

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Anthony Inc.
Petitioner
v.

ControlTec, LLC
Patent Owner

Patent No. 7,207,181

Issue Date: April 24, 2007

Title: REFRIGERATION UNIT CONDENSATION PREVENTION

Inter Partes Review No. IPR2025-00559

**PATENT OWNER'S PRELIMINARY RESPONSE
UNDER 37 C.F.R. §§ 42.107**

TABLE OF CONTENTS

I. INTRODUCTION	5
II. OVERVIEW OF U.S. PATENT NO. 7,207,181	10
III. CLAIM CONSTRUCTION	12
IV. <i>INTER PARTES</i> REVIEW SHOULD NOT BE INSTITUTED BECAUSE THE PETITION FAILS TO SHOW WHERE AT LEAST ONE ELEMENT RECITED BY THE PENDING CLAIMS IS FOUND IN THE CITED REFERENCES.....	15
A. All Words in the Claim Must Be Considered.	16
B. The Petition Fails to Show “the display case frame” and “the refrigerated display case.”	20
V. <i>INTER PARTES</i> REVIEW SHOULD NOT BE INSTITUTED BECAUSE THE PETITION LACKS ARTICULATED REASONING WITH SOME RATIONAL UNDERPINNING TO SUPPORT ITS CHALLENGES TO THE CLAIMS.....	21
A. Petitioner misidentifies the field of invention.....	22
B. Petitioner’s incorrect field of invention infects and undermines all claim challenges.	25
VI. <i>INTER PARTES</i> REVIEW SHOULD NOT BE INSTITUTED BECAUSE THE PETITION FAILS TO ARTICULATE THE DIFFERENCES BETWEEN THE CHALLENGED CLAIMS AND THE CITED REFERENCES.....	31
A. The Petition Fails to Discern What Portions of Carter or Knowledge of a POSITA Is Being Relied Upon to Meet Pertinent Claim Limitations Under Ground 1A.....	32
B. The Petition Fails to Discern What Portions of Carter, Beatenbough, and King are Being Relied Upon to Meet Pertinent Claim Limitations and How the References are Being Combined Under Ground 1B.....	35
VII. <i>INTER PARTES</i> REVIEW SHOULD NOT BE INSTITUTED BECAUSE THE PETITION FAILS TO COMPLY WITH 35 U.S.C. § 312(a)(3), 37 C.F.R. § 42.22(a)(2), and 37 C.F.R. § 42.104(b)(4)–(5).	39
VIII. <i>INTER PARTES</i> REVIEW SHOULD NOT BE INSTITUTED BASED ON THE OVERALL WEAKNESS OF MANY GROUNDS.....	45

IX. INTER PARTES REVIEW SHOULD NOT BE INSTITUTED UNDER 35 U.S.C. § 325(d) SINCE THE PRIMARY REFERENCES HAVE ALREADY BEEN CONSIDERED.....	46
X. CONCLUSION.....	50
Certificate of Service	53

PATENT OWNER'S EXHIBIT LIST

Ex.2001	Anthony corporate history webpage, https://www.anthonyintl.com/Aboutus/History.aspx
Ex.2002	U.S. Patent No. 4,261,179 to Dageford
Ex.2003	U.S. Patent No. 5,778,147 to Kim
Ex.2004	Declaration of John “Weeb” Bunch under 37 C.F.R. § 1.68
Ex.2005	Photographs of ControlTec LLC’s AS-20 Anti-Sweat Controller case
Ex.2006	Maintenance fee report for U.S. 7,207,181
Ex.2007 (NEW)	WIPO(PCT) Application No. WO2006093751A2 to Murry
Ex.2008 (NEW)	Internation Search Report for Application No. WO2006093751A2
Ex.2009 (NEW)	Written Opinion of the International Searching Authority for Application No. WO2006093751A2

I. INTRODUCTION

ControlTec, LLC (“Patent Owner”) submits the following preliminary response to the Petition filed by Anthony Inc. (“Petitioner”) on January 30, 2025 requesting *inter partes* review of Claims 1-20 of U.S. Patent No. 7,207,181 (“the ’181 Patent”). Patent Owner respectfully requests that the Board decline to institute *inter partes* review of the ’181 Patent because Petitioner has not shown that there is a “reasonable likelihood that [it] would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a).

The Board should not institute a trial because the Petition fails to show where multiple elements recited by the challenged claims are found in the cited references. Specifically, the Petition fails to show in the cited references: (1) “a frame temperature sensing unit adapted for monitoring temperature of one of the display case door or display case frame and including a carrier having a temperature sensor thereat,” from claim 1; (2) “a frame temperature sensing unit adapted for mounting at the display case for monitoring temperature of one of the display case door or display case frame,” from claim 8; and (3) “a temperature sensing unit in contact with the display case frame to monitor case frame temperature,” from claim 14. The Petition’s primary reference lacks disclosure of monitoring temperature of a display case door or a display case frame, as recited in the independent claims. The device in the primary reference does not teach a

refrigerated display case at all. Yet, Petitioner relies heavily on this reference for this critical teaching, coupled at best with the conclusory assertion that a POSITA would apply the primary reference to a refrigerated display case. Because the Petition fails to show these features recited by claim 1, 8, and 14, as explained in more detail below, Petitioner has necessarily failed to show each and every element recited by all claims at issue in this proceeding, namely claims 1-20.

Additionally, the Board should not institute a trial because the Petition lacks articulated reasoning with some rational underpinning to support the legal conclusion of obviousness with respect to its challenges to the claims. Instead, the Petition is replete with conclusory statements about groupings of references. This analysis falls short of stating why and how one skilled in the art would have modified the primary references, in view of the numerous secondary references, as presented in the Petition.

Also, the Board should not institute a trial because the Petition does not adequately state the differences between a challenged claim and the prior art, but instead relies on Patent Owner and the Board to determine those differences. This lack of required analysis leaves the Board and Patent Owner with only the ability to guess which claim limitations are being addressed by a particular reference, especially when a combination of references is cited for a particular claim limitation. Rather than provide the required analysis, the Petition leaves it for the

Board and Patent Owner to speculate how teachings from the various references are allegedly combinable and why a person of ordinary skill in the art would have allegedly combined the references in the manner recited by the claims of the '181 Patent. This approach improperly shifts the burden to the Board and Patent Owner to discern what portions of each reference are being relied upon as meeting the pertinent claim limitations and thereby obscures the actual teachings of the prior art.

Furthermore, the Board should not institute a trial because the Petition fails to comply with 35 U.S.C. §312(a)(3), 37 C.F.R. §42.22(a)(2), and 37C.F.R. §42.104(b)(4)–(5). In that regard, the Petition fails to specify sufficiently where each limitation of the challenged claim is taught or suggested by the cited references in the Petition. Instead, the Petition is littered with citations to combinations of references with little to no explanation of how these citations teach or suggest a claim limitation or how the cited portions of the references are combinable. That is, the Petition fails to provide a sufficiently detailed explanation of the significance of the citations presented in the Petition.

Additionally, the Board should not institute a trial because Petitioner has failed to show that some portion of the claims have a reasonable likelihood that Petitioner would prevail. Petitioner confusingly presents one “ground” but in a patchwork of parts, labeled as Grounds 1A-1E. Pet., 1. As discussed herein, these

sub-grounds have varying strengths, but if the Petition is instituted, all would need to be addressed. The Petition's first (and expectedly its strongest) presentation—of Ground 1A—is exceptionally weak, as the primary reference does not even include refrigerated display cases. However, pages two through thirty-five of the eighty-page Petition are directed to this Ground, so if Ground 1A fails, close to half of the Petition would relate to a failed ground. If the Board finds that less than all of the claims have a reasonably likelihood of institution, the Board may, in its discretion, elect not to institute. *See Deeper, UAB v. Vexilar, Inc.*, IPR2018-01310, Paper 7 at 42-43, (Jan. 24, 2019).

Finally, this Petition should be denied under 35 U.S.C. 325(d) to avoid wasting Board and Patent Owner resources on references that were considered by the Office eighteen years ago that resulted in a finding of patentability for the claims. Carter and Beatenbough were considered by the Office as part of an International Search Report for a nearly identical PCT application that was found to be novel and have an inventive step. These references form the entire basis of Ground 1A (Carter) and the core of the remaining Grounds 1B-1E (Carter and Beatenbough). These references were part of only four references cited. As such, these references alone and in combination have already been considered by the Office through the International Search Report, and this Petition should be denied on this basis. As a general matter, it would be nonsensical to invalidate a patent

that existed as a validly issued patent for the entirety of its statutory lifetime on largely, if not solely, the same grounds considered during prosecution.

In summary, Petitioner has failed to provide an adequate petition from which a trial should be instituted. In accordance with established principles, it is not the job of the Board to fill in the blanks and correct inadequacies in an *inter partes* review petition. *See CAO Group, Inc. v. The Procter & Gamble Co.*, IPR2014-00796, Paper 18 at 7 (Oct. 15, 2009) (stating that “Petitioner should not expect the Board to search the record and piece together what may support Petitioner’s arguments”); *see also Spears v. Holland*, Interf. No. 104,681, Paper 30 at 15 (BPAI 2002) (in the context of interference practice, “[i]t is not the role of this board to help party Spears articulate a difference between [claims]. That is the role of Spears’ counsel as an advocate, not the role of the board as an unbiased and impartial decision maker. Taking sides to aid one party to the detriment of the other is not what we do”). Accordingly, the duty to provide an adequate petition falls squarely on Petitioner, and Petitioner has failed to perform its duty by not showing a reasonable likelihood that it would prevail with respect to any of the claims in a way that justifies proceeding to trial. Patent Owner respectfully requests that the Board deny institution.

II. OVERVIEW OF U.S. PATENT NO. 7,207,181

The '181 Patent application was filed on March 1, 2005. The '181 Patent describes and claims a new and improved way to eliminate door and frame condensation on widely utilized commercial freezer/refrigeration display cases. *See* Ex.1001, Title; Abstract; 2:14-17.

The '181 Patent is specifically concerned with commercial freezer/refrigeration display cases. Reference to display cases is found in every claim of the patent. *See* at least the independent claims: Ex.1001, 9:29–30 (claim 1), 10:33 – 35 (claim 8), and 11:20 –11:21 (claim 14). The Field of the Invention section clarifies that the invention is designed to “remediate condensation build-up in refrigerated display cases.” *See* Ex.1001, 1:6–8 (emphasis added). This same context of commercial freezer/refrigeration display cases occurs throughout the '181 Patent. *See e.g.* Ex.1001, 5:14–17.

The novel approach of the '181 Patent relies on two sets of sensors—a “frame temperature unit” and a “dew point sensing unit”—to gather the information needed to efficiently “anticipate formation of condensation at the display case and activating and deactivating the frame/door heater responsive thereto.” *See* Ex.1001, 9:29–30 (claim 1), 10:33 –35 (claim 8), and 11:20–21 (claim 14).

The '181 Patent additionally provides for a number of features that further enhance the specificity of the design to refrigerated display cases. The Summary of the Invention states as follows:

The purpose of the apparatus, systems and methods of this invention is to efficiently *eliminate door and frame condensation at widely utilized commercial freezer/refrigeration display cases*. The invention is proactive in preventing condensation from forming by activating frame/door heaters before the dew point temperature at frame and door surfaces is reached. Power is then cycled off at a set point above dew point to save energy. This is accomplished by configuring apparatus of this invention to provide highly accurate sensing of frame temperature and dew point *by thermally isolating temperature sensors and constantly updating data* to reliably provide the ability to accurately anticipate condensation at case surfaces.

Ex.1001, 2:14 – 2:24, (emphasis added).

The inventors of the present patent specifically targeted their design to “commercial freezer/refrigeration display cases” and took special effort to deliver a design tailored for such devices. They did this not merely by providing two sets of sensors, one for dewpoint sensing and the other for sensing the temperature of the door and frame, but by additionally “thermally isolating temperature sensors” in a way specific to “commercial freezer/refrigeration display cases.” *See id.*

III. CLAIM CONSTRUCTION¹

In pertinent part, claims 1 and 8 of the '181 Patent recite:

. . . of the display case door or display case frame . . .

In pertinent part, claim 14 of the '181 Patent recites:

. . . the display case frame . . .

These elements of the independent claims specifically reference “the display case frame” bringing that feature of the preamble into the body of the claim.

In an *inter partes* review, claim construction begins with the language of the claims. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-14 (Fed. Cir. 2005). The “words of a claim are generally given their ordinary and customary meaning,” which is “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” *Id.* at 1312-13. The specification is “the single best guide to

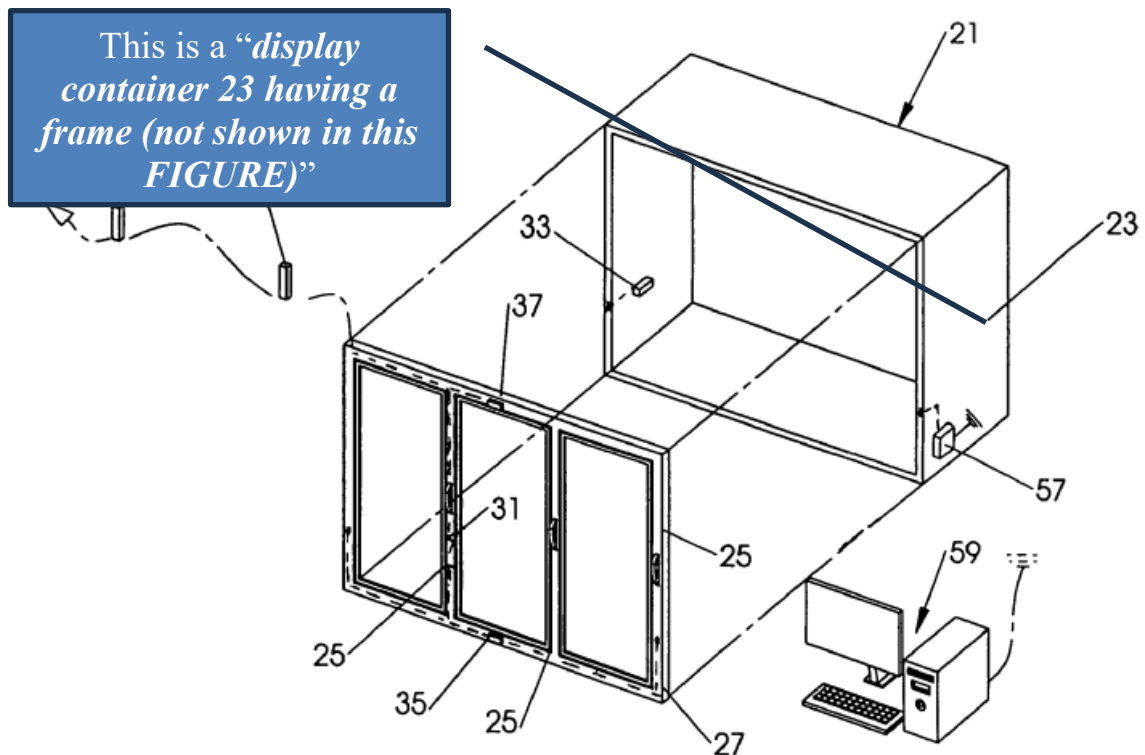
¹ Patent Owner discusses construction of certain claim terms only to the extent necessary for the Board to evaluate and reject Petitioner’s arguments at this preliminary stage. *See Vivid Techs. Inc. v. Am. Science & Eng’g., Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999). Patent Owner reserves the right to argue for a narrower or different construction of any term or claim in any pending or future litigation concerning this patent or any related patents.

the meaning of a disputed term and . . . acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication.” *Id.* at 1321 (internal quotation marks omitted). Although the prosecution history “often lacks the clarity of the specification and thus is less useful for claim construction purposes,” it is another source of intrinsic evidence that can “inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Id.* at 1317. Extrinsic evidence, such as expert testimony and dictionaries, may be useful in educating the court regarding the field of the invention or helping determine what a person of ordinary skill in the art would understand claim terms to mean. *Id.* at 1318-19. However, extrinsic evidence in general is viewed as less reliable than intrinsic evidence. *Id.* Further, as in *Shoes by Firebug LLC v. Stride Rite Children’s Group*, the present claims reach back into the preamble to pull limitations into the body of the claims. 962 F.3d 1362, 1367 (Fed. Cir. 2020). The Federal Circuit has explained that “[w]hile antecedent basis alone is not determinative of whether a preamble is limiting, use of preamble terms to define positive limitations in the body of claims can evince an inventor’s intent that the preamble limit the scope of the claim.” *Id.* That is the case here. The preamble limitations, namely a “refrigerated display case,” breath life and meaning into the claims and form the

antecedent for “the display case door or display case frame” of claims 1 and 8 and the “the display case frame” of claim 14, and therefore provide aspects of the claim that need to be addressed.

Petitioner largely ignores that the term “frame” may have any additional meaning beyond any physical structure that they choose to point to, especially in Carter. However, the term “frame” does not merely stand alone, it is a “display case frame.” It is clear from the specification and the claims themselves that in this context the terms have additional meaning. In fact, in relation to Fig. 1, the specification indicates that the frame of the display container is not shown, indicating that “a common commercial freezer/cooler display unit 21 including *a display container 23 having a frame (not shown in this FIGURE)* and doors 25 in frame 27 (hereinafter, refrigeration case(s)).” Ex.1001, 5:1-18 (emphasis added). Since the frame of the display container is not shown in Fig. 1, only the frame of the doors, the frame of the display container is not merely any structure as Petitioner seems to believe. The specification explains that the display container shown in Fig. 1 does not show the display container frame, and yet Petitioner points to substantially similar figure in Carter as allegedly showing a “display case frame.” Ultimately, it is not necessary for Patent Owner to explore what is meant by the term “frame”, and more specifically “display case frame”, only to note that Petitioner has not completed the necessary diligence to identify the meaning of this

term. *See* 37 CFR 42.104(b)(3) (explaining that petitioner has the burden to construe the claims); *see also Netflix, Inc. v. DivX, LLC*, 84 F.4th 1371, 1377 (“the Board should [] not have to decode a petition to locate additional arguments beyond the ones clearly made”).



Ex.1001, Figure 1.

IV. *INTER PARTES* REVIEW SHOULD NOT BE INSTITUTED BECAUSE THE PETITION FAILS TO SHOW WHERE AT LEAST ONE ELEMENT RECITED BY THE PENDING CLAIMS IS FOUND IN THE CITED REFERENCES

The Board should not institute a trial because Petitioner fails to “specify where each element of the claim is found in the prior art patents or printed

publications relied upon.” 37 C.F.R. § 42.104(b)(4). Consequently, Petitioner fails to demonstrate “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).

Claims 1-20 of the '181 Patent are challenged in this proceeding. Claims 1, 8, and 14 are the independent claims of the patent with all other claims depending therefrom. The proposed challenges for claim 1 are set forth under Grounds 1A, 1B, and 1D. *See* Pet., 1. The proposed challenge for claim 8 in the Petition is set forth under Ground 1E. *See* Pet., 1. The proposed challenges for claim 14 in the Petition are set forth under Grounds 1A and 1B. *See* Pet., 1. As discussed below, the Petition fails to show each and every element recited by Claims 1, 8, and 14 and thereby fails to show each and every element recited by all claims at issue in this proceeding, namely claims 1-20.

A. All Words in the Claim Must Be Considered.

“All words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970). Thus, when evaluating a claim for determining obviousness under 35 U.S.C. §103, all limitations of the claim must be considered.

As discussed above, the proposed challenges for the independent claims in the Petition are set forth under Grounds 1A, 1B, 1D, and 1E. In that regard, the Petition alleges that the preamble for all independent claims is addressed by Carter

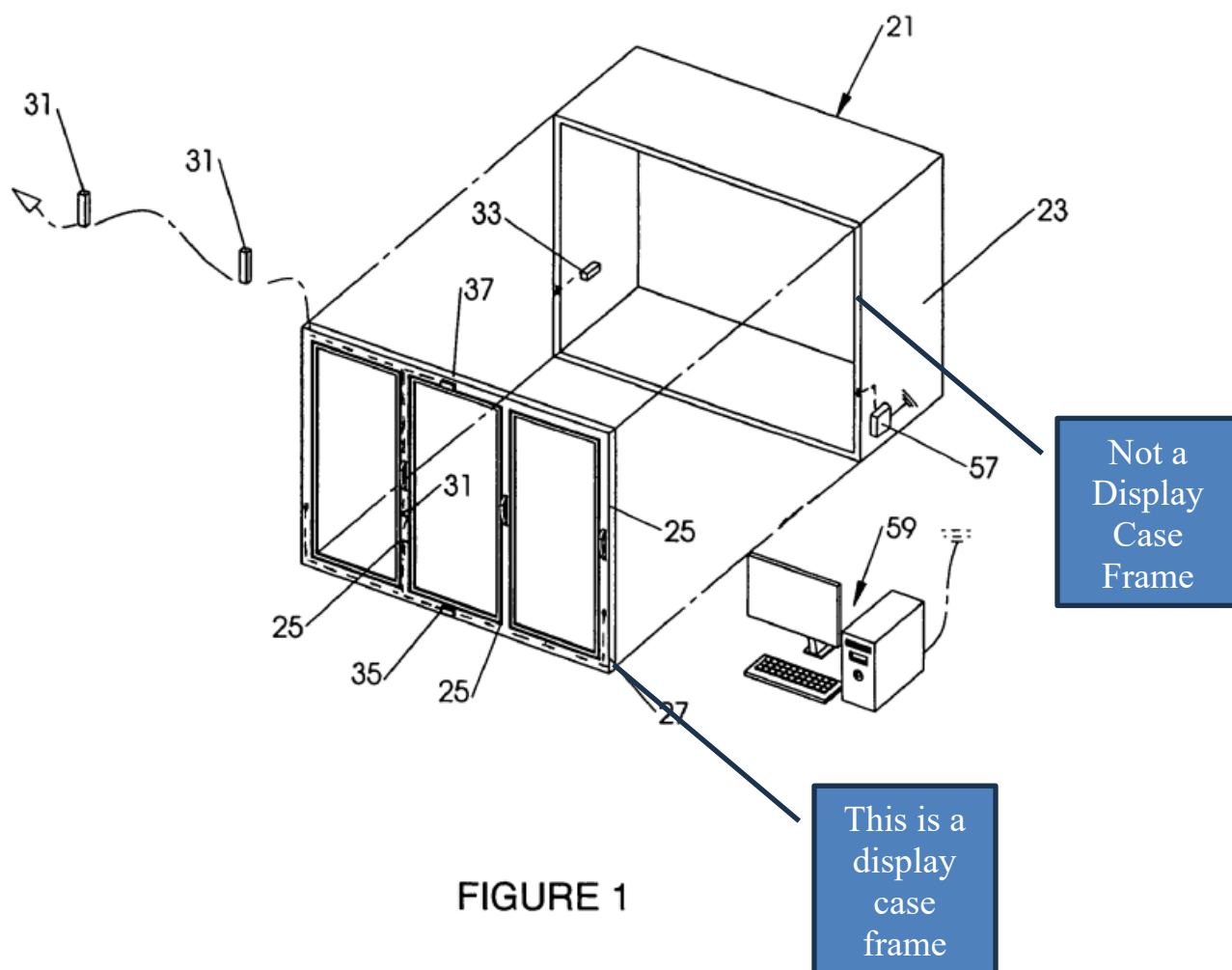
(Element[1.pre]). *See* Pet., 11. However, as set forth below, the Petition fails to consider every word in the claims. Namely, the petition fails to address the “refrigerated display case” and the “display case frame” with specificity. Instead of specifically addressing these aspects that breathe life and meaning into the claim by pulling aspects of the preamble into the body of the claim, Petitioner merely states in a conclusory fashion that “[a] POSITA would have been motivated to apply Carter’s apparatus to the well-known use case of display refrigerated cases that store retail food items in an environment where undesirable condensation can occur.” Ex.1003, ¶81 (quoting Ex.1004, 1:15–2:32), ¶¶34–41. In other words, Petitioner openly acknowledges that the recited “refrigerated display case” and “display case frame” are missing from the cited prior art. *Cf. Arendi S.A.R.L. v. Apple Inc.*, 832 F.3d 1355, 1362 (“references to ‘common sense’—whether to supply a motivation to combine or a missing limitation—cannot be used as a wholesale substitute for reasoned analysis and evidentiary support, especially when dealing with a limitation missing from the prior art references specified”).

Rather, the Petition spends significant time identifying aspects of Carter that are a “frame.” Patent Owner notes that the term “display case frame,” is specific to refrigerated display cases and is not merely a typical frame. Petitioner’s identification of a “frame” in Carter is clearly not the same as an identification of a “display case frame”—since Carter does not disclose a display case—but more

importantly, Petitioner does not even endeavor to identify a “display case frame.”

While the Petitioner does not necessarily have to address the meaning of every claim term, when there is dispute or ambiguity to the meaning of a term, this needs to be addressed under *Phillips* claim construction standards. Here, there is that very ambiguity, since the primary source of intrinsic evidence, the specification of the patent itself, indicates that a “frame” is not shown in the display case portion of Fig. 1 and Petitioner points to a frame in Carter bears a striking resemblance to that of Fig. 1 of the '181 Patent which is not a “frame.” This deficiency alone shows that the Petition fails on the merits.

Moreover, although it is not necessary for this response to establish why this is important, Patent Owner notes that the “display case frame” is fundamentally different from what Petitioner claims is a “frame” in Carter. This can clearly be seen in Fig. 1 of the '181 Patent, reproduced below and annotated. The refrigerated display case of Fig. 1 has a frame 27. *See* Ex.1001, 5:17. In frame 27, doors 25 are situated in order to provide both viewing of the contents and access to the inside of the refrigerated display case. The heat transfer and mounting of devices is different than that of Carter, which shows the mounting of sensors on the body of the freezer. This results in different heat transfer characteristics from the claimed “display case frame,” notwithstanding that the area identified in Carter is not a “display case frame.”



Ex.1001, Figure 1 (annotated).

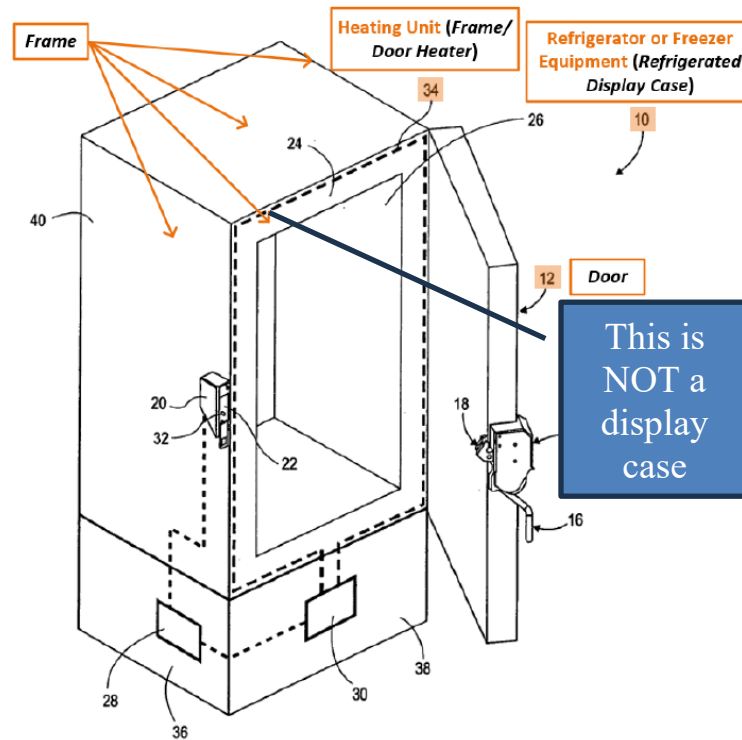


FIG. 1

EX1004, Figure 1 (annotated).

Pet., 12 (annotated).

B. The Petition Fails to Show “the display case frame” and “the refrigerated display case.”

The Petition fails because it is not enough to merely state that Carter or the other references *could be* applied to a refrigerated display case. *See Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1073 (Fed. Cir. 2015). The claims recite a display case frame, referring back to the “refrigerated display case” recited in the preamble as an antecedent. This relationship is not specifically addressed by Petitioner. In other words, identifying that a POSITA could have applied Carter’s apparatus to

refrigeration display cases is not the same as addressing the terms “the display case frame” and “the refrigerated display case” that appear in the claims.

The Petition also ignores important predicate factual questions, such as whether measuring a surface temperature as discussed by Carter would have taught or suggested to a POSITA the idea of evaluating the display case frame temperature. It is sufficient for the Board’s preliminary analysis to note that the Petition failed to show all elements of the claims and address all of the words of the claims. Accordingly, for at least this reason, the Petition fails to demonstrate “a reasonable likelihood that the petitioner would prevail with respect to at least one of the claims challenged in the petition.” 35 U.S.C. § 314(a).

V. *INTER PARTES* REVIEW SHOULD NOT BE INSTITUTED BECAUSE THE PETITION LACKS ARTICULATED REASONING WITH SOME RATIONAL UNDERPINNING TO SUPPORT ITS CHALLENGES TO THE CLAIMS.

A claim “composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” *KSR Int’l. Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). The Supreme Court stated that “[t]his is so because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.” *KSR*, 550 U.S. at 418-419. One “must [] be careful not to allow hindsight reconstruction of references to reach the claimed invention without any explanation as to how or

why the references would be combined to produce the claimed invention.” *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1343, 1368 (Fed. Cir. 2012) (quoting *Innogenetics, N.V. v. Abbott Labs.*, 512 F.3d 1363, 1374 n.3 (Fed. Cir. 2008)). Therefore, obviousness “cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *KSR*, 550 U.S. at 418.

A. Petitioner misidentifies the field of invention.

Petitioner attempts to justify combining or modifying Carter by first misstating the field of the ’181 Patent as relating to the field of “remediat[ing] condensation build up[sic].” Pet., 37. Petitioner fails to indicate that this is taken out of context and fails to indicate that the full statement of the field identified in the ’181 Patent is “remediat[ing] condensation build up in refrigerated display cases.” Ex.1001, 1:6-8 (emphasis added).

Field of Endeavor: Broadly stated, the ’181 patent pertains to the field of “remediat[ing] condensation build up.” EX1001, 1:5–10, 1:41–47 (explaining that “condensation control” is “utilized in a variety of applications”); EX1003, ¶¶145–146; *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1238 (Fed. Cir. 2010) (courts “construe the scope of analogous art broadly”). A POSITA would have understood that King’s disclosure of an integrated sensor package for use in a system that prevents “fog”—condensation—falls within the ’181 patent’s field. EX1003, ¶147.

Pet., 37.

This invention relates to frame and/or door heating to remediate condensation build-up in refrigerated display cases, and, more particularly, relates to sensing and operat-

Ex.1001, 1:6-8.

While Petitioner argues for construing the field of invention “broadly,” Petitioner has no legal support for its implied argument that the field of invention should be construed more broadly than that identified by the ’181 Patent itself. Notably, in the *Wyers v. Master Lock* case relied upon by Petitioner, the “patent itself defines its scope broadly, and makes clear that the claims are directed to ‘locking device[s]’ *generally*.” 616 F.3d 1231, 1238 (Fed. Cir. 2010) (emphasis added). In contrast, the ’181 Patent is not directed to condensation *generally*, nor even to refrigeration devices *generally*.

As a result, Petitioner has not actually provided a motivation to combine the references. “It was [Petitioner’s] burden to demonstrate both ‘that a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success in doing so.’” *Kinetic Concepts, Inc.* 688 F.3d at 1360 (*quoting Procter & Gamble Co. v. Teva Pharm. USA, Inc.*, 566 F.3d 989, 994 (Fed. Cir. 2009)). All the combinations are based on reading the field as “remediat[ing] condensation build up[sic],” and therefore finding a motivation to modify Carter or to combine Carter with other references. Carter, however, is not

in the field of remediating condensation build-up in refrigerated display cases.

Carter, at best, merely deals with condensation build-up.

The misidentification of the field of invention was not merely an oversight by Petitioner; rather, it was an integral part of Petitioner’s attempt to gloss over important differences between the claims and Carter. Petitioner alleges that Carter provides “complementary teachings on triggering heater activation/deactivation based on door/frame surface temperature.” But Carter is not in the field of remediating condensation build-up in refrigerated display cases and does not teach triggering based on display case frame surface temperature as claimed. Simply put, there is no display case frame in Carter. Petitioner conflates one surface of Carter’s specimen freezer with a display case frame, removing and ignoring the words “display case” from the claims, so that merely measuring a “frame” is equivalent. Petitioner is not entitled to rewrite the claims of the ’181 Patent. *See Intelligent Bio-Systems, Inc. v. Illumina Cambridge, Ltd.*, 821 F.3d 1359, 1367 (Fed. Cir. 2016) (“[F]ailure to consider the appropriate scope of the . . . patent’s claimed invention in evaluating the reasonable expectation of success . . . constitutes a legal error.”).

As a result, the Petition’s purported analysis of how the references might be combined is based on a misstatement of the field of invention in the ’181 Patent, a misstatement as to the teaching of Carter, and the omission of relevant claim terms.

That is insufficient to show any likelihood of prevailing. *See ActiveVideo*

Networks, Inc. v. Verizon Commc'n, Inc., 694 F.3d 1312, 1327 (Fed. Cir. 2012)

(obviousness requires an explanation of “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”); *Dominion Dealer Solutions, LLC v. Autoalert, Inc.*, IPR2013-00223, Paper 9 at 19 (August 15, 2013) (Board denied petition on obviousness grounds, stating: “[n]otably absent from [petitioner’s] stated rationale is a sufficient explanation of how the references may be combined, from the perspective of one with ordinary skill in the art, to arrive at the claimed invention, and why the proffered combination accounts for all the features of each claim”).

B. Petitioner’s incorrect field of invention infects and undermines all claim challenges.

The Petition includes five different grounds for rejection. Pet., 1. All of these combinations depend primarily on Carter.

Ground 1A relies solely on Carter. In this example of single reference obviousness, even if as stated, a “POSITA would have been motivated to apply Carter’s apparatus to the well-known use case of refrigerated display cases that store retail food items in an environment where ‘undesirable condensation can occur,’” were true—and it is not—the grounds presented do not address every aspect of the claims. Moreover, the motivation here is illusory and does not line

up. On one hand, Petitioner positions Carter's invention as addressing "housing specimens requiring subjection to certain operating temperatures for one of a variety of reasons," such as "to ensure that it doesn't spoil." Pet., 13. Carter finds usage in scenarios that may prevent the closing of the door and causing this referenced spoilage. Carter says:

Should condensation develop and/or refreeze along any freezer/refrigeration sealing areas such as a gasket, the gasket may lose its ability to remain flexible in order to seal surfaces completely. Hence, with a seal unable to conform to the surface of the freezer/refrigeration equipment, potential air paths could develop along the gasket surface contact area. This effect could result in the freezer/refrigeration equipment not being able to seal properly and hence, an inability of the freezer/refrigeration equipment to maintain a prescribed operating temperature(s).

Ex.1004, 1:45-54.

But there is no indication that refrigerated display cases suffer from the same issue, and in fact, they do not. Instead, the issue is that the condensation "can cause door damage and presents a safety hazard if runoff from the door(s) and/or case frames accumulates on adjacent floors." Ex.1001, 1:14-17. No connection is made by Petitioner between these two different motivations, save the prevention of undesirable condition. (Pet. 13, ¶ 2). This statement of deploying Carter to use cases where "undesirable condensation can occur," is not a real motivation based

in logic, but a circular statement of labeling something undesirable and then claiming that is motivation to prevent it.

ID	Claims	Basis for Rejection
1A	1-2, 14-18	§103: Carter (US 7,137,262)
1B	1-7, 14-18	§103: Carter, Beatenbough (US 5,778,689), King (US 6,422,062)
1C	17-20	§103: Carter, Beatenbough, King, Gatling (US 6,502,409)
1D	1-6	§103: Carter, Beatenbough, Kotani (US 5,396,796)
1E	8-13	§103: Carter, Beatenbough, Gatling

Each of these references pre-dates the '181 patent's filing date of March 1, 2005.

Pet., 1.

Ground 1B relies on “Carter’s complementary teachings on triggering heater activation/deactivation based on door/frame surface temperature.” Pet., 38. Carter is not in the field of remediating condensation build-up in refrigerated display cases and does not teach triggering based on display case frame surface temperature as claimed, because there is no display case frame in Carter. Petitioners conflate a surface of Carter with a display case frame, removing or ignoring the words “display case” from the claims, treating any “frame” as equivalent. Without fully addressing the words of the claims, not only are the claims not taught, they cannot be rendered obvious.

Petitioners continue to ignore the words of the claims and adopt the position that the “Carter-Beatenbough condensation control scheme relies on surface temperature...” when describing why a POSITA would be motivated to combine

King into Carter-Beatenbough. Again, this fails since the claims aren't concerned with surface temperature, but instead display case frame temperature.

By closely examining Petitioner's building of a supposed Carter-Beatenbough condensation control scheme, it becomes clear where Petitioner argues that the teachings originate. On page 38 of the Petition, when the Carter-Beatenbough condensation control scheme is first examined, Petitioner indicates that "[a] POSITA would have been motivated to incorporate Carter's teachings on selectively triggering heater activation/deactivation based on the monitored door/frame surface temperature of a refrigerated case with Beatenbough's teachings of a variable pulse width technique for operating the heater(s) on a refrigerated display case more efficiently." In this, Petitioner takes the position that Carter teaches "selectively triggering heater activation/deactivation based on the monitored door/frame surface temperature of a refrigerated case." However, because there is no teaching of a "frame" temperature control in Carter, the combination is lacking. Therefore, the "Carter-Beatenbough condensation control scheme" is faulty in its purported teachings. This is not a real control scheme, but an assumed and unspecified scheme that is not complete and built on faulty grounds. That is, again, the claims do not recite controlling heater activation based on surface temperature, but instead display case frame temperature.

In Grounds 1C, 1D, and 1E, the combination relies on the same failed Carter-Beatenbough combination. As indicated, the Carter-Beatenbough combination fails because it relies on Carter for the display case frame temperature sensing, but Carter does not provide a display case frame. Therefore, these combinations fail as well.

Returning to obviousness over Carter itself and the combination of Carter-Beatenbough, the analysis provided by Petitioner relies heavily on the conclusory statement concerning Carter's field of use and the general field of use of the invention, even though this conflicts with that of the '181 Patent. Also, importantly, even when justification is provided, it rests on a misstatement of Carter's teaching. Namely, the Petition states that Carter teaches "selectively triggering heater activation/deactivation based on the monitored door/frame surface temperature of a refrigerated case." Pet. 38. This is incorrect. Carter is not monitoring the door/frame surface temperature. Carter actually states that the "external surface temperature of a freezer/refrigeration equipment," is monitored. (Carter at c. 3, l. 43-44). The Petition fails to show that this external surface temperature is the same as the claimed aspects that recite monitoring "one of the display case door or display case frame" (claim 1 and 8) and monitoring "case frame temperature" (claim 14). No explanation or analysis is given as to how the display case frame temperature might relate to the external surface temperature of

freezer/refrigeration equipment. This continues Petitioner's failure to address plain aspects of the claims and appreciate the distinction between refrigeration equipment and refrigeration equipment that has a display case frame and display case door. Moreover, to support this conclusory statement, Petitioner cites to ¶81 of Dr. Henze's declaration. *See* Pet., 13. However, Petitioner's conclusory statement serves little more than an unexplained placeholder without reciting portions of Dr. Henze's declaration. The rules are clear that information contained in exhibits, but not discussed in the Petition, is not incorporated into the Petition. *See* 37 C.F.R. § 42.6 (a)(3). And as discussed above, the Board has cautioned against the very practice employed by Petitioner of burying its analysis in an expert declaration. *See Conopco, Inc. v. Procter & Gamble Company*, IPR2013-00510, Paper 9 at 8 (February 12, 2014). Regardless, Dr. Henze's testimony at ¶81 similarly fails to address the distinction between the prior art's discussion of monitoring surface temperature and the claims' recited monitoring of a display case door temperature or a display case frame temperature.

Accordingly, the Petition fails to provide articulated reasoning with some rational underpinning to support the legal conclusion of obviousness with respect to Grounds 1A-1E of the Petition. Instead, the Petition is replete with conclusory statements about the references in a given grouping (i.e. Groups 1B-1E) that do not always correspond to the same combination of references applied in the other

grounds. This analysis falls short of stating why one skilled in the art would have modified the references in the manner recited by claims 1-20. There is simply no analysis in the Petition on why and how one skilled in the art would have modified Carter to function in the context of display cases and how Carter teaches this aspect, alone or in combination with the other references. *See ActiveVideo Networks, Inc.*, 694 F.3d at 1327 (obviousness requires an explanation of “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”); *Personal Web Techs., LLC v. Apple, Inc.*, 848 F.3d 987, 993 (Fed. Cir. 2017) (it is not enough to show that “a skilled artisan, once presented with the two references, would have understood that they could be combined”); *Intelligent Bio-Systems, Inc.*, 821 F.3d at 1367 (it is Petitioner’s burden to demonstrate “that a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success in doing so”).

VI. *INTER PARTES* REVIEW SHOULD NOT BE INSTITUTED BECAUSE THE PETITION FAILS TO ARTICULATE THE DIFFERENCES BETWEEN THE CHALLENGED CLAIMS AND THE CITED REFERENCES.

A petitioner has the burden of proof to establish that it is entitled to the

requested relief. *See* 37 C.F.R. § 42.20(c). Differences between the claimed invention and the prior art are a critically important underlying factual inquiry for any obviousness analysis. *See Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17 (1966). Although the Board has “broad authority to establish procedures for revisiting earlier-granted patents in IPRs, that authority is not so broad that it allows the [Board] to raise, address, and decide unpatentability theories never presented by the petitioner and not supported by record evidence.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1381 (Fed. Cir. 2016); *see also Nike, Inc. v. Adidas AG*, 955 F.3d 45, 52 (Fed. Cir. 2020) (“Since the petitioner provided only conclusory arguments as to a motivation to combine the references underlying the Board’s obviousness conclusion, we determined that the Board did not have sufficient evidence on which to base its conclusion.”) (citing *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d at 1380). As set forth below, there are several instances in the Petition where Petitioner has failed to articulate the differences between the challenged claims and the cited references, let alone how the references are being combined.

A. The Petition Fails to Discern What Portions of Carter or Knowledge of a POSITA Is Being Relied Upon to Meet Pertinent Claim Limitations Under Ground 1A.

Petitioner asserts that claims 1-2, 14-18 are obvious over Carter. Pet., 35. Petitioner fails to reconcile where the “refrigerated display case” of the preamble

and the “the display case frame/door heater” of Petitioner-labeled limitation 1.c are provided by Carter.

First, in relation to the “refrigerated display case” of the preamble, Petitioner fails to identify the source of this claim term. Petitioner does not allege that the “refrigerated display case” is found in Carter. Instead, Petitioner indicates: “A POSITA would have been motivated to apply Carter’s apparatus to the well-known use case of refrigerated display cases that store retail food items in an environment where undesirable condensation can occur.” Pet., 13 (cleaned up). The preamble of this claim forms an antecedent for “the display case frame/door heater” and therefore it is necessary to show this claim term. *See supra*, § III. Therefore, indicating that a POSITA would apply Carter to the use-case of a refrigerated display case is not the same as identifying a prior-art disclosure of a refrigerated display case. This gap leaves Patent Owner to guess as to whether the POSITA is being cited as teaching refrigerated display cases, which is improper. *Netflix, Inc.*, 84 F.4th at 1377 (“A petitioner may not rely on a vague, generic, and/or meandering petition and later fault the Board for failing to understand what the petition really meant. Ultimately, it is the petitioner's burden to present a clear argument.”); *see also Arendi S.A.R.L. v. Apple Inc.*, 832 F.3d 1355, 1366 (stating that “conclusory statements and unspecific expert testimony” cannot be relied upon by the Board “in drawing its conclusion that it would have been ‘common sense’”

to supply a limitation missing from the prior art: “these errors were particularly problematic considering the fact that a key limitation of the ’843 patent was missing from the prior art reference in dispute”).

Second, Petitioner never addresses where “the display case frame/door heater” is taught in Carter. The Petition merely presumes without explanation that the “heating unit 34” described by Carter corresponds to the claimed “display case frame/door heater”:

The sealing surface 24 is part of a *frame* against which the door 12 seals when held shut by the door latch assembly 14. EX1004, 3:54–4:2; EX1003, ¶80. A *(frame/door)* “*heating* unit 34” “traverses” this portion of the frame, “providing supplement[al] heat generally to the sealing surface area” of both the frame and door, such that “the effects of condensation can be...prevented.” EX1004, 4:36–67.

Pet., 13 (highlight emphasis added).

Petitioner’s use of parenthesis implicitly acknowledges the informational gap between Carter’s disclosure and the claim language—and studiously avoids providing any of the analysis required to explain Petitioner’s position for why this difference would have been obvious to a POSITA.

This lack of required analysis leaves the Board and Patent Owner with only the ability to guess which claim limitations are allegedly supplied by Carter or whether a POSITA is relied on to teach these aspects. Moreover, the Board and Patent Owner are left to speculate as to which references are providing what

aspects and even what the ultimate combination yields. This approach improperly shifts the burden to the Board and Patent Owner to discern what particular portions of each reference are being relied upon as meeting the pertinent claim limitations and thereby obscures the actual teachings of the prior art. *See In re Natural Alternatives, LLC*, 659 Fed. Appx. 608, 614 (Fed. Cir. 2016) (“By failing to address this difference in the objectives of the prior art and the claimed invention, the examiner failed to set forth a prima facie case for motivation to combine.”).

Accordingly, because Petitioner’s presentation seeks to put the burden on Patent Owner and the Board to determine the differences between challenged claims and the cited references in the Petition, the corresponding grounds of obviousness must fail. *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d at 1381.

B. The Petition Fails to Discern What Portions of Carter, Beatenbough, and King are Being Relied Upon to Meet Pertinent Claim Limitations and How the References are Being Combined Under Ground 1B.

Petitioner asserts that claims 1-7, 14-18 are obvious over Carter, Beatenbough, and King under Ground 1B. Pet., 35. Claim 1 in part reads: “a frame temperature sensing unit adapted for monitoring temperature of one of the display case door or display case frame and including a carrier having a temperature sensor thereat[.]”

It is not possible to determine from the Petition what reference or combination of references is alleged to teach this aspect. There are multiple

possible options that appear to be presented, and Patent Owner cannot determine which one is intended. The confusion engendered by Petitioner's presentation begins with the language presented on page 46 of the Petition, where Petitioner argues for the further incorporation of King into its prior art combination.

First, King clearly operates in the automotive field, indicating in the technical field section that "[t]his invention relates to an automotive windshield fog sensor," and is entitled "Integrated Glass Fog Sensor Unit." Ex.1005, 1:4-5. So, King provides an automotive windshield fog sensor. This plainly makes King non-analogous art.

Second, Petitioner states: "In pursuing the Carter-Beatenbough-King Combination, a POSITA would have contemplated locating a '**sensor unit**' according to King's teachings such that the above-discussed glass **temperature sensor** is placed against—and, thus, **monitors the temperature of**—the outer glass pane supported by the frame of Beatenbough's display case door." Pet., 46. It appears that Petitioner is indicating that a POSITA would choose to place King's automotive sensor against the glass of Beatenbough.

However, it is not clear why this makes sense. Recall that the Petitioner conclusorily alleged that Carter would help of one of ordinary skill in the art to monitor a display case door/frame temperature (despite Carter not describing any of that). Petitioner also alleged a "POSITA would have been motivated to

incorporate Carter's teachings on selectively triggering heater

activation/deactivation based on the monitored door/frame surface temperature of a refrigerated case with Beatenbough's teachings of a variable pulse width technique for operating the heater(s) on a refrigerated display case more efficiently." Pet.,

38. As such, Petitioner's earlier analysis was apparently relying on Carter for monitoring the "door/frame surface temperature of a refrigerated case" and Beatenbough for "variable pulse width technique for operating the heater(s) on a refrigerated display case." *Id.* But the Petition at 46 has jettisoned that analysis and instead is now relying on Beatenbough for monitoring "the outer glass pane supported by the frame of Beatenbough's display case door," with no real explanation for the switch. *See* Pet., 46. This confusing presentation fails to identify with the requisite particularly what reference is being relied on for what claim limitation.

Third, Petitioner states: "It would have been an obvious alternative solution to locate a 'sensor unit' like the one King teaches against the display case frame to monitor frame temperature, as was well known in the art and even taught by Carter (*see* Element[1.a], Ground 1A)." Pet., 46. It appears that Petitioner is indicating that a POSITA's common sense, or maybe Carter, provides for placing the sensor against the display case frame. However, Carter does not include a display case frame, since there is no disclosure of a display case in Carter. Thus, there is no

teaching in Carter to locate a sensor against a display case frame. Determining how or why a POSITA would have applied the automotive sensor of King to a non-existent component of Carter is unexplained. Patent Owner cannot reasonably be expected to respond to such a vaguely described obviousness argument. Furthermore, the Petition completely ignores the fact that Carter already includes a temperature sensor suitable to its refrigerator, and thus, would not plausibly benefit from the addition of an automotive sensor.

Thus, Petitioner has failed to articulate the claim limitations missing from these claim elements with respect to Carter, Beatenbough, and King in its Petition and has further failed to discuss why it would have been obvious to modify which reference of Carter, Beatenbough, and King with a teaching of the other references.

This lack of required analysis leaves the Board and Patent Owner with only the ability to guess which claim limitations are being addressed by each of Carter, Beatenbough, and King and even what the references yield. This approach improperly shifts the burden to the Board and Patent Owner to discern what particular portions of each reference are being relied upon as meeting the pertinent claim limitations and thereby obscures the actual teachings of the prior art. *See Google Inc. v. Everymd.com LLC*, IPR2014-00347, Paper 9 at 24-25 (May 22, 2014) (denying petition where petition failed to meaningfully address “the scope

and content of the prior art and any differences between the claimed subject matter and the prior art”).

Accordingly, because Petitioner is relying on Patent Owner and the Board to determine the differences between challenged claims and the cited references in the Petition, the corresponding grounds of obviousness do not reach the threshold for the institution of trial. *See Liberty Mutual Ins. Co. v. Progressive Casualty Ins. Co.*, CBM-2012-00003, Paper 7 at 2-3 (Oct. 25, 2012).

**VII. *INTER PARTES* REVIEW SHOULD NOT BE INSTITUTED
BECAUSE THE PETITION FAILS TO COMPLY WITH 35 U.S.C.
§ 312(a)(3), 37 C.F.R. § 42.22(a)(2), and 37 C.F.R. § 42.104(b)(4)–(5).**

A petition for *inter partes* review must “identif[y], in writing and with particularity, each claim challenged, the grounds on which the challenge to each claim is based, and the evidence that supports the grounds for the challenge to each claim.” 35 U.S.C. § 312(a)(3). According to 37 C.F.R. § 42.104(b)(4), a petition for *inter partes* review “must identify how the construed claim is unpatentable under the statutory grounds on which the petitioner challenges the claims, and must specify where each element of the claim is found in the prior art patents or printed publications relied upon.” 37 C.F.R. § 42.104(b)(5) adds that the Petition must “identify[] specific portions of the evidence that support the challenge.” Similarly, 37 C.F.R. § 42.22(a)(2) states that each petition must include “[a] full statement of the reasons for the relief requested, including a detailed explanation of the

significance of the evidence including material facts, and the governing law, rules, and precedent.” Still further, the Office Patent Trial Practice Guide suggests that parties requesting *inter partes* review should “avoid submitting a repository of all the information that a judge could possibly consider, and instead focus on concise, well-organized, easy-to-follow arguments supported by readily identifiable evidence of record.” 77 Fed. Reg. 48,756, 48,763 (Aug. 14, 2012). Here, Petitioner fails to satisfy each of these requirements.

In that regard, Petitioner alleges 5 different grounds 1A-1E. Pet., 1. Petitioners spend many pages analyzing various aspects of the claims. However, this discussion is performed without reference to some of the important claims aspects, including, but not limited to (1) “a frame temperature sensing unit adapted for monitoring temperature of one of the display case door or display case frame and including a carrier having a temperature sensor thereat,” from claim 1, (2) “a frame temperature sensing unit adapted for mounting at the display case for monitoring temperature of one of the display case door or display case frame,” from claim 8, and (3) “a temperature sensing unit in contact with the display case frame to monitor case frame temperature,” from claim 14.

Then, rather than providing concise, well-organized, easy-to-follow arguments supported by readily identifiable evidence of record, Petitioner embeds arguments in multiple nested cross references to Exhibits and other parts of the

Petition. *See* for instance, page 73 of the Petition, a snippet of which is reproduced below.

(a) **Claim 1**

Element[1.pre]: Condensation control apparatus...

See Element[1.pre], Ground 1B (the combination of teachings from Carter and Beatenbough). EX1003, ¶221.

Pet., 73.

It is unclear what Petitioner means by the parenthetical following “Ground 1B.” The parenthetical text is not a heading or other clearly identify portion of the Ground 1B analysis. Thus, it is unclear what is being incorporated by reference from Ground 1B.

Additionally, Petitioner provides scant analysis in multiple places throughout the Petition. A prime example is the application of King to Beatenbough, where Petitioner states:

In pursuing the Carter-Beatenbough-King Combination, a POSITA would have contemplated locating a “sensor unit” according to King’s teachings such that the above-discussed glass temperature sensor is placed against—and, thus, monitors the temperature of—the outer glass pane supported by the frame of Beatenbough’s display case door. Ex.1003, ¶167.

Pet., 46.

This is a significant simplification of the combination of these references, recalling that King operates in the context of a windshield of a vehicle and not refrigeration (let alone refrigerated display cases). In an annotated figure, Petitioner labels King’s system a “Frame Temperature Sensing Unit.” Pet., 46. But King describes the unit as “an **integrated glass fog sensor unit 10** [that] communicates with a fog control unit 12. Unit 12 can be an integral part of a heating, ventilation [sic], and air conditioning control system, HVAC, **of a vehicle**, wherein the unit 10 is adhered to a glass surface 14 of a windshield.” Ex.1005, 2:34-39 (emphasis added). The adaptation of King’s device from the automotive context gets one conclusory sentence in the Petition, showing that Petitioner relies on hindsight bias instead of a legally supportable obviousness motivation. Pet., 46.

Another example is Petitioner’s treatment of Carter in relation to refrigerated display cases. To allege that Carter teaches refrigerated display cases, Petitioner merely states:

A POSITA would have been motivated to apply Carter’s apparatus to the well known use case of refrigerated display cases that store retail food items in an environment where “undesirable condensation can occur.” Ex.1003, ¶81 (quoting Ex.1004, 1:15–2:32), ¶¶34–41. Just as condensation control apparatus were desirable in the context of refrigerated cases for specimens, they were also sought by skilled artisans for refrigerated cases used to display food items. *Id.*

Pet., 13.

However, as previously discussed, refrigerated display cases form a core aspect of the claimed subject matter and their structure and frame is integral to the claims. But disclosure of this important context is absent from the prior art, and any analysis of this application is similarly absent from the Petition itself.

Petitioner's ipso facto assertions are insufficient and demonstrate improper hindsight bias. Relatedly, the Petition's "unexplained citations are inadequate to demonstrate a reason to modify the teachings of a particular reference or to combine the teachings of two or more references to teach or suggest a limitation of a challenged claim." *Gracenote, Inc. v. Iceberg Indus., LLC*, IPR2013-00552, Paper 6 at 22 (March 7, 2014).

As the Board fully appreciates, the Petition must itself set forth Petitioner's arguments, not seek to incorporate necessary analysis from other documents not subject to the word count limit. *See* 37 C.F.R. § 42.6 (a)(3). The Board has cautioned against the strategy employed here by Petitioner of burying its arguments in an expert declaration. *See Cisco Systems, Inc. v. C-Cation Technologies, LLC*, IPR2014-00454, Paper 12 at 7-10 (Aug. 29, 2014) (explaining that 250-page expert declaration "serves to circumvent the page limits imposed on petitions for *inter partes* review, while imposing on our time by asking us to sift through over 250 pages of [the] Declaration (including numerous pages of claim

charts) to locate the specific arguments corresponding to the numerous paragraphs cited to support petitioner’s assertions”); *Conopco, Inc. v. Procter & Gamble Company*, IPR2013-00510, Paper 9 at 8 (February 12, 2014) (“We decline to consider information presented in a supporting declaration, but not discussed in a petition, because, among other reasons, doing so would encourage the use of declarations to circumvent the page limits that apply to petitions.”).

Dr. Henze’s declaration is one hundred and eighty-two pages in length. To incorporate all of Dr. Henze’s remarks into the Petition would have plainly exceeded the word count limit. For example, Petitioner’s analysis of claim 1 in ground 1A is limited to a few pages of the Petition, while Petitioner cited to thirty-seven paragraphs of Dr. Henze’s declaration.

Thus, “the Petition’s consistent citation to voluminous portions of the [Henze] Declaration, . . . runs afoul of the particularity and specificity required of supporting evidence under our governing statute and rules. *See* 35 U.S.C. §312(a)(3); 37 C.F.R. §§ 42.22(a)(2), 42.104(b)(4)–(5).” *Apple, Inc. v. Contentguard Holdings, Inc.*, IPR2015-00444, Paper 9 at 8 (July 9, 2015). It is not the Board’s or Patent Owner’s obligation to identify the relevant evidence or arguments. *See Smithkline Beecham Corp. v. Apotex Corp.*, 439 F.3d 1312, 1320 (Fed. Cir. 2006) (“Judges are not like pigs, hunting for truffles buried in briefs.” (quoting *United States v. Dunkel*, 927 F.2d 955, 956 (7th Cir. 1991))).

Based on the foregoing, “the Petition fails: (1) to specify sufficiently where the limitations of the challenged claims are taught or suggested by [the cited references]; and (2) to provide a sufficiently detailed explanation of the significance of the citations to these references and the [Henze] Declaration—as required under 35 U.S.C. § 312(a)(3), 37 C.F.R. § 42.22(a)(2), and 37 C.F.R. § 42.104(b)(4)–(5).” *Apple, Inc. v. Contentguard Holdings, Inc.*, IPR2015-00444, Paper 9 at 8 (July 9, 2015).

VIII. *INTER PARTES* REVIEW SHOULD NOT BE INSTITUTED BASED ON THE OVERALL WEAKNESS OF MANY GROUNDS.

Petitioner presents a variety of grounds (or perhaps subgrounds of one ground). Pet., 1. All of the grounds present only weak arguments, with some even weaker than others. If the Petition were to be instituted, the Board and parties would have to address all of them. Pursuant to 35 U.S.C. § 314(a), an *inter partes* review may not be instituted “unless . . . the information presented in the petition . . . and any response . . . 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.” But even when a petitioner demonstrates a reasonable likelihood of prevailing with respect to one or more claims, institution of review remains discretionary. *SAS Inst. Inc. 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)); *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d

1356, 1367 (Fed. Cir. 2016) (“[T]he PTO is permitted, but never compelled, to institute an IPR proceeding.”). If the Board finds that less than all of the claims have a reasonably likelihood of institution, the Board may, in its discretion, elect not to institute. *See Deeper, UAB*, IPR2018-01310, at 42-43.

Even if the Board were to find one or two potentially meritorious challenges in the Petition, the Petition as a whole should be denied institution. For example, Ground 1A relies solely on Carter. Carter’s teachings do not operate in the context of a refrigerated display case. As this ground is likely to fail since the primary reference is not even analogous art, significant time would be wasted addressing Ground 1A alone. Pages two through thirty-five of the eighty page Petition are directed to this Ground, so if Ground 1A fails, close to half of the Petition would relate to a failed ground. If Ground 1A fails, instating the Petition would not be an efficient use of the Board’s resources.

IX. INTER PARTES REVIEW SHOULD NOT BE INSTITUTED UNDER 35 U.S.C. § 325(d) SINCE THE PRIMARY REFERENCES HAVE ALREADY BEEN CONSIDERED.

After Patent Owner presented its brief on Discretionary Denial (Paper 7), the Director issued a new precedential opinion addressing the scope and application of discretionary denial under 35 U.S.C. § 325(d). *See Ecto World, LLC v. Rai Strategic Holdings, Inc.*, IPR2024-01280, Paper 13 (May 19, 2025). This Preliminary Response is therefore Patent Owner’s first opportunity to address the

appropriateness of discretionary denial under 35 U.S.C. § 325(d) with the benefit of the Director's most recent binding guidance. Importantly, and in contrast to prior guidance from the Office, prior art that was cited but not discussed is presumed to have been considered by an examiner:

This decision resolves that dispute and clarifies that **a petitioner must provide an analysis even when the asserted prior art is on an IDS**, but the Examiner did not apply the reference.

Ecto World, IPR2024-01280, Paper 13 at 5.

The heart of Petitioner's combination of references has already been considered by the Office, and the challenged claims were effectively determined to be patentable. Carter and Beatenbough were considered by the Office in the context of an International Search Report that issued on December 21, 2007 for a Patent Cooperation Treaty application (*See Ex.2007*) having essentially the same contents as the '181 Patent. *See Ex.2008*, 3. This action occurred approximately eight months after the '181 Patent issued on April 24, 2007. Unsurprisingly, the Office, acting as the International Searching Authority in a Written Opinion of the International Searching Authority issued on September 24, 2007, found that the claims presented were novel and contained an inventive step. *See Ex.2009*, 4. Those presented claims included claims identical to the issued '181 Patent (at least in relation to claims 1 and 8 and those claims dependent thereon, claims 1-13; the remaining claims 14-20 are method claims and were withdrawn via a restriction

requirement). This Written Opinion of the International Searching Authority was issued by the US receiving office. *Id.* at 1.

Section 325(d) of 35 U.S.C. provides that the Director may deny institution when “the same or substantially the same prior art or arguments previously were presented to the Office.” 35 U.S.C. § 325(d). *Advanced Bionics* provides a two-part framework for evaluating whether denial under section 325(d) is warranted: (1) whether the same or substantially the same prior art or argument previously was presented to the Office; and (2) if the first part is satisfied, whether the petitioner has demonstrated that the Office erred in a manner material to the patentability of challenged claims. *Advanced Bionics v. Med-El Elektromedizinische Geräte GMBH*, Paper 6 at 8 (February 13, 2020). The factors set forth in the Board’s *Becton Dickinson* decision provide useful insight into how to apply the framework under 35 U.S.C. § 325(d). *Becton, Dickinson & Co. v. B. Braun Melsungen AG*, IPR2017-01586, Paper 8 (Dec. 15, 2017) (precedential as to § III.C.5, first paragraph).

The *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;

(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., IPR2017-01586, at 17–18.

For factor (a), under Ground 1A (Carter) and the core of the other Grounds 1B-1E (Carter and Beatenbough), the art is the same. This prior art is precisely and entirely cumulative under factor (b). Since there were only four cited references of the two at issue here, it is likely that Carter and Beatenbough were sufficiently evaluated under factor (c). Under factor (d), there are no arguments to evaluate, except that in the Written Opinion of the International Searching Authority (i.e., the Office), it was determined that the claims were patentable in view of Carter and Beatenbough. *See* Ex.2009, 4. Under factor (e), there is no specific analysis of how the Office failed in its analysis. Under factor (f), additional evidence is presented, however as explained elsewhere in this Paper, this evidence is flawed.

Based on the nearly identical nature of the claims and the citation of Carter

and Beatenbough in the International Search Report, the Board should find that the references were previously presented to the Office under part 1 of the *Advanced Bionics* framework.

Under the second part of the framework, the USPTO Examiner writing the International Search Report could hardly have overlooked Carter and Beatenbough, as there are only four prior art references on the report. *See* Ex.2008, 3. The Petition does not address whether there was a material error.

Finally, under *Becton Dickinson* factor (f), the Carter and Beatenbough references were not buried among numerous references. *Cf. Ecto World, LLC and SV3, LLC v. Rai Strategic Holdings, Inc.*, IPR2024-01280, Paper 13 at 6, (May 19, 2025). There were only four references considered. These references forms the entire basis of Ground 1A (Carter) and the core of the other Grounds 1B-1E (Carter and Beatenbough). But these references alone and in combination have already been considered by the Office in preparing the International Search Report. Therefore, denial under 35 U.S.C. § 325(d) is appropriate.

X. CONCLUSION

Because Petitioner has failed to meet its burden and the Petition fails to demonstrate a reasonable likelihood that Petitioner will prevail on any of the claims challenged in each and every Ground (Grounds 1A-1E), *inter partes* review of claims 1-20 of the '181 Patent should be denied.

Respectfully submitted,

Dated: May 27, 2025
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Registration No. 57,931

CERTIFICATE OF WORD COUNT

Under 37 C.F.R. § 42.24(b)(1), the undersigned attorney for the Patent Owner declares that the argument section of this Patent Owner's Preliminary Response (Sections I-X) has 10,111 words, according to the word count tool in Microsoft Word™.

/Robert P. Ziemian/

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), the undersigned certifies that a true and correct copy of the foregoing was served on the Petitioner as detailed below:

<i>Date of service</i>	May 27, 2025
<i>Manner of service</i>	Electronic Email: IPR43789-0259IP1@fr.com ; PTABInbound@fr.com
<i>Documents served</i>	Patent Owner's Preliminary Response Under 37 C.F.R. §§ 42.107 and Exhibits Ex.2007 – Ex.2009
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