

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

**SAMSUNG ELECTRONICS CO. LTD. and SAMSUNG ELECTRONICS
AMERICA, INC.**
Petitioners

v.

VB ASSETS, LLC,
Patent Owner

**IPR2025-00867
U.S. Patent No. 7,818,176**

PATENT OWNER'S PRELIMINARY RESPONSE

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Ex. 2001	Declaration of Andrew J. Ligotti
Ex. 2002	https://www.uspto.gov/sites/default/files/documents/InterimProcesses-PTABWorkloadMgmt-20250326.pdf (“Acting Director Memo”)
Ex. 2003	https://www.uspto.gov/patents/ptab/faqs/interim-processes-workload-management (“FAQs”)
Ex. 2004	<i>VB Assets, LLC v. Samsung Electronics Co., Ltd. et al.</i> , No. 2:24-cv-00828 (E.D. Tex. Oct. 9, 2024), Dkt. 1 (“Complaint”)
Ex. 2005	Prosecution History of U.S. Publication No. 2008/0256574
Ex. 2006	<i>VB Assets, LLC v. Samsung Electronics Co., Ltd. et al.</i> , No. 2:24-cv-00828, Dkt. 22 (E.D. Tex. Jan. 14, 2025) (“Samsung EDTX Litigation Answer”)
Ex. 2007	<i>VB Assets, LLC v. Amazon.com Servs. LLC</i> , No. 1:19-cv-01410-MN, Dkt. 291 (D. Del. Nov. 8, 2023) (“Amazon Delaware Litigation Jury Verdict”)
Ex. 2008	<i>VB Assets, LLC v. Amazon.com Servs. LLC</i> , No. 1:19-cv-01410-MN, Dkt. 352 (D. Del. June 9, 2025) (“Amazon Notice of Appeal”)
Ex. 2009	<i>VB Assets, LLC v. Samsung Electronics Co., Ltd. et al.</i> , No. 2:24-cv-00828, Dkt. 42 (E.D. Tex. Apr. 4, 2025) (“EDTX Litigation Amended Docket Control Order”)
Ex. 2010	<i>Samsung Electronics Ltd. et al. v. VB Assets, LLC</i> , IPR 2025-00870, Paper 6 (“Notice According Filing Date in IPR2025-00870”)
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Ex. 2013	Exhibit G-5, Subject Matter Eligibility Contentions for 176 Patent
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Ex. 2020	Samsung Notice of Documents Subpoena to AT&T Communications, LLC (June 12, 2025)
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I. INTRODUCTION

VB Assets, LLC (“VB Assets” or “Patent Owner”) respectfully submits this Preliminary Response (“POPR”) to the Petition filed by Samsung Electronics Co. Ltd. and Samsung Electronics America, Inc. (“Petitioners” or “Samsung”). Paper 3 (“Pet.”). The Petition seeks *inter partes* review (“IPR”) of claims 1-52 (the “Challenged Claims”) of U.S. Patent No. 7,818,176 (the “’176 Patent,” Ex. 1001).

Petitioners rely on four grounds to allege that the claimed invention would have been obvious to a person of ordinary skill in the art (“POSITA”). Ground 1 asserts the combination of Taschereau and Hansen. Grounds 2 and 3 propose further modification of the underlying Taschereau-Hansen combination with tertiary references Franco, and Jones, respectively. However, none of the asserted combinations disclose or suggest the claimed limitations for at least the following reasons. In Ground 4, Petitioners propose that the combination of Ramer and Cross renders all 52 claims of the ’176 Patent obvious. Each ground fails to disclose the claims for at least the reasons discussed below.

Taschereau is directed to “matching an utterance” with “a listing in a directory” using a multi-pass process that “requires” the utterance to be “re-applied in a manner which the caller cannot hear.” EX-1005, Abstract, 13:8-19. Hansen, on the other hand, “immediately” passes words that its Linguistic Processor extracts

from the incoming speech signal to the Command Processor. EX-1006, 27:34-38. These two approaches are inconsistent with one another and, as Patent Owner's expert Dr. Gershman explains, Taschereau distinguishes solutions like Hansen's such that a POSITA would have no motivation to combine these references as Petitioners propose. *See, e.g.*, EX-2025, ¶¶65; *see also id.*, ¶¶66-80.

Petitioners' further modification with tertiary reference Franco in Ground 2 does nothing to resolve these issues. In Ground 2, Petitioners map Franco to "determining an incorrect interpretation occurred and reinterpreting" but ignore that Franco works by "assuming" a second utterance will be a repeat of the first, so Franco then merges the audio of these repeats to yield a better recognition result. EX-1007, ¶[0020]. Petitioners do not identify anything in Franco that indicates it determines that an interpretation was incorrect or that any reinterpretation is performed—instead Franco performs recognition by merging repetitive utterances.

Ground 4 fails as to two independent claims (1 / 27) because Petitioners rely on Cross alone to satisfy the two alternative claim constructions proposed, which require "a grammar of phototactic [sic] English language rules that maps phonemes to *syllables*" or "a collection of the phonemes linked together to form *syllables*." Pet., 60-61 (emphasis added). But Petitioners do not identify syllables in Cross and instead assert "[a] POSITA would understand the reference to 'pronunciations' in Cross to be synonymous with syllables." Pet., 61 (citing EX-1003, ¶¶411-412).

Petitioners do not substantiate this statement and do not allege that Cross explicitly discloses mapping phonemes to syllables. As discussed below, Petitioners’ attempt to map Cross to the constructions is unsupported and improper.

The Petition’s challenge to the remaining two independent claims (14 / 40) in Ground 4 fares no better because Petitioners exclusively rely on Ramer to meet the “adaptive misrecognition engine” limitation (Pet., 66-68)—alleging that Ramer discloses a scenario where “the user *uttered* a word that did not appear in its dataset”—but Petitioners ignore that the relied upon disclosure in Ramer concerns user inputted text “query entry 120.” EX-1009, 25:10-25 (emphasis added), Fig. 4, 9; *see also* 5:48-67. Importantly, Ramer distinguishes “query entry 120” from “voice entry 122.” EX-1009, 5:48-67. Thus, Petitioners rely on Ramer’s teaching where the user doesn’t *utter* an input, they type it. Accordingly, unlike how Petitioners mischaracterize this disclosure, the system doesn’t “misrecognize” what the user typed. Petitioners and their expert fail to acknowledge or overcome Ramer’s flaws as asserted in Ground 4.

Accordingly, institution should be denied.

II. LEGAL STANDARDS

The Petition must both “clearly point out the differences between the claimed invention and [the prior art]” and “explain why a person of ordinary skill in the art would have found the claimed subject matter obvious in spite of those differences.”

Synopsys, Inc. v. Mentor Graphics Corp., IPR2012-00041, Paper 16, 14 (P.T.A.B. Feb. 22, 2013). Petitioners must recite where the challenged limitation is found in the reference(s) and explain why a POSITA would have modified the primary reference with the recited limitation from the secondary reference(s). *Microsoft Corp. v. Secure Web Conf. Corp.*, IPR2014-00745, Paper 12, 11-13 (P.T.A.B. Sept. 29, 2014).

The Petition must establish, ***with particularity***, the grounds and evidence that support invalidating the patented claims. 35 U.S.C. §312(a)(3). In addition, the Board institutes based on what the Petition ***actually presents*** and not what it could have reasonably contained. *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1381 (Fed. Cir. 2016). The Board cannot “deviate from the grounds in the petition and raise its own” theories of invalidity. *Sirona Dental Sys. GmbH v. Institut Straumann AG*, 892 F.3d 1349, 1356 (Fed. Cir. 2018).

III. LEVEL OF ORDINARY SKILL IN THE ART

Each of the arguments below should be considered from the standpoint of a POSITA in the field of the ’176 Patent. For purposes of this POPR, Patent Owner adopts the definition proposed by Petitioner. Pet., 6. Patent Owner reserves all rights to challenge Petitioners’ definition and/or further address the level of ordinary skill in the art if this proceeding is instituted.

IV. CLAIM CONSTRUCTION

Petitioners contend that “[t]he Board need not expressly construe any term for purposes of this proceeding because Petitioners establish the challenged claims are unpatentable under the constructions entered in the VBA-Amazon-Litigation, the Amazon-VBA-IPR and the claims’ plain meaning, where different.” Pet., 7.¹ The failure of the Petition to render obvious the Challenged Claims is clear in view of the arguments below without construing any specific claim term.

V. ARGUMENT

Throughout each of the Petition’s four Grounds, Petitioners ignore the purpose and teachings of their asserted references, mischaracterize their disclosure, and/or separately argue that multiple prior art references allegedly disclose certain claim limitations without considering the combination.

A. Ground 1

Petitioners fail to demonstrate that the Taschereau-Hansen combination asserted in Ground 1 renders obvious Claims 1-2, 9-11, 27-28, and 35-37. In view of the below deficiencies, Petitioners have failed to demonstrate a reasonable likelihood of prevailing on their challenge based on the combination of Taschereau and Hansen.

¹ Patent Owner reserves the right to later address constructions.

**1. Petitioners Fail to Demonstrate Motivation to Combine
Taschereau with Hansen**

a. Each of Petitioners' Proposed Motivations Fail

Petitioners allege that “[a] POSITA would have been motivated to incorporate teachings concerning the Hansen speech recognition implementation into the Taschereau speech recognition system.” Pet., 10; EX-1003, ¶¶160-161. In support, Petitioners propose three alleged motivations to combine. EX-2025, ¶¶66-67. None of the three arguments have merit, and as Patent Owner’s expert Dr. Gershman opines, a POSITA would not have been motivated to make Petitioners’ proposed combination with a reasonable expectation of success. *See* EX-2025, ¶65.

Petitioners’ first motivation is that Taschereau “does not disclose how” its ASR system converts speech to text and therefore that a POSITA would have looked to Hansen for details of such processing techniques. Pet., 10. But Petitioners fail to consider Hansen’s teachings and purpose. EX-2025, ¶68; *see also id.*, ¶¶55-64. If they had, it would have become clear that the Taschereau and Hansen are inapposite. EX-2025, ¶68. A POSITA would have understood that Taschereau’s telephone directory architecture would not be compatible with Hansen’s single pass processing techniques, which “act[] as a front-end to the operating system and/or to the applications that are executing on the host computer 22.” EX-1006, 28:21-30; EX-2025, ¶68; *see also* EX-2025, ¶¶43-54. Hansen discloses that its “processing

techniques” include “immediately pass[ing]” identified words to “the ‘Command Processor’ portion of the algorithm” which “determines whether the word or phrase constitutes text that should be passed as data to a higher level application . . . or whether it constitutes a command.” EX-1006, 10:12-19, 27:34-38. Hansen uses this Command Processor functionality in order to meet its stated goal to “act as a means for entering data and/or commands to a standard personal computer” in order to “essentially replace[], or supplement[] other computer input devices, such as keyboards and pointing devices.” EX-1006, 28:26-30. Therefore, as Dr. Gershman explains, a POSITA would have understood that Hansen’s processing techniques and stated purpose were therefore unsuitable for Taschereau’s telephone directory assistance system. EX-2025, ¶68.

Petitioners also, at times, rely on Taschereau’s ASR system, undercutting their argument that Taschereau’s supposed lack of details would motivate a POSITA to search for additional references. EX-2025, ¶69. In doing so, however, Petitioners ignore another key distinction between the two references that demonstrates there is no motivation to combine.

Taschereau discloses that its multi-pass process uses a grammar “designed to be as small as possible.” EX-1005, 6:8-7:22. Taschereau distinguishes other solutions that focus on techniques to improve the efficiency of a single pass, including those that use large grammars or the “common practice to split large

grammars . . . into more specific and smaller grammars.” EX-1005, 2:20-3:3, 4:20-22. But Hansen does just that. EX-2025, ¶70. Indeed, Hansen teaches that its “first dictionary contains a database of the most commonly used English words” and that its single pass can continue through “other dictionaries” that are “comprised of more specialized words.” EX-1006, 24:39-56. Dr. Gershman explains that a POSITA would have understood Hansen uses a large grammar first and splits subsequent grammars into more specific and smaller grammars. EX-2025, ¶70. Taschereau distinguishes such systems because it will “increase the overall time associated with obtaining the desired result; and increase the interaction duration, which in turn increases costs” and, thus, undercuts any reason to combine. EX-1005, 2:20-3:3. A POSITA would not have been motivated to combine these different approaches in view of Taschereau’s teachings. EX-2025, ¶70.

Petitioners’ second alleged motivation to combine is vague: the combination would purportedly “improve the speech recognition system.” Pet., 10-11; EX-1003, ¶162; EX-2025, ¶71. Petitioners base this assertion on Taschereau’s teaching that “[t]he ASR system can also be improved through additional audio processing in addition to or in place of gain control, for example by examining and adjusting for attributes particular to the utterance to be recognized” EX-1005, 18:6-9. Petitioners ignore, however, that Taschereau at most says that its ASR can be aided by “additional audio processing” such as to replace “gain control.” *Id.* Petitioners

misconstrue this teaching—which is directed to aiding Taschereau’s system—as a license to wholesale replace Taschereau with Hansen and argue that Hansen’s speech recognition approach supplies the missing details for “how [Taschereau’s] ASR system converts speech to text.” Pet., 10. Dr. Gershman explains that a POSITA would not have read Taschereau in this way and, when properly read, a POSITA would not have been motivated to combine the references to arrive at the claimed invention. EX-2025, ¶71. This is because a POSITA would have understood that adding Hansen to Taschereau in order to improve audio processing would not result in any new functionality in Taschereau and, in any event, would not have arrived at the claimed invention. *Id.*

Petitioners third alleged motivation to combine is that “the combination is nothing more than the application of a known technique (mapping phonemes to syllables phonemically represented in an acoustic grammar as disclosed in Hansen) to a similar known system (Taschereau’s ASR system) that operates in the same way (analyzing utterances through investigation of specific words and dynamic development of grammars) *for the above reasons.*” Pet., 11 (emphasis added); EX-1003, ¶163; EX-2025, ¶72. At the outset, Petitioners’ “third” motivation is nothing more than a repackaged presentation of the first two, given the reliance on “the above reasons” instead of a rationale for the alleged third motivation. EX-2025, ¶75. As

explained above, both of these “above reasons” fail to demonstrate a motivation to combine.

Irrespective, as Dr. Gershman explains “the two references do not operate in the same way because Taschereau distinguishes prior art ‘single pass’ systems like Hansen from its ‘multi pass’ system that uses grammars that are designed to be “as small as possible.” EX-2025, ¶73 (citing EX-1005, 6:13-24). Taschereau’s small grammar approach uses a “dynamically generated ‘latent grammar’” because it “know[s] that the ASR system will be used again to perform one or more latent, and optionally concurrent, recognitions, each latent recognition evaluating the terms from a previous recognition process.” EX-1005, 6:16-19, 14:7-8. In contrast, Hansen uses a large grammar first, and while it can evaluate additional pre-defined dictionaries, a POSITA would have understood Hansen to disclose a single pass. EX-2025, ¶73 (citing EX-1005, 27:16-26, Fig. 10).

There is another key difference in how Taschereau and Hansen operate. EX-2025, ¶74. Taschereau “whispers” utterances to human operators in certain circumstances, including when “the ASR system is not suitable for a response.” EX-1005, 17:3-16. Instead of a human operator failsafe, Hansen takes the opposite approach and *discards* sounds in the utterance which it refers to as “inactive sequences,” which is when the system determines it “would not ever lead to a valid word.” EX-1006, 25:37-26:12. Hansen even discards *recognized* words in certain

circumstances. EX-1006, 28:4-11. Petitioners never address these teachings in either Taschereau or Hansen. Dr. Gershman explains that, reading these disclosures, a POSITA would not have been motivated to implement Hansen—which discards both unrecognized and recognized words—given Taschereau solves this problem through the use of humans. EX-2025, ¶74.

b. Petitioners’ Alleged Reasonable Expectation of Success Does Not Apply to Petitioners’ Combination

Petitioners offer a reasonable expectation of success argument that is directly contradicted by the combination Petitioners rely upon to satisfy the limitations of the independent Claims 1 and 27. EX-2025, ¶¶76-77. Specifically, Petitioners allege that a POSITA would expect success, and that the results would have been predictable, because “[c]ombining Taschereau with Hansen would merely integrate *one component* (mapping phonemes to syllables phonemically represented in an acoustic grammar) into Taschereau’s system of receiving and responding to user’s utterances.” Pet., 11 (emphasis added); EX-1003, ¶164. This “one component” is the alleged “mapping phonemes to syllables phonemically represented in an acoustic grammar” functionality in Hansen’s Linguistic Processor. EX-1006, 24:19-56. Petitioners do not provide any other reason for why a POSITA would expect success in the combination, just that it would be predictable to integrate this single component. EX-2025, ¶¶76-80.

But this isn't the combination that Petitioners actually rely upon to allege obviousness in Ground 1 (and therefore Grounds 2 and 3 as well). Rather, Petitioners incorporate, and rely upon, multiple components in Hansen—including its Command Processor. *See* Pet., 25 (relying on Hansen's "'Command Processor' and associated host computer"). Therefore, Petitioners' arguments simply do not support the entirety of their own proposed combination. EX-2025, ¶77. Worse, there is *no* explanation of why a POSITA would expect success combining Hansen's Command Processor. Pet., 10-11. Dr. Gershman, on the other hand, explains why "combining Hansen with Taschereau would "lead to an architectural mismatch because their structures are incompatible." EX-2025, ¶77; *see also id.*, ¶¶78-80. For example, Hansen discloses a single pass system using its Linguistic and Command Processors while Taschereau is multi-pass. Each Taschereau "pass" through Hansen's Command Processor would result in commands to the computer and it is unclear how those commands would function within Taschereau's telephonic directory assistance system. In addition, Taschereau discloses a solution for resolving unclear utterances when the ASR system is not suitable whereas Hansen discards words and phrases when the ASR system is not suitable. EX-2025, ¶¶77-80. At bottom, Hansen's processing would not work with Taschereau's multi-pass system and Petitioners do not argue that there would have been motivation to modify Hansen to avoid using the Command Processor. *Id.*

Accordingly, and as Dr. Gershman explains, Petitioners have not demonstrated that a POSITA would have been motivated to combine Taschereau and Hansen in the manner proposed in the Petition. EX-2025, ¶¶79-80.

Even if a POSITA were to combine Taschereau and Hansen, the resulting combination would not render obvious the claims challenged in Ground 1 for at least the below reasons.

1. Claims [1B]/[27B] and Claims [1D]-[1E]/[27D]-[27E]

Petitioners separately allege that each of Taschereau and Hansen disclose the claimed speech recognition engine, but nowhere do Petitioners consider the proposed combination of Taschereau and Hansen and how the combination would actually teach or suggest the claimed speech recognition engine. Pet., 13-14; EX-2025, ¶81. Indeed, Petitioners do not explain how both references would simultaneously constitute the claimed speech recognition engine and carry out the claimed functionality, nor do Petitioners explain why a POSITA would be motivated to combine both alleged speech recognition engines with a reasonable expectation of success. Dr. Gershman considered Petitioners' arguments and the cited prior art to conclude that it is his "opinion that a POSITA would not have been motivated to merge the two alleged speech recognition engines nor would a POSITA have had a reasonable expectation of success in doing so." EX-2025, ¶82.

Petitioners compound this lack of particularity with regard to the speech recognition engine in their arguments for Claims [1D]/[27D] and Claims [1E]/[27E]. EX-2025, ¶83. Specifically, Petitioners rely entirely on Hansen for Claims [1D]/[27D] and never cite to or rely upon Taschereau. *See* Pet., 18-22. The functionality of Hansen that Petitioners rely upon for these Claims are the: “Dictionary Lookup; “Word Collocations;” and “Grammar Check” tools that are part of the “Linguistic Processor.” Pet., 18-19; *see also* EX-1006, 10:8-11. These linguistic program tools are what Petitioners alleged discloses the “speech recognition engine” of Claims [1B]/[27B] as discussed above. EX-2025, ¶84. Petitioners therefore cannot show Claims [1D]/[27D], and therefore Claims 1 and 27 as a whole, are obvious without Hansen’s alleged speech recognition engine. EX-2025, ¶85. But, confusingly, Petitioners separately allege that Taschereau’s ASR is also the claimed speech recognition engine. Pet., 13. To be clear, throughout Claims 1 and 27, Petitioner never resolves which of Hansen or Taschereau teaches or suggests the claimed speech recognition engine (and never proposes how they would be combined). EX-2025, ¶85.

Petitioners rely on Taschereau’s alleged speech recognition engine throughout Claims 1 and 27. But, given that Petitioners solely rely on Hansen’s alleged speech recognition engine for some of these claims’ limitations, it must mean that Petitioners’ combination either discards Taschereau’s speech recognition engine or

somehow combined with Hansen's. The Petition does not say. Worse still, Petitioners do not propose combination or modification of Taschereau's ASR with Hansen's system (or Hansen's system into Taschereau's ASR) and Petitioners never explain how the aspects of Hansen that are dispositive to Claims 1 and 27 would be used successfully with Taschereau. EX-2025, ¶¶85, 90. Therefore, because Petitioners fail to explain, with particularity, how the proposed combination would disclose the claimed speech recognition engine and interpretation limitations, Petitioners are unable to carry their burden. *See Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016).

Petitioners similarly fail to carry their burden for the "conversational language processor" and "interpretation" limitations of Claims 1 and 27. Petitioners allege that Hansen's **"*Command Processor' and associated host computer together*"** constitute the claimed 'conversational language processor' because they are coupled to a speech recognition engine and interpret the recognized words or phrases." Pet., 25 (emphasis added). But Petitioners admit that Hansen passes words "immediately" from the Linguistic Processor to the Command Processor. Pet., 24 (citing EX-1006, 27:34-37) (emphasis added). This means that, across Claims 1 and 27 as a whole, Petitioners' ground requires: Hansen's Linguistic Processor, Command Processor, and the associated host computer. EX-2025, ¶¶86-88.

But, once again, Petitioners separately and confusingly later allege that Taschereau's "multi-pass latent recognition process . . . is a 'conversational language processor.'" Pet., 23. As Dr. Gershman explains, a POSITA would have understood the Hansen and Taschereau processes are incompatible because Hansen outputs words directly to its Command Processor which routes commands to the computer operating system or applications while Taschereau runs multiple passes with amended utterances using variations of words. EX-2025, ¶¶88-90. Again, Petitioners cannot pick both.

Petitioners' proposed combination lacks particularity and, as a result, Dr. Gershman concludes that "Petitioners have not demonstrated (in part because of this lack of clarity) that a POSITA would have been motivated to arrive at the claimed invention with a reasonable expectation of success." EX-2025, ¶90. Indeed, it is Dr. Gershman's opinion that "a POSITA would not have been motivated Hansen's Linguistic Processor, Command Processor, and the associated host computer with Taschereau and a POSITA would not have had a reasonable expectation of success in such a combination." EX-2025, ¶91.

At bottom, Petitioners entirely fail to explain how the *combination* satisfies the claimed conversational language processor, just as Petitioners failed to explain how the *combination* discloses the claimed speech recognition engine." See Pet.,

22-26; EX-2025, ¶¶91. Petitioners fail to demonstrate Ground 1 renders these claims obvious.

B. Ground 2

Petitioners fail to demonstrate that the Taschereau-Hansen combination, further modified by Franco, as asserted in Ground 2 renders obvious Claims 12-18, 25-26, 38-44, and 51-52. At the outset, because Petitioners' Ground 2 depends on Ground 1, but Petitioners do not assert Franco for any of Ground 1's underlying independent claims, Ground 2 fails for the same reasons discussed above for Ground 1. Beyond this, in view of the below deficiencies, Petitioners have failed to demonstrate a reasonable likelihood of prevailing on their challenge based on the combination of Taschereau, Hansen, and Franco.

1. Petitioners Fail to Demonstrate Motivation to Combine Taschereau-Hansen with Franco

Petitioners provide three alleged motivations to “integrate the speech recognition error correction features disclosed in Franco with the speech recognition systems disclosed in Taschereau and Hansen.” Pet., 36. Petitioners fail to substantiate their allegations. *See* EX-2025, ¶¶99-103.

Petitioners' first motivation is “a POSITA would understand Taschereau express[es] a motivation to combine its system with systems like Franco, that specialize in correcting errors in speech recognition systems.” Pet., 36. But Franco

is directed to recognition, and only applies in the narrow use-case of merging repetitive utterances. EX-2025, ¶100. To support their argument, Petitioners cite Taschereau’s statement that “[a] significant limitation with ASR systems in the prior art is that *as a grammar’s size increases*, its accuracy diminishes . . . because as the number of possible phonetic matches for an utterance increase, the probability for error also increases as the differences between the various possible matches is smaller.” EX-1005, 2:1-4 (emphasis added). But Franco does not address this problem, and Taschereau already solved this problem. EX-2025, ¶100. Therefore, as Dr Gershman explains, using large grammars as motivation to combine Franco to help Taschereau with this problem is unjustified. *Id.*

Petitioners’ second alleged motivation to combine fails because Petitioners do not acknowledge Franco’s narrow purpose, wherein Franco “assum[es]” a second utterance will be a repeat of the first, so the audio of these repeats is merged to yield a better recognition result. *See* EX-2025, ¶101; *see also id.*, ¶¶94-98. Therefore, as Dr Gershman explains, Petitioners’ argument fails to provide a basis as to why a POSITA would have been motivated to modify Taschereau and Hansen in the proposed way. *Id.*

Last, Petitioners allege that a POSITA “would have been motivated to modify [Taschereau’s] *recursive process* (which includes ‘multiple simultaneous passes of the same utterance’ (EX-1005, 19:20-20:7)) with identified ‘predetermined events’

like a user repeating the same utterance in order to reduce processing time.” Pet., 36-37 (emphasis added). But, as Dr. Gershman explains, Taschereau’s recursive process is precisely what would lead a POSITA *away* from implementing Franco because, in combination, Franco’s process would assume each successive Taschereau pass is a repeat to be merged. EX-2025, ¶¶102-103. Dr. Gershman also explains implementing Franco in Taschereau would result in *more* processing time, contrary to Petitioners’ unsupported assertion that it would lead to less. *Id.*; cf. Pet., 37. Altogether, Petitioners fail to demonstrate that a POSITA would have been motivated to combine these references as proposed in Ground 2.

Furthermore, Petitioners do not address that Ground 2 relies on the modification of Taschereau with Hansen. Therefore, because Petitioners fail to explain, with particularity, why a POSITA would have been motivated to incorporate Franco into the combined Taschereau-Hansen system with a reasonable expectation of success, Petitioners are unable to carry their burden. *See Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016).

a. Independent Claims 14 and 40 and Claims 12, 38

Even if combined, Petitioners’ proposed combination fails to disclose Independent Claims 14 and 40. *See* Pet., 37-43; EX-2025, ¶104. Petitioners allege that, in relevant part, these claims require ““determining an incorrect interpretation occurred and reinterpreting” an utterance.” *Id.* Franco functions “by assuming that

[the] subsequent speaker utterance will comprise all or part of a previously spoken (and incorrectly recognized) utterance.” EX-1007, ¶[0020]. As Dr. Gershman explains, a POSITA would have understood that Franco does not disclose determining that an interpretation was incorrect or that any reinterpretation is performed—instead Franco performs recognition by merging repetitive utterances. EX-2025, ¶104; *see also id.*, ¶¶94-98.

Petitioners rely on two examples disclosed in Franco but provide internally inconsistent descriptions of those examples. Both examples combine hypotheses of a first utterance. Petitioners admit the first example is “an effort to correct recognition” but Petitioners describe the second as “reinterpret[ing] the misrecognized words from the first utterance.” Pet., 40, 42. Petitioners do not justify the different conclusions, nor do they cite to any support to Franco or any other reference. EX-2025, ¶106.

C. Ground 3

Ground 3 applies the combination of Ground 1, further modified by the Jones reference, but Petitioners do not challenge any independent claims in Ground 3. *See* Pet., 45-54. Petitioners do not assert that the Jones reference discloses or renders obvious any of the limitations of the independent claims challenged in underlying Ground 1, nor do Petitioners allege that Jones resolves any of the flaws in Ground 1 that Patent Owner has identified above. EX-2025, ¶¶107-109. Thus, the Board can

and should deny institution without considering Ground 3 because Petitioners have failed to demonstrate a reasonable likelihood of prevailing on their challenge based on the underlying combination of Taschereau and Hansen.

D. Ground 4

Petitioners fail to demonstrate that the Ramer-Cross combination asserted in Ground 4 renders obvious Claims 1-52. In view of the below deficiencies, Petitioners have failed to demonstrate a reasonable likelihood of prevailing on their challenge based on the combination of Ramer and Cross.

1. Independent Claims [1C]/[27C].

Petitioners interpret the term “acoustic grammar” in Claims [1C]/[27C] to require “a grammar of phototactic English language rules that maps phonemes to syllables” or “a collection of the phonemes linked together to form syllables, which are linked together to form the words of the language.” Pet., 60-61. Petitioners and their expert do not allege that Ramer discloses Claims [1C]/[27C], just Cross. EX-2025, ¶121.

But Petitioners acknowledge that Cross addresses pronunciations, not syllables, but nevertheless assert that “[a] POSITA would understand the reference to ‘pronunciations’ in Cross to be synonymous with syllables.” Pet., 61 (citing Ex. 1003, ¶¶411-412); EX-2025, ¶122; *see also id.*, ¶¶119-120. Petitioners’ expert does not provide any support for this assertion. *See* EX-1003, ¶412; *see also TQ Delta*,

LLC v. Cisco Sys., 942 F.3d 1352, 1360–61 (Fed. Cir. 2019) (“Conclusory statements and unspecific expert testimony do not qualify as substantial evidence that could support the Board’s conclusions regarding obviousness.”).

Dr. Gershman explains that Petitioners have not demonstrated that a POSITA would have understood this assertion to be true and also explains why the additional references that Mr. Lipoff cites (unasserted references Verma and Jones ’330) show that Petitioners have failed to show the claims are obvious in view of Cross. EX-2025, ¶¶123-125. Dr. Gershman points out that Petitioners and their expert provide no support for their assertion, and that the assertion is unclear. EX-2025, ¶¶125-126 (providing examples of words with different pronunciations and syllables). Moreover, Mr. Lipoff cites Verma and Jones ’330 to allege that mapping phonemes to syllables was allegedly known. EX-1003, ¶¶199-200. But whether these unasserted references disclosed functionality not alleged to be in Cross is beside the point. EX-2025, ¶¶127-132. Indeed, a POSITA would not have understood Cross to disclose a “syllabic mapping database” (as in Verma) or “the Nuance 7.0 speech server” (as in Jones ’330) simply because Verma and Jones ’330 suggest those features. EX-2025, ¶¶130-131. Petitioners tacitly admit that Cross does not simply by virtue of turning to these unasserted references to broadly allege what Petitioners argue was “well known in the art.” Pet., 61; *see also* EX-2025, ¶¶119-120. Petitioners and their expert never propose that Cross would be modified to include

these other features, either. EX-2025, ¶132. Accordingly, Petitioners have not demonstrated that Ground 4 satisfies the interpretations asserted in the Petition for “acoustic grammar.” Pet., 60-61; EX-2025, ¶133.

2. Independent Claims 14 and 40.

Petitioners allege that Ramer discloses the “adaptive misrecognition engine” claimed in independent Claims [14F] and [40F], but Petitioners do not rely on Cross for these limitations. Pet., 66-68; EX-2025, ¶134. Petitioners cite to Ramer at column 25 lines 9-25 and allege that Ramer discloses at this passage that “the user *uttered* a word that did not appear in its dataset.” Pet., 67 (citing EX-1009, 25:10-25). But this disclosure utilizes *text* that the user inputs into “query entry 120.” EX-1009, 25:9-25, Fig. 4, 9; *see also* 5:48-67 (“Query entry 120 may be accomplished through the use of a numeric key pad entry, full mobile device keyboard entry . . .”). Ramer distinguishes this from “voice entry 122,” which a POSITA would have understood to be different. EX-1009, 5:48-67; EX-2025, ¶¶135-136; *see also id.*, ¶¶111-117. Dr. Gershman’s opinion is that Petitioners have not demonstrated that a POSITA would have been “motivated to combine or modify Ramer’s ‘query entry’ embodiments to arrive at the claimed invention of the ’176 patent to solve the problem of selecting and presenting advertisements based on natural language processing of *voice-based* inputs,” in part because Petitioners never acknowledge the difference. EX-2025, ¶138; *see also id.*, ¶139.

Petitioners therefore mischaracterize Ramer’s embodiment when they argue that “a user *utters* ‘Coltrain’” which may lead “[t]he system may misrecognize the word.” Pet., 68 (emphasis added) (citing EX-1009, 25:9-25). The user types “Coltrain” in this example though, rather than utters it, and therefore the system would not “misrecognize” what the user typed. Pet., 68 (citing EX-1009, 25:9-15); EX-2025, ¶¶139-140. This can be seen in Ramer’s Figure 9, where Ramer discloses typed entry “Br Sp.”

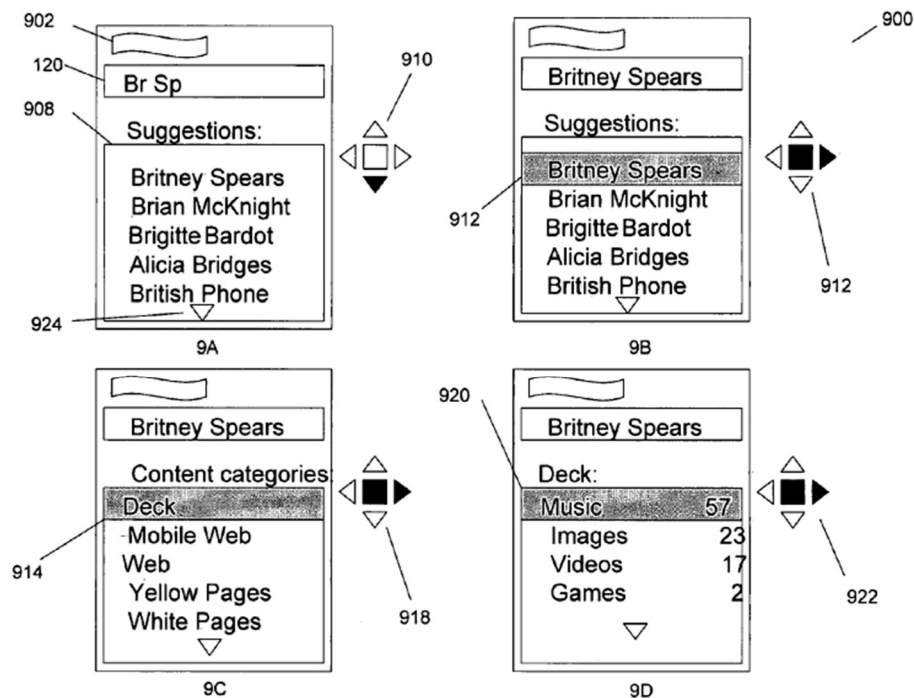


Fig. 9

See EX-1009, 12:46-49, Fig. 9. Figure 9 shows the typed entry “Br Sp” and suggested option “Britney Spears” as opposed to “Alicia Bridges” or “British Phone,” just like when the user types “Coltrain” there are suggestions of “Coltrane”

as opposed to “Coal Train” or “Soul Train.” EX-1009, 12:46-49, 25:9-25, Fig. 9; EX-2025, ¶141. Dr. Gershman disagrees with Petitioners’ conclusion that the “Coltrane” example of Ramer demonstrates that the system “misrecognized” the user entry as “Coal Train” or ‘Soul Train.’” EX-2025, ¶142; *cf.* Pet., 68. Similarly, Dr. Gershman disagrees that Ramer’s example discloses that the system “reinterprets the words or phrases” uttered by the user. *Id.*

Petitioners also allege that Ramer discloses that the system “determines that the conversational language processor incorrectly interpreted the words or phrases” when “the user utter[s] a word that did not appear in [Ramer’s] dataset.” Pet., 67-68 (citing EX-1009, 25:20-25). Petitioners’ argument fails for multiple reasons. EX-2025, ¶¶143-145. First, as noted above, this disclosure concerns typed text rather than user utterances. EX-2025, ¶144. Dr. Gershman explains that “a POSITA would have understood that in this example, when a user’s typed query entry does not appear in the dataset, the system did not ‘incorrectly interpret’ what words or phrases were typed.” EX-2025, ¶145. Instead, while in this example the user may have entered a word or phrase that didn’t match the dataset, Ramer never suggests that the system failed to accurately capture the typed input. *Id.*

Petitioners do not allege that any other disclosure in Ramer allegedly satisfies this limitation. EX-2025, ¶146. Accordingly, Petitioners have failed to demonstrate

that Claims 14 and 40 would have been obvious for the reasons asserted in the Petition.

VI. CONCLUSION

Accordingly, Grounds 1-4 of the Petition do not render Claims 1-52 of the '176 Patent unpatentable as obvious. For the reasons noted above, Patent Owner respectfully submits that the Board should deny institution of all Grounds of the Petition.

Dated: August 20, 2025

Respectfully submitted,

By: / Christopher TL Douglas /
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CERTIFICATION UNDER 37 C.F.R. §42.24

Pursuant to 37 C.F.R. §42.24(d), I certify that this brief complies with the type-volume limits of 37 C.F.R. §42.24 because it contains 5,345 words, according to the word-processing system used to prepare this brief, excluding the parts that are exempted by 37 C.F.R. §42.24 (including the table of contents, a table of authorities, a listing of facts which are admitted, a certificate of service or this certificate word count, and appendix of exhibits).

Dated: August 20, 2025

By: / Christopher TL Douglas /
Christopher TL Douglas

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. §42.6(e), the undersigned hereby certifies that true and correct copies of the foregoing **PATENT OWNER'S PRELIMINARY RESPONSE and VB ASSETS EXHIBITS 2025-2026** were served in their entirety on August 20, 2025 by filing this document through Patent Trial and Appeal Case Tracking System (P-TACTS) as well as delivering true and correct copies by electronic mail on Petitioners' lead and backup counsel at the following email addresses (as agreed by counsel for Petitioners):

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