Trials@uspto.gov
571-272-7822

Paper 12
Entered: April 17, 2020

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ROKU, INC.,
Petitioner,

v.

UNIVERSAL ELECTRONICS, INC.,
Patent Owner.

IPR2019-01615
Patent 9,716,853 B2

Before PATRICK M. BOUCHER, MINN CHUNG, and SHARON FENICK, *Administrative Patent Judges.*

FENICK, *Administrative Patent Judge*.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314, 37 C.F.R. § 42.4

I. INTRODUCTION

Roku, Inc. ("Petitioner") filed a Petition requesting *inter partes* review of claims 1, 3, 5, and 7 ("the challenged claims") of U.S. Patent No. 9,716,853 B2 (Ex. 1001, "the '853 patent"). Paper 2 ("Pet."). Patent Owner Universal Electronics, Inc. ("Patent Owner") filed a Preliminary Response. Paper 6 ("Prelim. Resp."). After we issued an order (Papers 7, 8)

that granted authorization for additional briefing addressing the issue of discretionary denial under 35 U.S.C. § 325(d), Petitioner filed a Reply to the Preliminary Response (Paper 9 ("Pet. Reply")) and Patent Owner filed a Sur-Reply to the Reply (Paper 11 ("PO Sur-Reply")). We have authority under 35 U.S.C. § 314.

Upon consideration of the Petition, Preliminary Response, and additional briefing, we decline to exercise the discretion to deny institution under 35 U.S.C. § 325(d), and we determine that Petitioner has demonstrated a reasonable likelihood that it would prevail in showing the unpatentability of the challenged claims of the '853 Patent. We institute *inter partes* review.

II. BACKGROUND

A. Related Matters and Real Parties in Interest

Petitioner and Patent Owner each state that the '853 patent is involved in *Universal Electronics Inc. v. Roku, Inc.*, Case 8-18-cv-01580, in the Central District of California. Pet. 72; Paper 3 (Patent Owner's Mandatory Notices), 2. Patent Owner additionally identifies as related eight other *inter partes* review petitions filed by Petitioner requesting review of other patents owned by Patent Owner. Paper 3, 2.

Petitioner identifies only itself as the real party in interest. Pet. 72. Patent Owner also identifies only itself as the real party in interest. Paper 3, 2.

B. Overview of the '853 Patent

The '853 patent relates to a device that receives "a request from a controlling device, such as a remote control, smart phone, or the like" to "have one or more target devices perform one or more functional operations." Ex. 1001, code (57). The device "responds to the request by

applying the optimum methodology to propagate one or more commands" to the target device(s) to perform the functional operation(s). *Id.*

Figure 1 of the '853 patent, reproduced below, illustrates an exemplary system in which a universal control engine (UCE) according to the invention is used to issue commands to control various controllable appliances. *Id.* at 3:39–41.

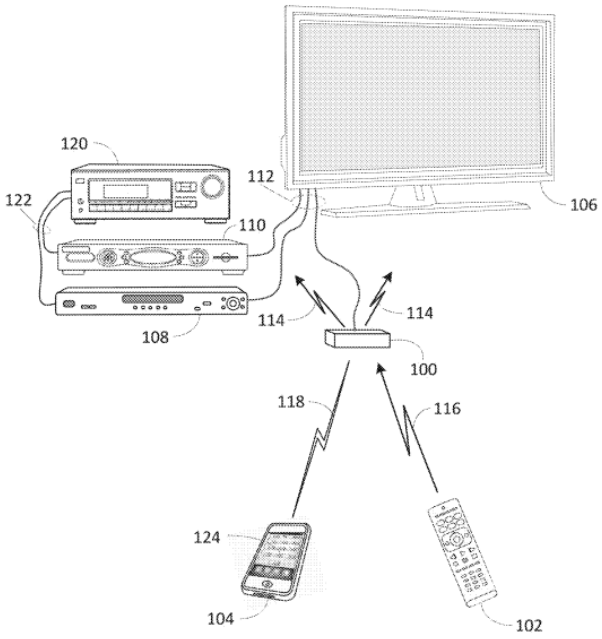

Figure 1

In Figure 1, controllable appliances include television 106, cable set top box combined with digital video recorder 110, DVD player 108, and AV receiver 120. *Id.* at 3:41–44. Appliance commands are issued by UCE 100 in response to infrared ("IR") request signals 116 received from remote control device 102 or radio frequency ("RF") request signals 118 received from app 124 resident on smart device 104. *Id.* at 3:52–56. Transmission of commands from UCE 100 to the controllable appliances may take the form

of wireless IR signals 114 or Consumer Electronic Control ("CEC") commands issued over wired HDMI interface 112 if available. *Id.* at 2:38–45, 3:58–4:4.

The '853 patent describes that the method, protocol, or medium for issuing commands to controllable appliances may vary by appliance and/or by function to be performed. *Id.* at 6:62–64, 7:5–7. "[I]n some instances a particular appliance may support receipt of an operational command via more than one path," such as via a CEC command or via an IR command. *Id.* at 7:10–12. A UCE may use a matrix including data cells, each corresponding to a specific command and a specific appliance, with the data content of the cell including "identification of a form of command/transmission to be used and a pointer to the required data value and formatting information for the specific command." *Id.* at 7:26–29, Fig. 7. The matrix 700 may contain a null entry if "a particular function is not available on or not supported by a specific appliance." *Id.* at 7:46–49. "In certain embodiments one or more secondary command matrices . . . may also be provisioned, allowing for the use of alternate command methods in the event it is determined by the UCE programming that a preferred command was unsuccessful." *Id.* at 7:42–46.

Figure 13 of the '853 patent, reproduced below, illustrates an exemplary series of steps performed by a UCE in issuing a function command to an appliance. *Id.* at 3:29–31, 11:40–47.

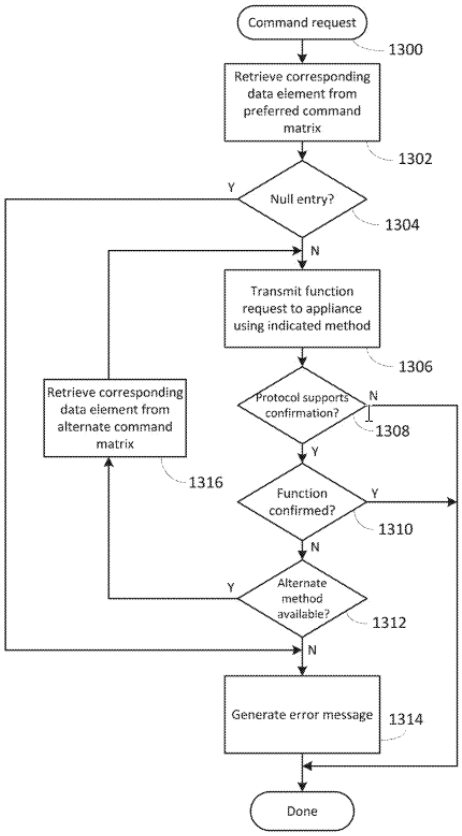

Figure 13

As shown in Figure 13, a command request is received (1300) and a corresponding data element, if one exists, is retrieved from a preferred command matrix and transmitted to the appliance (1302, 1304, 1306). *Id.* at 11:40–57, 12:4–10. In certain cases, when a determination that the communication interface and protocol used provides for a confirmation of successful transmission, if that confirmation is not received (1308, 1310) then if an alternate method of issuing the command is available, the data element from an alternate command matrix is retrieved and transmitted (1312, 1316, 1306). *Id.* at 12:10–16, 12:21–35.

C. Challenged Claims

Of the challenged claims, claim 1 is the sole independent claim, and each of the remaining challenged claims depends directly from claim 1.

Claim 1 is reproduced below with bracketed notations, corresponding to notations in the Petition, added for reference.

> 1. [1.P] A universal control engine, comprising:
> [1.1] a processing device; and
> a memory device having stored thereon instructions executable by the processing device, the instructions, when executed by the processing device, causing the universal control engine [1.2] to respond to a detected presence of an intended target appliance within a logical topography of controllable appliances which includes the universal control engine [1.3] by using an identity associated with the intended target appliance to create a listing comprised of at least a first communication method and a second communication method different than the first communication method [1.4] for use in controlling each of at least a first functional operation and a second functional operation of the intended target appliance [1.5] and to respond to a received request from a controlling device intended to cause the intended target appliance to perform a one of the first and second functional operations [1.6] by causing a one of the first and second communication methods in the listing of communication methods that has been associated with the requested one of the first and second functional operations to be used to transmit to the intended target appliance a command for controlling the requested one of the first and second functional operations of the intended target appliance.

Ex. 1001, 14:49–15:7.

D. Evidence Relied Upon

Reference		Date	Exhibit
Chardon et al. ("Chardon")	US 2012/0249890 A1	Oct. 4, 2012	1005

Reference		Date	Exhibit
Stecyk	US 2009/0254500 A1	Oct. 8, 2009	1006
HDMI Licensing, LLC, High-Definition Multimedia Interface, Specification Version 1.3a (November 10, 2006) ("HDMI 1.3a")		2006	1010

Petitioner also relies upon the Declaration of Dr. Samuel H. Russ. (Ex. 1003).

E. Asserted Grounds of Unpatentability

Petitioner asserts the following grounds of unpatentability:

Claims Challenged	**35 U.S.C. §[1]**	**Reference(s)/Basis**
1, 3, 5, 7	103(a)	Chardon
1, 3, 5, 7	103(a)	Chardon and HDMI 1.3a
1, 3, 5, 7	103(a)	Chardon and Stecyk
1, 3, 5, 7	103(a)	Chardon, HDMI 1.3a, and Stecyk

As discussed *infra* at Section IV.D.4, we determine that the Petition sufficiently sets forth an argument under 35 U.S.C § 103 that the challenged claims are obvious over Chardon and, alternatively, sufficiently sets forth an argument that the challenged claims are obvious over a combination of Chardon with HDMI 1.3a and/or Stecyk.

[1] The Leahy-Smith America Invents Act ("AIA"), Pub. L. No. 112-29, 125 Stat. 284, 285–88 (2011), amended 35 U.S.C. § 103. Because the application from which the '853 patent claims priority through a chain of continuation applications to an application filed before March 16, 2013, the effective date of the relevant amendment, the pre-AIA version of § 103 applies. Ex. 1001, code (63).

III. 35 U.S.C. § 325(d) DISCRETION

Patent Owner takes the position that we should exercise our discretion to deny the Petition under 35 U.S.C. § 325(d). Prelim. Resp. 15–19; PO Sur-Reply. Patent Owner argues, quoting Petitioner, that the sole ground of the Petition is based principally on the "primary reference" Chardon, which was cited on an Information Disclosure Statement ("IDS") during the prosecution of the application that issued as the '853 patent. Prelim. Resp. 16–17 (quoting Pet. 2); PO Sur-Reply 2; Ex. 1002, 81, 170, 182–186).

Petitioner acknowledges that "Chardon . . . was cited . . . during prosecution." Pet. 9; Pet. Reply 1. But, because the proposed combination of prior art includes what Petitioner characterizes as "non-cumulative" additional references, Petitioner contends that the instant Petition does not present "the same or substantially the same" art or arguments previously considered. Pet. 9; Pet. Reply 1–2.

Institution of *inter partes* review is discretionary. *See* 35 U.S.C. § 314(a); *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2140 (2016) (the AIA does not impose a "mandate to institute review"). Our discretion is guided by 35 U.S.C. § 325(d), which provides, in relevant part:

> MULTIPLE PROCEEDINGS -- . . . In determining whether to institute or order a proceeding under this chapter, chapter 30, or chapter 31, the Director may take into account whether, and reject the petition or request because, the same or substantially the same prior art or arguments previously were presented to the Office.

Thus, 35 U.S.C. § 325(d) identifies two separate issues that the Director may consider in exercising discretion to deny institution of review: whether the petition presents to the Office the same or substantially the same art previously presented to the Office; and whether the petition presents to

the Office the same or substantially the same arguments previously presented to the Office. *Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6, at 7 (PTAB Feb. 13, 2020) (designated precedential March 24, 2020). We may consider multiple factors when determining whether to exercise our discretion not to institute under § 325(d), including:

> (a) the similarities and material differences between the asserted art and the prior art involved during examination; (b) cumulative nature of the asserted art and the prior art evaluated during examination; (c) the extent to which the asserted art was evaluated during examination, including whether the prior art was the basis for rejection; (d) the extent of the overlap between the arguments made during examination and the manner in which Petitioner relies on the prior art or Patent Owner distinguishes the prior art; (e) whether Petitioner has pointed out sufficiently how the Examiner erred in its evaluation of the asserted prior art; and (f) the extent to which additional evidence and facts presented in the Petition warrant reconsideration of the prior art or arguments.

Becton, Dickinson & Co. v. B. Braun Melsungen AG, IPR2017-01586, Paper 8, 17–18 (PTAB Dec. 15, 2017) (informative; precedential as to § III.C.5, first paragraph). We apply a two-part framework, first considering *Becton, Dickinson* factors (a), (b), and (d) to determine whether the same or substantially the same art or arguments were previously presented to the Office, and if so, evaluating *Becton, Dickinson* factors (c), (e), and (f) to determine whether the Petitioner has demonstrated that the Office erred in a manner material to the patentability of challenged claims. *Advanced Bionics,* 7–11.

With respect to the first part of the *Advanced Bionics* framework, Petitioner's challenge is based on Chardon alone or, alternatively on a

combination of art including Chardon[2]. Chardon was presented to the Examiner in an IDS, which the Examiner both initialed as considered and separately noted as having been considered. Pet. 36–71; Ex. 1002, 79–84 (IDS citing Chardon at 81), 167–179 (Office Action noting that the IDS has been considered at 170), 182–187 (initialed version of IDS). Petitioner and Patent Owner agree that the two other references, HDMI 1.3a and Stecyk, included in the ground were not specifically cited to the Examiner or noted as having been considered during the prosecution of the application that issued as the '853 patent. Pet. Reply 2; PO Sur-Reply 3.

Petitioner argues that the HDMI 1.3a and Stecyk references are not cumulative of the references the Examiner used in rejecting the claims during prosecution, and thus that the challenge is not based on substantially the same art previously presented to the Office. Pet. Reply 2. Patent Owner argues that the proper evaluation per our precedent in *Advanced Bionics* is whether HDMI 1.3a and Stecyk are cumulative of Chardon. PO Sur-Reply 2–3. Patent Owner also argues that Petitioner included the HDMI 1.3a and Stecyk references in combination with Chardon specifically to defeat a § 325(d) argument, and noted that Petitioner might characterize the sole ground in the Petition "as including an additional unnamed ground of Chardon alone." Prelim. Resp. 1, 14, 16, 19.

The Petition uses the HDMI 1.3a reference to indicate what, according to Petitioner, one of ordinary skill in the art would have recognized

[2] As discussed *infra* at Section IV.D.4, we determine that the Petition sufficiently sets forth an argument under 35 U.S.C § 103 that the challenged claims are obvious over Chardon alone and, alternatively, sufficiently sets forth an argument that the challenged claims are obvious over a combination of Chardon and Stecyk and/or HDMI 1.3a.

regarding the teachings and suggestions of Chardon's described HDMI display connected via an HDMI cable with respect to limitation [1.2] of claim 1. Pet. 43–46; Ex. 1003 ¶¶ 178–179. Petitioner describes this limitation as "explicitly disclosed" in Chardon. Pet. 46. Petitioner generally describes that "[a] person of ordinary skill in the art would have . . . turned to [HDMI 1.3a] to fill in any details in Chardon with respect to how HDMI-capable devices operate." *Id.* at 29. Stecyk "is optionally relied on [in the Petition] to the extent that the Board does not find creation of a 'listing' [in claim 1] obvious over Chardon alone, or in view of the state of the art; and to the extent that the Board does not find providing a 'prompt' [in claim 5] obvious over Chardon alone, or in view of the state of the art." Pet. 32. We find this argument inconsistent with Petitioner's contention that Stecyk is not cumulative of Chardon. That is, to the extent Petitioner relies upon Stecyk, Petitioner itself argues that the teachings relied upon are cumulative of Chardon.

In analyzing *Becton, Dickinson* factors (a) and (b) (the similarities and material differences between the asserted art and the prior art involved during examination, and the cumulative nature of the asserted art and the prior art evaluated during examination in this case), we agree with Patent Owner that the similarities between Chardon and the portions of HDMI 1.3a and Stecyk described by Petitioner, and the cumulative nature of those portions of HDMI 1.3a and Stecyk with respect to Chardon, lead to a conclusion that that the same or substantially the same art was previously presented to the Office.

Thus, we proceed to the next part of the *Advanced Bionics* framework and consider *Becton, Dickinson* factors (c), (e), and (f) to determine whether Petitioner has demonstrated that the Office erred in a manner material to the

patentability of the challenged claims. *Advanced Bionics* at 8. While it is undisputed that the Examiner initialed the IDS, there is no record of what the Examiner's consideration of Chardon involved. *See, generally,* Ex. 1002. As *Advanced Bionics* instructs, "if the record of the Office's previous consideration of the art is not well developed or silent, then a petitioner may show the Office erred by overlooking something persuasive under factors (e) and (f)." *Advanced Bionics* at 10.

Petitioner argues that the Examiner materially erred by misapprehending or overlooking the specific teachings of the relevant prior art with respect to the patentability of the challenged claims. Pet. Reply 2–5. Petitioner details that, in the prosecution history of the application that issued as the '853 patent, the applicant relied upon, and the Examiner found persuasive, the features of limitations [1.3] and [1.4] of challenged claim 1 to overcome the prior art references cited in a rejection. *Id.* at 3–4. Petitioner further argues that Chardon discloses these limitations. *Id.* at 4–5 (citing Pet. 47–52). Therefore, Petitioner argues, the Examiner materially erred in the evaluation of Chardon. *Id.* at 2–5. Patent Owner argues that "Chardon would have been fresh in the Examiner's mind" when the Examiner issued an office action and the notice of allowability, and that the combination of Chardon with additional references that disclose the same information cannot show material error. PO Sur-Reply 4–5.

We determine, with respect to *Becton, Dickinson* factor (e), that Petitioner has pointed out sufficiently how the Examiner materially erred in its evaluation of Chardon. Specifically, we determine that the Examiner erred by overlooking the specific teachings of Chardon. As further discussed below at Sections IV.D.5.c through IV.D.5.e, Chardon discloses responding to a detected presence of an intended target appliance by using

an identity associated with the intended target appliance to create a listing comprised of at least two different communication methods for use in controlling functional operations of the intended target appliance, which teaches or suggests limitations [1.2] through [1.4] of claim 1. The Notice of Allowability specifically sets forth the Examiner's conclusion that these limitations are not disclosed, taught, or suggested in the references applied in prior rejections or in the other art considered. Ex. 1002, 3–4. Accordingly, we determine that there has been a showing that the Examiner erred in the evaluation of the asserted prior art in a manner material to the patentability of the challenged claims. We decline to exercise discretion under 35 U.S.C. § 325(d) not to institute *inter partes* review.

IV. DISCUSSION

A. Person of Ordinary Skill in the Art

Petitioner argues that one of ordinary skill in the art

> would have had general knowledge of home theater systems, control of devices within the home theater systems, and remote control devices as of October 28, 2011. Further, a POSA would have had: (1) at least a bachelor's degree in an electrical engineering, computer engineering, or equivalent coursework, and (2) at least one year of experience researching or developing structure and operating principles of common digital content reproduction and related appliances, contemporary television and home theater standards, and specifications of consumer digital reproducing devices of the time.

Pet. 13. Patent Owner proposes a different standard:

> [A person of ordinary skill in the art] would have had a bachelor's degree which involved software design and development coursework, for example, electrical engineering, computer engineering, computer science, cognitive science, industrial engineering, information systems, information studies, or a similar degree, and at least one year of work experience in

> software programming, development, or design of consumer applications. Additional education might substitute for some of the experience, and substantial experience might substitute for some of the educational background.

Prelim. Resp. 6. We note that the '853 patent specifically relates to remote control devices, and therefore, for the purposes of this decision, we adopt Petitioner's standard that includes general knowledge consistent with the field of the invention, and, additionally, is consistent with the prior art presented. *See* Ex. 1001, 1:63–2:3; *Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (the prior art may reflect an appropriate level of skill in the art). We note that this determination is preliminary, and that Patent Owner's expert testified that his analysis was not affected by the definition adopted. *See* Prelim. Resp. at 7; Ex. 2001 (Expert report of Dr. Don Turnbull), ¶ 40. Adopting the Patent Owner's definition would not affect our analysis here.

B. Principles of Law

It is a petitioner's burden to demonstrate unpatentability. *See Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (citing *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1326–27 (Fed. Cir. 2008)).

A claim is unpatentable as obvious if "the differences between" the claimed subject matter "and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." 35 U.S.C. § 103(a) (2012). The question of obviousness is resolved on the basis of underlying factual determinations, including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) objective

evidence of nonobviousness.[3] *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17–18 (1966).

Even if prior art references disclose all claim limitations when combined, there must be evidence to explain why a person of ordinary skill in the art would have combined the references to arrive at the claimed invention. *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1342, 1366–67 (Fed. Cir. 2012) (citing *Innogenetics, N.V. v. Abbott Labs.*, 512 F.3d 1363, 1374 (Fed. Cir. 2008) (holding that "some kind of motivation must be shown from some source, so that the [trier of fact] can understand why a person of ordinary skill would have thought of either combining two or more references or modifying one to achieve the patented [invention]")). An invention "composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). Rather, "it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does." *Id.*

An obviousness determination "cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *Id.* (*quoting In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)); *see In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016).

[3] No argument or evidence concerning secondary considerations has been adduced.

We apply the same claim construction standard that is applied in civil actions under 35 U.S.C. § 282(b), which is articulated in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). *See* 37 C.F.R § 42.100(b) (2019). Under *Phillips*, claim terms are afforded "their ordinary and customary meaning." *Phillips*, 415 F.3d at 1312 (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed.Cir.1996)). "[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention. . . ." *Id.* at 1313. "Claim construction begins with the words of the claim, which 'must be read in view of the specification, of which they are a part.'" *Wi-Lan, Inc. v. Apple, Inc.*, 811 F.3d 455, 462 (Fed. Cir. 2016) (quoting *Phillips*, 415 F.3d at 1312–15).

C. Claim Construction

Only terms that are in controversy need to be construed, and then only to the extent necessary to resolve the controversy. *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999).

Petitioner proposes only one claim construction, for limitation [1.4], which specifies that the first and second communication methods are "for use in controlling each of at least a first functional operation and a second functional operation of the intended target appliance." Pet. 14–17. Petitioner requests that we follow the district court's construction from the Markman order and construe this term as "for use in controlling the same at least a first functional operation and a second functional operation of the same intended target appliance." *Id.* at 15 (quoting Ex. 1017, 31). Petitioner argues that this construction "is the most natural reading of the claim in view of the specification and prosecution history," and provides each claim term with meaning. *Id.* at 16–17 (citing *Elekta Instrument S.A. v. O.U.R. Sci.*

Int'l, Inc., 214 F.3d 1302, 1305–07 (Fed. Cir. 2000); *Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 950 (Fed. Cir. 2006)).

Patent Owner argues that this term "is understood by its plain and ordinary meaning" and requires no further construction. Prelim. Resp. 11.

Preliminarily, we agree with the district court's conclusion that the language of claim 2 and additional portions of the prosecution history of the application that issued as the '853 patent each support the district court's construction. Ex. 1007, 34–35. However, at this point, no specific construction is required for the disputed term. *Vivid Techs.*, 200 F.3d at 803.

D. Analysis of the Asserted Grounds

Petitioner argues that claims 1, 3, 5, and 7 would have been obvious over "over Chardon (EX1005), alone or in view of HDMI Specification (EX1010), and Stecyk (EX1006)." Pet. 36.

1. Overview of Chardon

Chardon is a U.S. Patent Application Publication published on October 4, 2012 of an application filed March 31, 2011[4]. Ex. 1005, codes (43), (22). Chardon relates to configuring a remote-control system including by querying a display for identification data for the display and storing the display's identification data and command codes configured for controlling the display. *Id.* at code (57), ¶ 7. Chardon describes an entertainment system with a set of HDMI appliances including, for example, an HDMI

[4] Petitioner contends that Chardon qualifies as prior art under pre-AIA 35 U.S.C. § 102(a) and (e). Pet. 4. Patent Owner contends that Chardon is not prior art under pre-AIA 35 U.S.C. § 102(a), but does not dispute that Chardon qualifies as prior art under pre-AIA 35 U.S.C. § 102(e). Prelim. Resp. 14–15. On the current record and for the purposes of this decision, we determine that Chardon is prior art at least under pre-AIA 35 U.S.C. § 102(e).

display and speakers, and HDMI sources such as a cable or a satellite set-top-box, a personal video recorder, a DVD player, a personal computer, among others. *Id.* ¶¶ 30, 37, Fig. 1. A multi-media gateway having a remote-control engine may be included in the entertainment system. *Id.* ¶¶ 30–32, 44. The entertainment system also supports access, for example via a connection to a remote server, to a database that stores sets of command codes, such as sets of IR command codes and CEC command codes. *Id.* ¶¶ 30–35. For example, the remote database may store sets of command codes such as sets of IR and CEC command codes, and a link that associates a given appliance with the set of command codes configured to control that appliance. *Id.* ¶ 33.

The remote control system includes a memory and processor to store and operate a remote-control engine application. *Id.* ¶¶ 39, 43. Sets of command codes including IR and CEC command codes may be stored in memory of the remote control. *Id.* ¶¶ 39, 43. The remote control also may include an IR transceiver, an RF transceiver, and a bus that includes a CEC bus or communication port over which CEC command codes may be communicated to HDMI appliances. *Id.* ¶¶ 38–40, 43.

In one embodiment, "the remote-control engine operating on the remote-control system of the multimedia gateway is configured to collect the Extended Display Identification Data (EDID) of an HDMI display." *Id.* ¶ 44. This may occur "if the multi-media gateway and HDMI display are coupled by an HDMI cable." *Id.* "The remote-control engine of the multi-media gateway or the remote control device may query the HDMI display via a two-way IR or RF communication to collect the EDID." *Id.*; *see also id.* ¶ 47. "The multi-media gateway or the remote-control device may be configured to 'link' the EDID for the HDMI display with the locally stored

set of command codes (IR command codes and/or CEC command codes) for the HDMI display." *Id.*

In operation, the remote control engine sends a CEC command code to an HDMI appliance to be executed. *Id.* ¶ 58, Fig. 5, element 500. If a response is not received indicating that the command code has been received and executed, an IR command code is sent to the HDMI appliance. *Id.* ¶ 58, Fig. 5, elements 510, 530, 540; *see also id.* ¶ 62, Fig. 6.

2. Overview of HDMI 1.3a

HDMI 1.3a is version 1.3a of the High-Definition Multimedia Interface specification. Ex. 1010, 17. "The High-Definition Multimedia Interface is provided for transmitting digital television audiovisual signals from DVD players, set-top boxes and other audiovisual sources to television sets, projectors and other video displays." *Id.* HDMI carries audio, video, control, and status information. *Id.* HDMI 1.3a describes transmitting the audiovisual signals from an audiovisual source (a device with HDMI output) to an HDMI sink (a device with an HDMI input) such as television sets, projectors, and other video displays. *Id.* at 17, 21. HDMI 1.3a describes an optional CEC line "for high-level user control of HDMI-connected devices." *Id.* at 139; *id.* at 24, 128.

HDMI 1.3a describes a physical address discovery algorithm that allocates physical addresses for each device upon power-up or "whenever a new device is added" to an HDMI cluster, indicated by a change in the HPD ("Hot Plug Detect") signal. *Id.* at 139–142. An HDMI source can access an HDMI sink's Enhanced Extended Display Identification Data ("E-EDID"), which contains an EDID structure, to discover the configuration or capabilities of the sink. *Id.* at 25, 128, 134. A high voltage level for the HPD signal indicates that the E-EDID for a sink is readable. *Id.* at 139.

3. Overview of Stecyk

Stecyk relates to a home theater network system including a control system providing centralized control of the devices in the home theater network system. Ex. 1006 ¶¶ 1, 47, 70. A digital module ("DM") allows a user to operate the devices of the home theater network. *Id.* ¶ 71. The digital module includes a device management system module that, in turn, maintains a device container list and a device interconnect list. *Id.* ¶¶ 74, 77. The device container list "is a list, or database, of all the supported devices" of the home theater network, with information about each device placed into a device container object in memory. *Id.* ¶ 78. A device container object includes, for a device, a logical device ID, model number ID, and IR code file (for IR-signal controlled devices) containing IR codes for each supported remote control device key for the device. *Id.* ¶¶ 78, 85–87.

Stecyk discloses that when an audiovisual receiver device is detected in the system, "the user is prompted to identify the device in the control system from a list of known devices." *Id.* ¶¶ 7–8, 45. If the user indicates that the device is not a known device, the user may be presented with a learning mode by which the system learns the control codes for the device. *Id.* ¶¶ 45, 99, 102–104, Figs. 9B, 10C, 10D.

4. Asserted Grounds

Petitioner characterizes the grounds of the Petition as using HDMI 1.3a "to fill in any perceived gaps" in the teachings of Chardon "with respect to the operation of HDMI-compliant devices," and on Stecyk "in the event that the Board does not agree" that Chardon teaches certain features of claim 1. Pet. 3. Petitioner characterizes its challenge as one of obviousness "over Chardon . . . , alone or in view of [HDMI 1.3a], and Stecyk." Pet. 36. In a header immediately following that statement, Petitioner characterizes its

sole ground as relating to obviousness "[o]ver Chardon, and in view of HDMI Specification and Stecyk." *Id.*

Patent Owner argues that, to the extent the Petitioner characterizes the Petition "as including an additional unnamed ground of Chardon," such a characterization would be improper, and asserts that "Petitioner does not assert Chardon alone as a ground" and that "Chardon alone is not one of the available grounds for institution." Prelim. Resp. 16, 19, 24.

The Petition must set forth "with particularity, each claim challenged, the grounds on which the challenge to each claim is based, and the evidence that supports the grounds for the challenge to each claim." 35 U.S.C. § 312(a)(3); *see Adaptics Ltd. v. Perfect Co.*, IPR2018-01596, Paper 20 (Mar. 6, 2019) (informative) (declining to institute *inter partes* review when the petition presents voluminous grounds not presented with sufficient particularity.) We are cautioned that, in our decisions on institution, we do not "enjoy[] a license to depart from the petition and institute a different inter partes review of [our] own design." *SAS Institute, Inc. v. Iancu*, 138 S. Ct. 1348, 1356 (2018). We need not, however, recite the grounds from the Petition *in haec verba* as long as we rely on the discussion in the Petition and on the same citations from the prior art and, in doing so, do not change unpatentability theories from those of the Petition. *See Sirona Dental Systems GmbH v. Institut Straumann AG*, 892 F.3d 1349, 1356 (Fed. Cir. 2018).

We examine the arguments made in the Petition to determine whether it sufficiently sets forth an argument for obviousness over Chardon alone. While the Petition includes references to Stecyk as teaching elements of claim 1 (relating to limitations [1.P] and [1.3]) and of claim 5, in each case Stecyk is described as being relied on in the alternative to reliance on the

teachings of Chardon. Pet. 38–40, 47–56, 65–69. HDMI 1.3a is relied upon to support what one of ordinary skill in the art would have known about Chardon's described HDMI devices in the discussion of limitation [1.2] of claim 1 and of claim 7. *Id.* at 43–45, 69–71.

In no case does the Petition argue that Stecyk teaches or suggests an element of the challenged claims except in the alternative to a teaching or suggestion of Chardon. *Id.* at 38–40, 47–56, 65–69. In no case does the Petition directly argue that HDMI 1.3a teaches or suggests an element of the challenged claims; instead the Petition relies on HDMI 1.3a to buttress contentions regarding what one of ordinary skill in the art would have recognized regarding Chardon's use of HDMI. Pet. 43–45, 69–71. We determine that the Petition sufficiently sets forth the argument that Chardon teaches or suggests all the limitations of the challenged claims, in addition to alternative arguments for certain limitations relating to the teachings of Stecyk, of the combination of Chardon and Stecyk, and of the combination of Chardon and HDMI 1.3a.

5. Claim 1

Petitioner argues that claim 1 is unpatentable as obvious over Chardon, or alternatively, over Chardon and Stecyk and/or HDMI 1.3a. Pet. 2–3, 27–58.

a) Claim 1 – preamble – "A universal control engine, comprising:"

While not arguing that the preamble is limiting, Petitioner asserts that Chardon teaches or suggests a universal control engine in Chardon's multi-media gateway that includes a remote control system and a remote control engine, and that uses stored command codes to control connected devices in a home theater system. Pet. 38–40 (citing Ex. 1005 ¶¶ 7, 30, 36, 43, Fig. 1; Ex. 1003 ¶¶ 163–165). Alternatively, Petitioner argues that Stecyk describes

a universal control engine. *Id.* at 32–33, 40 (citing Ex. 1006 ¶¶ 5, 50; Ex. 1003 ¶¶ 166–168).

Patent Owner does not present any arguments regarding the teachings of Chardon or Stecyk with respect to this recitation.

We do not determine whether the preamble is limiting. On the present record and for the purposes of institution, Petitioner has shown sufficiently, if the preamble is determined to be limiting, that Chardon teaches the preamble of claim 1 and, alternatively, that Stecyk teaches the preamble.

b) Claim 1 – limitation [1.1] – "a processing device; and a memory device having stored thereon instructions executable by the processing device, the instructions, when executed by the processing device, causing the universal control engine"

Petitioner asserts that Chardon's remote control system has a processor and a memory with stored executable instructions. Pet. 40–42 (citing Ex. 1005 ¶¶ 36, 38, 39, 88, Fig. 2, elements 205, 210; Ex. 1003 ¶¶ 170, 171). Petitioner further argues that Chardon's disclosure that the stored instructions are used to configure the UCE to communicate command codes to the HDMI appliances teaches that the executable instructions cause the universal control engine to store command codes and causing them to be used. *Id.* at 41–42 (citing Ex. 1005 ¶¶ 34, 38–40, 43, 46; Ex. 1003 ¶ 171).

Patent Owner does not present any arguments regarding the teachings of Chardon with respect to this limitation.

On the present record and for the purposes of institution, Petitioner has shown sufficiently that Chardon teaches this limitation.

c) Claim 1 – limitation [1.2] – "to respond to a detected presence of an intended target appliance within a logical topography of controllable appliances which includes the universal control engine"

(1) Chardon

Petitioner asserts that Chardon teaches the logical topography of controllable appliances in the description of controllable appliances such as HDMI display and HDMI sources that each are connected via HDMI cables and can remotely control each other. Pet. 43–46 (citing Ex. 1005 ¶¶ 3, 30, 44, Fig. 1 elements 105a, 105b; Ex. 1003 ¶¶ 177, 178, 180, 181). Petitioner argues that Chardon's remote control system responds to the detected presence of an appliance by linking a received EDID from an HDMI display with command codes used to control the display. *Id.* at 46 (citing Ex. 1005 ¶ 44; Ex. 1003 ¶¶ 178, 180).

Patent Owner does not present any arguments regarding the teachings of Chardon with respect to this limitation.

(2) Chardon and HDMI 1.3a

Petitioner further contends that one of ordinary skill in the art "would have recognized that such a logical topography where all HDMI-compatible devices can communicate with each other is an important feature of HDMI's CEC [standard]," and that the appliances in Chardon would be controlled as explained in HDMI 1.3a. *Id.* at 43–45 (citing Ex. 1005 ¶¶ 1, 3, 30, Fig. 1; Ex. 1010, 25, 139, 142[5], 195; Ex. 1003 ¶¶ 73–76, 177–179). Specifically, Petitioner argues that one of ordinary skill would have recognized that the collection of the EDID data of the HDMI display (the "intended target

[5] The Petition cites to paragraph 126 of Ex. 1010 for the "physical address discovery algorithm," however this algorithm appears on page 142 of the document, internally paginated as 126 of 156 in one subsection of the document.

appliance") could have, for example, been accomplished via HDMI's HPD as described in HDMI 1.3a. *Id.* at 45 (citing Ex. 1010, 139; Ex. 1003 ¶ 179).

With respect to the combination of Chardon and HDMI 1.3a, Petitioner contends that Chardon "unambiguously relies on the features and capabilities of HDMI-compliant devices" and that therefore "a person of ordinary skill in the art would have thus turned to [HDMI 1.3a] to fill in any details in Chardon with respect to how HDMI-capable devices operate." *Id.* at 29 (citing Ex. 1003 ¶¶ 140–141). Petitioner additionally argues that "skilled artisans . . . relied on well-known standards" like the HDMI 1.3a standard to simplify the control of HDMI appliances and that Chardon's appliances are "HDMI appliances" that would be controlled as explained in the HDMI specification. *Id.* at 37, 43–44 (citing Ex. 1005 ¶¶ 1, 3, 30; Ex. 1003 ¶¶ 73–76, 177, 178).

Patent Owner argues that Petitioner has failed to provide a motivation for one of ordinary skill to combine Chardon and HDMI 1.3a and has not asserted that one of ordinary skill would have had a reasonable expectation of success in combining Chardon and HDMI 1.3a. Prelim. Resp. 20–24.

Patent Owner does not address Petitioner's statement that one of ordinary skill would have used an HDMI specification to determine details regarding the HDMI appliances described in Chardon. *Id.* On this record and at this point, we find this motivation to examine an HDMI specification to determine details regarding the functioning of HDMI as used in Chardon sufficiently persuasive. *Cf. Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355 (Fed. Cir. 2011) (in an indefiniteness context, holding that "an inventor need not explain every detail because a patent is read by those of skill in the art" and that "[w]ell known industry standards need not be repeated in a patent").

Patent Owner additionally argues that in consulting an HDMI standard, one of ordinary skill would not have had an expectation of success, because at the relevant time, HDMI 1.3a had been superseded by more recent versions of the HDMI standard, and one of ordinary skill, if motivated to look to an HDMI standard, would have looked only to the current version at the time. Prelim. Resp. 21–22 (citing Ex. 2001 ¶¶ 74–79). Petitioner does not describe why version 1.3a of the HDMI standard is used in its challenge, as opposed to other versions, excepting observing that it qualifies as prior art non-patent literature under 35 U.S.C. § 102(b) due to its availability more than a year before, and, in fact, "long before" the Petitioner-identified earliest priority date for the '853 patent. Pet. 24 (citing Ex. 1003 ¶ 67). Patent Owner cites Dr. Turnbull's testimony that during the relevant time period, one of ordinary skill would have used the most current specification possible "to ensure the longest lifetime for a particular product" and "to take full advantage of the features available in the current version of the HDMI standard." Prelim. Resp. 22–23 (citing Ex. 2001 ¶¶ 79–82).

However, while Patent Owner describes one of ordinary skill in the art as optimally preferring the most current specification, it appears from the testimony and evidence presented that one of ordinary skill would have had an expectation of success in using an older version of the HDMI standard, such as HDMI 1.3a, to explain details of HDMI implementation not sufficiently set forth in Chardon. For purposes of deciding whether to institute an *inter partes* review, we view genuine issues of material fact in a light most favorable to the petitioner. 37 C.F.R. § 42.108(c). In this case, on the present record, we find that, in doing so, Petitioner has sufficiently shown a motivation to combine Chardon and HDMI v3.1a and a reasonable expectation of success in doing so.

(3) Conclusion

On the present record and for the purposes of institution, Petitioner has shown sufficiently that Chardon teaches this limitation and, alternatively, that the combination of Chardon and HDMI 1.3a teaches limitation [1.2].

d) Claim 1 – limitation [1.3] – "by using an identity associated with the intended target appliance to create a listing comprised of at least a first communication method and a second communication method different than the first communication method"

(1) Chardon

Petitioner argues that Chardon creates a database of IR and CEC command codes, including identifying and storing previously unrecognized CEC command codes, and applying similar identification and storage techniques to IR command codes. Pet. 47–50 (citing Ex. 1005 ¶¶ 20, 33, 39, 48, 52, 53, 55, 56, 88; Ex. 1003 ¶¶ 182–189). Petitioner further describes Chardon's creation of a link between EDID information for HDMI appliances. Pet. 50–52 (citing Ex. 1005 ¶¶ 7, 44, 51; Ex. 1003 ¶¶ 190–196).

Chardon describes, after the collection of EDID from a display, the linking of the EDID "with the locally stored set of command codes (IR command codes and/or CEC command codes) for the HDMI display." Ex. 1005 ¶ 44. Chardon further describes that "[t]he link may be an entry in a local memory in a file, database, etc. where the EDID is stored with the sets of command codes." *Id.* Petitioner argues that, while Chardon does not use the word "listing," one of ordinary skill would have understood that the database of Chardon constitutes such a listing. Pet. 53 (citing Ex. 1003 ¶¶ 194–196).

Patent Owner does not present any arguments regarding the teachings of Chardon with respect to this limitation.

(2) Chardon and Stecyk

Petitioner argues that Chardon and Stecyk teaches or suggests limitation [1.3] of claim 1. Pet. 53–56. Petitioner argues that Stecyk discloses a device container list ("DCL") that is a list of all supported devices in a home theater network system. Pet. 55 (citing Ex. 1006 ¶ 78; Ex. 1003 ¶ 199). The DCL contains a device container object ("DCO") for each device that contains model number ID and, where relevant, an IR code file. *Id.* (citing Ex. 1006 ¶ 78, 95; Ex. 1003 ¶ 200). *Id.* (citing Ex. 1003 ¶¶ 167, 201). Petitioner further argues that one of ordinary skill in the art would have used known techniques to modify Chardon's command code databases to include Stecyk's listing of supported devices, in an individual object for each device containing ID information and code information. *Id.* at 55–56 (citing Ex. 1003 ¶¶ 167, 201). Petitioner argues that such modification would have been "a simple use of known techniques" to improve similar devices in the same way, and a simple substitution of one known element for another to obtain predictable results. *Id.* at 56 (citing Ex. 1003 ¶¶ 167, 201).

Patent Owner argues that one of ordinary skill would not have been motivated to make this combination with any reasonable expectation of success. Prelim. Resp. 25–31. Patent Owner specifically argues that no motivation has been provided for the combination, and that a mere showing that the references could be combined is not a sufficient showing for motivation to combine. *Id.* at 25–26. Petitioner's expert, Dr. Russ, testifies that the results of substituting the device container of Stecyk for the database of Chardon would be predictable. Ex. 1003 ¶ 201 (cited at Pet. 55–56).

Patent Owner's expert, Dr. Turnbull, however, asserts that Stecyk's device container list and device interconnect list, which are maintained in

Stecyk's device management system ("DMS"), "cannot work without the DMS." Ex. 2001 ¶ 98 (cited at Prelim. Resp. 30). Patent Owner argues that "[t]he DMS determines 'what devices to connect and operate, what device connections to break, how to accomplish the device connections and disconnects, and how to operate a particular device'" and implies that all of these aspects of Stecyk's DMS are necessary and would need to be incorporated into Chardon. Prelim. Resp. 30 (quoting Ex. 1006 ¶ 77). However, the functions of Stecyk's DMS relevant to the listing of devices and command codes ("how to operate a particular device") are also functions of the remote-control engine of Chardon, and it is unclear why the complete incorporation of Stecyk's DMS would be required in order to use the structure of the data storage taught in Stecyk.

Again, for the purposes of institution decisions, we view genuine issues of material fact in a light most favorable to the petitioner. 37 C.F.R. § 42.108(c). Therefore, in this case, for the purposes of institution and on the present record, we find that Petitioner has sufficiently shown that the combination would be according to known methods and yield predictable results. *KSR*, 550 U.S. at 416 ("The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.")

Patent Owner additionally argues that there are "numerous differences between Chardon and Stecyk that teach away from combining with one another." Prelim. Resp. 28. Patent Owner argues that Chardon is focused on HDMI devices, while Stecyk can detect non-HDMI devices. *Id.* at 28–29 (citing Ex. 1003 ¶¶ 150, 164; Ex. 1005 at code (57); Ex. 2001 ¶¶ 53, 54, 59, 60, 89, 90). Patent Owner further argues that Stecyk teaches a centralized system but Chardon includes decentralized features, in which HDMI

appliances may communicate with each other. *Id.* at 29–30 (citing Ex. 1003 ¶¶ 132, 152; Ex. 1005 ¶ 3; Ex. 1006 ¶ 5; Ex. 2001 ¶¶ 88–91, 93–95). Patent Owner characterizes Stecyk as therefore teaching away from a combination with Chardon. *Id.* at 29–30. However, we conclude that Stecyk, merely by including non-HDMI devices and describing appliances communicating with each other, does not "teach away" from the combination because it "is not so credible or persuasive of a contrary teaching that it would have deterred the skilled artisan from using the teachings of" Chardon regarding systems of only HDMI appliances or which include decentralized features. *In re Young*, 927 F.2d 588, 592 (Fed. Cir. 1991).

(3) Conclusion

On the present record and for the purposes of institution, Petitioner has shown sufficiently that Chardon teaches limitation [1.3] of claim 1 and, alternatively, that the combination of Chardon and Stecyk teaches limitation [1.3] of claim 1.

e) Claim 1 – limitation [1.4] – "for use in controlling each of at least a first functional operation and a second functional operation of the intended target appliance"

Petitioner argues that Chardon's database contains a CEC code and an IR code for the same functional operation for an HDMI appliance, so that IR code can be used as a backup in case the CEC code is issued and fails. Pet. 56–58 (citing Ex. 1005 ¶¶ 4, 40, 48; Ex. 1003 ¶¶ 204, 205). Petitioner further contends that one of ordinary skill would have recognized that Chardon uses this database "to control all, or substantially all, functional operations of the target appliances subject to remote control," and thus that Chardon discloses the first and second functional operations of an HDMI

appliance as recited in limitation [1.4] of claim 1. *Id.* at 58–59 (citing Ex. 1005 ¶¶ 3, 7, 66, 88; Ex. 1003 ¶ 206).

Patent Owner does not present any arguments regarding the teachings of Chardon with respect to this limitation.

On the present record and for the purposes of institution, Petitioner has shown sufficiently that Chardon teaches this limitation.

f) Claim 1 – limitation [1.5] – "and [causing the universal control engine] to respond to a received request from a controlling device intended to cause the intended target appliance to perform a one of the first and second functional operations"

Petitioner argues that Chardon teaches that a remote control device with a plurality of buttons is used, and one of ordinary skill would have understood that the remote would have been capable of sending requests for various functional operations and that the remote control engine of Chardon would have responded to the received request by transmitting a command to perform a functional operation. Pet. 59–61 (citing Ex. 1005 ¶¶ 31, 43, Fig. 1, element 115; Ex. 1003 ¶¶ 210–212).

Patent Owner does not present any arguments regarding the teachings of Chardon with respect to this limitation.

On the present record and for the purposes of institution, Petitioner has shown sufficiently that Chardon teaches this limitation.

g) Claim 1 – limitation [1.6] – "[to respond to a received request] by causing a one of the first and second communication methods in the listing of communication methods that has been associated with the requested one of the first and second functional operations to be used to transmit to the intended target appliance a command for controlling the requested one of the first and second functional operations of the intended target appliance"

Petitioner argues that the multi-media gateway of Chardon would communicate the command code to the target appliance, and if the

communication was unsuccessful, would communicate a code from the database using a second communication method, to control a functional operation of the intended target appliance. Pet. 62–63 (citing Ex. 1005 ¶¶ 12, 43; Ex. 1003 ¶¶ 214).

Patent Owner does not present any arguments regarding the teachings of Chardon with respect to this limitation.

On the present record and for the purposes of institution, Petitioner has shown sufficiently that Chardon teaches this limitation.

h) Claim 1 – Conclusion

For the reasons discussed above, and notwithstanding Patent Owner's arguments to the contrary, at this stage of the proceeding Petitioner demonstrates a reasonable likelihood of showing claim 1 is unpatentable over Chardon. Additionally, for the reasons discussed above, at this stage of the proceeding Petitioner demonstrates a reasonable likelihood of showing claim 1 is unpatentable over Chardon and HDMI 1.3a and/or Stecyk.

6. Claim 3

Claim 3 depends from claim 1, and further recites that "the instructions cause the universal control engine to initiate a detection of the presence of the intended target appliance within the logical topography of controllable appliances."

Petitioner reiterates the arguments relating to Chardon teaching or suggesting "responding to a detected presence of an intended target appliance" and actions in Chardon in response to such detected presence. Pet. 64. For the claimed initiation of such detection, Petitioner argues that the initiation of detection is taught or suggested by the HPD functionality in HDMI 1.3a. Pet. 64–65 (citing Pet. 44–45 (itself citing Ex. 1010, 139; Ex. 1003 ¶ 179); Ex. 1003 ¶ 218).

Patent Owner does not present any additional arguments with respect to claim 3.

While Petitioner asserts that Chardon "discloses" the initiation, the HPD functionality described is part of HDMI 1.3a and not mentioned in Chardon, and thus we do not find sufficient evidence that the initiation of detection is taught or suggested in Chardon. However, on the present record and for the purposes of institution, Petitioner demonstrates a reasonable likelihood of showing claim 3 is unpatentable over Chardon and HDMI 1.3a, or over Chardon, HDMI 1.3a, and Stecyk.

7. Claim 5

Claim 5 depends from claim 1, and further recites that "the instruction cause [sic] the universal control engine to cause a prompt to be displayed in a display associated with the universal control engine in response to a detected presence of the intended target appliance within a logical topography of controllable appliances, the prompt requesting a user to provide data indicative of the identity associated with the intended target appliance."

Petitioner contends that Chardon, or alternatively, Chardon and Stecyk teach or suggest the additional limitations of claim 5. Pet. 65–69. Petitioner notes that Chardon discloses user interactions including collecting the make and model of an HDMI appliance from the user, which the Petitioner argues is "data indicative of the identity associated with the intended target appliance." *Id.* at 65–66 (citing Ex. 1005 ¶¶ 8, 47, 48; Ex. 1003 ¶¶ 221–222). Petitioner argues that one of ordinary skill in the art would have understood that in order to query a user effectively, a prompt would be displayed on a display. *Id.* at 66 (citing Ex. 1003 ¶¶ 222–223).

Alternatively, Petitioner contends that Stecyk teaches operations for detecting the existence of unidentified appliances, including via prompts displayed to a user. *Id.* at 65–69 (citing Ex. 1006 ¶ 78, Fig. 10A; Ex. 1003 ¶¶ 224–230).

Patent Owner does not present any additional arguments with respect to claim 3. On the present record and for the purposes of institution, Petitioner demonstrates a reasonable likelihood of showing claim 5 is unpatentable over Chardon, or over Chardon and HDMI 1.3a and/or Stecyk.

8. Claim 7

Claim 7 depends from claim 1, and further recites that "the instructions cause the universal control engine to initiate an interrogation of the intended target appliance to determine which of a plurality of communication methods are supported by the appliance for use in receiving a command for controlling at least one of the first and second functional operations and using results obtained from the interrogation to create the listing."

Petitioner relies on prior arguments with respect to Chardon teaching or suggesting the initiation of an interrogation of a target appliance. Pet. 69–70. However, as discussed *supra* at Section IV.D.6, we find this taught or suggested only in the combination of Chardon and HDMI 1.3a. Petitioner relies on prior arguments also with respect to the discussion of the creation of the listing. Pet. 70 (citing Ex. 1003 ¶ 223). Petitioner further argues that one of ordinary skill "would have understood that Chardon's communication with the intended target appliance to receive the EDID initiates an interrogation that subsequently determines physical and logical addresses of the intended target appliance, and linked listing of CEC and IR command codes used to control the intended target appliance. Moreover, the

interrogation further includes a handshake that determines which of the communication methods (e.g., IR or CEC) are supported by the appliance or use in receiving a command for controlling the intended target appliance." *Id.* at 70–71 (citing Ex. 1003 ¶¶ 231-234).

Patent Owner does not present any additional arguments with respect to claim 7.

On the present record and for the purposes of institution, Petitioner demonstrates a reasonable likelihood of showing claim 7 is unpatentable over Chardon and HDMI 1.3a, and, alternatively, over Chardon, HDMI 1.3a, and Stecyk.

V. CONCLUSION

After considering the evidence and arguments presented in the Petition, we determine the information presented establishes a reasonable likelihood that Petitioner would prevail in showing that at least one claim of the '853 patent is unpatentable. At this preliminary stage, we have not made a final determination with respect to the patentability of the challenged claims or any underlying factual and legal issues.

VI. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review is instituted with respect to claims 1, 3, 5, and 7 of the '853 patent on the grounds set forth in the Petition; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial, which commences on the entry date of this decision.

PETITIONER:

Jon E. Wright
Lestin L. Kenton
Daniel S. Block
Ali Allawi
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
jwright-PTAB@sternekessler.com
lkenton-PTAB@sternekessler.com
dblock-PTAB@sternekessler.com
allawi-PTAB@stemekessler.com

PATENT OWNER:

Benjamin S. Pleune
Ryan W. Koppelman
Thomas W. Davison
James H. Abe
Caleb J. Bean
Derek S. Neilson
Nicholas T. Tsui
ALSTON & BIRD LLP
ben.pleune@alston.com
ryan.koppelman@alston.com
tom.davison@alston.com
james.abe@alston.com
caleb.bean@alston.com
derek.neilson@alston.com
nick.tsui@alston.com