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

IPR2025-00868
U.S. Patent No. 8,515,765

PATENT OWNER'S PRELIMINARY RESPONSE

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Page(s)

CASES

STATUTES

TABLE OF EXHIBITS

Exhibit Number	Description
2001	Declaration of Andrew J. Ligotti
2002	https://www.uspto.gov/sites/default/files/documents/InterimProcesses-PTABWorkloadMgmt-20250326.pdf ("Acting Director Memo")
2003	https://www.uspto.gov/patents/ptab/faqs/interim-processes-workload-management ("FAQs")
2004	*VB Assets, LLC v. Samsung Electronics Co., Ltd. et al.*, No. 2:24-cv-00828 (E.D. Tex. Oct. 9, 2024), Dkt. 1 ("Complaint")
2005	Excerpts of Prosecution History of U.S. Patent No. 10,891,968
2006	U.S. Patent No. 8,073,681 ("'681 Patent")
2007	*VB Assets, LLC v. Amazon.com Servs. LLC*, No. 1:19-cv-01410-MN, Dkt. 291 (D. Del. Nov. 8, 2023) ("Amazon Delaware Litigation Jury Verdict")
2008	*VB Assets, LLC v. Amazon.com Servs. LLC*, No. 1:19-cv-01410-MN, Dkt. 352 (D. Del. June 9, 2025) ("Amazon Notice of Appeal")
2009	*VB Assets, LLC v. Samsung Electronics Co., Ltd. et al.*, No. 2:24-cv-00828, Dkt. 42 (E.D. Tex. Apr. 4, 2025) ("EDTX Litigation Amended Docket Control Order")
2010	*Samsung Electronics Ltd. et al. v. VB Assets, LLC*, IPR 2025-00870, Paper 6 ("Notice According Filing Date in IPR2025-00870")
2011	Docket Navigator Statistics
2012	*VB Assets, LLC v. Samsung Electronics Co., Ltd. et al.*, No. 2:24-cv-00828, Samsung Elecs. Co., Ltd. and Samsung Electronics America Inc.'s Invalidity and Subject Matter Eligibility Contentions (April 29, 2025) ("Samsung EDTX Litigation Invalidity Contentions")
2013	Exhibit G-3, Subject Matter Eligibility Contentions for '765 Patent
2014	Samsung Notice of Deposition Subpoena to Carnegie Mellon University (May 14, 2025)
2015	Samsung Notice of Documents Subpoena to Carnegie Mellon University (May 14, 2025)
2016	Samsung Notice of Deposition Subpoena to Mavenir Systems, Inc. (May 14, 2025)
2017	Samsung Notice of Documents Subpoena to Mavenir Systems, Inc. (May 14, 2025)

Exhibit Number	Description
2018	Samsung Notice of Deposition Subpoena to Xura, Inc. (May 14, 2025)
2019	Samsung Notice of Documents Subpoena to Xura, Inc. (May 14, 2025)
2020	Samsung Notice of Documents Subpoena to AT&T Communications, LLC (June 12, 2025)
2021	Plaintiff's Rule 30(B)(1) Notice of Oral and Videotaped Deposition of Ho-Jung Ahn (July 18, 2025)
2022	Plaintiff's Rule 30(B)(1) Notice of Oral and Videotaped Deposition of Roger Kibbe (June 20, 2025)
2023	Reserved
2024	Reserved
2025	Declaration of Dr. Anatole Gershman
2026	Curriculum vitae of Dr. Anatole Gershman

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 1-14 (the "Challenged Claims") of Patent No. 8,515,765 (the "'765 Patent," Ex. 1001).

Petitioners sole ground relies on a combination of Smith & Hipp and Guinn to allege that the claimed invention would have been obvious to a person of ordinary skill in the art ("POSITA"). However, the asserted combination fails to disclose or suggest the claimed limitations for at least the following reasons.

First, Petitioners' argument that the combined system determines a conversation type is unsupported. Specifically, Petitioners argue that Smith & Hipp's "directive mode" would be determined by the combination. *See* Pet., 29. But, the references do not disclose a mechanism for selecting a specific initiative mode (or level)—such as Smith & Hipp's directive mode. Smith & Hipp describes multiple initiative modes (levels) when a computer has initiative, including directive and suggestive modes, as well as multiple initiative modes (levels) when a user has initiative. At best, Guinn discloses assigning a computer or a user initiative during a conversation. However, Petitioners fail to explain how a POSITA would select among the various initiative modes (or levels) in Smith & Hipp based solely on the determination that either a computer or a user has the initiative in a conversation.

Second, Smith & Hipp fails to disclose generating a response in a format adapted to limit the user's future input. Notably, Petitioners do not address the claimed limitation of "generating a response to the natural language utterance with a format based on the conversation type." Regardless, Petitioners fail to demonstrate that Smith & Hipp adapts its response format. Petitioners simply rely on the directive mode of Smith & Hipp without explaining how Smith & Hipp's system outputs responses and/or whether there is any correlation in Smith & Hipp between an initiative level and the system output. Petitioners do not rely on Guinn to address these shortcomings in Smith & Hipp.

Finally, Petitioners' motivation to combine the references is deficient. The alleged explicit motivation in Smith & Hipp is not addressed or solved by the Guinn system. Additionally, Petitioner's argument that Guinn cites specifically to Smith & Hipp is not supported by the list of references cited at the end of Guinn. As such, Petitioners unsupported motivations to combine fail.

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 '765 Patent. For purposes of this POPR, Patent Owner adopts the definition proposed by Petitioner. Pet., 10. Patent Owner reserves all rights to challenge Petitioner's definition and/or further address the level of ordinary skill in the art if this proceeding is instituted.

IV. CLAIM CONSTRUCTION

Petitioner contends that "[t]he Board need not expressly construe any term for purposes of this proceeding because Petitioners establish the challenged claims are unpatentable using a construction of the claims' plain meaning." Pet., 10.[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

A. Even if properly combined, the Smith & Hipp + Guinn combination fails to disclose "determining the conversation type corresponding to the natural language utterance. . ."

Petitioners never account for the shortcoming in their proposed combination—neither reference discloses the ability to determine an initiative mode or level (the alleged conversation type of the claim) based on a natural language utterance. Petitioners assert, without support, that "the combined Smith & Hipp-Guinn system determines during a conversation that the computer is the more knowledgeable agent, [and] the system gives initiative (or control) to the computer" and "[i]n such a case, the system would therefore be operating in **directive** mode, where '[t]he computer has complete dialog control.'" Pet., 29 (emphasis in original). That is, Petitioners equate the computer being the more knowledgeable agent with

[1] Patent Owner reserves the right to later address constructions.

the directive mode of operation. But neither reference teaches nor suggests such a conclusion. *See* EX-2025, ¶44. Other than conclusory statements by their expert, which are contrary to the teachings of the references, Petitioners provide no rational basis for why a POSITA would equate the computer being the more knowledgeable agent with one of many available initiative modes (or levels)—specifically, the directive mode. *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."). Petitioners' correlation of computer control and directive mode is the epitome of hindsight.

Petitioners interpret Claims [1B]/[10B] to require the conversation type to automatically change in real time—"[i]n other words, as roles and information allocation shift, so too should the conversation type that is being applied by the system."[2] Pet., 27. In view of Petitioners' interpretation, there is no dispute that Smith & Hipp alone fails because while it disclosed multiple different levels of initiative, such as directive mode, suggestive mode, declarative mode, and passive mode, it "***did not include an automatic mechanism*** for selecting among the variable

---

[2] Should this *inter partes* review be instituted, Patent Owner reserves the right to address this interpretation of Claims [1B]/[10B]

initiatives." Pet., 28 (emphasis added) (citing EX-1005, 316 (noting that "an automatic mechanism is needed for setting the appropriate level of initiative as an interaction proceeds")); EX-1006, 278 ("Smith presents no algorithm for the computer to change initiative during a dialogue."); *See* EX-2025, ¶46. Petitioners, thus, admit that Smith & Hipp alone fails to render Claims [1B]/[10B] obvious. Pet., 28; *In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1381 (Fed. Cir. 2016) ("[T]he Board must base its decision on arguments that were advanced by a party, and to which the opposing party was given a chance to respond.").

There is also no dispute that, at best, Guinn discloses nothing more than giving initiative (or control) to the computer or the user. *See* Pet., 28-29. That is, "Guinn allows for initiative changes between a computer and user during a particular conversation, but Guinn goes no furthers and does not describe setting different levels of initiative or control." EX-2025, ¶47; *see also* EX-1006, 278-279. Indeed, Guinn says nothing about selecting a particular initiative type or assigning degrees of initiative type. *See* EX-1006, 278 ("Our model of mixed-initiative dialogue allows either participant to be in control of the dialogue at any point in time.").

The sole dispute is whether the system of Guinn, which is only configured to determine whether a user or computer has initiative, is able to select Smith & Hipp's granular initiative modes (or levels).[3] Petitioners' argument turns on the mistaken belief that ***if the computer is in control***, the combined system ***is necessarily operating in "directive mode"*** (and not, for example, in the suggestive mode). *See* Pet., 28-29 (emphasis added). Specifically, the Petition states:

> Applying Guinn's teachings related to Continuous mode to Smith & Hipp's four initiative modes, if the combined Smith & Hipp-Guinn system determines during a conversation that the computer is the more knowledgeable agent, the system gives initiative (or control) to the computer. (EX-1003, ¶177.) In such a case, the system would therefore be operating in directive mode, where "[t]he computer has complete dialog control." (EX-1005, 282; EX-1003, ¶178.) On the other hand, if the system determines during a conversation that the user is the more knowledgeable agent, it gives the initiative (control) to the user, thereby operating in passive mode, where "[t]he user has complete dialog control." (EX-1005, 283.)

[3] Petitioners must show that the directive mode of Smith & Hipp would be selected because Petitioners rely on the directive mode alone with respect to Claims [1C]/[10C].

Pet., 29.[4] As explained by Patent Owner's expert, Dr. Gershman, "the knowledge that the computer has the initiative that is gained from the teachings of Guinn does not provide the information necessary to select a particular initiative level in Smith & Hipp." EX-2025, ¶48 *see also* EX-1006, 278. Dr. Gershman further explains that "[] the Petition erroneously correlates the determination that the computer has initiative with directive mode and the determination that the user has the initiative with passive mode, effectively ignoring suggestive mode and declarative mode." *Id*.

Smith & Hipp discloses "four initiative modes," two initiative modes where the computer has control and two initiative modes the user has control. EX-2025, ¶49. Smith & Hipp's modes include:

Initiative Level	Computer v. User Control (EX-1005, 289; EX-2025, ¶49.)
Directive	**<u>Computer Control</u>**. EX-1005, 289 ("Unless the user explicitly needs some type of clarification, the ***computer*** will select its response solely according to its next goal for the task."); *see also* EX-1005, 282 ("The computer has complete dialog control.").

[4] Similar to the Petition, the expert declaration merely concludes, without explanation, that the system would be operating in directive mode. *See* EX-1003, ¶178.

Initiative Level	Computer v. User Control (EX-1005, 289; EX-2025, ¶49.)
Suggestive	**<u>Computer Control</u>**. EX-1005, 289 ("The ***computer*** will again select its response according to its next goal for the task, but it will allow minor interruptions to subdialogs about closely related goals.); *see also* EX-1005, 283 ("***The computer still has dialog control***, but not as strongly.").
Declarative	**<u>User Control</u>**. EX-1005, 289 ("The ***user*** has dialog control.")
Passive	**<u>User Control</u>**. EX-1005, 289 ("The ***user*** has complete dialog control.")

Even if the computer was deemed to be in control, the combined system could be operating in ***one of two modes*** (not one as Petitioners imply), directive or suggestive mode. EX-2025, ¶49. Indeed, if the user was deemed to be in control, the combined system could be operating in ***one of two modes*** (not one as Petitioners imply), declarative or passive mode. *Id*. Petitioners fail to explain how or why a POSITA would pick any particular initiative level from among the set of initiative levels that provide, for example, computer control (*i.e.*, directive and suggestive modes). Petitioners cannot provide such an explanation because, according to Dr. Gershman, the "combined system is unable to make such a determination." EX-2025, ¶49. Indeed, not even Smith & Hipp resolved the preferred mode of initiative only “that user behavior differs according to the level of initiative” and Smith & Hipp did not have an experimentally proven theory of how to assign initiative modes. EX-2025, ¶51 (citing EX-1005, 308, 310).

At best, Petitioners’ expert, Mr. Lipoff, appears to dismiss the suggestive and declarative modes when he alleges “Smith & Hipp’s suggestive and declarative modes are equivalent to the ’765 patent’s exploratory conversation type, as the user and the computer may each have a leader or supporter role in those modes.” EX-1003, ¶168; *see also* Pet., 25. But this assertion that each participant has both a leader/supporter role is not supported by Smith & Hipp. As confirmed by Dr. Gershman, “in suggestive mode, the ‘***[t]he computer still has dialog control***, but not as strongly’ (EX-1005, 282) and, in declarative mode, ‘[t]he ***user*** has dialog control.’” EX-2025, ¶50 (emphasis is original) (citing EX-1005, 289).

Petitioners’ combination is thus missing any teaching or suggestion that the combined system would be able to select a particular initiative mode from Smith & Hipp based solely on Guinn’s determination that a user or computer was taking the lead. EX-2025, ¶52. Instead, Petitioners rely on mere hindsight and not the actual teachings of the references to select the directive mode. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). As such, even if properly combined, the combination fails to render the Claims [1B]/[10B] obvious.

B. Smith & Hipp + Guinn combination fails to disclose "generating a response to the natural language utterance with a format based on the conversation type, wherein the format is adapted to limit the user's future input to interjecting queries or requests for clarification if the user has the supporter role."

Notably, the Petition never addresses "generating a response to the natural language utterance with a format based on the conversation type." The discussion of Claims [1C]/[10C] focuses solely on "interjecting queries or requests for clarification if the user has the supporter role." Without any discussion as to how the combined system "generat[es] a response to the natural language utterance with a format based on the conversation type," Petitioners cannot carry their burden.

Regardless, there is no dispute that Claims [1C]/[10C] are directed to adapting a ***format*** of a response to "limit the user from taking control of the dialog and moving it in another direction." Pet., 30-31. In fact, Petitioners freely admit that the claimed response is generated "in a ***format*** that would limit the user's future input 'to interjecting queries or requests for clarification.'" Pet., 30 (emphasis added). Based on this interpretation of the claims, Petitioners allege that Smith & Hipp's directive mode means that the "user's future input is limited to '*interjecting queries or requests for clarification if the user has the supporter role*.'" Pet., 31.

However, Petitioners identify an initiative mode in Smith & Hipp that does not clearly rely on a format of the response at all. Unlike Petitioners' interpretation of Claims [1C]/[10C], Smith & Hipp does not disclose that it adapts its responses. EX-2025, ¶55. With respect to the directive mode of operation, Smith & Hipp states:

> Directive Mode. Unless the user explicitly needs some type of clarification, the computer will select its response solely according to its next goal for the task. If the user expresses need for clarification about the previous goal, this must be addressed first. No interruptions to other subdialogs are allowed.

EX-1005, 289. As explained by Dr. Gershman, "Smith & Hipp's directive mode implies only that, for example, '[n]o interruptions to other subdialogs are allowed' but a person of ordinary skill in the art would not necessarily interpret this statement in the manner alleged by Petitioner. Instead, preventing interruptions could be interpreted as a system level control whereby the system does not allow interruptions or simply ignores interruptions." EX-2025, ¶55. Regardless of the interpretation and in view of the lack of disclosure in Smith & Hipp, it was Petitioners' burden to demonstrate that the cited reference rendered the claim unpatentable and Petitioners did not do so. Therefore, because Petitioners fail to explain, with particularity, how the directive mode of operation operates with regard to generating a response, Petitioners are unable to carry their burden. *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016).

Moreover, Dr. Gershman explains that "[a] person of ordinary skill in the art would have understood that the initiative levels in Smith & Hipp, such as directive mode, are indicating what level of interruptions will be allowed. Indeed, similar to the directive mode, suggestive mode selects its 'response according to its next goal for the task.'" EX-2025, ¶56 (citing EX-1005, 289). When the system is in suggestive mode, some minor interruptions are allowed. *Id.* As such, in both modes, the system is selecting a response based on its next goal for the task and, thus, a POSITA, according to Dr. Gershman, "a person of ordinary skill in the art reading Smith & Hipp would not have understood that Smith & Hipp is disclosing 'generating a response to the natural language utterance with a ***format*** based on the conversation type, wherein the ***format is adapted*** to limit the user's future input to interjecting queries or requests for clarification if the user has the supporter role.'" EX-2025, ¶56 (emphasis in original).

Finally, Petitioners' argument is undercut by the disclosure of Smith & Hipp. First, Smith & Hipp relies on a different system, the output generator, to generate output statements based on assertiveness. EX-1005, 289. But despite a passing reference to assertiveness[5], neither Petitioners nor their expert explain the

[5] Supported solely by a citation to the expert declaration, the Petition states: "[a]s Smith & Hipp explain, it had been known since at least 1988 that assertive statements (e.g., commands) are most likely to maintain dialog control with the speaker." Pet.,

correlation, if any, between the level of assertiveness and the initiative level. EX-2025, ¶57. Second, Smith & Hipp confirms that its system does not and cannot adapt its response to limit responses as it states: "[i]nputs from a passive participant can be expected to be more predictable and well behaved than those from a directive one. ***Our system does not account for this effect at this time***." EX-1005, 290 (emphasis added). Based on this disclosure, a POSITA would have understood that the Smith & Hipp system had not implemented "generating a response to the natural language utterance with a format based on the conversation type, wherein the format is adapted to limit the user's future input to interjecting queries or requests for clarification if the user has the supporter role." EX-2025, ¶58.

As such, even if properly combined, the combination fails to render Claims [1C]/[10C] obvious.

C. Petitioners' Alleged Motivation to Combine is Flawed

Petitioners' motivation to combine is both brief and unsupported. First, Petitioners rely on Smith & Hipp's identification of an "important unsolved

---

31. However, "conclusory statements and unspecific" expert testimony are "insufficient to justify" the use of general knowledge to modify a reference or provide a missing limitation. *Arendi S.A.R.L. v. Apple Inc.*, 832 F.3d 1355, 1362 (Fed Cir. 2016).

problem[]" in its system, namely "**an automatic mechanism is needed for setting the appropriate level of initiative as an interaction proceeds**." Pet., 14-15 (emphasis in original). Petitioners provide no other explanation. *KSR*, 550 U.S. at 418 (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2016) (requiring "articulated reasoning with some rational underpinning to support the legal conclusion of obviousness").

This first purported motivation is undercut by the fact that Guinn does not solve this problem. EX-2025, ¶60. Smith & Hipp disclose multiple initiative modes (or levels) and suggests a solution that picks between them whereas Guinn only provides an identification of whether a computer or a user has the initiative. *See supra* Section V.A. As explained with regard to Claims [1B]/[10B] in Section V.A and the table therein, Smith & Hipp discloses four initiative modes: two initiative modes where the computer has control and two initiative modes the user has control. EX-2025, ¶61. Thus, even if the computer was deemed to be in control, the combined system still is unable to determine which of two modes it is operating in, directive or suggestive mode. *Id*. Likewise, even if the user was deemed to be in control, the combined system is still unable to determine which of two modes it is operating in, declarative or passive mode. *Id*. Because Guinn does not address the problem identified in Smith & Hipp, Petitioners' purported motivation to combine fails.

The Petition also states that "a POSITA would understand Guinn's teachings to be directly applicable to the system disclosed in Smith & Hipp." Pet., 15. Petitioners rely on such a brief and conclusory motivation section apparently because they believe that Guinn directly cites the Smith & Hipp paper relied upon in this IPR. *See* Pet., 15. That is, at best, the motivation to combine apparently turns on an explicit identification of the cited Smith & Hipp paper in Guinn. Petitioners' statement is incorrect, exposing its insufficient motivation to combine.

Petitioners wrongly assume that Guinn was referring to the cited Smith & Hipp (EX-1005) paper, which is entitled "An Architecture for Voice Dialog Systems Based on Prolog-Style Theorem Proving" in its discussion at page 15 of the Petition. *See* EX-1005, 281. But the only citation to Smith & Hipp in Guinn is "R.W. Smith and D.R. Hipp. 1995. Spoken Natural Language Dialog Systems: A Practical Approach. Oxford University Press, New York." EX-1005, 285. Further undercutting Petitioners' assertion is the fact that EX-1005 (which is at issue in this proceeding) lists an additional author, Alan W. Biemann, who does not appear to be listed as an author of "R.W. Smith and D.R. Hipp. 1995. Spoken Natural Language Dialog Systems: A Practical Approach. Oxford University Press, New York."

Guinn was referring to a different Smith & Hipp work. EX-2025, ¶¶63-65. Missing an explicit link between the documents, the Petition does not include this different work as an exhibit and does nothing to explain how this different Smith &

Hipp work relates to the explicit disclosure relied upon in EX-1005 (to include establishing that the disclosure is coextensive). In fact, the Petitioner contains very little explanation at all regarding the motivation to combine. Petitioners cannot fix this shortcoming or its insufficient motivation to combine at this stage. For this additional reason, Petitioners' ground fails.

These failures of the Petition are fatal and warrant denial on their own. Compounded with the additional discretionary denial factors, these failures strongly favor denial. Additional details as to the merits will be presented in Patent Owner's Preliminary Response.

VI. CONCLUSION

Patent Owner respectfully submits that the Board should deny institution.

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 preliminary response complies with the type-volume limits of 37 C.F.R. §42.24(b)(l) because it contains 3,676 words, according to the word-processing system used to prepare this preliminary response, excluding the parts of this preliminary response that are exempted by 37 C.F.R. §42.24(b) (including a 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 EXHIBITS 2025-2026** were served in their entirety on August 20, 2025 by filing this document through the PTAB's P-TACTS Filing System as well as delivering a true and correct copy by electronic mail on Petitioner's lead and backup counsel at the following email addresses (as agreed by counsel for Petitioner):

Lori Gordon
gordon-ptab@goodwinlaw.com

Doug Kline
dkline@goodwinlaw.com

Srikanth Reddy
sreddy@goodwinlaw.com

Brian T. Drummond
bdrummond@goodwinlaw.com

Theodoros Konstantakopoulos
tkonstantakopoulos@goodwinlaw.com

Date: August 20, 2025

/Christopher TL Douglas/
Christopher TL Douglas