

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

VOLKSWAGEN GROUP OF AMERICA, INC.

Petitioner

v.

CARUCEL INVESTMENTS, L.P.

Patent Owner

Case No. IPR2019-01102
U.S. Patent No. 7,848,701

PATENT OWNER'S PRELIMINARY RESPONSE

UNDER 35 U.S.C. § 313 AND 37 C.F.R. § 42.107

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	LEVEL OF ORDINARY SKILL	2
III.	OVERVIEW OF THE '701 INVENTION.....	2
IV.	RELATED PROCEEDINGS	2
V.	CLAIM CONSTRUCTION	3
VI.	STANDARD FOR GRANTING <i>INTER PARTES</i> REVIEW	3
VII.	GROUND 2 IS IMPERMISSIBLY REDUNDANT TO GROUND 1	5
VIII.	PETITIONER DOES NOT PROVE A REASONABLE LIKELIHOOD OF UNPATENTABILITY FOR ANY CHALLENGED CLAIM.....	7
A.	Ground 1 of the Petition Fails to Demonstrate a Motivation to Combine <i>Ito</i> and <i>Gardner</i>	9
1.	Ground 1 of the Petition Fails to Meet its Burden to Explain Why a POSITA Would Have Been Motivated to Combine <i>Ito</i> and <i>Gardner</i>	10
a.	Petitioner Improperly Relies on Impermissible Hindsight Bias to Support its Motivation to Combine <i>Ito</i> and <i>Gardner</i>	10
b.	The Mere Fact that References Are Similar Is Insufficient to Show that a POSITA Would Have Been Motivated to Combine <i>Ito</i> and <i>Gardner</i>	12
c.	Petitioner's Additional Arguments for Combining <i>Ito</i> and <i>Gardner</i> Also Fail	13
d.	Petitioner's Expert Declaration Fails to Adequately Explain How Any Specific Rationale Applies to the Proposed Combination of <i>Ito</i> and <i>Gardner</i>	16
2.	Ground 1 of the Petition is Substantively Deficient Because It Does Not Explain in Sufficient Detail How to Combine <i>Ito</i> with <i>Gardner</i>	17
3.	Ground 1 of the Petition Fails to Address Whether the Combination of <i>Ito</i> and <i>Gardner</i> Would Have a Reasonable Expectation of Success.	19
4.	Petitioner's Expert Declaration in Support of its Motivation to Combine <i>Ito</i> and <i>Gardner</i> is Entitled to Little or No Weight	19

B.	Ground 2 of the Petition Fails to Demonstrate a Motivation to Combine <i>Gilhousen865</i> and <i>Gilhousen390</i>	21
1.	Ground 2 of the Petition Fails to Meet its Burden to Explain Why a POSITA Would Have Been Motivated to Combine <i>Gilhousen865</i> and <i>Gilhousen390</i>	22
a.	Petitioner Improperly Relies on an Inventor’s Recitation of a Problem to Be Solved to Support its Motivation to Combine <i>Gilhousen865</i> and <i>Gilhousen390</i>	22
b.	The Mere Fact that References Are Similar Is Insufficient to Show that a POSITA Would Have Been Motivated to Combine <i>Gilhousen865</i> and <i>Gilhousen390</i>	24
c.	Petitioner’s Additional Arguments for Combining <i>Gilhousen865</i> and <i>Gilhousen390</i> Also Fail	25
d.	Petitioner’s Expert Declaration Fails to Adequately Explain How Any Specific Rationale Applies to the Proposed Combination of <i>Gilhousen865</i> and <i>Gilhousen390</i>	28
2.	Ground 2 of the Petition is Substantively Deficient Because It Does Not Explain in Sufficient Detail How to Combine <i>Gilhousen865</i> and <i>Gilhousen390</i>	29
3.	Ground 2 Fails to Address Whether the Combination of <i>Gilhousen865</i> and <i>Gilhousen390</i> Would Have a Reasonable Expectation of Success.....	30
4.	Petitioner’s Expert Declaration in Support of its Motivation to Combine <i>Gilhousen865</i> and <i>Gilhousen390</i> is Entitled to Little or No Weight.....	30
IX.	PATENT OWNER’S FINAL COMMENTS	31
X.	CONCLUSION.....	32

TABLE OF AUTHORITIES

Cases

<i>ActiveVideo Networks, Inc. v. Verizon Commc'ns, Inc.</i> , 694 F.3d 1312 (Fed. Cir. 2012)	8, 11, 17, 29
<i>Apple Inc. v. OpenTV, Inc.</i> , IPR2015-00980, (Sep. 28, 2015) (Paper 11)	7
<i>Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.</i> , 381 F.3d 1371 (Fed. Cir. 2004)	23
<i>Comcast Cable Comm'ns, LLC v. Rovi Guides, Inc.</i> , IPR2019-00297, (PTAB Apr. 22, 2019) (Paper 7).....	5
<i>Commvault Systems, Inc. v. Realtime Data LLC</i> , IPR2017-02007, Paper 11 at 13 (PTAB March 15, 2018)	17
<i>Deeper, UAB v. Vexilar, Inc.</i> , IPR2018-01310, (PTAB Jan. 24, 2019) (Paper 7).....	4
<i>Dell, Inc. v. Realtime Data, LLC</i> , IPR2016-01002, (October 31, 2017) (Paper 71)	8
<i>Hyundai Motor Co. v. American Vehicular Sciences LLC</i> , IPR2014-00658, (Sep. 18, 2014) (Paper 8)	5
<i>Hyundai Motor Company v. Blitzsafe Texas, LLC</i> , IPR2016-01476, (PTAB Jan. 24, 2017) (Paper 12).....	20
<i>In re Broadcom Ltd. v. Invensas Corp.</i> , IPR2017-00424, (PTAB Jul. 3, 2017) (Paper 7)	20
<i>In re Kahn</i> , 441 F.3d 977 (Fed. Cir. 2006)	14, 25
<i>In re Nuvasive, Inc.</i> , 842 F.3d 1376 (Fed. Cir. 2016)	8, 14, 15, 26

<i>In re Zurko</i> , 111 F.3d 887 (Fed. Cir. 1997)	23
<i>Initiative for Medicines, Access & Knowledge v. Gilead Pharmasset LLC</i> , IPR2018-00390, (PTAB Jul 29, 2018) (Paper 7)	20
<i>ipDataTel, LLC v. ICN Acquisition, LLC</i> , IPR2018-01822, (PTAB Apr. 22, 2019) (Paper 19).....	14, 25
<i>KSR Int’l Co. v. Teleflex Inc.</i> , 550 U.S. 398 (2007).....	8
<i>Liberty Mutual Insurance Company v. Progressive Casualty Insurance Company</i> , CBM2012-00003, (Oct. 25, 2012) (Paper 7).....	5, 6
<i>Metalcraft of Mayville, Inc. v. Toro Co.</i> , 848 F.3d 1358 (Fed. Cir. 2017)	8
<i>Microsoft Corp. v. Enfish, LLC</i> , 662 F. App’x 981 (Fed. Cir. 2016)	13
<i>Nintendo Co. Ltd. et al. v. Genuine Enabling Technology LLC</i> , IPR2018-00542, (PTAB Aug. 6, 2018) (Paper 7)	15, 27
<i>Otsuka Pharm. Co. v. Sandoz, Inc.</i> , 678 F.3d 1280 (Fed. Cir. 2012)	23
<i>Personal Web Tech. v. Apple</i> , 848 F.3d 987 (Fed. Cir. 2017)	7
<i>Regents of University of California v. Board Institute, Inc.</i> , 903 F.3d 1286 (Fed. Cir. 2018)	19, 30
<i>SAS Inst. v. Iancu</i> , 138 S. Ct. 1348 (2018).....	4
<i>Unified Patents v. Realtime</i> , IPR2017-02129, (PTAB March 27, 2018) (Paper 11).....	17, 18

<i>Wellman, Inc. v. Eastman Chem. Co.</i> , 642 F.3d 1355 (Fed. Cir. 2011)	3
---	---

<i>Westway Feed Products, LLC v. Pellet Technology USA, LLC</i> , IPR2015-01621 (PTAB Jan. 22, 2016) (Paper 8).....	16
--	----

Statutes

35 U.S.C. § 314(a)	4
--------------------------	---

35 U.S.C. § 316(b)	4
--------------------------	---

Rules

37 C.F.R. § 42.1(b)	4, 5
---------------------------	------

37 C.F.R. § 42.108(c).....	4
----------------------------	---

Other Authorities

Office Patent Trial Practice Guide, 77 Fed. Reg. 48756 (Aug. 14, 2012)	4
--	---

I. INTRODUCTION

Carucel Investments, L.P. (“Patent Owner”) submits this Preliminary Response to the Petition for *Inter Partes* Review (“Petition,” Paper 2) filed by Volkswagen Group of America, Inc. (“Petitioner”) against claims 10, 15-18, 31, 33-35 (the “Challenged Claims”) of U.S. Patent No. 7,848,701 (the “’701 Patent”) (Ex. 1001).

On May 20, 2019, Petitioner submitted a Petition to institute *inter partes* review (“IPR”), challenging claims 10, 15-18, 31, 33-35. On May 29, 2019, the Patent Trial and Appeal Board (the “Board”) mailed its Notice of Accord Filing Date (Paper 3)—granting the Petition a filing date. As an initial matter, the Board should exercise its discretion to deny the Petition because Ground 2 is impermissibly redundant to the claims challenged in Ground 1 and the Petition fails to differentiate its redundant challenges in terms of the relative strengths and weaknesses. (*See* Section VII).

Finally, Patent Owner respectfully requests that the Board decline to institute *inter partes* review of the ’701 Patent because the Petition fails to make a *prima facie* showing of obviousness at several levels, resting instead on conclusory and insufficient allegations of the very sort the Board and the Federal Circuit have repeatedly rejected.

Thus as demonstrated in this Preliminary Response, institution as to all claims and all grounds should be denied.

II. LEVEL OF ORDINARY SKILL

For purposes of this Preliminary Response only, Patent Owner does not dispute Petitioner's definition of a person of ordinary skill in the art ("POSITA"), but reserves the right to do so in the event that trial is instituted.

III. OVERVIEW OF THE '701 INVENTION

The '701 Patent is generally directed to a moving base station which is interposed between a moving mobile telephone unit and a fixed base station. The claimed invention is directed toward a wireless communication device, such as a wireless router, that is configured to move relative to Earth. The wireless communication device includes a plurality of spatially separated antennas; a receiver configured to receive fixed port signals through the plurality of spatially separated antennas; and a transmitter configured to transmit radio frequency signals to a mobile device corresponding to the received fixed port signals. .

IV. RELATED PROCEEDINGS

The following proceedings are currently pending cases concerning U.S. Patent No. 7,848,701 (Ex. 1001):

Case Caption	Case No.	District	Case Filed	Status
<i>Carucel Investments, L.P., v. FCA US LLC</i>	3:18-cv-3331	NDTX	12/18/18	Pending
<i>Carucel Investments, L.P., v. General Motors Company</i>	3:18-cv-3332	NDTX	12/18/18	Pending
<i>Carucel Investments, L.P., v. Volkswagen Group of America, Inc. d/b/a Audi of America, Inc.</i>	3:18-cv-3333	NDTX	12/18/18	Pending
<i>Carucel Investments, L.P., v. Mercedes-Benz USA, LLC, et al.</i>	3:18-cv-3334	NDTX	12/18/18	Pending
<i>Petition for Inter Partes Review by Volkswagen Group of America</i>	IPR2019-01102	PTAB	5/20/19	Pending
<i>Petition for Inter Partes Review by Mercedes-Benz USA, LLC, et al.</i>	IPR2019-01442	PTAB	7/31/19	Pending

V. CLAIM CONSTRUCTION

Patent Owner submits that the Board need not construe any claim term in a particular manner in order to arrive at the conclusion that the Petition is procedurally and substantively deficient. *See Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355, 1361 (Fed. Cir. 2011) (“need only be construed to the extent necessary to resolve the controversy”).

VI. STANDARD FOR GRANTING *INTER PARTES* REVIEW

A petition for IPR may only be granted when “the information presented in the petition...shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C.

§ 314(a); *see also* 37 C.F.R. § 42.108(c). The burden of proof lies with the petitioner to show that the statutory threshold is satisfied. (*See* Office Patent Trial Practice Guide, 77 Fed. Reg. 48756 (Aug. 14, 2012)).

IPR institution is discretionary. *See SAS Inst. v. Iancu*, 138 S. Ct. 1348, 1356 (2018) (“[Section] 314(a) invests the Director with discretion on the question whether to institute review ...”) (emphasis omitted). “In exercising that discretion, [the Board is] guided by the statutory requirement, in promulgating regulations for *inter partes* review, to consider the effect of any regulations on ‘the efficient administration of the Office [and] the ability of the Office to timely complete proceedings,’ 35 U.S.C. § 316(b), as well as the requirement to construe the PTAB’s rules to ‘secure the just, speedy, and inexpensive resolution of every proceeding,’ 37 C.F.R. § 42.1(b).” *Deeper, UAB v. Vexilar, Inc.*, IPR2018-01310, slip op. at 43 (PTAB Jan. 24, 2019) (Paper 7) (informative) (“On this record, and based on the particular facts of this proceeding, instituting a trial with respect to all twenty-three claims and on all four grounds based on evidence and arguments directed to only two claims and one ground would not be an efficient use of the Board’s time and resources.”).

For example, “the Board may consider the number of claims and grounds that meet the reasonable likelihood standard when deciding whether to institute *inter partes* review under 35 U.S.C. § 314(a).” *Id.* at 42. The Board may also consider the

number of sequential and concurrent petitions that Petitioner and others have filed against the Challenged Claims and related patents, because this practice of filing multiple petitions against a single patent “presents a significant burden for the Board, because, among other things, the Board endeavors to assign all such cases to the same panel ... this [practice] can undermine the Office’s ability to complete proceedings in a timely manner and may place an unfair burden on the Patent Owner.” *Comcast Cable Comm’ns, LLC v. Rovi Guides, Inc.*, IPR2019-00297, slip op. at 3 (PTAB Apr. 22, 2019) (Paper 7).

VII. GROUND 2 IS IMPERMISSIBLY REDUNDANT TO GROUND 1

The Board has the authority to deny a Petition that presents undifferentiated and redundant grounds under its discretionary power to “secure the [j]ust, speedy and inexpensive resolution of every proceeding.” 37 C.F.R. § 42.1(b). Where a Petitioner presents multiple redundant grounds and makes no meaningful distinction between them, the Board has consistently declined to institute on any of those grounds. *See, e.g., Hyundai Motor Co. v. American Vehicular Sciences LLC*, IPR2014-00658, Paper 8 at 23 (Sep. 18, 2014); *Liberty Mutual Insurance Company v. Progressive Casualty Insurance Company*, CBM2012-00003, Paper 7 at 2 (Oct. 25, 2012).

The Board has stated that horizontal redundancy exists where multiple prior art references are asserted “not in combination to complement each other but as

distinct and separate alternatives.” *See Liberty Mut. Ins. Co. v. Progressive Cas. Ins. Co.*, No. CBM2012-00003, Paper 7 at 2 (PTAB. Nov. 26, 2012). Such redundancy is usually found where the references “provide essentially the same teaching to meet the same claim limitation.” *Id.* Here, Ground 2 is horizontally redundant of Ground 1 because Ground 2 presents multiple prior art references as distinct and separate alternatives for challenging the identical claims in Ground 1. Specifically, the Petition raises the following obviousness challenges for Grounds 1 and 2:

Ground	Basis	Claims Challenged	References
1	35 U.S.C. § 103	10, 15-18, 31, 33-35	<i>Ito & Gardner</i>
2	35 U.S.C. § 103	10, 15-18, 31, 33-35	<i>Gilhousen865 & Gilhousen390</i>

Yet, Petitioner fails to explain the differences between the combination of *Ito* and *Gardner* for Ground 1 and the combination of *Gilhousen865* and *Gilhousen390* for Ground 2, or why the combination of *Ito* and *Gardner* for Ground 1 is better suited for disclosure or teaching of any particular limitation than the combination of *Gilhousen865* and *Gilhousen390* for Ground 2, so as to justify the redundancy in raising multiple redundant challenges.

In determining whether a Petition has presented undifferentiated and redundant grounds, the Board considers “whether Petitioner articulated meaningful distinctions between its patentability arguments by, for example, explaining the

relative strengths and weaknesses of various prior art combinations with respect to one or more claim limitations.” *Apple Inc. v. OpenTV, Inc.*, IPR2015-00980, Paper 11 at 25-26 (Sep. 28, 2015). Here, Petitioner makes no attempt to differentiate its redundant challenges in terms of the relative strengths and weaknesses of Ground 2 with respect to Ground 1, presumably to avoid having to concede any weakness in the Petition. Petitioner’s failure to identify the strengths and weaknesses of its respective petitions gives the Board no guidance on how to proceed. Such circumstances invoke the Board’s discretion to deny the Petition as procedurally deficient.

Further, even if the Board were to consider the substantive merits of Ground 2, notwithstanding these procedural defects, Ground 2 should nevertheless be denied as failing to present a *prima facie* case of obviousness for the reasons discussed below in Section VIII.B.1 – Section VIII.B.4 (discussing the substantive merits of Ground 2).

VIII. PETITIONER DOES NOT PROVE A REASONABLE LIKELIHOOD OF UNPATENTABILITY FOR ANY CHALLENGED CLAIM

To support an allegation of obviousness, it is not sufficient for a petition to merely show that all of the elements of the claims at issue are found in separate prior art references. *Personal Web Tech. v. Apple*, 848 F.3d 987, 991 (Fed. Cir. 2017) (holding that such evidence “would not be enough”). *See also KSR Int’l Co. v.*

Teleflex Inc., 550 U.S. 398, 418-19 (2007) (“a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.”). “Often, every element of a claimed invention can be found in the prior art.” *Metalcraft of Mayville, Inc. v. Toro Co.*, 848 F.3d 1358, 1367 (Fed. Cir. 2017). For this reason, it is necessary to identify “the reason why a PHOSITA would have been motivated to” perform the combination. *In re Nuvasive, Inc.*, 842 F.3d 1376 at 1384 (Fed. Cir. 2016).

In addition, the Petition must also (1) “explain how specific references could be combined,” (2) “which combination(s) of elements in specific references would yield a predictable result,” and (3) “how any specific combination would operate or read on” the claims. *ActiveVideo Networks, Inc. v. Verizon Commc’ns, Inc.*, 694 F.3d 1312, 1327-28 (Fed. Cir. 2012). *See also Dell, Inc. v. Realtime Data, LLC*, IPR2016-01002, Paper 71 at 15 (October 31, 2017) (upholding validity of all claims because petitioner’s combination theory failed to articulate “how specific references could be combined, which combination(s) of elements in specific references would yield a predictable result, or how any specific combination would operate or read on the asserted claims,” citing *ActiveVideo*).

As set forth in more detail herein, the Petition fails to make a *prima facie* showing of obviousness at several levels, resting instead on conclusory and insufficient allegations of the very sort the Board and the Federal Circuit have

repeatedly rejected. Specifically, the Petition fails to explain in sufficient detail (1) why a POSITA would have been motivated to combine the prior art references; (2) how to combine the prior art references; and most egregiously, (3) the Petition fails to even address whether Petitioner's proposed combinations would have a reasonable expectation of success. Each of these deficiencies is a sufficient basis, independently, to deny institution of each Ground and the Petition as a whole.

Accordingly, the Board should decline to institute Grounds 1 - 2 of the Petition because the Petitioner has as failed to establish a *prima facie* case of obviousness.

A. Ground 1 of the Petition Fails to Demonstrate a Motivation to Combine *Ito* and *Gardner*

Ground 1 of the Petition purports to combine *Ito* and *Gardner* for challenging Claims 10, 15-18, 31, 33 – 35 of the '701 Patent. (See Petition at 6). However, as set forth in more detail below, the Petition fails to explain in sufficient detail for Ground 1: (1) why a POSITA would have been motivated to combine *Ito* and *Gardner*; (2) how to combine *Ito* and *Gardner*; and most egregiously, (3) the Petition fails to even address whether Petitioner's proposed combination of *Ito* and *Gardner* would have a reasonable expectation of success.

Accordingly, the Board should decline to institute Ground 1 of the Petition because the Petitioner has as failed to establish a *prima facie* case of obviousness.

- 1. Ground 1 of the Petition Fails to Meet its Burden to Explain Why a POSITA Would Have Been Motivated to Combine *Ito* and *Gardner***
 - a. Petitioner Improperly Relies on Impermissible Hindsight Bias to Support its Motivation to Combine *Ito* and *Gardner***

First, the Petitioner alleges that a POSITA would have been motivated to combine *Ito* and *Gardner* because *Gardner* discloses “useful techniques for improving receiver performance”. (Petition at 27). However, Petitioner’s analysis is fraught with impermissible hindsight bias because it proposes a solution to a problem that never existed in *Ito*. In particular, the crux of Petitioner’s rationale revolves around *Gardner*’s alleged improvement in receiver performance by using spatially separated antennas. (See Petition at 26-27). Yet, *Ito* expresses no concern or even a need to improve its invention, let alone its receiver performance. Rather, *Ito* is concerned with providing a mobile radio communication system that eliminates the necessity of wiring the mobile base device and portable device. (See Ex. 1005 at Col. 2, lns. 5-12).

Notably, Petitioner cites no evidence in the art that suggests a POSITA would see *Ito*’s lack of the alleged improvement in receiver performance as problematic. Instead, Petitioner cites to its own Expert Declaration (see Petition at 27 (citing Ex. 1003 ¶ 106)), but the Petitioner’s Expert Declaration fails to cure the deficiencies of

the Petition. Similar to the Petition, the Expert Declaration focuses on the purported improvement receiver performance of *Gardner* and does not explain why *Ito*'s lack of the alleged improvement in receiver performance would seem problematic to a POSITA. Accordingly, Petitioner's purported reasoning is fraught with impermissible hindsight bias, and, is thus, insufficient to support Petitioner's assertion that a POSITA would have been motivated to combine *Ito* and *Gardner*.

To further support Petitioner's contention of combining *Ito* and *Gardner*, the Petitioner's Expert Declaration attempts to rely on the modular nature of the components to support the contention that a POSITA would have been motivated to modify *Ito* with *Gardner*'s teachings. See Petition at 27 (citing Ex. 1003 ¶ 108)). Specifically, the Expert Declaration contends that "a POSITA would have recognized *Gardner*'s spatially diverse receiver to be modular." (Petition at 27 (citing Ex. 1003 ¶ 108) (emphasis added)).

The Federal Circuit, in *ActiveVideo Networks, Inc. v. Verizon Commc'ns, Inc.*, previously rejected similar conclusory testimony, where:

"[T]he expert's testimony on obviousness was essentially a conclusory statement that a person of ordinary skill in the art would have known, based on the "modular" nature of the claimed components, how to combine any of a number of references to achieve the claimed inventions. This is not sufficient and is fraught with hindsight bias." *ActiveVideo*, 694 F.3d 1312, 1327-28 (Fed. Cir. 2012).

Accordingly, Petitioner's Expert Declaration is insufficient to support Petitioner's assertion that a POSITA would have been motivated to combine *Ito* and *Gardner*.

b. The Mere Fact that References Are Similar Is Insufficient to Show that a POSITA Would Have Been Motivated to Combine *Ito* and *Gardner*

Presumably recognizing the weak of its argument for combining *Ito* and *Gardner*, Petitioner articulates an additional rationale for combination. This time, the Petitioner alleges that a POSITA would have been motivated to combine *Ito* and *Gardner* simply because “both are in the same general field of mobile communications”. (Petition at 28). This reasoning, however, is based exclusively on locating claim elements in the prior art and developing an *ex-post* rationale to combine those elements to arrive at the claimed invention. Notably, the Petitioner cites no authority—and Patent Owner can find none—supporting a finding of a motivation to combine simply because two prior art references are merely in the same field of invention.

More importantly, the Federal Circuit has previously concluded that merely asserting the fact that two references “were drawn from the same general field of art the skilled artisan would have turned to them to solve the problems identified in the [challenged] Patent” is “simply too conclusory to satisfy [a Petitioner's] burden of proving by a preponderance of the evidence that the skilled artisan would have

combined these references in the way of the claimed invention.” *Securus Techs., Inc. v. Glob. Tel*Link Corp.*, 701 F. App’x 971, 976 (Fed. Cir. 2017); *see Microsoft Corp. v. Enfish, LLC*, 662 F. App’x 981, 990 (Fed. Cir. 2016) (“[The] Board correctly concluded that [petitioner] did not articulate a sufficient motivation to combine. With respect to [certain challenged claims], [petitioner] gave no reason for the motivation of a person of ordinary skill to combine [the two references] except that the references were directed to the same art or same techniques. . . .”). Accordingly, Petitioner’s mere allegation that the references are similar, even if proved correct, is insufficient to satisfy Petitioner’s burden of proving that the skilled artisan would have combined *Ito* and *Gardner*.

c. Petitioner’s Additional Arguments for Combining *Ito* and *Gardner* Also Fail

Next, Petitioner contends that “a POSITA could have combined the system of *Ito* with the teachings of *Gardner* by known methods, and the results of the combination would have been predictable to a POSITA (e.g., by replacing *Ito*’s antenna with *Gardner*’s spatially separated antennas). (Petition at 28). However, Petitioner’s vague assertion and mere recitation of buzzwords such as “predictable results” from *KSR*, without providing any substantive analysis or articulated reasoning, does not satisfy the requisite legal standard. To the contrary, Petitioner’s reasons to combine must be more than “mere conclusory statements; instead, there

must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006). *See also ipDataTel, LLC v. ICN Acquisition, LLC*, IPR2018-01822, slip op. at 20-21 (PTAB Apr. 22, 2019) (Paper 19) (denying institution) (“Conclusory statements alone, even those provided by a declarant, are inadequate to demonstrate a rationale for why a [POSITA] would combine the teachings from prior art references. Instead, Petitioner’s arguments must be supported by a reasoned explanation.”).

The Federal Circuit, in *In re Nuvasive*, previously concluded that where a petition merely states that a POSITA would have been motivated to combine the prior art references but fails to articulate a “reason why,” the petition’s “arguments amount to nothing more than conclusory statements” that cannot support a finding of obviousness. *See In re Nuvasive*, 842 F.3d 1376, 1384 (Fed. Cir. 2016). Accordingly, Petitioner’s additional contention amounts to nothing more than a mere conclusory statement since Petitioner failed to provide any substantive analysis or articulated reasoning in support.

Petitioner further contends that a POSITA would have been motivated to combine *Ito* and *Gardner* because “the proposed combination of *Ito* and *Gardner* would involve nothing more than incorporating a well-known concept (i.e., *Gardner*’s signal diversity) into a well-known system (i.e., *Ito*’s radio

communication system). (See Petition at 28). But that statement is also conclusory since it is not supported by any rational underpinning. See *In re Nuvasive*, 842 F.3d 1376, 1384 (Fed. Cir. 2016) (where a petition merely states that a POSITA would have been motivated to combine the prior art references but fails to articulate a “reason why,” the petition’s “arguments amount to nothing more than conclusory statements” that cannot support a finding of obviousness).

Instead, the Petition attempts to rely on the mere fact that *Ito* and *Gardner* **could be** combined—not the required showing of a **reason to combine**. (See Petition at 26-28). The mere fact that two references could be combined is not enough to demonstrate a rationale for combining the references. See *Nintendo Co. Ltd. et al. v. Genuine Enabling Technology LLC*, IPR2018-00542, Paper 7 at 25 (PTAB Aug. 6, 2018) (denying institution where the Petitioner’s “reasoning appears to be that a skilled artisan, once presented with the two references, would have understood that they could be combined, which is not enough to demonstrate a rationale for combining the references.”). Accordingly, Petitioner’s additional arguments are insufficient to satisfy Petitioner’s burden of proving that the skilled artisan would have combined *Ito* and *Gardner*.

d. Petitioner’s Expert Declaration Fails to Adequately Explain How Any Specific Rationale Applies to the Proposed Combination of *Ito* and *Gardner*

Petitioner’s only support for its conclusory proposition—that a POSITA would have been motivated to combine *Ito* and *Gardner*—are citations to Paragraphs 106, 108 – 110 of Petitioner’s Expert Declaration. (See Petition at 26-31 (citing Ex. 1003 ¶¶ 106, 108 – 110)). However, Paragraphs 106, 108 – 110 of Petitioner’s Expert Declaration also fail to adequately explain how any specific rationale applies to the combination of *Ito* and *Gardner*, and do not support any proffered rationales with citations to facts or evidence. For example, Paragraph 108 sets forth the generic assertion of improved receiver performance to support its motivation to combine. (See Ex. 1003 ¶ 108). In this context, to say combining the references would provide the invention of *Ito* with “improved receiver performance” is not much different than saying it would make the invention of *Ito* “better”. Such generic statements provide no explanation why a POSITA would pursue any specific combination, which is what Petitioner must show. This is the type of “generic rationale[] why a [POSITA] would have combined the references” that the Board has held should result in a denial of institution. See *Westway Feed Products, LLC v. Pellet Technology USA, LLC*, IPR2015-01621, slip op. at 29 (PTAB Jan. 22, 2016) (Paper 8) (denying institution because, [a]lthough [the expert] provides multiple generic rationales why a [POSITA] would have combined the references, [the expert] does not explain

adequately how any specific rationale applies to the combinations [at issue here], and does not support the proffered rationales with citations to facts or evidence.”) Accordingly, Petitioner’s Expert Declaration is insufficient to satisfy Petitioner’s burden of proving that the skilled artisan would have combined *Ito* and *Gardner*.

2. Ground 1 of the Petition is Substantively Deficient Because It Does Not Explain in Sufficient Detail How to Combine *Ito* with *Gardner*

The Petition also fails to explain in sufficient detail how to combine *Ito* with *Gardner*, despite the requirements of Federal Circuit precedent. *See ActiveVideo Networks, Inc. v. Verizon Commc’ns, Inc.*, 694 F.3d 1312, 1327-28 (Fed. Cir. 2012) (requiring a Petitioner “to explain how specific references could be combined”).

Adhering to Federal Circuit precedent, in *Commvault Systems, Inc. v. Realtime Data LLC*, the Board refused to institute because it found that the petition “fail[ed] to demonstrate how a person of ordinary skill in the art could combine the prior art.” *Commvault Systems, Inc. v. Realtime Data LLC*, IPR2017-02007, Paper 11 at 13 (PTAB March 15, 2018). Likewise, the Board refused to institute in *Unified Patents v. Realtime* because the petitioner had failed to explain how the POSITA could have combined specific prior art elements to achieve the claimed invention. *See Unified Patents v. Realtime*, IPR2017-02129, Paper 11 at 12 (PTAB March 27, 2018) (“Petitioner does not explain how a person of ordinary skill would have made the combination.”).

Here, as in *Unified Patents v. Realtime*, the Petition does not explain how a person of ordinary skill would have made Petitioner's proposed combination of *Ito* and *Gardner*. Instead, the Petition merely contains conclusory assurances that a person of ordinary skill could combine *Ito* and *Gardner*, but the Petition never actually articulates how the POSITA could do so. For example, the Petitioner asserts that "[f]inally, in order to achieve all the benefits of *Gardner*'s receiver, the receive-side circuitry (e.g., elements 61-65) [of *Ito*] **would be modified to match** the receiver circuitry illustrated in *Gardner*." (Petition at 27-28). Yet, the Petition never actually articulates how the POSITA could do so, and provides no evidence to show that the POSITA could do so. The Petition also does not point to evidence of, or even describe, what the combined system's performance would be other than Petitioner's general assertion that the modification of *Ito* is necessary to "achieve all the benefits of *Gardner*'s receiver." (*Id.*).

This is exactly the type of rationale that the Board has held is insufficient to satisfy its burden of demonstrating a reasonable likelihood that it would prevail in showing unpatentability on the grounds it asserts. *See Unified Patents v. Realtime*, IPR2017-02129, Paper 11 at 12 (PTAB March 27, 2018). Notably, the Petition fails to even cite its own Expert Declaration to support this proposition. Accordingly, Ground 1 of the Petition is substantively deficient because it does not explain in sufficient detail how to combine *Ito* and *Gardner*.

3. Ground 1 of the Petition Fails to Address Whether the Combination of *Ito* and *Gardner* Would Have a Reasonable Expectation of Success.

Critically, Ground 1 of the Petition fails to specifically address whether the combination of *Ito* and *Gardner* would have a reasonable expectation of success despite the requirements of Federal Circuit precedent. As previously discussed, “[a]n obviousness determination requires finding that a person of ordinary skill in the art would have been motivated to combine or modify the teachings in the prior art and would have had a reasonable expectation of success in doing so.” *Regents of University of California v. Board Institute, Inc.*, 903 F.3d 1286, 1291 (Fed. Cir. 2018) (emphasis added). Despite this requirement of Federal Circuit precedent, the Petition is simply devoid of any evidence or argument that addresses whether the combination of *Ito* and *Gardner* would have a reasonable expectation of success. (See Petition at 26-28). Accordingly, Ground 1 of the Petition is also substantively deficient because each Ground does not explain, let alone address, that a POSITA would have a reasonable expectation of success in modifying *Ito* as Petitioner proposes with *Gardner*.

4. Petitioner’s Expert Declaration in Support of its Motivation to Combine *Ito* and *Gardner* is Entitled to Little or No Weight

Petitioner’s only support for its conclusory propositions—that a POSITA would have been motivated to combine *Ito* and *Gardner*—are citations to Paragraphs

106, 108 – 110 of Petitioner’s Expert Declaration. (*See* Petition at 26-28 (citing Ex. 1003 ¶¶ 106, 108 – 110)). Yet, Paragraphs 106, 108 – 110 of Petitioner’s Expert Declaration are near-verbatim copies of the conclusory statements set forth in the Petition. (*Compare* Petition at 26-28 *with* Ex. 1003, ¶¶ 106, 108 – 110).

Notably, the Board has routinely denied institution and afforded an expert’s opinion “little or no weight”, in similar instances, where the expert’s testimony “merely repeat[ed] verbatim the conclusory statements set forth in the Petition, without providing any factual analysis or citing any supporting objective proof.” *Initiative for Medicines, Access & Knowledge v. Gilead Pharmasset LLC*, IPR2018-00390, slip op. at 14-15 (PTAB Jul 29, 2018) (Paper 7). *See also In re Broadcom Ltd. v. Invensas Corp.*, IPR2017-00424, slip op. at 13 (PTAB Jul. 3, 2017) (Paper 7) (denying institution where the expert’s “declaration repeats almost verbatim Petitioner’s argument . . . As such, [the expert’s] testimony adds no probative value to Petitioner’s argument”); *Hyundai Motor Company v. Blitzsafe Texas, LLC*, IPR2016-01476, slip op. at 21-22 (PTAB Jan. 24, 2017) (Paper 12). Thus, the testimony proffered in the Petition and the supporting Expert Declaration—supporting Petitioner’s alleged motivation to combine *Ito* and *Gardner*—suffers from the same deficiencies in *Initiative for Medicines*; *In re Broadcom Ltd.*; and *Hyundai Motor Company* and, thus, the Petitioner’s Expert Declaration should be afforded little or no weight.

For the reasons stated above, the Board should decline to institute Ground 1 of the Petition because the Petitioner has failed to establish a *prima facie* case of obviousness.

B. Ground 2 of the Petition Fails to Demonstrate a Motivation to Combine *Gilhousen865* and *Gilhousen390*

Notwithstanding the fact that Ground 2 is impermissibly redundant to Ground 1 as previously discussed above (*see* Section VII), Ground 2 of the Petition purports to combine *Gilhousen865* and *Gilhousen390* for challenging Claims 10, 15-18, 31, 33-35 of the '701 Patent. (*See* Petition at 6).

However, as set forth in more detail below, the Petition fails to explain in sufficient detail for Ground 2: (1) why a POSITA would have been motivated to combine *Gilhousen865* and *Gilhousen390*; (2) how to combine *Gilhousen865* and *Gilhousen390*; and most egregiously, (3) the Petition fails to even address whether Petitioner's proposed combination of *Gilhousen865* and *Gilhousen390* would have a reasonable expectation of success.

Accordingly, the Board should decline to institute Ground 2 of the Petition because the Petitioner has as failed to establish a *prima facie* case of obviousness.

1. Ground 2 of the Petition Fails to Meet its Burden to Explain Why a POSITA Would Have Been Motivated to Combine *Gilhausen865* and *Gilhausen390*

Ground 2 of the Petition assert it would have been obvious to combine *Gilhausen390*'s teachings with *Gilhausen865* (see Petition at 51 - 55); however, the Petition fails to set forth any legally permissible or reasoned explanation, as to why a POSITA would have been motivated to combine *Gilhausen865* and *Gilhausen390*. As discussed herein, Petitioner's purported reasons to combine amount to mere "conclusory statements" that ultimately lack a "reasoned explanation" required for a proper showing of a motivation to combine references.

a. Petitioner Improperly Relies on an Inventor's Recitation of a Problem to Be Solved to Support its Motivation to Combine *Gilhausen865* and *Gilhausen390*

First, the Petitioner alleges that a POSITA would have been motivated to combine *Gilhausen865* and *Gilhausen390* because *Gilhausen390* discloses various configurations "to counter the negative effects of [signal] fading." (Petition at 53). However, Petitioner's contention improperly relies on *Gilhausen390*'s recitation of the problem to be solved for its motivation to combine *Gilhausen865* and *Gilhausen390*. Specifically, Petitioner uses *Gilhausen390*'s recitation of the problem to be solved—namely to "reduc[e] the negative effects on signals during wireless transmission" (i.e., to address signal fading) (see Petition at 53)—as

evidence of the solution's obviousness. Thus, Petitioner contends that "a POSITA would have been motivated to modify *Gilhousen865*'s system with any one or more of the signal diversity configurations of *Gilhousen390*" (Petition at 54-55). Petitioner's argument is not only misplaced but it is also contrary to Federal Circuit precedent.

An inventor's recitation of a problem to be solved is not an admission that this problem was known and, therefore, the recitation of the problem cannot serve as the motivation to combine *Gilhousen865* and *Gilhousen390*. Notably, the cited portion of *Gilhousen390*'s specification does not cite someone else's recognition of a problem to be solved—it merely reveals a rationale or motivation of the inventors pursuing their invention.

It is black letter law that "[t]he inventor's own path itself never leads to a conclusion of obviousness; that is hindsight. What matters is the path that the person of ordinary skill in the art would have followed, as evidenced by the pertinent prior art." *Otsuka Pharm. Co. v. Sandoz, Inc.*, 678 F.3d 1280, 1296 (Fed. Cir. 2012). *See also Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 381 F.3d 1371, 1377 (Fed. Cir. 2004) ("[r]ecognition of the problem . . . does not render obvious the eventual solution."); *In re Zurko*, 111 F.3d 887, 889-90 (Fed. Cir. 1997) ("to say that the missing step comes from the nature of the problem to be solved begs the question

because the Board has failed to show that this problem had been previously identified anywhere in the prior art.”).

Accordingly, Petitioner’s reliance on *Gilhousen390*’s recitation of the problem to be solved as evidence of the solution’s obviousness is not only misplaced but it is also contrary to Federal Circuit precedent; and, thus, is insufficient to satisfy Petitioner’s burden of proving that the skilled artisan would have combined *Gilhousen865* and *Gilhousen390*.

b. The Mere Fact that References Are Similar Is Insufficient to Show that a POSITA Would Have Been Motivated to Combine *Gilhousen865* and *Gilhousen390*

Next, Petitioner erroneously contends that a POSITA would have been motivated to combine *Gilhousen865* and *Gilhousen390* because “all are in the same general field of cellular communications.” (Petition at 54-55). Once again, this reasoning is based exclusively on locating claim elements in the prior art and developing an *ex-post* rationale to combine those elements to arrive at the claimed invention.

As previously discussed above, this is exactly the type of conclusory assertion that the Federal Circuit has held is insufficient to “satisfy [a Petitioner’s] burden of proving by a preponderance of the evidence that the skilled artisan would have combined these references in the way of the claimed invention.” *Securus Techs., Inc.*

*v. Glob. Tel*Link Corp.*, 701 F. App'x 971, 976 (Fed. Cir. 2017). Accordingly, Petitioner's mere allegation that the references are similar, even if proved correct, is insufficient to satisfy Petitioner's burden of proving that the skilled artisan would have combined *Gilhousen865* and *Gilhousen390*.

c. Petitioner's Additional Arguments for Combining *Gilhousen865* and *Gilhousen390* Also Fail

Next, Petitioner contends that “a POSITA could have combined the system of *Gilhousen865* with the teachings of *Gilhousen390* by known methods, and the results of the combination would have been predictable to a POSITA (e.g., by replacing *Gilhousen865*'s antenna with spatially separated antennas).” (Petition at 55). As previously discussed, Petitioner's vague assertion and mere recitation of buzzwords such as “predictable results” from *KSR*, without providing any substantive analysis or articulated reasoning, does not satisfy the requisite legal standard. To the contrary, Petitioner's reasons to combine must be more than “mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006). *See also ipDataTel, LLC v. ICN Acquisition, LLC*, IPR2018-01822, slip op. at 20-21 (PTAB Apr. 22, 2019) (Paper 19) (denying institution) (“Conclusory statements alone, even those provided by a declarant, are inadequate to demonstrate a rationale for why a [POSITA] would combine the

teachings from prior art references. Instead, Petitioner’s arguments must be supported by a reasoned explanation.”).

As previously discussed, the Federal Circuit, in *In re Nuvasive*, rejected similar conclusory testimony where the petition merely stated that a POSITA would have been motivated to combine the prior art references but failed to articulate a “reason why,” concluding that the petition’s “arguments amount[ed] to nothing more than conclusory statements” that cannot support a finding of obviousness. *See In re Nuvasive*, 842 F.3d 1376, 1384 (Fed. Cir. 2016). Accordingly, Petitioner’s additional contention amounts to nothing more than a mere conclusory statement since Petitioner failed to provide any substantive analysis or articulated reasoning in support.

Moreover, the Petition attempts to rely on the mere fact that *Gilhousen865* and *Gilhousen390* **could be** combined—not the required showing of a **reason to combine**. (See Petition at 36 – 37 and 40-41). Specifically, the Petitioner asserts that “[a]s shown in *Gilhousen390*’s Fig. 3, *Gilhousen865*’s repeater **could be** modified with multiple data receivers that are individually configurable to extract different signals received from different base stations and/or with multiple antennas for space diversity. . . .” (Petition at 54). As previously discussed, the mere fact that two references could be combined is not enough to demonstrate a rationale for combining

the references. *See Nintendo Co. Ltd. et al. v. Genuine Enabling Technology LLC*, IPR2018-00542, Paper 7 at 25 (PTAB Aug. 6, 2018) (denying institution where the Petitioner’s “reasoning appears to be that a skilled artisan, once presented with the two references, would have understood that they could be combined, which is not enough to demonstrate a rationale for combining the references.”).

Finally, Petitioner contends that “the proposed combination of *Gilhousen865* and *Gilhousen390* would involve nothing more than incorporating well-known concepts (i.e., *Gilhousen390*’s diversity techniques) into a well-known system (i.e., *Gilhousen865* radio communication system).” (Petition at 55). But this statement is also conclusory since it is not supported by any rational underpinning. *See In re Nuvasive*, 842 F.3d 1376, 1384 (Fed. Cir. 2016) (where a petition merely states that a POSITA would have been motivated to combine the prior art references but fails to articulate a “reason why,” the petition’s “arguments amount to nothing more than conclusory statements” that cannot support a finding of obviousness). Accordingly, Petitioner’s additional arguments are insufficient to satisfy Petitioner’s burden of proving that the skilled artisan would have combined *Gilhousen865* and *Gilhousen390*.

d. Petitioner’s Expert Declaration Fails to Adequately Explain How Any Specific Rationale Applies to the Proposed Combination of *Gilhousen865* and *Gilhousen390*

Petitioner’s only support for its conclusory proposition—that a POSITA would have been motivated to combine *Gilhousen865* and *Gilhousen390*—are citations to Paragraphs 158, 161 – 162 of Petitioner’s Expert Declaration. (See Petition at 51-55 (citing Ex. 1003 ¶¶ 158, 161 – 162)). However, Paragraphs 158, 161 – 162 fail to adequately explain how any specific rationale applies to the combination of *Gilhousen865* and *Gilhousen390*, and do not support any proffered rationales with citations to facts or evidence. Instead, Paragraphs 158, 161 – 162 of the Expert Declaration are nothing more than a near-verbatim copy of the conclusory statements set forth in the Petition. As previously discussed above, this is the type of “generic rationale[] why a [POSITA] would have combined the references” that the Board has held should result in a denial of institution. See *Westway Feed Products, LLC v. Pellet Technology USA, LLC*, IPR2015-01621, slip op. at 29 (PTAB Jan. 22, 2016) (Paper 8). Accordingly, Petitioner’s Expert Declaration is insufficient to satisfy Petitioner’s burden of proving that the skilled artisan would have combined *Gilhousen865* and *Gilhousen390*.

2. Ground 2 of the Petition is Substantively Deficient Because It Does Not Explain in Sufficient Detail How to Combine *Gilhousen865* and *Gilhousen390*

The Petition also fails to explain in sufficient detail how to combine *Gilhousen865* and *Gilhousen390*, despite the requirements of Federal Circuit precedent. See *ActiveVideo Networks, Inc. v. Verizon Commc'ns, Inc.*, 694 F.3d 1312, 1327-28 (Fed. Cir. 2012) (requiring a Petitioner “to explain how specific references could be combined”).

As previously discussed, the Board in *Unified Patents v. Realtime* refused to institute because the petitioner had failed to explain how the POSITA could have combined specific prior art elements to achieve the claimed invention. See *Unified Patents v. Realtime*, IPR2017-02129, Paper 11 at 12 (PTAB March 27, 2018). Here, as in *Unified Patents*, the Petition merely contains conclusory assurances that a person of ordinary skill **could** combine *Gilhousen865* and *Gilhousen390*, but never actually articulates how the POSITA could do so, and provides no evidence to show that the POSITA could do so. Accordingly, Ground 2 of the Petition is substantively deficient because it fails to explain in sufficient detail how to combine *Gilhousen865* and *Gilhousen390*.

3. Ground 2 Fails to Address Whether the Combination of *Gilhousen865* and *Gilhousen390* Would Have a Reasonable Expectation of Success

Critically, the Petition fails to address whether the combination of *Gilhousen865* and *Gilhousen390* would have a reasonable expectation of success despite the requirements of Federal Circuit precedent. As previously discussed, “[a]n obviousness determination requires finding that a person of ordinary skill in the art would have been motivated to combine or modify the teachings in the prior art and would have had a reasonable expectation of success in doing so.” *Regents of University of California v. Board Institute, Inc.*, 903 F.3d 1286, 1291 (Fed. Cir. 2018) (emphasis added). Accordingly, Ground 2 of the Petition is substantively deficient because it fails to explain, let alone address, that a POSITA would have a reasonable expectation of success in modifying *Gilhousen865* as Petitioner proposes with *Gilhousen390*.

4. Petitioner’s Expert Declaration in Support of its Motivation to Combine *Gilhousen865* and *Gilhousen390* is Entitled to Little or No Weight

Petitioner’s only support for its conclusory propositions—that a POSITA would have been motivated to combine *Gilhousen865* and *Gilhousen390*—are citations to Paragraphs 158, 161 – 162 of Petitioner’s Expert Declaration. (See Petition at 51-55 (citing Ex. 1003 ¶¶ 158, 161 – 162)). Yet, Paragraphs 158, 161 – 162 of Petitioner’s Expert Declaration are near-verbatim copies of the conclusory

statements set forth in the Petition. (*Compare* Petition at 51-55 with Ex. 1003, ¶¶ 158, 161 – 162). As previously discussed above, the Board has routinely denied institution, in similar instances, and afforded an expert’s opinion “little or no weight”, where the expert’s testimony “merely repeat[ed] verbatim the conclusory statements set forth in the Petition, without providing any factual analysis or citing any supporting objective proof.” *Initiative for Medicines, Access & Knowledge v. Gilead Pharmasset LLC*, IPR2018-00390, slip op. at 14-15 (PTAB Jul 29, 2018) (Paper 7). Thus, the Expert Declaration—supporting Petitioner’s alleged motivation to combine *Gilhousen865* and *Gilhousen390*—should be afforded little or no weight.

For the reasons stated above, the Board should decline to institute Ground 2 of the Petition because the Petitioner has failed to establish a *prima facie* case of obviousness.

IX. PATENT OWNER’S FINAL COMMENTS

Patent Owner does not concede the legitimacy of any arguments in the Petition that are not specifically addressed herein, and expressly reserves the right to rebut any such arguments in its Patent Owner Response if *inter partes* review is instituted. Similarly, Patent Owner also does not concede any underlying contentions in the Petition, and reserves the right to rebut them later. For example, Patent Owner reserves the right to challenge the prior art status of the references cited in the Petition. Additionally, Patent Owner is not limited to the arguments presented here

in this Preliminary Response, but expressly reserves the right to raise further arguments, including claim construction arguments, not presented in this Preliminary Response.

X. CONCLUSION

For at least the reasons set forth above, Patent Owner respectfully requests that the Board deny all challenges in the Petition.

Date: August 28, 2019

Respectfully submitted,

/s/ Charles D. Gavrilovich, Jr.

Charles D. Gavrilovich, Jr.

Reg. No. 41,031

**CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME
LIMITATION, TYPEFACE REQUIREMENTS,
AND TYPE STYLE REQUIREMENTS**

1. Pursuant to 37 C.F.R. § 42.24(d), the undersigned certifies that this Preliminary Response complies with the type-volume limitation of 37 C.F.R. § 42.24(b)(1) because it contains fewer than the limit of 14,000 words, excluding the parts of the brief exempted by 37 C.F.R. § 42.24(a)(1).
2. The undersigned certifies that this Preliminary Response complies with the general format requirements of 37 C.F.R. § 42.6(a) and has been prepared using Microsoft Word 2013 in 14 point Times New Roman.

Date: August 28, 2019

Respectfully submitted,

/s/ Charles D. Gavrilovich, Jr.

Charles D. Gavrilovich, Jr.
Reg. No. 41,031

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. §§ 42.6(e), the undersigned certifies that an electronic copy of the foregoing PATENT OWNER'S PRELIMINARY RESPONSE UNDER 35 U.S.C. § 313 AND 37 C.F.R. § 42.107 was served on the Petitioners by electronic mail on August 28, 2019:

rrichardson-PTAB@sternekessler.com,
lschleh-PTAB@sternekessler.com,
mspecht-PTAB@sternekessler.com,
dyonan-PTAB@sternekessler.com, and
PTAB@sternekessler.com.

Date: August 28, 2019

Respectfully submitted,

/s/ Charles D. Gavrilovich, Jr.
Charles D. Gavrilovich, Jr.
Reg. No. 41,031