

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC,
Petitioner,

v.

DIALECT, LLC,
Patent Owner.

Case IPR2024-00753
Patent 7,640,160

PATENT OWNER'S PRELIMINARY RESPONSE

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PATENT OWNER’S EXHIBIT LIST

Exhibit No.	Description
2001	Patent Owner’s Power of Attorney
2002	U.S. Patent 7,693,720 (“the ’720 Patent”)
2003	U.S. Patent 8,015,006 (“the ’006 Patent”)
2004	U.S. Patent 8,195,468 (“the ’468 Patent”)
2005	U.S. Patent 9,263,039 (“the ’039 Patent”)
2006	U.S. Patent 9,495,957 (“the ’957 Patent”)
2007	Order (Construing Claim Terms), Dialect, LLC v. Amazon.com Inc., Civ. No. 1:23cv581, Dkt. 213 (E.D. Va. Apr. 29, 2024)
2008	Reserved
2009	Reserved

Pursuant to 37 C.F.R. § 42.107, Patent Owner Dialect, LLC (“Dialect” or “Patent Owner”) files this preliminary response to the Petition, setting forth reasons why the Petition for *inter partes* review (“IPR”) of only claim 12 of U.S. Patent No. 7,640,160 (the “’160 Patent”), as requested by Google LLC (“Petitioner”), should be denied.¹

I. THE PETITION’S GROUND FAILS TO DISCLOSE EVERY CLAIMED FEATURE, AND RELIES UPON ART THAT WAS FULLY CONSIDERED BY THE EXAMINER DURING PROSECUTION

The ’160 Patent provides techniques that mitigate against the risk of false recognitions of natural language utterances when performing speech interface processing. As part of the method for interpreting natural language utterances recited in challenged claim 12, the ’160 Patent includes the step of “comparing” text combinations contained in a transcription “against the grammar expression entries in the context description grammar and against one or more expected contexts stored in a context stack.” However, the references relied upon by Petitioner not only fail to disclose the required comparison against *both* “grammar expression entries” and “one or more expected contexts,” as claimed, but also fail to disclose the claimed “one or more expected contexts.” Indeed, Petitioner’s lead

¹ By submitting this Preliminary Response, no waiver of any argument is intended by Patent Owner. Patent Owner will have a right to file a complete response to the Petition, should the Board institute *inter partes* review. 37 C.F.R. § 42.120(a).

asserted art—Kennewick—corresponds to work by common inventors to the ’160 Patent. Further, Petitioner’s redline between the earlier work’s publication and the ’160 Patent (Ex. 1007), confirms that requirements of challenged claim 12 were not present in Kennewick. As such, the sole Ground in the Petition fails, and the Petition should be denied.

The Petition’s substantive failure is not the sole basis to deny the Petition. Petitioner acknowledges that the lead reference relied upon in Ground 1—Kennewick—was already considered and discussed by the Examiner during prosecution. Rather than pointing out how the Examiner erred during prosecution, Petitioner contends that the Examiner did not appreciate this reference’s significance. To the contrary, the Examiner could not have been clearer—the prior art considered by the Examiner lacked “comparing text combinations against **both** grammar expression entries in the context description grammar and against one or more expected contexts stored in a context stack.” *See* Ex. 1012, 305 (emphasis added). As discussed below, Petitioner’s secondary reference fails to cover the absence of the missing features from Kennewick, and does not alter the Examiner’s correct result of allowing claim 12. While Petitioner’s challenge plainly fails, the Petition also presents no reason why the Board should double-check the Examiner’s reasoned analysis of Kennewick. Thus, the Petition should be denied under 35 U.S.C. § 325(d).

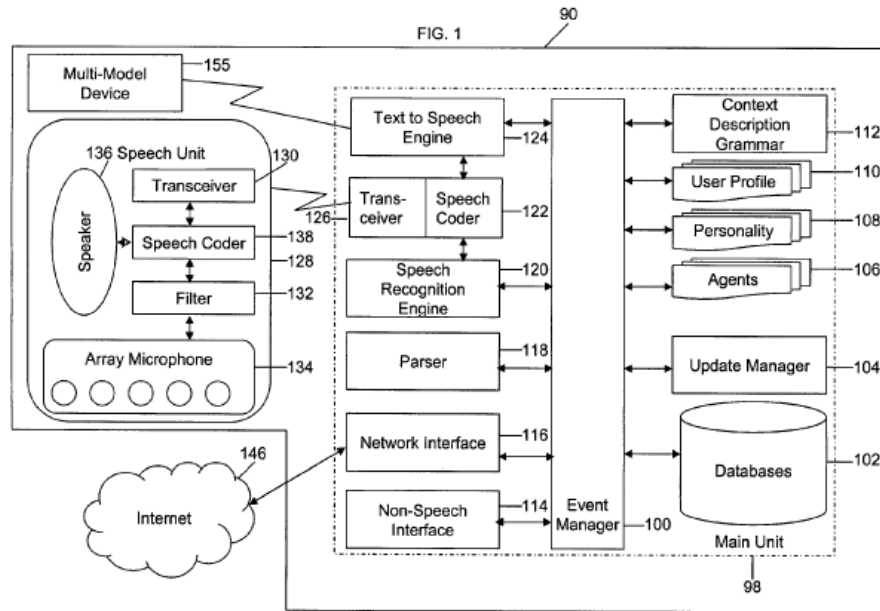
II. THE '160 PATENT DISCLOSES AND CLAIMS WAYS TO USE A CONTEXT STACK THAT ARE NOT DISCLOSED OR SUGGESTED BY THE ASSERTED ART

A. The '160 Patent Discloses and Claims Features not Disclosed or Suggested by the Earlier Kennewick Reference

The '160 Patent is entitled, “Systems and Methods for Responding to Natural Language Speech Utterance,” and is related to speech interface processing that determines an intent and corrects false recognitions of natural language utterances. Contrary to Petitioner's theories, the '160 Patent discloses an efficient and reliable way to identify a context for the natural language utterances that is not disclosed in any of the asserted art relied upon by Petitioner. And as introduced above, Petitioner's lead asserted art—Kennewick—corresponds to work by common inventors to the '160 Patent. Based on Petitioner's own redline between the earlier work and the '160 Patent (Ex. 1007), Patent Owner will show below how the '160 Patent adds to and improves upon Kennewick.

B. The '160 Patent Improves on the Kennewick Reference by Using Grammar Expression Entries and Expected Contexts in a Method for Interpreting Natural Language Utterances

FIG. 1 of the '160 Patent represents an “overall diagrammatic view according to one embodiment of the invention”:



'160 Patent, Fig. 1, 9:63-64. The system includes speech unit 128, speech recognition engine 120, context description grammar module 112, parser 118, and agents 106. Speech unit 128 includes a microphone to receive a spoken utterance from a user. '160 Patent, 11:55-57. After initial processing, the speech is passed to speech recognition engine 120 for processing using the context description grammar module 112. '160 Patent, 12:23-25.

Then, “[a]ny recognized information may be processed by the parser 118, which transforms information into complete algorithms and questions using data supplied by knowledge agents.” '160 Patent, 12:25-28. “The knowledge agents may then process the commands or questions.” '160 Patent, 12:32-36. The agents may update a context stack, which includes an ordered list of command contexts, to enable follow-up requests. '160 Patent, 13:57-59.

To select the correct agent to process the command or question, “[t]he parser 118 uses a scoring system to determine the most likely context or domain for a user’s question and/or command. To accomplish the scoring, the context description module 112 uses context description grammar, which may be derived from content packages in the system. ’160 Patent, 16:46-54. An initial or default context is typically supplied for each command or question, and the command or question may include a grammar for the management and evaluation of the context stack. ’160 Patent, 16:51-54. As noted above, the context stack includes an ordered list of command contexts. ’160 Patent, 13:57-59.

A user’s command or request may be presented or converted into a text message, which may be searched for text combinations. ’160 Patent, 13:29-35, 13:44-47. The text combinations may be compared against entries in a context description grammar associated with each domain agent 106. ’160 Patent, 13:47-49. As reflected in an addition to the ’160 Patent relative to Kennewick, the requirement of comparing text combinations against entries in a context description grammar associated with each domain agent 106 is not found in Kennewick and was added in the ’160 Patent (Ex. 1007, 21; *id.*, 1 (“blue [and double underlined] indicating material added by the ’160 patent”)):

According to one embodiment of the invention, the text message may be searched for a particular character, group of characters, word, group of words, and other text combinations. The text combination may be compared against entries in a context description grammar that is associated with each agent 106. If a match is identified between an active grammar in the context description grammar and the command and/or request, then the match may be scored. The agents 106 may be ranked based

Thus, Petitioner's own redline admits that these features disclosed in the '160 Patent and claimed in the '160 Patent were not present in the Kennewick reference, in contrast to Petitioner's challenges.

Turning back to the '160 Patent's disclosure of the scoring system, if a match is identified between an active grammar in the context description grammar and the command and/or request, then the match may be scored. '160 Patent, 13:49-51. The score is determined from weighing a number of factors, including the user profile 110, the domain agent's data content and previous context. Based on this scoring, the system 90 invokes the correct agent." '160 Patent, 21:10-15.

In addition to using "grammar expression entries" in a context description grammar to accomplish the scoring, the '160 Patent also uses "expected contexts" stored in a context stack. If the process of comparing the text combinations against active grammar in the context description grammar yields no match or only a partial match, the system can semantically broaden the search. '160 Patent, 13:60-64. The knowledge enhanced speech recognition may access a set of expected contexts that are stored in a context stack to determine a most likely context. '160 Patent, 13:66-14:2. As also reflected in an addition to the '160 Patent relative to

Kennewick, the requirement of using expected contexts to identify contexts is not found in Kennewick and was added in the '160 Patent (Ex. 1007, 21; *id.*, 1 (“blue [and double underlined] indicating material added by the '160 patent”))):

According to another embodiment of the invention, if a match is not found, or only a partial match is found, between the text message and active grammars, then a knowledge-enhanced speech recognition system may be used to semantically broaden the search. The knowledge-enhanced speech recognition system may be used to determine the intent of the request and/or to correct false recognitions. The knowledge-enhanced speech recognition may access a set of expected contexts that are stored in a context stack to determine a most likely context. The knowledge-

Thus, Petitioner's redline also admits that the expected context features disclosed in the '160 Patent and claimed in the '160 Patent were not present in the Kennewick reference, in contrast to Petitioner's challenges. The knowledge-enhanced speech recognition may use context specific matchers that are able to identify context such as time, location, numbers, dates, categories (e.g., music, movies, television, addresses, etc.). '160 Patent, 14:2-6

Thus, after a transcription of a natural language utterance is received, the '160 Patent discloses comparing text combinations contained in the transcription of a natural language utterance against *both* the grammar expression entries *and* one or more expected contexts to identify matching contexts. Once identified, the '160 Patent discloses scoring each identified matching context.

Claim 12 of the '160 Patent includes these requirements, claiming (emphasis added):

12. A method for interpreting natural language utterances using knowledge-enhanced speech recognition engine, wherein the knowledge-enhanced speech recognition engine is configured to determine an intent and correct false recognitions of the natural language utterances, comprising:

receiving a transcription of a natural language utterance at a computer comprising the knowledge-enhanced speech recognition engine;

identifying one or more contexts that completely or partially match one or more text combinations contained in the transcription, wherein identifying the matching contexts includes *comparing the text combinations against the grammar expression entries in the context description grammar and against one or more expected contexts stored in a context stack*;

scoring each of the identified matching contexts;

selecting the matching context having a highest score to determine a most likely context for the utterance; and

communicating a request to a domain agent configured to process requests in the most likely context for the utterance, the request formulated using at least one grammar expression entry in the context description grammar.

As acknowledged in the Petition, the Examiner viewed the claim 12 as requiring “comparing text combinations against *both* grammar expression entries in the context description grammar and against one or more expected contexts stored in a context stack” and found that the claims were allowable. Pet., 8-9; *see*

also Ex. 1012, 305 (emphasis added). The Examiner came to this conclusion after being aware of the Kennewick reference and applying it to reject certain claims earlier in the prosecution. Ex. 1012, 196-210.

III. THE BOARD NEED NOT REACH ANY CLAIM CONSTRUCTION ISSUES TO DENY THE PETITION

The Petitioner identifies no terms as requiring construction. *See* Pet., 12.

The United States District Court for the Eastern District of Virginia has issued constructions for the following terms in other patents assigned to Patent Owner (Ex. 2007):

Term	Patent(s)	Claim(s)	Construction
context	'720 Patent	1, 31	"the subject matter area to which a particular user input is directed and which is used to determine the meaning of the user input"
	'006 Patent	1, 2, 4, 5, 10	
	'468 Patent	19, 28	
	'039 Patent	17, 18	
context stack	'006 Patent	2	"a data structure that stores or references contexts in a manner that can be ordered"
	'468 Patent	19, 28	
	'039 Patent	17	
	'957 Patent	1, 3, 4, 7	
entries in a context stack	'468 Patent	19	"elements of a context stack that store or reference contexts"
context entries	'957 Patent	1, 3, 4, 5, 7	"elements of a context stack that store or reference contexts"
grammar	'720 Patent	1, 31	"a set of rules governing how inputs and requests to a domain agent should be structured"
	'006 Patent	1, 5, 10	

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context description grammar	'039 Patent	13	"a data structure containing entries constituting or referencing sets of rules, wherein each of those sets describes the structure of natural language in a particular context"
domain agent	'720 Patent	1, 31	"executables associated with a specific domain that receive, process and respond to user questions, queries and commands"
	'006 Patent	1, 2, 5, 10	
	'468 Patent	19, 30, 32	"software with domain-specific behavior and information"
	'039 Patent	13, 14	
procedures sensitive to the determined context	'006 Patent	5	"procedures that differ based on which context has been determined"
parser	'720 Patent	1, 35	"software that analyzes a string of words"
	'006 Patent	1, 5, 10	

U.S. Patent 9,263,039 ("the '039 Patent") (Ex. 2005), identified in the table above as '039 Patent, is related to the '160 Patent through other continuation applications. Ex. 2005 at 1-2. U.S. Patent 7,693,720 ("the '720 Patent") (Ex. 2002), U.S. Patent 8,015,006 ("the '006 Patent") (Ex. 2003), U.S. Patent 8,195,468 ("the '468 Patent") (Ex. 2004), and U.S. Patent 9,495,957 ("the '957 Patent") (Ex. 2006) are each assigned to Patent Owner and share at least one inventor in common with the '160 Patent.

Without waiving its right to submit constructions in a Patent Owner Response, Patent Owner submits that the Board need not engage in any pre-

institution claim construction. For the reasons presented in Section IV below, Petitioner’s ground 1 includes fundamental flaws and fails to establish the disclosure of every claimed element in each independent claim. These findings do not require the Board to conduct any construction of the above-identified terms.

IV. PETITIONER’S CHALLENGE FAILS ON THE MERITS

Petitioner purports to present a single Ground in its Petition, asserting that claim 12 is obvious in view of Kennewick² and Ross³. In truth, Petitioner presents two alternative grounds, one based on Kennewick alone and the other based on Kennewick in view of Ross. Throughout its discussion, Petitioner makes statements suggesting it is relying on Kennewick alone to demonstrate obviousness. *See, e.g.,* Pet., 27 (“alone or in view of Ross.”) (emphasis omitted); *id.*, 39 (“To the extent there is any question that Kennewick alone discloses and renders obvious”). The ’160 Patent adds disclosure relative to Kennewick (Ex. 1007) and was, as noted above, known to the Examiner and used by the Examiner. When looking at the subject matter added to Kennewick and claimed by the common inventors in the ’160 Patent, it is clear that the ’160 Patent claims subject matter not disclosed by Kennewick. Indeed, any suggestion the Examiner was not aware of Kennewick, or did not fully appreciate Kennewick’s disclosures, is

² Ex. 1004, U.S. Patent App. Pub. No. 2004/0044516 (“Kennewick”).

³ Ex. 1005, U.S. Patent App. Pub. No. 2002/0133354 (“Ross”).

incorrect. As set forth below, the Examiner's conclusion set out in the reasons for allowance, including the absence of "expected contexts" in Kennewick and other features, was correct and should not be revisited.

Concerning the alternate ground, Petitioner's secondary reference to Ross also does not concern itself with "expected contexts" and uses a first-to-match system when searching a context stack. Accordingly, Ross fails to remedy the deficiencies of Kennewick. Additionally, Petitioner has not provided sufficient motivation that would cause a POSITA to combine Ross's first-to-match system with Kennewick's incompatible scoring system and end up with the claimed invention.

Thus, regardless of whether Ground 1 consists of one ground or two, the Petition is facially deficient in establishing the unpatentability of the sole challenged claim.

A. Kennewick Fails to Disclose Element 12[b]

In Ground 1, Petitioner asserts that Kennewick discloses claim 12's recitation of "identifying one or more contexts that completely or partially match one or more text combinations contained in a transcription of a natural language utterance, wherein identifying the matching contexts includes comparing the text combinations against the grammar expression entries in the context description grammar and against one or more expected contexts stored in a context stack."

Pet., 23-31, 38-39. These features were added by the common inventors to Kennewick. *See, e.g.*, Ex. 1007, 21. And as the Examiner recognized during prosecution, Kennewick fails to disclose these features. *See* Ex. 1012, 305.

1. Kennewick fails to disclose “grammar expression entries”

Contrary to Petitioner's assertion, Kennewick does not identify contexts by comparing text combinations against grammar expressions or by comparing text combinations against expected contexts. Rather, Kennewick is explicit in that its system “determines a context for an utterance by applying prior probabilities or fuzzy possibilities to keyword matching, user profile 110, and dialog history.” Kennewick, ¶152. Identifying contexts based on comparing text combinations against grammar expressions or by comparing text combinations against expected contexts, as claimed in element 12[b], is not disclosed or suggested in Kennewick.

Petitioner's theory on element 12[b] appears to be that because Kennewick discloses content packages that include questions and commands, and because questions and commands each include a context for creation of queries and grammar, Kennewick therefore discloses using grammar expressions to identify a context. Pet., 27-28. But nowhere does the Petition or Petitioner's declarant demonstrate the necessary link to support this theory. Petitioner provides no analysis of how grammar would be used to identify contexts in Kennewick. Rather, Petitioner's declarant simply concludes that “a collection of grammar

expressions used to identify a context in Kennewick” satisfies the claimed requirement of element 12[b], even though the declarant does not cite to a use or disclosure in Kennewick of grammar expressions to identify contexts. Ex. 1002, ¶168. The Board should disregard such a conclusory assertion by a declarant that is unsupported by the document relied upon. *Consolidated Trial Practice Guide* at 36 (Nov. 2019) (“expert testimony cannot take the place of disclosure from patents or printed publications”); 37 C.F.R. § 42.65(a).

2. Kennewick fails to disclose “expected contexts”

Kennewick also does not disclose “expected contexts” or comparing text combinations against expected contexts to identify matching contexts, as additionally required in element 12[b]: “wherein *identifying the matching contexts* includes comparing the text combinations ... against one or more *expected contexts* stored in a context stack.” (emphasis added). As explained below, the Petition attempts in vain to establish the presence of something plainly absent from Kennewick and something that was added in the ’160 Patent—expected contexts—by pointing to Kennewick’s “possible contexts” or to Kennewick’s storage of dialog history. Pet., 19-20, 38-39. Neither of these features of Kennewick can satisfy the requirements of element 12[b].

Kennewick uses keyword matching on its context stack to identify stack entries as “possible contexts.” See, e.g., Kennewick, ¶152 (“a question with the

keywords ‘temperature’ implies a context value of weather for the question”). In other words, Kennewick’s context stack is compared against keywords to identify contexts matching a question’s content, and the “possible contexts” are the result of that search. But, importantly, Petitioner has not shown that any entries subject to keyword matching are “expected contexts.”

In contrast, the processing in the ’160 Patent does not look at all entries in the context stack and, instead, pre-filters the contexts to “expected contexts” before identifying matching contexts. ’160 Patent, 13:64-14:2. Recall that the ’160 Patent adds this new embodiment to Kennewick and new content directed to “expected contexts.” Ex. 1007, 21. Thus, while both Kennewick and the ’160 Patent have embodiments with “possible contexts,” only the ’160 Patent has “expected contexts.” Kennewick fails to disclose this feature.

Moreover, neither Petitioner nor its declarant explains any viable theory of how the prior art allegedly discloses “expected contexts.” The Petition first relies on Kennewick’s disclosure that “possible contexts are scored and the top one or few are used for further processing.” *See* Pet., 38 (citing Kennewick, ¶152). Element 12[b], however, requires a comparison of “expected contexts” against text combinations, and this requirement is not disclosed by Kennewick.

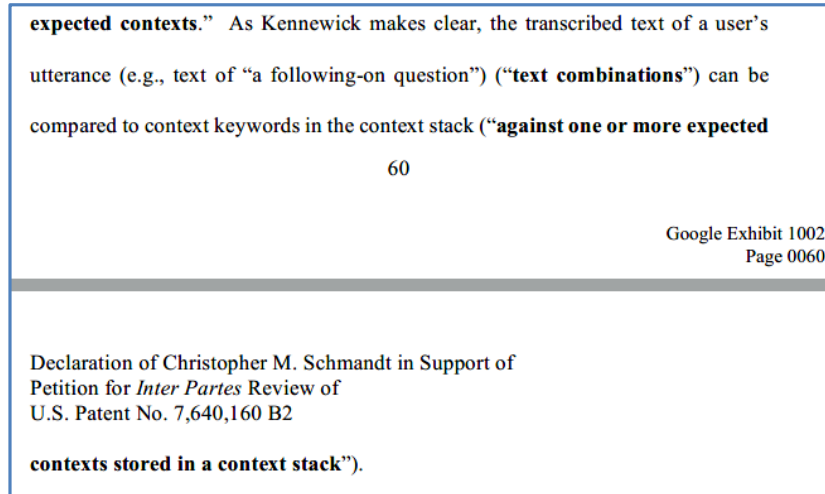
Specifically, under element 12[b], “expected contexts” must be compared to text combinations to identify matching contexts. Kennewick’s “possible contexts”

are not compared to text combinations to identify matching contexts, as required.

Instead, Kennewick states that “possible contexts” are those contexts having a match with a question’s content, and Kennewick does not disclose a comparison of “possible contexts” against text combinations to then identify another set of matching contexts.

Further, neither Petitioner nor its expert even attempts to link Kennewick’s “possible contexts” with the requirement in element 12[b] to “compar[e] the text combinations ... against one or more expected contexts stored in a context stack” as part of the claimed step for “identifying the matching contexts.” For the critical question of whether there is disclosure in Kennewick for a comparison of “possible contexts” with a text combination, Petitioner offers no direct answer. While addressing the comparison portion of element 12[b], Petitioner does not even refer to “possible contexts” and instead unreasonably insinuates that any context in a context stack is “expected” by conflating the entire context stack with “one or more expected contexts.” Pet., 39 (arguing that “the transcribed text of a user’s utterance ... can be compared to context keywords in the context stack (**‘against one or more expected contexts stored in a context stack’**).”) (emphasis in original). Moreover, Petitioner’s only citation for this unfounded assertion is “Schmandt, ¶78,” which also lacks any technical explanation or support. As can

be seen below, Petitioner’s declarant simply repeats the same bare assertion from the Petition without supporting evidence or reasoning (Ex. 1002, ¶78):



Once again, the Board should disregard such conclusory assertions by a declarant. *Consolidated Trial Practice Guide* at 36 (Nov. 2019) (“expert testimony cannot take the place of disclosure from patents or printed publications”); 37 C.F.R. § 42.65(a).

Petitioner also presents an alternate theory to address “expected contexts,” but this alternate theory has similar defects. The Petition alleges that, in Kennewick, dialog history can be maintained in a context stack, including context keywords associated with earlier questions. Pet., 38-39. Relying on this dialog history, the Petition incorrectly assert that “context keyword(s) stored in the context stack and associated with an earlier question is an example of an ‘expected context.’” Pet., 38-39 (citing Kennewick, ¶¶144-45, ¶166). But even if the context

entries have different context keyword(s), this does not show the presence of any “expected contexts.”

In presenting this alternate theory, Petitioner provides no reasoning to support the asserted linkage of “context keyword(s) ... associated with an earlier question,” or dialog history, to expected contexts, nor does Petitioner explain how “context keyword(s)” can be an “example” of expected contexts. That a context stack has content that can be updated with dialog history and used in a context search says nothing about whether any particular contexts in the context stack are “expected.” Moreover, Kennewick does not differentiate between context entries with dialog history and context entries without dialog history when identifying possible contexts. Petitioner improperly leaves the Board to speculate as to why it follows that context entries with dialog history would constitute a set of “expected contexts.”

Additionally, even if context entries with dialog history were incorrectly considered a set of “expected” contexts, element 12[b] still requires that set of contexts to be compared against text combinations to identify matching contexts. Petitioner broadly posits that text combinations are compared against “context keywords in the context stack” (Pet., 39), but this ignores that Petitioner’s theory would require a narrower comparison to only those entries “associated with an earlier question,” and Petitioner fails to show such a narrower comparison.

Instead, Petitioner proffers the same reasoning and absence of evidentiary support concerning “context keywords in the context stack” as it presented for its “possible contexts” alternative, which should also be disregarded for the same reasons explained above. *See* Pet., 39 (also relying only on Ex. 1002, ¶78); Ex. 1002, ¶78 (presenting unsupported conclusions).

For the foregoing reasons, Kennewick does not disclose or render obvious element 12[b] of claim 12 of the '160 Patent.

B. Ross Fails to Remedy the Deficiencies of Kennewick

The Petition alternatively proposes a combination of Kennewick and Ross. *See* Pet., 31-37, 39-42. But Ross's grammar-based process for selecting a context does not remedy Kennewick's failure to disclose expected contexts. For this reason alone, Petitioner's alternate ground fails. Further, there is no permissible reason to combine Ross's first-to-match process into Kennewick scoring process in order to recreate the claimed invention.

In Ross, recognized speech is sequentially evaluated against the grammar found in contexts in a context list, and as soon as a matching grammar is identified, Ross selects that first-matching context and grammar as active. Thus, Ross presents a first-to-match process predicated on grammar.

In more detail, a context manager in Ross manages a context list. The context list includes contexts for speech-enabled applications in the system, which

represent the grammars for the applications. Ross, [0033]. The context list in Ross establishes speech focus priority by maintaining an ordered list of applications. Ross, [0035].

After receiving a speech recognition message, Ross processes the ordered list of applications sequentially so that the highest context with grammar that matches the grammar in the recognition message becomes the selected context. *See* Ross, Step 106 of FIG. 5, [0053] (“The context manager 50 tests the utterance against these grammars (indicated by the contexts 70 in the context list 62) in priority order, and passes the commands on to the first application 26 that has a grammar that will accept the phrase.”). In that way, Ross never encounters any possibility that the grammar in the recognition message would match multiple contexts. Ross, [0053]-[0055].

For example, when an application is being actively prioritized by the user (such as by gaining window focus and being brought to front in a windows-based graphical user interface), it will move to the head of the context list. Likewise, whenever an application that is not the top priority application is chosen as the target for a speech command, the application indicated by the selected context will move to the head of the context list. In this way, the last application that the user touched or talked to will be considered first for interpreting the next user utterance,

and the other applications will be ordered in a most-recently-accessed way. Ross, [0035].

1. Ross’s first-to-match system fails to disclose “expected contexts”

Ross’s first-to-match system fails to disclose the features of claim 12, including the “expected contexts” in element 12[b] and other requirements.

As can be recognized from the above, Ross does not disclose or suggest “identifying one *or more* contexts that completely or partially match one *or more* text combinations contained in the transcription” as set forth in element 12[b] because Ross only identifies a single match and moves on to process that match.

Furthermore, Ross does not compare text combinations against both grammar expression entries in the context description grammar *and against one or more expected contexts stored in a context stack*. Ross simply does not include the concept of “expected contexts” because the context list maintained in Ross is just an ordered list of all speech enabled applications. Ross, [0053]. Petitioner’s justification for contending that Ross discloses “expected contexts” focuses on the word “stack” rather than requirement of “expected.” Pet., 40 (“Ross’s priority ordering description of a context list is consistent with the well-known concept of a ‘stack,’ ‘last in, first out’ (‘LIFO’) behavior of a stack contrasts with, for example, the ‘first in, first out’ (‘FIFO’) behavior of a queue.”). But regardless of whether the context list in Ross is accessed in a LIFO or FIFO manner, accessing the list in

a particular manner does not show that any contexts are “expected” since all of the speech enabled applications are found in the list and can be accessed.

Further, as Ross only selects a single context based on a first match, the claimed concepts of “scoring each of the identified matching contexts” in element 12[c] and “selecting the matching context having a highest score to determine a most likely context for the utterance” in element 12[d], are antithetical to Ross. Ross does not move beyond the first match and would not even envision a scoring and selecting process as claimed in elements 12[c] and 12[d].

Given these differences, Petitioner has not shown how a combination of Kennewick and Ross would include each feature of the claimed invention. Any hypothetical combination of Kennewick and Ross would still lack what the Examiner found missing from the prior art when examining the ’160 Patent – “comparing text combinations against *both* grammar expression entries in the context description grammar and against one or more expected contexts stored in a context stack.” *See* Ex. 1012, 305 (emphasis added).

2. A POSITA would not be motivated to combine Ross’s first-to-match teachings with Kennewick’s scoring system

It is axiomatic when evaluating obviousness that the claim should be viewed as whole, and not a collection of elements. 35 U.S.C. § 103 (“such that the subject matter as a whole would have been obvious”). When that is done in this case, Petitioner’s stated motivations fail to support obviousness. Indeed, only the

product of impermissible hindsight would cause a POSITA to pick and choose features from Kennewick and Ross to attempt to reconstruct the invention of claim 12 the ’160 Patent. And, as both Kennewick and Ross lack “expected contexts,” there certainly would not be any justifiable motivation to include that feature in the combination.

Nevertheless, turning to Petitioner’s theory, instead of viewing the claim as a whole when presenting a motivation for combining of Kennewick and Ross, Petitioner asserts distinct motivations for the elements in isolation. Pet., 36-37 (set 1), 40-41 (set 2).

The first set of Petitioner’s theories do not offer any advantage in use of any technique of Ross with Kennewick. Petitioner imagines that Kennewick discloses “expected contexts” and suggests “Ross picks up where Kennewick leaves off,” arguing that a POSITA “would have turned to Ross for its more detailed teachings.” Pet., 37. That theory fails to acknowledge that Ross implements a completely different context selection scheme than Kennewick and does not support a combination of Ross’s scheme with Kennewick’s.

Kennewick leaves nothing “off” about how its scoring system operates, and Ross uses a different, first-to-match system for selecting a context instead of a scoring system like that found in Kennewick. Combining Ross’s different techniques into Kennewick would not “pick up” where Kennewick “left off” but

instead would change the fundamental operation of both Kennewick and Ross as they relate to the selection of contexts. Such an alteration to the fundamental operation of the references does not establish obviousness and demonstrates the conclusory nature of Petitioner’s evidence. *See In re Ratti*, 270 F.2d 810, 813 (CCPA 1959) (obviousness not established where the combination changes the “basic principles under which the [prior art] was designed to operate”); *In re Gordon*, 733 F.2d 900, 902 (Fed. Cir. 1984) (obviousness not established where combination renders the prior art “inoperable for its intended purpose”); *see also ActiveVideo Networks, Inc. v. Verizon Commc’ns, Inc.*, 694 F.3d 1312, 1327-28 (Fed. Cir. 2012) (rejecting conclusory and unsupported expert testimony asserting the “motivation to combine would be because you wanted to build something better. You wanted a system that was more efficient, cheaper, or you wanted a system that had more features, makes it more attractive to your customers, because by combining these two things you could do something new that hadn’t been able to do before” as “fail[ing] to explain why a person of ordinary skill in the art would have combined elements from specific references *in the way the claimed invention does.*”) (emphasis added).

Petitioner’s second set of proffered motivations highlight the incompatibility with a combination of Ross’s first-to-match system in a scoring system. Here, Petitioner contends it is making the combination to “efficiently identify a matching

context” and seeks to implement the highest priority context method in Ross. Pet., 41-42. As noted above, the motivation to be vaguely “more efficient” is conclusory and fails to establish obviousness. *See ActiveVideo*, 694 F.3d at 1328. But even accepting for the sake of argument that Ross’s features are “efficient,” a POSITA would use Ross’s “efficient” (for the sake of argument) first-to-match method for selecting a context described above, and not the claimed identifying, scoring, and selecting steps set forth in claim 12. Thus, Petitioner’s second proffered motivation becomes self-defeating because the combination would remove from Kennewick the scoring features that Petitioner relies to satisfy elements 12[b], [c], and [d].

Accordingly, Kennewick in view of Ross fails to render obvious claim 12 and Petitioner’s challenge should fail.

V. The Board Should Deny the Petition Based on 35 U.S.C. § 325(d)

Section 325(d) allows the Board to elect not to institute a proceeding if the challenge to the patent is based on matters previously presented to the Office. The statute states, in pertinent part, “[i]n determining whether to institute ..., the Director 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). The question of whether a petition presents art or arguments that are “the same or substantially the same” as art or arguments

previously presented to the Office is a factual inquiry, which may be resolved by reference to the factors set forth in *Becton, Dickinson. Becton, Dickinson & Co. v. B. Braun Melsungen AG*, IPR2017-01586, Paper 8 (PTAB Dec. 15, 2017) (precedential as to § III.C.5, first paragraph) (“*Becton, Dickinson*”).

The precedential section of that decision sets forth the following non-exclusive factors for consideration:

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

Becton, Dickinson, 17–18.

Advanced Bionics, LLC v. MED-EL Electromedizinische Geräte GmbH, IPR2019-01469, Paper 6 at 8, 10, 17-18 (Feb. 13, 2020) (precedential), sets out a two-part framework for analyzing these factors. In the first part, factors (a), (b),

and (d) are considered to determine whether the art or arguments presented in the petition are the same or substantially the same as those previously presented to the Office. *Advanced Bionics*, 8-10. “If, after review of factors (a), (b), and (d), it is determined that the same or substantially the same art or arguments previously were presented to the Office,” then the second part of the analysis determines “whether the petitioner has demonstrated a material error by the Office” in view of factors (c), (e), and (f). *Id.* *Advanced Bionics* instructs that “[i]f 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.*, 9.

With regard to the first part of the *Advanced Bionics* framework, Kennewick was cited during examination and applied to reject certain claims earlier in the prosecution. Ex. 1012, 196-210. In allowing the claims of the '160 Patent, the Examiner viewed claim 12 as requiring “comparing text combinations against **both** grammar expression entries in the context description grammar and against one or more expected contexts stored in a context stack.” *See* Ex. 1012, 305 (emphasis added). The Petition relies on Kennewick to disclose these features. Pet., 23-31, 38-39.

Although the Petition attempts to rely on Ross in its obviousness combination, Petitioner claims it does so with a vague suggestion that it somehow provides “further context and detail for understanding Kennewick.” Pet., 9. To

this extent, Petitioner can be seen as admitting that Ross’s substantive teachings would be cumulative to what is found in Kennewick and would not give rise to a material difference in the art.

Petitioner further suggests that Ross’s “disclosures provide a compelling ground of obviousness” (Pet., 9) without stating which “disclosures” provide this “compelling” ground. As noted above, Ross’s grammar-based disclosures do not compel a finding of obviousness particularly because of the fact that they do not address the deficiency of “comparing text combinations against *both* grammar expression entries in the context description grammar and against one or more expected contexts stored in a context stack.” *See* Ex. 1012, 305 (emphasis added). As explained above, there is no such comparison in Ross, which simply uses the first matching context entry in a context stack. Thus, even when Kennewick is evaluated in view of Ross, there is no substantive challenge to what the Examiner found absent in the prior art. Thus, the Board should proceed to step 2 of the *Advanced Bionics* framework.

For step 2 of the *Advanced Bionics* framework, Petitioner acknowledges that Kennewick was evaluated during examination and used as a basis for rejecting claims in the ’160 Patent. But far from pointing out how the Examiner erred, Petitioner offers “[w]hy the Examiner did not appreciate Kennewick’s significance is unclear.” Pet., 9. The Examiner could not have been clearer—the prior art

considered by the Examiner lacked “comparing text combinations against *both* grammar expression entries in the context description grammar and against one or more expected contexts stored in a context stack.” *See* Ex. 1012, 305 (emphasis added). In fact, rather than providing targeted and direct citations in Kennewick or Ross for the feature the Examiner found absent, Petitioner spends 19 pages of its 46 page Petition trying to explain substitute theories founded on its biased reading of the teachings of Kennewick and Ross. Thus, instead of pointing out sufficiently how the Examiner erred when evaluating the asserted prior art in a balanced and neutral way, the Petition's failures confirm that the Examiner's conclusion was correct. The Board should decline Petitioner's request to reconsider the Examiner's reasoned decision to allow the '160 Patent over Kennewick.

VI. CONCLUSION

For the reasons presented above, the Petition should be denied, and no *inter partes* review should be instituted.

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CERTIFICATE OF WORD COUNT

The undersigned certifies that the foregoing PATENT OWNER'S PRELIMINARY RESPONSE complies with the type-volume limitation in 37 C.F.R. § 42.24(b)(1). According to the word-processing system's word count, the brief contains 6,162 words, excluding the parts of the brief exempted by 37 C.F.R. § 42.24(a).

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