

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

**IPR2025-00869
U.S. Patent No. 8,886,536**

PATENT OWNER'S PRELIMINARY RESPONSE

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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”)
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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 1-55 (the “Challenged Claims”) of U.S. Patent No. 8,886,536 (the “’536 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”). Across all grounds, Petitioners propose modifying the O’Neill reference with Jones as set forth in Ground 1. Grounds 2-4 each depend on Ground 1’s proposed combination. Ground 2 further modifies the O’Neill-Jones combination with Franco; Ground 3 modifies the O’Neill-Jones combination with Wang; and Ground 4 modifies the O’Neill-Jones combination with Howard. Each ground fails to demonstrate the challenged claims are obvious.

Thus, across all grounds, Petitioners propose modifying the O’Neill reference with Jones. But reliance on O’Neill dooms Petitioners’ challenges, especially once combination with Jones is contemplated, because O’Neill doesn’t do what Petitioners allege and because Petitioners do not appreciate that Jones relies on human searchers. Moreover, Jones does not disclose obtaining “user profile

information associated with a user, wherein the user profile information specifies prior user interactions with items,” functionality required by Petitioners’ proposed combination for independent Claims 50 and 53-55. In fact, Petitioners’ alleged motivations to combine and reasonable expectation of success arguments do not address these aspects of the claimed invention at all.

Petitioners’ further modification with tertiary references Franco, Wang, and Howard (in Grounds 2-4, respectively) does nothing to resolve these issues. In Ground 2, for example, Petitioners map Franco to “reinterpretation” of an utterance 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 (and admit as much: “Franco does not explicitly [sic] ‘determining a reinterpretation of the second language utterance.’”)—instead Franco performs recognition by merging repetitive utterances. *See* EX-1003, ¶552.

For Ground 3, Petitioners ignore that Wang’s “multi-request utterance” process (EX-1008, 56:12-23 (shifting the original focus to “the background while the system addresses the” new request)) is contrary to O’Neill’s stated purpose and architecture designed to “cop[e] with user-initiated shifts of discourse focus” where “rules have been developed for controlling transfers,” which are “restricted to ensure

that the improved dialogue manage elicits information in a clearly defined context.” EX-1005, ¶[0235]. Put another way, Petitioners overlook that O’Neill is designed to maintain focus while Wang is designed to shift focus—a POSITA would have understood that these two references teach opposite approaches to the same problem. *See generally* Pet., 68-69.

Last, in Ground 4, Petitioners map Howard to Claim [27A] and allege that “Howard provides an example of a *single user utterance* which includes multiple requests.” Pet., 79-80 (citing EX-1009, 2:37-50); *see also id.*, (“That utterance contains two separate requests sent to two separate devices.”). But the example in Howard that Petitioners rely upon makes clear that Howard discloses, at most, multiple utterances with only one request in each. *See* EX-1009, 2:37-50. Petitioners never demonstrate that Howard discloses multiple requests in a single utterance, or explain how the Howard system would function with such an utterance.

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. 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.

¹ Patent Owner reserves the right to later address constructions.

IV. ARGUMENT

Throughout each of the Petition's four Grounds, Petitioners ignore the purpose and teachings of their asserted references, overlook their designs, and mischaracterize their disclosure.

A. Ground 1

Petitioners fail to demonstrate that the O'Neill-Jones combination asserted in Ground 1 renders obvious Claims 1-12, 16-23, 30, 32, and 50-55. In view of the below deficiencies, Petitioners have failed to demonstrate a reasonable likelihood of prevailing on their challenge based on the combination of O'Neill and Jones.

1. Petitioners Fail to Demonstrate Motivation to Combine O'Neill with Jones

Spanning less than two pages, Petitioners propose that O'Neill's teachings regarding its interactive natural language dialogue system would be combined with the Jones system in order to provide targeted promotional content. Pet., 9; EX-1003, ¶161. Immediately after proposing the above, Petitioners appear to take a different view of the combination, asserting "the addition of the targeted advertising of Jones to the interactive dialogue system disclosed by O'Neill would provide opportunities to monetize and/or increase revenues of the interactive dialogue system, which the system in O'Neill is already designed to handle." EX-1003, ¶165; Pet., 10. Regardless, as discussed further below, Petitioners' alleged motivations fail.

a. Petitioners’ Alleged Motivations Do Not Address the Inventions Claimed in Challenged Independent Claims 50 and 53-55

Petitioners use the same alleged motivations to address all claims challenged in Ground 1, namely, independent Claims 1, 32, 50, and 53-55 along with their respective dependent claims. *Compare* Pet., 9-10 *with* 44-49. But, as discussed below for these Claims, Petitioners rely on Jones (the secondary reference) to allegedly satisfy limitations. Petitioners’ alleged motivations to combine, however, do not address the claimed inventions of independent Claims 50 and 53-55, specifically, the limitations that require obtaining “user profile information associated with a user, wherein the user profile information specifies prior user interactions with items.” Nor do Petitioners address why a POSITA would expect success in such a combination. EX-2025, ¶¶67, 74, 87, 102. Accordingly, Petitioners have not, and cannot, meet their “burden to demonstrate both ‘that a skilled artisan would have been motivated to combine the teachings of the prior art references *to achieve the claimed invention*, and that the skilled artisan would have had a reasonable expectation of success in doing so.’” *Intelligent Bio-Sys., Inc. v. Illumina Cambridge, Ltd.*, 821 F.3d 1359, 1367-68 (Fed. Cir. 2016) (citing, *inter alia*, *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1342, 1360 (Fed. Cir. 2012)) (emphasis added).

Petitioners do not explain why a POSITA would allegedly be motivated to combine teachings of Jones to arrive at the inventions claimed in Claims 50 and 53-55, and therefore dependent claims 51 and 52 as well. EX-2025, ¶¶67, 74, 87, 102. Indeed, Petitioners never address “user profile information,” “prior interactions with items,” “categories of items,” or “promotional content associated with one of the categories” in their alleged motivations to combine or reasonable expectation of success arguments. This is a fatal deficiency that cannot be resolved by the Board. *See In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1381 (Fed. Cir. 2016) (“[W]hile the PTO has broad authority to establish procedures for revisiting earlier-granted patents in IPRs, that authority is not so broad that it allows the PTO to raise, address, and decide unpatentability theories never presented by the petitioner and not supported by record evidence”).

b. A Person of Ordinary Skill in the Art Would not have Been Motivated to Combine O’Neill with Jones in the Alleged Manner

A POSITA reviewing O’Neill and Jones in their entirety would not have been motivated to combine the two references as Petitioners propose. The four alleged motivations to combine that Petitioners offer in Ground 1 are conclusory and suffer from hindsight. *See* Pet., 9-10; EX-1003, ¶¶160-169; EX-2025, ¶¶68-73. Such hindsight reasoning that “use[es] the invention as a roadmap to find its prior

components” is insufficient to establish a motivation to combine. *See Ruiz v. A.B. Chance Co.*, 357 F.3d 1270, 1275 (Fed. Cir. 2004).

Petitioners first allege that Jones “suggests the combination” and that “O’Neill also suggests the system can be combined with other systems.” EX-1003, ¶163 (citing EX-1006, [0025]; EX-1005, [0089]). But these boilerplate statements do not establish motivation to combine, let alone in the specific manner alleged in the Petition. EX-2025, ¶69.

Petitioners allege second that “the systems disclosed in O’Neill and Jones are designed to help users with requests.” EX-1003, ¶164; Pet., 9-10. This position stems from Jones’s teaching that “the purpose of the system is to ‘receive[] voice requests or queries submitted by users or information seekers from user devices 12, deliver[] the requests *to providers* for processing and return[] responses *resulting from the processing by the providers* to the users.” *Id.* (emphasis added). Therefore, Petitioners’ argument is founded on the processing done by Jones’s providers. But Jones defines its “providers” as humans, which Petitioners ignore. EX-1006, ¶[0022]. Indeed, while Petitioners do not explicitly admit that Jones’s system utilizes human searchers (or even reference Jones’s “providers”), their arguments nevertheless hinge on those teachings. *See* EX-2025, ¶¶70, 74-87; Pet., 9-10; EX-1006, ¶[0022]. Petitioners’ assertions as to Jones’s “record of advertisements,” “index,” and “database” (*see, e.g.* Pet., 17-18, 41-44), therefore, only exist because

human searchers identified and tagged the keywords and areas of interest. EX-1006, ¶¶[0009]-[0010], [0022]-[0024], [0032], [0041].

Petitioners rely throughout the ground on Jones’s keyword-based linking to advertisements without considering how that linking occurred (indeed, Petitioners never address that aspect of Jones). *See* Pet., 17-18, 42-43, 44-49. As Dr. Gershman explains, “[a] POSITA would have reviewed Jones in its entirety and would have understood that Jones discloses linking keywords with advertisements using human searchers.” EX-2025, ¶77. Accordingly, the Petition lacks an explanation as to why a POSITA would have been motivated to modify O’Neill with such a reference. Petitioners provide no reason why a POSITA would be motivated to modify O’Neill’s computational service agents with a human-based system, leaving the Board with insufficient evidence to reach a finding of obviousness. *In re Magnum Oil*, 829 F.3d at 1381. In fact, given that O’Neill’s purpose is to provide automated assistance to user requests, a POSITA would see no reason to add Jones to O’Neill. EX-2025, ¶¶76, 85-87.

There are multiple problems with Petitioners’ motivations to combine that stem from Jones’s reliance on human searchers, because Petitioners rely on features from Jones that require human involvement. EX-2025, ¶76; *see also id.*, ¶¶77-87. For one, Petitioners never propose modifying Jones to remove human involvement and Dr. Gershman opines that “[a] POSITA would have understood that, without

human involvement, Jones's database would not function as Jones teaches and Jones never considers a system that populates the database automatically or without human involvement." EX-2025, ¶81. In fact, doing so would contradict Jones's intended purpose of "allowing a human searcher to select an advertisement for the keyword and providing the advertisement to the user." EX-1006, ¶[0010]; *see also* EX-2025, ¶¶78-80.

Petitioners rely on Paragraphs [0030]-[0031] of Jones to suggest that human involvement might not be required for so-called unguided searches (*see* Petition 9, 12, 42-44), but a POSITA would have understood that these examples are premised on human involvement just like the rest of Jones. EX-2025, ¶¶82-84. To be sure, Jones's database leverages searches (whether or not the search is guided by a human provider or unguided) contingent on information populated by previous human searcher involvement. *Id.* (citing EX-1006, ¶¶[0030]; [0046]). Jones only presents advertisements for similar queries because of previous human searcher input: by tagging the utterance, identifying keywords, selecting the appropriate advertisement, and so on. EX-1006, ¶¶[0023]-[0024]; [0029]-[0032]. Jones relies on humans for other purposes, too. Jones teaches that human providers (referred to as the ChaCha Guide in this embodiment) are required to clarify keywords. EX-1006, ¶¶[0043]-[0050]; EX-2025, ¶¶82-84. In this way, the integral nature of human providers or guides to Jones's system and framework cuts against motivation to combine with

O'Neill's automatic system—Jones depends on humans for its database and to intervene when a user's utterance lacks clarity—and Petitioners' failure to address the issue speaks volumes. EX-2025, ¶¶82-84.

Jones's selection and presentation of advertisements depends on its populated database, and there is no alternative to populating this database other than using human searchers, which means that O'Neill would need to accommodate human searcher involvement. But, as Dr. Gershman explains, “[a] POSITA would have understood that it would not be trivial to modify a computational dialogue system (as in O'Neill) with solutions that depend on human involvement (as in Jones).” EX-2025, ¶85. Moreover, this contradicts O'Neill's purpose, which is *replacing* “conventional human-human conversation[s]” with O'Neill's computational “improved dialogue manager.” *Id.* (citing EX-1005, ¶¶[0263]-[0264]). Moreover, Petitioners identify nothing in Jones or O'Neill that indicates how this would work. Worse, Petitioners do not argue that a POSITA would have been motivated to modify *Jones* so as to somehow remove the reliance on human searchers. EX-2025, ¶¶86-87; *see In re Magnum Oil*, 829 F.3d at 1381.

Petitioners' third alleged motivation is that “the addition of the targeted advertising of Jones to the interactive dialogue system disclosed by O'Neill would provide opportunities to monetize and/or increase revenues of the interactive dialogue system, which the system in O'Neill is already designed to handle.” EX-

1003, ¶165; Petition 10. This argument fails because, as Dr. Gershman explains, “a POSITA would have understood that Jones does not have any automatic process to link keywords with advertisements, and instead, such linking only occurs with human provider involvement and those results are saved in Jones’s database.” EX-2025, ¶71 (citing EX-1006, ¶¶[0009]-[0010], [0022]-[0024], [0030]-[0032], [0041]). On the other hand, O’Neill’s dialogue manager is automatic, and a POSITA would not have been motivated to look to a system that requires human involvement to modify O’Neill. *Id.* Petitioners again fail to reconcile their arguments with the fact that Jones’ targeted advertising stems from human workers.

Petitioners’ allegation that “adding the targeted advertising of Jones to O’Neill’s interactive dialogue system would monetize the system” also misses the mark. Pet., 10; EX-1003, ¶165. As Dr. Gershman explains, O’Neill’s payment processing means are used to complete user requests such as booking a hotel. EX-2025, ¶72 (citing EX-1005, ¶[0068]). O’Neill’s stated purpose is to “cop[e] with user-initiated shifts of discourse focus” where “rules have been developed for controlling transfers,” which are “restricted to ensure that the improved dialogue manager elicits information in a clearly defined context.” EX-1005, ¶[0235]. O’Neill discloses that its architecture is designed in accordance with that purpose. *Id.* Jones does the opposite, presenting its advertising to the user while the human searcher processes the user’s request. *Compare* EX-1006, ¶[0028] *with* EX-1005, ¶¶[0075],

[0234]-[0235]. Accordingly, as Dr. Gershman concludes, “[a] POSITA would have understood that implementing Jones’s targeted advertising, which interrupts a user’s request, to O’Neill’s system would render O’Neill unsatisfactory for its originally intended purpose.” EX-2025, ¶72.

Petitioners’ fourth and final alleged motivation is that “the combination is nothing more than use of a known technique of targeted advertising (Jones) to improve a similar system that utilizes automatic speech recognition (O’Neill’s interactive dialogue system)” and that “[b]oth Jones and O’Neill operate in the same way, as both systems rely on automatic speech recognition and processing to interact with a user who is requesting information from the systems.” EX-1003, ¶166; Pet., 10. This conclusory assertion ignores the underlying references’ teachings. Indeed, the systems operate differently and are dissimilar. EX-2025, ¶73. As discussed above, Jones’s system does not automatically analyze natural language utterances to interact with the user’s requests and is designed to interrupt user requests while O’Neill is designed to avoid interruptions. Petitioners fail to demonstrate that a POSITA would have been motivated to modify O’Neill’s streamlined computational dialogue system with an interruption-based system having a foundation of human searchers. EX-2025, ¶73.

2. Claims [1H]/[1I] and [32H]/[32I]

O'Neill uses a dialogue manager provided by a “cohort of [computational] agents,” where “[e]ach agent is a specialist in a particular transactional area.” EX-1005, ¶[0073]; *see also* EX-2025, ¶¶47-53. Petitioners assert O'Neill discloses [1H] (“obtaining a first interpretation of the second natural language utterance from the first domain agent”) and [1I] (“obtaining a second interpretation of the second natural language utterance from the second domain agent”) as well as [32H] and [32I], which Petitioners assert are similar. To do so, Petitioners allege that O'Neill's computational agents satisfy the first and second domain agents. Pet., 15-16. But Petitioners err when they allege that O'Neill obtains a first and second interpretation from these agents because, in Petitioners' view, “the domain agents *must* obtain interpretations.” Pet., 16. Petitioners are wrong to assume that the agents “must” do so. EX-2025, ¶¶88-89, 98.

Petitioners rely on O'Neill's architecture at the “DomainSpotter” stage for these claims but, at this stage, O'Neill's agents only score “parse tags” against categories the agent can handle. EX-2025, ¶¶90-91; EX-1005, ¶¶[0200]-[0202]. DomainSpotter passes the tags and keywords to each domain agent rather than the utterance itself. O'Neill's agents score the number of categories within their purview that match the parse tags they are provided, which *then* leads to a *single* service agent processing the utterance (which is what Petitioners allege to be interpretation).

EX-2025, ¶¶92-95. An example of this is shown in O’Neill’s Figure 4, which Dr. Gershman explains a POSITA would have understood to disclose “that O’Neill’s DomainSpotter polls agents to match the parse tags against the categories that each agent can process, and DomainSpotter selects the agent with the highest score.” EX-2025, ¶96. A POSITA would have understood that the agent with the highest score is a *single* agent. *Id.*, ¶94. Petitioners fail to identify a teaching in O’Neill where *multiple* domain agents obtain different interpretations of the second natural language utterance. EX-2025, ¶¶90-96.

Petitioners also allege O’Neill’s example where the user responses “Yes” after the system states “So, you’re staying in Dublin” is an interpretation of a second language utterance. Pet., 16; EX-1003, ¶219. But Petitioners do not explain how this example discloses the claimed multiple domain agents that obtain different interpretations of the second natural language utterance. EX-2025, ¶97.

3. Claims [1J] and [32J]

Petitioners allege that the processing of the utterance by a *selected* service agent satisfies the “determining the interpretation based on one or more of the first interpretation or the second interpretation” limitations of Claims [1J] and [32J]. Pet., 16-17; EX-1003, ¶221. As explained above, the user’s utterance is only passed to one service agent for processing to “apply its domain-specific heuristics to the more

detailed processing of the user’s enquiry,” therefore, Petitioners fail to show the claimed first and second interpretation. EX-2025, ¶99.

4. Claims [1F] and [32F]

Petitioners rely on analysis for *other* limitations to allegedly disclose Claims [1F] and [32F]. Pet., 14 (citing EX-1003, ¶205); *see also* EX-1003, ¶205 (citing analysis for Claims [1G]-[1J]/[32I]-[32J]). As discussed herein, Petitioners’ arguments for those other limitations fail. EX-2025, ¶100. Beyond this, however, Petitioners fail to properly consider the limitations of Claims [1F] and [32F]. *Id.*

To try to address Claims [1F] and [32F], Petitioners’ expert cites O’Neill’s Paragraphs [0052]-[0058]. EX-1003, ¶205 (citing EX-1005, ¶¶[0052]-[0058]). But Petitioners do not allege that these passages of O’Neill disclose processing “based on the domain information” as required by Claims [1F] and [32F]. Pet., 14. Moreover, Petitioners do not cite to Jones for these limitations. *Id.* And although Petitioners also cite to their analysis for Claims [1G]-[1J]/[32I]-[32J], neither Petitioners’ analysis for those Claims nor the Claims themselves address the limitation required by Claims [1F] and [32F]. Accordingly, Petitioners failed to address the limitations Claim [1F] and [32F]. EX-2025, ¶101.

5. Independent Claims 50, 53-55

As explained above, Petitioners fail to provide a motivation to combine or reasonable expectation of success that applies to these independent claims, and

therefore Petitioners' challenge fails from the start. EX-2025, ¶¶67, 74, 87, 102. Irrespective, Petitioners allege Jones's advertising-focused database entries satisfy the "user profile information" of Claim 30, and rely on this allegation for independent Claims 50, 53, 54, and 55. Pet., 42-43, 44-49; EX-1003, ¶¶393-404. But Jones does not disclose the concept of a user profile. EX-2025, ¶¶102-103; *see also id.*, ¶¶ 54-64. Instead, Jones makes "very clear that instead of maintain user profiles for individual users and their individual interactions, Jones's database 18 maintains records of *advertisements*—including their (human generated) association with keywords, typical length of engagement from past sessions, click-through rates based on the aggregated information across all users." EX-2025, ¶102 (citing EX-1006, ¶¶[0032]-[0033]) (emphasis added).

While Jones uses previous results stored in the database, these results are not tied to the present user, they are tied to the advertisement. EX-2025, ¶103. Thus, Petitioners' expert Mr. Lipoff confuses individual user interaction tracking and tracking of aggregate advertising utilization (such as click-through rates). EX-1003, ¶396. Instead, as Dr. Gershman explains, "[a] POSITA reading the entirety of Jones would have understood that Jones does not disclose repeatedly presenting the same advertisement for a given user to view and click through repeatedly, which is how Petitioners and their expert appear to misunderstand this paragraph." EX-2025, ¶103. For example, Jones refers to "the number of times an advertisement has been

presented” (EX-1006, ¶[0033]), which “[a] POSITA would have understood . . . refers to times an advertisement has been presented in the past, irrespective of user”. EX-2025, ¶104. Jones also explains that its advertisement-specific records in the database track “the length of time *a user* (or requester) viewed an advertisement, whether the user ‘clicked through’ or accessed the advertisement, where the user bought products or requested services” EX-1006, ¶[0033] (emphasis added). Dr. Gershman opines that a POSITA would have understood these examples to teach “aggregated data for all users rather than interactions specified to any one user.” EX-2025, ¶104.

Similarly, Petitioners misplace reliance on Jones’s teaching as to “user telephone number or other geographic data such as GPS coordinates.” Pet., 42-43 (citing EX-1006, ¶[0031]). Petitioners seem to assert this discloses the claimed “user profile information” but overlook that Jones does not disclose the claimed “prior user interactions *specified* by the user profile information.” These database records are not specified by user profile information nor do they contain user phone numbers or geo-locations. EX-2025, ¶107. Instead, a POSITA would have understood Jones’s database records keywords linked to advertisements by human searchers in association with previous requests made by different users. *Id.*

Moreover, Petitioners fail to demonstrate that Jones discloses the *categories* of items based on the prior user interactions specified by the user profile

information” required by Claim [30.B]. EX-2025, ¶105. To support their allegations for this Claim, Petitioners again rely on the example in Jones concerning “restaurants in Indiana.” *See* EX-1003, ¶397. This example in Jones discloses advertising-specific database records which indicate that ads related to seafood restaurants have been presented to past users for similar queries. EX-1006, ¶[0031]; EX-2025, ¶106. However, as Dr. Gershman explains, this example does not disclose “prior user interactions specified by the user profile information” because Jones’s resulting “seafood restaurant advertisement” was triggered by the keyword “restaurants,” not the prior user interactions specified by the user profile information. EX-2025, ¶106. Petitioners do not assert that O’Neill resolves this flaw in Jones, indeed, O’Neill does not disclose tracking “item categories.” *Id.*, ¶¶105-106.

Petitioners admit that O’Neill’s dialogue manager at most “continues to use information from prior parts of the conversation with the user” (EX-1003, ¶399) but do not explain whether or how these components disclose identifying categories of items based on prior user interactions specified by the user profile information. Pet., 43; EX-2025, ¶108. Indeed, Petitioners never specify what alleged “items” are disclosed by O’Neill. On the other hand, O’Neill explains that the functionality that Petitioners identify is used so the dialogue “evolve[s] dynamically, as agents are selected in light of the user’s utterances or as a consequence of the agents’ own rules.” EX-1005, ¶[0077] (“stor[ing] data values elicited by the system from the

user” in what O’Neill calls “a Knowledge Hierarchy” and/or a “knowledge tree”). As Dr. Gershman explains, “a POSITA would not have understood O’Neill’s knowledge hierarchy and/or tree to disclose” the claimed “identifying . . . categories of items based on the prior user interactions specified by the user profile information.” EX-2025, ¶108.

B. Ground 2

Petitioners fail to demonstrate that the O’Neill-Jones combination, further modified by Franco, as asserted in Ground 2 renders obvious Claims 13-15, 24, and 33-38. 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 O’Neill, Jones, and Franco.

1. Petitioners Fail to Demonstrate Motivation to Combine O’Neill-Jones with Franco

Petitioners provide two alleged motivations to modify the O’Neill-Jones combination of Ground 1 with Franco but both fail. EX-2025, ¶¶115-119.

Petitioners allege that “O’Neill express[es] a motivation to combine its system with systems like Franco, that could enhance the system in O’Neill to add correction of errors in speech recognition. Pet., 50. Petitioners further explain that O’Neill

“does not provide all the details of the [DARPA Communicator system architecture]” that it utilizes and therefore a POSITA would have been motivated to look to Franco to implement O’Neill’s “speech recognizer and dialogue manager.” *Id.* But even if true, a POSITA would have understood that Franco only addresses speech recognition and has a very narrow and specific use case—merging repetitive utterances to improve recognition. EX-2025, ¶¶110-114, 116. Plus, Petitioners admit that O’Neill’s discourse manager can already “determine if the user’s current utterance repeats,” which demonstrates that combination with Franco would be redundant. Pet., 56 (citing EX-1005, ¶¶[0212]-[0213], [0236]); EX-2025, ¶119. Accordingly, a POSITA would not have been motivated to combine Franco with O’Neill to arrive at the claimed invention. EX-2025, ¶117.

Petitioners also allege there would have been motivation to combine because Franco “suggest[s] that its method of error correction was broadly applicable and could be implemented and combined with speech recognition applications, like O’Neill and Jones.” Pet., 50; EX-1003, ¶529. But, even if Franco did disclose broad applicability to other systems, Dr. Gershman explains that “a POSITA would have understood the narrow *purpose* for which Franco could be used—improving recognition by acoustically merging repetitive utterances—restricted Franco’s ability to solve the problem of the claimed invention.” EX-2025, ¶118 (emphasis in original).

2. Claim [13C] and Independent Claims [33G], [36H]

Petitioners allege that Franco discloses Claim [13C] and rely on that analysis to address independent Claims [33G] and [36H]. Pet., 51-56, 63-65. However, even beyond the failed motivation to combine, the Petition fails to show that the combination renders these claims obvious. EX-2025, ¶¶120, 125, 127.

Petitioners allege that “the O’Neill-Jones-Franco combination” discloses Claim [13C]’s limitation requiring “reinterpretation” of an utterance. Pet., 51. Despite the fact that Petitioners’ argument is premised entirely on Franco, Petitioners’ expert contradicts the Petition’s assertion and admits that “Franco does not explicitly [sic] ‘determining a reinterpretation of the second language utterance.’” EX-1003, ¶552. Dr. Gershman agrees that Franco does not determine a reinterpretation. EX-2025, ¶121. Accordingly, Petitioners’ Claim [13C] arguments fail from the start.

Petitioners nevertheless quote Franco’s disclosure at Paragraph [0020] to allege Franco’s system “reinterprets the misrecognized words from the first utterance in response to subsequent utterances.” Pet., 55. But the quoted passage from Franco does not use the word “reinterpretation,” rather, Franco recites “more accurate corrected recognition.” EX-1007, ¶[0020]; EX-2025, ¶122. Dr. Gershman opines that “Petitioners mischaracterize Franco when substituting ‘interpretation’

for ‘recognition’ despite Franco explicitly disclosing ‘recognition.’” EX-2025, ¶123.

Petitioners also mischaracterize two examples in Franco when arguing that they disclose the claimed invention, indeed, Petitioners’ own characterizations are internally inconsistent. Both examples combine hypotheses of a first utterance, but while Petitioners admit the first example is “an effort to correct *recognition*,” second example is alleged to be “reinterpret[ing] the misrecognized words from the first utterance.” Pet., 53-55 (emphasis added). No support in Franco is cited for the different conclusions, nor do Petitioners explain why, in their view, the first example discloses recognition while the second discloses reinterpretation. EX-2025, ¶124.

Separate from Franco, Petitioners turn to O’Neill. Pet., 56. Therefore, despite this Ground’s assertion that the combination of O’Neill, Franco, and Jones renders the claims obvious, Petitioners never consider the combination of O’Neill and Franco (let alone O’Neill modified by Franco and Jones). *See* Pet., 49-56. Instead, Petitioners only address O’Neill and Franco separately, and never address Jones, and thus Petitioners’ challenge of this claim must fail. EX-2025, ¶127.

Even if considered, O’Neill’s disclosure of a “confirmation strategy” does not disclose “determin[ing] a reinterpretation of the second natural language utterance” based on the “third natural language utterance.” Pet., 56. O’Neill discloses this confirmation strategy is used to determine whether to “transfer[] (or refus[e] to

transfer) to a new handling agent,” but Petitioners do not demonstrate how this functionality discloses the claim. *See* EX-1005, ¶[0236]. Nor does the other disclosed functionality for O’Neill’s confirmation strategy disclose the claim. Here, O’Neill uses “the *system’s previous intentions*” to “interpret the user’s most recent utterance *in light of the improved dialogue manager’s last utterance*.” EX-1005, ¶¶[0212]-[0213] (emphasis added). Therefore, as Dr. Gershman explains, in this configuration O’Neill’s “interpretation” is based on *the system’s* last output, not natural language utterances of the user as claimed. EX-2025, ¶126.

3. Claims [14] and [34], [15B]/[35B], and Independent Claims [33H], [36H]

Petitioners address Claims 14 and 34 together and rely on this analysis to allege obviousness of independent Claims 33 and 36. EX-2025, ¶128; Pet., 56-57, 63-65. But the foundation of Petitioners’ argument is their view that “[t]he only difference between claims [14] and [34] and [1K]/[32K] is that claims [14] and [34] require determining the promotional content based on the ‘reinterpretation’ rather than the ‘interpretation’ of the second natural language utterance.” Pet., 57. In essence, in order to reapply their Claims [1K]/[32K] argument, Petitioners assume that the difference between the claims and claim terms is immaterial. Putting aside whether this assertion is correct (and without admitting it is correct), Petitioners’ arguments and asserted references still fail to disclose the claims. EX-2025, ¶¶129-136.

For one, Petitioners assume in this section that “reinterpretation” is disclosed by Ground 2 for the reasons addressed with respect to Claim [13C], but Petitioners’ Claim [13C] arguments fail for the reasons discussed above. Additionally, Petitioners’ expert never cites to O’Neill or Franco for these Claims. *See generally* EX-1003, ¶¶555-561; EX-2025, ¶130.

Second, Petitioners allege that the combined system would “determine the promotional content” using “the interpretation of the utterance that is operative at the time the promotional content is generated.” *Id.* But Petitioners never explain how this combination would “reinterpret” let alone how it would determine the promotional content based on such a reinterpretation. EX-2025, ¶129.

Petitioners’ expert also asserts that “Jones discloses using keywords from the user’s request to target advertisement [sic].” EX-1003, ¶557. But Petitioners do not explain how this resolves the flaws in their Claim [13C] argument, or how Jones’s keywords disclose Claims 14 and 34 and the required “reinterpretation.” Nor does this disclosure remedy the issues discussed above with respect to Claim [13C]. Similarly, Petitioners allege that Jones’s “system uses a number of factors to weight and determine the appropriate ‘promotional content’, including the user’s request and other factors” (EX-1003, ¶558) without explaining how Jones’s factors disclose Claims 14 and 34 and the required “reinterpretation,” or resolve the issues discussed above with Claim [13C]. Last, Petitioners’ expert relies on Jones’s “example in

which the user requests information related to restaurants” and then determines promotional content related to the request. EX-1003, ¶560. Jones discloses with this example that “when a user requests information pertaining to ‘restaurants in Indiana’” the system can present restaurant advertisements to the user. EX-1006, ¶[0031]. Petitioners do not explain how this resolves the flaws in their Claim [13C] argument, or how presenting restaurant advertisements discloses Claims 14 and 34 and the required “reinterpretation.” EX-2025, ¶¶131-136.

4. Claim [24] and Independent Claims [37E]/[37I] and [38E], [38H]/[38I]

Petitioners rely on their assertion that Franco discloses Claims [24A]-[24C], to address independent Claims [37E]/[37I] and [38E], [38H]/[38I]. Pet., 59-63, 65-66. But Petitioners’ Franco arguments for these limitations merely cite back to the analysis for Claims [13C], which fails to disclose the claim for the reasons discuss above. EX-2025, ¶¶137, 141.

To try to remedy Franco’s failings, Petitioners identify elements in O’Neill and Jones, but none of these cited elements disclose Claims [24A]-[24C]. Accordingly, Petitioners’ challenges for these claims fail. *See* EX-2025, ¶¶138-141.

Petitioners separately cite to O’Neill’s DiscourseManager confirmation strategy, Jones’s “prompt [of] the user to clarify,” and Franco’s merging of utterances for better recognition in an attempt to satisfy Claim [24A]. Pet., 59. Petitioners, once again, never address the supposed combination of O’Neill, Jones,

and Franco. Petitioners also fail to demonstrate which of these three references' different processes would be used or whether any (or all) of them would be modified. EX-2025, ¶138.

Petitioners next cite to only O'Neill and Jones for Claim [24B], which requires "interaction of the user with the promotional content," but again fail to consider the combination. Pet., 60-61. Regardless, Jones does not monitor interactions of the user with the promotional content. EX-2025, ¶139. Petitioners also cite O'Neill, but "ignore that O'Neill does not disclose promotional content." *Id.*

As to Claim [24C], which recites "interpreting . . . the at least one incomplete or ambiguous request based on the interaction," Petitioners acknowledge that "O'Neill does not explicitly disclose interpreting an incomplete or ambiguous request based on an interaction of a user with promotional content . . ." Pet., 61; EX-2025, ¶140. Petitioners' reliance on Franco ignores that Franco is limited to narrow circumstances where a user repeats an utterance, which the Franco system merges because Franco assumes the utterances are repeats. *See* EX-2025, ¶140; *cf.* Pet., 62-63. Dr. Gershman explains that, as a result, "a POSITA would have understood that Franco does *not* include an interaction of the user with promotional content as a subsequent utterance, as that would not satisfy Franco's assumption concerning repeat utterances." EX-2025, ¶140.

Accordingly, Petitioners fail to demonstrate any of Claims [24A]-[24C] are obvious in view of the O'Neill, Jones, and Franco combination. EX-2025, ¶141.

C. Ground 3

Petitioners fail to demonstrate that the O'Neill-Jones combination, further modified by Wang, as asserted in Ground 3 renders obvious Claims 25-26, 31, and 39-43. At the outset, because Petitioners' Ground 3 depends on Ground 1, but Petitioners do not assert Wang for any of Ground 1's underlying independent claims, Ground 3 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 O'Neill, Jones, and Wang.

Petitioners provide two alleged motivations to modify the O'Neill-Jones combination of Ground 1 with Wang but both fail. EX-2025, ¶¶151-158; *see also id.*, ¶¶143-150.

Petitioners first allege that "O'Neill express[es] a motivation to combine its system with systems like Wang, that could enhance the system in O'Neill to understand multi-request utterances in speech recognition." Pet., 68-69. But, as Dr. Gershman explains, a POSITA would have understood that Wang's approach to multi-request utterances is contrary to the system architecture of O'Neill given that O'Neill is predicated on processing and completing one request per utterance. EX-

2025, ¶152. Specifically, Wang’s “multi-request utterance” process shifts the original focus to “the background while the system addresses the” new request. EX-1008, 56:12-23. This is inapposite with O’Neill’s purpose to “cop[e] with user-initiated shifts of discourse focus” where “rules have been developed for controlling transfers,” which are “restricted to ensure that the improved dialogue manage elicits information in a clearly defined context.” EX-1005, ¶[0235]; EX-2025, ¶¶153-155.

Petitioners and their expert never address this contradiction, which Dr. Gershman refers to as a “vastly different approach to managing user discourse.” EX-2025, ¶155. Petitioners rely on teachings in Wang that make this clear. For example, Wang’s disclosure related to the CD purchase and return policy demonstrates that Wang shifts the first focus to the background while addressing the new focus regarding the return policy. Pet., 69-70 (citing EX-1008, 56:16-18, 21, 23). O’Neill, on the other hand, makes clear that its “strategy *must be capable of coping* with user-initiated shifts of discourse focus” and restricts these shifts. EX-1005, ¶[0235] (emphasis added). O’Neill explains a “number of rules [that] have been developed for controlling transfers of dialogue control” in order to “provid[e] a degree of contextual coherency to a dialogue session.” EX-1005, ¶[0235]. Dr. Gershman explains that “[a] POSITA would have understood from O’Neill that its improved dialogue manager requires this strategy, and that Wang’s shifting focus would not

‘ensure that the improved dialogue manager elicits information in a clearly defined context’ as required by O’Neill. EX-2025, ¶156.

Petitioners also allege that “Wang discloses the benefit of being able to process multi-request utterances in customer service applications.” Pet., 68-69. But Wang provides this “benefit” by shifting focus to address the newest request. Accordingly, as Dr. Gershman explains, “a POSITA would have appreciated that Wang’s approach to multi-request utterances is incompatible with O’Neill’s architecture.” EX-2025, ¶157.

Finally, with regard to whether a POSITA would expect success, Petitioners allege the combination would have been predictable. Pet., 69. Here, Petitioners base their argument solely on their view that “Wang discloses that its features can be broadly implemented in ‘serving voice applications to clients over a communication network.’” *Id.* But Dr. Gershman explains that “a POSITA would have understood that Wang’s features are contrary to O’Neill’s features and strategy” because Wang shifts focus instead of maintaining it (like O’Neill) and that this would be true “[r]egardless of whether Wang states that its features can be implemented in various systems.” EX-2025, ¶158. Accordingly, a POSITA would not have had a reasonable expectation of success in Petitioners’ proposed combination. *Id.*

D. Ground 4

Petitioners fail to demonstrate that the O’Neill-Jones combination, further modified by Howard, as asserted in Ground 4 renders obvious Claims 27-29 and 44-49. At the outset, because Petitioners’ Ground 4 depends on Ground 1, but Petitioners do not assert Howard 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 O’Neill, Jones, and Howard.

Petitioners rely on their analysis of Claim [27A] to address independent Claims 44 and 49 and allege that Howard discloses Claim [27A] because, in their view, “Howard provides an example of a *single user utterance* which includes multiple requests.” Pet., 79-80 (citing EX-1009, 2:37-50) (emphasis added); *see also id.*, (“That utterance contains two separate requests sent to two separate devices.”). The only support for this assertion, or Claim [27A] as a whole, is Howard at 2:37-50. *See* EX-2025, ¶¶162, 169.

But even Petitioners’ *own description* of Howard does not support this allegation. Pet., 79-80; *see also* EX-2025, ¶¶160-161, 163-165. The Petition explains that in Howard the “*user asks* ‘What can I make for dinner?’” then “[t]he system would then check the contents of the refrigerator and make suggestions” and “[i]n

response the user says ‘I think I will make chicken stew tonight. Please print me a shopping list.’” Petition 79-80 (quoting EX-1009, 2:46-47) (emphasis added).

Petitioners’ description makes clear that Howard discloses multiple, separate, utterances with only one request in each. *See* EX-1009, 2:37-50; EX-2025, ¶¶164-165. Petitioners’ expert similarly mischaracterizes Howard’s example as having two separate utterances. *See* EX-1003, ¶829.

Dr. Gershman notes that Petitioners seem to suggest that the second utterance has two requests in it, but explains that such a notion would be incorrect. EX-2025, ¶166. Howard’s second utterance is “I think I will make chicken stew tonight. Please print me a shopping list.” EX-1009, 2:37-50. This single utterance contains only one request: to print the shopping list for the missing items that had already been identified for each recipe in the first request. EX-2025, ¶166. Petitioners do not identify any other support in Howard to meet this limitation and Petitioners do not rely on O’Neill or Jones to supply the missing functionality. *Id.*, ¶167. Accordingly, and as Dr. Gershman concludes, “Petitioners never demonstrate that Howard discloses multiple requests in a single utterance, or explain how the Howard system would function with such an utterance.” *Id.*, ¶168.

E. The Petition Should be Denied because Petitioners Impermissibly Force the Board (and Patent Owner) to Play Archaeologist with the Record

The Petition's grounds are fatally flawed and lack the particularity required for petitions, which the Board cannot remedy. *Microsoft Corp. v. FG SRC, LLC*, 860 F. App'x 708, 713 (Fed. Cir. 2021) (The Supreme Court has observed that the petitioner is the 'master of its complaint.'") (quoting *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1355, 200 L. Ed. 2d 695 (2018)); *Intelligent Bio-systems, Inc. v Illumina Cambridge Ltd.*, 821 F.3d 1359, 1369 (Fed Cir. 2016) (IPR petitioners must "'adhere to the requirement that the initial petition identify 'with particularity' the 'evidence' that supports the grounds for the challenge to each claim.'").

The Petition's labyrinthine layout is nearly identical to that in *Lenovo (United States) Inc. v. LiTL LLC*, where the Board declined to institute because the petition's confusing and deficient arguments failed to explain petitioner's positions. IPR2021-00800, Paper 7 at 19 (P.T.A.B. Nov. 2, 2021). Like here, the *Lenovo* petition relied heavily on a web of internal cross references that required the reader to engage in extensive analysis just to decipher what is being argued, much less evaluate the merits of that argument. *Id.*; see also *Niantic, Inc., v. Barbaro Techs., LLC*, IPR2019-00668, Paper 8 at 16 (P.T.A.B. August 14, 2019) (denying institution because Petitioner's internal cross references improperly "place[d] the burden on us to sift through the information presented by Petitioner[]" rather than providing a

sufficiently clear explanation (citing *Google Inc. v. EveryMD.com LLC*, IPR2014-00347, Paper 9 at 23-25 (P.T.A.B. May 22, 2014))). The Board denied institution in *Lenovo* because instituting would require the Board to “play archaeologist with the record,” which it declined to do. *Id.* at 18 (citing *DeSilva v. DiLeonardi*, 181 F.3d 865, 866–67 (7th Cir. 1999)). The same defects are found in the present Petition and present serious merits-based deficiencies throughout Petitioners’ grounds; thus, the Board should likewise deny institution here.

Take Ground 4’s challenge of Independent Claim 44, for example. Pet., 82. Independent Claim 44 is not challenged anywhere else, just Ground 4, which asserts a combination of O’Neill, modified by Jones, and further modified by Howard.

But the Petition’s “analysis” of this independent claim relies entirely on other limitations—which themselves often rely on analyses in other limitations—and are found in *other Grounds* applying *a different prior art combination*. All told, Petitioners allege the following for independent claim 44:

Claim 44	Claim Petitioners Analyze	Analysis	Ground
[44P]- [44C] =	[1P]-[1C]/[32P]-[32C]	Pet., at 11-13	1
[44D] =	[16A]	Pet., at 33 (citing [2B] analysis)	1
	→ [2B]	Pet., at 18	1
	[27A]	Petition at 79-80	4
[44E] =	[39E]	Pet., at 73-74 (citing [25B] analysis)	3
	→ [25B]	Pet., at 71 (citing [1K]/[32K]/[1L][32L]/[16B] analysis)	3
	○ [1K]/[32K]	Pet., at 17	1
	○ [1L][32L]	Pet., at 17-18	1
	○ [16B]	Pet., at 34	1
[44F]	[1L]/[32L]	Pet., at 17-18	1

Thus, for this one independent claim, Petitioners ask the Board to stitch together arguments spanning three grounds and dozens of pages. But “[i]t is not the Board’s job to cobble together assertions from different sections of a petition or citations of various exhibits in order to infer every possible permutation of a petitioner’s argument” because “[a]rguments must be made with particularity, not opacity.” *Microsoft*, 860 F. App’x at 713. Worse, Petitioners do not acknowledge that part of its analysis for Independent Claim 44 in Ground 4 relies on its analysis for Claim [25B]—which is only challenged in Ground 3 under the combination of O’Neill, Jones, and Wang. But Ground 4 does not rely on Wang. These problems are not unique to Claim 44 but persist throughout. *See, e.g.*, Pet., 63-64 (alleging independent claim 33 is obvious with no analysis other than twelve internal citations

to other claims); at 64 (alleging independent claim 36 is obvious entirely through citations to other claims spanning multiple grounds), at 65 (same, for independent claim 37), at 73-74 (same, for independent claims 39 and 43), and at 82-83 (alleging Ground 4 renders independent claim 49 obvious over claims analyzed elsewhere in Grounds 1, 3, and 4, despite Wang not being asserted in Ground 4).

Respectfully, the Board cannot ultimately find Independent Claim 44 unpatentable on the merits presented given the flawed complex, opaque, and disjointed nature of Petitioners' challenge. The same is true for at least independent Claims 33, 36, 37, and 49. Accordingly, it is simply not efficient to institute on other grounds and for other claims. *Chevron Oronite Co. v. Infieum USA LP*, IPR2018-00923, Paper 9, 9-11 (P.T.A.B. Nov. 7, 2018) (informative).

V. CONCLUSION

Accordingly, Grounds 1-4 of the Petition do not render Claims 1-55 of the '536 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 /
Christopher TL Douglas, Reg. No. 56,950

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 and the Director Memo because it contains 7,700 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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