first exemplary embodiment, in contrast to Ohta, provides that after the signaling section of the switching source device receives a “session establishment” response from the switching destination candidate device, the “high speed device switching section” “notifies media sending section 103 to start transmission (D1) of the media data” to the switching destination candidate devices. Ex. 1007, ¶84.

Specifically, media data is sent to all the switching destination candidate devices described in the switching destination candidate device list by multicast or broadcast.” Ex. 1007, ¶84. In other words, before the user selects a specific device to switch to, the first exemplary embodiment not only establishes a session with the destination candidate devices (which the ’512 Patent acknowledges Ohta discloses), but also sends media data to those devices in anticipation of a potential switch (which the ’512 Patent claims Ohta does not disclose).

- Second, the ’512 Patent claims that, in contrast to Ohta, when the “signaling section” of the switching source device “instructs that the output section of the switching destination candidate device prohibit the output of media data transferred in the session.” Ex. 1007, ¶83. This “prohibition” instruction ensures that transferred media data is not output until the user actually selects a specific destination device.
- Third, the ’512 Patent claims that the first exemplary embodiment, in contrast to Ohta, provides that after the user selects a specific switching destination device through the “input section” of the switching source device, the high speed device switching section “sends the media data output notification” through the signaling section to the switching destination device so that “switching destination device starts outputting media data.” Ex. 1007, ¶85.

Put more simply, the “media data output notification” is what causes the destination device to play the transferred media. *Id.*

With respect to the “Second Exemplary Embodiment,” Ex. 1001, at 22:39-24:13 & Figs. 10-12, the ’512 Patent states that the “configuration of a high speed device switching system” is “the same as that shown in the first exemplary embodiment except that a switching source device is different” in that “preference information holding section 1001 is provided” which “holds previously set user's preference information.” Ex. 1007, ¶86. The idea behind the “preference information” is that it “narrows down the device responding that a service can be provided,” such as by limiting the list to devices with a certain display size. Ex. 1001, at 23:8-13.

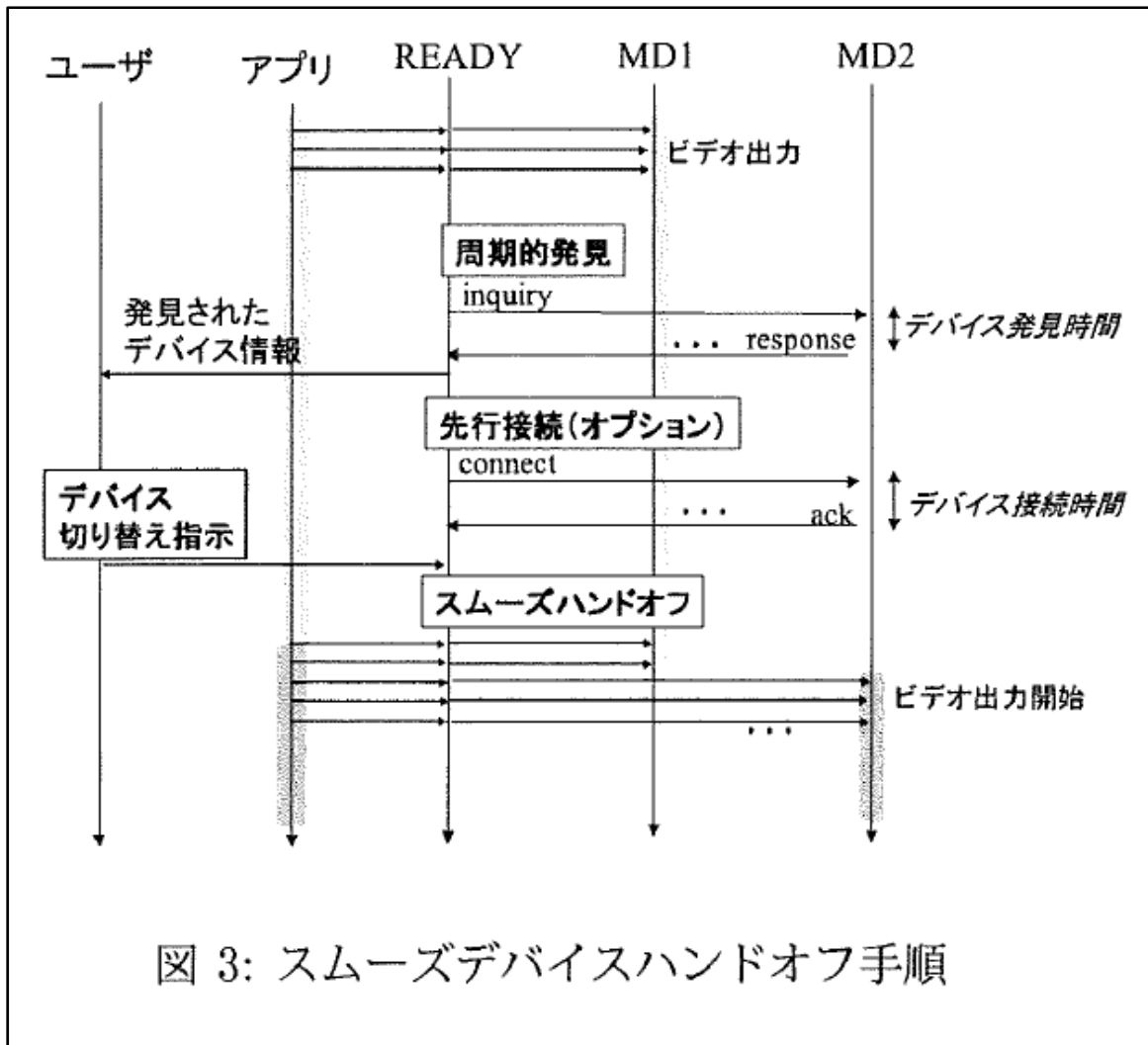
With respect to the “Third Exemplary Embodiment,” Ex. 1001, at 24:17-27:13, the ’512 Patent states that the “configuration of a high speed device switching system” is “the same as that shown in the first exemplary embodiment” except for the “difference” that “MN 1301 corresponds to a switching source device” that “completes service discovery, session establishment with a switching destination candidate device and the media processing preparation, and thereafter understands the state of the switching destination candidate device.” Ex. 1007, ¶87. As a result of “understanding the state” of the switching destination device, the switching source device can “update the switching destination candidate list.” Ex. 1001, at 24:27-30.

Of the five “differences” that the ’512 Patent claims exist over Ohta, a POSA would understand that four of them do not appear in challenged claim 1. Ex. 1007, ¶¶89-98. Specifically, the first (media sending section transmitting data before user selection of destination device) and second (instruction to prohibit media output) differences in the first exemplary embodiment and the “differences” in the second (preference information holding section) and third (understanding the state of the switching destination device) exemplary embodiments do not appear in claim 1. Ex. 1001, claim 1; Ex. 1007, ¶¶89-98.

In contrast, the third described “difference” between Ohta and the first exemplary embodiment—the “media output notification”—is arguably present in claim 1. As explained above, Figure 2 of the ’512 Patent shows that the “media data output notification” is an example of a “device switching instruction,” which is present in the “wherein” clause of claim 1. Ex. 1001, at Fig. 2; Ex. 1007, ¶98. Thus, a POSA would understand that, as described by the ’512 Patent, the only arguable distinction between Ohta and claim 1 is a “switching instruction” sent to the destination device in the form of a “media data output notification.” *Id.* However, as explained below, the English translation of Ohta demonstrates what the applicant failed to disclose, which is that Ohta in fact teaches instructing the destination device to “output” the media data, and therefore renders obvious the “device switching instruction” that the applicant claimed distinguished claim 1 from Ohta.

B. Prosecution History of the '512 Patent

The application that led to the '512 Patent and on which the '512 Patent claims priority entered the national stage in the United States on September 11, 2007. Ex. 1002, at 19. Along with the application, applicant filed an information disclosure statement that listed five Japanese language references, including as references (4) and (5), Japanese unexamined patent application 2003-304251 and the Ohta paper, respectively. Ex. 1002, at 9-10. For those two references, the applicant noted that there were English abstracts, but that the remainder of the references were “not in the English language.” Ex. 1002, at 10. Instead, the applicant represented that a “concise explanation” of the references were included in the background section of the specification under 37 C.F.R. § 1.98(a)(3). Ex. 1002, at 10. Thus, the examiner was not provided during prosecution with an English translation of Ohta, and instead only had the version of Ohta in Japanese attached to this Petition as Ex. 1003. Ex. 1007, ¶¶101-102. In that version, even Ohta’s figures were incomprehensible, such that the examiner would have been relying entirely on the applicant’s description. For example, below is Figure 3 from Ohta, as the examiner would have seen it:



Ex. 1003, Fig. 3.

The original version of claim 1 in the application was identical to claim 1 of the '512 Patent (as issued) and the examiner stated in the first (and only) office action that claim 1 is allowable. Ex. 1002, at 361. The examiner issued a notice of allowance on July 26, 2010. Ex. 1002, at 398.

IV. SUMMARY OF PRIOR ART

In related District Court litigation, Patent Owner has asserted that the '512 Patent is entitled to a priority date of at least as early as March 14, 2005. For purposes of this Petition, Petitioner relies on references that are prior art as of the alleged March 14, 2005 priority date, including:

- “Mobile Multimedia Middleware for Seamless Service”, by Ohta, K., Yoshikawa, T., Nakagawa, T., Isoda, Y., Sugimura, T. (“Ohta”), which was published by Mobile Computing and Wireless Communication No. 18-35, Intelligent Handoff System No. 6-35, IPSJ SIG Technical Report, Information Processing Society of Japan on Sep. 7, 2001;
- “AUDIO/VIDEO REMOTE CONTROL PROFILE”, by Bluetooth Audio Video Working Group (“AVRCP”), which published by Bluetooth SIG on May 22, 2003.

A. Ohta and AVRCP are Prior Art to Claim 1 of the '512 Patent

Ohta is a printed publication under pre-AIA 35 U.S.C. § 102 because it was publicly accessible at least as of September 7, 2001, such that “persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence, can locate it,” *Kyocera Wireless Corp. v. Int’l Trade Commission*, 545 F.3d 1340, 1350 (Fed. Cir. 2008), as shown by the accompanying declaration of Dr. Sylvia Hall-Ellis. Ex. 1008, ¶¶40-48.

Applicant also admitted that Ohta is prior art. In the “Background Art” section, Applicant acknowledged the publication of Ohta on September 7, 2001 in a study report of the Information Processing Society of Japan. Ex. 1001, at 4:39-44. During prosecution, Applicant agreed to mark Figures 19-26 as “Prior Art” at the examiner’s request. Ex. 1002, at 362, 384 (“Applicants have amended Figs. 19-26 with the legend ‘*Prior Art.*’”). Figures 20 and 23-25 are described in the ’512 Patent as depicting the structure and operation of Ohta. Ex. 1001, at 52-66. These admissions establish that Ohta is prior art under at least 35 U.S.C. § 102(a) and are binding for the purposes of invalidity analyses. *See PharmaStem Therapeutics, Inc. v. ViaCell, Inc.*, 491 F.3d 1342, 1362 (Fed. Cir. 2007) (“Admissions in the specification regarding the prior art are binding on the patentee for purposes of a later inquiry into obviousness.”). Ohta therefore qualifies as prior art under pre-AIA 35 U.S.C. § 102.

AVRCP is a printed publication under pre-AIA 35 U.S.C. § 102 because it was publicly accessible at least as of May 22, 2003 such that POSAs “exercising reasonable diligence, can locate it,” *Kyocera*, 545 F.3d at 1350, as shown by the accompanying declaration of Dr. Sylvia Hall-Ellis. Ex. 1008, ¶¶49-56. Specifically, AVRCP is an approved Bluetooth specification that bears a release date of May 22, 2003 and a ©2003 legend. Ex. 1008, ¶¶50-51. A textbook published in September 2003, shortly after approval, cited AVRCP, further demonstrating its public

accessibility. Ex. 1008, ¶52. Further, it was the practice of the Bluetooth Special Interest Group to publish adopted specifications, like AVRCP, on the Bluetooth website, which is confirmed by the fact that publications around the time of AVRCP directed interested members of the public to the Bluetooth website to find adopted specifications, as did a number of patents and published applications. Ex. 1007, ¶162; Ex. 1008, at ¶¶53-56. Adopted specifications and profiles “on the Bluetooth website and developments in Bluetooth technology were (and still are) followed by interested POSITAs.” Ex. 1007, ¶162. AVRCP therefore qualifies as prior art under pre-AIA 35 U.S.C. § 102.

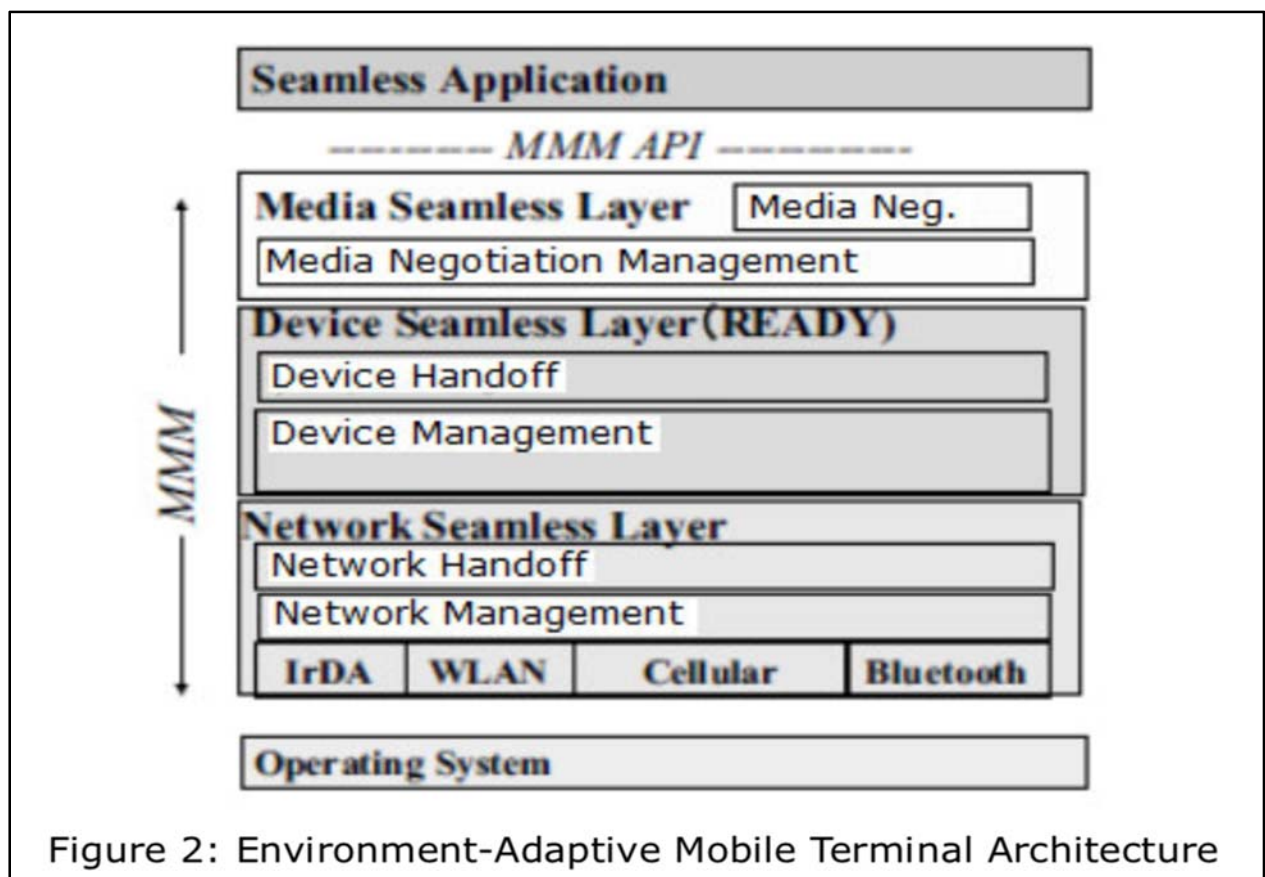
B. Ohta

Ohta is directed to the same technology as the ’512 Patent: switching a media “session” from one device to another. Specifically, Ohta recognized that, in its time, mobile devices were “evolv[ing] as multimedia terminals that handle video and music in addition to text, voice, and images.” Ex. 1004, at 1. However, the devices themselves still had screens, microphones, and other “input/output devices” that were “limited in terms of size and quality” compared to other home electronics like large-screen televisions. Ex. 1004, at 1; Ex. 1007, ¶129. Thus, Ohta sought to build on the art that proposed the use of “nearby large-screen televisions or speakers to output high-quality content obtained from a video/music distribution service via Bluetooth.” Ex. 1004, at 1; Ex. 1007, ¶130.

Ex. 1004, at 2 & Fig. 1; Ex. 1007, ¶133. In Ohta, the mobile host is a mobile terminal (e.g., “mobile phone or PDA”). Ex. 1004, at 2; Ex. 1007, ¶134. The multimedia devices are home electronics like televisions and speakers” Ex. 1004, at 2; Ex. 1007, ¶135. The “companion host” is a “host on the Internet,” such as a “content distribution server for a music distribution service.” Ex. 1004, at 3; Ex. 1007, ¶136.



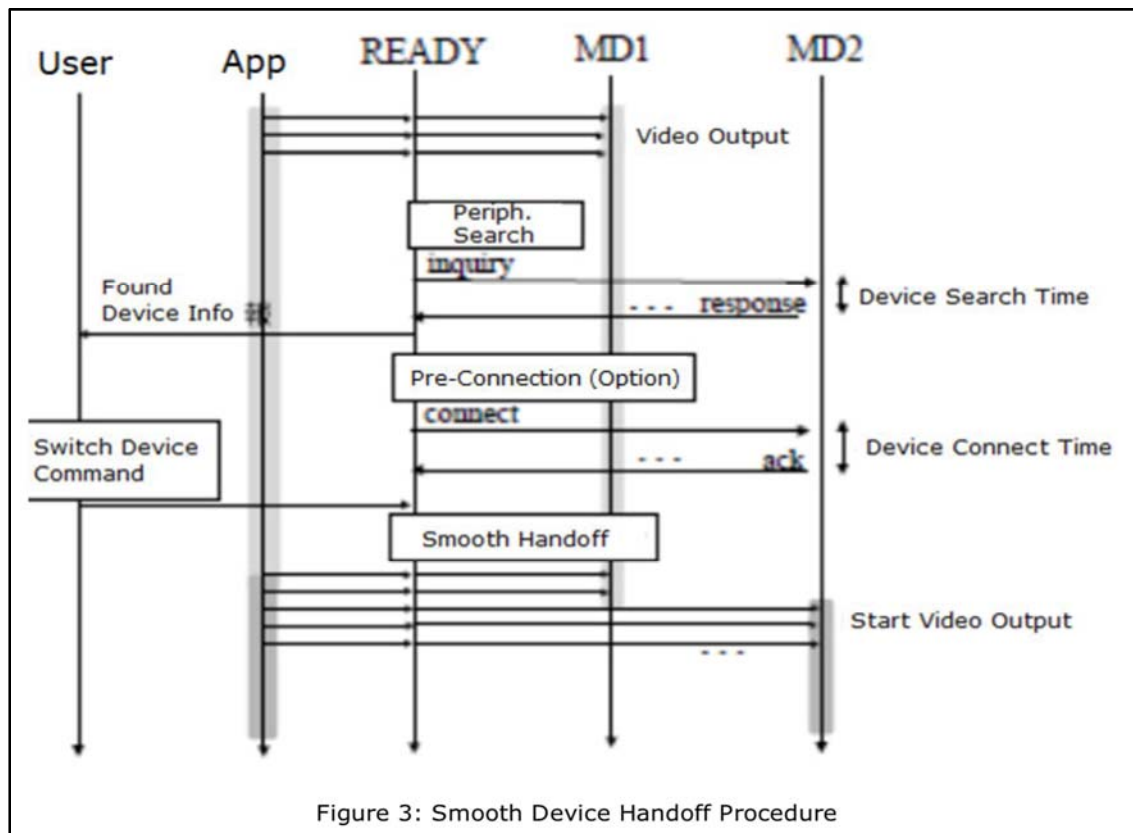
Ohta's disclosure includes a three-tiered "Mobile Multimedia Middleware" ("MMM"). As relevant to this Petition, the "device seamless" layer of the MMM, called "READY," handles the "device handoff," including searching and finding candidate devices, connecting to those devices, and switching a session to those devices. Ex. 1004, at 4-5; Ex. 1007, ¶¶141-144. Ohta diagrams the MMM, including READY, in Figure 2:



Ex. 1004, at Fig. 2.

Ohta's READY purports to solve two problems relating to device switching. First, Ohta observes that attempting to switch a session to a device that is not ready

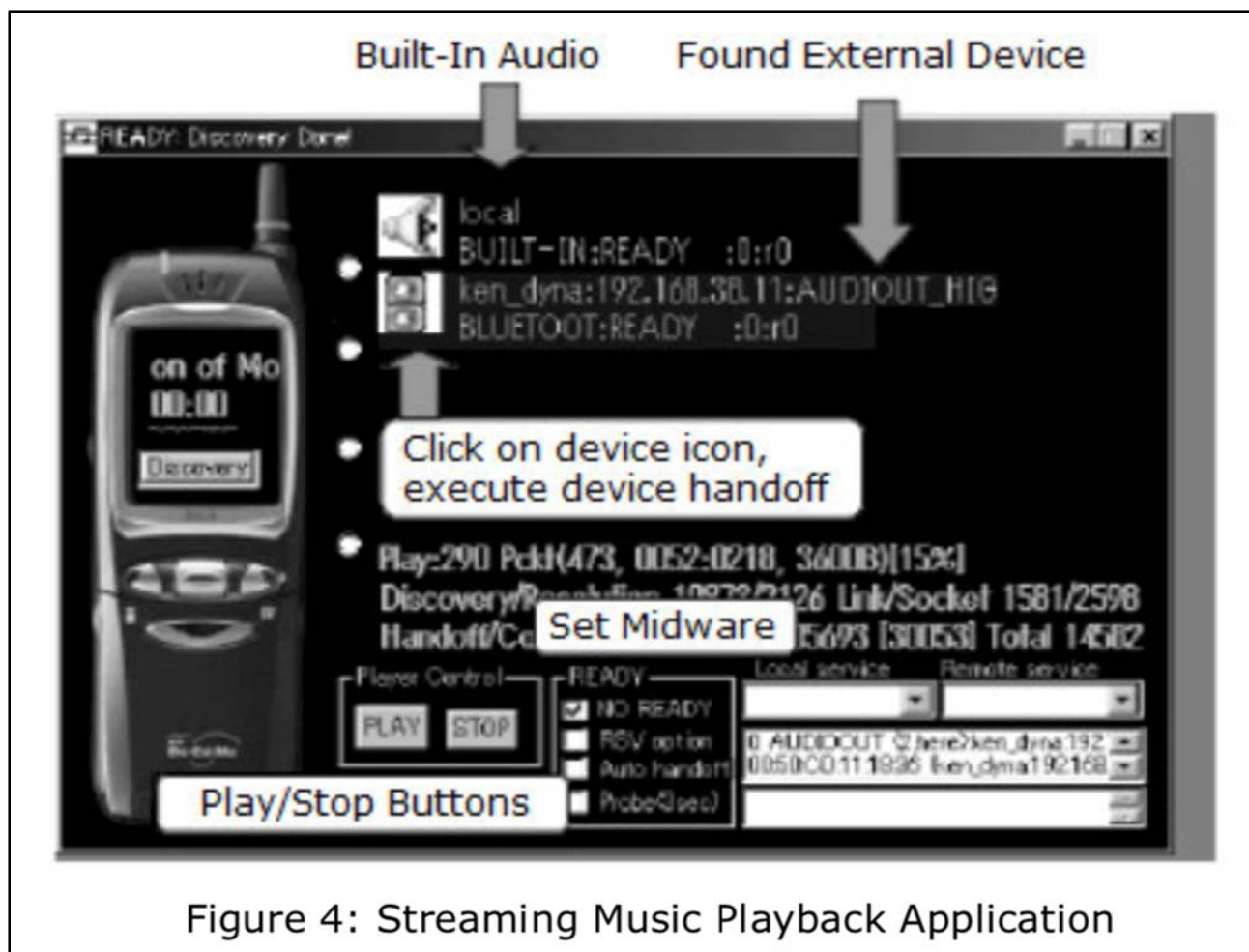
to do so results in delay because the “media [input/output] will be interrupted,” and thus “[w]hile connecting with a new device, it is necessary to continue using the original device and to switch the media transfer destination once the new device is ready.” Ex. 1004, at 6; Ex. 1007, ¶146. Second, because it takes time for a source device (the mobile host) to find and connect to an external device (the multimedia device), it can “take several seconds” to execute switching once the user decides to switch. Ex. 1004, at 6; Ex. 1007, ¶147. To solve these problems, Ohta’s READY middleware performs “periodic device searching,” “smooth handoff” to the multimedia device, and an optional “pre-connection” to the multimedia device, as shown in the English translation of Ohta’s Figure 3:



Ex. 1004, at 10046 & Fig. 3; Ex. 1007, ¶¶148-152.

Ohta's "device searching" occurs in the background. Ex. 1004, at 6; Ex. 1007, ¶149. This has the effect of "reduc[ing] the user's perceived waiting time for discovery of a new device." Ex. 1004, at 6; Ex. 1007, ¶149. The "smooth handoff" aspect occurs in response to a "device switching instruction" and involves handing off media transmission to the multimedia device. Ex. 1004, at 6-7; Ex. 1007, ¶¶151-152. The "pre-connection" option involves the mobile host establishing, in the background, a connection with the potential multimedia devices in order to "reduce the waiting time after the user gives an instruction to switch devices." Ex. 1004, at 6; Ex. 1007, ¶150.

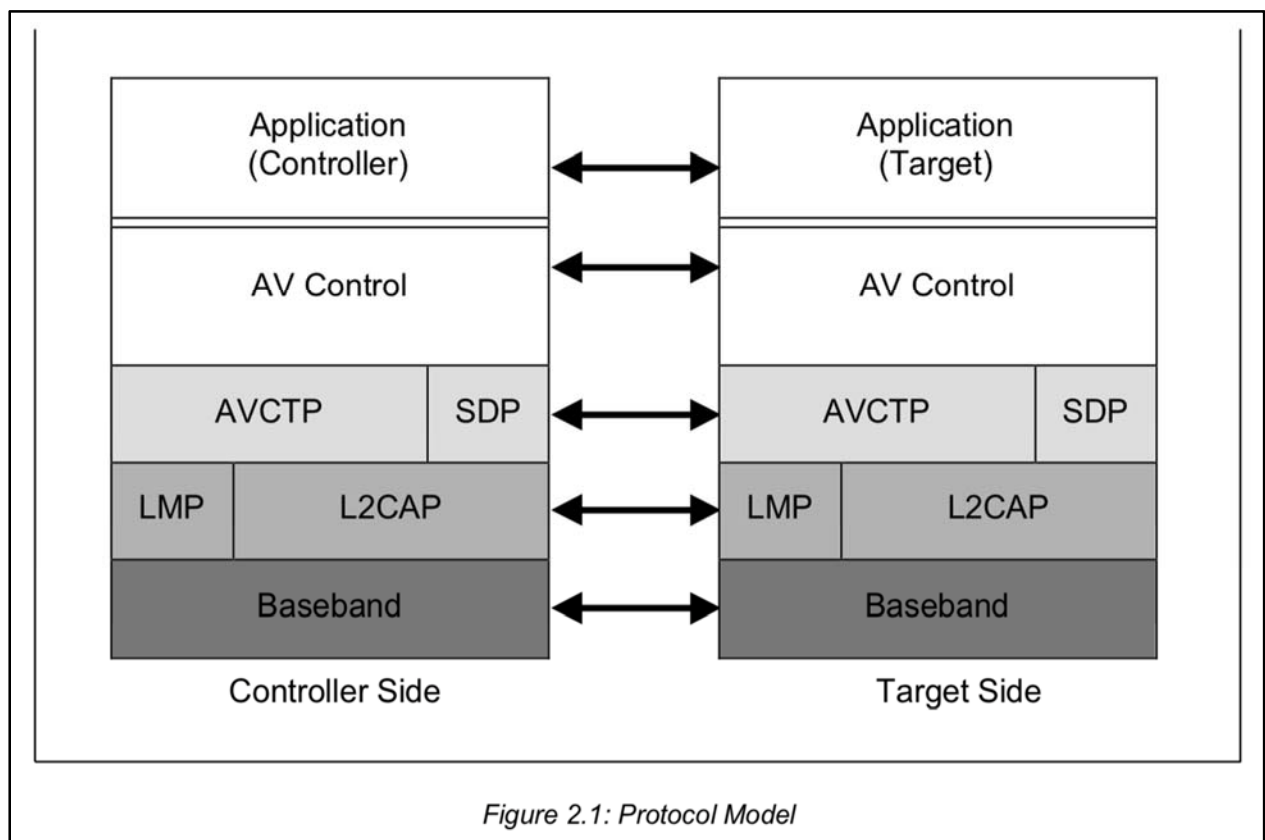
Ohta's "test environment" evaluated the performance of READY. In reference to Figure 4, Ohta diagrammed how the switching process would appear to a user:



Ex. 1004, at Figure 4; Ex. 1007, ¶156. The display shows “[i]cons indicating external devices and built-in devices found by READY” and the “device status” such that a user can “switch the music output to a destination device (issue a device handoff instruction) by clicking an icon.” Ex. 1004, at 8-9; Ex. 1007, ¶157. Ohta’s tests demonstrated that implementation of the READY middleware improved device switching times. Ex. 1004, at 11; Ex. 1007, ¶159-161.

C. AVRCP

The Bluetooth Audio/Video Remote Control Profile “defines the features and procedures required in order to ensure interoperability between Bluetooth devices with audio/video control functions in the Audio/Video distribution scenarios.” Ex. 1005, at 10; Ex. 1007, ¶163. Put more simply, while AVRCP does not itself handle audio/video streaming, it provides for “controller” and “target” devices, whereby the “controller” issues commands that are transmitted by Bluetooth connection to the “target” device, and those commands are carried out on the target device. Ex. 1005, at 10, 15; Ex. 1007, ¶164. AVRCP’s Figure 2.1 models the protocol, and explains that “AV Control” is the “entity responsible for A/V device control signaling:



Ex. 1005, at 15 & Fig. 2.1; Ex. 1007, ¶166-167.

AVRCP recognizes that the “controller” can be a device such as a “personal computer, a PDA, a mobile phone.” Ex. 1005, at 15; Ex. 1007, ¶167. The controller sends a “command frame” to the target device and the target device “generates a response frame” and behaves accordingly. Ex. 1005, at 15; Ex. 1007, ¶167. Among these “AV/C commands” are “PASS THROUGH commands,” which are the “main feature” of the profile. Ex. 1005, at 25; Ex. 1007, ¶¶176-179. Using the PASS THROUGH command, the controller “conveys a user operation” to the target, such as a “play” command, among others, that is executed on the target device. Ex. 1001, at 31 & Fig. 2.1; Ex. 1007, ¶180-183.

V. GROUNDS FOR INVALIDITY CHALLENGE

Petitioner presents the following grounds for trial:

- Ground 1: Claim 1 of the ’512 Patent is obvious under 35 U.S.C. § 103 based on Ohta in view of the skill and knowledge of a POSA;
- Ground 2: Claim 1 of the ’512 Patent is obvious under 35 U.S.C. § 103 based on Ohta in view of AVRCP and the skill and knowledge of a POSA.

The grounds are supported by the Declaration of Dr. Kevin Negus, and the other exhibits filed herewith. Dr. Negus’s Declaration explains the relevant level of ordinary skill in the art and how a POSA would have understood the prior art, as

well as the conclusions that such a person would have made regarding the obviousness of the challenged claim.

VI. CLAIM CONSTRUCTION

A claim subject to *inter partes* review “shall be construed using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. § 282(b), including construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.” 37 C.F.R. § 42.100(b).

Petitioner proposes that each claim term be given its plain and ordinary meaning in this proceeding, and that no specific construction of any claim term is required because the prior art relied on in this Petition meets each of the claim terms under any reasonable construction. Ex. 1007, ¶118.

VII. LEVEL OF ORDINARY SKILL IN THE ART

As of March 14, 2005, a person of ordinary skill in the art (“POSA”) would have been a person familiar with telecommunication networking and media transmission technology and applicable standards-based protocols and architectures for common telecommunications networks and their components and subsystems. Ex. 1007, ¶24. By way of example, a POSA may have had a Bachelor of Science in Computer Science, Electrical Engineering, or an equivalent field, as well as two

years of experience in developing network equipment; or a Master's degree in Computer Science, Electrical Engineering, or an equivalent field with one year of such work experience. Ex. 1007, ¶¶24-25.

VIII. DETAILED EXPLANATION UNDER 37 C.F.R. § 42.104(B)

Ohta at least renders obvious challenged claim 1 of the '512 Patent. Petitioner's certified English translation of Ohta, which was never presented to the examiner, demonstrates that applicant's description of Ohta understated its similarity to the alleged "invention" of the '512 Patent. Ohta's disclosures are virtually incomprehensible to someone who does not read Japanese, and the examiner had only the applicant's description of how its invention differed from Ohta. And the only arguably relevant element in claim 1 that applicant claimed was missing from Ohta—that the "signaling section sends a switching instruction to the selected device"—actually is at least rendered obvious by Ohta, if not explicitly disclosed.

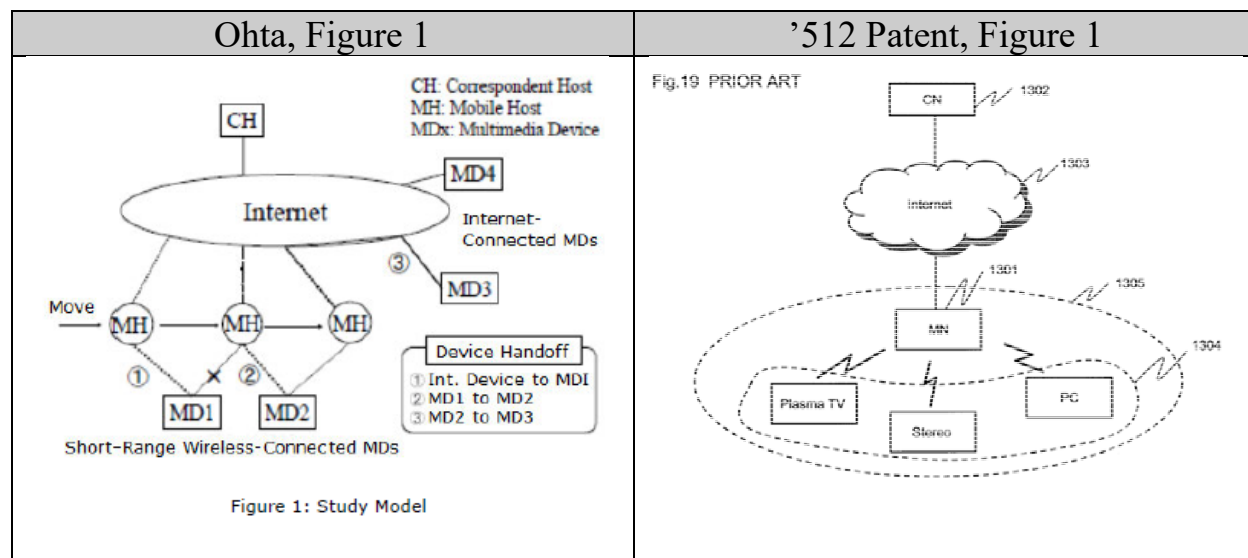
Alternatively, to the extent that the Board finds that Ohta does not disclose or render obvious the "sends a switching instruction" limitation, that limitation is disclosed in AVRCP—the Bluetooth Audio/Video Remote Control Profile, which a POSA would have been motivated to combine with Ohta. Specifically, AVRCP is in the same field as Ohta (which references and relies upon Bluetooth), and teaches methods by which a user device "sends commands" to a target device to output

media data (i.e., a switching instruction), such as a “play” command. Thus, AVRCP fills the only hole in Ohta’s disclosure identified by the applicant during prosecution.

A. Ground 1: Claim 1 Is Obvious over Ohta in View of the Knowledge of a POSA

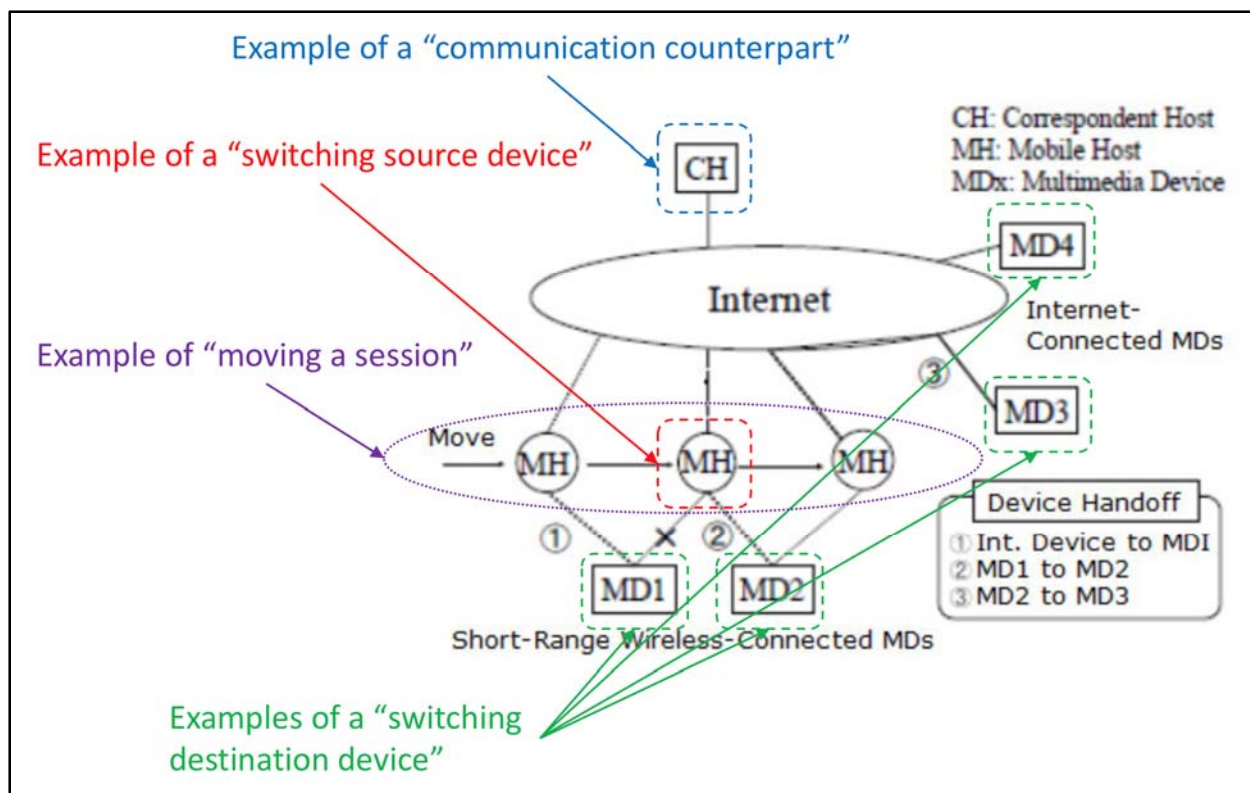
1. [1 Pre] “A switching source device for moving a session established with a communication counterpart to a switching destination device, comprising: ...”

To the extent this preamble is limiting, Ohta discloses this limitation. Ohta, for example, includes Figure 1, which when considered with its English textual descriptions, is strikingly similar to Figure 19 of the ’512 Patent showing “a configuration of a conventional device switching system,” Ex. 1001, at 2:20-21:



Ohta’s “Mobile Host” is an example of a “switching source device,” the “Correspondent Host” is an example of a “communication counterpart,” and the various “Multimedia Devices” are examples of “switching destination devices.” Ex. 1004, at Figure 1. Ohta’s mobile host, for example, can be a “mobile phone or PDA

that is equipped with several wireless interfaces such as Bluetooth, IrDA, wireless LAN, and cellular” and also “supports service finding and control protocols.” Ex. 1004, at 2; Ex. 1007, ¶233. Ohta’s multimedia device can correspond to “information-related home electronics such as a camera or speaker that is equipped with media input/output and a network interface, and that can be connected to the mobile host (MH) indirectly via the Internet or directly via Bluetooth.” Ex. 1004, at 2; Ex. 1007, ¶234. And Ohta’s companion host is a “host on the Internet that is used to realize services in conjunction with a mobile host.” Ex. 1004, at 3; Ex. 1007, ¶235. Ohta explains that Figure 1 “shows three examples of device switching,” including an example of a mobile host switching music output via Bluetooth to connected car speakers (the multimedia device). Ex. 1004, at 3; Ex. 1007, ¶¶237-238. Thus, Ohta discloses a switching source device (a mobile host) for moving a session established with a communication counterpart (a companion host) to a switching destination device (a multimedia device), as shown in the below version of Ohta’s Figure 1 annotated by Dr. Negus:



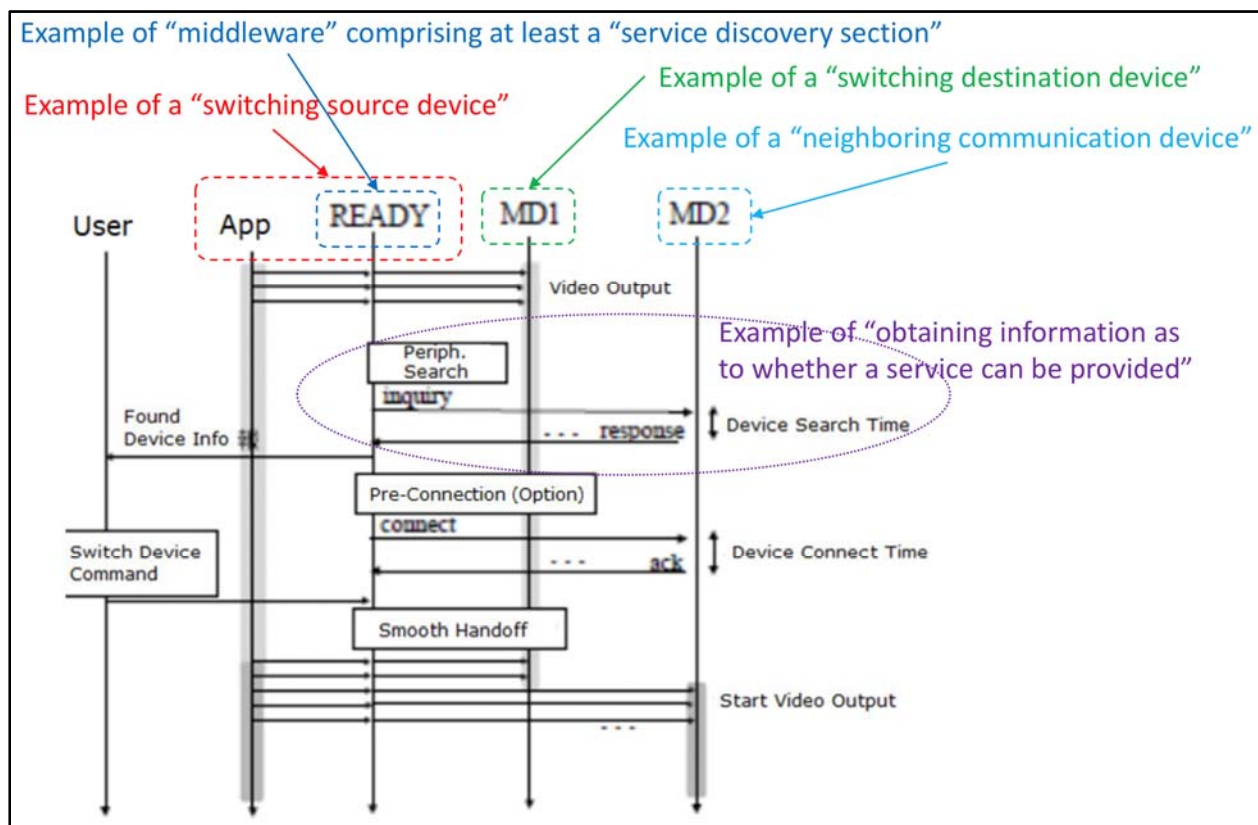
Ex. 1007, ¶¶232, 239-241.

Ohta's components map directly to the similar terms "mobile node," "counterpart node," and "switching destination device" in Figure 19 of the '512 Patent, which the '512 Patent admits are within the scope of the "present invention." Ex. 1001, at 12:9-14 ("The configuration of the high speed device switching system of the first exemplary embodiment of the present invention is the same as that shown in FIG. 19, and mobile node (MN) 1301 and device group 1304 correspond to a switching source device and a switching destination device in accordance with the present invention, respectively."). Thus, the '512 Patents admits that these

components were known in the art, specifically in Ohta. *See* Ex. 1001, at 7:10-16; Ex. 1007, ¶242.

2. [1A] “a service discovery section for obtaining information as to whether a service can be provided from a neighboring communication device;”

Ohta’s “Device Seamless Layer,” which it calls “READY,” is an example of a service discovery section. Ex. 1004, at 4-5 & Figure 2 (“READY corresponds to the device seamless layer”); Ex. 1007, ¶249. As Ohta explains, “READY manages connections to both current and new devices” and “provides a mechanism for smooth device switching.” Ex. 1004, at 4. Specifically, “READY alternate service finding and reserving method” taught by Ohta “performs a periodic device search” of neighboring communication devices to obtain information as to whether a service can be provided. Ex. 1004, at 6; Ex. 1007, ¶¶249-253. It does that by making an “inquiry” and receiving a “response” from the device as to whether a service can be provided. Ex. 1004, at Figure 3 & p.6; Ex. 1007, ¶253. Ohta illustrates the operation of the service discovery section in Figure 3. Ex. 1004, Figure 3; Ex. 1007, ¶253. In this diagram “READY” corresponds to the “service discovery section,” “MD2” corresponds to a “neighboring communication device,” and the “inquiry” and “response” messages correspond to “obtaining information as to whether a service can be provided,” as shown in the versions of Ohta’s Figures 2 and 3 below annotated by Dr. Negus:



Ex. 1007, ¶253. As a specific example of the “service discovery section” “obtaining information as to whether a service can be provided from a neighboring communication device,” Ohta discloses READY performing a “Bluetooth device search and device name resolution” in which the mobile host connects to “MD Bluetooth device” and “the MD Bluetooth device name includes information on the socket connection such as an IP address and port number, and device quality information.” Ex. 1004, at 10; Ex. 1007, ¶¶254-255.

Furthermore, the ’512 Patent admits that Ohta discloses this limitation. Specifically, it states that Ohta’s “high speed middleware” “periodically sends

service discovery request (M1) to devices 1 to N in PAN 1305 at one time through service discovery section 1411” and “receives service discovery response (M2) from the switching destination device and notifies the high speed middleware of it.” Ex. 1001, at 5:11-19; Ex. 1007, ¶¶257-259.

Accordingly, Ohta discloses or renders obvious a service discovery section for obtaining information as to whether a service can be provided from a neighboring communication device.

3. 1[B] “a high speed device switching section for instructing the service discovery section at an arbitrary timing to inquire whether a service can be provided,”

Ohta’s “READY” middleware (sometimes called “mobile multimedia middleware” or “MMM”), which the ’512 Patent calls “high speed middleware,” is an example of a high speed device switching section. Ex. 1004, at 5; Ex. 1001, at 12:41-43 (“Herein, high speed device switching section 101 corresponds to a conventional high speed middleware and includes modified and added functions.”). As explained above in connection with Element 1A, READY is an example of a service discovery section. *See supra*, Element 1A; Ex. 1004, at 6.

Ohta discloses that the service discovery section is instructed to “inquire whether a service can be provided” at an “arbitrary timing.” As explained above, Ohta’s device search process “activates the service search protocol and notifies the user of information” about devices that can provide service, which is an example of

inquiring “whether a service can be provided.” *See supra*, Element 1A; Ex. 1004, at 6. Ohta further discloses that the instruction to perform a device search occurs at an arbitrary timing without the user requesting the search. Specifically, Ohta’s service discovery is “performed ***automatically in the background*** to reduce the user’s perceived waiting time for discovery of a new device.” Ex. 1004, at 6 (emphasis added); Ex. 1007, ¶¶283-286. Ohta does not prescribe any set timing for the device search, and in fact discloses multiple examples of differing timings, further making clear that the timing can be arbitrary. In Ohta’s first example, device searching occurs “periodically (for example, every 30 seconds).” Ex. 1004, at 6; Ex. 1007, ¶283. In another example, READY “execute[s]” the “device search process” in the “background five seconds after playback starts.” Ex. 1004, at 11; Ex. 1007, ¶283.

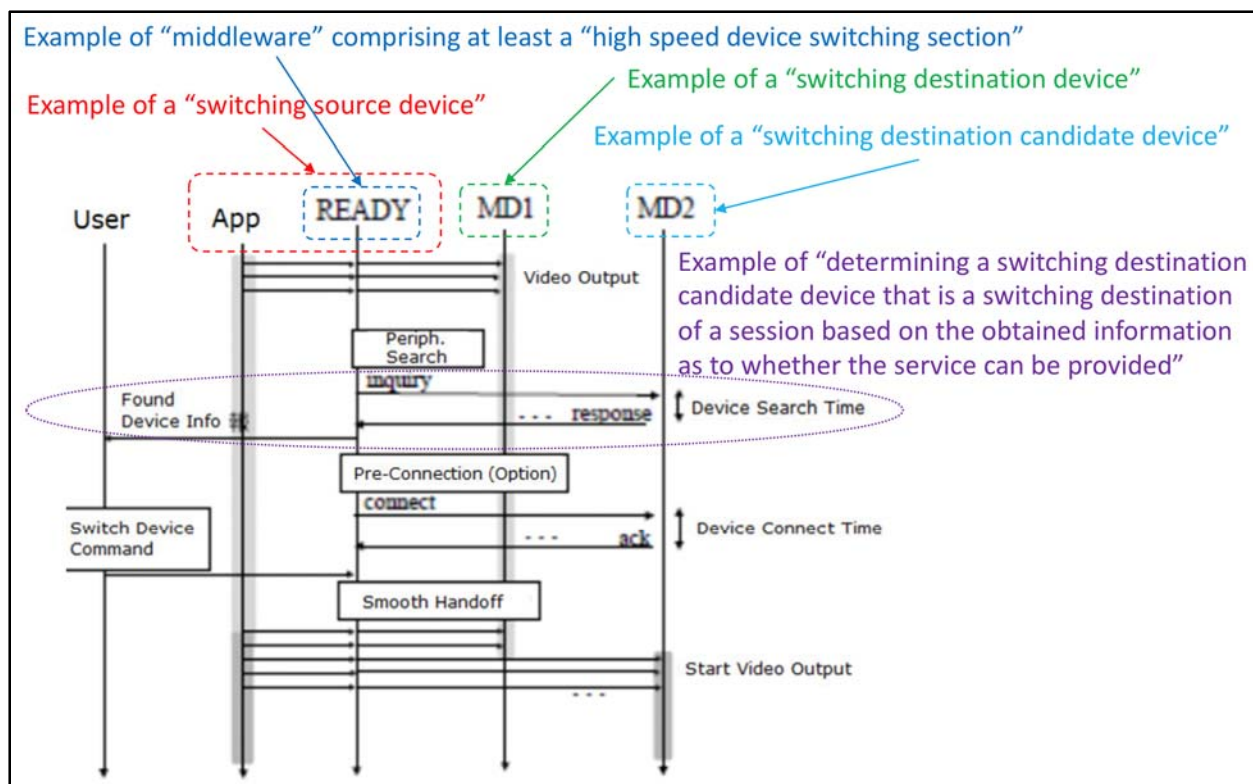
The ’512 Patent also admits that Ohta discloses this limitation. Specifically, the ’512 Patent points to “M1” in Figure 2 as an example of sending service discovery requests at an “arbitrary timing.” Ex. 1001, at 13:19-25. Figure 2 annotates step “M1” as when service discovery “operate[s] periodically,” which is identical to the description of how Ohta’s service discovery section works in Figure 23. *Compare* Ex. 1001, Fig. 2 with Ex. 1001, Fig. 23. Additionally, the ’512 Patent admits that Ohta’s “high speed middleware periodically sends service discovery request (M1) to devices 1 to N in PAN 1305 at one time through service discovery section 1411 (step S1802).” Ex. 1001, at 5:11-14; Ex. 1007, ¶¶289-291. As Dr.

Negus explains, a POSA would understand that the '512 Patent thereby admits that this “periodic” searching is an example of “arbitrary” timing. Ex. 1007, ¶¶ 280, 290.

Accordingly, Ohta discloses or renders obvious a high speed device switching section (MMM/READY) that instructs the service discovery section (READY) at an arbitrary timing to inquire whether a service can be provided.

4. **[1C] “a high speed device switching section for ...
determining a switching destination candidate device that is
a switching destination of a session based on the obtained
information as to whether the service can be provided,”**

As explained above in connection with Element 1B, Ohta's READY middleware is an example of the “high speed device switching section” of the '512 Patent. *See supra* Element 1B. Figure 3 of Ohta demonstrates how READY “determine[s] a switching destination candidate device that is a switching destination of a session based on the obtained information as to whether the service can be provided,” as annotated by Dr. Negus:



Ex. 1004, Figure 3; Ex. 1007, ¶296. Specifically, Ohta discloses that READY sends “inquiry” messages to potential switching destination devices and receives a “response” that includes information about whether a service can be provided. *See supra* Element 1A; Ex. 1007, ¶297. Ohta discloses starting the “connection process” with MD2 (the switching destination candidate device providing the “response”) “immediately after MD2 has been found.” Ex. 1004, at 6; Ex. 1007, ¶297. A POSA would understand that this means that the high speed device switching section (MMM/READY) has determined based on the “response” that MD2 is an “external device” to which it is possible to “switch[] the media input/output destination of an application.” Ex. 1007, ¶¶297-298.

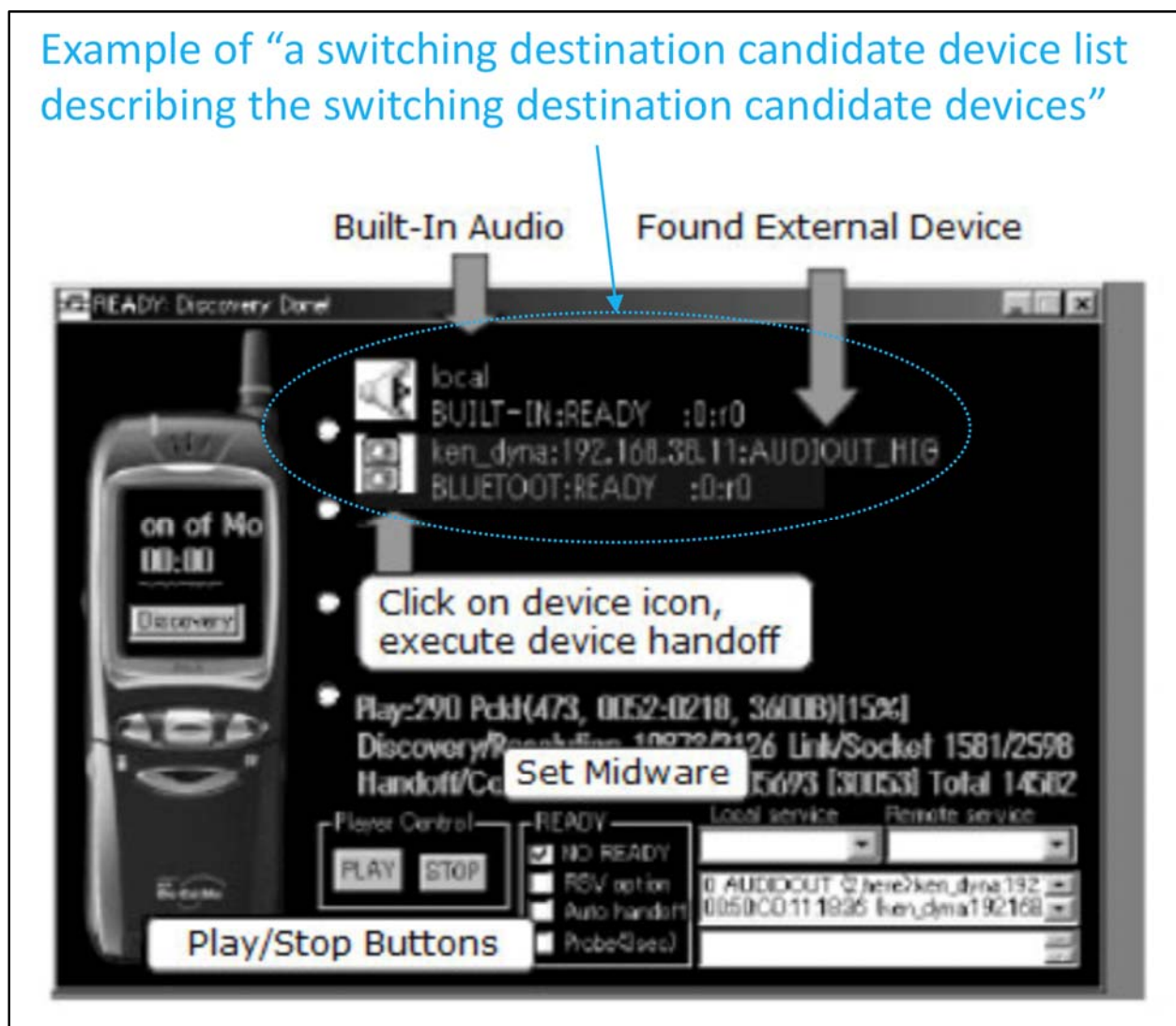
Furthermore, the '512 Patent admits that Ohta discloses this limitation in describing Ohta: Ohta's "service discovery section 1411 receives service discovery response (M2) from the switching destination device and notifies the high speed middleware of it (step S1802)" such that "based on the notification, the high speed middleware generates a switching destination candidate device list of devices capable of providing a service (step S1803)." Ex. 1001, at 5:17-22; Ex. 1007, ¶¶300-301.

Accordingly, Ohta discloses or renders obvious a high speed device switching section (MMM/READY) that determines a switching destination candidate device that is a switching destination of a session based on the obtained information as to whether the service can be provided.

5. [1D] "a high speed device switching section for ... generating a switching destination candidate device list describing the switching destination candidate devices,"

Ohta describes an implementation of its "MMM prototype" designed the "evaluate the effectiveness of READY and the MMM." Ex. 1004, at 8; Ex. 1007, ¶308. Ohta's Figure 4 "shows the implemented streaming music playback application." Ex. 1004, Figure 4; Ex. 1007, ¶308. Ohta teaches that the display includes "[i]cons indicating external devices and built-in devices found by READY and their device status" are "displayed on the right side of the screen." Ex. 1004, at 8; Ex. 1007, ¶308. Ohta's list of such devices is an example of a "switching

destination candidate device list describing the switching destination candidate devices,” which correspond to the “device name” and “device status” combinations, as indicated in this annotated version of Figure 4 prepared by Dr. Negus:



Ex. 1007, ¶308; *see also* Ex. 1007, ¶¶309-310.

Furthermore, the '512 Patent admits that Ohta discloses this limitation by describing with respect to the “switching source device” of Ohta that “the high speed middleware generates a switching destination candidate device list of devices

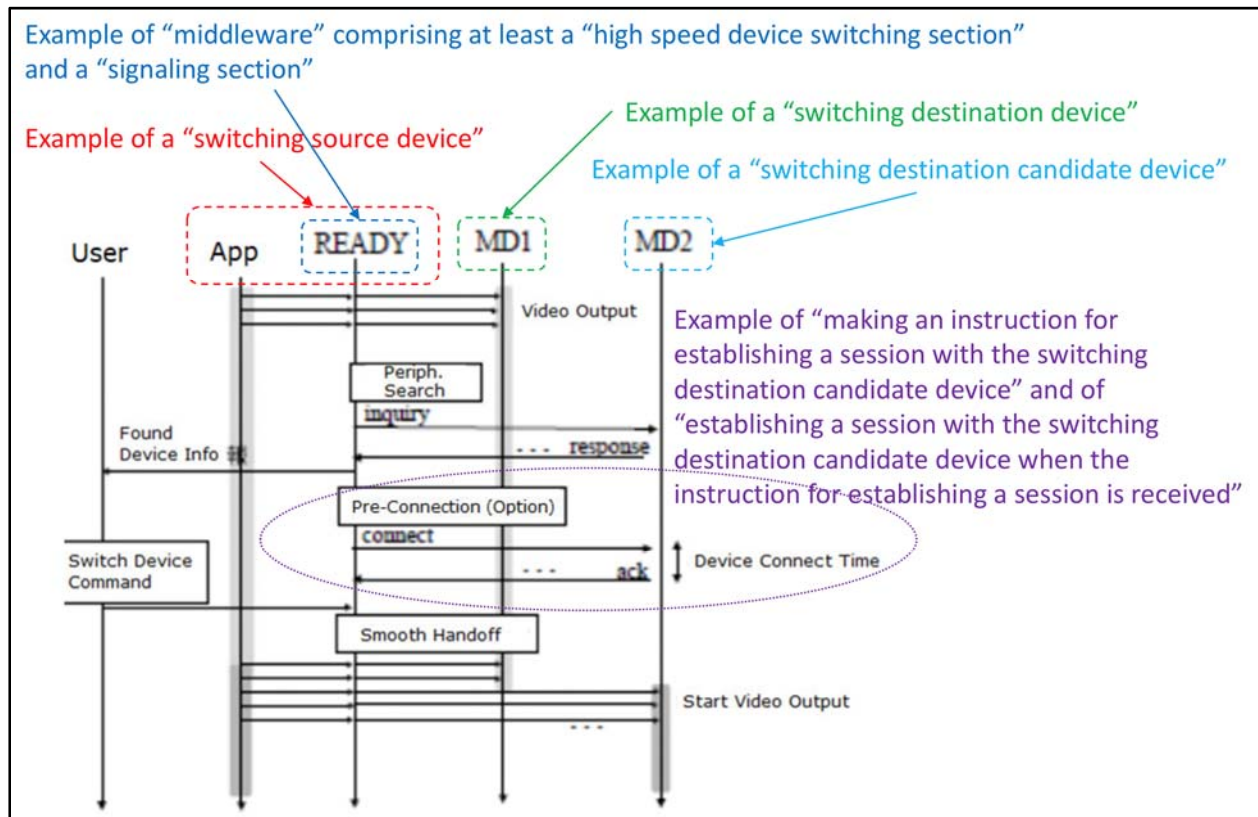
capable of providing a service (step S1803).” Ex. 1001, at 5:20-22; Ex. 1007, ¶¶313-314. As explained above, the “high speed device switching section” of claim 1 corresponds to Ohta’s READY “high speed middleware.” *See supra* element 1B.

Accordingly, Ohta discloses or renders obvious a high speed device switching section (MMM/READY) for generating a switching destination candidate device list describing the switching destination candidate devices.

6. [1E] “a high speed device switching section for ... making an instruction for establishing a session with the switching destination candidate device;”

As explained above, the “high speed device switching section” of claim 1 corresponds to Ohta’s READY “high speed middleware.” *See supra* element 1B. Ohta discloses that READY performs a “pre-connection” with the switching destination candidate device, which is represented in Ohta’s Figure 3 as “MD2” (Multimedia Device 2). Ex. 1004, Figure 3. The “pre-connection” process in Ohta refers to when “the connection process with MD2 is started immediately after MD2 has been found,” which “reduce[s] the waiting time after the user gives an instruction to switch devices.” Ex. 1004, at 6; Ex. 1007, ¶319. Thus, Ohta teaches that a “device connection is established immediately after the device is found” by “Bluetooth link,” and a POSA would understand that this pre-connection process is done based on an “instruction for establishing a session” with the MD2 device (i.e., the “switching destination candidate device”). Ex. 1004, 10-11; Ex. 1007, ¶¶319-320. As shown in

Figure 3, the “pre-connection” process establishes a “session” with the MD2 (the “switching destination device” through the exchange of “connect” (sent from READY/signaling section) and “ack” (sent to READY/signaling section) messages, as shown in this version of Figure 3 annotated by Dr. Negus:



Ex. 1007, ¶319.

Furthermore, the '512 Patent admits that Ohta discloses this limitation. Specifically, the '512 Patent describes Ohta as teaching that “high speed middleware sends session establishment—media processing preparation request (M3) through signaling section 1410 to all the devices that are switching destination candidates described in the switching destination candidate device list in order to establish a

session and carry out media transmission (step S1804).” Ex. 1001, at 5:25-30; Ex. 1007, ¶¶323-325.

Accordingly, Ohta discloses or renders obvious a high speed device switching section (MMM/READY) for making an instruction for establishing a session with the switching destination candidate device.

7. [1F] “a signaling section for establishing a session with the switching destination candidate device when the instruction for establishing a session is received from the high speed device switching section;”

Ohta’s “Device Seamless Layer,” which it calls “READY,” is an example of “a signaling section for establishing a session ...”. Ex. 1004, at 4-5 & Figure 2. As explained in detail above in relation to Element 1E, Ohta discloses that READY (which is an example of a “signaling section”) establishes a session with the switching destination candidate device (MD2 in Ohta) through an exchange of “connect” and “ack” messages. *See supra* Element 1E. The “session” is a “device connection” in Ohta that “is established immediately after the device is found.” Ex. 1004, at 11; Ex. 1007, ¶¶331-332 (noting also that the session is established “as a ‘Bluetooth link’”).

Furthermore, the ’512 Patent admits that Ohta discloses this limitation. Specifically, the ’512 Patent describes Ohta as teaching that the switching destination candidate device of Ohta “receives session establishment—media processing preparation request (M3) from MN 1301 (step S1902)” and subsequently

“sends session establishment—media processing preparation response (M4) to the switching source device.” Ex. 1001, at 6:11-20; Ex. 1007, ¶¶335-336.

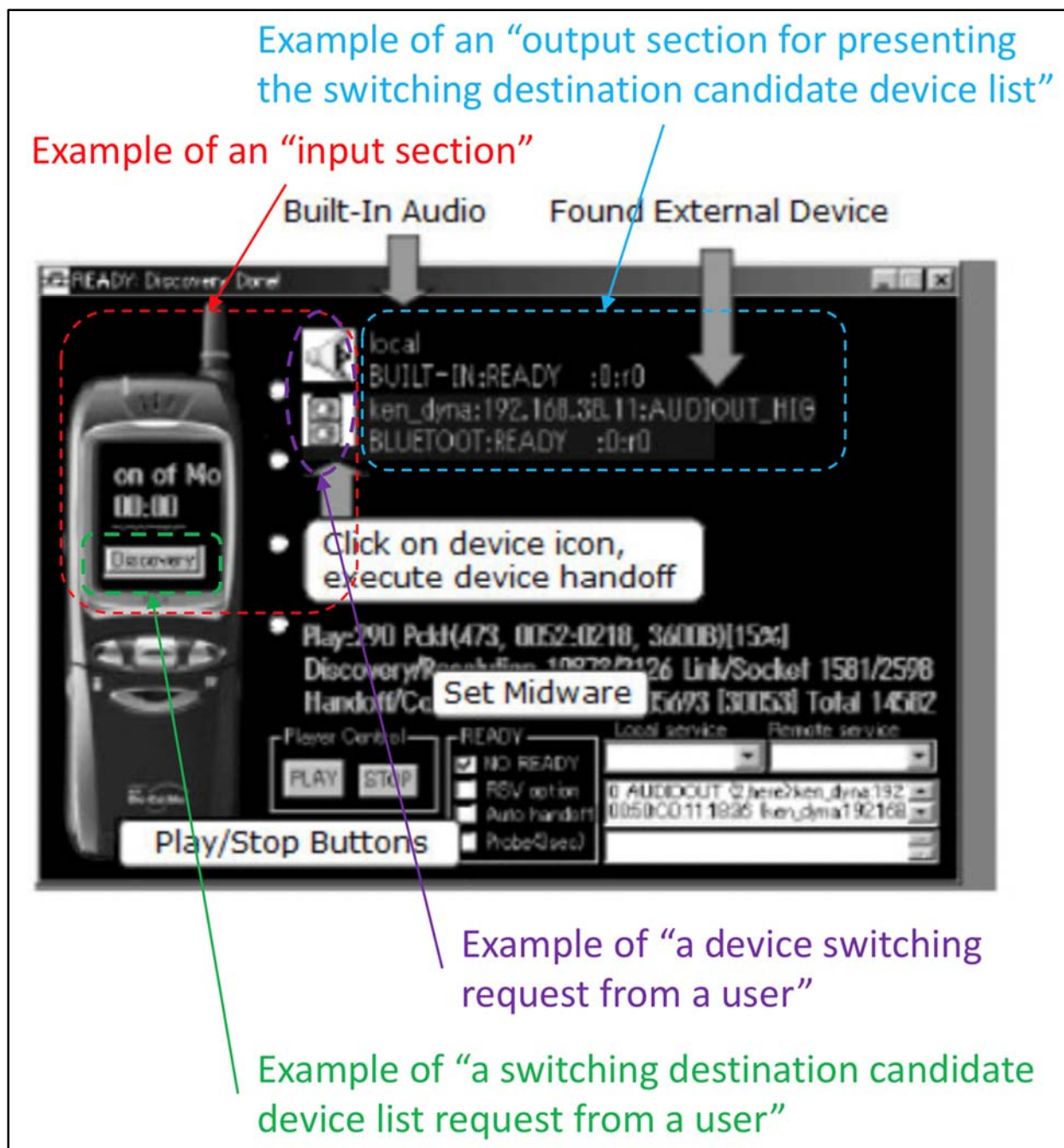
Accordingly, Ohta discloses or renders obvious a signaling section (READY) for establishing a session with the switching destination candidate device when the instruction for establishing a session is received from the high-speed device switching section.

8. [1G] “an input section for receiving a switching destination candidate device list request from a user;”

The '512 Patent describes an “input section” as an “interface (I/F) with respect to a user” that is for “receiving input from a user.” Ex. 1001, at 2:43-44, 12:20-21; Ex. 1007, ¶346. Among the “inputs” described by the '512 Patent are a “list request” that is “input into the switching source device from a user.” Ex. 1001, at 16:16-17; Ex. 1007, ¶347. Ohta discloses a “user interface used to control device selection and switching.” Ex. 1004, at 6; Ex. 1007, ¶351. Ohta further includes Figure 4, which “shows the implemented streaming music playback application” described in Ohta, which includes a user interface. Ex. 1004, Figure 4; Ex. 1007, ¶350 (with annotated Figure 4). The user interface in Ohta is an example of an “input section.” Ohta teaches that the user interface can include “[i]cons indicating external devices and built-in devices found by READY and their device status” that is “displayed on the right side of the screen.” Ex. 1004, at 8 & Fig. 4; *see also supra* Element 1D (describing Ohta’s disclosure of a switching candidate device list). And the user

interface permits the user to “switch the music output destination device (issue a device handoff instruction) by clicking on an icon.” Ex. 1004, at 9; Ex. 1007, ¶¶352, 394.

Among the clickable “icons” shown in Ohta’s Figure 4 is a “Discovery” icon. A POSA would understand that the “Discovery” icon corresponds to a command to display a list of devices that have been “discovered” during the READY “service search protocol.” Ex. 1007, ¶¶350-352. Ohta discloses that, using READY, a “device search is performed automatically in the background to *reduce the user’s perceived waiting time for discovery of a new device*”—that is, to ensure that the switching device candidate list is displayed as soon as the user makes the request. Ex. 1004, at 6; Ex. 1007, ¶149. Thus, a POSA would understand that pressing the “Discovery” icon on Ohta’s user interface is a user making a “switching destination candidate device list request,” which will prompt a list of switching destination candidate devices, as shown in the annotated Figure 4 below:



Ex. 1007, ¶350; *see also id.* ¶352.

Furthermore, the '512 Patent admits that Ohta discloses this limitation. Specifically, the '512 Patent states that Ohta teaches in relation to the “switching source device” of Ohta that when “an instruction of switching destination candidate

device display request (U1) is sent from a user (“YES” in step S1807), the high speed middleware presents the switching destination candidate device list held therein to a user (U2) through output section 1403 (step S1808).” Ex. 1001, at 5:46-50. And Figure 23 of the ’512 Patent, which depicts a “message sequence” for the device disclosed in Ohta, Ex. 1001, at 4:61-63, labels step “U1” as a “List request” and a “Switching destination candidate device display request,” demonstrating that the ’512 Patent applicant understood that Ohta discloses such a request by a user using the input section. *See also* Ex. 1007, ¶¶355-357.

Even if Ohta did not explicitly disclose this limitation, and even if the ’512 Patent did not admit that Ohta discloses this limitation, it would have been obvious based on the knowledge of a POSA to add such functionality to Ohta’s user interface. As the declaration of Dr. Negus explains, there “were only a few practical options” available for causing a switching destination candidate device list to display, including having the user click on an icon or button to do so. Ex. 1007, ¶358. Accordingly, a POSA would have been motivated to look to well-known interfaces for devices and operating systems such as Windows, MacOS, Symbian, or Blackberry, all of which would have taught clickable icons that could have been predictably combined with Ohta’s “Mobile Host” device. Ex. 1007, ¶359. Indeed, Ohta itself discussed that its “Mobile Host” could be a “mobile phone or PDA,” which would have further motivated a POSA to look to clickable icons that existed

in such devices. *Id.* And Ohta specifically discussed its system as providing a “Bluetooth link” between the mobile host and various multimedia devices. Ex. 1004, at 10. At the time of Ohta, it was (and remains) true that the most common way to select a candidate device for Bluetooth link is by a user request for a list followed by a user selecting a specific device to connect with. *Id.* ¶¶360-361. Accordingly, it would have been obvious for a POSA to incorporate this functionality into Ohta’s mobile host.

Accordingly, Ohta discloses or renders obvious an input section for receiving a switching destination candidate device list request from a user.”

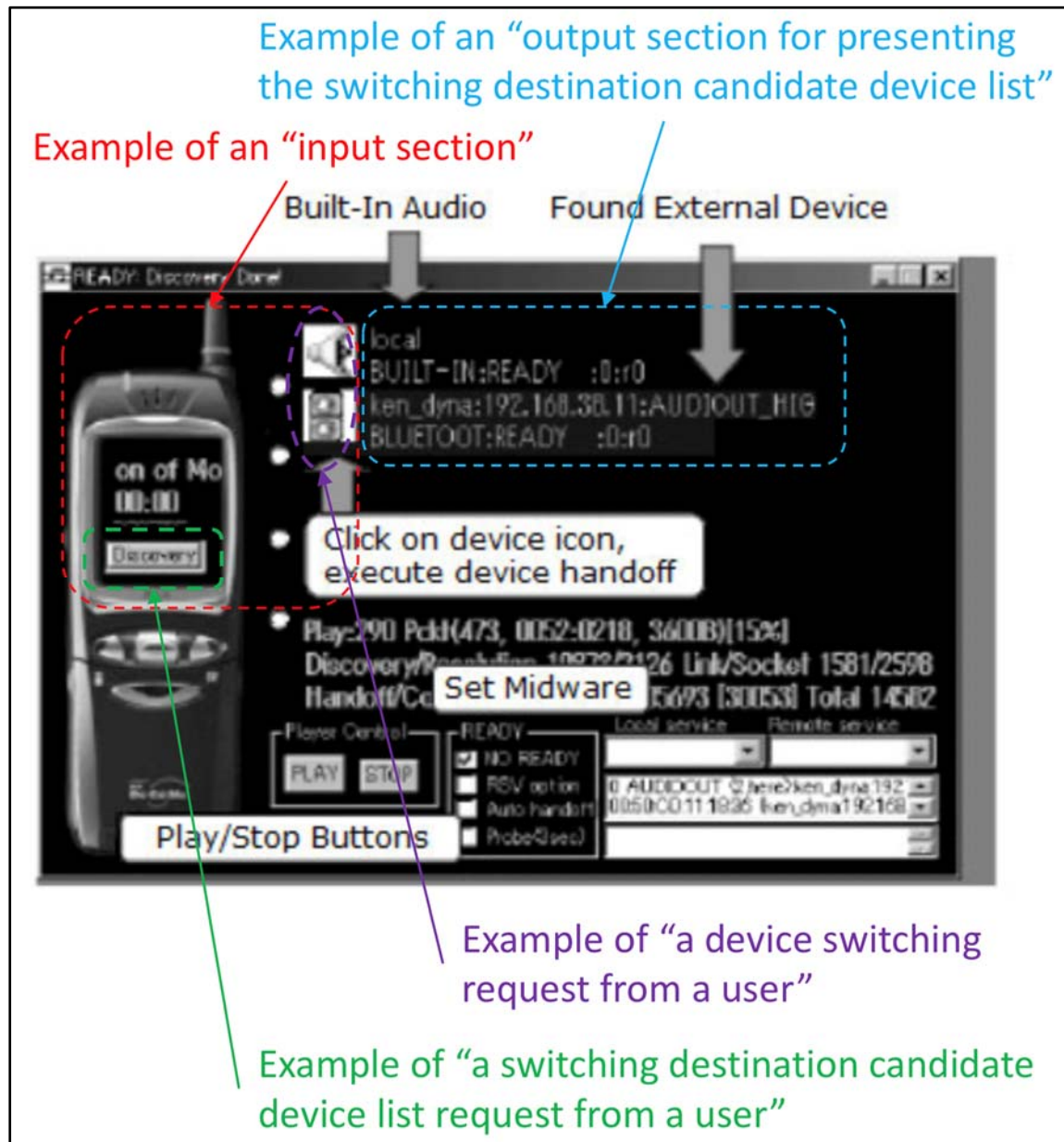
9. [1H] “an output section for presenting the switching destination candidate device list when the high speed device switching section receives the switching destination candidate device list request through the input section;”

As explained above, Ohta discloses “receiv[ing] the switching destination candidate device list request through the input section.” *See supra* Element 1G.

The ‘512 Patent describes an “output section” as being for “outputting a display,” and provides specific examples of “displays,” such as the display of a “mobile terminal such as a portable telephone” and a “large size television display.” Ex. 1001, at 1:60-65, 2:43; Ex. 1007, ¶366.

Ohta discloses a “screen” that is an example of an “output section.” Ex. 1004, at 1, 8. Indeed, Ohta describes “mobile phone terminals” that have “input/output devices such as *screens*, speakers, microphones, and cameras.” Ex. 1004, at 1. In

addition, Ohta's screen, depicted in Figure 4, is capable of presenting on the "right side of the screen" a list of "[i]cons indicating external devices and built-in devices found by READY and their device status," as shown in the below annotated version of Figure 4:



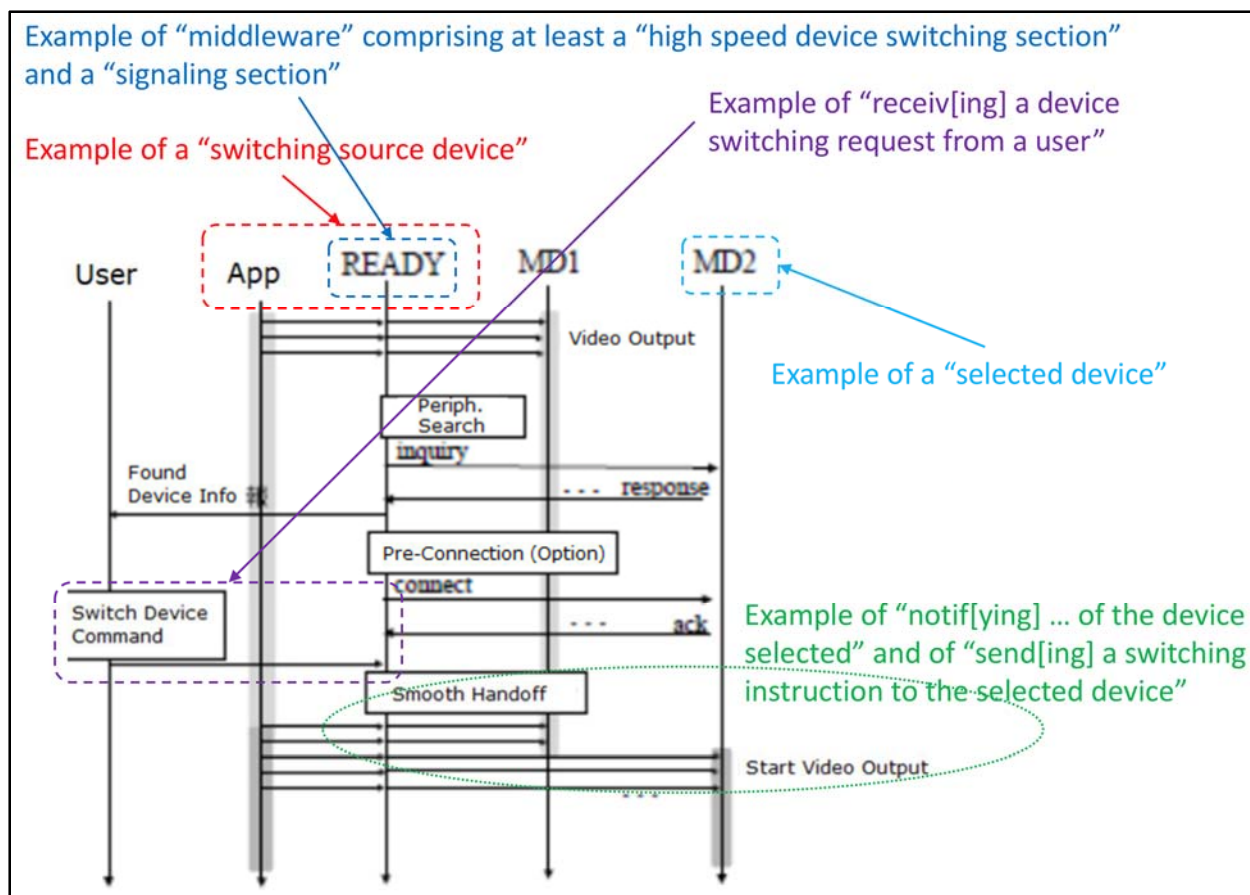
Ex. 1007, ¶350. This is an example of an output section “presenting the switching destination candidate device list when the high speed device switching section receives the switching destination candidate device list request through the input section.” *Id.* ¶¶ 350, 372-373. A POSA would understand that this list presentation is done after the user inputs a switching destination candidate device list request. *See supra* Element 1G. In addition, a POSA would understand that the message in the header of Ohta’s Figure 4, which appears to be “READY: Discovery Done!”, indicates that a user made a list request, such as by pressing the “Discovery” icon on the input section.

Furthermore, the ’512 Patent admits that Ohta discloses this limitation. The ’512 Patent describes its Figure 23 in relation to Ohta as showing step “U2” as a “list presentation” of a “candidate device list” that is made immediately upon receipt of the “switching destination candidate device list” from a “user.” Ex. 1001, at Fig. 23; Ex. 1007, ¶376.

Accordingly, Ohta discloses or renders obvious an output section for presenting the switching destination candidate device list when the high speed device switching section receives the switching destination candidate device list request through the input section.

10. [1I] “wherein when the high speed device switching section receives a device switching request from a user through the input section, it notifies the signaling section of the device selected from the switching candidate device list, and the signaling section sends a switching instruction to the selected device.”

Ohta discloses or renders obvious this limitation. As to “the high speed switching section receives a device switching request from a user through the input section,” the discussion above explains Ohta’s disclosure of an “input section” in the form of a “user interface used to control device selection and switching.” *See supra* Element 1G. Ohta further discloses that the READY middleware, i.e., the “high speed device switching section,” “performs ... media transfer destination switching (smooth handoff) after device connection is completed,” thus outputting the media at the destination device. Ex. 1004, at 6; Ex. 1007, ¶392. As shown in Ohta’s Figure 3 as annotated by Dr. Negus, this “smooth handoff” happens as a result of a “Switch Device Command” sent by the user to READY:



Ex. 1004, Figure 3; Ex. 1007, ¶¶392-394. Ohta explains that Figure 3 depicts a “procedure followed when an application that has been outputting video to an external device MD1 switches output to a newly found device MD2.” Ex. 1004, at 6; Ex. 1007, ¶392. Thus, a POSA would understand that Ohta’s “Switch Device Command,” triggered when a user clicks on an “icon” representing a found external device, is an example of a high-speed device switching section receiving a device switching request from a user through the input section. Ex. 1007, ¶¶392, 395.

Ohta also discloses or renders obvious the limitations of “notif[ying] the signaling section of the device selected from the switching candidate device list” and

“the signaling section send[ing] a switching instruction to the selected device.” Specifically, Ohta discloses the “smooth handoff” procedure, which is shown in the annotated Figure 3 above. After the user inputs the “Switch Device Command,” READY “switches the media destination from MD1 to MD2” and sends a message from READY to MD2 that causes MD2 to “start video output” as shown in Ohta’s Figure 3, which a POSA would understand to require and be an example of notifying the signaling section of the selected device. Ex. 1007, ¶¶392, 396; Ex. 1004, at 6. Specifically, Ohta’s Figure 3 shows READY executing a “smooth handoff” to the selected device (MD2), which requires that READY (the signaling section) be notified of the selected device. *Id.* Ohta further discloses notification of the signaling section by its illustration in Figure 4, which shows the display of the switching source device and includes the “icons indicating external devices and built-in devices” that corresponds to a switching destination device candidate list. *See supra* Elements 1D & 1H; Ex. 1004, at 8. Ohta teaches that the “user can then switch the music output destination device,” i.e., can “issue a device handoff instruction,” “by clicking on an icon.” Ex. 1004, at 8-9. Thus, a POSA would understand that, by clicking on an icon and issuing a “device handoff instruction” or a “Switch Device Command,” Ohta’s high speed middleware (the “high speed device switching section”) would notify READY (the “signaling section”) of the selected device so that a smooth handoff could be made. *See* Ex. 1004, Figure 3 (Switch Device

Command going from “user” to “READY”), Figure 4 (“Click on device icon, execute device handoff”); Ex. 1007, ¶396.

With respect to the signaling section “send[ing] a switching instruction to the selected device,” Ohta further explains that “handoff is executed immediately after the user’s device switching instruction” and, as shown in Figure 3, the destination device “Start[s] Video Output.” Ex. 1004, at 6 & Fig. 3; Ex. 1007, ¶397. A POSA would understand that this requires and is an example of the signaling section (READY) sending a switching instruction to the selected device (MD2). Ex. 1007, ¶¶392, 397; *see also supra* Element 1A (READY is an example of a signaling section). Specifically, READY “executes device handoff” when the user clicks the icon to select a destination device. Ex. 1004, at Figure 4; Ex. 1007, ¶397. This causes READY to “immediately” “switch[] the media destination from MD1 to MD2,” which is an example of a “switching instruction.” Ex. 1004, at 6; Ex. 1007, ¶¶396-397.

In sum, Ohta discloses or renders obvious this limitation because a POSA would understand that: (i) Ohta’s “Switch Device Command” is an example of a high speed device switching section receiving a device switching request from a user through the input section; (ii) Ohta’s “Smooth Handoff” procedure is an example of notifying the signaling section of the device selected from the switching candidate

device list; and (iii) Ohta's "Start Video Output" indication requires and is an example of sending a switching instruction to the selected device.

The '512 Patent's description of Ohta does not describe Ohta as explicitly disclosing "the signaling section sends a switching instruction to the selected device." Specifically, Figure 2 of the '512 Patent differs from Figure 23 (which the '512 Patent describes as a "message sequence" disclosed in Ohta, Ex. 1001, at 4:61-63) in part by its inclusion of "M7: Media data output notification." Ex. 1001, Fig. 2; Ex. 1007, ¶¶401-402. The '512 Patent explains that, in the purported invention, "[h]igh speed device switching section 101 send the media data output notification (M7) to device 2 through signaling section 104 so that switching destination device 2 selected as the switching destination device *starts outputting media data (step S312).*" Ex. 1001, at 14:42-46; Ex. 1007, ¶402. While the discussion above demonstrates that Ohta in fact discloses or renders obvious sending a switching instruction to the selected device under the ordinary meaning of this term, a fact obscured by applicant's provision of only a Japanese-language version that did not include Ohta's "Start Video Output" annotation on Figure 3, Petitioner considers here a potential argument in which a "switching instruction" requires disclosure of a "media data output notification." As Dr. Negus explains in his accompanying declaration, a POSA would understand that Ohta at least renders a "media data output notification" obvious. Ex. 1007, ¶¶403-411.

First, because the media data output notification in the '512 Patent is a trigger for the destination device to “start[] outputting media data,” a POSA would understand that the media data output notification is effectively a “play” command with respect to “media data.” Ex. 1007, ¶404. Ohta teaches such a play command with respect to audio playing on the mobile host device (i.e., the switching source device), and a POSA would understand that Ohta Figure 3 shows messages from READY to external devices MD1 and MD2 that result in “video output.” Ex. 1007, ¶¶405-407. Because the messages result in video output, a POSA would understand that they necessarily must include a “play” command that, in the terminology of the '512 Patent, constitutes a “media data output notification.” Ex. 1007, ¶¶406-407.

Second, even if a media data output notification were not explicitly disclosed by Ohta, it would have been obvious to a POSA that Ohta's use of Bluetooth necessarily includes standard Bluetooth media commands such as “play.” As Ohta explains, in its “test environment” the link between the mobile host and the destination device (MD) is a “Bluetooth link.” Ex. 1004, at 10; Ex. 1007, ¶408. Bluetooth does not in ordinary implementations begin outputting video on a destination device based only on the receipt of a media transfer message. Ex. 1007, ¶409. Rather, a standard implementation of Bluetooth (like the one in Ohta) would require a further “play” command to begin media output on the destination device, such as Ohta's disclosure of when the “user presses the play button.” *Id.* ¶¶409-410.

Accordingly, Ohta discloses or renders obvious the limitation wherein when the high speed device switching section receives a device switching request from a user through the input section, it notifies the signaling section of the device selected from the switching candidate device list, and the signaling section sends a switching instruction to the selected device.

B. Ground 2: Claim 1 Is Obvious over Ohta in View of AVRCP

As explained above, Ohta discloses or renders obvious all of the limitations of claim 1, and thus supplies grounds for canceling claim 1 by itself. Nonetheless, it would have been obvious to a POSA at the time of the '512 Patent's earliest claimed priority date to combine Ohta's disclosure with the features of available Bluetooth profiles, and specifically the Bluetooth Audio/Visual Remote Control Profile ("AVRCP"). AVRCP version 1.0 was adopted in May 2003 and, at a high level, "defines the features and procedures required in order to ensure interoperability between Bluetooth devices with audio/video control functions in the Audio/Video distribution scenarios." Ex. 1005, at 10.

A POSA would be motivated to combine Ohta with AVRCP for numerous reasons. First, Ohta and AVRCP both address the same field of art: audio/video media distribution to external devices using the Bluetooth protocol. Ex.1007, ¶210. Therefore, a POSA would naturally look to combine Ohta with other Bluetooth technology, such as the AVRCP.

Second, both Ohta and AVRCP are directed to solving similar, indeed complementary, challenges in the same basic system architecture of Bluetooth connections to external devices from a mobile phone. Ex. 1007, ¶¶211. Ohta discloses a system in which there is a “Bluetooth link” between the mobile host and the multimedia device and where the “user presses the play button” to begin media playback on the mobile device. Ex. 1007, ¶¶212-214. Ohta further discloses that its READY middleware executes a “Smooth Handoff” to an external multimedia device and that, in the course of this handoff, “video output” starts on the destination device. Ex. 1004, Figure 3; Ex. 1007, ¶215. AVRCP thus provides precisely the tools that would be needed for a user to control playback on Ohta’s destination device—a PASS THROUGH command that allows the user to “mute”, “pause”, “stop”, “play,” or execute other commands at the destination device. Ex. 1007, ¶¶215-217. Thus, a POSA would be highly motivated to combine AVRCP with Ohta.

Third, market demand for seamless device switching would have motivated a POSA to combine Ohta with well-known Bluetooth profiles such as AVRCP to provide additional user-directed functionality and to maintain interoperability with external Bluetooth devices in a predictable manner. Ex. 1007, ¶¶218-222, 227. Specifically, the purpose of Bluetooth profiles like AVRCP is to provide a common protocol and “ensure interoperability between Bluetooth devices,” and a POSA

would therefore look to them to ensure compatibility with a wide-variety of external devices. Ex. 1005, at 10; Ex. 1007, ¶222.

Fourth, art in the Bluetooth space would have motivated a POSA to use Bluetooth profiles, which “define how different parts of the Bluetooth specification can be used for a particular use case.” Ex. 1007, ¶224. Exhibit 1006, for example, is a prior art textbook (Kumar) that cites AVRCP and explains that the Bluetooth service discovery protocol is capable of identifying remote devices and further identifying “all the [Bluetooth] profiles the service implements.” Ex. 1007 ¶226. This capability would have confirmed to a POSA that Ohta’s device would have been compatible with the AVRCP PASS THROUGH command described below.

Id.

As to reasonable expectation of success, a POSA would understand that combination of AVRCP and Ohta—both of which address Bluetooth transfer of data and messages between devices—could be made successfully and with highly predictable results. Ohta teaches for “READY” that “[b]y using the MMM API (Application Program Interface) to perform media input/output processing, the application can entrust device switching processing to the MMM” such that “the application can run without having to be aware of device changes” and that such “READY” “middleware” resides within a protocol stack of the “Mobile Host” underneath a “Seamless Application.” Ex. 1007, ¶220; Ex. 1004, at 5 & Fig. 2.

AVRCP likewise discloses an “AV control” that is “middleware” that resides within the protocol stack of a “mobile phone” underneath an “application.” Ex. 1007, ¶221. Thus, a POSA would have expected success in using the two forms of middleware in a Bluetooth system disclosed in Ohta and AVRCP, and would have expected the combination to produce predictable results (i.e., the features of both Ohta’s READY middleware and AVRCP’s AV Control). Ex. 1007, ¶¶219-222.

Accordingly, a POSA would have been motivated to combine AVRCP with Ohta’s device and would have expected a high likelihood of success in doing so.

The Ohta disclosures discussed in detail above all apply equally to this ground. Accordingly, the analysis in this ground discusses in detail only certain elements with respect to AVRCP.

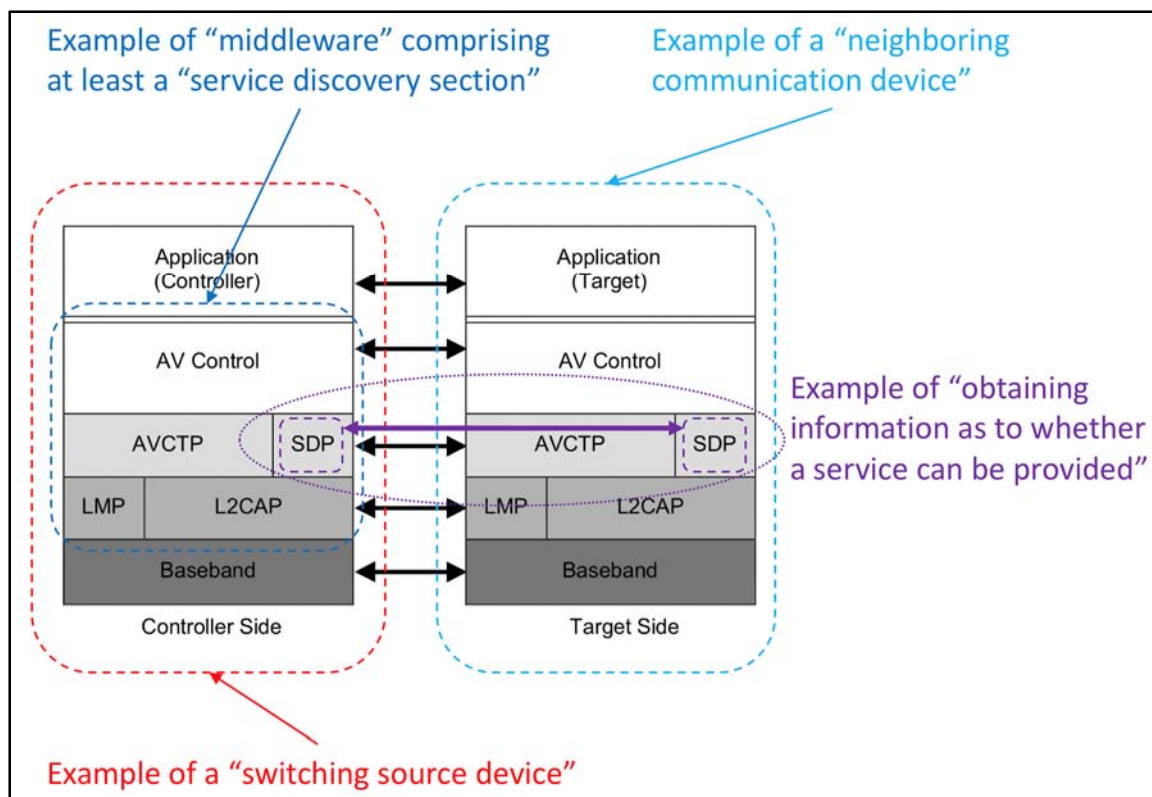
1. **[1 Pre] “A switching source device for moving a session established with a communication counterpart to a switching destination device, comprising: ...”**

To the extent this preamble is limiting, Ohta discloses or renders obvious this limitation as explained above with respect to Ground 1, which is incorporated herein by reference. *See supra* Ground 1, Element 1 Pre.

2. **[1A] “a service discovery section for obtaining information as to whether a service can be provided from a neighboring communication device;”**

Petitioner incorporates by reference its discussion of Ohta’s disclosure with respect to this element. *See supra* Ground 1, Element 1A.

AVRCP teaches two types of devices (among other teachings): a “controller” and a “target.” *See* Ex. 1005, at 15 & Fig. 2.1. AVRCP discloses that the “controller translates the detected user action to the A/V control signal, and then transmits it to a remote Bluetooth device” (i.e., the “target”). Ex. 1005, at 10. A POSA would understand that the Bluetooth “service discovery protocol” (abbreviated “SDP”) is used to discovery target devices is an example of a service discovery section for obtaining information as to whether a service can be provided from a neighboring communication device (i.e. a “target” device). Ex. 1007, ¶261-263. Thus, a POSA would have understood that AVRCP’s service discovery protocol is an example of a “service discovery section.” Ex. 1007, ¶264. This disclosure is shown in the below annotated version of AVRCP’s Figure 2.1:



Ex. 1005, at Fig. 2.1; Ex. 1007, ¶261.

The '512 Patent further admits that its purported "service discovery section" can use "existing protocols," including "SDP and SLP (Service Location Protocol) of Bluetooth." Ex. 1001, at 3:23-26.

Accordingly, AVRCP discloses or renders obvious a service discovery section for obtaining information as to whether a service can be provided from a neighboring communication device.

3. **1[B] “a high speed device switching section for instructing the service discovery section at an arbitrary timing to inquire whether a service can be provided,”**

Ohta discloses or renders obvious this limitation as explained above with respect to Ground 1, which is incorporated herein by reference. *See supra* Ground 1, Element 1B.

4. **[1C] “a high speed device switching section for ... determining a switching destination candidate device that is a switching destination of a session based on the obtained information as to whether the service can be provided,”**

Ohta discloses or renders obvious this limitation as explained above with respect to Ground 1, which is incorporated herein by reference. *See supra* Ground 1, Element 1C.

5. **[1D] “a high speed device switching section for ... generating a switching destination candidate device list describing the switching destination candidate devices,”**

Ohta discloses or renders obvious this limitation as explained above with respect to Ground 1, which is incorporated herein by reference. *See supra* Ground 1, Element 1D.

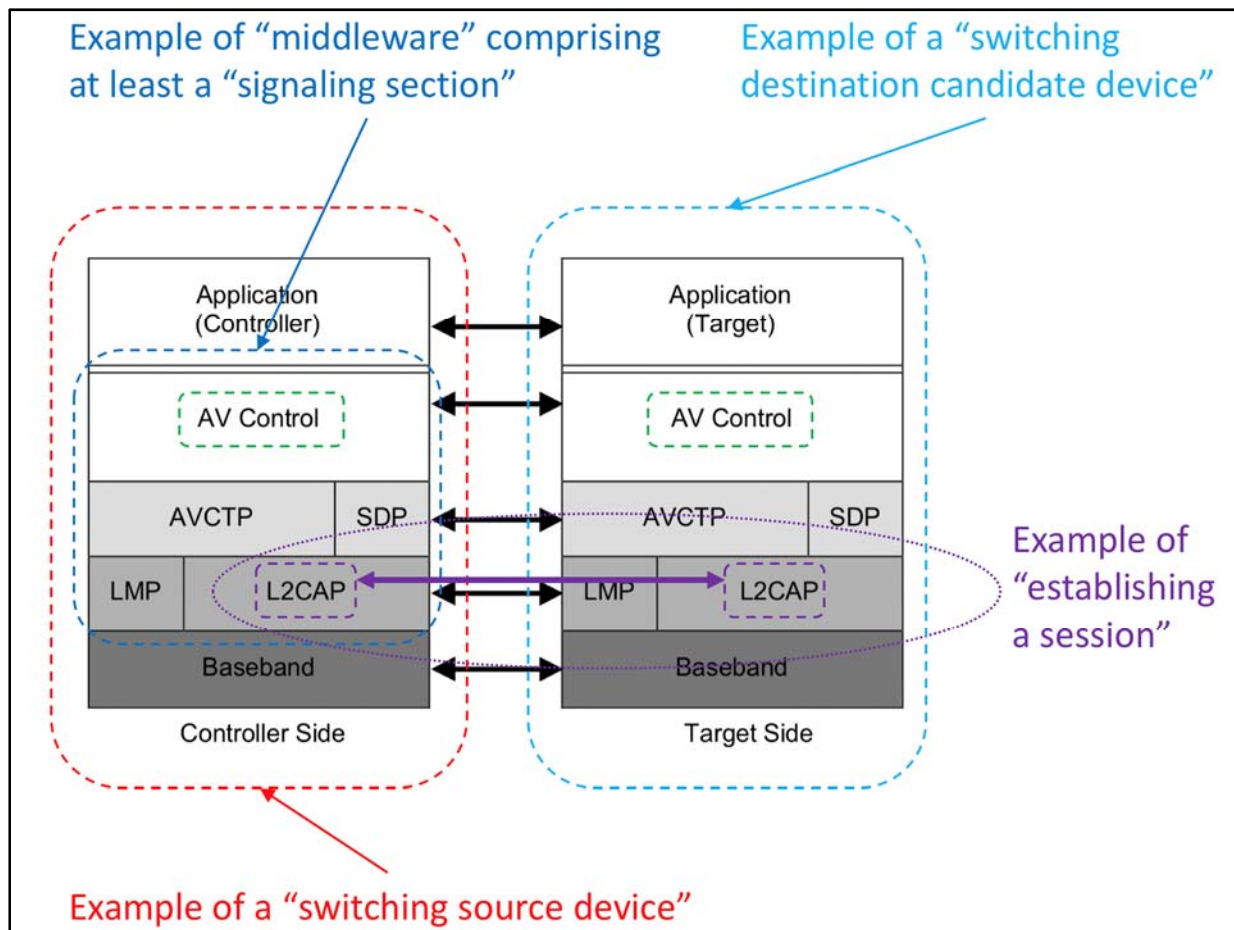
6. **[1E] “a high speed device switching section for ... making an instruction for establishing a session with the switching destination candidate device;”**

Ohta discloses or renders obvious this limitation as explained above with respect to Ground 1, which is incorporated herein by reference. *See supra* Ground 1, Element 1E.

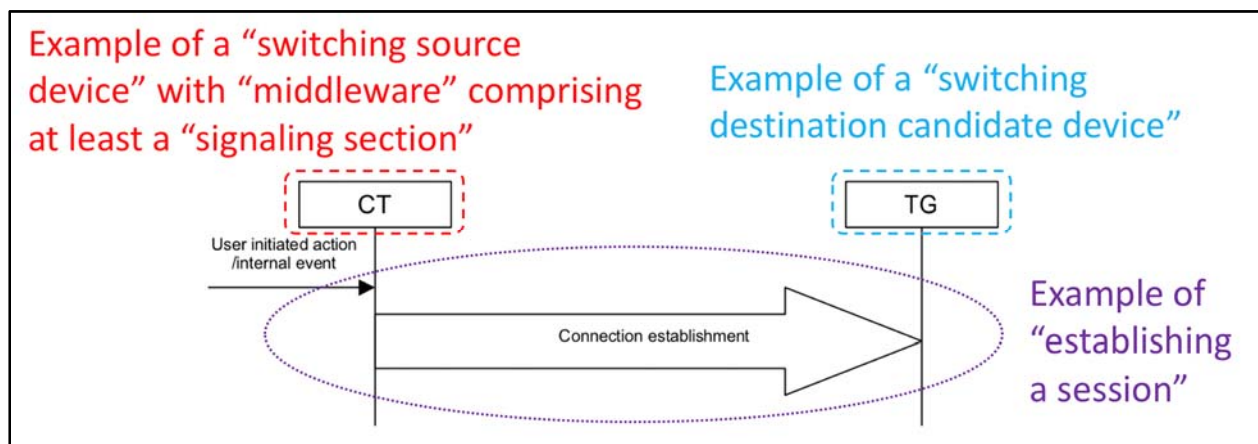
7. [1F] “a signaling section for establishing a session with the switching destination candidate device when the instruction for establishing a session is received from the high speed device switching section;”

Petitioner incorporates by reference its discussion of Ohta’s disclosure with respect to this element. *See supra* Ground 1, Element 1F.

AVRCP discloses a signaling section (part of the “controller” device) that establishes a session with a switching destination candidate device (the “target”) device, as shown in this annotated version of AVRCP’s Figure 2.1:



Ex. 1007, ¶338; Ex. 1005, Figure 2.1. As the description of Figure 2.1 explains, the “Baseband, LMP, and L2CAP are the OSI layer 1 and 2 Bluetooth protocols.” Ex. 1005, at 15; Ex. 1007, ¶338. Under AVRCP, “[controller] and [target] interoperate through L2CAP channel connections.” Ex. 1005, at 19. This L2CAP “connection establishment” is an example of “establishing a session.” Ex. 1007, ¶339. As AVRCP teaches, this session “may be initiated by the [controller]” and may be initiated by “an internal event or an event generated by a user.” Ex. 1005, at 22; Ex. 1007, ¶339. AVRCP depicts the connection establishment in Figure 4.1, annotated below by Dr. Negus:



Ex. 1007, ¶339; Ex. 1005, Figure 4.1.

Accordingly, AVRCP discloses or renders obvious a signaling section for establishing a session with the switching destination candidate device when the instruction for establishing a session is received from the high speed device switching section.

8. **[1G] “an input section for receiving a switching destination candidate device list request from a user;”**

Ohta discloses or renders obvious this limitation as explained above with respect to Ground 1, which is incorporated herein by reference. *See supra* Ground 1, Element 1G.

9. **[1H] “an output section for presenting the switching destination candidate device list when the high speed device switching section receives the switching destination candidate device list request through the input section;”**

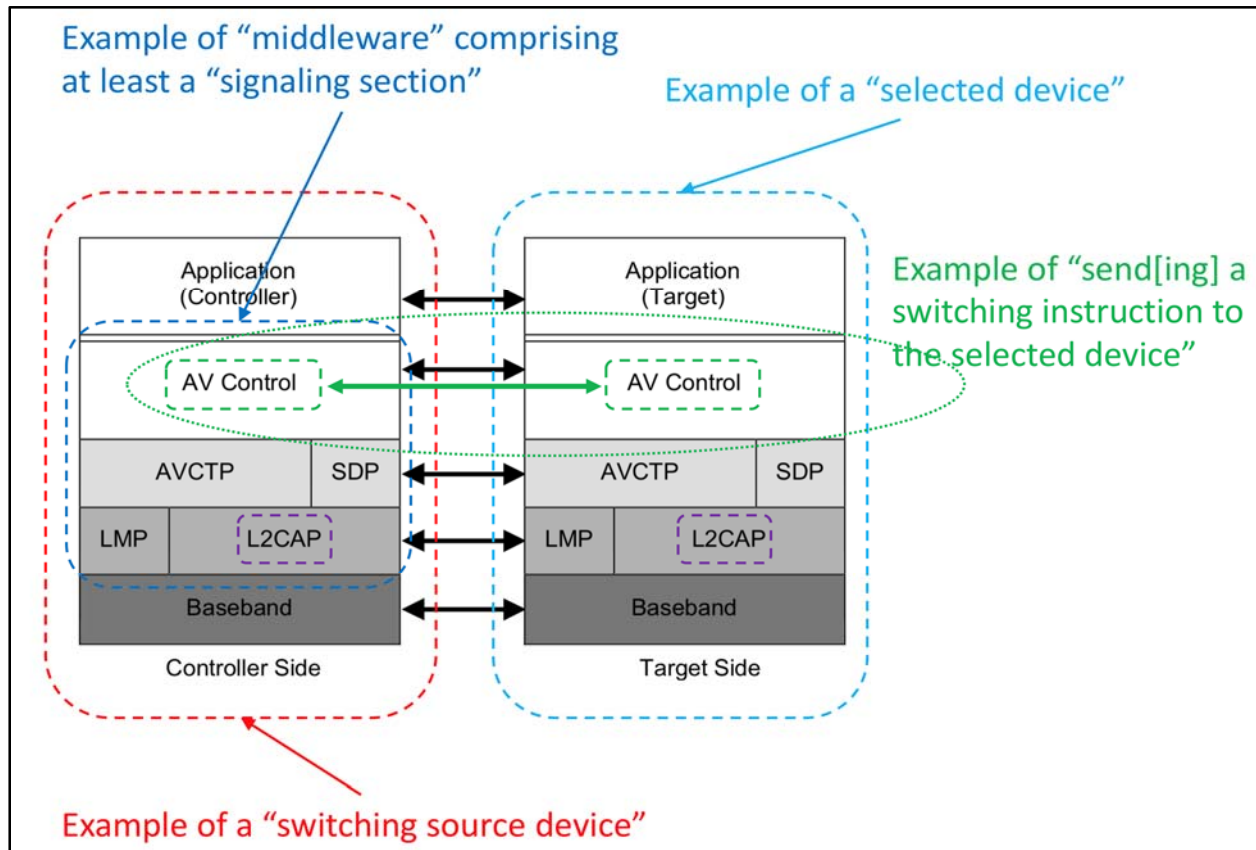
Ohta discloses or renders obvious this limitation as explained above with respect to Ground 1, which is incorporated herein by reference. *See supra* Ground 1, Element 1H.

10. **[1I] “wherein when the high speed device switching section receives a device switching request from a user through the input section, it notifies the signaling section of the device selected from the switching candidate device list, and the signaling section sends a switching instruction to the selected device.”**

Petitioner incorporates by reference its discussion of Ohta’s disclosure with respect to this element. *See supra* Ground 1, Element 1I.

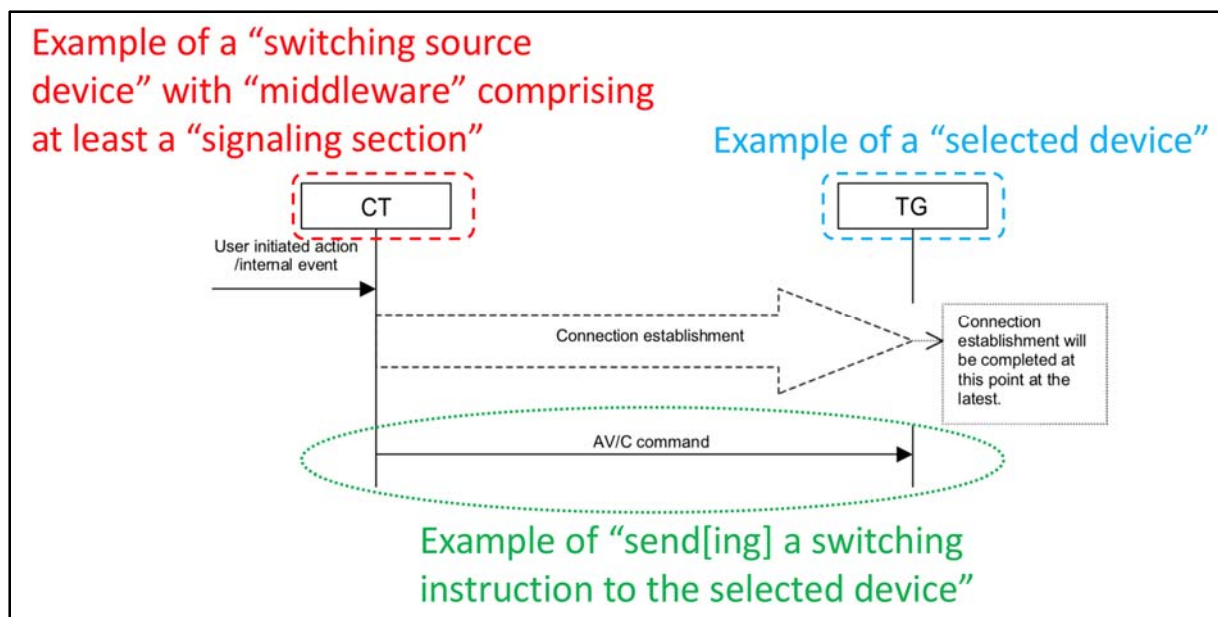
AVRCP teaches that, while it does not itself “handle the audio/video streaming,” it provides mechanisms by which the “controller translates the detected user action to the A/V control signal, and then transmits it to a remote Bluetooth device.” Ex. 1007, ¶413; Ex. 1005, at 10. As AVRCP explains, the interaction between the controller device and the target device occurs when “protocol signals

are exchanged by initiating procedures in communicating devices and by exchanging messages” such that the depicted “AV control” layer in Figure 2.1 “is the entity responsible for A/V device control signaling”:



Ex. 1007, ¶413.

Once a session has been established, AVRCP discloses that the controller device “is able to send a AV/C command,” and illustrates such a command in Figure 4.4, as the excerpt annotated by Dr. Negus shows:



Ex. 1005, Fig. 4.4; Ex. 1007, ¶414. Among the potential AV/C commands is the PASS THROUGH command, which is the “main feature” of the AVRCP. Ex. 1005, at 25; Ex. 1007, ¶415. AVRCP discloses that the PASS THROUGH command is used when the “user manipulates the user interface on the display or operates a button” and causes the “controller [to] convey[] a user operation to a [target].” Ex. 1007, ¶415. Put more simply, AVRCP discloses that a user of a “controller” device can press various buttons and send commands to the “target” device—thus acting as a remote control. The list of possible PASS THROUGH commands is extensive, but includes numerous commands applicable to audio/video playback of the type described as being done over Bluetooth link in Ohta: “mute”, “pause”, “stop”, “power” and “play.” Ex. 1007 ¶¶415-419; Ex. 1005, at 31-32, 51. As explained above in connection with Ohta, *see supra* Ground 1, Element 1I, these sort of

commands are examples of a “switching instruction” or a “media data output notification” sent to the switching destination device.

Accordingly, AVRCP discloses or renders obvious the limitation wherein when the high speed device switching section receives a device switching request from a user through the input section, it notifies the signaling section of the device selected from the switching candidate device list, and the signaling section sends a switching instruction to the selected device

IX. THE BOARD SHOULD NOT DENY INSTITUTION UNDER 35 U.S.C. § 325(d)

Patent Owner may argue that the Board should deny institution because, in relying on Ohta, this Petition presents “the same or substantially the same prior art or arguments previously ... presented to the Office.” 35 U.S.C. § 325(d). But the above discussion shows that that such an argument lacks merit. The applicant never “presented” Ohta in a manner that would have allowed the Office to independently assess its significance, *i.e.*, in English. And, as explained above, applicant’s “concise description” of Ohta left out key details that were material to patentability, including Ohta’s disclosures relating to a “switching instruction” sent to the destination device. As such, applicant effectively never presented Ohta to the Office at all.³

³ 37 C.F.R. § 1.98(a)(3)(ii) requires an applicant to provide an English translation where it is “within the possession, custody, or control or, or is readily available to”

Moreover, none of the arguments raised in this Petition were presented to the Office; indeed, Ohta was not discussed during prosecution at all with respect to claim 1. Although the examiner rejected original claim 14 over “Applicant Admitted Prior Art (including, in part, applicant’s discussion of Ohta), the examiner did not attempt to apply Ohta (or even the applicant’s description of Ohta) to claim 1. That omission is striking, and provides yet more evidence that the Applicant’s failure to provide an English translation prevented the Office from evaluating the significance of Ohta to the patentability of claim 1. Indeed, because the examiner referenced “AAPA” in discussing claim 14, rather than Ohta, it appears the examiner relied entirely on Applicant’s description of Ohta, and did not independently examine Ohta, much less appreciate its disclosures. Accordingly, there is no evidence that the examiner considered the arguments presented in Ground 1 because the examiner was not provided an English version of Ohta that could be independently examined.

Moreover, the examiner never considered Ohta in light of AVRCP, or indeed in light of any other available Bluetooth art. Given that Ohta is in Japanese, it is not even apparent that the examiner appreciated that Ohta includes a discussion of the

the applicant. The prosecution history does not reflect an explanation from Applicant as to why it did not provide an English translation of Ohta, which is a short article in a language for which translation would have been readily available.

application of his device in the Bluetooth space. Accordingly, the examiner did not consider the combination of art presented in Ground 2.

X. THE BOARD SHOULD NOT DENY INSTITUTION UNDER 35 U.S.C. § 314(a)

In *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020), the Board set forth six non-dispositive factors intended to guide that discretionary decision under 35 U.S.C. § 314(a) of whether efficiency, fairness, and the merits support the exercise of authority to deny institution in view of a parallel proceeding. On June 21, 2022, the Director issued interim procedure regarding application of the *Fintiv* factors (Interim Guidance). Under the Interim Guidance, the PTAB will not discretionarily deny institution where a petition presents “compelling evidence of unpatentability.” USPTO Memorandum, Interim Procedure for Discretionary Denials in AIA PostGrant Proceedings with Parallel District Court Litigation (June 21, 2022), at 2. Here, the Petition is particularly strong. Specifically, the Petition explains how the full scope of Ohta’s teaching was unavailable to the examiner and renders obvious the single challenged claim. Moreover, the petition further presents a straightforward combination as a second ground—Ohta with aspects of Bluetooth AVRCP.

A holistic view of the remaining *Fintiv* factors also weighs in favor of institution.

Factor 1 is neutral because no request for stay has been filed in the District Court Litigation. *Sand Revolution II LLC v. Continental Intermodal Group – Trucking LLC*, IPR2019-01393, Paper 24 at 7 (June 16, 2020) (informative). Under factor 2, the trial date has been set for September 2024. Ex. 1011 (Scheduling Order). A Final Written Decision in this matter is expected in or around January, 2025 and therefore will likely occur before any judgment in the District Court litigation becomes final, even assuming that trial were to go forward on the scheduled date (a significant assumption where multiple trials are scheduled for the same date). Factor 2 weighs against discretionary denial.

As to factor 3, the co-pending litigation is in its early stages, and the investment in it has been minimal. The parties have not exchanged proposed claim terms or constructions, and will not even begin claim construction briefing until February 2024, after the expected institution decision in this matter. Ex. 1011. The *Markman* hearing is not until April 2024. *Id.* Fact discovery is not set to close until May 6, 2024, and expert discovery is not set to close until June 10, 2024. *Id.*; see also *PEAG LLC v. Varta Microbattery GMBH*, IPR2020-01214, Paper 8 at 17 (Jan. 6, 2021). Factor 3 weighs against discretionary denial.

Under factor 4, Petitioner stipulates that if the IPR is instituted, it will not pursue the same grounds in District Court. *Sand Revolution II* at 7. Thus, the grounds

presented here will not be asserted in District Court. Thus, this factor favors institution. *Sand Revolution II* at 12.

Under factor 5, Petitioner is a defendant in District Court, which makes this factor neutral. *See HP Inc. v. Slingshot Printing LLC*, IPR2020-01084, Paper 13 at 9 (Jan. 14, 2021) (“same parties as parallel proceeding” makes factor 5 “neutral”).

Under factor 6, the compelling nature of Petitioner’s challenge weighs in favor of institution regardless of any pending parallel proceeding.

When viewed holistically, the timing of the present Petition is reasonable, there has been limited investment in the related litigation, and there is minimal overlap between the present IPR and the litigation. Further, given the compelling evidence of unpatentability presented in the Petition, the efficiency and integrity of the IPR process is best served by instituting review.

XI. MANDATORY NOTICES UNDER 37 C.F.R. §42.8

A. Real Parties-In-Interest Under 37 C.F.R. § 42.8(b)(1)

Petitioner is Hewlett Packard Enterprise Company, which is the real party-in-interest.

B. Related Matters Under 37 C.F.R. § 42.8(b)(2)

The ’512 Patent is asserted against Petitioner in *Sovereign Peak Ventures, LLC v. Hewlett Packard Enterprise Co.*, 2:23-cv-00009 (E.D. Tex.), filed on January 10, 2023.

To Petitioner’s knowledge, the ’512 Patent was involved in the following pending case, which may be affected by a decision in this proceeding:

Style	Number	Tribunal	Filed
<i>Sovereign Peak Ventures, LLC v. TP-Link Corp. Ltd.</i>	6:22-cv-01273	Western District of Texas	12/09/2022

C. Lead and Back-Up Counsel Under 37 C.F.R. § 42.8(b)(3)

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D. Service Information Under 37 C.F.R. § 42.8(b)(4)

Service via hand-delivery may be made at the postal mailing address of either lead or back-up counsel. Petitioner consents to service by e-mail at the addresses listed above.

XII. CONCLUSION

For the foregoing reasons, Petitioner respectfully requests institution of an *inter partes* review, and cancellation of claim 1 of the '512 Patent.

Dated: July 31, 2023

Respectfully submitted,

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I. CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. § 42.24, the undersigned attorney for the Petitioner, Hewlett Packard Enterprise Company, declares that the argument section of this petition (Sections I-X and XII) has a total of 13,480 words, according to the Microsoft Wordtm word count tool.

Dated: July 31, 2023

Respectfully submitted,

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CERTIFICATION OF SERVICE ON PATENT OWNER

Pursuant to 37 C.F.R. §§42.6(e), 42.8(b)(4) and 42.105, the undersigned certifies that on the 31st of July, 2023, a complete and entire copy of this Petition for Inter Partes Review of U.S. Patent 7,796,512 and all supporting exhibits were served via Federal Express, postage prepaid, to the correspondence address of record for the '512 Patent:

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Dated: July 31, 2023

Respectfully submitted,

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