Paper No. 10 Entered: July 2, 2018

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

COMCAST CABLE COMMUNICATIONS, LLC, Petitioner,

v.

PROMPTU SYSTEMS CORPORATION, Patent Owner.

Case IPR2018-00345 Patent 7,047,196 B2

Before JAMESON LEE, ROBERT L. KINDER, and ALEX S. YAP, *Administrative Patent Judges*

YAP, Administrative Patent Judge.

DECISION Institution of *Inter Partes* Review 35 U.S.C. § 314(a)

I. INTRODUCTION

Petitioner, Comcast Cable Communications, LLC. ("Comcast"), filed a Petition (Paper 1, "Pet.") requesting an *inter partes* review of claims 14, 15, 17–19, 25, 26, 53–55, 61, 62, and 64–66 of U.S. Patent 7,047,196 B2 (Ex. 1001, "the '196 Patent"). Patent Owner, Promptu Systems Corporation. ("Promptu"), filed a Preliminary Response (Paper 8, "Prelim. Resp.").

Under 35 U.S.C. § 314(a), an *inter partes* review may not be instituted unless the information presented in the Petition shows "there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition." On April 24, 2018, the Supreme Court held that a final written decision under 35 U.S.C. § 318(a) must decide the patentability of all claims challenged in the petition. *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1355 (2018). Taking into account the arguments presented in Patent Owner's Preliminary Response, we determine that the information presented in the Petition establishes that there is a reasonable likelihood that Petitioner would prevail in showing the unpatentability of at least one challenged claims. Accordingly, we institute an *inter partes* review of *all* challenged claims (14, 15, 17–19, 25, 26, 53–55, 61, 62, and 64–66) of the '196 Patent, based on all grounds raised in the Petition. *See* April 26, 2018, *Guidance on the Impact of SAS on AIA Trial Proceedings* ("SAS Guidance"). ¹

Our factual findings and conclusions at this stage of the proceeding are based on the evidentiary record developed thus far. This is not a final

¹ Available at https://www.uspto.gov/patents-application-process/patent-trial-and-appeal-board/trials/guidance-impact-sas-aia-trial.

decision as to the patentability of claims for which *inter partes* review is instituted. Our final decision will be based on the record as fully developed during trial.

A. Related Matter

The '196 Patent is the subject of a pending civil action, *Promptu Systems Corporation v. Comcast Corporation and Comcast Cable Communications, LLC*, Case No. 2:16-cv-06516 (E.D. Pa.). Patent Owner's Mandatory Notices (Paper 5), 2. Petitioner states that a related "petition for *inter partes* review of different claims" of the '196 Patent was also filed "along with [its] petition" for this case. Pet. x; *see also* IPR2018-00344, Paper 1.

B. The '196 Patent

The '196 Patent, titled "System and Method of Voice Recognition Near a Wireline Node of a Network Supporting Cable Television and/or Video Delivery," was issued on May 16, 2006. Ex. 1001, [45]. It issued from U.S. Patent Application 09/785,375, filed on February 16, 2001, and claims the benefit of U.S. Provisional Application No. 60/210,440 filed on June 8, 2000. *Id.* at [21], [22], [60]. The '196 Patent generally relates to a "method and system of speech recognition presented by a back channel from multiple user sites within a network." Ex. 1001, Abstract.

According to the Specification, "a centralized wireline node refers to a network node providing video or cable television delivery to multiple users using a wireline physical transport between those users at the node." *Id.* at 1:66–2:2. The Specification states that "the problems of speech recognition

at a centralized wireline node in a network supporting video delivery or cable television delivery have not been addressed by [the] prior art." *Id.* at 1:63–66. The Specification describes a "preferred embodiment [of the claimed invention that uses] a back channel containing a multiplicity of identified speech channels from a multiplicity of user sites presented to a speech processing system at a wireline node in a network that supports at least one of cable television delivery and video delivery." *Id.* at Abstract. Figure 3 of the '196 Patent is reproduced below.

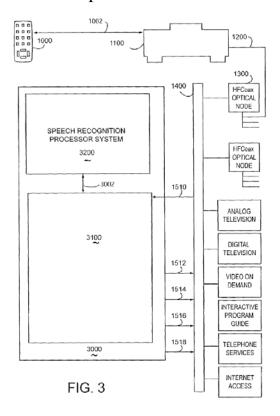


Figure 3 illustrates:

a remote control unit 1000 coupled 1002 to set-top apparatus 1100, communicating via a two-stage wireline communications system containing a wireline physical transport 1200 through a distributor node 1300, and through a high speed physical transport 1400, *possessing various delivery points 1510* and entry points 1512–1518 to a tightly coupled server farm 3000,

with one or more gateways 3100, and one or more tightly coupled server arrays 3200[.]

Ex. 1001, 7:17–25, emphasis added. Server farm 3000 includes a central "speech recognition processor system 3200" for processing speech signals from user sites, such as from subscribers' set-top boxes. *Id.* at Fig. 3. The Specification further notes that "[t]he back channel is from a multiplicity of user sites and is presented to a speech processing system at the wireline node in the network." *Id.* at 22:12–14. Specifically, "[t]he speech signal transmitted from a subscriber's set-top box, or set-top appliance, 1100[,] is received [at the] 1510 [entry points] by the five to 40 MHz data receiving equipment." *Id.* at 12:21–23, 12:57–58. Figure 10 of the '196 Patent is reproduced below.

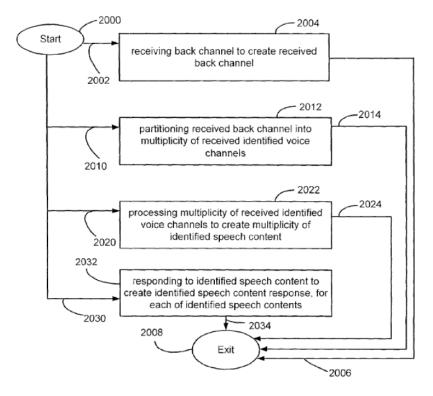


Figure 10 "depicts a flowchart of a method using a back channel from a multiplicity of user sites containing a multiplicity of identified speech channels presented to a speech processing system at a wireline node in a

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network supporting cable television delivery in accordance with the invention." *Id.* at 7:42–46.

C. Challenged Claims

Claims 14 and 53 are independent. Claim 14 is a system claim directed to a "program system controlling at least part of a speech recognition system coupled to a wireline node in a network" (*id.* at 50:65–53:21), while claim 53 is a method claim for "operating at least part of a speech recognition system coupled to a wireline node in a network" (*id.* at 58:12–29). Claims 15, 17–19, 25, and 26 depend directly or indirectly from claim 14, while claims 54, 55, 61, 62, and 64–66 depend directly or indirectly from claim 53. Independent claims 14 and 53, reproduced below, are illustrative of the challenged claims.

14. A program system controlling at least part of a speech recognition system coupled to a wireline node in a network, said program system comprising the program steps of:

processing a multiplicity of received identified speech channels to create a multiplicity of identified speech content; and

responding to said identified speech content to create an identified speech content response that is unique to each of said multiplicity of identified speech contents;

wherein said speech recognition system is provided said multiplicity of received identified speech channels based upon a received back channel at said wireline node from a multiplicity of user sites coupled to said network;

wherein each of said program steps reside in memory accessibly coupled to at least one computer included in said speech recognition system; wherein said at least one computer communicatively couples through said wireline node to said multiplicity of user sites; and

wherein said network supports at least one of the collection comprising: cable television delivery to said multiplicity of user sites; and video delivery to said multiplicity of user sites.

Ex. 1001, 50:65-53:21.

53. A method of operating at least part of a speech recognition system coupled to a wireline node in a network, comprising the steps of:

processing a multiplicity of received identified speech channels to create a multiplicity of identified speech content; and

responding to said identified speech content to create an identified speech content response that is unique to each of said multiplicity of identified speech contents;

wherein said speech recognition system is provided said multiplicity of received identified speech channels based upon a received back channel at said wireline node from a multiplicity of user sites coupled to said network;

wherein said network supports at least one of the collection comprising: cable television delivery to said multiplicity of user sites; and video delivery to said multiplicity of user sites.

Ex. 1001, 58:12-29.

D. References Relied Upon

Petitioner relies on the following references:

Exhibit	Reference
1010	United States Patent No. 7,013,283 B1, issued March 14, 2006 ("Murdock").

Exhibit	Reference
1012	United States Patent No. 6,513,063 B1, issued January 28, 2003 ("Julia").
1013	United States Patent No. 6,490,727 B1, issued December 3, 2002 ("Nazarathy").
1014	United States Patent No. 6,650,624 B1, issued November 18, 2003 ("Quigley").
1015	United States Patent No. 5,477,262, issued December 19, 1995 ("Banker").
1016	United States Patent No. 6,314,573 B1, issued November 6, 2001 ("Gordon").

Pet. 1–2. Petitioner also relies on the Declaration of Christopher Schmandt (Ex. 1019, the "Schmandt Declaration") and on the Declaration of Jeffrey Lau (Ex. 1018, "Lau Declaration").

1. Murdock (Ex. 1010)

Murdock describes a "system and a concomitant method for providing programming content in response to an audio signal." Ex. 1010, Abstract. Figure 1 of Murdock is reproduced below.

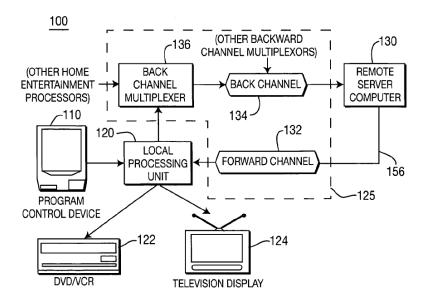


FIG. 1

Figure 1 "depicts a high-level block diagram of a voice control system." Ex. 1010, 1:64–65. The program control device 110 can be "a portable or hand-held controller." *Id.* at 2:35–36. It can "capture[] the input verbal command signal from the user of the voice activated control system 100." *Id.* at 2:22–24. "Once the input command signal is received, the program control device 110 performs a transmission, e.g., a wireless transmission, of the command signal to the local processing unit 120," which "may include a set top terminal, a cable box, and the like." *Id.* at 2:31–34, 45–47. The input command signal is then transmitted to remote server computer 130 via back channel 134. *Id.* at 3:1–12. Remote server computer 130 "performs speech recognition on the received signal . . . retrieves the requested program content from a program database, and transmits the retrieved program content via the forward channel 132 to the local processing unit 120." *Id.* at 3:15–36. "Upon receipt of the requested programming content, the local processing unit 120 transmits the received content to the video player 122 or the television recorder 124." *Id.* at 2:61–66.

2. Julia (Ex. 1012)

Julia describes a "navigation of electronic data by means of spoken natural language requests." Ex. 1012, 1:16–18. Figure 1a of Julia is reproduced below.

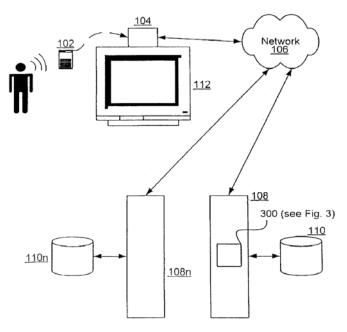


Fig. 1a

Figure 1a "illustrates a system providing a spoken natural language interface for network-based information navigation . . . with server-side processing of requests." *Id.* at 3:6–9. "[A] user's voice input data is captured by a voice input device 102, such as a microphone[, which p]referably [] includes a button or the like that can be pressed or held down to activate a listening mode." *Id.* at 3:39–43. Input device 102 can be also be "a portable remote control device with an integrated microphone, and the voice data is transmitted from device 102 preferably via infrared (or other wireless) link to [a receiver in] communications box 104." *Id.* at 3:46–52. "The voice data is then transmitted across network 106 to a remote server or servers 108." *Id.* at 3:54–55. The voice data "is processed by request processing logic 300

in order to understand the user's request and construct an appropriate query or request for navigation of remote data." *Id.* at 3:61–64. "Once the desired information has been retrieved from data source 110, it is electronically transmitted via network 106 to the user for viewing on client display device 112." *Id.* at 4:18–20. Communications box 104 is used for "receiving and decoding/formatting the desired electronic information that is received across communications network 106." *Id.* at 4:27–30. It is "preferabl[e to use] the same [] communications box 104, but [it] may also be a separate unit) for receiving and decoding/formatting the desired electronic information that is received across communications network 106." *Id.* at 4:25–30.

3. *Nazarathy (Ex. 1013)*

Nazarathy describes "hybrid fiber coaxial cable networks such as [those] used in cable television where two-way digital communications are desired." Ex. 1013, Abstract. Figure 9 of Nazarathy is reproduced below.

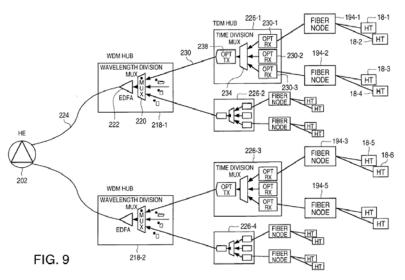


Figure 9 of Nazarathy illustrates a Wavelength Division Multiplexing ("WDM") and Time Division Multiplexing ("TDM") network showing how

data from multiple home terminals, 18-1, . . . 18-n, for example, cable modem or set-top box, is transmitted to the cable headend (HE 202). *Id.* at Fig. 9, 1:21–27, 14:6–8. Nazarathy discloses that "[a]ny operations of TDM and/or WDM multiplexing are undone at the [headend, HE202,] by corresponding WDM and TDM demultiplexers." *Id.* at 14:62–64, 15:40–46.

4. *Quigley (Ex. 1014)*

Quigley describes a "number of features for enhancing the performance of a cable transmission system in which data is transmitted between a cable modern termination system at a headend and a plurality of cable modern located [at] different distances from the headend." Ex. 1014, Abstract, 1:32–35. Figure 1 of Quigley is reproduced below.

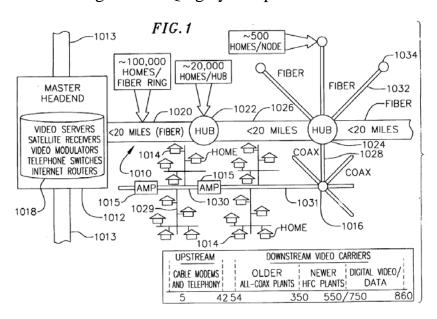
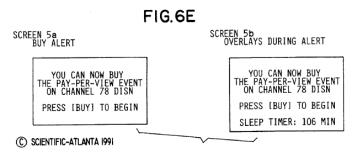


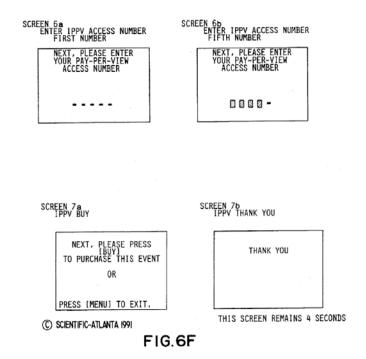
Figure 1 of Quigley "is a schematic diagram of a hybrid fiber coaxial (HFC) network showing typical pathways for data transmission between the headend[,] which contains the cable modem termination system[,] and a plurality of homes[,]each of which contain[s] a cable modem[.]" *Id.* at 3:56–60. In Quigley, "[t]he hybrid fiber coaxial network of a cable modem

system utilizes a point-to-multipoint topology to facilitate communication between the cable modem termination system and the plurality of cable modems." *Id.* at 9:1–4. "Frequency domain multiple access (FDMA)/time domain multiple access (TDMA) is used to facilitate communication from each cable modem to the cable modem termination system, [*i.e.*], in the upstream direction." *Id.* at 9:8–12, 48–52. "The upstream channel 491, is divided into a plurality of time intervals 110." *Id.* at 46:31–34. "The upstream channel 491 is thus partitioned so as to facilitate the definition of time slots, such that each of a plurality of cable modems 12 may transmit data packets to the cable modem termination system 10 without interfering with one another." *Id.* at 46:34–40.

5. Banker (Ex. 1015)

Banker describes an apparatus "for providing a user friendly interface to a subscription television terminal." Ex. 1015, Abstract. Banker describes a number of user interface features such as "messaging, establishing a favorite channel list, pay-per-view, program timing, and terminal control." *Id.*; *see also id.* at 4:1–5, 16–18. Figures 6E and 6F of Banker are reproduced below.





Figures 6E and 6F illustrate a sequence of screens a user would navigate through in order to purchase a pay-per-view event. *Id.* at 16:54–17:3. Banker also discussed how customers can be billed for using the subscription television terminal. *See id.* at 7:58–8:3, 12:1–15.

6. Gordon (Ex. 1016)

Gordon describes a "method and apparatus for providing subscription-on-demand (SOD) services for a[n] interactive information distribution system, where a consumer may subscribe to packages of on-demand programs for a single price[.]" Ex. 1016, Abstract. Figure 8 of Gordon is reproduced below.



Figure 8 of Gordon shows "a menu that allows a consumer to subscribe to a selected subscription-on-demand service." *Id.* at 3:40–41. According to Gordon, "through manipulation of the menus, the consumer [can] select[] a programming package [and] become[] a subscriber to that package and [will be] billed accordingly." *Id.* at 2:61–63.

E. Asserted Grounds of Unpatentability

Petitioner challenges claims 14, 15, 17–19, 25, 26, 53–55, 61, 62, and 64–66 of the '196 Patent based on the asserted grounds of unpatentability set forth in the following table. Pet. 3–4, 15–65.

Asserted Grounds			
Reference(s)	Basis	Claims Challenged	
Murdock alone	§ 103(a)	14, 15, 17–19, 25, 26, 53–55, 61, 62, and 64–66	

Asserted Grounds			
Reference(s)	Basis	Claims Challenged	
Murdock and Nazarathy or Quigley	§ 103(a)	14, 15, 17–19, 25, 26, 53–55, 61, 62, and 64–66	
Murdock alone or Murdock and Nazarathy or Quigley and Banker or Gordon	§ 103(a)	18, 19, 55, and 65	
Julia alone	§ 103(a)	14, 15, 17–19, 25, 26, 53–55, 61, 62, and 64–66	
Julia and Nazarathy or Quigley	§ 103(a)	14, 15, 17–19, 25, 26, 53–55, 61, 62, and 64–66	
Julia and Nazarathy or Quigley and Banker or Gordon	§ 103(a)	18, 19, 55, and 65	

For the reasons stated below, we institute an *inter partes* review of claims 14, 15, 17–19, 25, 26, 53–55, 61, 62, and 64–66 on all grounds set forth in the below table for these claims. *See infra* Section II.C.

II. ANALYSIS

A. Level of Ordinary Skill in the Art

In determining the level of ordinary skill in the art, various factors may be considered, including the "type of problems encountered in the art; prior art solutions to those problems; rapidity with which innovations are made; sophistication of the technology; and educational level of active workers in the field." *In re GPAC, Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995) (citation omitted). In that regard, Petitioner and Mr. Schmandt contend that a person of ordinary skill in the relevant art would have:

- (i) an undergraduate degree (or equivalent) in electrical engineering, computer science, or a comparable subject and *at least* three years of professional work experience in the field of multi-media systems including in particular speech recognition and control technologies; or (ii) an advanced degree (or equivalent) in electrical engineering, computer science, or a comparable subject and *at least* one year of post-graduate research or work experience in the field of multi-media systems including in particular speech recognition and control technologies.
- Pet. 7–8, emphases added; *see also* Ex. 1019 ¶¶ 75–77. Patent Owner does not propose an alternative definition nor does Patent Owner respond to Petitioner's proposal. *See generally* Prelim. Resp. Based on the current record, we adopt, with modification (*e.g.*, removal of the words "at least" from Petitioner's proposed definition), Petitioner's definition of a person of ordinary skill in the art:
 - (i) an undergraduate degree (or equivalent) in electrical engineering, computer science, or a comparable subject and three years of professional work experience in the field of multi-media systems including in particular speech recognition and control technologies; or

(ii) a Master's of Science degree (or equivalent) in electrical engineering, computer science, or a comparable subject and one year of post-graduate research or work experience in the field of multi-media systems including in particular speech recognition and control technologies.

We further note that the prior art in the instant proceeding reflects the level of ordinary skill in the art at the time of the invention. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001). For example, as reflected in Julia, a person of ordinary skill in the art would have familiarity with using spoken natural language as input into control systems. *See* Ex. 1012, 1:39–48.

B. Claim Construction

In an *inter partes* review, claim terms in an unexpired patent are given their broadest reasonable construction in light of the specification of the patent in which they appear. *See* 37 C.F.R. § 42.100(b); *Cuozzo Speed Techs.*, *LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016) (upholding the use of the broadest reasonable interpretation standard as the claim construction standard to be applied in an *inter partes* review proceeding). Under the broadest reasonable interpretation standard,² claim terms generally are given their ordinary and customary meaning as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *See In re Translogic Tech.*, *Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007).

² The parties are given notice that the United States Patent and Trademark Office published a proposed rules package that would change the standard for construing unexpired and proposed amended claims in trials under the America Invents Act. *See* 83 Fed. Reg. 21221 (May 9, 2018) (available at: https://www.gpo.gov/fdsys/pkg/FR-2018-05-09/pdf/2018-09821.pdf).

Petitioner proposes constructions for three terms: "wireline node," "back channel," and "partitioning said received back channel into a multiplicity of [said] received identified speech channels." Pet. 8–11. The Patent Owner does not propose alternative constructions nor does Patent Owner respond to Petitioner's proposals. *See generally* Prelim. Resp. Based on our review of the record before us, we determine that no claim terms require express construction at this stage of the proceeding to resolve the controversy regarding whether Petitioner has shown a reasonable likelihood to prevail regarding the unpatentability of the challenged claims. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co. Ltd.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017); *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (holding that only claim terms that "are in controversy" need to be construed and "only to the extent necessary to resolve the controversy").

C. Requirements for Specificity and Particularity

Patent Owner contends that the "[P]etition fails to present clear grounds of unpatentability [because the asserted grounds] identif[y] all but one of its challenges to the claims using the word 'or' between disparate references within each ground." Prelim. Resp. 5. According to Patent Owner, "[t]his ambiguous language fails to articulate exactly which reference is relied upon for each feature in the 'four' asserted grounds beyond the Murdock-by-itself ground." *Id.* at 6. We have reviewed the record and, on the record before us, are persuaded that Petitioner has identified its asserted grounds sufficiently. For example, for independent claims 14 and 53, we understand from the Petition and the Schmandt

Declaration that the Petitioner, in addition to asserting that Murdock (Pet. 17–24, 30–31) alone renders independent claims 14 and 53 obvious, is also contending that Murdock can be combined with Nazarathy or Quigley for the "processing a multiplicity of received identified speech channels to create a multiplicity of identified speech content" limitation in claims 14 and 53. *See, e.g.*, Pet. 14–20, 30. Moreover, Patent Owner's argument regarding the lack of specificity is itself lacking in specificity. *See* Prelim. Resp. 5–10. We agree, however, with Patent Owner that the Petition effectively challenges more than six grounds but disagree with Patent Owner regarding what those grounds are. Prelim. Resp. 7–9. We understand the Petition is effectively asserting these 14 grounds:

Ground	Reference(s)	Basis ³	Claims Challenged
Obviousness Grounds involving Murdock			
1	Murdock alone	§ 103(a)	14, 15, 17–19, 25, 26, 53–55, 61, 62, and 64–66
2	Murdock and Nazarathy	§ 103(a)	14, 15, 17–19, 25, 26, 53–55, 61, 62, and 64–66
3	Murdock and Quigley	§ 103(a)	14, 15, 17–19, 25, 26, 53–55, 61, 62, and 64–66

³ The relevant section of the Leahy-Smith America Invents Act ("AIA"), Pub. L. No. 112–29, took effect on March 16, 2013. Because the application from which the '196 Patent issued was filed before that date, the pre-AIA statutory framework applies.

Ground	Reference(s)	Basis ³	Claims Challenged
4	Murdock, Nazarathy, and Banker	§ 103(a)	18, 19, 55, and 65
5	Murdock, Nazarathy, and Gordon	§ 103(a)	18, 19, 55, and 65
6	Murdock, Quigley, and Banker	§ 103(a)	18, 19, 55, and 65
7	Murdock, Quigley, and Gordon	§ 103(a)	18, 19, 55, and 65
	Obviousness Grounds involv	ving Julia	
8	Julia alone	§ 103(a)	14, 15, 17–19, 25, 26, 53–55, 61, 62, and 64–66
9	Julia and Nazarathy	§ 103(a)	14, 15, 17–19, 25, 26, 53–55, 61, 62, and 64–66
10	Julia and Quigley	§ 103(a)	14, 15, 17–19, 25, 26, 53–55, 61, 62, and 64–66
11	Julia, Nazarathy, and Banker	§ 103(a)	18, 19, 55, and 65
12	Julia, Nazarathy, and Gordon	§ 103(a)	18, 19, 55, and 65
13	Julia, Quigley, and Banker	§ 103(a)	18, 19, 55, and 65
14	Julia, Quigley, and Gordon	§ 103(a)	18, 19, 55, and 65

D. Obviousness

1. General Principles

A claim is unpatentable under § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time the invention was made to a

person having ordinary skill in the art to which said subject matter pertains. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations, including (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) when in evidence, objective indicia of non-obviousness (*i.e.*, secondary considerations).⁴ *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

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, to establish obviousness, it is petitioner's "burden to demonstrate both that a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention." In re Magnum Oil Tools Int'l, Ltd., 829 F.3d 1364, 1381 (Fed. Cir. 2016) (quotations omitted); see KSR, 550 U.S. at 418. Moreover, a petitioner cannot satisfy this burden by "employ[ing] mere conclusory statements" and "must instead articulate specific reasoning, based on evidence of record" to support an obviousness determination. Magnum Oil, 829 F.3d at 1380. Stated differently, there must be "articulated reasoning" with some rational underpinning to support the legal conclusion of obviousness." KSR, 550 U.S. at 418 (quoting In re Kahn, 441 F.3d 977, 988) (Fed. Cir. 2006)). The "factual inquiry" into the reasons for "combin[ing] references must be thorough and searching, and [t]he need for specificity

⁴ Patent Owner, at this stage of the proceeding, has not presented evidence of secondary considerations.

pervades" *In re Nuvasive, Inc.*, 842 F.3d 1376, 1381–82 (Fed. Cir. 2016) (quotations omitted). We analyze the asserted grounds with these principles in mind.

2. Graham Analysis Generally

Patent Owner contends that "Petitioner fails to establish a reasonable likelihood of success for each of the challenged claims because, for each of its grounds, it fails to present a proper *Graham* analysis by not addressing any differences between the claimed subject matter and the prior art." Prelim. Resp. 19–23. We have reviewed the record and are persuaded that Petitioner has sufficiently set forth alleged differences between the claimed invention and the prior art. For example, for the limitation "processing a multiplicity of received identified speech channels to create a multiplicity of identified speech content" in claim 14, Petitioner notes that:

In Murdock, "remote server computer 130 performs . . . speech recognition" of the received audio signals. Murdock at 3:13–17. Murdock explains that the remote server computer executes "speech recognition module 410 that . . . causes the remote server computer 130 to operate as a speech recognition server." *Id.* at 5:4–7. In this way, the remote server computer "recognizes" each user's voice command and then processes each particular request. *Id.* at 5:10–22. Thus, Murdock discloses "processing said multiplicity of said received identified speech channels" (i.e., voice command signals) "to create a multiplicity of identified speech content" (i.e., each user's specific command), as recited in the claim. . . .

A person of ordinary skill in the art would have known that Murdock's multiplexed back channel signal must be demultiplexed. Schmandt Dec. ¶ 142. In addition, such a person could also combine the disclosure in Murdock with various prior art techniques for demultiplexing a multiplexed communication signal at a cable headend. *Id*.

Pet. 18–19 (citing Ex. 1019 ¶¶ 140–142; Ex. 1001, 3:1–5, 13–17, 5:4–7, 5:10–22). Therefore, according to the Petitioner, while Murdock discloses back channel 134 carrying voice command signals from multiple different users, it does not explicitly disclose the claimed "processing a multiplicity of received identified speech channels to create a multiplicity of identified speech content." Ex. 1001, 53:1–3, emphases added. However, Petitioner and its expert contend that because remote server computer 130 performs speech recognition by identifying and recognizing each user that generated the audio signal, it would have been obvious to a person of ordinary skill in the art that remote server computer 130 would have to demultiplex the multiplexed signal on back channel 134, in order to identify each users' voice command signal. Pet. 18–19; Ex. 1019 ¶¶ 140–143. Hence, based on the record before us, we are persuaded that Petitioner has sufficiently shown on the record before us how it has conducted a *Graham* analysis.

3. Obviousness Grounds Involving Murdock (Grounds 1–7)
The '196 Patent issued from an application that has a filing date of
February 16, 2001, and that claims the benefit of priority to a provisional
application with a filing date of June 8, 2000. Ex. 1001, at [22], [60]; Pet. 4.
Petitioner relies on Murdock for a number of asserted grounds. Murdock
was filed, on November 16, 2000, after the effective filing date of the
'196 Patent, but claims the benefit of priority to the filing date of Provisional
Application No. 60/166 010 (Ex. 1011, the "Murdock Provisional"), which
was filed on November 17, 1999. Ex. 1010, at [22], [60]. Petitioner argues
that Murdock is 35 U.S.C. § 102(e) prior art to the '196 Patent because
Murdock Provisional. Pet. 11–12.

In *Ex Parte Mann*, the Board held that "under *Dynamic Drinkware*, a non-provisional child can be entitled to the benefit of a provisional application's filing date if the provisional application provides sufficient support for at least one claim in the child." 2016 WL 7487271, at *6 (PTAB Dec. 21, 2016) (discussing whether *Dynamic Drinkware*, *LLC v. Nat'l Graphics*, *Inc.*, 800 F.3d 1375, 1378, requires "support in the provisional [] for *all* claims, *any* claim, or something in between."). The Board further held that "the [party claiming priority] also must [also] show that the subject matter relied upon in the non-provisional is sufficiently supported in the provisional application [and that t]his subject matter test is in addition to the comparison of claims required by *Dynamic Drinkware*." *Id.* at *5.

Recognizing these requirements, Petitioner asserts that:

Petitioner's expert Christopher Schmandt shows in his supporting declaration that at least claim 1 of Murdock is supported by the disclosure in the [Murdock P]rovisional application. Schmandt Decl. ¶¶ 99–113. In addition, Petitioner's expert witness confirms that the Murdock [P]rovisional application meets this requirement, too. Schmandt Decl. ¶¶ 135–257 (showing that the provisional application discloses the challenged claims and also showing that the provisional application discloses the same subject matter); . . .

Pet. 11–12. Patent Owner, however, contends that "Petitioner fails to establish that . . . and thus cannot establish a reasonable likelihood of prevailing on the Murdock grounds" because "the [P]etition omits the analysis . . . necessary to establish Murdock as prior art, and instead relies on bare conclusions lacking any factual support that could sustain its position." Prelim. Resp. 17. According to Patent Owner, Petitioner's "attempt to incorporate more than 120+ paragraphs of essential analysis from the declaration" into the Petition is improper. *Id.* at 16.

We agree with Patent Owner that Petitioner's barebones analysis, in its Petition, is insufficient to support its contention that Murdock is entitled to the filing date of the Murdock Provisional. Specifically, while there is no requirement to rewrite every word or example from an expert declaration into a petition, Petitioner's two sentences concluding that "at least claim 1 of Murdock is supported by the disclosure in the [Murdock P]rovisional application" and that "the [Murdock P]rovisional [] provide[s] support for the subject matter relied upon," are insufficient to establish Murdock as prior art. Pet. 11. "Arguments must not be incorporated by reference from one document into another document." 37 C.F.R. § 42.6(a)(3). Here, the Petitioner cites to over 130 paragraphs (Ex. 1019 ¶¶ 99–113, 135–257), spanning more than 60 pages in the Schmandt Declaration. No reasonable application of 37 C.F.R. § 42.6(a)(3) to the circumstance of this case results in a conclusion that Petitioner complied with the rule.

Accordingly, we disregard all the material improperly incorporated by reference for this issue, which is paragraphs 99 to 113 and 135 to 257 of the Schmandt Declaration, and Petitioner is left with only two conclusory and general sentences in the Petition with respect to why at least one claim of Murdock is supported by the disclosure of the Murdock Provisional and how the Murdock Provisional provides support for the subject matter relied upon.

Based on the current record, Petitioner has, therefore, not shown that Murdock is entitled to the benefit of priority to the filing date of the Murdock Provisional. Hence, Petitioner has not shown that Murdock is prior art to the '196 Patent. Because each of the Murdock asserted grounds relies on Murdock in whole or in part, we are not persuaded that Petitioner has established a reasonable likelihood that it would prevail in showing

unpatentability of claims 14, 15, 17–19, 25, 26, 53–55, 61, 62, and 64–66 over (1) Murdock; (2) Murdock and Nazarathy; or (3) Murdock and Quigley, or of claims 18, 19, 55, and 65 over (4) Murdock, Nazarathy, and Banker; (5) Murdock, Nazarathy, and Gordon; (6) Murdock, Quigley, and Banker; or (7) Murdock, Quigley, and Gordon.⁵

4. Obviousness Grounds Involving Julia (Grounds 8–14) a. Claims 14, 15, 17, 25, 26, 53, 54, 61, 62, 64, and 66

Petitioner contends that claims 14, 15, 17, 25, 26, 53, 54, 61, 62, 64, and 66 are unpatentable over Julia alone (Ground 8), Julia in view of Nazarathy (Ground 9), or Julia in view of Quigley (Ground 10) under 35 U.S.C. § 103(a), relying on the supporting testimony of Mr. Schmandt. Pet. 43–64 (citing Ex. 1019). We have reviewed the Petition, the Schmandt Declaration, the evidence cited, and the Preliminary Response regarding these claims and are persuaded that Petitioner has established a reasonable likelihood that it would prevail in showing unpatentability of these claims challenged under these grounds.

For example, with respect to independent claim 14, addressed in the Petition at pages 44 to 50, Petitioner, notwithstanding Patent Owner's arguments, has made a sufficient showing of unpatentability of this claim challenged under the asserted Julia alone, Julia in view of Nazarathy, or Julia in view of Quigley grounds. Specifically, the preamble of claim 14 recites: "A program system controlling at least part of a speech recognition system coupled to a wireline node in a network." Ex. 1001, 52:65–67.

⁵ Nevertheless, we institute an *inter partes* review of *all* challenged claims (14, 15, 17–19, 25, 26, 53–55, 61, 62, and 64–66) of the '196 Patent based on these Murdock Grounds (1–7). *See* SAS Guidance.

Petitioner, citing to various portions of Julia and the testimony of Mr. Schmandt, explains that "Julia discloses a program system controlling at least part of a speech recognition system coupled to a wireline node in a network," whereby "[m]ultiple users can issue voice commands requesting television and other video content from a remote server computer (e.g., "a wireline node")." Pet. 44. Petitioner also points out that the "remote server [also] performs speech recognition processing to identify the spoken request and then sends the requested content to the particular user." *Id.* We are sufficiently persuaded that Julia discloses a program system controlling at least part of a speech recognition system coupled to a wireline node in a network.

Claim 14 further recites "processing a multiplicity of received identified speech channels to create a multiplicity of identified speech content." Ex. 1001, 53:1–3. Petitioner explains that Julia discloses that multiple users may issue requests in its system and also that support for simultaneous access requests from multiple network users is well known in the art. Pet. 45. Petitioner then notes that Julia alone (Ground 8) discloses processing voice commands (*i.e.*, "identified speech channels") to create user specific commands (*i.e.*, "multiplicity of identified speech content"). *Id.* (citing Ex. 1012, 3:61–65; 7:5–7). Petitioner's expert explains that Julia discloses that "the remote server 108 'process[es]' the voice data using 'processing logic 300 in order to understand the user's request and construct an appropriate query or request for navigation of remote data source 110 " Ex. 1019 ¶ 274 (quoting Ex. 1001, 3:61–65). The request processing logic 300 of Julia is shown in Figure 3, which is reproduced below.

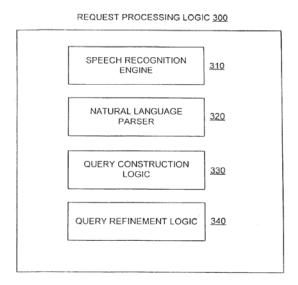


Fig. 3

Figure 3 "illustrates the functional logic components of a request processing module in accordance with an embodiment of" the claimed invention in Julia. Ex. 1012, 3:19–21. Petitioner's expert further explains that Figures 4 and 5 of Julia provides "an overview of how user commands are processed in Julia." Ex. 1019 ¶ 275. Figures 4 and 5 of Julia are reproduced below.

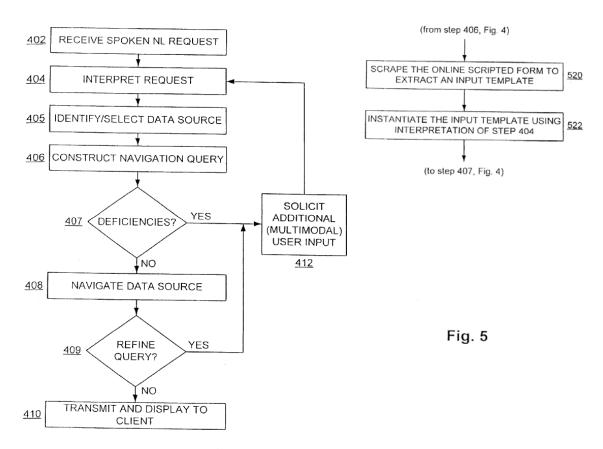


Fig. 4

Figure 4 "illustrates a process utilizing spoken natural language for navigating an electronic database" and Figure 5 "illustrates a process for constructing a navigational query for accessing an online data source via an interactive, scripted (e.g., CGI) form." Ex. 1012, 3:22–27; *see* Ex. 1019 ¶¶ 275–278 (explaining the steps in Figures 4 and 5). Petitioner has, therefore, made a sufficient showing that Julia alone (Ground 8) discloses the claimed "processing a multiplicity of received identified speech channels to create a multiplicity of identified speech content."

Petitioner further notes that while Julia does not explicitly teach demultiplexing a multiplicity of received identified speech channels, both Nazarathy and Quigley disclose techniques for demultiplexing an upstream data channel carrying multiple user signals at a cable headend and it would have been obvious to one of ordinary skill in the art to combine Julia with Nazarathy (Ground 9) or Julia with Quigley (Ground 10). Pet. 45–46, 58–59; *see also* Ex. 1019 ¶¶ 379–384.

Patent Owner, however, contends that:

Petitioner's combinations of references are facially deficient because the [P]etition fails to articulate a motivation to combine the features of the prior art to yield the claimed invention. [Specifically, t]he entirety of the [P]etition's discussion of a motivation to combine . . . Julia with Nazarathy or Quigley[] falls within a mere three paragraphs of each ground.

Prelim. Resp. 23–26.

We have reviewed the Petition, the Schmandt Declaration, and the Preliminary Response regarding this issue and, based on this record, are persuaded that Petitioner has established that one of ordinary skill in the art would have been motivated to combine Julia with Nazarathy (Ground 9) or Julia with Quigley (Ground 10) for this limitation. As discussed above, according to Petitioner, while Julia teaches receiving voice commands from multiple users or devices at a headend, it does not explicitly teach demultiplexing a multiplicity of received identified speech channels into a multiplicity of identified speech content. Pet. 45-46. However, both Nazarathy and Quigley disclose techniques for demultiplexing an upstream data channel carrying multiple user signals at a cable headend and it would have been obvious to one of ordinary skill in the art to combine Julia with Nazarathy (Ground 9) or Julia with Quigley (Ground 10). Pet. 45–46, 58– 59; see also Ex. 1019 ¶¶ 379–384. This is because "[a] person of ordinary skill in the art would have naturally considered Nazarathy and Quigley in connection with the system disclosed by Julia." Pet. 58–59; Ex. 1019 ¶ 382. Petitioner's expert elaborates on the reasons as follows:

Julia, Nazarathy, and Quigley disclose inventions for use in two-way transmission of data over cable networks. For example, Julia, Nazarathy, and Quigley describe transmission of data in cable networks made up of the same types of physical media. . . . the networked systems of Nazarathy and Quigley are designed to be used in the very same network infrastructure [that is] disclosed by Julia.

- . . . Further, Julia, Nazarathy, and Quigley describe systems requiring bidirectional communication between a central node (like a headend or a remote server) and multiple, distributed user units. . . . Nazarathy and Quigley thus disclose methods for communications that fit directly into the communication needs of Julia.
- ... Julia, Nazarathy, and Quigley are also similar in that all three describe transmitting media content in the downstream direction.
 . . . Nazarathy and Quigley thus disclose methods for communications that fit directly into the communication needs of Julia.
- ... Julia, Nazarathy, and Quigley are also similar in that all three describe transmitting media content in the downstream direction.
- ... Nazarathy and Quigley also provide additional details for implementing bi-directional communication systems for cable networks that fit directly into, but are not expressly described, by Julia. [For example,] Nazarathy and Quigley disclose details for multiplexing / demultiplexing signals, which can be implemented in Julia to support receiving and processing simultaneous user requests. A person of ordinary skill in the art, looking for further details regarding how to implement Julia to support simultaneous requests, would thus naturally consider the teachings of Nazarathy and Quigley because they disclose methods for bi-directional communication that fit directly into the communication needs of Julia.

Ex. $1019 \P 9 379-382$ (citing and quoting various portions of Julia (Ex. 1012), Nazarathy (Ex. 1013), and Quigley (Ex. 1014)). Therefore, we agree with Petitioner and its expert that "[a] person of ordinary skill in the

art would have naturally considered Nazarathy and Quigley in connection with the system disclosed by Julia" and "would [also] have known that Julia's voice control system could be implemented using those techniques and networks" taught in Nazarathy or Quigley. Pet. 58-59; Ex. 1019 ¶¶ 379, 382; *see also id.* ¶ 384 (explaining why the combination "would have been no more than combining prior art elements according to known methods to yield predictable results.").

We also agree with Petitioner that "a person of ordinary skill in the art would also have recognized the benefits of combining Julia with the teachings of Nazarathy [or Julia with the teachings of] Quigley." Pet. 59. Specifically, according to Petitioner:

The Julia network would reap the benefits of Nazarathy (e.g., increased bandwidth) or Quigley (e.g., avoiding collisions between multiple upstream signals)[, and i]mplementing Julia's voice control system on the networks of Nazarathy or Quigley would [also] improve the user interface for those systems. Combining them would have been no more than . . . combining prior art elements according to known methods to yield predictable results for a person of ordinary skill in the art. . . . Additionally, Julia's disclosure of multiple cable subscribers accessing a central remote server (i.e., cable headend) suggests techniques like those disclosed in Nazarathy or Quigley.

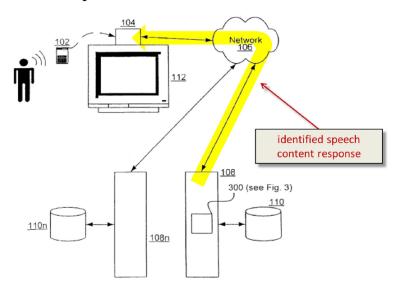
Pet. 59; *see* Ex. 1019 ¶ 383 (further elaborating on benefits of the combined system). We are sufficiently persuaded that the combination of Julia and Nazarathy (Ground 9) or Julia and Quigley (Ground 10) discloses the claimed "processing a multiplicity of received identified speech channels to create a multiplicity of identified speech content."

Claim 14 further recites "responding to said identified speech content to create an identified speech content response that is unique to each of said multiplicity of identified speech contents." Ex. 1001, 53:4–6. Petitioner's

expert explains that:

the remote server "responds" to the identified speech content by retrieving the requested programming content and transmitting it to the particular viewer who requested the particular content. Thus, Julia responds to the voice data requesting content from each user by creating "an identified speech content response" (requested programming content) that is "unique" in that it responds to the specific spoken request of a particular viewer.

Ex. 1019 ¶ 285. Petitioner further relies on the annotated version of Figure 1a of Julia as reproduced below.



Julia Fig. 1 (annotated)

Petitioner's annotated Figure 1a of Julia (Pet. 47) graphically demonstrates how, after the requested programming content is identified, "'[t]he retrieved information is transmitted across the network and presented to the user on a suitable client display device." *Id.* at 46 (quoting Ex. 1001, 2:65–67). We are sufficiently persuaded that Julia discloses the claimed "responding to said identified speech content to create an identified speech content response that is unique, for each of said multiplicity of identified speech contents."

Claim 14 further recites "wherein said speech recognition system is provided said multiplicity of received identified speech channels based upon a received back channel at said wireline node from a multiplicity of user sites coupled to said network." Ex. 1001, 53:7–11. Petitioner explains that a user in Julia issues a voice command using voice input device 102, which is transmitted to remote server 108 via communications box 104. Pet. 47–48. Petitioner notes that network 106 is a two-way electronic communications network and that "multiple network users may issue voice requests 'simultaneously or otherwise' through network 106 to remote server 108." *Id.* (quoting Ex. 1012, 6:12–26). Petitioner concludes that:

Thus, Julia discloses that the "speech recognition system" (i.e., remote server 108) is "provided said multiplicity of received identified speech channels" (i.e., users' voice requests) "based upon a received back channel" (the data coming in from the multiple network users via network 106) as recited in claim 14.

Julia also discloses that the multiplicity of received identified speech channels (again, the user's voice commands) are "from a multiplicity of user sites coupled" to the network. . . .

Pet. 48. Petitioner has, therefore, made a sufficient showing that Julia discloses the claimed "wherein said speech recognition system is provided said multiplicity of received identified speech channels based upon a received back channel at said wireline node from a multiplicity of user sites coupled to said network."

Claim 14 further recites "wherein each of said program steps reside in memory accessibly coupled to at least one computer included in said speech recognition system." Ex. 1001, 53:12–14. Petitioner explains that "the 'processing' and 'responding' steps of claim 14, which are performed by the remote server 108, [] is a 'computer' that is 'included' in the 'speech

recognition system.'." Pet. 49. Petitioner further explains that:

As discussed in connection with the 'processing' step, 'remote server 108' includes 'processing logic 300' that performs speech recognition processing. Julia at 3:61–62, Fig. 3. A person of ordinary skill would understand that in a server, 'program steps' (i.e., the instructions executing on server computer) reside in 'memory' that is accessibly coupled to that computer. Schmandt Decl. ¶ 294. Otherwise, the computer would not be able to execute the program steps. *Id.*...

Pet. 49. We are sufficiently persuaded that Julia discloses the claimed "wherein each of said program steps reside in memory accessibly coupled to at least one computer included in said speech recognition system."

Claim 14 further recites "wherein said at least one computer communicatively couples through said wireline node to said multiplicity of user sites." Ex. 1001, 53:15–17. Petitioner states that "[t]he remote server 108 of Julia is both the 'said at least one computer' and 'said wireline node' [and] the remote server 108 is connected to multiple user sites. . . . Thus, Julia's remote server is therefore 'communicatively couple[d]' through 'said wireline node to said multiplicity of user sites.'" Pet. 50. Petitioner has, therefore, made a sufficient showing that Julia discloses the claimed "wherein said at least one computer communicatively couples through said wireline node to said multiplicity of user sites."

Claim 14 further recites "wherein said network supports at least one of the collection comprising: cable television delivery to said multiplicity of user sites; and video delivery to said multiplicity of user sites." Ex. 1001, 53:18–21. Petitioner points out that "network 106 can be used to supply cable television and on-demand video." Pet. 50. Petitioner further points out that "the network can be used to deliver content to a multiplicity of users." *Id.* We are sufficiently persuaded that Julia discloses the claimed

"wherein said network supports at least one of the collection comprising: cable television delivery to said multiplicity of user sites; and video delivery to said multiplicity of user sites." Therefore, for the foregoing reasons, Petitioner has shown a reasonable likelihood that it would prevail in establishing that claim 14 is unpatentable as obvious over (8) Julia alone, (9) Julia in view of Nazarathy, or (10) Julia in view of Quigley.

As another example, with respect to independent claim 53, addressed in the Petition at pages 55 to 56, Petitioner, has also made a sufficient showing of unpatentability of this claim challenged under the Julia alone, Julia in view of Nazarathy, or Julia in view of Quigley grounds. Claim 53 recites "[a] method of operating at least part of a speech recognition system coupled to a wireline node in a network, comprising the steps of." Ex. 1001, 58:12-29. Petitioner and its expert note that claim 53 contains essentially identical steps as in claim 14 with the "only difference [being] that claim 53 recites a 'method' of 'steps,' while claim 14 recites a 'system' that includes 'program steps,'" and refer to their analysis of claim 14 in their discussion of claim 53. Pet. 55–56; see also Ex. 1019 ¶¶ 334–344. We have reviewed the information provided by Petitioner, including the relevant portions of the supporting declaration of Mr. Schmandt, and are persuaded, based on the current record, that Petitioner has shown a reasonable likelihood that it would prevail in establishing that claim 53 is unpatentable as obvious over (8) Julia alone, (9) Julia in view of Nazarathy, or (10) Julia in view of Quigley.

b. Claims 18, 19, 55, and 65

Both dependent claims 18 and 19 depend indirectly on independent claim 14 and both dependent claims 55 and 65 depend indirectly on

independent claim 53. Dependent claim 18 recites, in part, "assessing said speech content response identified as to said user site *to create a financial consequence* identified as to said user site." Ex. 1001, 54:1–3, emphasis added. Dependent claim 65 contains an identical limitation. *Id.* at 60:32–34. Dependent claims 19 and 55 each recites a similar limitation: "assessing said speech response to create a financial consequence identified with said user site." *Id.* at 54:10–11, 58:50–51.

Petitioner contends that the limitations of claims 18, 19, 55, and 65 are disclosed: either by: Julia alone (Ground 8); Julia combined with Nazarathy (Ground 9); Julia combined with Quigley (Ground 10); Julia combined with Nazarathy and Banker (Ground 11); Julia combined with Nazarathy and Gordon (Ground 12); Julia combined with Quigley and Banker (Ground 13); or Julia combined with Quigley and Banker (Ground 14). Pet. 60.

With regard to the obviousness grounds involving Julia alone (Ground 8), Julia with Nazarathy (Ground 9) or Julia with Quigley (Ground 10), for the "create a financial consequence" limitation of claims 18, 19, 55, and 65, Petitioner states that:

Julia discloses this limitation. Schmandt Decl. ¶ 309. Julia discloses that the voice control system can be implemented on various different platforms including the "Diva Systems video-on-demand system." Julia at 6:47-59; see also id. at 1:30-43, 3:61-4:17. A person of ordinary skill in the art knows that the Diva System provided pay-per-view functionality. Schmandt Decl. ¶ 309. Thus, Julia discloses to one of ordinary skill in the art requesting pay-per-view or video-on-demand content by issuing voice requests, which the system would process, and providing responsive content. *Id.* ¶ 309. A person of ordinary skill would also understand that pay-per-view and video-on-

demand functionality, such as that provided by the Diva system, would require a purchase, resulting in a bill. Id.

Pet. 60–61, emphasis added; *see id.* at 62, 64 (discussing claims 19, 55, and 65). According to Petitioner's expert, "[a] person of ordinary skill in the art would have known that the Diva System provided pay-per-view functionality." Ex. $1019 \, \P \, 309$.

Patent Owner argues that "Petitioner cannot equate 'video-on-demand' with 'pay-per-view' because they are not the same thing. For example, . . . Netflix subscribers can watch as many videos on-demand as they please; they do not need to pay per view." Prelim. Resp. 19–30. In order words, according to Patent Owner, "video-on-demand" does not necessary "create a financial consequence." We agree and are not sufficiently persuaded that a person of ordinary skill in the art would have known that the "Diva Systems video-on-demand system" (see Ex. 1012, 6:47–59) provides "pay-per-view functionality" as Petitioner's expert opines (Ex. 1019 ¶ 309). Petitioner's expert does not point to any persuasive evidence to support his position that the Diva video-on-demand system provides "pay-per-view functionality" or that a person of ordinary skill in the art would have known that the Diva video-on-demand system would "require a purchase, resulting in a bill" in response to a request for a video-on-demand content. *Id*.

Therefore, based on the record before us, we are not persuaded that the information presented in the Petition and the relevant portions of Julia and the Schmandt Declaration show a reasonable likelihood that Petitioner would prevail in showing that claims 18, 19, 55, and 65 are unpatentable over (8) Julia alone; (9) Julia and Nazarathy; or (10) Julia and Quigley.

With regard to the obviousness combination of Julia combined with Nazarathy and Banker (Ground 11); Julia combined with Nazarathy and Gordon (Ground 12); Julia combined with Quigley and Banker (Ground 13); or Julia combined with Quigley and Banker (Ground 14), Petitioner states that claims 18, 19, 55, and 65 "are also rendered obvious by the additional teaching of either Banker or Gordon." Pet. 60, 62–63; see Ex. 1019 ¶¶ 385– 386. Patent Owner, however, argues that "Petitioner appears to premise any combination of Banker or Gordon with Julia on Julia already disclosing the "creat[ing]" step. Prelim. Resp. 29. In other words, according to Patent Owner, Petitioner is not relying on the combination with either Banker or Gordon for the "creating a financial consequence" limitation. We have reviewed the record and, on the record before us, we agree with Patent Owner that Petitioner appears to be relying on Julia for teaching the "creating a financial consequence" limitation (Pet. 60–62, 64; Ex. 1019 ¶ 309) and as discussed above, Petitioner has not persuaded us that Julia teaches the limitation at issue. We are therefore not persuaded that Petitioner has established a reasonable likelihood that it would prevail in showing unpatentability of claims 18, 19, 55, and 65 over (11) Julia, Nazarathy, and Banker; (12) Julia, Nazarathy, and Gordon; (13) Julia, Quigley, and Banker; or (14) Julia, Quigley, and Gordon.

III. CONCLUSION

For the reasons set forth above, based on the current record, we determine that the information presented in the Petition establishes that there is a reasonable likelihood that Petitioner would prevail in showing the unpatentability of at least one challenged claim. We institute an *inter partes*

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review of *all* challenged claims (14, 15, 17–19, 25, 26, 53–55, 61, 62, and 64–66) of the '196 Patent based on *all* grounds raised in the Petition as identified in the table above. *See supra* Section II.C; SAS Guidance.

IV. ORDER

For the foregoing reasons, it is hereby:

ORDERED that the Petition is *granted*, and trial is instituted on *all* challenged claims (14, 15, 17–19, 25, 26, 53–55, 61, 62, and 64–66) of the '196 Patent and based on *all* grounds raised in the Petition as identified in the table above. *See supra* Section II.C.

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