

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SIEMENS MOBILITY, INC., GROUND TRANSPORTATION SYSTEMS USA,
INC., and PIPER NETWORKS, INC.,
Petitioners,

v.

METROM RAIL, LLC,
Patent Owner.

Case No. IPR2024-00947

U.S. Patent No. 9,731,738

PATENT OWNER'S PRELIMINARY RESPONSE

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Exhibit No.	Description
2001	U.S. Patent Publication No. 2010/0063656 (“Knott”)
2002	U.S. Patent Publication No. 2013/0138276 (“Soderi”)

I. SUMMARY

35 U.S.C. § 325(d) states:

In determining whether to institute . . . , the Director may take into account whether, and reject the petition or request because, the same or substantially the same prior art or arguments previously were presented to the Office.

Petitioners assert that the independent claim is invalid in view of two references that were not applied by the Examiner. However, the argument made in the Petition is the same as the argument considered and rejected by the Examiner using substantially the same art, *and* Petitioners' references were also presented to the Office. Under the Board's precedential decision in *Advanced Bionics* and subsequent decisions, the Board should exercise its discretion to deny review of the Challenged Claims under 35 U.S.C. § 325(d).

II. THE BOARD SHOULD DENY INSTITUTION UNDER 35 U.S.C. § 325(d)

In determining whether to deny institution under 35 U.S.C. § 325(d), the Board applies a two-part framework: “(1) whether the same or substantially the same art previously was presented to the Office or whether the same or substantially the same arguments previously were presented to the Office; and (2) if either condition of [the] first part of the framework is satisfied, whether the Petitioner has demonstrated that the Office erred in a manner material to the patentability of challenged claims.” *Advanced Bionics, LLC v. Med-El Elektromedizinische Geräte*

GmbH, IPR2019-01469, Paper 6 at 8 (P.T.A.B. Feb. 13, 2020) (precedential).¹

“[T]he Becton, Dickinson factors provide useful insight into how to apply the framework under 35 U.S.C. § 325(d).” *Id.* at 9-10 (footnote omitted). The nonexclusive *Becton, Dickinson* factors are:

(a) the similarities and material differences between the asserted art and the prior art involved during examination;

(b) the cumulative nature of the asserted art and the prior art evaluated during examination;

(c) the extent to which the asserted art was evaluated during examination, including whether the prior art was the basis for rejection;

(d) the extent of the overlap between the arguments made during examination and the manner in which Petitioner relies on the prior art or Patent Owner distinguishes the prior art;

¹ Petitioners acknowledged that “the rationale of *Advanced Bionics*” controls the § 325(d) analysis, (Pet. at 71), yet relied on cases decided *before* the precedential *Advanced Bionics* decision to support their analysis. *See* Pet. at 72 (citing *Bowtech, Inc. v. MCP IP, LLC*, IPR2019-00382, Paper 12 at 12 (P.T.A.B. Aug. 6, 2019)) and Pet. at 73 (citing *Adobe v. Rah Color*, IPR2019-00627, Paper 41 at 20 (P.T.A.B. Sept. 10, 2019)).

(e) whether Petitioner has pointed out sufficiently how the Examiner erred in its evaluation of the asserted prior art; and

(f) the extent to which additional evidence and facts presented in the Petition warrant reconsideration of the prior art or arguments.

Becton, Dickinson & Co. v. B. Braun Melsungen AG, IPR2017-01586, Paper 8 at 17-18 (P.T.A.B. Dec. 15, 2017) (precedential as to § III.C.5, first paragraph). “*Becton, Dickinson* factors (a), (b), and (d) relate to the first part of the Advanced Bionics framework (whether the same or substantially the same art or arguments previously were presented to the Office), and *Becton, Dickinson* factors (c), (e), and (f) relate to the second part of that framework (previous Office error).” *Autel Intelligent Technology Corp., Ltd., v. Orange Electronic Co., Ltd.*, IPR2021-01545, Paper 8 at 13 (P.T.A.B. Apr. 8, 2022) (citing *Advanced Bionics*, IPR2019-01469, Paper 6 at 9-11).

“If a condition in the first part of the [*Advanced Bionics*] framework is satisfied and the Petitioner fails to make a showing of material error, the Director generally will exercise discretion not to institute *inter partes* review.” *Advanced Bionics*, IPR2019-01469, Paper 6 at 8-9. “If reasonable minds can disagree regarding the purported treatment of the art or arguments, it cannot be said that the Office erred in a manner material to patentability.” *Id.* at 9. The Board has emphasized that “this

framework reflects a *commitment to defer to previous Office evaluations* of the evidence of record unless material error is shown.” *Id.* (Emphasis added)

Part one of the *Advanced Bionics* framework is met here, with both the art and argument for combining that art being substantially the same. For part two, the Petitioners have not demonstrated a material error by the Office. The Board should deny *inter partes* review.

A. The First *Advanced Bionics* Factor Is Met Because All of Petitioners’ References Were Previously Presented to the Office or Substantially the Same as the Prior Art Previously Considered

Petitioners do not show that “the prior art cited in the Petition differs in any specific, substantial way from the prior art cited” during prosecution. *See Autel*, IPR2021-01545, Paper 8 at 13. As affirmatively shown below, the references relied on in the Petition are “the same or substantially the same art previously . . . presented to the Office.” *Advanced Bionics*, IPR2019-01469, Paper 6 at 8. “Previously presented art includes . . . art provided to the Office by an applicant, such as on an Information Disclosure Statement (IDS), in the prosecution history of the challenged patent.” *Id.* at 7-8; *ABS Global, Inc. v. Cytonome/ST, LLC*, IPR2021-00306, Paper 13 at 10 (P.T.A.B. June 7, 2021) (finding the first *Advanced Bionics* condition indisputably met where the art relied upon in the petition was “submitted on an IDS during prosecution of the ’210 patent”); *Johnson & Johnson Surgical Vision, Inc. v. Alcon Inc.*, IPR2021-01069, Paper 16 at 14-15 (P.T.A.B. Dec. 10, 2021) (finding

reference “cited in an IDS during prosecution” demonstrated that “the same or substantially the same art was previously presented”); *NXP USA, Inc. v. Impinj, Inc.*, IPR2020-00519, Paper 7 at 8 (P.T.A.B. Aug. 17, 2020) (same).

The asserted ground challenging the sole independent claim 1 in the Petition relies on combining Kane and Heddebaut. *See* Pet. at 2. The other asserted references of Grisham, Das, and Ackerman are used in various obviousness combinations with Kane and Heddebaut for dependent claims 2-18. *Id.* Because Petitioners assert only a single ground, disposition of the sole independent claim is dispositive as to the remaining dependent claims. *See Kayak Software Corp. v. IBM*, CBM2016-00075, Paper 16 at 10 (P.T.A.B. Dec. 15, 2016) (informative) (holding Petitioners’ citation of a reference not considered by the examiner solely for “additional subject matter of certain dependent claims[] is insufficient to persuade us that exercising our discretion under 35 U.S.C. § 325(d) is inappropriate”).

1. Factor (a) - The Similarities of the Art

The Examiner was aware of both Kane and Heddebaut during the prosecution of the 738 Patent. Heddebaut was presented to the Office in an IDS filed during prosecution of the 738 Patent:

IPR2024-00947
Patent Owner Preliminary Response

U.S. PATENT APPLICATION PUBLICATIONS						Remove
Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	20140229096		2014-08-14	Carlson	
	2	20120296562		2012-11-22	Carlson	
	3	20110046845		2011-02-24	Kozlay	
	4	20080114519		2008-05-15	Defaux	
	5	20060151672		2006-07-13	Heddebaut	

Ex. 1002, July 27, 2025 IDS, at 108.

The Examiner certified that “all references” on the IDS were “considered except where lined through,” and he did not line through Heddebaut. Ex. 1002, at 182. He then allowed the Challenged Claims over Heddebaut.

	5	20060151672		2006-07-13	Heddebaut	
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EFS Web 2.1.17

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /Z.L.K/

Likewise, Kane appeared in the Examiner’s search report:

S9	24	"20040006413"	"20040182970"	US- PGPUB; USPAT; USOCR	AND	OFF	2015/12/11 12:33
		"20050110628"	"20060015224"				
		"20060080009"	"4196412" "5437422"				
		"5452870"	"6112142" "6609049"				
		"6688561"	"6824110" "6845953"				
		"6853888"	"6863246" "6865454"				
		"6903658"	"6957131" "6996461"				

EASTSearchHistory.14809950_AccessibleVersion.htm[12/11/2015 7:54:39 PM]

Ex. 1002, at 186.

Thus, Heddebaut and arguably Kane, were considered by the Office during the prosecution of the 738 Patent. *See Vital Connect, Inc. v. Bardy Diagnostics, Inc.*, IPR2023-00381, Paper 7 at 15-17 (P.T.A.B. July 11, 2023) (finding reference “Yang” which was a continuation of “Yang Parent” was presented to the Office because Yang Parent “is listed on an IDS and not lined through, indicating that the [e]xaminer considered this reference,” “[t]he face of the ’743 patent also identifie[d] Yang Parent as a cited reference,” and the portions of Yang that Petitioners relied on were “also present in Yang Parent”).

2. Factor (b) - The Cumulative Nature of the Art

The Examiner during prosecution of the 738 Patent rejected the claims as obvious over similar references used for identical purposes - U.S. Patent Publication No. 2010/0063656, attached as Ex. 2001 (“Knott”) in view of U.S. Patent Publication No. 2013/0138276, attached as Ex. 2002 (“Soderi”). Knott and Soderi were considered and distinguished during prosecution of the 738 Patent. In short, the

Petition relies on Heddebaut and Kane as disclosing and combining the same elements said during prosecution to be disclosed and combined by Knott and Soderi.

During examination, Applicant overcame the non-final rejection by arguing that “Knott and Soderi do not teach or suggest, individually or in combination, communication of UWB signals carrying data that comprises “at least one of: a unique ID associated with the vehicle mounted control system, a signal indication, a track number, a track direction, speed, and direction of travel.” Ex. 1002, January 31, 2017 Response, at 268.² In the following Notice of Allowance, the Examiner agreed with Patent Owners arguments conceding that Soderi:

cannot be said to ‘communicate UWB signals carrying data pertinent to evaluating vehicle operation compliance, the data comprising at least one of: a unique ID associated with the vehicle mounted control system, a signal indication, a track number, a track direction, speed, and direction of travel,’ as recited in claim [1]. Soderi's UWB signals are used to determine the vehicle position, but the signals do not carry one of the above listed data types.

Ex. 1002, June 9, 2017 Notice of Allowance, at 279.

The Examiner explained why several other UWB related prior art references likewise would not render the allowed claim obvious. *See id* (“Using UWB signals

² In the same response, Patent Owner also made a claim amendment, deleting “and positioning related information” from limitation 1[H].

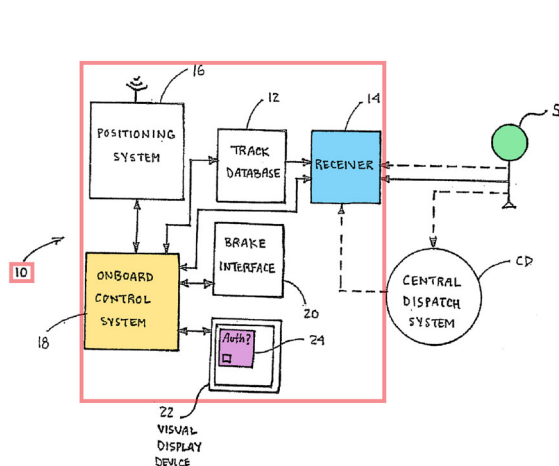
to carry data is known in the art. Breed et al. (US 2008/0040023) teaches using coded UWB pulses to indicate a position relative to the coded location in Para. [0166]. However, Breed fails to teach a code for one of the above described data types. Further, the Examiner finds no obvious reason for the primary reference Knott (US 2010/0063656) to transmit these data types using a UWB signal.”); 279-80 (“Hilleary (US 2006/0015224) teaches using a UWB signal to transmit train data, including data from crossing equipment (Para. [0021]), which may be interpreted broadly as ‘signal indication data.’ However, Hilleary teaches none of the limitations regarding rule behavior listed in claim 16. Further, the Examiner finds no obvious reason for the primary reference Knott (US 2010/0063656) to transmit the listed data types using a UWB signal.”). The record evidence shows that Heddebaut was considered and was deemed duplicative or not notable enough to warrant mention in the Notice of Allowance. As shown in part II.B *infra*, Petitioners presented no substantive arguments that the Examiner was wrong in allowing the Challenged Claims over Knott and Soderi.

Petitioners’ brief one page discussion addressing the first *Advanced Bionics* relies on a flawed argument that although Heddebaut (and Grisham) were previously before the Examiner, the combination with Kane was “neither disclosed nor relied upon during prosecution.” Pet. at 72. This misses the point. Although Kane and Heddebaut may be new in name, review of the file wrapper shows that the art relied

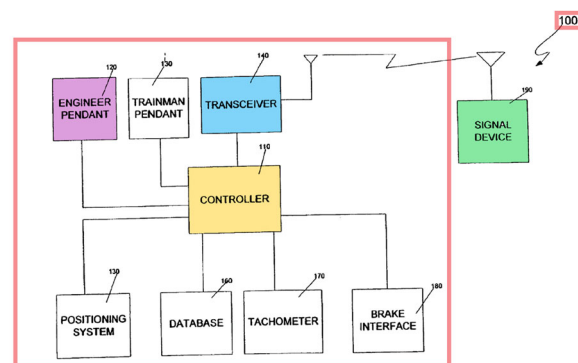
upon in the Petition presents the same arguments previously disposed of by the Office. Petitioners combination of Kane and Heddebaut is no better than the combination of Knott and Soderi. *Compare* Ex. 1005 (Kane), Ex. 1006 (Heddebaut), and Pet. 12-24 *with* Ex. 2001 (Knott), Ex. 2002 (Soderi), and Ex. 1002 (738 Patent prosecution history) at 245-25.

3. Factor (d) - Overlap of the Arguments

There are no differences between the prior art asserted in this Petition and the prior art evaluated during prosecution because the previously examined combination of Knott and Soderi discloses identical elements and is effectively the same as the combination of Kane and Heddebaut proposed by Petitioners. For example, Knott and Kane include nearly identical block diagrams for their respective train control systems, which include the components being relied upon for claim elements 1A to 1E.



Knott



Kane

Specifically, as shown in the table below, the previously asserted disclosure of Knott and Soderi lines up one-for-one with Kane and Heddebaut (see color coding with reference to figures above), asserted in the Petition.³

Claim Limitation	Examiner-Cited Prior Art	IPR-Asserted Prior Art
1A <i>a <u>control signal interface subsystem</u>; and</i>	Knott, Reference 5 (SIC “S”) Ex. 1002, October 31, 2016 Non-Final Office Action, at 246 <i>“Signal data includes information regarding the location, operation, aspect, indication or other parameter associated with <u>a specific signal S</u>”</i> Ex. 2001 at ¶ 35: <i>“The information and data . . . may be generated . . . in a wireless form from <u>the wayside signal S</u>”</i> Ex. 2001 at ¶ 36.	Kane (Pat. No. 6,957,131), 1:10-24, 4:15-31, 5:59-6:12, Figs. 1, 3, claims 1 and 31: <i>“. . . the signal from the <u>wayside signal device 190</u> is displayed to the engineer/operator . . .”</i> Pet. at 13.

³ Patent owner reserves arguments on whether the Petitioners references are actually less relevant, and assumes for institution purposes only that the references teach what Petitioners claim they teach.

Claim Limitation	Examiner-Cited Prior Art	IPR-Asserted Prior Art
1B <i>a vehicle-mounted subsystem configured to:</i>	Knott, Reference 10 Ex. 1002, at 246 <i>“<u>The system 10</u> also includes an on-board control system 18. . . . Further . . . the on-board control system 18 is programmed, configured or adapted to automatically brake the train TR prior to encountering a next, upcoming signal S.”</i> Ex. 2001 at ¶ 39.	Kane, 1:66-2:12, Abstract: <i>“. . . <u>a positive signal comparator system [100]</u> comprising a transceiver [which is also connected to a positioning system, a database, a tachometer, and a brake interface] located on a train . . .”</i> Pet. at 14.
1C <i>communicate with the control signal interface subsystem to receive information corresponding to a status of a control signal;</i>	Knott, ¶ 0037: <i>“. . . the system 10 includes <u>a receiver 14</u>. . . . any such receiver 14 is appropriate of <u>picking up or otherwise obtaining a</u> signal”</i> Ex. 1002, at 246; Ex. 2001, at ¶ 37.	Kane, 5:37-39: <i>“When the next device 190 is within range, the controller 110 causes <u>the transceiver 140</u> to transmit an interrogation message at step 308.”</i> Kane, 5:59-62: <i>“If the wayside signaling device 190 responds at step 312, <u>the received signal</u> is displayed in some embodiments on the engineer’s pendant 120, and in yet other embodiments on the trainman’s pendant 130 at step 314.”</i>

Claim Limitation	Examiner-Cited Prior Art	IPR-Asserted Prior Art
		Pet. at 15.
1D <i><u>determine a rule for behavior of a vehicle according to the information corresponding to the status of the control signal; and</u></i>	Knott, ¶ 0041: <i>“The signal data used in <u>making the appropriate control decisions</u> within the context of the present system can be a variety of signal types... Based upon the signal data obtained... the <u>train control system</u> of the present invention enforces or brakes the train to a complete stop in an automatic manner . . .”</i> Ex. 1002, at 246; Ex. 2001, at ¶ 41.	Kane, 6:4-8: <i>“If a correct matching Signal is received from the engineer's pendant 120 (and, in some embodiments, the trainman's pendant 130) at step 318, <u>the controller [110] then monitors the train's compliance</u> with the Signal at Step 320.”</i> Pet. at 17.
1E <i><u>observe operation of the vehicle to evaluate compliance with the rule; wherein:</u></i>	Knott, ¶ 0044: <i>“In the embodiment where the on-board control system <u>predictively enforces</u> the signal aspect data of the upcoming wayside signal to ‘stop,’ the on-board control system 18 may require that the operator press <u>a selectable portion 24</u> that indicates that appropriate authority has been received by the operator from</i>	Kane, 6:4-8 <i>“If a correct matching signal is received from the <u>engineer's pendant 120</u> (and, in some embodiments, the trainman's pendant 130) at step 318, the controller then <u>monitors the train's compliance with the signal</u> at step 320.”</i> Pet. at 17.

Claim Limitation	Examiner-Cited Prior Art	IPR-Asserted Prior Art
	<i>central dispatch to proceed.”</i> Ex. 1002, at 247; Ex. 2001, at ¶ 44.	
1F <i>the control signal interface subsystem comprises an ultra-wideband (UWB) communications component; and</i>	Soderi, ¶ 0014: <i>“ . . . the signals transmitted by the vehicle are ultra-wideband (UWB) pulses, which provide a highly accurate distance estimate . . . ”</i> Ex. 1002, at 247; Ex. 2002 at ¶ 14.	Heddebaut, ¶ 0045: <i>“Rail vehicle 4 and fixed station 1 modulate a pulse string according to an ultra wide band technique.”</i> Pet. at 20.
1G <i>the vehicle-mounted subsystem comprises an ultra-wideband (UWB) communications component; and</i>	Soderi, ¶ 0014: <i>“ . . . the signals transmitted by the vehicle are ultra-wideband (UWB) pulses, which provide a highly accurate distance estimate . . . ”</i> Ex. 1002, at 247; Ex. 2002, at ¶ 14.	Heddebaut, ¶ 0045: <i>“Rail vehicle 4 and fixed station 1 modulate a pulse string according to an ultra wide band technique.”</i> Pet. at 22.
1H <i>the vehicle-mounted subsystem and the control signal interface subsystem are further configured to</i>	Soderi, ¶ 0020: <i>“ . . . the ranging unit 104 determines the [estimated distance of the vehicle from a reflector] by transmitting an outbound signal from the vehicle 102, receiving a reflected signal from one or more of the reflectors 108,</i>	Heddebaut, ¶ 0049: <i>“One or several processing lanes locked onto the codes of the fixed stations 1 and rail vehicles 4 in radio range. They collect the operating data transmitted (identity, speeds, positions, state of the trans and stations . . .)”</i>

Claim Limitation	Examiner-Cited Prior Art	IPR-Asserted Prior Art
<i>communicate UWB signals carrying data pertinent to evaluating vehicle operation compliance, the data comprising at least one of: a unique ID associated with the vehicle-mounted subsystem, a signal indication, a track number, a track direction, speed, and direction of travel.</i>	<i>and computing a time-of-flight of the signals.”</i> Ex. 1002, at 247; Ex. 2002 at ¶ 20. See also Knott disclosure: <i>“However, it is envisioned that any Such receiver 14 is appropriate of picking up or otherwise obtaining a signal (or the signal data) from the wayside signal S”</i> Ex. 2001, at ¶ 37.	Pet. at 24.

Kane and Heddebaut are being used here for the same disclosure as Knott and Soderi. Kane and Heddebaut are “‘substantially the same art’ that was previously presented to the Office.” *Advanced Bionics*, IPR2019-01469, Paper 6 at 15 (finding that “Charvin” (not evaluated during examination) disclosed “substantially the same information already considered by the Office,” because Zimmerling (cited in an office action during prosecution) disclosed the same limitation). Further, Heddebaut was considered by the Office because it was cited in an IDS. *See Vital Connect*,

IPR2023-00381, Paper 7 at 15-17 (finding parent on IDS with identical disclosure to prior art reference met part one of *Advanced Bionics*).

Petitioners cite to *SHDS v. Truinject*, IPR2020-00937, Paper 11 at 8-12 (P.T.A.B. Nov. 17, 2020) for the proposition that step 1 is not satisfied even though Petitioners relied on art applied during prosecution because the petition combined it with new art. Pet. at 72. *SHDS* differs and is not applicable to the present Petition. In *SHDS*, three of the four references were previously before the examiner during prosecution, who allowed the claims after an examiner's amendment adding the limitation that the graphical depiction of the training injection includes a "dynamic position of the plunger in real-time" and that the plunger is moving "in real-time." *SHDS*, IPR2020-00937, Paper 11 at 10-11. The newly asserted reference identified by petitioner specifically addressed the limitations added by the examiner. *Id.* The Board concluded that because the "[e]xaminer . . . did not have the benefit of the teachings of the Mukherjee articles before her[.]" i.e., the fourth reference, one could readily infer from the record that had the new reference "been before the [e]xaminer during prosecution, the claims of the '232 patent would not have issued." *Id.* at 11. Based on this the Board refused to exercise its discretion under § 325(d). *Id.* at 11-12. Here Heddebaut not only was considered by the Examiner but is being used for the same limitations as Soderi, which was considered at length and overcome.

Further, Petitioners’ argument regarding the motivation to combine Kane’s GPS based system with Heddebaut’s UWB teaching repurposes the same argument that the Examiner initially made when he rejected the claims in view of Knott and Soderi.

Examiner’s Rejection	Petition
“It would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention, for Knott to use the UWB distance measurement system, as taught by Soderi, in addition to Knott’s GPS system, in order to ensure failsafe, accurate distance measurements with reference to stopping points at railway signals.” Ex. 1002, at 172.	“ . . . a POSITA would have understood that UWB ranging would improve Kane in the same way that it improves Heddebaut, such as by providing more accurate positioning information in environments where the GPS positioning disclosed in Kane may not work, such as in a tunnel, such as in a tunnel.” Pet. at 31.

The Petition not only presents substantially the same art, but “the . . . arguments presented in the petition are the same . . . as those previously presented to the Office.” *Advanced Bionics*, Paper 6 at 8-10. Ultimately, the examiner concluded that there was no motivation to modify Knott to add UWB. Exhibit 1002 at p. 279-80. Petitioner merely swaps in similar references and repeats the same arguments already overcome in prosecution. Patent Owner has established that

Becton, Dickinson factors (a), (b) and (d) are met and first *Advanced Bionics* condition is satisfied.

B. Petitioners Failed To Meet Their Burden To Show a Material Error Required by the Second *Advanced Bionics* Factor

Because the first *Advanced Bionics* condition is satisfied, Petitioners must demonstrate how the Examiner erred. *Nespresso USA, Inc. v. K-Fee Sys. GmbH*, IPR2021-01223, Paper 9 at 29 (P.T.A.B. Jan. 18, 2022) (“Petitioner bears the burden of showing that the Office erred.”). But the Petition addresses the second *Advanced Bionics* factor with only five conclusory sentences that do not demonstrate how the Office erred in a manner material to the patentability of the Challenged Claims. *See* Pet. at 73. Additionally, the Petition does not explain what if any “additional evidence and facts presented in the petition warrant reconsideration of the prior art or arguments” *Becton, Dickinson*, IPR2017-01586, Paper 8 at 18. Instead, the Petition merely asks the Office to consider “whether Grisham and Heddebaut in combination with other new references render the challenged claims obvious.” *See* Pet. at 73.

As an initial matter, “Grisham and Heddebaut in combination with other new references” is not what is asserted against independent claim 1. What is asserted is Kane combined with Heddebaut and the Petition does not try to flesh out any material error the Examiner made when he allowed claim 1 over the substantially

similar combination of Knott and Soderi. This reason alone is enough to find that Petitioners failed to meet their burden under the second *Advanced Bionics* factor. *NXP*, IPR2020-00519, Paper 7 at 13 (“Petitioners does not identify any error in the Office’s prior consideration of the Mandal ’090 patent, which is substantially similar to the prior art asserted in the Petition. . . . Thus, on this record, we determine that Petitioners do not demonstrate that the Office erred in a manner material to the patentability of the challenged claims.”); *Nespresso*, IPR2021-01223, Paper 9 at 31 (“[T]he paucity of analysis provided by Petitioner in the Petition tips the scales in favor of a discretionary denial.”).

Petitioners appreciated that their petition was vulnerable to discretionary denial under § 325(d) because it cited the statute and argued, albeit erroneously, that the combination of Kane and Heddebaut was not considered by the Office. *See* Pet. at 72-73. But Petitioners did not even attempt to identify an alleged material error by the Examiner. Instead, Petitioners focused their § 325(d) arguments on the proposition that the “previous consideration of the art [was] not well developed” and that the Examiner must have “necessarily overlooked” the combination of Kane and Heddebaut. Pet. at 72.

1. Factor (e) - Petitioner has Failed To Point Out How the Examiner Erred

Under *Advanced Bionics*, when the Petition relies on prior art and arguments that are substantially the same as those previously presented to the Office, it is Petitioners who must affirmatively explain how the Examiner erred such that the Petition should be instituted. In assessing factor (e), the Board “consider[s] whether Petitioner ‘points out sufficiently how the examiner erred in its evaluation of the asserted prior art.’” *Nespresso*, IPR2021-01223, Paper 9 at 29-30.

Other than summarily concluding that the Office erred because it did not consider the combination of Kane and Heddebaut, Petitioners fail to substantively address Factor (e), which is fatal to the Petition. *Nespresso*, IPR2021-01223, Paper 9 at 29-30; *see also Sony Interactive Entm’t LLC v. Terminal Reality, Inc.*, IPR2020-00711, Paper 15 at 11-12 (P.T.A.B. Oct. 13, 2020) (denying institution under § 325(d) where Petitioners remained silent on *Becton, Dickinson* factors (e) and (f)).

Petitioners provide no evidence or analysis to support their argument that aspects of Kane and Heddebaut were “not considered by the Examiner.” The evidence shows that the Examiner considered Knott and Soderi at length, which are substantially the same on the points extracted by Petitioners from Kane and Heddebaut. *See* Ex. 1002, 169-177 (December 18, 2015 (first) Non-Final Office Action asserting Knott and Soderi), 208-217 (June 17, 2016 Final Office Action

asserting Knott and Soderi), 245-254 (October 31, 2016 (second) Non-Final Office Action asserting Knott and Soderi); 279-280 (June 6, 2017 Notice of Allowance (finding no reason to modify the primary reference to add UWB)).

2. Factor (c) - The Art Was Considered During Examination

Further, Heddebaut *was* considered by the Office. *See* Ex. 1002, at 182; *see also Vital Connect*, IPR2023-00381, Paper 7 at 16 (“Yang Parent is listed on an IDS and not lined through, indicating that the [e]xaminer considered this reference.”). Yet, Petitioners provides ***no evidence or analysis*** to support their argument that the Examiner “necessarily overlooked” Heddebaut (for example in combination with Knott). Pet. at 73. Again, the record suggests the opposite. The IDS citing Heddebaut was submitted on July 27, 2015. *See* Ex. 1002 at 108. The Examiner certified that he considered Heddebaut (and other references) five months later, on December 11, 2015. *See id.* at 183. The Examiner issued the first Non-Final Office action on December 18, 2015, a week after certifying that the references cited in the IDS had been considered. On that record, it cannot be said that the Examiner did not consider Heddebaut.

Petitioners rely on *Bowtech, Inc. v. MCP IP* for the proposition that a reference cited in an IDS does not support exercising discretion under § 325(d). *Bowtech*, IPR2019-00382, Paper 12 at 12. That case, however, is non-precedential and predates *Advanced Bionics*. “The precedential decision in *Advanced Bionics*

unambiguously instructs [that] ‘Previously presented art includes art made of record by the Examiner, and art provided to the Office by an applicant, such as on an Information Disclosure Statement (IDS), in the prosecution history of the challenged patent.’” *Nespresso*, IPR2021-01223, Paper 9 at 13 (criticizing Petitioners for relying on “non-precedential Board decisions, which predate *Advanced Bionics*, to argue that ‘the “mere submission of a reference in an IDS is insufficient for purposes of exercising discretion”” to deny review under Section 325(d).”).

Finally, even if Heddebaut was not considered by the Office (which it was), *Advanced Bionics* clarifies that merely swapping out one reference for another where both references disclose the same limitations, does not clear the “substantially the same prior art or arguments” threshold of Rule 325(d). *See Advanced Bionics*, IPR2019-01469, Paper 6 at 15. The Office did not need to consider Kane because Knott disclosed the same limitations that Petitioners now cite in Kane.

3. Factor (f) - No Other Evidence or Facts were Presented

When considering factor (f), the Board “look[s] for some explanation of how or why ‘the extent to which additional evidence and facts presented in the petition warrant reconsideration of the prior art or arguments.’” *Nespresso*, IPR2021-01223, Paper 9 at 29-30.

The Petitioners arguments that the Office’s previous consideration of the art was “not well developed” and that the Office “necessarily overlooked” the

combination of Kane and Heddebaut is attorney argument lacking any support and should be disregarded. *See Microsoft Corp. v. Virtru Corp.*, IPR2023-00017, Paper 12 at 10 (P.T.A.B. May 17, 2023) (rejecting Petitioners’ attorney argument that did “not provide sufficient factual support”) (citing *Estee Lauder Inc. v. L’Oreal, S.A.*, 129 F.3d 588, 595 (Fed. Cir. 1997) (“arguments of counsel cannot take the place of evidence lacking in the record”)). As explained above, the only case that Petitioners rely on for their § 325(d) arguments is the non-precedential *Bowtech* case, which *Advanced Bionics* has effectively overruled. *See Google LLC v. Valtrus Innovations*, IPR2022-01197, Paper 9 at 26 (P.T.A.B. Jan. 3, 2023) (finding prior Board decision, which likewise held that citation in an IDS does not support exercising discretion under § 325(d), inapposite in view of *Advanced Bionics*).

The Board’s decision in *Vital Connect v. Bardy Diagnostics* denying institution under § 325(d) is directly on-point. Like here, the Petitioners’ prior art (or substantially similar art) was presented to the Office via an IDS during prosecution. *Vital Connect*, IPR2023-00381, Paper 7 at 18. And like here, Petitioners did not explain how the Examiner allegedly erred in a manner material to patentability of the challenged claims. *Id.* at 19. Instead, the *Vital Connect* Petition was “silent on material error, even though its relied-upon references (or their substantially identical disclosures), were before the Office during examination.” *Id.* The Board denied institution under § 325(d). *Id.* at 20.

In *Vital Connect*, the Board also refused to accept Petitioners’ boilerplate assertion that “the Petition presents grounds of unpatentability not previously considered and/or applied by the [e]xaminer” as somehow demonstrating material error. *Id.* at 19. The Board explained:

But these statements, without any further analysis, cannot persuade us of material error. *Advanced Bionics* cautions that “[i]f reasonable minds can disagree regarding the purported treatment of the art or arguments, it cannot be said that the Office erred in a manner material to patentability.” Paper 6, 9. *Advanced Bionics* also explains the rationale for this rule: “At bottom, this framework reflects a commitment to defer to previous Office evaluations of the evidence of record unless material error is shown.” *Id.* Here, we defer to the Office’s previous consideration of the prior art of record because Petitioners’ statements (i.e., that the Petition presents grounds of unpatentability not previously considered and/or applied by the [e]xaminer) do not “demonstrate[] that the Office erred in a manner material to the patentability of challenged claims.” *Advanced Bionics*, 8-9.

Vital Connect, IPR2023-00381, Paper 7 at 19-20. Petitioners’ circularly claim that because the Office didn’t explicitly articulate Petitioners’ proposed combination of Kane and Heddebaut, that it erred despite evidence that the prior combination of Knott and Soderi is already substantially the same combination modified in substantially the same way as proposed by the Petitioners. Pet. at 73. As explained

in *Vital Connect*, Board precedent dictates that such conclusory statements do “not ‘demonstrate[] that the Office erred in a manner material to the patentability of the challenged claims.” *Id.* at 20; *see also Google*, IPR2022-01197, Paper 9 at 22 (finding Petitioners’ “mere two sentence assertion regarding § 325(d)” insufficient to demonstrate material error). Nor do Petitioners’ other evidence and argument explain how the Examiner allegedly erred. The Petition is simply silent on the material-error prong of *Advanced Bionics*.

Nor should the Board infer material error from Petitioners’ Grounds. The *Vital Connect* decision correctly explained that *Advanced Bionics* forecloses such an inference:

Moreover, while there are no “magic words” necessary to address material error, Petitioners’ alleged grounds of unpatentability cannot establish material error *per se* under our binding precedent. *See id.* (“If a condition in the first part of the framework is satisfied and the Petitioners fails to make a showing of material error, the Director generally will exercise discretion not to institute inter partes review.”). Otherwise, the reasonable likelihood standard of § 314(a) and the second part of the *Advanced Bionics* framework (“material error”) would collapse into one.

Vital Connect, IPR2023-00381, Paper 7 at 20.

Finally, Petitioners mention in passing that the Office “lacked the benefit of expert testimony regarding the prior art on which Petition relies.” Pet. at 73. Petitioners do not expand this point because Mr. Petersons’ testimony adds no benefit. Mr. Petersons’ reason for combining Kane with Heddebaut is no different that the Examiner’s reason for combining Knott with Soderi:

Peterson’s Motivation to Combine	Examiner’s Motion to Combine
“Kane explains that its GPS positioning system is supplemented by the tachometer, but the tachometer may not be accurate. Because of this, a POSITA would have been motivated to supplement the accuracy of the GPS system with complementary technologies, such as the UWB ranging of Heddebaut” Ex. 1003 at ¶154.	“It would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention, for Knott to use the UWB distance measurement system, as taught by Soderi, in addition to Knott’s GPS system, in order to ensure failsafe, accurate distance measurements with reference to stopping points at railway signals.” Ex. 1002 at 172.

The declaration is merely disagreeing on a point the Examiner already considered, not raising a new argument not previously considered. *See Eyenovia, Inc. v. Sydnexis*, IPR2022-00963, Paper 7 at 20-21 (P.T.A.B. November 8, 2022) at 21 (denying institution under 325(d) when expert’s testimony was consistent with argument the Examiner considered.).

Further, Petitioners’ “expert” has no experience designing railway safety systems, much less any experience implementing one with UWB. Ex. 1004, at 2-3. Mr. Peterson’s experience is limited to “operational experience with the operating rules and practices of Norfolk Southern and CSX.” Ex. 1003 at 3. Thus, Mr. Petersons proposed testimony should be given little weight to overrule the Office’s determination that the 738 Patent is patentable over substantially the same art for substantially the same reasons.

Petitioners attempted to show that the first part of *Advanced Bionics* was not met, but failed. Petitioners then ignored the second part making mere conclusory statements devoid of any substantive analysis. Because the combination of Kane and Heddebaut is substantially identical to Knott and Soderi, which were previously presented to and considered by the Office, and because Petitioners failed to meet their burden under *Advanced Bionics*, the Board should exercise its discretion under § 325(d) and refuse to institute *inter partes* review. See *Vital Connect*, IPR2023-00381, Paper 7 at 20.

III. PETITIONERS SHOULD NOT BE PERMITTED A REPLY TO FURTHER ADDRESS § 325(d)

Patent Owner expects that Petitioners may ask to backfill their deficient § 325(d) arguments by seeking a pre-institution reply to address the second prong of

Advanced Bionics. The Board should not authorize such a reply because Petitioners have no good cause. This is not a case where Petitioners could not have foreseen Patent Owner’s arguments—it is the opposite situation. Petitioners already addressed § 325(d) in the Petition (*see* Pet. at 72-73) and should not be allowed to supplement months after filing, effectively bypassing and exceeding the permitted length of a Petition. *Progenity, Inc. v. Natera, Inc.*, IPR2021-00266, Paper 7 at 5 (P.T.A.B. Apr. 1, 2021) (denying request for pre-institution reply because Patent Owner’s § 325(d) arguments were “foreseeable” and “could have been comprehensively addressed by Petitioners in the Petition(s)”). In denying a pre-institution reply to address § 325(d), the Board in *Edwards Life Sciences* explained:

Petitioner was on notice prior to filing its Petition that, by statute, consideration may be given to whether the prior art or arguments presented in the Petition are the same, or substantially the same, as those previously raised during prosecution. Accordingly, Petitioner had the opportunity to address the issue in the Petition, and, given the limits on the length of a Petition, may not neglect to address an issue with the expectation that additional briefing will be permitted in reply.

Edwards Life Sci., Corp. v. Boston Scientific Scimed, Inc., IPR2017-00444, Paper 8 at 3 (P.T.A.B. May 22, 2017).

Here, Petitioners also “had the opportunity to address the issue in the Petition” and made the strategic decision to dedicate only two pages and irrelevant case law

to the issue. *Id.* Petitioners’ strategy of superficially treating a dispositive issue “with the expectation that additional briefing will be permitted in reply” should not be sanctioned, and any request for a pre-institution reply to further address § 325(d) should not be permitted. *Id.*, *see also Helmerich & Payne Int’l Drilling Co. v. Nabors Drilling Techs. USA, Inc.*, IPR2021-00621, Paper 8 at 2-3 (P.T.A.B. July 15, 2021) (distinguishing bases for good cause in denying Petitioners’ request for pre-institution reply to address § 325(d) because Patent Owner’s arguments were foreseeable, but granting Petitioners’ request to address new facts relating to § 314(a) and *Fintiv* that developed after the Petition was filed because they were not foreseeable); *Instrumentation Lab Co. v. Hemosonics*, IPR2018-00264, Paper 7 at 4 (P.T.A.B. Mar. 9, 2018) (“[W]e agree with Patent Owner that granting Petitioner’s request would effectively allow Petitioner to extend the length of its Petition, which we are not inclined to do. . .”).

IV. CONCLUSION

The combination of Knott and Soderi is substantially the same as Kane and Heddebaut and was considered by the Examiner. Petitioners failed to meet its burden to show that the Examiner allegedly erred in a manner material to patentability of the Challenged Claims. A disagreement between the Examiner and Petitioners’ expert on the motivation *vel non* to modify the primary reference does not support institution. Exhibit 1002 at 279-80. The Board should thus “defer to previous Office

evaluations of the evidence of record”, deny institution, and return this dispute to district court where these directly competing parties are already engaged and issues such as copying and other objective indicia can be fully developed. Exhibit 1019 at 2-19. *See Vital Connect*, IPR2023-00381, Paper 7 at 19-20 (citing *Advanced Bionics*).

Dated: August 28, 2024

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CERTIFICATE OF SERVICE

I certify that the Patent Owner Preliminary Response to Petition for *Inter Partes* Review under 35 U.S.C. § 42.107 in connection with *Inter Partes* Review Case IPR2024-00947 and exhibits 2001-2002 were served on August 28, 2024 by electronic mail to:

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CERTIFICATE OF WORD COUNT

Under 37 C.F.R. § 42.24(d), the undersigned attorney for the Patent Owner, Metrom Rail, LLC, declares this Patent Owner Preliminary Response has 6,265 words, according to Microsoft Word® word count tool, excluding the parts of the Response exempted by 37 C.F.R. § 42.24(a)(1).

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