

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 IPR2018-00344
Patent 7,047,196

PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE

TABLE OF CONTENTS

I.	Introduction.....	1
II.	Murdock Is Invalidating Prior Art	2
A.	Claim 1 of Murdock Is Supported by the Murdock Provisional.....	3
B.	The Subject Matter That Petitioner Cited in Murdock Is Supported by the Murdock Provisional.....	6
C.	Patent Owner Does Not Attempt to Distinguish Murdock	8
III.	The Challenged Claims Are Obvious in View of Julia as the Primary Reference	8
A.	Julia Discloses the “Receiving” Step	8
B.	The Prior Art Discloses the “Partitioning” Step	10
C.	Julia Discloses the “Processing” Step	11
D.	Julia Discloses a “Speech Recognition System Coupled to a Wireline Node”.....	12
E.	Petitioner Demonstrated Motivation to Combine Julia with Nazarathy or Quigley	13
F.	Julia Alone or in Combination with Gordon or Banker Discloses Voice-Control for Financial Transactions	14
G.	Julia Discloses “Natural Language” Processing for the Requesting “User Site”.....	17
IV.	Patent Owner’s Reliance on Secondary Considerations Is Unavailing.....	18
A.	Patent Owner Does Not Establish a Nexus Between Its Evidence and Any Novel Features of the Challenged Claims	18
B.	Patent Owner Cannot Establish a “Long-Felt Need” Satisfied by the Challenged Claims	20
C.	Patent Owner’s Evidence of “Industry Praise” Is Not Tied to Any Novel Feature of the Challenged Claims	21
D.	The Challenged Claims Are Not “Commercially Valuable”	23
E.	Comcast Did Not License the Challenged Claims	24
F.	There Is No Evidence of Copying.....	25
V.	Conclusion	26

TABLE OF AUTHORITIES

FEDERAL CASES

<i>Bayer Healthcare Pharm., Inc. v. Watson Pharm., Inc.</i> , 713 F.3d 1369 (Fed. Cir. 2013)	21
<i>Bosch Auto. Serv. Solutions, LLC v. Matal</i> , 878 F.3d 1027 (Fed. Cir. 2017)	25
<i>Brown & Williamson Tobacco Corp. v. Philip Morris Inc.</i> , 229 F.3d 1120 (Fed. Cir. 2000)	19
<i>In re Cree</i> , 818 F.3d 694 (Fed. Cir. 2016)	22
<i>Dynamic Drinkware, LLC v. National Graphics, Inc.</i> , 800 F.3d 1375 (Fed. Cir. 2015)	2, 3
<i>In re GPAC Inc.</i> , 57 F.3d 1573 (Fed. Cir. 1995)	25
<i>J.T. Eaton & Co.. v. Atl. Paste & Glue Co.</i> , 106 F.3d 1563 (Fed. Cir. 1997)	18
<i>In re Kao</i> , 639 F.3d 1057 (Fed. Cir. 2011)	20
<i>Ormco Corp. v. Align Tech., Inc.</i> , 463 F.3d 1299 (Fed. Cir. 2006)	20
<i>Texas Instruments, Inc. v. U.S. Int’l Trade Comm’n</i> , 988 F.2d 1165 (Fed. Cir. 1993)	20
<i>Tokai Corp. v. Easton Enters., Inc.</i> , 632 F.3d 1358 (Fed. Cir. 2011)	20
<i>Wyers v. Master Lock Co.</i> , 616 F.3d 1231 (Fed. Cir. 2010)	25

ADMINISTRATIVE DECISIONS

<i>Apple Inc. v. Chestnut Hill Sound Inc.</i> , 2017 WL 4349386 (PTAB Sept. 5, 2017)	19
<i>Chums, Inc. v. Cablz, Inc.</i> , 2016 WL 763054 (PTAB Feb. 8, 2016)	19
<i>Ex Parte Mann</i> , 2016 WL 7487271 (PTAB Dec. 21, 2016).....	3
<i>Google, Inc. v. Meiresonne</i> , 2016 WL 280103 (PTAB Jan. 20, 2016).....	21
<i>L-3 Communications Holdings, Inc. v. Power Survey, LLC</i> , 2015 WL 7695160 (PTAB Nov. 23, 2015)	21
<i>Sonos, Inc. v. D&M Holdings Inc.</i> , 2018 WL 792169 (PTAB Jan. 31, 2018).....	2, 3

FEDERAL STATUTES

35 U.S.C. § 102(e)	2
--------------------------	---

I. INTRODUCTION

Petitioner demonstrated in its petition, which was supported by documentary evidence and the thorough analysis of its expert witness, how the cited prior art references disclose every element of the challenged claims of the ’196 Patent and render them obvious. Patent Owner’s response offers only superficial arguments based on the opinions of an expert witness who admits he never attempted to construe and understand the terms of the challenged claims and never attempted to analyze those claims in view of the prior art. Thus, the great weight of the evidence establishes that the challenged claims are obvious in light of the prior art.

In an effort to avoid the prior art, Patent Owner relies heavily on purported evidence of secondary considerations of nonobviousness. But Patent Owner does not establish the required nexus between its evidence and any novel aspect of the challenged claims, and moreover its arguments are a gross mischaracterization of history. Comcast did evaluate Patent Owner’s voice-controlled television product in 2004 and 2005, but rejected it after a “marketing trial.” Indeed, Patent Owner’s own evidence deemed its product “Not Currently a Deployable Solution.”

Ex. 2031 at 23. The product was unsuccessful with only a few installations and low revenues. Cook Dep. at 206:2-17 (Ex. 1024). Patent Owner therefore abandoned its voice-controlled television product in 2006 and shifted focus to an automobile product instead. *Id.* at 215:13-218:13. In light of the actual facts,

Patent Owner’s conclusory arguments of secondary considerations do not withstand the lightest scrutiny.

II. MURDOCK IS INVALIDATING PRIOR ART

Patent Owner asserts that Murdock (Ex. 1010) is not prior art. PO Resp. at 6-8. Under *Dynamic Drinkware, LLC v. National Graphics, Inc.*, 800 F.3d 1375, 1378-81 (Fed. Cir. 2015), Petitioner had the initial burden of production and met it by explaining that Murdock, which has an earlier filing date than the ’196 Patent, is invaliding. *Id.* at 1379; Pet. at 9-10. As in *Dynamic Drinkware*, “the burden of production then shifted to [Patent Owner] to argue or produce evidence” that either Murdock does not render the challenged claims obvious or that Murdock “is not prior art because the asserted claims in the [’196 Patent] are entitled to the benefit of a filing date” before Murdock’s filing date. *Dynamic Drinkware*, 800 F.3d at 1380. Patent Owner did neither.

The Board addressed the same situation in *Sonos, Inc. v. D&M Holdings Inc.*, 2018 WL 792169 (PTAB Jan. 31, 2018):

Petitioner demonstrated that [the prior art] Lambourne ’853 is an issued patent...that has a filing date...before the...filing date of the [challenged] ’294 patent.... Thus, Petitioner established at least a prima facie case that Lambourne ’853 is prior art under 35 U.S.C. § 102(e). At this point, the burden of production shifted to Patent Owner to show that the ’294 patent is entitled to its provisional application’s filing date....

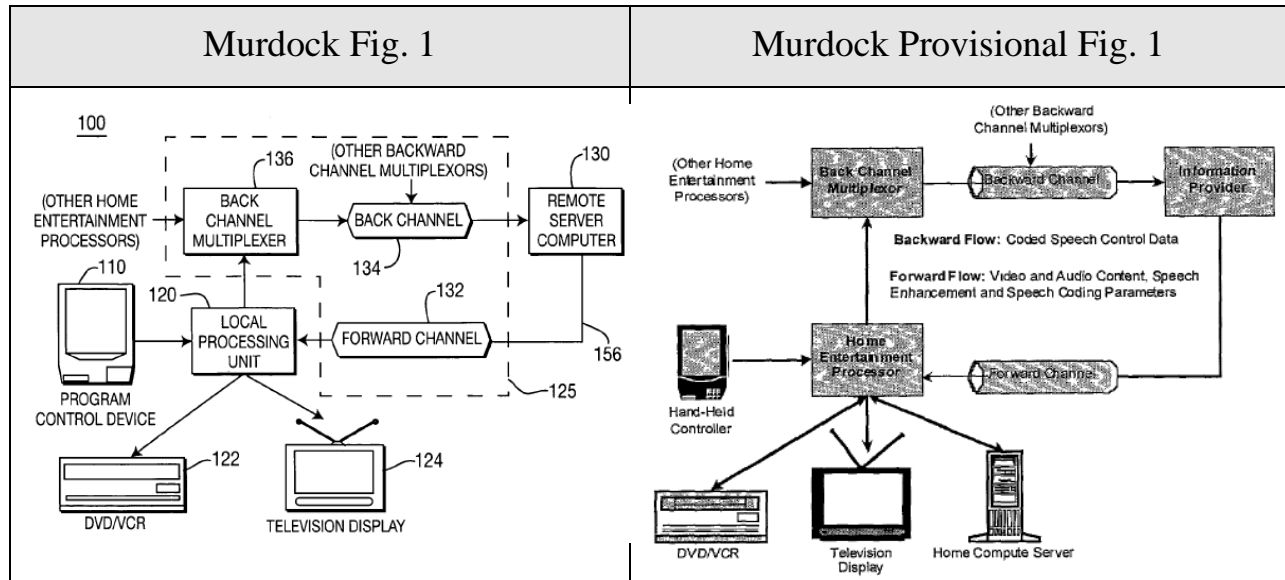
Id. at *2. Because the patent owner failed to meet its burden, the Board limited the challenged patent to its actual filing date. *Id.* Similarly, Patent Owner failed to antedate Murdock, so the ’196 Patent should be held to its filing date.

Had Patent Owner antedated Murdock, the burden would return to Petitioner to prove Murdock “was entitled to the benefit of a filing date prior to the date” Patent Owner established. *Dynamic Drinkware*, 800 F.3d at 1380. And, as discussed below, Murdock *is entitled* to an earlier filing date based on the Murdock Provisional (Ex. 1011) because it (1) “provides sufficient support for at least one claim” in Murdock and (2) “provide[s] support for the subject matter relied upon” to invalidate. *See Ex Parte Mann*, 2016 WL 7487271, at *5-6 (PTAB Dec. 21, 2016)).¹

A. Claim 1 of Murdock Is Supported by the Murdock Provisional

The Murdock Provisional discloses the system of the Murdock patent, as the figures illustrate:

¹ All evidence cited here was submitted with the petition, which explained that Murdock qualifies as prior art. Pet. at 10-11. No “new arguments or evidence” is presented. *Cf.* PO Resp. at 7-8.



Both Murdock and its provisional disclose a system where a user issues voice commands to obtain video programming from a remote service provider. Murdock at 1:8-11; Murdock Provisional at 1:4-6.

The preamble of Murdock’s claim 1 reads:

A system for providing programming content in response to an audio signal, where said audio signal and programming content are transmitted using a television network having a forward channel and a back channel, the system comprising:

The Murdock Provisional discloses such a system. Schmandt Decl. ¶ 100 (Ex. 1019). It provides video content in response to audio signals. Murdock Provisional at 1:4-6. The audio signal and content are transmitted using a television network that includes a “Forward Channel” and “Backward Channel.” *Id.* at 1:1-2, 1:18-22, 2:3-7, 4:1-3, 4:18-22, Fig. 1.

The first element of claim 1 reads:

a local processing unit for receiving a first audio signal from a first user, where said first audio signal contains a request for said programming content from a service provider, transmitting said first audio signal to the service provider via a back channel of said television network;

The Murdock Provisional discloses a “local processing unit,” which is the “Home Entertainment Processor” (HEP). Schmandt Decl. ¶¶ 102-105; Murdock Provisional at 2:3-7. The HEP receives an audio signal from a user requesting programming (e.g., “Show me all of the NCAA football games on this afternoon”). Murdock Provisional at 2:16-22, 3:8-11. The audio signal is sent to “the information source...located at the site of the information provider,” which provides “web-content, video-on-demand, [or] cable television.” *Id.* at 2:9-14. The “audio signal” is transmitted to the information source (i.e., “service provider”) on the network’s backward channel. *Id.* at 1:15-18, 2:5-7, 2:9-11, 2:28-29, 3:23-30.

The second element of claim 1 reads:

a remote server computer for receiving said first audio signal from the back channel, recognizing the first user and said request for said programming content from said transmitted audio signal, retrieving the request programming content from a program database, and transmitting said programming content to said local processing unit via the forward channel.

The Murdock Provisional discloses such a remote server computer. Schmandt Decl. ¶¶ 107-112. It describes an “information source...at the site of the information provider” that “contains the central speech recognition server” (i.e., “a remote server computer”). Murdock Provisional at 4:1-3; 4:18-22. The “central speech recognition server...processes speech control data arriving through the backward channel” (i.e., it receives “the first audio signal from the back channel”). *Id.* at 4:18-22; *see also* 1:15-18, 2:5-7, 2:9-11, 3:23-26. The central speech recognition server uses “software modules that perform speaker identification,” which are used “to perform a more accurate recognition by employing a user profile” (i.e., “recognizing the first user and said request for said programming content from said transmitted audio signal”). *Id.* at 3:16-18; *see also* 3:20-23, 4:6-8. The delivered information “could be web content, video-on-demand, or cable television” (i.e., “programming content”). *Id.* at 4:2-3; *see also* 2:12-14. A person of ordinary skill would have known such content was commonly retrieved from a database. Schmandt Decl. ¶ 111. The voice recognition server “sends the appropriate programming modifications through the forward channel as requested by the viewer” as claimed. Murdock Provisional at 1:18-22; *see also* 2:5-7, 2:7-9, 3:15-26.

B. The Subject Matter That Petitioner Cited in Murdock Is Supported by the Murdock Provisional

The petition cites the voice-activated control system of Murdock’s Figure 1.

Pet. at 15-42. In Murdock’s system (as discussed in the petition), users issue natural language voice commands, like “Show me all the college football games on this Saturday,” submitted through a “program control device” (e.g., hand-held remote control) requesting video-on-demand content and cable television.

Murdock at 2:22-43, 3:48-57. The commands are transmitted to local processing unit 120 (e.g., set-top box). *Id.* at 2:44-49. The commands are multiplexed with other users’ commands by back-channel multiplexer 136 and transmitted via back-channel 134 to remote server 130 at the service provider. *Id.* at 3:1-12. The server recognizes users’ requests, retrieves the requested content, and sends it to the respective users via the forward channel. *Id.* at 3:28-41, 4:65-5:14, 5:23-34.

The Murdock Provisional discloses the same subject matter for which Murdock is cited in the petition. Like Murdock, the Murdock Provisional also discloses a system providing natural language voice commands, like “Show me all of the NCAA football games on this afternoon,” submitted through a hand-held controller, to request video-on-demand or cable television. Murdock Provisional at 2:12-22, 4:2-3. These commands are sent to a user’s local HEP. *Id.* at 2:19-22. The HEP sends the commands to the back-channel multiplexer, which combines commands received from multiple HEPs into one signal and transmits it to the information source via the back channel. *Id.* at 2:1-14, 3:15-32, 4:14-18, Fig. 1. The information source includes a central speech recognition server that processes

speech data from the back channel and sends each viewer their requested programming via the forward channel. *Id.* at 2:5-9, 4:1-4, 4:11-22.

C. Patent Owner Does Not Attempt to Distinguish Murdock

Petitioner’s evidence that Murdock discloses every element of the challenged claims (rendering them obvious) is undisputed.

III. THE CHALLENGED CLAIMS ARE OBVIOUS IN VIEW OF JULIA AS THE PRIMARY REFERENCE

A. Julia Discloses the “Receiving” Step

Patent Owner argues that Julia does not disclose the “receiving” step in claims 1 and 27. It initially argues that Julia cannot be implemented in an “interactive cable television network” and instead is limited to a network “such as the Internet.” PO Resp. at 11. But Julia states that the system can be implemented in “a two-way electronic communications network that may be embodied in electronic communication infrastructure including coaxial (cable television) lines....” Julia at 4:31-35 (Ex. 1012); *see also* 4:38-42 (Julia’s system “*may* be part of the Internet” or “*any other* electronic communications network infrastructure”)²; Schmandt Decl. ¶¶ 307, 311. And, Patent Owner *licensed Julia* for its AgileTV cable television product purportedly embodying the challenged claims. LDA at 77 (Ex. 2022); Cook Dep. at 450:25-452:19.

² All emphasis added unless otherwise indicated.

Patent Owner additionally argues that Julia does not disclose the “receiving” step because it allegedly requires two separate elements: “receiving said back channel” and “creating a received back channel.” PO Resp. at 12. Its argument ignores the actual claim language, which recites the single step of “*receiving* said back channel *to create* a received back channel.” ’196 Patent at 51:1-2, 55:15-16 (Ex. 1001). Julia discloses that “multiple simultaneous network users” can issue voice requests through the upstream channel of network 106 (i.e., back channel). Julia at 4:31-35, 6:12-26; Schmandt Decl. ¶¶ 307, 311-312. When the remote server receives these voice requests, it is creating the “received back channel.” Pet. at 44-45, Schmandt Decl. ¶¶ 307, 311-312; Schmandt Reply Decl. ¶ 5 (Ex. 1029).

Patent Owner also argues that the “received back channel” is a “second element” distinct from the “back channel,” but does not propose any construction of the terms, explain how they allegedly differ, or identify any support in the patent showing that the “received back channel” is a distinct network element from the “back channel.” PO Resp. at 10. There is no such support. Schmandt Reply Decl. ¶¶ 6-7. The only reference to “received back channel” in the specification (other than mere repetition of the claim language) states that the “received identified speech channels are based upon a received back channel at the wireline node from multiple user sites coupled to the network.” *Id.* ¶ 7; ’196 Patent at 22:47-50. A person of ordinary skill would not conclude, based on the plain meaning of the

claims and the specification, that the received back channel is a different and distinct network “element” as Patent Owner argues. Schmandt Reply Decl. ¶ 8. Rather, when the systems disclosed in the ’196 Patent and in Julia are receiving voice data over the network back channel, they are “receiving said back channel to create a received back channel.” *Id.*

Finally, Patent Owner argues that Petitioner’s analysis maps the “received back channel” to “data,” which is incorrect. PO Resp. at 13. The received back channel is not data—it is the upstream channel carrying the signals containing user’s voice commands once it has been received by the speech processing system. Schmandt Reply Decl. ¶ 9. In Julia, the “received back channel” is created when the remote server receives voice data on the network back channel. Pet. at 44-45; Schmandt Decl. ¶¶ 311-312; Schmandt Reply Decl. ¶ 9.

B. The Prior Art Discloses the “Partitioning” Step

Patent Owner’s argument regarding the “partitioning” step of claims 1 and 27 relies on the same false premise that Petitioner mapped the “said received back channel” to “data” instead of a channel or signal, which is incorrect. Pet. at 44; Schmandt Reply Decl. ¶¶ 9, 11. Patent Owner attempts to distinguish Nazarathy and Quigley because they do not “disclose partitioning data.” PO Resp. at 14-15. Because Petitioner did not map the “received back channel” to data, the argument has no merit.

Patent Owner also argues that Petitioner conflates the “back channel” with the “received back channel” rather than treating them as separate claim elements. But, as discussed above, the received back channel is created when Julia’s remote server 108 receives voice commands from multiple users on the upstream channel of network 106 (*i.e.*, the back channel). Pet. at 44; Schmandt Decl. ¶¶ 307, 311-12; *see also* Schmandt Reply Decl. ¶ 5. There is no need to “conflate” elements.

Patent Owner also asserts that a skilled artisan would not understand the “partitioning” step as Petitioner has shown. But its only support is its expert who admittedly made no attempt to construe and understand the challenged claims. Tinsman Dep. at 32:6-33:3, 40:14-24, 99:8-100:22 (Ex. 1026).

C. Julia Discloses the “Processing” Step

Patent Owner argues that Julia does not disclose the “processing” step of claims 1 and 27 based on an unsupported and unreasonable distinction between “data” and “signals.” In a two-way interactive cable network, as in the ’196 Patent and Julia, signals carry data. Schmandt Reply Decl. ¶ 14. The remote server processes the signals received from the back channel to extract and perform speech recognition on the voice data. *Id.*; *see also* Nazarathy at 2:8-28 (describing data signals transmitted to cable head-end where signals are processed to extract the data) (Ex. 1013). Thus, Petitioner’s explanation of Julia does not “conflate” data and signals, as Patent Owner asserts, but instead recognizes that signals and data

are interrelated in network communication technology. Schmandt Reply Decl.

¶ 14; Nazarathy at 1:15-18 (head-end receives “digital data signals from multiple local and remote sources”), 2:3-6 (referring to “data signals”).

D. Julia Discloses a “Speech Recognition System Coupled to a Wireline Node”

Patent Owner argues that Petitioner did not identify a “speech recognition system coupled to a wireline node” as recited in claim 27. Julia’s remote server 108 constitutes a wireline node and within it (i.e., coupled to it) is processing logic 300 (a speech recognition system). Pet. at 53; Schmandt Decl. ¶¶ 371, 373. The ’196 Patent uses “coupled to” broadly, as Dr. Schmandt explained during his deposition. Schmandt Dep. at 27:24-28:9; *see also, e.g.*, ’196 Patent at 10:34-35, 21:21-22; 22:56-57, 26:50-51, 40:42-46. Patent Owner argues that Dr. Schmandt “does not know what ‘coupled to’ means....” PO Resp. at 20-21. But he testified that “coupled to” means the coupled elements “have some way of communicating” or “there’s some influence between the two things that are coupled.” Schmandt Dep. at 28:14-29:5. Patent Owner neither proposes nor supports any narrower construction under the broad applicable standard (or any other).

Patent Owner also argues that Julia’s remote server cannot be a “wireline node” and also execute the speech processing steps. But the ’196 Patent states that speech processing “program steps” reside in “memories accessibly coupled” to a computer that also “receive[s] the back channel” and “partition[s] the back

channel.” ’196 Patent at 40:55-67. Therefore, a computer (e.g., Julia’s remote server) can be a “wireline node” and also execute speech processing steps residing in memory “coupled to” the same computer.

E. Petitioner Demonstrated Motivation to Combine Julia with Nazarathy or Quigley

Patent Owner repeats its preliminary response argument that Petitioner failed to “articulate a motivation to combine” Julia with Nazarathy or Quigley. PO Resp. at 21-23; PO Prelim. Resp. at 23-26. As the Board already recognized, while Julia discloses receiving voice commands from multiple users over the back-channel, it does not explicitly teach “partitioning” the back-channel into a multiplicity of received identified speech channels. Pet. at 45-47; Inst. Dec. at 31-33. However, both Nazarathy and Quigley disclose “partitioning” an upstream data channel carrying multiple user signals at a cable head-end. *Id.* at 46. Julia states existing systems had “already been constructed to support access requests from multiple network users, as known by practitioners of ordinary skill in the art” (Julia 6:13-21), such as those in Nazarathy and Quigley. Pet. at 45-46; Schmandt ¶¶ 314-320, 445.

The Board previously concluded that a person of ordinary skill “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 by Nazarathy or Quigley. Inst. Dec. at 32 (citing Pet. at 61 and Schmandt Decl. ¶¶ 439, 443,

445). The Board agreed that a practitioner “would also have recognized the benefits of combining Julia with the teachings” of Nazarathy or Quigley. *Id.* (citing Pet. at 61 and Schmandt Decl. ¶ 444); *see also* Schmandt Decl. ¶¶ 443, 440-445 (reasons a POSITA would be motivated to combine).

Patent Owner responds by recycling its earlier argument and adds only a citation to a paragraph in its expert declaration. PO Resp. at 22. But the cited paragraph merely recites the same argument as the brief. *Compare* PO Resp. at 22 (last paragraph) *with* Tinsman Decl. ¶ 50 (Ex. 2033). Having its expert repeat attorney argument verbatim adds nothing to Patent Owner’s argument.

F. Julia Alone or in Combination with Gordon or Banker Discloses Voice-Control for Financial Transactions

Patent Owner incorrectly asserts that Petitioner relies on Julia alone for the step of “assessing said speech content response ... to create a financial consequence” in claims 5, 6, 31, and 32. In fact, the petition states that “Julia can be combined with either Banker or Gordon to disclose the ‘assessing’ and ‘billing’ steps” of these claims. *See, e.g.*, Pet. at 63; *see also* 36-38 (Gordon and Banker disclose “assessing said speech content response ... to create a financial consequence”).

Julia states that its voice-control system can be implemented on “the Diva Systems video-on-demand system.” Julia at 6:47-59. This suggests a combination with Gordon, which is a Diva Systems patent. Pet. at 67. Gordon discloses a

“video-on-demand” system providing “subscription-on-demand” services. *Id.* at 37-38; Gordon at 1:8-14, 8:35-9:63, Figs. 3A-3C. When the user selects a title, “the video session manager determines ... the title price.” Gordon at 9:29-31; *see also* 9:56-63, Fig. 3B; Schmandt Decl. ¶¶ 349, 353, 409, 413. This easily falls within the broadest reasonable interpretation of “creating a financial consequence.” Julia can also be combined with Banker, which discloses that users can purchase pay-per-view content. Pet. at 36-37. Banker describes a “BUY key” that “begins a purchase sequence” (i.e., creating a financial consequence). Banker at 16:62-17:3, Fig. 6F; Schmandt Decl. ¶¶ 348, 352, 409, 412.

Patent Owner never rebuts Petitioner’s argument that Julia combined with Gordon or Banker discloses the “assessing” step and never disputes Petitioner’s motivation evidence. Thus, Petitioner’s grounds of unpatentability based on these combinations stand undisputed.

Additionally, Julia alone suggests the “assessing” step. Julia discloses voice-controlled selection of on-demand video content and identifies the “Diva Systems video-on-demand system.” Julia at 6:47-59, 10:9-13, 11:29-43.

Petitioner cited Dr. Schmandt’s testimony that a person of ordinary skill would have known that Diva Systems’ system provided pay-per-view functionality. Schmandt Decl. ¶ 345. Diva Systems’ founder confirmed that its provided pay-per-view. Cook Dep. at 22:2-13, 249:6-17. A skilled artisan would have known

that pay-per-view and video-on-demand functionality, such as that provided by Diva Systems, would generate financial consequences. Schmandt Decl. ¶ 345.

Patent Owner relies on the unsupported premise that video-on-demand and pay-per-view services are mutually exclusive and that video-on-demand would not “create a financial consequence.” But these terms were not so rigid. A person of ordinary skill would have understood that a video rental system (e.g., in a hotel room) could be called “video-on-demand” or “pay-per-view.” Schmandt Reply Decl. ¶ 22. Furthermore, video-on-demand services were not free—they required at least one subscription payment. Schmandt Reply Decl. ¶ 21, 24. Patent Owner argues that “Netflix subscribers can watch as many videos on-demand as they please; they do not need to pay per view.” PO Resp. at 25. But the claims do not recite or require pay-per-view—they recite creating a “financial consequence.” Netflix subscribers must pay to subscribe and doing so using Julia’s voice-control system would create a “financial consequence” for which they would be billed. Schmandt Reply Decl. ¶ 24; *see also generally* Gordon at 7:49-11:40 (describing steps for paying to add a “subscription-on-demand” service). A person of ordinary skill in the art in 2000 would have understood that both video-on-demand subscription services (like Netflix although it did not exist) and pay-per-view services “create a financial consequence” for the user. Schmandt Reply Decl. ¶¶ 21-24. Patent Owner provides no evidence to the contrary.

G. Julia Discloses “Natural Language” Processing for the Requesting “User Site”

Patent Owner argues that Julia does not disclose “processing said received speech channels from said user site based upon natural language for said user site” as claims 13 and 39 recite. But Julia’s entire disclosure is directed to allowing users—at different “user sites”—to request programming content using “natural language” requests that will be recognized “for said user site.” Schmandt Decl. ¶ 363; Julia at 1:38-42 (providing “*spoken natural language requests*...for rapidly searching and accessing desired content”), 1:61-63 (“the voice-driven front-end must accept *spoken natural language input* in a manner that is intuitive to access.”); *see generally* Julia at 6:61-12:62.

In Julia, voice data is first “interpreted in order to understand the user’s request” and then processed by “natural language interpreter (or parser) 320.” Julia at 7:5-7, 7:47-53. Users’ voice requests are processed to identify content specified by a user—Julia provides examples of natural language requests, such as “Show me the movie ‘Unforgiven’” and “I want to see that movie starring and directed by Clint Eastwood.” Julia at 10:12-13, 11:31-32. After performing the speech processing for the user’s spoken request (i.e., “for the user site”), remote server 130 retrieves the requested content and transmits it to the user for display on the user’s display device 112. Julia at 2:27-41, 2:61-67, 4:13-17, 6:12-26, 11:60-67.

Patent Owner compares the language of claim 13 with claim 12, suggesting

that Julia must disclose the limitations added by those dependent claims in different ways. But claims 12 and 13 each depend directly from claim 2—claim 13 does not depend from, and further limit, claim 12. ’196 Patent at 52:48-64.³ Both dependent claims refer to “natural language” speech recognition associated with the “user site” transmitting the request. *Id.* The same disclosures in Julia satisfy the “natural language” limitations added by either dependent claim. Schmandt Decl. ¶¶ 362-369.

IV. PATENT OWNER’S RELIANCE ON SECONDARY CONSIDERATIONS IS UNAVAILING

A. Patent Owner Does Not Establish a Nexus Between Its Evidence and Any Novel Features of the Challenged Claims

Patent Owner must establish a nexus between the merits of the claims and the purported evidence of secondary considerations. *J.T. Eaton & Co., v. Atl. Paste & Glue Co.*, 106 F.3d 1563, 1571 (Fed. Cir. 1997). Patent Owner argues that a nexus should be presumed because its AgileTV product allegedly embodied the claims. PO Resp. at 28-30. Patent Owner relies on a conclusory declaration by

³ Similarly, claims 38 and 39 each depend directly from claim 28. ’196 Patent at 57:10-26.

its former CTO⁴ and the provisional application filed five years before Patent Owner’s “marketing trial” with Comcast. PO Resp. at 30-31. Patent Owner cites no evidence describing its actual commercial product. It merely argues in a circle that the product embodied the patent because the patent allegedly describes the product. *See Apple Inc. v. Chestnut Hill Sound Inc.*, 2017 WL 4349386, at *13 (PTAB Sept. 5, 2017) (no nexus presumed because “Patent Owner does not cite to persuasive evidence to support” that product embodied invention).

Further, “it is not sufficient that a product or its use merely be within the scope of a claim in order for secondary considerations of non-obviousness tied to that product to be given substantial weight.” *Chums, Inc. v. Cablz, Inc.*, 2016 WL 763054, at *12 (PTAB Feb. 8, 2016). “A nexus is required in order to establish that the evidence relied upon traces its basis to a novel element in the claim, not to something in the prior art.” *Id.* (citation omitted). “Objective evidence that results from something that is not ‘both claimed and *novel* in the claim,’ lacks a nexus to

⁴ Mr. Chaiken makes no attempt to show that the AgileTV product embodied and was “coextensive” with the challenged claims. Chaiken Decl. ¶¶ 14-16 (Ex. 2032); *see Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1130 (Fed. Cir. 2000) (“nexus is presumed” when a “product embodies the claimed features, and is coextensive with them”).

the merits of the invention.” *Id.* (citation omitted; emphasis in original); *see also Tokai Corp. v. Easton Enters., Inc.*, 632 F.3d 1358, 1369 (Fed. Cir. 2011); *Ormco Corp. v. Align Tech., Inc.*, 463 F.3d 1299, 1311-12 (Fed. Cir. 2006).

Patent Owner identifies no novel claim elements tied to its secondary considerations evidence. It asserts that the challenged claims were “[u]nlike existing speech recognition methods and systems” because the patent “teaches a method that uses a back channel containing a multiplicity of identified speech channels for speech recognition at a wireline node in a network supporting video or cable television delivery.” PO Resp. at 31. Yet, none of Patent Owner’s secondary considerations evidence relates to these aspects of the claims. *See In re Kao*, 639 F.3d 1057, 1068 (Fed. Cir. 2011) (no nexus “[w]here the offered secondary consideration actually results from something other than what is both claimed and novel in the claim”). Furthermore, the purported novelty existed in the prior art. Murdock and Julia both disclosed systems using a back-channel containing a multiplicity of identified speech channels for speech recognition at a wireline node in a network supporting video or cable television delivery. *See Pet.* at 15-20, 43-48; Schmandt Decl. ¶¶ 135-157, 306-330.

B. Patent Owner Cannot Establish a “Long-Felt Need” Satisfied by the Challenged Claims

“[L]ong-felt need is analyzed as of the date of an articulated identified problem and evidence of efforts to solve that problem.” *Texas Instruments, Inc. v.*

U.S. Int’l Trade Comm’n, 988 F.2d 1165, 1178 (Fed. Cir. 1993). Patent Owner asserts that the problem was that “[p]revious tools for navigating the large amounts of content in cable systems were unwieldy and impractical.” PO Resp. at 34. Patent Owner suggests this “problem” arose “[a]s early as 2000”—which was the *same year* the provisional application cited by the ’196 Patent was filed. Chaiken Decl. ¶ 6. This is not a “long-felt” need. *See, e.g., L-3 Communications Holdings, Inc. v. Power Survey, LLC*, 2015 WL 7695160, at *13 (PTAB Nov. 23, 2015) (purported need “was not long-felt because it arose in 2004 and was met in 2005”).

There is also no evidence that the alleged “need” was “persistent” and unsatisfied by the prior art. *See Google, Inc. v. Meiresonne*, 2016 WL 280103, at *11 (PTAB Jan. 20, 2016). The ’196 Patent (and all of Patent Owner’s secondary considerations evidence) concerns voice control in a cable television network—the same solution identified in the prior art. Julia at 4:18-30, Fig. 1; Murdock at 3:13-24, Fig. 1; Houser at 33:49-67, Fig. 15; IBM Technical Bulletin at 287, Fig. 3. And far from “needing” Patent Owner’s product, Comcast undisputedly rejected it. Cook Dep. at 215:13-217:7; Chaiken Dep. at 70:19-71:8.

C. Patent Owner’s Evidence of “Industry Praise” Is Not Tied to Any Novel Feature of the Challenged Claims

Patent Owner’s “industry praise” is directed to features disclosed in the prior art. *See Bayer Healthcare Pharm., Inc. v. Watson Pharm., Inc.*, 713 F.3d 1369, 1377 (Fed. Cir. 2013) (rejecting “industry praise of what was clearly rendered

obvious by published references”). For instance, Patent Owner cites a report by Buckingham Research Group (which is not in the “cable industry”) mentioning the product and noting “the ease with which it could conduct searches (e.g., for all programs starring Julia Roberts).” Ex. 2020 at 7. But spoken search requests were disclosed in the prior art. Julia at 11:31-32 (voice query for Clint Eastwood movies); Murdock at 3:53-55 (voice query for college football games); Houser at 30:49-58 (voice query for Marilyn Monroe movies). Patent Owner’s assertion that certain Comcast executives praised AgileTV suffers the same defect—the cited statements all relate to spoken search requests disclosed in the prior art. Ex. 2016 at 1 (voice query for John Wayne movies); Ex. 2017 at 1 (same); Ex. 2011 at 1 (“scan cooking” and “scan sports”).

Patent Owner alleges it won an award from “Speech Technology Magazine” but cites only its own self-congratulatory press release. Ex. 2009 at 1-2; *see In re Cree*, 818 F.3d 694, 702 (Fed. Cir. 2016) (finding “self-serving” press releases “unpersuasive”). Moreover, the press release credits aspects of the AgileTV system not in the challenged claims. Ex. 2009 at 2 (referring to “extensive, dynamically managed database of more than 100,000 phrases” for delivering

“higher than 90 percent voice recognition accuracy”).⁵

Patent Owner cites its executives’ appearance on “Kudlow & Cramer” (also not in the “cable industry”) discussing the AgileTV product. Yet, the product failed to work on the show (Ex. 2019 at 1, 3; Chaiken Dep. at 96:14-97:19), and AgileTV’s representatives simply described how it was supposed to operate (Ex. 2019 at 2-4). Specifically, they described the same spoken search requests disclosed in the prior art. *Id.* at 3 (“Find movies with Brad Pitt”).

Finally, Patent Owner cites as “industry praise” its internal summary of an “Alpha trial” in 10 homes over a one-month period. Ex. 2010 at 5. The summary concludes that “[t]o date, user acceptance has exceeded our expectations” without providing any evidence of the expectations or how “user acceptance” was measured. *Id.* at 6. The summary shows only that an extremely limited test did not fail—not “industry praise.”

D. The Challenged Claims Are Not “Commercially Valuable”

There is no evidence that the ’196 Patent was valuable. Comcast’s payment

⁵ The AgileTV product employed voice recognition processing provided by a third-party vendor. Cook Dep. at 250:15-253:14, 255:22-258:21, 316:4-6. Any praise for such voice recognition processing is not praise for Patent Owner’s product at all.

under the License and Development Agreement (“LDA”) was a loan that Patent Owner later repaid in full. Cook Dep. at 156:5-12, 160:20-161:2. Patent Owner also offered a paid-up license to its patents, which Comcast declined. *Id.* at 106:20-107:9, 117:12-118:7, 135:4-5. After failing to win Comcast’s business, Patent Owner dropped its television product and shifted to an automobile product. *Id.* at 215:13-218:13.

Patent Owner received several rounds of funding, but cannot tie any to the challenged claims. Patent Owner cites a presentation showing its early funding was based on at least two different products: one for television and another for cellular telephones. Ex. 2003 at 34. It mentions no particular patents or features of the television product tying any investment to the challenged claims. *Id.*; *see also* Ex. 2002 at 3; Ex. 2021 at 1-2. And Patent Owner’s former CEO testified that it received substantial funding to change course to a new automobile product. Cook Dep. at 217:22-219:18.

E. Comcast Did Not License the Challenged Claims

Patent Owner cites the limited license to an application that eventually lead to the ’196 Patent as evidence of commercial value. The LDA was expressly limited to Comcast’s evaluation of AgileTV. LDA at 8 (Section 1(c)) (Ex. 2022). The license required “no additional consideration” and applied to all of Patent Owner’s then-pending patent applications plus four SRI patents. *Id.* at 77-78

(Exhibit E); Cook Dep. at 450:25-452:19. This limited license was simply a prudent effort to avoid infringement claims based on Comcast’s trial of AgileTV. *See Bosch Auto. Serv. Solutions, LLC v. Matal*, 878 F.3d 1027, 1037-38 (Fed. Cir. 2017) (license is “not a strong indication of nonobviousness” if entered only “to avoid litigation expense”).

The license could not have signified any “recognition and acceptance” of the challenged claims because they did not yet exist. *In re GPAC Inc.*, 57 F.3d 1573, 1580 (Fed. Cir. 1995) (rejecting evidence of “extensive licensing” because patent holder had “not shown that licensing of [the] invention arose out of recognition and acceptance of the subject matter claimed in the” challenged patent). The ’196 Patent did not issue until a year after the LDA was entered.

F. There Is No Evidence of Copying

Patent Owner asserts that Comcast copied its voice recognition technology, citing its district court infringement contentions. PO Resp. at 39-40. But infringement contentions are not evidence of copying. *See Wyers v. Master Lock Co.*, 616 F.3d 1231, 1246 (Fed. Cir. 2010) (“copying requires evidence of efforts to replicate a specific product”).

Patent Owner’s declarant refers to unidentified “acquaintances” saying “they confused Comcast’s functionality with the AgileTV solution” from ten years earlier. Chaiken Decl. ¶ 34. Even if not rejected as rank hearsay, this testimony

does not demonstrate copying.

V. CONCLUSION

The challenged claims are obvious in light of the prior art.

Respectfully submitted,

/s/ James L. Day

James L. Day

Registration No. 72,681

Attorney for the Petitioner

CERTIFICATE OF COMPLIANCE

This reply complies with the 5,600 word count limit under 37 C.F.R. § 42.24(c)(1). The reply contains 5,597 words, excluding the parts exempted by 37 C.F.R. § 42.24(c) (i.e., table of contents, table of authorities, mandatory notices under § 42.8, certificate of service, word count certificate, and appendix of exhibits), as determined by the word count feature of Microsoft Word, which was used to prepare this reply.

/s/ James L. Day
James L. Day
Registration No. 72,681

CERTIFICATE OF SERVICE

I hereby certify that on December 13, 2018, the foregoing Petitioner’s Reply to Patent Owner’s Response was served on the Patent Owner’s counsel of record via email, as agreed to by Patent Owner, at the following email addresses:

Joshua L. Goldberg (joshua.goldberg@finnegan.com)
Jacob A. Schroeder (jacob.schroeder@finnegan.com)
Cory C. Bell (cory.bell@finnegan.com)
Daniel Klodowski (daniel.klodowski@finnegan.com)
John S. Ferrell (jsferrell@carrferrell.com)
Wade C. Yamazaki (wyamazaki@carrferrell.com)

/s/ James L. Day
James L. Day
Registration No. 72,681

December 13, 2018
235 Montgomery Street
San Francisco, CA