

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC,
Petitioner,

v.

DIALECT, LLC,
Patent Owner.

IPR2024-00752
Patent 8,849,652 B2

Before BRIAN J. McNAMARA, HYUN J. JUNG, and
GEORGE R. HOSKINS, *Administrative Patent Judges*.

HOSKINS, *Administrative Patent Judge*.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

Petitioner Google LLC has filed a Petition (Paper 2, “Pet.”) pursuant to 35 U.S.C. §§ 311–319 to institute an *inter partes* review of U.S. Patent No. 8,849,652 B2 (Ex. 1001, “the ’652 patent”), claims 1–27.

Patent Owner Dialect, LLC has filed a Preliminary Response (Paper 9, “Prelim. Resp.”). Patent Owner argues the Petition fails to satisfy the requisite threshold for instituting review on the merits, and also urges us to exercise our discretion under 35 U.S.C. § 325(d) to deny institution.

For reasons provided below, we determine on behalf of the Director (*see* 37 C.F.R. § 42.4(a)) that the record demonstrates a reasonable likelihood Petitioner would prevail with respect to at least one challenged claim. *See* 35 U.S.C. § 314(a). We also decide not to exercise our discretion to deny institution pursuant to 35 U.S.C. § 325(d). Therefore, we grant institution of the petitioned *inter partes* review.

II. BACKGROUND

A. *Real Parties-in-Interest and Related Proceedings*

Petitioner identifies itself (i.e., Google LLC) as the real party-in-interest. *See* Pet. 11 & n.1. Patent Owner identifies itself (i.e., Dialect, LLC) as the real party-in-interest. *See* Paper 5, 1.

Petitioner has filed several IPR proceedings to challenge patents owned by Patent Owner. *See* Pet. 11–12. They are: IPR2024-00746 (U.S. Patent No. 7,398,209 B2); IPR2024-00747 (U.S. Patent No. 7,502,738 B2); IPR2024-00748 (U.S. Patent No. 8,015,006 B2); IPR2024-00749 (U.S. Patent No. 7,693,720 B2); IPR2024-00750 (U.S. Patent No. 9,031,845 B2); IPR2024-00751 (U.S. Patent No. 8,447,607 B2); IPR2024-00752 (U.S.

Patent No. 8,849,652 B2); and IPR2024-00753 (U.S. Patent No. 7,640,160 B2).

The parties also identify three district court litigations as related to the '652 patent. *See* Pet. 11; Paper 5, 1; Prelim. Resp. 11–13.

B. The '652 Patent Specification

The '652 patent provides a plurality of mobile devices that each have a speech interface enabling natural language human-machine interactions. *See* Ex. 1001, 1:20–25. In particular, each device allows “mobile users to submit natural language speech and/or non-speech questions or commands in a wide range of domains” and then “present[s] responses in a natural manner.” *Id.* at 1:25–29, 3:33–38.

Figure 1 of the '652 patent is reproduced below.

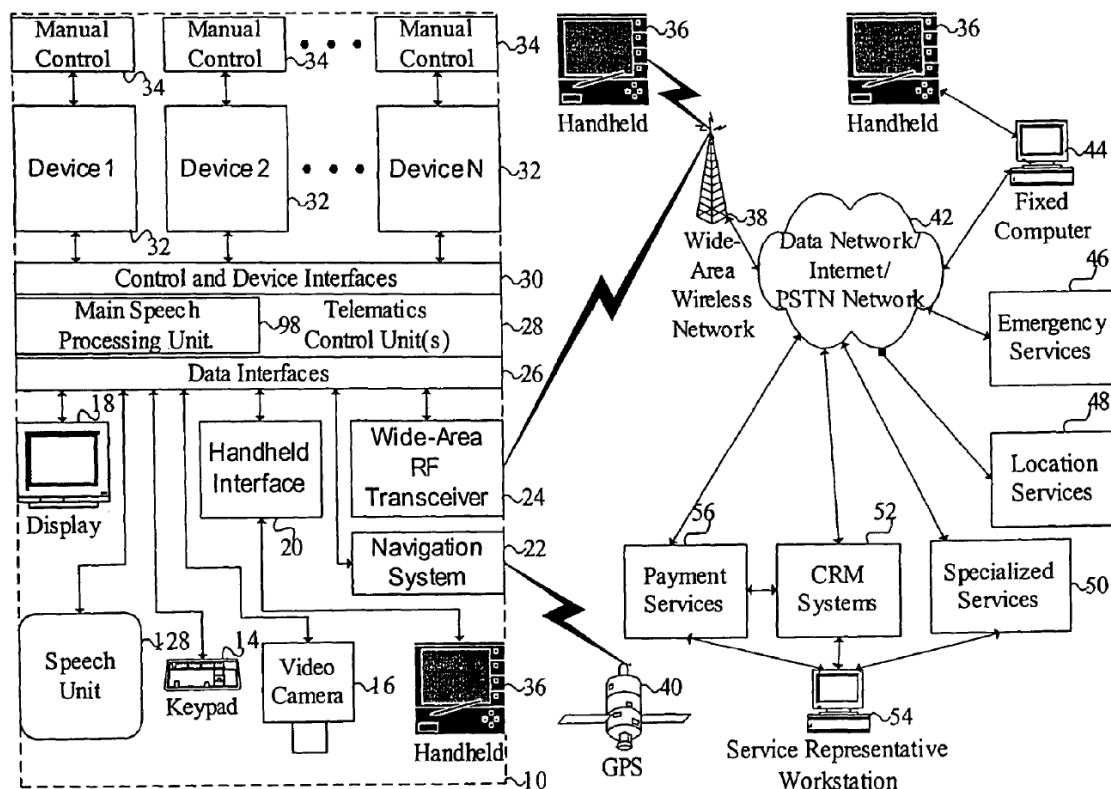


Figure 1

'652 Patent, Figure 1.

Figure 1 is a block diagram of a system according to one embodiment of the '652 patent's invention. *See id.* at 15:30–31, 15:58–64. The system includes mobile structure 10, several mobile devices 36, and fixed home or office computer system 44, all in communication with each other via wireless network(s) 38 and other data network(s) 42 such as the Internet. *See id.* at 15:65–16:1, 17:5–14.

Mobile structure 10 can be a vehicle such as an automobile, and includes telematics control unit 28 that controls various devices 32 (e.g., door locks, interior temperature controls, cruise control, etc.) within mobile structure 10 to execute commands spoken by users. *See id.* at 15:61–63, 16:7, 16:37–41, 16:64–17:4. Mobile structure 10 accordingly has speech unit 128 including microphone(s) and related circuitry to record natural language utterances by the user, and main speech processing unit 98 that parses the recorded utterances to discern and respond to user questions or commands. *See id.* at 16:6–12, 16:37–41, 25:48–54, 26:18–28.

Mobile devices 36 can be mobile telephones or personal digital assistants, for example. *See id.* at 16:1–3. Each mobile device 36 can include its own speech unit 128 and main speech processing unit 98 to enable its local processor to respond to natural language questions and commands from users. *See id.* at Fig. 3, 18:33–41, 18:54–62, 19:24–32.

Fixed computer system 44 also can include its own speech unit 128 and main speech processing unit 98 to enable its local processor to respond to natural language questions and commands from users. *See id.* at Fig. 4, 18:33–41, 21:61–22:12.

Each networked device 10, 36, and 44 tracks the “context” of verbal utterance questions and commands received and processed by the device,

such as “time, location, numbers, dates, categories (e.g., music, movies, television, addresses, etc.) and other context.” *Id.* at 19:32–33, 19:49–55, 20:22–26, 22:12–13, 23:11–35. Each device maintains this context information in a “context stack” stored on the device, which “includes an ordered list of command contexts.” *Id.* at 20:10–12, 20:19–22. The context information may be utilized to determine the intent of subsequent verbal utterance questions and commands. *See id.* at 2:11–22, 2:58–67, 4:50–51, 6:3–16, 20:13–22, 29:42–51, 32:55–64, 33:67–34:18.

The context information maintained by each networked device 10, 36, and 44 can be synchronized between the devices. *See id.* at 17:15–21. Figure 7 shows how context manager 702 may maintain the contexts tracked by the various networked devices. *See id.* at 15:43–44, 19:33–41. Then, each networked device “may be informed of context changes through context tracking module 714, thereby synchronizing the context across the . . . devices.” *Id.* at 19:41–44; *see also id.* at 4:29–32 (“[M]obile devices may be informed of context changes through a context tracking module to enable synchronizing of context across the [devices].”). “The synchronization may be performed automatically when any two or more of the computers are connected to these networks,” or “the synchronization may be performed on demand under user control.” *Id.* at 17:21–25.

C. The '652 Patent Claims

The '652 patent includes twenty-seven claims, all of which are challenged here. *See Ex. 1001, 38:38–42:63; Pet. 13–14.* Claim 1 is illustrative, and it recites, with our emphases added:

1. A system for processing natural language utterances where recognized words of the natural language utterances alone

are insufficient to completely determine one or more commands or requests, the system comprising:

one or more physical processors programmed with one or more computer program instructions which, when executed, cause the one or more physical processors to:

generate a first context stack associated with a first device, the first context stack comprising context information that corresponds to a plurality of prior utterances;

synchronize the first context stack with a second context stack associated with a second device such that the context information of the first context stack is updated based on related context information of the second context stack;

receive a natural language utterance associated with a command or request;

determine one or more words of the natural language utterance by performing speech recognition on the natural language utterance; and

determine the command or request based on the one or more words and the updated context information.

Ex. 1001, 38:39–61 (emphases added).

D. Asserted Prior Art

Petitioner relies on the following three references as prior art against all claims of the '652 patent. *See* Pet. 13–14.

Name	Reference	Exhibit No.
Coffman	WO 00/20962	1003
Kennewick	US 2004/0044516 A1	1004
Lee	US 2002/0087315 A1	1006

Patent Owner does not dispute at this time that these references are prior art against all claims of the '652 patent. *See* Prelim. Resp. *generally*.

E. Asserted Grounds

Petitioner asserts the following three grounds of unpatentability. *See* Pet. 13–14.

35 U.S.C. § ¹	References	Claims Challenged
103(a)	Coffman	1–9, 14–18, 20–26
103(a)	Coffman, Kennewick	10–13, 19, 27
103(a)	Coffman, Kennewick, Lee	13, 19

F. Testimonial Evidence

Petitioner relies on the proffered expert witness testimony of Mr. Christopher Schmandt (Exhibit 1002). Patent Owner does not rely on opposing expert witness testimony. *See* Prelim. Resp. *generally*.

III. PETITIONER’S GROUNDS OF UNPATENTABILITY

A. Legal Standards — Petitioner’s Burden

“In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is

¹ Amendments to 35 U.S.C. § 103 enacted by the Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”) took effect in March 2013. The '652 patent issued from an application filed in May 2013, asserting priority to three applications filed before March 2013. *See* Ex. 1001, codes (22) & (60). Therefore, we cite to the pre-AIA version of § 103. The outcome of this Decision is not affected by which version of § 103 applies here.

unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)). This burden of persuasion never shifts to the patent owner. *See Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015).

B. Legal Standards — Obviousness

A patent claim is unpatentable under 35 U.S.C. § 103 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 ordinary skill in the art; and (4) objective evidence of nonobviousness, if made available in the record, which has not happened here. *See Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

C. Level of Ordinary Skill in the Art

Petitioner contends a person having ordinary skill in the art pertaining to the ’652 patent “would have possessed a bachelor’s degree in electrical engineering or computer science, and two years of work experience in the field of speech- and natural language-interfaces for interacting with and directing computer systems and software, including speech recognition and

processing (and more experience could substitute for less formal education, and vice versa).” Pet. 16; Ex. 1002 ¶¶ 11–15.

Patent Owner does not oppose Petitioner’s formulation of ordinary skill. *See* Prelim. Resp. *generally*.

For purposes of this Decision, we are satisfied that Petitioner’s formulation of ordinary skill generally comports with the level of skill necessary to understand and implement the teachings of the ’652 patent and the asserted prior art, so we apply that formulation here.

D. Claim Construction

We interpret the ’652 patent claims “using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. 282(b).” 37 C.F.R. § 42.100(b). This “includ[es] construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.” *Id.*

Petitioner argues: “Express claim construction is unnecessary because the prior art renders the challenged claims obvious under any reasonable construction.” Pet. 18.

Patent Owner argues “the Board need not engage in any pre-institution claim construction” because “Petitioner’s grounds include fundamental flaws” regardless of any claim construction issues. Prelim. Resp. 13–14. Patent Owner further notifies the Board that the United States District Court for the Eastern District of Virginia has construed various terms found in the claims of the ’652 patent, albeit in the context of other patents owned by Patent Owner. *See id.* at 11–13 (citing Exs. 2002–2007).

In Section III.E.2(ii)(c) below, we discuss the claim term “synchronize” when considering Patent Owner’s arguments comparing claim 1 with Coffman. Otherwise, based on the arguments and evidence presented, we determine no explicit construction is needed to resolve the parties’ controversy. *See Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) (“The Board is required to construe ‘only those terms . . . that are in controversy, and only to the extent necessary to resolve the controversy.’”) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

E. Ground One — Obviousness over Coffman

In Ground One, Petitioner asserts claims 1–9, 14–18, and 20–26 of the ’652 patent are unpatentable as having been obvious over Coffman. *See* Pet. 13–14, 18–60. Patent Owner disagrees. *See* Prelim. Resp. 1–2, 14–23.

We firstly summarize Coffman’s disclosure. Then we consider the parties’ competing contentions, and we conclude the record demonstrates a reasonable likelihood that Petitioner would prevail with respect to at least claim 1, so we grant the petitioned *inter partes* review.

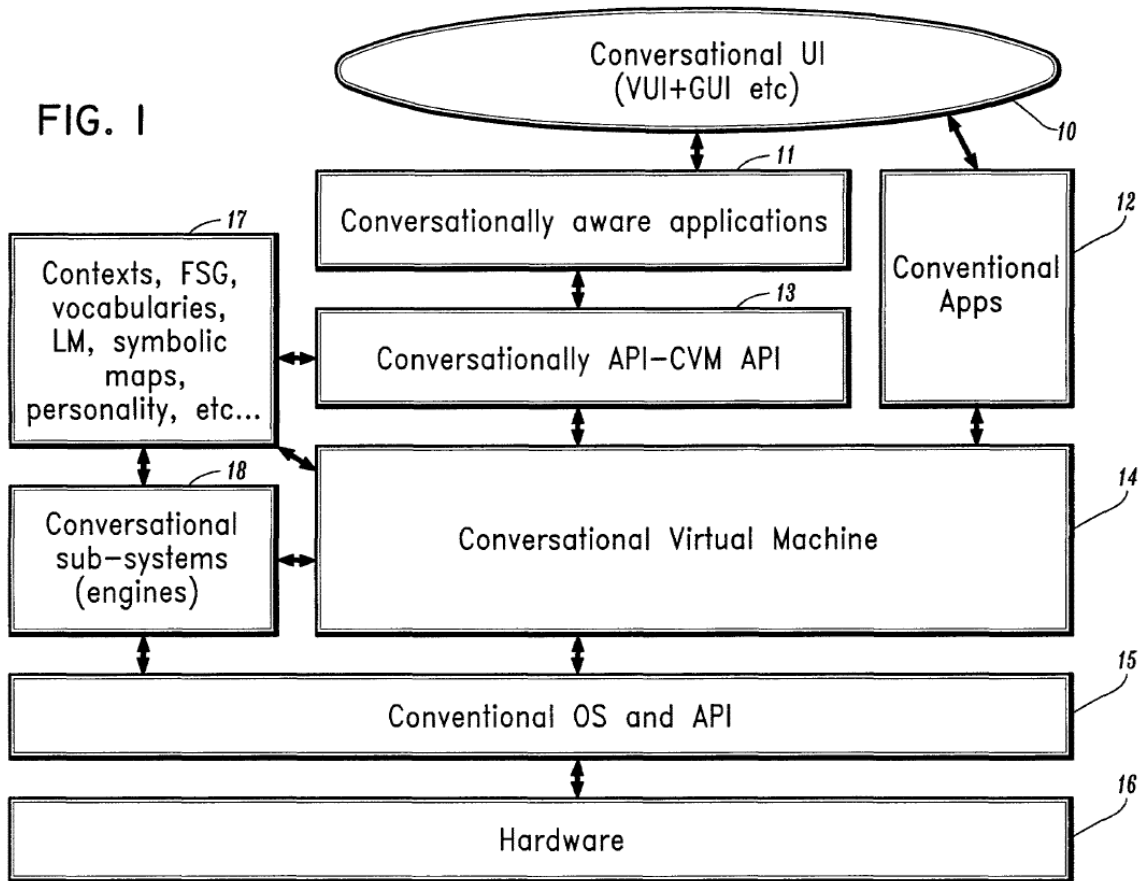
1. Coffman

Coffman discloses a “conversational virtual machine” (CVM) that “exposes conversational APIs (application program interface), conversational protocols and conversational foundation classes to application developers.” Ex. 1003, 1:6–14.² Coffman’s CVM “provides a kernel layer that is responsible for implementing conversational computing

² When citing to the written description of Coffman, we refer to the native pagination at the bottom center of each page.

by managing dialog and context, conversational engines and resources, and conversational protocols/communication across platforms and devices having different conversational capabilities to provide a universal CUI (conversational user interface).” *Id.* at 1:14–17.

Figure 1 of Coffman is reproduced below.

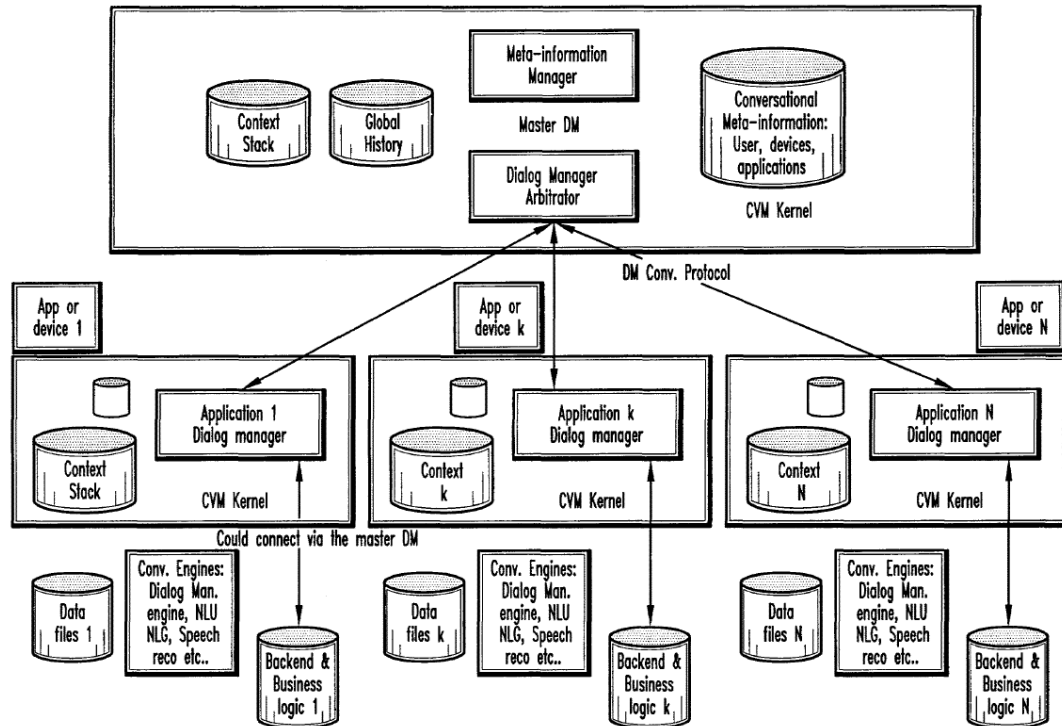


Coffman, Figure 1.

Figure 1 of Coffman is a block diagram of a conversational computing system. *See id.* at 9:27–28, 12:5–7. The system includes a multi-modal CUI 10, a plurality of conversationally aware applications 11, APIs 13 for applications 11 to operate with CVM 14, and other components. *See id.* at 12:7–10, 12:26–13:13.

Figure 10 of Coffman is reproduced below.

FIG. 10



Coffman, Figure 10.

Figure 10 is a diagram of a dialog management system and process, including “protocols for information exchange between dialog managers (DMs) . . . of networked devices” wherein “different devices, CVMs or different applications will have their own dialog manager [and] context stack.” *Id.* at Figs. 9–10, 10:15–16, 26:28–27:2, 27:23–24. In particular, Figure 10 “illustrates a hierarchical dialog between multiple dialog managers (i.e, the master arbitrator, and the slave dialog managers 1, k, and N) of various devices/applications (1, k and N)” that follows “a typical master slave topology . . . formed by exchanging the relevant information via the DM protocols.” *Id.* at 27:24–28. The master dialog manager is shown at the top of Figure 10 (“Master DM”), and three slave or

peer dialog managers are shown across the middle of Figure 10 (“Dialog manager[s]”). *See id.* at 27:2–5.

The master DM is “responsible for managing the flow of I/O to the different [slave] managers to decide the active dialog and appropriately execute a query and update the context and history.” *Id.* at 27:5–7. Various types of “information can be exchanged” between the master and slave devices, including “context” information, as discussed further below. *Id.* at 27:7–20.

2. *Claim 1 of the '652 Patent*

Petitioner provides arguments and evidence in support of contending claim 1 is unpatentable as having been obvious over Coffman, including supporting testimony from Mr. Schmandt. *See* Pet. 19–37; Ex. 1002 ¶¶ 41–46, 56–80. Patent Owner opposes. *See* Prelim. Resp. 1–2, 14–23. For the following reasons, we conclude Petitioner has demonstrated a reasonable likelihood of prevailing on its assertions for claim 1.

(i) *Petitioner’s Unopposed Contentions*

Petitioner contends and Mr. Schmandt testifies that Coffman discloses, as recited in the preamble of claim 1 if it is limiting, a system for processing natural language utterances where recognized words of the utterances alone are insufficient to completely determine one or more commands or requests. *See* Pet. 19–24 (citing Ex. 1003, Fig. 6, 5:1–4, 6:6–8, 6:32–7:3, 11:23–24, 13:8–11, 29:20–32, 36:19–21, 37:14–32, 41:2–5, 42:1–5, 48:1–3, 53:8–10, 53:22–26, 56:25–57:2; Ex. 1008, 35); Ex. 1002 ¶¶ 57–62.

Petitioner also contends and Mr. Schmandt testifies that Coffman’s system includes, as required by claim 1, one or more physical processors programmed with instructions to cause the processors to take certain actions. *See* Pet. 24–25 (citing Ex. 1003, 13:1–3); Ex. 1002 ¶ 63. Petitioner and Mr. Schmandt alternatively assert this claim requirement “describes nothing more than routine and conventional components and operation of a generic computer system,” which a person of ordinary skill in the art would have found obvious to utilize in Coffman’s system. Pet. 24–25, 33, 35, 37 (citing Ex. 1009, 16, 24–25, 28, 33); Ex. 1002 ¶¶ 63, 75, 77, 80.

Further according to Petitioner and Mr. Schmandt, the actions taken by Coffman’s processors include, as recited in claim 1: “receiv[ing] a natural language utterance associated with a command or request”; “determin[ing] one or more words of the natural language utterance by performing speech recognition on the natural language utterance”; and “determin[ing] the command or request based on the one or more words and . . . context information” maintained in a context stack. *See* Pet. 32–37 (citing Ex. 1003, Figs. 4 and 6, 6:32–7:3, 10:28–30, 13:8–13, 29:1–4, 30:8–10, 37:14–26, 38:9–11, 38:26–27, 40:12–15, 41:2–5, 42:1–5, 48:1–3, 51:12–14, 56:25–57:2); Ex. 1002 ¶¶ 73–80.

We conclude the foregoing contentions, which Patent Owner does not oppose at the present time, are supported sufficiently by the cited disclosures in Coffman and by Mr. Schmandt’s testimony to justify institution of review.

(ii) *Petitioner's Opposed Contentions*

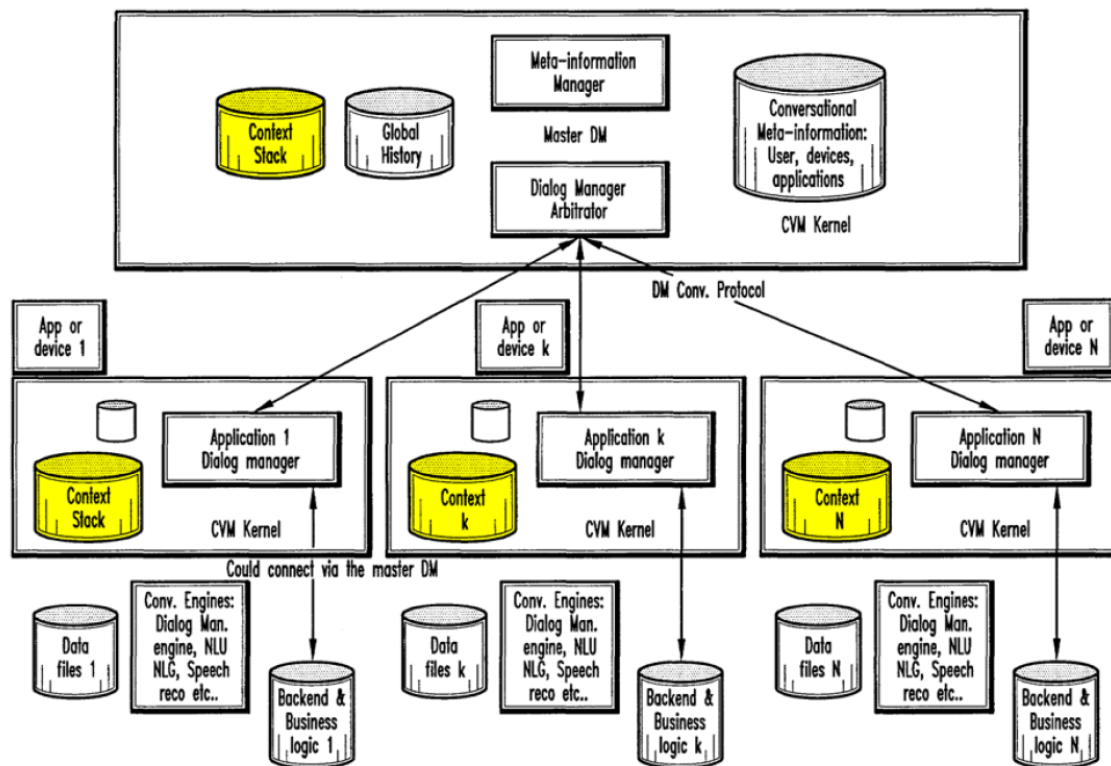
Patent Owner opposes Petitioner's reliance on Coffman as disclosing *synchronizing* a first *context stack* associated with a first device with a second *context stack* associated with a second device, such that the context information of the first context stack is updated based on related context information of the second context stack, as required by claim 1. Ex. 1001, 38:46–56; *see* Prelim. Resp. 1–2, 14–23.

We summarize the parties' competing contentions in this regard, then we explain why we conclude the record supports Petitioner's contentions sufficiently to justify institution of review.

(a) *Petitioner's Contentions*

Petitioner contends “Coffman's conversational system includes a ‘**context stack**’ where the state and history of each active task/process, such as an application process, is tracked in its own ‘context’ . . . derived from a user's spoken input.” Pet. 25–26 & n.3 (citing Ex. 1003, 6:8–10, 6:26–28, 6:32–7:3, 29:18–30:10, 37:20–26, 41:2–5); Ex. 1002 ¶¶ 64–65 & n.4. Petitioner asserts “Coffman explains that its conversational computing system can take the form of a distributed system involving multiple devices” which “exchange information” over a network, including “their current conversational state, arguments (data files 209) and context.” Pet. 26–27 (citing Ex. 1003, Fig. 3, 22:32–23:3); Ex. 1002 ¶ 66.

Petitioner further asserts Coffman “discloses a ‘**first context stack associated with a first device.**’” Pet. 26. To support this assertion, Petitioner annotates Coffman's Figure 10, as reproduced below:



Coffman, Figure 10 (As Annotated at Pet. 28).

Figure 10 is a diagram of a dialog management system and process, as summarized above in Section III.E.1. Petitioner has annotated (in yellow) the “Context Stack” maintained by CVM 14 with a master dialog manager or “Master DM,” as well as the “Context Stack[s]” respectively maintained by three “[D]evice[s]” 1, k, and N with respective slave “Dialog manager[s].” Ex. 1003, Fig. 10, 26:28–27:28; *see* Pet. 27–29 (“Coffman further explains that the devices in its conversational system ‘typically . . . will have their own . . . context stack 217, 217a’ — i.e., each device has a ‘**context stack associated with [that] device**’ [per claim 1].”) (citing Ex. 1003, Fig. 10, 27:1–7, 27:24–26); *id.* at 29 (arguing Coffman’s “context stack operates and is managed under control of dialog manager/controller”) (citing Ex. 1003, 28:24–27, 29:18–20); Ex. 1002 ¶¶ 66–67.

Petitioner asserts that “[i]n Coffman, the ‘**first device**’ could correspond to the device in a master slave topology having the master/central dialog manager.” Pet. 29 (citing Ex. 1003, 27:5–7, 27:26–28, 28:24–27, 29:18–20); Ex. 1002 ¶ 67. Further according to Petitioner, “[t]he claimed ‘**second context stack associated with a second device**’ . . . corresponds in Coffman to a context stack associated with a slave device.” Pet. 30 (citing Ex. 1003, Figs. 3 and 10, 27:1–7, 27:24–26); Ex. 1002 ¶ 69. Petitioner next asserts “Coffman further makes clear that a master device’s context stack (‘**the first context stack**’) is ‘**synchronized**’ with a slave device’s context stack (‘**a second context stack associated with a second device**’).” Pet. 30–31 (citing Ex. 1003, 25:10–14, 27:7–20); Ex. 1002 ¶ 70.

Petitioner argues a person of ordinary skill in the art “would have further understood and found it obvious that, as a result of synchronizing device context stacks in Coffman’s system, ‘**the context information of the first context stack is updated based on related context information of the second context stack.**’” Pet. 31; Ex. 1002 ¶ 71. Petitioner asserts “[t]he context information in the two context stacks would be ‘**related**’” per claim 1 because: (1) Coffman explains the context information “can comprise ‘**context updates**,’ which would update previous, related context information in the device’s context stack”; and (2) “the associated devices themselves are related as a result of the master slave topology relationship.” Pet. 31–32; Ex. 1002 ¶ 71.

Petitioner and Mr. Schmandt next posit that a person of ordinary skill in the art “would have further understood and found it obvious that determining the command or request could take place after the master/central device had updated its context information, predictably resulting in

determining the command or request ‘**based on the one or more words and the updated context information,**’” as recited in the final limitation of claim 1. Pet. 37 (citing Ex. 1003, 55:27–30); Ex. 1002 ¶ 79.

Petitioner and Mr. Schmandt finally conclude Coffman discloses or alternatively suggests utilizing one or more physical processors programmed with instructions to cause the processors to generate the first context stack and to synchronize the first context stack with the second context stack, substantially as discussed above in relation to Petitioner’s unopposed contentions. *See* Pet. 29–30 (“referring back to 1[a] . . .”) (citing Ex. 1003, 19:26–29, 29:18–20, 30:4–10, 37:18–20); *id.* at 32 (“for substantially the same reasons as those explained for 1[a][i] . . .”); Ex. 1002 ¶¶ 68, 72.

(b) Patent Owner’s Contentions

Patent Owner opposes Petitioner’s foregoing arguments and Mr. Schmandt’s testimony in support. *See* Prelim. Resp. 1–2, 14–23.

Patent Owner argues “Petitioner fails to establish that Coffman synchronizes a ‘context stack’ . . . in one device with another ‘context stack’ . . . in another device.” Prelim. Resp. 1. Patent Owner asserts “Petitioner’s citations to Coffman do not mention ‘synchronizing’ and, instead, just indicate that a master dialog manager in Coffman may instruct a slave dialog manager *to add* or *update* context in a context stack.” *Id.* at 1–2. According to Patent Owner, “Petitioner fails to explain how those activities in Coffman would result in synchronization of context stacks . . . in the devices.” *Id.* at 18, 20–23 (citing Pet. 30–31; Ex. 1002 ¶ 70; Ex. 1003, 25:10–14, 27:7–20).

Patent Owner particularly asserts the distinction between Coffman and claim 1 is “that [Coffman’s] synchronizing context does not show [the claimed] synchronization of context stacks.” *Id.* at 15. According to Patent Owner, “Coffman may add context to a context stack or update context in a context stack, but that does not establish that Coffman discloses synchronization of a context stack” “in a first device with a context stack . . . in a second device.” *Id.* at 15, 18. Patent Owner moreover argues “such a result — synchronized context stacks in different devices — is inconsistent with Coffman, which states that ‘different devices, CVMs or different applications *will have their own . . . context stack 217, 217a.*’” *Id.* at 2 (citing Ex. 1003, 27:1–2). Patent Owner thus faults Petitioner’s argument and Mr. Schmandt’s testimony as failing to establish “the desirability of synchronized context stacks in Coffman.” *Id.* at 22–23 (citing Pet. 30–31; Ex. 1002 ¶ 70).

Patent Owner also addresses Figure 10 of Coffman, asserting: “Through the dialog manager DM protocols, the different dialog managers will negotiate a topology,” and “[a]n active master dialog manager (illustrated as [‘Master DM’ in Figure 10]) will be responsible for managing the flow of I/O to the different managers to decide the active dialog and appropriately execute a query and update the context and history.” *Id.* at 17–18 (citing Ex. 1003, 27:2–7). Patent Owner argues “Coffman lists at least fifteen (15) items of information that *can be* — *not must be* — exchanged between the different dialog managers in Coffman’s system,” and “Coffman also fails to disclose any ‘synchronization’ protocol to synchronize any of these fifteen items among different context stacks in different devices.” *Id.* at 18–19 (citing Ex. 1003, 27:7–22). According to

Patent Owner, “Coffman even allows the individual dialog managers the choice to act *or not act* on received information when managing their own context stack.” *Id.* at 19–20, 22 (citing Ex. 1003, 27:1–2, 27:12–13 (item 5), 27:16–18 (item 11), 27:18–19 (item 12), 27:19 (item 14), 27:19–20 (item 15)).

Patent Owner further asserts Coffman is deficient in failing to disclose “the stacks . . . in different devices would be synchronized *at a particular point in time* as required by” claim 1. *Id.* at 2 (emphasis added); *see also id.* at 21 (describing claim 1 as requiring “two context stacks that are synchronized, *e.g.*, at a particular point in time”).

Patent Owner finally argues the foregoing alleged deficiencies in Coffman represent the exact reason(s) for the Examiner’s allowance of claim 1 during prosecution of the ’652 patent over a counterpart to Coffman, as discussed below in Section IV addressing potential discretionary denial under 35 U.S.C. § 325(d). *See* Prelim Resp. 2–3, 14–15, 22.

(c) Analysis and Conclusion

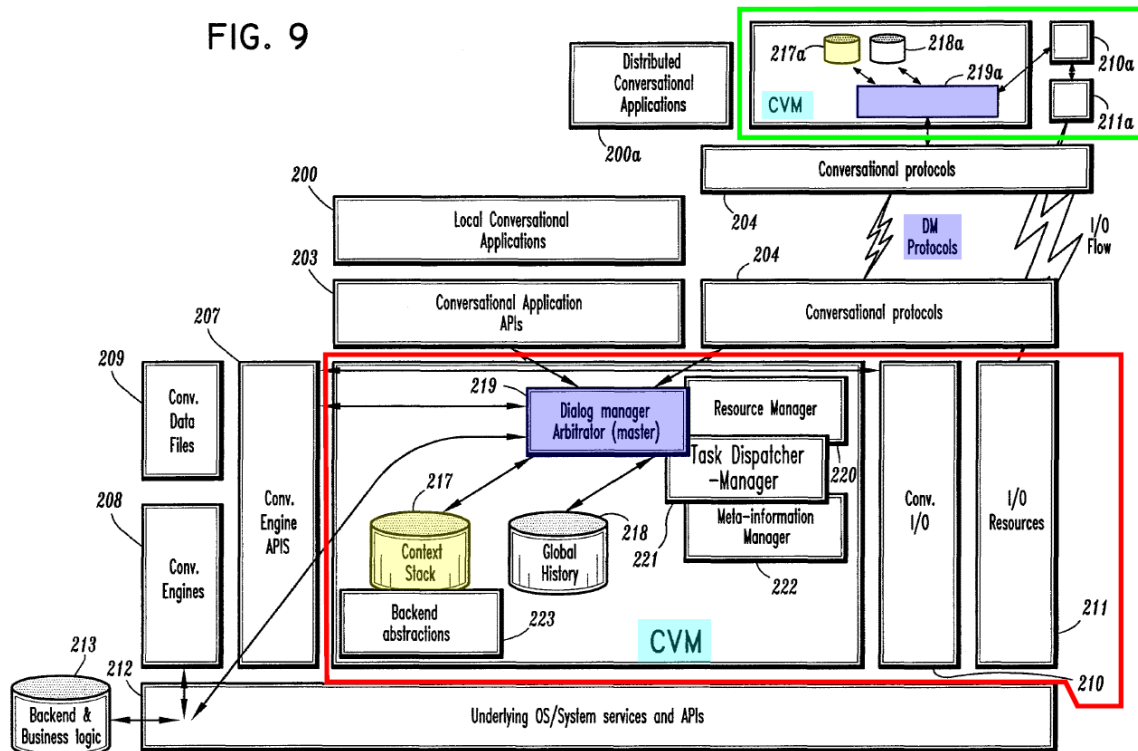
We conclude the record supports, sufficiently to justify institution of review, Petitioner’s contention that Coffman discloses synchronizing a first context stack associated with a first device (i.e., Coffman’s master device) with a second context stack associated with a second device (i.e., one of Coffman’s slave devices), such that the context information of the first stack is updated based on related context information of the second stack.

We begin with Coffman’s Figure 3, which illustrates “conversational protocols 204 [that] allow, in general, remote applications and resources [to] register their conversational capabilities and proxies.” Ex. 1003, 22:24–32,

Fig. 3 (illustrating conversational protocols 204 (in the middle)).³ In particular, conversational protocols 204 “allow network conversational applications 200, 200a and network-connected devices (local client and other networked devices such as a server) to exchange information [such as] *context* with each other” including “notification of state and *context changes*.” *Id.* at 22:32–23:5, 23:9–15 (emphasis added), Fig. 3 (illustrating conversational protocols 204 intermediating between a local client device (on the left) and a server device (on the right)); *see* Pet. 26–27, 30 (citing Ex. 1003, 22:32–23:3, Fig. 3). Conversational protocols 204 “include Dialog Manager (DM) protocols” and can “allow the exchange of information to coordinate the conversation involving multiple devices or applications including [a] master/[slave] conversational network” such as shown in Figures 9 and 10. Ex. 1003, 23:5–9, 26:28–30, 27:23–28.

Figure 9 of Coffman is reproduced below (on the next page), with our color annotations.

³ We find the “304” numeral in Figure 3 should be “204” to match the written description. *See* Ex. 1003, 22:29–32, 24:10–11.



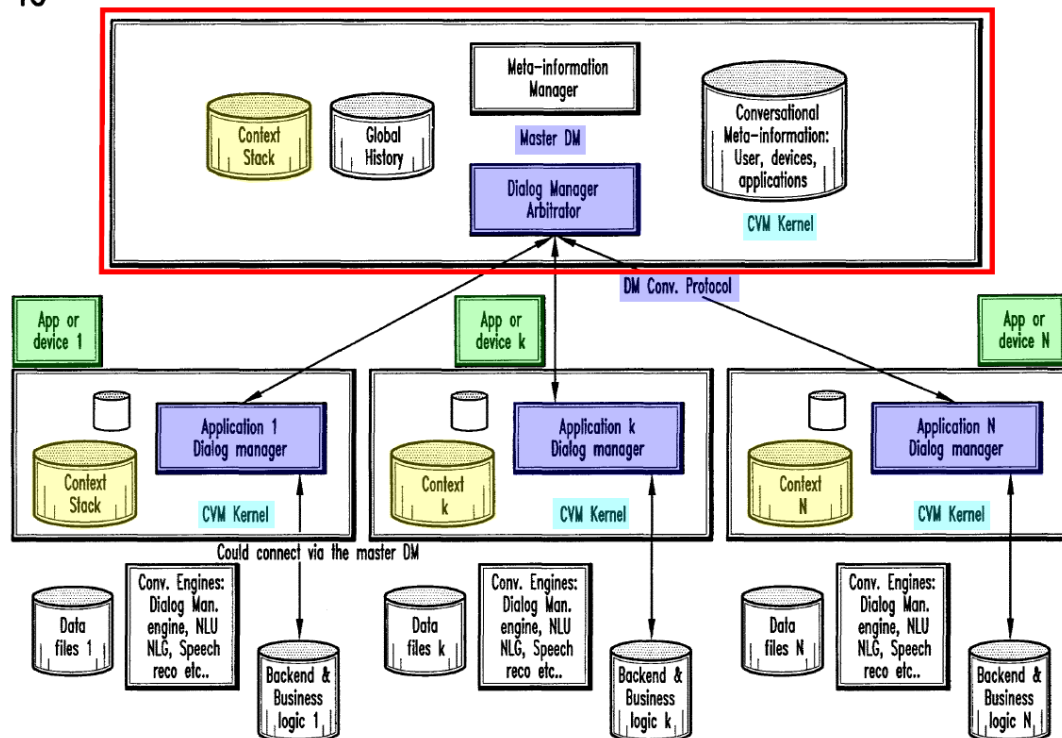
Coffman, Figure 9 (Annotated).

Figure 9 is a diagram of a dialog management process, including conversational protocols 204 for information exchange between networked devices (colored red and green), wherein each device has its own CVM (colored light blue), dialog manager 219 or 219a (colored purple), and context stack 217 or 217a (colored yellow). *Id.* at 10:13–14, 26:28–27:2. “Through the dialog manager DM protocols [colored purple] . . . the different dialog managers [colored purple] will negotiate a topology with a master dialog manager [at the red device] and slave or peer dialog managers [at the green device],” wherein “[t]he active master dialog manager [219] will be responsible for managing the flow of I/O to the different [slave] managers” to “*update the context.*” Ex. 1003, 27:2–7 (emphasis added); *see* Pet. 27–28, 30 (citing Ex. 1003, 27:1–7, 27:24–26). “For instance, the following information can be exchanged:” “(4) data files (conversational

arguments) if applicable i.e., if engines are used that are controlled by a master DM); “(5) notification of I/O events such as user input, outputs to users for transfer to engines and/or *addition to contexts*”; “(11) transfer of confidence and ambiguity results, proposed feedback and output, proposed expectation state, proposed action, *proposed context changes*, proposed new dialog state”; “(12) decision notification, *context update*, action update, state update, etc;” “(14) notification of *context changes*”; and “(15) data files, *context and state updates due to action.*” Ex. 1003, 27:7–20 (emphases added); see Pet. 31 (citing Ex. 1003, 27:7–20).

Figure 10 of Coffman is reproduced below, with our color annotations.

FIG. 10



Coffman, Figure 10 (Annotated).

Figure 10 is a diagram of a dialog management system and process similar to the process shown in Figure 9, and is annotated in color in the same

fashion as Figure 9 above, but adds the additional detail of showing three different slave devices (colored green) in network communication with the master device (colored red). *See* Ex. 1003, 27:24–28. Coffman describes how “[w]ith a master/slave network configuration” such as shown in Figure 10, “the master dialog manager can compile all the lists and match the functions and needs with conversational capabilities,” and “*context information* may be transmitted by indicating passing or pointing to the *context stack*/history of the device or application that the controller can access and *add to its context stack*.” *Id.* at 25:10–14 (emphases added); *see* Pet. 28–29, 30–31 (citing Ex. 1003, Fig. 10, 25:10–14, 27:5–7, 27:24–28, 28:24–27, 29:18–20).

Based on the foregoing disclosures in Coffman, which are undisputed by Patent Owner at the present time, Mr. Schmandt testifies that Coffman’s system “synchronizes” the master device’s context stack with a slave device’s context stack, such that the master device’s context stack is updated based on related context information in the slave device’s context stack. *See* Ex. 1002 ¶¶ 66–71; Pet. 26–32. In particular, Mr. Schmandt cites Coffman’s statement that the master device’s dialog manager 219 “can compile all the lists and match the functions and needs with conversational capabilities,” wherein “context information may be transmitted by indicating passing or pointing to the context stack/history of the device or application that the controller can access and add to its context stack.” Ex. 1003, 25:10–14 (cited at Ex. 1002 ¶ 70); *see* Pet. 31–32. Mr. Schmandt also testifies “Coffman further explains that, using dialog manager protocols, devices can exchange various kinds of information, including notification of ‘addition to

contexts,’ ‘context update’ and ‘notification of context changes.’” Ex. 1002 ¶¶ 70–71 (citing Ex. 1003, 27:7–20); *see* Pet. 31.

We conclude Mr. Schmandt’s foregoing testimony is sufficiently articulated and supported by the cited disclosures in Coffman to justify institution of review. Patent Owner’s opposition, as presented in the preliminary record before us, is not supported by expert testimony and is not persuasive for the following reasons.

First, Patent Owner attempts to distinguish between the claimed “synchronizing” of context information and Coffman’s “updating” of context information. *See* Prelim. Resp. 1–2, 18, 20–23. However, this overlooks that Coffman describes its “updating” of context information as “the *exchange* of information to *coordinate* the conversation involving multiple devices,” such as Coffman’s master device and slave devices. Ex. 1003, 22:32–23:15 (emphasis added), 25:10–14, 26:28–27:20. Based on the present record, we are persuaded by Mr. Schmandt’s testimony that this results in synchronization of context information between the devices, such that (for example) the context stack of Coffman’s master device is updated based on the context stack of Coffman’s slave device(s). *See* Ex. 1002 ¶¶ 70–71. This is consistent, for example, with the ’652 patent’s description of “[t]he synchronization process” as “attempt[ing] to determine which version of a data element or an agent are the newest or most up-to-date and propagates that element,” including replacing “a portion of the database.” Ex. 1001, 17:25–32.

Second, Patent Owner suggests Coffman fails to disclose synchronizing “context stacks” (specifically). *See* Prelim. Resp. 1–2, 3, 15, 18, 20–23. However, this overlooks Coffman’s disclosure that its various

devices each have their own context stack, and that each device utilizes its context stack to store context information. *See* Ex. 1003, Figs. 9 and 10, 5:15–18 (“The context stack accumulates the context . . .”), 25:10–14, 27:1–20, 29:18–30:3; Ex. 1002 ¶¶ 64–67. Thus, based on the present record, we are persuaded by Mr. Schmandt’s testimony that a person of ordinary skill in the art would have understood Coffman’s various descriptions relating to updating context information between its various devices would have involved updating the context stack of each device. *See* Ex. 1002 ¶¶ 64–67, 69–71.

Third, Patent Owner argues Coffman falls short of the claimed synchronization because each device in Coffman’s system can choose to act or not to act in response to exchanging information between devices. *See* Prelim. Resp. 18–20, 22. We are not persuaded, based on the preliminary record. We find that, even if there are instances where a given device in Coffman may not be synchronized with updated context information,⁴ still there are other instances when Coffman’s devices are synchronized with updated context information. *See* Ex. 1003, 25:10–14, 27:1–20.

Patent Owner appears to be relying on an implicit claim construction that the term “synchronize” requires perfect synchronization, not allowing any deviation between the respective context stacks of the synchronized devices. This implicit claim construction is contradicted by the ’652 patent specification, which contemplates that “[t]he synchronization may be performed automatically when any two or more of the computers are connected to these networks,” or “[a]lternatively . . . the synchronization

⁴ *See, e.g.*, Ex. 1003, 27:17 (referring to “*proposed* context changes” (emphasis added)).

may be performed on demand under user control.” Ex. 1001, 17:15–25. Both of those scenarios contemplate points in time when the devices are not synchronized — in the first scenario when the computer is not connected to the network, and in the second scenario before the user initiates the synchronization. Thus, we conclude Patent Owner’s argument in this regard relies on unclaimed subject matter.

Fourth, Patent Owner argues Coffman fails to disclose synchronizing context “at a particular point in time.” Prelim. Resp. 2, 21. However, as just discussed, the ’652 patent specification contemplates points in time when the devices are not synchronized. Further, claim 1 does not specify any particular conditions or points in time when the synchronization must occur. *See* Ex. 1001, 38:50–54. Therefore, Patent Owner’s argument in this regard relies on unclaimed subject matter.

Fifth, concerning Patent Owner’s reliance on the Examiner’s statement of reasons for allowing claim 1 of the ’652 patent, we address that reliance below in Section IV.B.3 in relation to potential discretionary denial under 35 U.S.C. § 325(d).

For the foregoing reasons, we conclude the record supports, sufficiently to justify institution of review, Petitioner’s contention that Coffman discloses the context stack synchronizing required by claim 1.

(iii) Conclusion as to Claim 1

We conclude Petitioner has demonstrated a reasonable likelihood of prevailing on its assertion that claim 1 is unpatentable as having been obvious over Coffman.

3. *Claims 2–9, 14–18, and 20–26 of the '652 Patent*

Petitioner provides arguments and evidence in support of contending claims 2–9, 14–18, and 20–26 are unpatentable as having been obvious over Coffman, including supporting testimony from Mr. Schmandt. *See* Pet. 37–60; Ex. 1002 ¶¶ 41–46, 81–131. Patent Owner opposes, relying on arguments we have considered above in connection with claim 1. *See* Prelim. Resp. 1–2, 20–21, 23. For example, Patent Owner does not attempt to draw any meaningful distinction between the “context stack” of independent claims 1 and 14, and the “context set” of independent claim 20. *See, e.g., id.* at 1–2, 15, 18, 20–21.

“When instituting *inter partes* review, the Board will authorize the review to proceed on all of the challenged claims and on all grounds of unpatentability asserted for each claim.” 37 C.F.R. § 42.108(a). Thus, pursuant to USPTO rules and policy implementing *SAS Inst. Inc. v. Iancu*, 584 U.S. 357 (2018), we “either (1) institute as to all claims challenged in the petition and on all grounds in the petition, or (2) institute on no claims and deny institution.” Patent Trial and Appeal Board Consolidated Trial Practice Guide (Nov. 2019) (“CTPG”), 5–6, 64.⁵ We “will not institute on fewer than all claims or all challenges in a petition.” *Id.* at 5, 64; *see also PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1359–60 (Fed. Cir. 2018) (stating a decision to institute is “a simple yes-or-no institution choice respecting a petition, embracing all challenges included in the petition”).

Thus, because we have decided to grant institution on claim 1, we do the same for claims 2–9, 14–18, and 20–26. *See supra* Section III.E.2;

⁵ Available at <https://www.uspto.gov/TrialPracticeGuideConsolidated>.

37 C.F.R. § 42.108(a); CTPG 5–6, 64. Further, Patent Owner does not address these claims apart from arguments we have considered above in connection with claim 1, so there is nothing further for us to address with respect to these claims at this time. *See* CTPG 5–6, 64.

4. *Conclusion as to Ground One*

We conclude the record demonstrates a reasonable likelihood that Petitioner would prevail with respect to challenging claim 1 as having been obvious over Coffman, so we grant institution of review on Petitioner’s Ground One.

F. Ground Two — Obviousness over Coffman and Kennewick

In Ground Two, Petitioner asserts claims 10–13, 19, and 27 of the ’652 patent are unpatentable as having been obvious over Coffman and Kennewick. *See* Pet. 13–14, 60–78. Patent Owner disagrees. *See* Prelim. Resp. 14–15, 23. As discussed above, because we have decided to grant institution on Ground One, we do the same for Ground Two. *See supra* Section III.E.3; 37 C.F.R. § 42.108(a); CTPG 5–6, 64. Further, Patent Owner does not address Ground Two apart from arguments we have considered above in connection with Ground One, so there is nothing further for us to address here at this time. *See* CTPG 5–6, 64.

G. Ground Three — Obviousness over Coffman, Kennewick, and Lee

In Ground Three, Petitioner asserts claims 13 and 19 of the ’652 patent are unpatentable as having been obvious over Coffman, Kennewick, and Lee. *See* Pet. 13–14, 78–81. Patent Owner disagrees. *See* Prelim. Resp. 14–15, 23. As discussed above, because we have decided to

grant institution on Ground One, we do the same for Ground Three. *See supra* Section III.E.3; 37 C.F.R. § 42.108(a); CTPG 5–6, 64. Further, Patent Owner does not address Ground Three apart from arguments we have considered above in connection with Ground One, so there is nothing further for us to address here at this time. *See* CTPG 5–6, 64.

IV. POTENTIAL DISCRETIONARY DENIAL UNDER 35 U.S.C. § 325(d)

Patent Owner urges us to exercise our discretion under 35 U.S.C. § 325(d) to deny institution of review, on the basis that during prosecution of the '652 patent the Examiner considered U.S. Patent Application Publication No. 2007/0043574 A1 to Coffman et al. (“Coffman '574”), a counterpart to the Coffman reference cited in the Petition, and then allowed the '652 patent after finding Coffman '574 does not disclose or suggest the claimed synchronization of context stacks. *See* Prelim. Resp. 2–3, 10–11, 14–15, 22, 23–28. Petitioner provides opposing arguments. *See* Pet. 14–15. For the following reasons, we do not invoke our discretion to deny institution under § 325(d).

A. *Legal Authority*

Pursuant to 35 U.S.C. § 325(d), when determining whether to institute an *inter partes* review, we “*may* take into account whether, and reject the petition . . . because, the same or substantially the same prior art or arguments previously were presented to the Office.” 35 U.S.C. § 325(d) (emphasis added). When applying § 325(d), we utilize a two-part framework. *See Advanced Bionics, LLC v. MED-EL Elektromedizinische*

Geräte GmbH, IPR2019-01469, Paper 6, at 8 (PTAB Feb. 13, 2020) (precedential).

First, we determine “whether the same or substantially the same art previously was presented to the Office or whether the same or substantially the same arguments previously were presented to the Office.” *Advanced Bionics*, at 8. In this first part, we consider: the similarities and material differences between Coffman and Coffman ’574; the cumulative nature of Coffman and Coffman ’574; and the extent of the overlap between the arguments made during examination and the manner in which Petitioner relies on the prior art or Patent Owner distinguishes the prior art. *Id.* at 10 (citing factors (a), (b), and (d) of *Becton, Dickinson & Co. v. B. Braun Melsungen AG*, IPR2017-01586, Paper 8 (PTAB Dec. 15, 2017) (precedential), as being considered in the first part).

Second, “if either condition of [the] first part of the framework is satisfied,” then we consider “whether the petitioner has demonstrated that the Office erred in a manner material to the patentability of challenged claims.” *Advanced Bionics*, at 8. In this second part, we consider: the extent to which Coffman / Coffman ’574 was evaluated during examination, including whether it was the basis for rejection; whether Petitioner has pointed out sufficiently how the Examiner erred in evaluating Coffman / Coffman ’574; and the extent to which additional evidence and facts presented in the Petition warrant reconsideration of Coffman / Coffman ’574. *Id.* at 10 (citing factors (c), (e), and (f) of *Becton, Dickinson*). “[I]f the record of the Office’s previous consideration of the art is not well developed or silent, then a petitioner may show the Office erred by overlooking something persuasive,” but on the other hand “if the alleged

error is a disagreement with a specific finding of record by the Office, then ordinarily the petitioner's required showing of material error must overcome persuasively that specific finding of record." *Id.* at 10–11. "If reasonable minds can disagree regarding the purported treatment of the art or arguments, it cannot be said that the Office erred in a manner material to patentability." *Id.* at 9.

B. Whether to Deny Institution Here

1. Prosecution History of the '652 Patent

The '652 patent was filed as U.S. Patent Application No. 13/898,045 ("the '045 Application") on May 20, 2013. *See* Ex. 1001, codes (21) and (22). The prosecution history of the '045 Application is in the record here as Exhibit 1012. *See* Pet. 9.

On June 25, 2013, the applicant filed a Preliminary Amendment, presenting application claims 50–69 for the Examiner's consideration. *See* Ex. 1012, 119, 123–129. As pertinent here, claims 50 and 63 recited:

50. A system for processing natural language utterances where recognized words of the natural language utterances alone are insufficient to completely determine one or more commands or requests, the system including one or more processors executing one or more computer program modules which, when executed, cause the one or more physical processors to:
 - generate a context stack comprising context information that corresponds to a plurality of prior utterances;*
 - receive a natural language utterance associated with a command or request;
 - determine one or more words of the natural language utterance by performing speech recognition on the natural language utterance; and

determine the command or request based on the one or more words and the context information.

63. The system of claim 50, wherein *the context stack is a first context stack of a first device*, and wherein the one or more processors are further caused to:
- synchronize the context stack with a second context stack of a second device.*

Id. at 123, 127 (emphases added).

On January 29, 2014, the Examiner issued a Non-Final Office Action. *See id.* at 149–150. The Examiner cited twelve references including Coffman '574 as having been considered. *See id.* at 175. The Examiner rejected claim 50 under 35 U.S.C. § 103 as having been obvious over U.S. Patent Application Publication No. 2002/0133354 A1 to Ross et al. *See id.* at 156–160. The Examiner objected to claim 63 as dependent upon the rejected claim 50, but concluded claim 63 would be allowable if rewritten in independent form. *See id.* at 170. The Examiner included a statement of reasons for allowance of claim 63, as follows:

As described in the Notice of Allowability mailed [November 1, 2010] in Application 12/617506⁶, Mumick et al. (US 2003/0046346) teaches synchronizing plural browsers on a plurality of mobile devices including a state manager that stores navigation histories in a data store so that a user can switch from a visual browser on one device to a voice browser on a second device without losing navigation state, but synchronization of navigation state is not the claimed synchronization of context across multiple devices (page 2).

While the claim language at issue is not identical, the limitation in claim 63 is directed to a similar concept which is

⁶ Nothing from the prosecution history of U.S. Patent Application No. 12/617,506 has been entered into the record of this proceeding.

also more narrow in that not only is context synchronized, but context stacks of distinct devices are synchronized.

Id. at 171.

On April 29, 2014, the applicant filed an Amendment in response to the Non-Final Office Action. *See id.* at 185. The applicant amended claim 50 and the other independent claims to incorporate the subject matter of claim 63, and to address other rejections not pertinent here. *See id.* at 186 (independent claim 50), 191 (independent claim 64), 194 (independent claim 70), 198. The applicant also submitted an Information Disclosure Statement, identifying approximately 650 references for the Examiner to consider in connection with the '045 Application. *See id.* at 200–229.

On June 3, 2014, the Examiner allowed the '045 Application, after a further amendment of dependent claims. *See id.* at 387–400 (Supplemental Amendment), 441–449 (Notice of Allowance). The Examiner initialed the applicant's approximately 650 references as having been considered. *See id.* at 450–477. The Examiner also provided another statement of reasons for allowance, which is identical to the first statement (reproduced above), except that the reference in the final sentence to "stacks" was changed to "stacks/sets" to account for the addition of new independent claim 70. *Id.* at 447.

The '045 Application thereafter issued in due course as the '652 patent, with independent application claims 50, 64, and 70 being re-numbered respectively as claims 1, 14, and 20 in the patent. *See id.* at 480, 504.

2. Advanced Bionics *Part One*

Patent Owner applies *Advanced Bionics* part one, arguing that the Examiner considered substantially the same art during prosecution of the '045 Application as is advanced in the Petition. *See* Prelim. Resp. 2–3, 25–26. According to Patent Owner, Coffman (cited in the Petition) and Coffman '574 (considered during prosecution) are “counterpart” references, disclosing substantially the same subject matter as they relate to the contentions in the Petition.⁷ *Id.* at 2–3, 10–11, 14–15, 22, 25–26 (citing Ex. 1012, 127, 170–171, 175, 186, 191, 194, 198, 446–447; Ex. 2008 (Coffman '574); Ex. 2009 (comparing Coffman with Coffman '574 in relation to the Petition's citations)). In particular, according to Patent Owner, Coffman and Coffman '574 contain the same deficiencies in relation to the synchronization of context stacks as claimed in the '652 patent, which Patent Owner asserts was recognized by the Examiner. *See id.* Patent Owner concludes that “even though [Coffman '574] was not itself part of a rejection formulated by the Examiner, the first part of the *Advanced Bionics* framework is satisfied.” *Id.* at 25–26 (citing *Google LLC v. Valtrus Innovations, Ltd.*, IPR2022-01197, Paper 18, at 17–18 (PTAB June 13, 2023)).

Petitioner does not dispute that Coffman and Coffman '574 are substantially the same art as they relate to the contentions in the Petition. *See* Pet. 14–15. Indeed, Petitioner acknowledges Coffman '574 is “the

⁷ Patent Owner also refers to portions of the '652 patent prosecution history citing a third Coffman reference (U.S. Patent No. 7,137,126), but Patent Owner's argument focuses on Coffman '574, so we do too. *See* Prelim. Resp. 11, 14 (citing Ex. 1012, 216).

published divisional application . . . of Coffman’s U.S. patent counterpart” *Id.* at 14. Petitioner makes no effort to establish Coffman and Coffman ’574 are materially different from one another in any particular respect. *See id.* at 14–15.

We conclude Coffman and Coffman ’574 are substantially the same art, pursuant to *Advanced Bionics* Part One, for at least two reasons. First, Coffman ’574 is the publication of U.S. Patent Application No. 11/551,901, which was filed as a division of U.S. Patent Application No. 09/806,565, which was filed as the national stage entry of the international application published as Coffman. *See* Ex. 1003, code (21); Ex. 2008, codes (21) and (62). Second, and more importantly, the Coffman disclosures cited in the Petition as related to the synchronization of context stacks or sets recited in claims 1, 14, and 20 of the ’652 patent are also found in Coffman ’574. *See supra* Section III.E.2(ii) (comparing Coffman with claim 1 of the ’652 patent); *compare* Ex. 1003, Figs. 3, 9, and 10, 22:24–23:15, 25:10–14, 26:28–27:28, *with* Ex. 2008, Figs. 3, 9, and 10, ¶¶ 148, 153, 157–158.

Therefore, we next consider *Advanced Bionics* part two.

3. *Advanced Bionics Part Two*

Patent Owner applies *Advanced Bionics* part two, repeating its opposition to Petitioner’s reliance on Coffman in connection with Ground One as discussed above in Section III.E.2, as establishing that Petitioner has not demonstrated the Examiner erred in allowing the ’652 patent claims over Coffman ’574. *See* Prelim. Resp. 1–3, 14–15, 26–27. Patent Owner argues that Petitioner, “[r]ather than addressing the distinction the Examiner found when allowing the claims,” instead

“contends that the Examiner’s actions were ‘unclear’ or that the Examiner did not appreciate Coffman’s significance.” *Id.* at 2, 14 (citing Pet. 14–15); *see also id.* at 3 (“[T]he Petition also presents no reason why the Board should discard the Examiner’s reasoned analysis of Coffman’s disclosed subject matter.”). Patent Owner asserts “the Examiner could not have been clearer” that the ’652 patent claims were allowed over Coffman ’574 because it “lacked synchronizing context stacks,” and Patent Owner argues “Coffman is no different.” *Id.* at 2–3, 15, 27. Patent Owner points out the Examiner cited Coffman ’574 in the same Office Action that initially allowed the ’652 patent claims, and argues this weighs in favor of discretionary denial. *See id.* at 26–27 (citing Pet. 14; *Google v. Valtrus*, at 18–24).

In response, Petitioner maintains “the [E]xaminer did not . . . discuss” Coffman ’574 apart from citing it as a considered reference. Pet. 14 (citing Ex. 1012, 175). Petitioner asserts “[t]he Notice of Allowance identified [Mumick] and its teachings” concerning “synchronization of *navigation state*,” and then “contrasted Mumick with claim language where ‘not only is context synchronized, but *context stacks/sets of distinct devices* are synchronized.”” *Id.* at 15 (emphasis modified) (citing Ex. 1012, 447). Petitioner argues “it is unclear why the Examiner did not appreciate [Coffman ’574’s] significance” to the claims of the ’652 patent. *Id.* Petitioner “submits that the Examiner materially erred in failing to appreciate” that significance, for the reasons set forth in the Petition’s Ground One relying on Coffman, and in particular “Coffman teaches and renders obvious the challenged claims, including limitations related to synchronizing context information and/or context stacks/sets that the

Examiner identified as missing from [Mumick].” *Id.* (citing Ex. 1003, 25:10–14, 27:7–20).

We conclude, per *Advanced Bionics*, that the Examiner erred in “overlooking specific teachings” of Coffman / Coffman ’574 when allowing the ’652 patent to issue. *Advanced Bionics*, at 8–9 & n.9; *see also id.* at 10 (“[I]f the record of the Office’s previous consideration of the art is not well developed or silent, then a petitioner may show the Office erred by overlooking something persuasive[.]”). Here, the Examiner cited Coffman ’574 as a considered reference, but did not cite Coffman ’574 as the basis for any claim rejections. *See supra* Section IV.B.1. Nor did the Examiner express any reasons for allowance over Coffman ’574. *See id.*

Patent Owner’s argument that the Examiner allowed the ’652 patent claims over Coffman ’574 for the same reasons that the Examiner allowed the claims over the unrelated Mumick reference is not supported by the prosecution history evidence. In particular, the Examiner cited Mumick’s synchronization of *navigation histories* as being different from the claimed synchronization of *context stacks/sets*. *See* Ex. 1012, 170–171, 447. Coffman / Coffman ’574, by contrast, specifically discloses *context stacks/sets*. *See supra* Section III.E.2(ii) (comparing Coffman with claim 1 of the ’652 patent). Patent Owner does not cite to anything in the prosecution history to establish the Examiner considered the specific teachings of Coffman / Coffman ’574 cited in the Petition as disclosing the synchronization of context stacks/sets recited in claims 1, 14, and 20 of the ’652 patent. Indeed, accepting Patent Owner’s reasoning would prove too much, as it would mean the Examiner concluded *all* of the twelve initially-cited references (*see* Ex. 1012, 175) as well as *all* of the

approximately 650 later-cited references (*see id.* at 450–477) were distinguished from the allowed claims by failing to disclose or suggest synchronizing context stacks/sets, because the same reasons for allowance over Mumick were provided in both instances (*see id.* at 170–171, 447). Thus, we conclude Petitioner’s case for obviousness over Coffman is not a mere “disagreement with a specific finding of record by the Office” during prosecution of the ’652 patent. *Advanced Bionics*, at 10–11.

Finally, we determine the present case differs materially from the *Google v. Valtrus* decision cited by Patent Owner. In that case, the petitioner had “provide[d] no analysis whatsoever of the Office’s previous consideration of EP ’329, i.e., the same or substantially the same art as *Vea* applied in the Petition” and did “not even assert that the Office erred with respect to its consideration of EP ’329 or any other reference, much less to a material degree.” *Google v. Valtrus*, at 19–20. The PTAB panel found the petitioner’s “invitation to review the entirety of Ground 6, without more, does not ‘point[] out sufficiently how the examiner erred’ pursuant to [*Becton, Dickinson*] factor (e).” *Id.* at 20–24. Here, by contrast, Petitioner asserts “the Examiner materially erred in failing to appreciate” the significance of Coffman / Coffman ’574’s teachings concerning “synchronizing context information and/or context stacks/sets,” and Petitioner cites where some of those allegedly overlooked teachings are found in Coffman. Pet. 15 (citing Ex. 1003, 25:10–14, 27:7–20).

For the foregoing reasons, we conclude the Examiner erred in overlooking specific teachings of Coffman / Coffman ’574 when allowing the ’652 patent to issue.

4. *Conclusion as to § 325(d)*

We decide not to exercise our discretion to deny institution pursuant to § 325(d).

V. CONCLUSION

For the above reasons, we determine the information presented in the record demonstrates there is a reasonable likelihood that Petitioner would prevail with respect to at least one claim of the '652 patent challenged in the Petition. We also decline to deny institution pursuant to 35 U.S.C. § 325(d). Therefore, we institute an *inter partes* review of all challenged claims 1–27 on all grounds presented in the Petition. *See* 35 U.S.C. § 314(a); 37 C.F.R. § 42.108(a).

At this preliminary stage, the Board has not made a final determination with respect to the patentability of the challenged claims or any underlying factual or legal issue. The Board's final determination will be based on the record as developed during the *inter partes* review. Any arguments not raised by Patent Owner in a timely-filed response may be deemed waived.

VI. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review is instituted for claims 1–27 of the '652 patent on all grounds presented in the Petition; and

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

IPR2024-00752
Patent 8,849,652 B2

FOR PETITIONER:

Heidi L. Keefe
Andrew C. Mace
COOLEY LLP
hkeefe@cooley.com
amace@cooley.com

FOR PATENT OWNER:

Wayne M. Helge
James T. Wilson
BUNSOW DE MORY, LLP
whelge@bdiplaw.com
jwilson@bdiplaw.com