

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LOCO CRAZY GOOD COOKERS, INC
Petitioner,

v.

NORTH ATLANTIC IMPORTS, LLC
Patent Owner.

Case IPR2024-00642
Patent 10,660,473

PETITIONER REPLY TO PATENT OWNER RESPONSE

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	CLAIM CONSTRUCTION	1
A.	Magistrate’s Recommended Construction of “Rib” and Related Fact Findings	2
B.	Patent Owner’s Constructions Are Inconsistent with the Intrinsic Evidence.....	3
C.	Patent Owner’s Reliance on Extrinsic Evidence is Improper	8
D.	Patent Owner’s Arguments Related to Nonce Terms is a Straw- Man.....	11
III.	PATENT OWNER FAILS TO REBUT PETITIONER’S SHOWING THAT THE CHALLENGED CLAIMS ARE OBVIOUS.....	12
A.	Williams, Best and Farnsworth Each Teach “Ribs”, Including Under Patent Owner’s Construction	13
B.	Grounds 1 and 4 - Williams Alone Renders Obvious Ribs “Integrally Formed” With Underside of Griddle	16
C.	Grounds 2-3 and 5-6 - Williams in View of Farnsworth or Best Renders Obvious Ribs “Integrally Formed” With Underside of Griddle	20
IV.	CONCLUSION.....	24

TABLE OF AUTHORITIES

Page(s)

Cases

<i>Advanced Bionic v. Med-EL Elektromedizinische Geräte</i> , IPR2019-01469, 2020 WL 740292 (P.T.A.B. Feb. 13, 2020)	84
<i>Apple, Inc. v. Fintiv, Inc.</i> , IPR2020-00019, Paper 11 (Mar. 20, 2020)	85
<i>KSR Int’l Co. v. Teleflex Inc.</i> , 550 U.S. 398 (2007).....	70
<i>In re Larson</i> , 340 F.2d 965 (CCPA 1965)	28
<i>Sotera Wireless, Inc. v. Masimo Corp.</i> , IPR2020-01019, Paper 12 (PTAB Dec. 1, 2020)	85
<i>Thorne Res., Inc. v. Trs. of Dartmouth Coll.</i> , IPR2021-00491, Paper 18 (PTAB Aug. 12, 2021)	84
<i>Wellman, Inc. v. Eastman Chem. Co.</i> , 642 F.3d 1355 (Fed.Cir.2011)	5

Statutes

35 U.S.C. §102(a)	10, 12, 13, 14
35 U.S.C. § 103	4, 16, 22, 61, 62
35 U.S.C. § 314(a)	85
35 U.S.C. § 325(d)	84

Other Authorities

37 C.F.R. § 42	1, 2, 3, 4, 15
MPEP 2411.04(V)(B)	85

LIST OF EXHIBITS

Exhibit No.	Description
Exhibit 1001	U.S. Patent No. 10,660,473
Exhibit 1002	Declaration of Dr. Glenn E. Vallee
Exhibit 1003	Curriculum Vitae of Dr. Glenn E. Vallee
Exhibit 1004	Prosecution History of U.S. Patent 10,660,473
Exhibit 1005	U.S. Patent 6,389,960 (hereinafter, “Williams”)
Exhibit 1006	U.S. Patent 5,676,043 (hereinafter, “Best”)
Exhibit 1007	U.S. Patent 5,890,482 (hereinafter, “Farnsworth”)
Exhibit 1008	U.S. Patent Publication 2013/0112088 (hereinafter “May”)
Exhibit 1009	U.S. Patent 4,715,356 (hereinafter, “Reynolds”)
Exhibit 1010	U.S. Patent 2,351,130 (hereinafter, “Jones”)
Exhibit 1011	U.S. Patent 2,325,828 (hereinafter, “Betts”)
Exhibit 1012	U.S. Patent 7,647,866 (hereinafter, “Button”)
Exhibit 1013	U.S. Patent 3,747,509 (hereinafter, “Hinkle”)
Exhibit 1014	U.S. Patent 2,271,585 (hereinafter, “Fleming”)
Exhibit 1015	U.S. Patent 3,006,270 (hereinafter, “Graham”)

Exhibit 1016	U.S. Patent 3,225,682 (hereinafter, “Savio”)
Exhibit 1017	U.S. Publication No. 2009/0250048 (hereinafter, “Educate”)
Exhibit 1018	Budynas, R.G., Nisbett, K. J.;”Shigley’s Mechanical Engineering Design, 89 th ed.” , McGraw Hill, 2008 (hereinafter, “Shigley”)
Exhibit 1019	Star Manufacturing International, Installation and Operating Instructions M-Z16558 Rev. B (2013) (hereinafter, “Star”)
Exhibit 1020	Dacor, Outdoor Grill Use & Care Materials (2015) (hereinafter “Dacor”)
Exhibit 1021	Pasqualone, Antonella, Traditional flat breads spread from the Fertile Crescent: Production process and history of baking systems, Journal of Ethnic Foods Vol 1:5 p. 10-19 (2018) (hereinafter “Pasqualone”).
Exhibit 1022	Lyons and D’Andrea, Griddles, Ovens, and Agricultural Origins: An Ethnoarchaeological Study of Bread Baking in Highland Ethiopia, American Anthropologist 105(3):515-530 (2003)(hereinafter “Lyons”).
Exhibit 1023	Callister, W.D., Rethwisch, D.G., “Fundamentals of Materials Science and Engineering, an Integrated Approach”, Wiley, 2008 (hereinafter, Callister).
Exhibit 1024	U.S. Fire Administration Topical Fire Research Series Vol 2:3 (2002).
Exhibit 1025	Letter dated November 4, 2022 sent by Brian C. Park to Michael P. Dulin, with subject line “RE: United States Patent No. 10,660,473” including enclosures
Exhibit 1026	Complaint filed in <i>North Atlantic Imports, LLC v. LoCo Crazy Good Cookers, Inc.</i> Case No. 1:23-cv-00999-GBW-SRF (D. Del.) (filed on Sept. 8, 2023)
Exhibit 1027	Magistrate Report and Recommendation on Claim Construction, <i>North Atlantic Imports, LLC v. LoCo Crazy Good Cookers, Inc.</i> Case No. 1:23-cv-00999-GBW-SRF (D. Del.), Docket No. 72 (issued on January 8, 2025).
Exhibit 1028	Plaintiff’s Objection to the Report and Recommendation on Claim Construction, <i>North Atlantic Imports, LLC v. LoCo Crazy Good Cookers, Inc.</i> Case No. 1:23-cv-00999-GBW-SRF (D. Del.), Docket No. 74 (filed on January 22, 2025).
Exhibit 1029	Response to Plaintiff’s Objection to the Report and Recommendation on Claim Construction, <i>North Atlantic Imports, LLC v. LoCo Crazy</i>

	<i>Good Cookers, Inc.</i> Case No. 1:23-cv-00999-GBW-SRF (D. Del.), Docket No. 79 (filed on February 5, 2025).
Exhibit 1030	Deposition Transcript of Glen Stevick, Ph.D., P.E., Case No. IPR2024-00642, Patent No. 10,660,473 (taken April 15, 2025)

I. INTRODUCTION

In this reply, LoCo Crazy Good Cookers, Inc. (“Petitioner”) addresses the arguments presented by North Atlantic Imports, LLC (“Patent Owner”) in its response (“Response”) to the Petition for inter partes review of U.S. Patent No. 10,660,473 (“the ’473 Patent”).

II. CLAIM CONSTRUCTION

Patent Owner’s arguments in its response rely extensively on its construction of the term “rib.” However, both the Board in the Institution Decision of this proceeding and the Magistrate Judge assigned by District Court in the underlying litigation have extensively considered Patent Owner’s construction of “rib” and rejected it.¹ *See* Paper No. 9, Institution Decision at 12-17; Ex. 1027 at 7-11. Against this backdrop, Patent Owner asks the Board to reconsider its construction and import limitations from the specification or dictionaries in a desperate attempt to narrow the meaning of “rib.”

¹ The Patent Owner has objected to the Magistrate’s report citing similar reasons for asking the Board to reconsider its construction in this proceeding. *See* Ex. 1028. The Petitioner responded asking the District Court to adopt the Magistrate’s report. *See* Ex. 1029. The District Court has yet to act on the Magistrate’s claim construction recommendation at the time of this filing.

A. Magistrate’s Recommended Construction of “Rib” and Related Fact Findings

An explicit construction of “rib” may be unnecessary for this IPR since the prior art structures teaching a “rib” would meet that limitation under any reasonable interpretation. *See Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) (construction required “only to the extent necessary to resolve the controversy.”). However, to the extent an explicit construction is needed, the Board should adopt the Magistrate’s understanding of “rib” as a “a structural member” and avoid potential inconsistencies with the construction applied in the underlying litigation.

While the Magistrate’s recommendations in the underlying litigation are not binding on the District Court judge or the Board, their legal analysis and findings align with the Board’s in the Institution Decision. *See* Ex. 1027. Indeed, the Magistrate found the Board’s similar understanding of the ’473 Patent to be persuasive when rejecting Patent Owner’s proposed construction. *Id.* at 10-11.

Like the Board, the Magistrate found that the specification does not require ribs to be strong, thick, elongated, or to support a structure. *Id.* at 8-9 (Patent Owner’s “proposal to define the purpose of the ribs as structural support for the griddle also lacks a foundation in the intrinsic record.”). The Magistrate noted that ribs of the ’473 Patent “may” serve as stabilizers but that this permissive language “confirms that the ribs do not act as stabilizers in every embodiment.” *Id.* at 9. Rather,

Magistrate determined (like the Board) that “the claims and the specification describe the primary purpose of the ribs as defining heating regions and channels.” *Id.* The Magistrate also noted that Patent Owner’s construction is “unsupported by the prosecution history.” *Id.* at 9. Finally, the Magistrate determined that Patent Owner’s extrinsic evidence, including dictionary definitions, “do not overcome the intrinsic evidence confirming that Plaintiffs[/Patent Owner’s] proposal improperly narrows the scope of the claim term.” *Id.* at 11.

Accordingly, the Magistrate recommended a construction of “‘rib’ in accordance with its plain and ordinary meaning as a ‘structural member.’” *Id.* at 1 at 11. To resolve any further disputes, the Magistrate closed the report by “clarifying that there is no supporting or strengthening requirement encompassed by the term ‘rib’ in the context of the ’473 patent.” *Id.* at 11.

B. Patent Owner’s Constructions Are Inconsistent with the Intrinsic Evidence

Patent Owner argues “rib” can be construed “under the definition proposed in Patent Owner’s Preliminary Response,... or simply as a structural support.” POR at 24. Neither of these constructions are consistent with the intrinsic evidence as the Board and the Magistrate have already determined. *See* Institution Decision at 16 (“we find insufficient support for Patent Owner’s proposed construction in the intrinsic evidence”); Ex. 1027 at 8 (Patent Owner’s proposed “meaning of ‘rib’ is not consistent with the way ribs are described in the claims or specification.”)

Indeed, Patent Owner ignores a cardinal rule of claim construction and relies mostly on extrinsic evidence to support their position, namely that the “prior art and supporting references of record...all point to ‘ribs’ as elongated *structural* supports.” POR at 11 (emphasis in original) (citing various dictionaries). However, as the Federal Circuit has instructed, “[w]hen construing claim terms, we first look to, and primarily rely on, the intrinsic evidence...which is usually dispositive.” *Sunovion Pharms., Inc. v. Teva Pharms. USA, Inc.*, 731 F.3d 1271, 1276 (Fed. Cir. 2013).

As the Board and Magistrate recognized, there is no recitation in the ’473 Patent that ribs are strong and the references to thickness and elongation in the ’473 Patent do not limit ribs to specified or relative amounts. *See* Ex. 1001 at 7:10-12; 7:20-22; Institution Decision at 15; Ex. 1027 at 8-9. The Board and Magistrate also determined the intrinsic evidence does not require ribs to provide support. Institution Decision at 15 (intrinsic evidence does not “refer[] to the ribs as ‘strong’ or ‘thick’ such that they serve ‘to support or strengthen the structure.’”); Ex. 1027 at 11 (“there is no supporting or strengthening requirement encompassed by the term ‘rib’ in the context of the ’473 patent.”). Moreover, adding any of these limitations via construction would create ambiguity since there is no reference point in the ’473 Patent for how strong, thick, elongated or supportive a structure must be to qualify as a rib under Patent Owner’s construction. *See Interval Licensing LLC v. AOL, Inc.*,

766 F.3d 1364, 1371 (Fed. Cir. 2014) (patent claims with descriptive words or terms of degree “must provide objective boundaries for those of skill in the art.”).

The intrinsic evidence also never uses the phrase “structural support.” The closest the ’473 Patent comes to this term is in describing how the **frame** is a structure that supports other components, such as the griddle. Ex. 1001 at 5:1-20. There is no similar description in the ’473 Patent of the **ribs** supporting any structure, including the griddle.

Instead, ribs in the ’473 Patent are consistently described in terms of defining heating regions for venting or channeling convection heat as the Board and Magistrate recognized. Ex. 1001 at Title, Abstract, 1:16-19; 1:44-54; 2:10-30, 3:1-20; 3:39-59, 4:52-55, 7:3-18, 7:54-63, 8:24-28, 8:46-65, 9:10-29, 10:31-38, 10:51-58, and 11:34-47; Institution Decision at 16; Ex. 1027 at 9; Ex. 2011 at 59:11-60:16. This is consistent with the claims themselves that recite specific position of the ribs “to define multiple heating regions.” *See e.g.*, Ex. 1001 at 10:31-38, 10:51-53, 10:54-58. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996) (Courts first look to the “intrinsic evidence, i.e., the patent itself, including the claims, the specification, and the prosecution history. Such intrinsic evidence is the most significant source of the legally operative meaning of disputed claim language.”).

At best, Patent Owner points to the description where rib “may also serve as stabilizers” to prevent warping. POR at 20; see Ex. 1001 at 7:41-53. According to Patent Owner the “may” in this sentence is used because “[r]ibs in the griddle context always provide structural support” but “whether the ribs stabilize the griddle to prevent warping depends on their configuration and the direction of warping.” *Id.* Yet, there is nothing in the ’473 Patent to support this interpretation as the specification never discusses configuration of ribs to prevent warping or discusses the direction of warping that would be prevented.

Instead of basing their argument on disclosure in the ’473 Patent, Patent Owner relies on a hypothetical example where ribs would “prevent warpage in one direction but would not prevent warpage in another” direction. POR at 20. However, this hypothetical example by Patent Owner suggests that ribs would always serve as a stabilizer since warping does not occur in a single direction. Patent Owner’s expert, Dr. Stevick, confirmed his understanding that the ribs of the ’473 Patent “always” act as a stabilizer. Ex. 1030 at 32:8-34:13. Patent Owner’s theory relying on a rib always being a stabilizer is contrary to the specification that discloses ribs “may also serve as stabilizers.”

Lastly, the prosecution history also undercuts Patent Owner’s construction. See Ex. 1027 at 9-10 (Magistrate agreeing that Patent Owner’s construction “is also unsupported by the prosecution history.”). During prosecution the Examiner rejected

the claims over Reynolds’ “baffles 30” with “heat reflective radiant 31” and a “ridge flange 33.” EX1004, 95. Reynolds discloses these components are made of “thin sheet metal.” EX1009, 5:1-10. The Patent Owner did not dispute these structures formed a rib but instead distinguished them based on how they were connected to other structural elements. EX1004, 127. Thus, the prosecution history suggests ribs can be “thin sheet metal” in contrast to Patent Owner’s construction.

Patent Owner incorrectly argues that the Examiner’s understanding of rib is not relevant. POR at 21. “Actions by PTO examiners are entitled to appropriate deference as official agency actions, for the examiners are deemed to be experienced in the relevant technology.” *Nature Simulation Sys. v. Autodesk, Inc.*, 23 F.4th 1334, 1343 (Fed. Cir. 2022); *see also PowerOasis, Inc. v. T-Mobile USA, Inc.*, 522 F.3d 1299, 1304 (Fed. Cir. 2008) (PTO examiners are “assumed to have some expertise in interpreting the references and to be familiar from their work with the level of skill in the art.”). Thus, the Examiner’s understanding of the scope of a rib in the context of the technology at issue is part of the intrinsic evidence and contradicts the Patent Owner’s construction.

Patent Owner’s argument that no disclaimer exists in the prosecution history is irrelevant. POR at 22. Petitioner is not alleging that Patent Owner disclaimed any claim scope relative to “rib.” If anything, it is the Patent Owner that would need to argue for disclaimer to support its proposed construction limiting rib to “a structural

support.” However, there is no such disavowal in the prosecution history with respect to “rib” as the Patent Owner acknowledged and the Magistrate recognized. Ex. 1027 at 9 (“There is no dispute that [Patent Owner] did not clearly and unmistakably disavow any claim scope with respect to the term ‘rib’ during prosecution.”).

C. Patent Owner’s Reliance on Extrinsic Evidence is Improper

Before addressing the impact of the extrinsic evidence, Patent Owner has not explained why the Board should even consider it. Patent Owner relies on the extrinsic evidence to supports its construction “proposed in Patent Owner’s Preliminary Response,... or simply as a structural support.” POR at 24. However, as discussed above, these constructions are not consistent with the intrinsic evidence. Accordingly, reliance on extrinsic evidence to support the proposed construction of “rib” is improper. *Grace Instrument Indus. v. Chandler Instruments Co.*, 57 F.4th 1001, 1010 (Fed. Cir. 2023) (“The district court erred in its reliance on extrinsic evidence—i.e., dictionary definitions—that contradict the scope and meaning of...the intrinsic record.”); *Seabed Geosolutions (US) Inc. v. Magseis FF LLC*, 8 F.4th 1285, 1287 (Fed. Cir. 2021) (“If the meaning of a claim term is clear from the intrinsic evidence, there is no reason to resort to extrinsic evidence.”).

Patent Owner’s citation to an unpublished opinion supporting dictionary use does not alter the outcome here. In that case, the reliance on extrinsic evidence was

premised on a situation “when the dictionary definition does not contradict the intrinsic evidence.” POR at 14-15 (quoting *Masimo Corp. v. Sotera Wireless, Inc.*, 2023 WL 6307959, at *3 (Fed. Cir. Sept. 28, 2023)). As discussed above and found by both the Board and the Magistrate, limiting the term “rib” to “a structural support” is inconsistent with the intrinsic evidence here. See Institution Decision at 15; Ex. 1027 at 11. Moreover, when the intrinsic record does refer to structure of the rib, it is structure that is designed to control the movement of convection heat. See *e.g.*, Ex. 1001 at 2:22-30, 2:27-30, 3:13-20; 9:10-29.

Even if extrinsic evidence is considered, it does not compel the Patent Owner’s proposed construction. Perhaps most notable is that even Dr. Stevick acknowledges that ribs in the art can be thin and made of sheet metal. Ex. 1030, at 28:15-17 (“If you have real thin ribs like sheet metal, they -- they tend to buckle.”). Whether thin ribs are more prone to buckling is irrelevant to claim construction as this testimony confirms that thin “ribs” made of sheet metal were known in the art.

In addition, one dictionary relied on by Patent Owner states a rib is “a part or element similar in function or appearance to a rib, esp. a structural or supporting member *or a raised strip or ridge*.” Ex. 2005 at 3 (emphasis added). The Patent Owner leans on the parts of the dictionary definition that supports its structural argument, but ignores the part of the definition that merely describes a rib as a raised strip or ridge.

Another dictionary cited by Patent Owner states a rib is “*typically* serving to support or strengthen.” Ex. 2003 at 3 (emphasis added). Something that “typically” occurs is an optional feature rather than a required feature. Thus, even if relevant, these definitions are no more material than the disclosure that a rib “may” serve as a stabilizer. Neither the ’473 Patent nor the extrinsic evidence supports Patent Owner’s assertion that ribs always prevent warpage or always provide structural support. POR at 20.

Furthermore, the definitions used by the Patent Owner differ considerably in describing a rib, rather than providing a single consistent understanding as a structural support. One definition describes a rib as a “V-shaped or radius indentation,” while another relates to tubing, differing from the context of the ’473 Patent. *See* Ex. 2007 at 1; Ex. 1028 at 122. This is precisely why the Federal Circuit has described extrinsic evidence as “less reliable” because it “does not have the specification’s virtue of being created at the time of patent prosecution for the purpose of explaining the patent’s scope and meaning written in the context on the patent.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1318 (Fed. Cir. 2005). These dictionary definitions neither provide a singular definition of a rib nor were written in the context of the ’473 Patent. Therefore, there’s no basis to favor these extrinsic definitions over the intrinsic evidence.

Finally, Patent Owner asserts “rib” can be construed based on “dictionary definitions or other uses of the term [rib] in publications of record.” POR at 24. First, Petitioner has no notice for what construction would apply from “other publications of record.” Second, it is not the job of the Board to review these dictionaries and publications and craft its own argument to achieve Patent Owner’s desired outcome. *Parus Holdings, Inc. v. Google LLC*, 70 F.4th 1365, 1372 (Fed. Cir. 2023) (“A brief must make all arguments accessible to the judges, rather than ask them to play archaeologist with the record.”) (quoting *DeSilva v. DiLeonardi*, 181 F.3d 865, 866-67 (7th Cir. 1999); see also *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1381 (Fed. Cir. 2016) (“the Board must base its decision on arguments that were advanced by a party, and to which the opposing party was given a chance to respond.”)).

D. Patent Owner’s Arguments Related to Nonce Terms is a Straw-Man

Patent Owner also argues that Petitioner re-writes the claims with “a nonce term in place of rib.” POR at 22. Yet, as Petitioner set forth above, no construction is necessary. Accordingly, this argument is little more than a straw-man.

Regardless, the claims as construed by the Magistrate would require the rib “structural members” to be in the recited positions and orientations recited in the claim, such as “front [structural member] extending along the front end of the underside surface” or “lateral [structural members] extending along the underside surface from the front [structural member] to the rear end of the underside

surface...spaced from each other so as to define multiple heating regions.” See ’473 Patent at Claim 1. These limitations do not become meaningless nonce terms when “structural member” is used for “rib” but properly reflect the breadth of the claim scope and the specification.

Patent Owner did not amend the claims during prosecution or in this IPR to require the ribs to support, strengthen or stabilize.² As such, the Board must consider the claims as issued rather than the claims the Patent Owner wished it had obtained. *Chef Am. v. Lamb-Weston, Inc.*, 358 F.3d 1371, 1374 (Fed. Cir. 2004) (“we construe the claim as written, not as the patentees wish they had written it.”)

III. PATENT OWNER FAILS TO REBUT PETITIONER’S SHOWING THAT THE CHALLENGED CLAIMS ARE OBVIOUS

Patent Owner raises three arguments for independent claims 1, 10 and 17 and makes no separate arguments to distinguish the dependent claims.

Patent Owner’s first argument is that none of the prior art teaches a “rib” as Patent Owner construes the term. POR at 25-30. First, Patent Owner’s construction should not be adopted, but even if it were, the prior art would still render the claims

² Petitioner does not concede such attempted amendments would be proper or allowable under the applicable statutes and rules, including 35 U.S.C. §§102, 103 or 112.

obvious since the dictionary definitions of rib also define a rib as “*a raised strip or ridge.*”

The Patent Owner second and third arguments suggest that the proposed Grounds fail to show the ribs are “integrally formed with the underside surface” of the griddle, as required by the independent claims. POR at 31-37 (addressing Williams alone) and 38-42 (addressing Williams combined with Best or Farnsworth).

A. Williams, Best and Farnsworth Each Teach “Ribs”, Including Under Patent Owner’s Construction

Patent Owner relies on its proposed construction of “rib” to distinguish the claimed ribs from the sidewalls of Williams and the baffles of Best and Farnsworth. POR at 25-31. Patent Owner does not contest that the sidewalls of Williams and the baffles of Best and Farnsworth are structural members that define heating regions for venting or channeling convection heat in the same manner as the “ribs” in the claims and specification of the ’473 Patent. Thus, the sidewalls of Williams and baffles of Best and Farnsworth teach the claimed “ribs” for the reasons set out in the Petition.

Furthermore, if Board agrees with Patent Owner that dictionary definitions are relevant, then the sidewalls of Williams and baffles of Best and Farnsworth are a rib because they meet at least the definition of “rib” being a part that is “a raised strip or ridge.” Ex. 2005 at 3.

Yet, even if the Board agrees with Patent Owner’s construction of rib as “under the definition proposed in Patent Owner’s Preliminary Response,... or simply as a structural support” then the prior art would still render such a rib obvious for the reasons provided in the Petition. POR at 24; *see also* Preliminary Response at 13 (Patent Owner proposing “the term ‘rib’ should be construed as ‘an elongated raised piece of strong or thick material across a surface or through a structure, serving to support or strengthen the structure.’”).

Importantly, even Dr. Stevick acknowledged during his deposition and declaration that prior art sidewalls and baffles would provide some stiffening since they are perpendicular to the griddle. Ex. 1030 at 46:35-47:16 (“Any time you have perpendicular plates, you significantly -- you tend to significantly increase stiffness.”). In addition, Dr. Stevick admitted that William’s sidewalls “provide at least some sort of support” to the griddle. *Id.* at 66:19-67:7. Lastly, Dr. Stevick admitted that attached baffles “would provide de minimis strengthening to the griddle.” EX2002, ¶79. Thus, Dr. Stevick’s testimony supports that the prior art sidewalls and baffles teach stiffening, support, and strengthening. The only dispute is how much stiffening, support, and strengthening they provide but neither the claims nor the proposed construction requires any specific amount of those characteristics.

As explained by Dr. Vallee, it would have been obvious to integrate Williams' front dam and side walls with the underside of the griddle as "integrating the side walls with the underside of the griddle would also greatly strengthen the horizontally planar griddle to be heated by providing built-in vertical support structures." EX1002, ¶88. This is due in part because the integration helps prevent warping of the griddle by increasing the griddle's "area moment of inertia and consequently its resistance to bending." *Id.*, ¶¶89-90. "Accordingly, a POSITA would be motivated to include *structural support* features on the underside surface of the griddle. By integrally forming the front dam (42), rear dam (46) and sidewalls (44) with the underside surface of the griddle, *the structural rigidity of griddle will be significantly improved to withstand such warping.*" *Id.*, ¶90 (emphasis added); *see also* EX1015, 2:38-42 ("warpage was limited by the peripheral integrally formed ridge 34"). Thus, the front dam and sidewalls of Williams when integrally formed with the griddle would serve to strengthen the griddle and provide support against warpage.

As also explained in the Petition, Best and Farnsworth teach baffles integrally formed with the underside surface of a griddle. Petition at 47 and 55; EX1006, FIG. 5 and 9:18-22; EX1007, 3:15-19; EX1002, ¶¶190-191 and 303. Dr. Vallee testified how these integrated baffles would provide similar stiffening or strengthening effects as integrating William's sidewalls. EX2011, 122:20-123:24 ("We had a lengthy discussion on stiffening effects. So one in the art simply needs to see the

baffle connected and can immediately apply that, oh, and when I attach it, the act of attaching is going to have some effect on the stiffness.... we could go through the whole design process we discussed this morning on how I could strengthen the structure”); *see also id.* at 75:2-77:17 (discussing the design process). As such, integrated baffles of Best or Farnsworth would increase the griddle’s “area moment of inertia and consequently its resistance to bending” just like the integrated sidewalls of Williams. *See* EX1002, ¶¶89-90. Thus, the baffles of Best or Farnsworth when integrated with the griddle would serve to strengthen the griddle and provide support against warpage.

Therefore, regardless of the construction adopted by the Board, the prior art would render the challenged claims obvious.

B. Grounds 1 and 4 - Williams Alone Renders Obvious Ribs “Integrally Formed” With Underside of Griddle

Patent Owner fails to overcome the strong showing in the Petition for why it would have been obvious to a POSITA to “integrally form” Williams’ front dam and sidewalls (collectively “Williams’ ribs”) with the underside of the griddle. *See* Petition at 27-32. Petitioner’s argument is based on the testimony of Dr. Vallee who provides multiple rationales to support this implementation, including improved performance and easier end-user assembly. Patent Owner’s Response, at best, demonstrates that there are certain trade-offs to integrally forming Williams’ rib, but these trade-offs do not undermine the motivation.

In *KSR*, the Supreme Court explained, “[w]hen there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007). This is fundamentally the issue here as there is a design need in Williams to provide separate heating regions for a griddle and a finite number of ways to implement Williams’ sidewalls to do so. As explained by Dr. Vallee, integrating sidewalls to the underside of the griddle is one of a finite number solutions to hold the sidewalls in place:

The only four possibilities are to integrate the sidewall with the underside of the griddle, top of the floor plate (24), front dam (42), or rear dam (46).

EX1002, ¶92; *see also* EX2011, 94:7-14 (sidewalls “have to be held somewhere”). Choosing which of the four surfaces to integrally form the sidewalls is an obvious design choice, not a technological advance.

Moreover, Patent Owner does not dispute that integrally forming Williams’ ribs with the underside of the griddle would reduce assembly time and errors by the end user as Dr. Vallee opines. POR at 37. Instead, Patent Owner tries to argue that doing so would increase “assembly efforts and costs on the part of the manufacturer” or that doing so “would increase the potential for damage to the baffles.” *Id.* Patent Owner’s argument is legally misplaced since motivation does not require a proposed

modification to be “the best option, only that it be a suitable option.” *PAR Pharm., Inc. v. TWI Pharms., Inc.*, 773 F.3d 1186, 1197–98 (Fed. Cir. 2014); *Intel Corp. v. Qualcomm Inc.*, 21 F.4th 784, 800 (Fed. Cir. 2021). That two suitable options exists demonstrates that either option is obvious, not that neither option is obvious.

In addition, Patent Owner does little to rebut Dr. Vallee’s rationale that integrally forming the Williams’ ribs with the underside side of the griddle would help strengthen the griddle against warping. POR at 34-35. Patent Owner does not contest that it was well known to a POSITA at the time of the invention that adding vertical support structures to the underside of the griddle would reduce warping of the griddle. See EX 1002 at ¶¶88-90; see also Ex. 1030 at 47:2-16 (Dr. Stevick admitting that any time you have a perpendicular plates you significantly increase stiffness). Instead, Patent Owner tries to argue that the degree of strengthening would not be “great” and that Williams’ ribs would likely break under the deformation stress. POR at 34. While Dr. Vallee and Dr Stevick disagree on the magnitude of strengthening and capability to resist deformation stress provided by Williams’ ribs, these are merely disputes about the degree of benefit to be provided. The absolute degree of improvement is ultimately of little relevance since any improvement against warping would motivate a POSITA to integrally form Williams’ ribs with the underside of the griddle.

Patent Owner also argues “Dr. Vallee does not provide a reason to want to increase thermal coupling” by integrally forming Williams ribs with the griddle. POR at 33. This is not true as Dr. Vallee extensively testifies how a stronger thermal coupling reduces the thermal gradient which prevents warping of Williams’ sidewalls 44. EX1002 at ¶89; EX 2011, 70:22-71:22 (“if you don’t thermally couple them, you could get some extreme deflection due to the fact that you have a much different distribution of temperature in rib 44 than you do in the [griddle] plate.” Indeed, Dr. Stevick also notes that the uneven heating of Williams’ sidewall and the griddle will create “a temperature disparity...which can cause thermal stress along the junction between the two.” EX2002, ¶62. Solving this thermal stress problem provides a reason to increase thermal coupling by integrally forming the sidewall with the underside of the griddle, just as Dr. Vallee opined.

Dr. Stevick suggests that another potential solution to this thermal stress problem is to leave a gap to provide for free expansion between Williams’ sidewalls and the griddle. EX2002, ¶62. Even assuming this is another suitable solution, it doesn’t undercut the solution of increasing the thermal coupling by integrally forming the components. *PAR Pharm.*, 773 F.3d at 1197–98. Moreover, as Dr. Vallee explained, leaving a gap at the top of the sidewalls would not be a preferred option because “[s]uch a gap would undermine the advantages described in Williams by allowing combustion gases to pass over the lateral ribs and affect adjacent heat

zones, reducing the effectiveness of the cooking device.” EX1002, ¶91. Thus, integrally forming Williams’ ribs with the underside of the griddle to improve thermal coupling is the solution that best accomplishes William’s stated purpose to create a “uniform heating” zone underneath the griddle using the front dam and sidewalls to “trap” the hot gasses while reducing thermal stress on Williams’ ribs. EX1005 at 3:57-4:2.

Therefore, the Board should find that a POSITA would have multiple reasons motivating them to integrally form Williams’ ribs with the underside of the griddle.

C. Grounds 2-3 and 5-6 - Williams in View of Farnsworth or Best Renders Obvious Ribs “Integrally Formed” With Underside of Griddle

1. Farnsworth teaches integrally formed ribs

Patent Owner acknowledges that Farnsworth discloses “baffle 30 is attached to the bottom surface 26” of the griddle but argues this disclosure is insufficient to teach a baffle ***integrally formed*** with the griddle. POR at 40-41. Patent Owner fails to explain what it finds lacking, likely because the specification ’473 Patent itself is lacking in any detail on the term “integrally formed.” Indeed, the specification does not use the term “integrally formed” or even “integral.” However, the ’473 Patent does suggest that ribs are “formed” and coupled to the griddle using “known techniques”:

Further, the ribbing structure 50 may be formed with typical metal cutting techniques and processes and *coupled to the underside surface of the griddle 12 with known techniques*, such as welding.

EX1001, 9:62-65(emphasis added); *see also id.* 2:61-64 (“front rib...is coupled to the front end of the underside surface” of the griddle)” and 7:3-8 (“ribs each being positioned and directly coupled to the underside surface 58 of the griddle 12”); *see also* Ex. 1030 at 25:9-24 (Dr. Stevick admitting that integrally formed involves coupling using known techniques).

Likewise, Farnsworth indisputably discloses a baffle coupled to the underside of a griddle. Like the ’473 Patent, Farnsworth does not detail how the baffle is coupled, because this uses well-known techniques in the art as admitted in the ’473 Patent. *McRO, Inc. v. Bandai Namco Games America Inc.*, 959 F.3d 1091, 1102 (Fed. Cir. 2020) (“A patent need not teach, and preferably omits, what is well known in the art.”) (internal quotations omitted). Patent Owner’s argument that Farnsworth need to provide a more detailed description than the generic “coupled” in the ’473 Patent is unfounded. *See Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1570 (Fed. Cir. 1997) (“Moreover, the [challenged] patent itself does not disclose the level of detail that Lockwood would have us require of the prior art.”).

Even if such details on how to integrally form a baffle with the underside of a griddle were required, they are admittedly “known techniques” to a POSITA and accordingly obvious. EX1001, 9:62-65. The Federal Circuit has held that “it is

appropriate to rely on admissions in a patent’s specification when assessing whether that patent’s claims would have been obvious” in an IPR proceeding. *Koninklijke Philips N.V. v. Google LLC*, 948 F.3d 1330, 1339 (Fed. Cir. 2020) (citing *PharmaStem Therapeutics, Inc. v. ViaCell, Inc.*, 491 F.3d 1342, 1362 (Fed. Cir. 2007) (“Admissions in the specification regarding the prior art are binding on the patentee for purposes of a later inquiry into obviousness.”)). As such, it would have been obvious to use welding or other known technique to integrally form Farnsworth baffle with the underside of the griddle.

Lastly, Patent Owner argues that the Farnsworth baffles are not ribs (POR at 41-42), but this is premised on Patent Owner’s flawed claim construction. The term “rib” encompasses the Farnsworth baffle under any construction of the term rib, including Patent Owner’s.

2. Best teaches integrally formed ribs

Patent Owner argues that Best does not teach integrally formed baffles because the disclosure of the baffles in Best is “scant.” POR 39-40. This argument fails for the same reasons as previously discussed related to Farnsworth. There is little dispute that Best’s baffle is coupled to the underside of the griddle since baffle 95 is not otherwise connected to any structure as shown and described for Figure 5 (and thus would be floating in air if not coupled to the underside of the griddle). EX 1006, Figure 5 and 9:18-22 (“baffles 95 extend downwardly from plate 20”).

As discussed above, Patent Owner's argument that prior art needs to provide a more detailed description than the generic "coupled" in the '473 Patent is unfounded since these are well-known techniques to a POSITA as admitted by the '473 Patent. *See Koninklijke Philips*, 948 F.3d at 1339' *McRO*, 959 F.3d at 1102; and *Lockwood*, 107 F.3d at 1570. As such, it would have been obvious to use welding or other known technique to integrally form Best's baffle with the underside of the griddle.

Lastly, Patent Owner argues that Best's baffles are not ribs (POR at 41-42), but this is premised on Patent Owner's flawed claim construction. The term "rib" encompasses Best's baffle under any construction of the term rib, including Patent Owner's.

3. Motivation to Combine Williams with Farnsworth or Best

Patent Owner does not contest that substituting Best's or Farnsworth's baffles would be a "simple substitution" for Williams' sidewalls but argues that Dr. Vallee does not provide "a convincing reasons to make the substitution at all." POR at 41. But Patent Owner's arguments on why a POSITA would not want to modify Williams' sidewalls to be integrally formed with the underside of the griddle have no relevance to Farnsworth and Best which expressly teach doing do. Patent Owner is essentially arguing that a POSITA would ignore the exact structure from Farnsworth and Best, but this is legally untenable. *Homeland Housewares, LLC v.*

Whirlpool Corp., 865 F.3d 1372, 1378 (Fed. Cir. 2017) (“[W]e must disregard the testimony of an expert that is plainly inconsistent with the record.”).

To the extent that Patent Owner’s arguments on why a POSITA would not want to modify Williams’ side is relevant to Farnsworth or Best, then those arguments are not persuasive for the reasons explained above with regards to Williams.

IV. CONCLUSION

In view of the foregoing, Petitioner requests the Board find claims 1-4, 6-7, 10-13, 15-18, and 20 of the ‘473 Patent to be unpatentable.

Date: April 23, 2025

Respectfully submitted,

/James P. Murphy/
James P. Murphy, Reg. No. 55,474

Polsinelli, PC
1000 Louisiana Street, Suite 6400
Houston, Texas 77002
Tele: (713) 374-1631
Fax: (713) 374-1601

CERTIFICATE OF COMPLIANCE

Petitioner certifies that the word count in this Petition, including all footnotes and annotations, is 5,572 words as counted by the word-processing program used to generate this Reply, where such word count excludes the table of contents, list of exhibits, counsel's signature block, and this certificate of compliance. This Reply is in compliance with the 5,600 word limit set forth in 37 C.F.R. § 42.24(c).

CERTIFICATE OF SERVICE UNDER 37 CFR § 42.6(e)(4)

The undersigned hereby certifies that a copy of the accompanying Petitioner's Reply and all accompanying exhibits is being served via electronic mail on April 23, 2025 upon the following:

Nicholas M. Lagerwall
Foley & Lardner LLP
150 East Gilman Street, Suite 5000
Madison, WI 53703
Email: nlagerwall@foley.com

Jared J. Braithwaite
Foley & Lardner LLP
95 S State Street, Suite 2500
Salt Lake City, UT 84111
Email: jbraithwaite@foley.com

/Ericka McNeil/
Ericka McNeil

Polsinelli, PC
1000 Louisiana Street, Suite 6400
Houston, Texas 77002
Tele: (713) 374-1600