

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

RJ MACHINE COMPANY, INC.,
Petitioner

v.

ARMATURENFABRIK FRANZ,
SCHNEIDER GMBH + CO. KG,
Patent Owner

Case: IPR2024-00851
U.S. Patent No. 9,851,030

PATENT OWNER'S PRELIMINARY RESPONSE

TABLE OF CONTENTS

EXHIBIT LIST	v
TABLE OF AUTHORITIES	vii
I. INTRODUCTION	1
II. THE '030 PATENT	3
A. BACKGROUND	3
B. THE CLAIMED INVENTION	5
III. PETITIONER FAILED TO DISCLOSE, LET ALONE EXPLAIN OR RECONCILE, ITS LITIGATION CLAIM CONSTRUCTION POSITIONS	10
IV. INSTITUTION SHOULD BE DENIED BECAUSE THE PETITION UNQUESTIONABLY FAILS TO COMPLY WITH 37 C.F.R. § 42.104(B)(3), ESPECIALLY GIVEN PETITIONER'S LITIGATION POSITION THAT "MEANS" TERMS IN CLAIM 1 "MUST" BE CONSTRUED UNDER 35 U.S.C. § 112(F).....	15
V. PETITIONER FAILS TO SHOW THAT ITS NON-PATENT REFERENCES WERE PUBLICLY ACCESSIBLE AT THE RELEVANT TIME, THUS FAILING TO QUALIFY AS PRINTED PUBLICATIONS UNDER 35 U.S.C. § 102.....	22
A. PETITIONER'S CURSORY "WAYBACK MACHINE" RELIANCE IS NOT SUFFICIENT TO SHOW PUBLIC ACCESSIBILITY OF THE AS-SCHNEIDER CATALOGS (EXHS. 1006, 1008) AND PARKER 2 MANUAL (EXH. 1011).....	24
B. PETITIONER'S RELIANCE ON PRINTED DATES AND AN UNVERIFIABLE SEARCH RESULT IS NOT SUFFICIENT TO SHOW PUBLIC ACCESSIBILITY OF THE PARKER 1 AND 2 MANUALS (EXHS. 1010, 1011).....	32
VI. CLAIM CONSTRUCTION REQUIRED DUE TO PETITIONER'S INVALIDITY ARGUMENTS	34

A.	THE “MEANS” TERMS IN CLAIM 1 SHOULD BE CONSTRUED AS PETITIONER SAID THEY “MUST” BE IN THE PARALLEL LITIGATION	35
1.	The “by means . . . are clamped together” language should be construed to require the relevant surfaces to be clamped to each other as described in the specification	37
2.	The “sealing means” term should be construed to equate to the structures disclosed in the specification.....	39
B.	DESPITE ITS VIGOROUS INDEFINITENESS LITIGATION POSITION, PETITIONER HERE SAYS NOTHING ABOUT WHAT IT MEANS FOR CLAIM 1 TO RECITE THAT THE OUTWARD FLANGE “FITS BEHIND” THE INNER FLANGE	41
VII.	GROUND 1: CRAIG FAILS TO DISCLOSE A NUMBER OF MATERIAL LIMITATIONS IN CLAIM 1 OF THE ’030 PATENT.....	45
A.	CRAIG DISCLOSES “SPACED APART FACES” IN STARK CONTRAST TO THE “CLAMPED TOGETHER” SURFACES REQUIRED BY THE ’030 PATENT.....	46
B.	CRAIG’S DIELECTRIC GASKET IS NOT THE CLAIMED “SEALING MEANS”	51
C.	CONTRARY TO PETITIONER’S MISLEADING COLORING, THE CRAIG VALVE’S PURPORTED OUTER FLANGE DOES NOT “FIT BEHIND” THE PURPORTED INNER FLANGE	54
VIII.	GROUND 3 FALLS WITH GROUND 1	57
IX.	GROUND 2: PETITIONER’S RELIANCE ON A SINGLE DIAGRAM WITH NO DISCUSSION IN THE AS-SCHNEIDER “HOOK-UPS” CATALOG IS CONSPICUOUSLY DEFICIENT.....	58
A.	PETITIONER’S REPEATED REFERENCES TO THE KNOWLEDGE OF A POSITA FOR ANTICIPATION IS TELLING	58
B.	THE PRG08 DIAGRAM DOES NOT SHOW VARIOUS CLAIM 1 LIMITATIONS	59

X.	GROUNDS 4, 5: THE PARKER MANUALS AND AS-SCHNEIDER “ACCESSORIES” CATALOG COLLECTIVELY FAIL TO DISCLOSE LIMITATIONS IN CLAIM 1 OF THE ’030 PATENT.....	65
A.	NO DISCLOSURE OF FIRST “MEANS” TERM.....	65
B.	NO DISCLOSURE OF “SEALING MEANS”.....	67
XI.	GROUND 6: THE AS-SCHNEIDER CATALOGS COLLECTIVELY FAIL TO DISCLOSE LIMITATIONS IN CLAIM 1 OF THE ’030 PATENT	70
XII.	THE PETITION FAILS TO ADDRESS KNOWN ALLEGED EVIDENCE OF PETITIONER’S COPYING.....	71
XIII.	CONCLUSION.....	74

EXHIBIT LIST¹

Exhibit No.	Description
2001	RJ Machine's May 1, 2024 Claim Term Disclosure in parallel district court litigation (<i>Armaturenfabrik Franz Schneider GMBH + Co. KG v. RJ Machine Company, Inc.</i> , Case No. 6:23-cv-00680-AM-DTG, Western District of Texas – Waco Division)
2002	RJ Machine's May 15, 2024 Proposed Claim Constructions in parallel district court litigation
2003	RJ Machine's May 22, 2024 Disclosure of Extrinsic Evidence (in support of proposed claim constructions) in parallel district court litigation
2004	RJ Machine's June 5, 2024 Opening Claim Construction Brief in parallel district court litigation
2005	Exhibit B to RJ Machine's June 5, 2024 Opening Claim Construction Brief (Exhibit 2004) ("Declaration of Dr. John P. Rodgers In Support Of RJ Machine Company, Inc.'s Opening Claim Construction Brief")
2006	Internet Archive's Terms of Use, Privacy Policy, and Copyright Policy (https://archive.org/about/terms.php) (dated December 31, 2014)
2007	Internet Archive Blog posted on October 5, 2017 by Mark Graham, Director of Wayback Machine (https://blog.archive.org/2017/10/05/wayback-machine-playback-now-with-timestamps/)
2008	Screenshot of webpage shown in Exh. 1007 with "About this capture" link expanded

¹ Provided pursuant to 37 C.F.R. § 42.63(e).

- 2009 Screenshot of webpage shown in Exh. 1009 with “About this capture” link expanded
- 2010 Screenshot of webpage shown in Exh. 1012 with “About this capture” link expanded
- 2011 June 7, 2023 cease-and-desist letter from AS-Schneider to RJ Machine alleging infringement of U.S. Patent No. 9,851,030 by copying
- 2012 July 19, 2023 letter from RJ Machine counsel confirming receipt of AS-Schneider's June 7, 2023 cease-and-desist letter (Exh. 2011)
- 2013 AS-Schneider's March 6, 2024 Preliminary Infringement Contentions in parallel district court litigation
- 2014 Result of clicking on <https://www.as-schneider.com/en/hook-ups/schneider-hook-ups.pdf> (clicked on August 22, 2024)
- 2015 Result of clicking on <https://www.as-schneider.com/en/instrumentation-products/schneider-products.pdf> (clicked on August 22, 2024)
- 2016 Result of clicking on <http://www.pgiint.com/pdf/PGI-DMD.pdf> (clicked on August 22, 2024)

TABLE OF AUTHORITIES

	Page(s)
Cases	
<i>Apple Inc. v. DSS Technology Management, Inc.</i> , IPR2015-00373, Paper 8 (PTAB Jun. 25, 2015)	32
<i>Aventis Pharm., Inc. v. Amino Chems. Ltd.</i> , 715 F.3d 1363 (Fed. Cir. 2013)	43, 50
<i>Aylus Networks, Inc. v. Apple Inc.</i> , 856 F.3d 1353 (Fed. Cir. 2017)	43, 50
<i>Bruckelmyer v. Ground Heaters, Inc.</i> , 445 F.3d 1374 (Fed. Cir. 2006)	22
<i>Ebates Performance Marketing, Inc. d/b/a Rakuten Rewards v.</i> <i>International Business Machines Corp.</i> , IPR 2022-00439, Paper 11 (PTAB Oct. 3, 2022)	21, 22
<i>Facebook, Inc. v. Sound View Innovations, LLC</i> , IPR2017-00998, Paper 13 (PTAB Sept. 5, 2017)	13, 14
<i>First Solar, Inc. v. Rovshan Sade</i> , IPR2023-00827, Paper 13 (PTAB Nov. 16, 2023)	<i>passim</i>
<i>Hulu, LLC v. Sound View Innovations, LLC</i> , IPR2018-01039, Paper 29 (PTAB Dec. 20, 2019)	23, 31, 34
<i>In-Depth Geophysical, Inc. v. Conocophillips Co.</i> , IPR2019-00849, Paper 14 (PTAB Sept. 6, 2019)	32
<i>In-Depth Geophysical, Inc. v. Conocophillips Co.</i> , IPR2019-00849, Paper 17 (PTAB Mar. 30, 2020)	33
<i>IPCom GmbH & Co. v. HTC Corp.</i> , 861 F.3d 1362 (Fed. Cir. 2017)	16
<i>In re Lister</i> , 583 F.3d 1307 (Fed. Cir. 2009)	24

<i>Nidec Motor Corporation v. Zhongshan Broad Ocean Motor Co. Ltd.</i> , 851 F.3d 1270 (Fed. Cir. 2017)	59
<i>O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.</i> , 521 F.3d 1351 (Fed. Cir. 2008)	34
<i>OrthoPediatrics Corp. v. K2M, Inc.</i> , IPR2018-01546, Paper 10 (PTAB Feb. 14, 2019).....	<i>passim</i>
<i>Panel Claw, Inc. v. SunPower Corporation</i> , IPR2014-00388, Paper 10 (PTAB Jun. 30, 2014)	22
<i>Pride Solutions, LLC v. Not Dead Yet Mfg., Inc.</i> , IPR2013-00627, Paper 14 (PTAB Mar. 17, 2014)	22
<i>Robert Bosch Tool Corp. v. SD3 LLC</i> , IPR2016-01751, Paper 15 (PTAB Mar. 22, 2017)	72, 73
<i>Samsung Electronics America, Inc. v. Prisia Eng’g Corp.</i> , 948 F.3d 1342 (Fed. Cir. 2020)	43
<i>Samsung Electronics Co., Ltd., et al. v. Power2B Inc.</i> , IPR2022-01378, Paper 12 (Mar. 15, 2023)	17, 19, 21
<i>SMR Automotive Systems USA, Inc. v. Magna Mirrors of America, Inc.</i> , IPR2018-00505, Paper 10 (PTAB Jun. 28, 2018)	69, 71
<i>Sophos Ltd., et al. v. Open Text Inc.</i> , IPR2023-00732, Paper 23 (PTAB Nov. 2, 2023).....	26
<i>Stryker Corp. v. KFXMedical, LLC</i> , IPR2019-00817, Paper 10 (PTAB Sep. 16, 2019).....	73
<i>Valve Corp. v. Ironburg Inventions</i> , 8 F.4th 1364 (Fed. Cir. 2021)	30
<i>Williamson v. Citrix Online, LLC</i> , 792 F.3d 1339 (Fed. Cir. 2015)	17, 18
<i>Xerox Corp. v. Bytemark, Inc.</i> , IPR2022-00624, Paper 9 (PTAB Aug. 24, 2022).....	2, 59

Statutes

35 U.S.C. § 312(a)23

Other Authorities

37 C.F.R. § 42.104(b)(3).....*passim*

37 C.F.R. § 42.104(b)(4).....48

I. INTRODUCTION

Pursuant to 37 C.F.R. § 42.107(a), Patent Owner Armaturenfabrik Franz Schneider GMBH + Co. KG (“AS-Schneider”) hereby files its Preliminary Response to the Petition, which seeks *inter partes* review and cancellation of claims 1-7 of U.S. Patent No. 9,851,030 (“the ’030 Patent”). As will be explained herein, institution of the sought IPR should be denied because:

1. The Petition fails to disclose, let alone reconcile, Petitioner and Dr. Rodgers’s inconsistent claim construction positions in the parallel district court litigation;
2. The Petition fails to comply with 37 C.F.R. § 42.104(b)(3), which failure is dispositive as to all grounds raised in the Petition;
3. The Petition fails to establish that its relied-upon non-patent references qualify as prior art under 35 U.S.C. § 102, which failure is dispositive as to Grounds 2 and 4-6 raised in the Petition;
4. The references used in § 102 Grounds 1 and 2 each fail to disclose a number of material limitations in claim 1 of the ’030 Patent;
5. Each combination used in § 103 Grounds 3-6 fails to disclose material limitations in claim 1; and
6. The Petition fails to address known evidence of secondary considerations of non-obviousness in regard to Petitioner’s deliberate and unmistakable

copying of the '030 Patent claimed invention, which failure should result in the rejection of obviousness Grounds 3-6 raised in the Petition.

Moreover, Dr. Rodgers's declaration (Exh. 1002) should be given little if any weight because, in substance, the vast majority of it parrots the language used in the Petition. *Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9, at 18 (PTAB Aug. 24, 2022) (precedential) (determining that an expert declaration is entitled to little weight when it contains an exact restatement of the petition's arguments without any additional supporting evidence or reasoning).

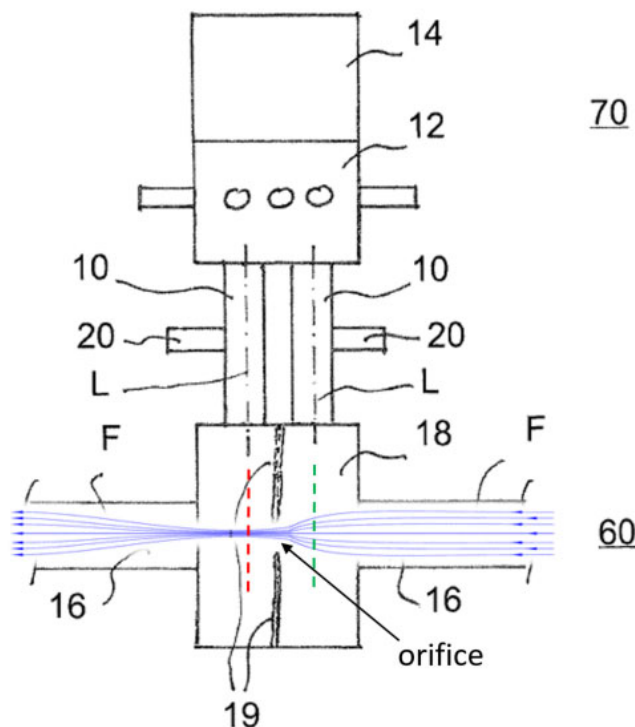
The following table lays out the Petition's deficiencies across Grounds 1-6:

	Failure to comply with 37 C.F.R. § 42.104(b)(3) (Section IV <i>infra</i>)	Failure to disclose or address litigation claim constructions (Section III <i>infra</i>)	Failure to establish non-patent reference(s) as a printed publication (Section V <i>infra</i>)	Failure to disclose material limitations in claim 1 of 030 Patent (Sections VII-XI <i>infra</i>)	Failure to address known evidence of copying (Section XII <i>infra</i>)
Ground 1	X	X		X	
Ground 2	X	X	X	X	
Ground 3	X	X		X	X
Ground 4	X	X	X	X	X
Ground 5	X	X	X	X	X
Ground 6	X	X	X	X	X

II. THE '030 PATENT

A. BACKGROUND

With reference to Fig. 6 of the '030 Patent (reproduced below with color markings), the flow rate of gas (**blue right-to-left gas flow**) in a gas pipeline **16** can be determined using a metering device **18** that has an orifice that creates relatively high pressure (**green-dashed line**) immediately upstream of the orifice compared to low pressure (**red-dashed line**) immediately downstream of the orifice. Exh. 1001, col. 1, ll. 28-36. A connecting apparatus **10** connects the metering orifice device **18** to a shutoff valve block **12** that can open or close communication between the interior of the pipeline **16** and a measuring instrument **14** designed to measure the respective high and low pressures upstream and downstream of the orifice, where the difference in pressures can be used to calculate the flow rate in the pipeline **16**. *Id.*



'030 Patent, Fig. 6

Because the measuring instrument **14** is used to determine differential pressure, the measuring instrument **14** has to be connected to two connecting apparatuses **10** which have to be relatively close together in order to allow measurements of pressures close to either side of the orifice. *Id.* at col. 1, l. 65 – col. 2, l. 5. Otherwise, if the connecting apparatuses are spaced further apart (*e.g.*, further to the right of the green-dashed line and/or further to the left of the red-dashed line), the differential pressure method becomes less reliable as pressures tend to equalize further away from the orifice.

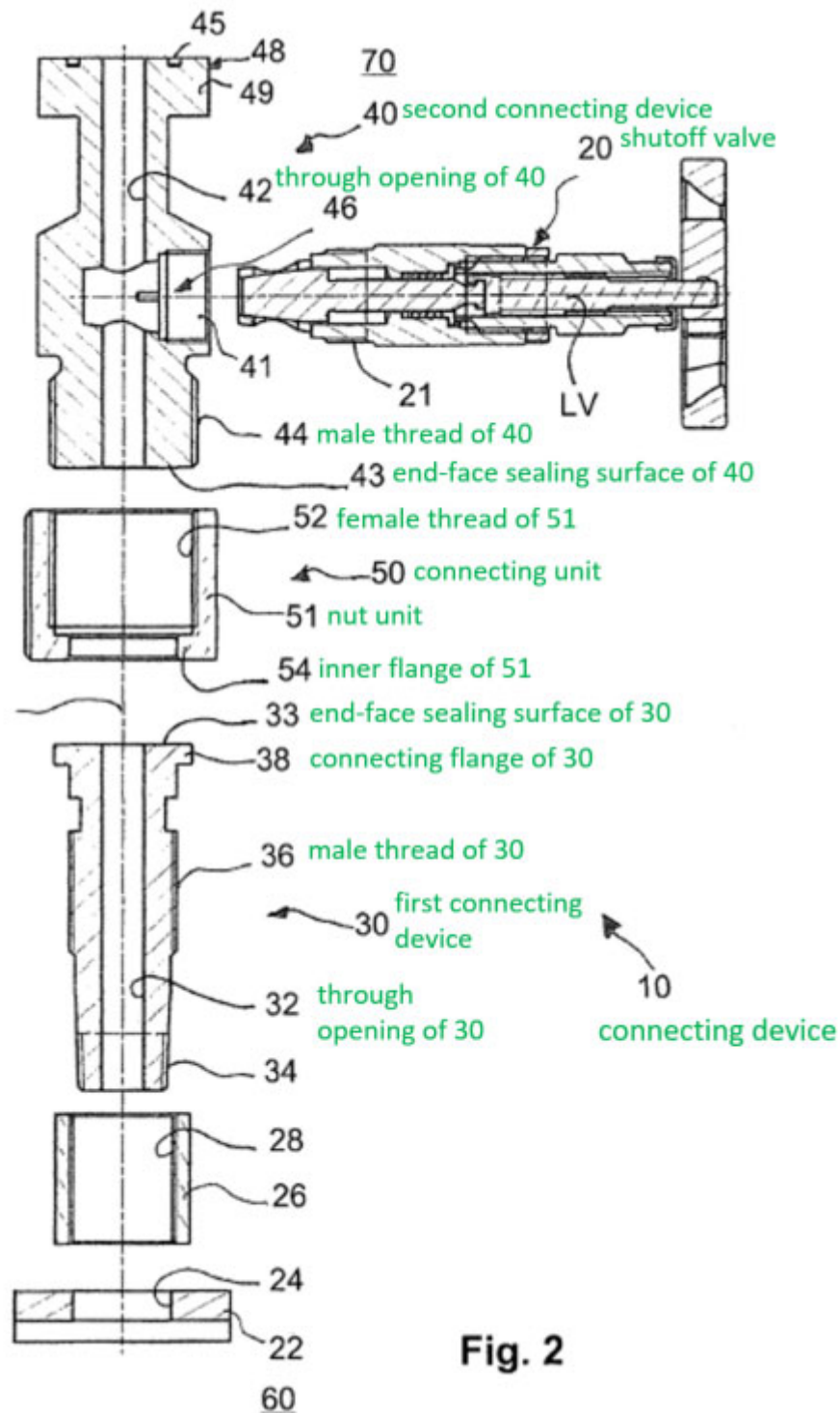
At least one problem with the above configuration is that because the shutoff valve **20** is typically integrated to be perpendicular to the longitudinal direction of

the connecting apparatus, when a first connecting apparatus has been installed (e.g., connecting apparatus **10** on the right side), the second connecting apparatus (e.g., connecting apparatus **10** on left right side) can no longer be rotatably screwed into the metering orifice device because the second connecting apparatus's shutoff valve **20** collides with the first connecting apparatus. *Id.* at col. 2, ll. 5-13.

B. THE CLAIMED INVENTION

To address the above shortcoming in the prior art (among other advantages over the prior art), the '030 Patent describes and claims a new connecting apparatus design that has first and second connecting devices that can be sealingly connected solely by rotation of a connecting unit—*i.e.*, the first and second connective devices are sealingly connected without having to rotate those devices. *Id.* at col. 2, ll. 59-67; col. 6, l. 61 – col. 7, l. 3. In other words, the '030 Patent describes a novel two-piece stabilized connector design that allows assembly with a connecting unit (or union nut) in a manner that, among other benefits described in the specification, avoids the collision issues discussed above.

Fig. 2 of the '030 Patent, annotated below, shows the inventive design. *Id.* at col. 5, l. 61 – col. 6, l. 58 (describing component features to achieve reliably sealed connection); col. 8, ll. 4-43 (list of numerical references).



Sole independent claim 1 of the '030 Patent in part details the arrangement by which the connecting unit **50** ensures that the first and second connecting

devices are “interconnected with sealing effect”:

[. . .]

an upper edge region of the first connecting device has an outwardly pointing outer flange and an end-face sealing surface,

a lower edge region of the second connecting device has a male thread and an end-face sealing surface,

the connecting unit is designed as a nut unit with a female thread and an inwardly pointing inner flange which is arranged in the lower edge region,

the outwardly pointing outer flange of the first connecting device fits behind the inner flange of the nut unit,

the female thread of the nut unit is screwed onto the male thread of the second connecting device so that by means of the inner flange and the outer flange the end-face sealing surfaces are clamped together with sealing effect,

[. . .]

the outer flange and the inner flange are provided in an encompassing manner on the first connecting device or on the nut unit, and

sealing means are arranged between the end-face sealing surface of the first connecting device and the end-face sealing surface of the second connecting device.

Id. at col. 8, l. 63 – col. 9, l. 19.

As described in the '030 Patent:

The great advantage of the connecting apparatus **10** according to the invention lies in the fact that the connection between first connecting device **30** and second connecting device can be created via the connecting unit **50** without the installed position of the first connecting device **30** or of the second connecting device **40** having to be altered, but by the clamping action with sealing effect being carried out solely by operation, that is to say by rotation, of the connecting unit **50**. In this case, the two sealing surfaces **33**, **43** are clamped together with sealing effect.

Id. at col. 6, l. 61 – col. 7, l. 3.

Fig. 1 (reproduced below with color markings), which shows an assembled state of the connecting apparatus **10**, clearly illustrates that sealing surface **33** (**green**) of the first connecting device **30** and sealing surface **43** (**red**) of the second connecting device **40** are *clamped together* (**purple**) to help provide a stable connection:

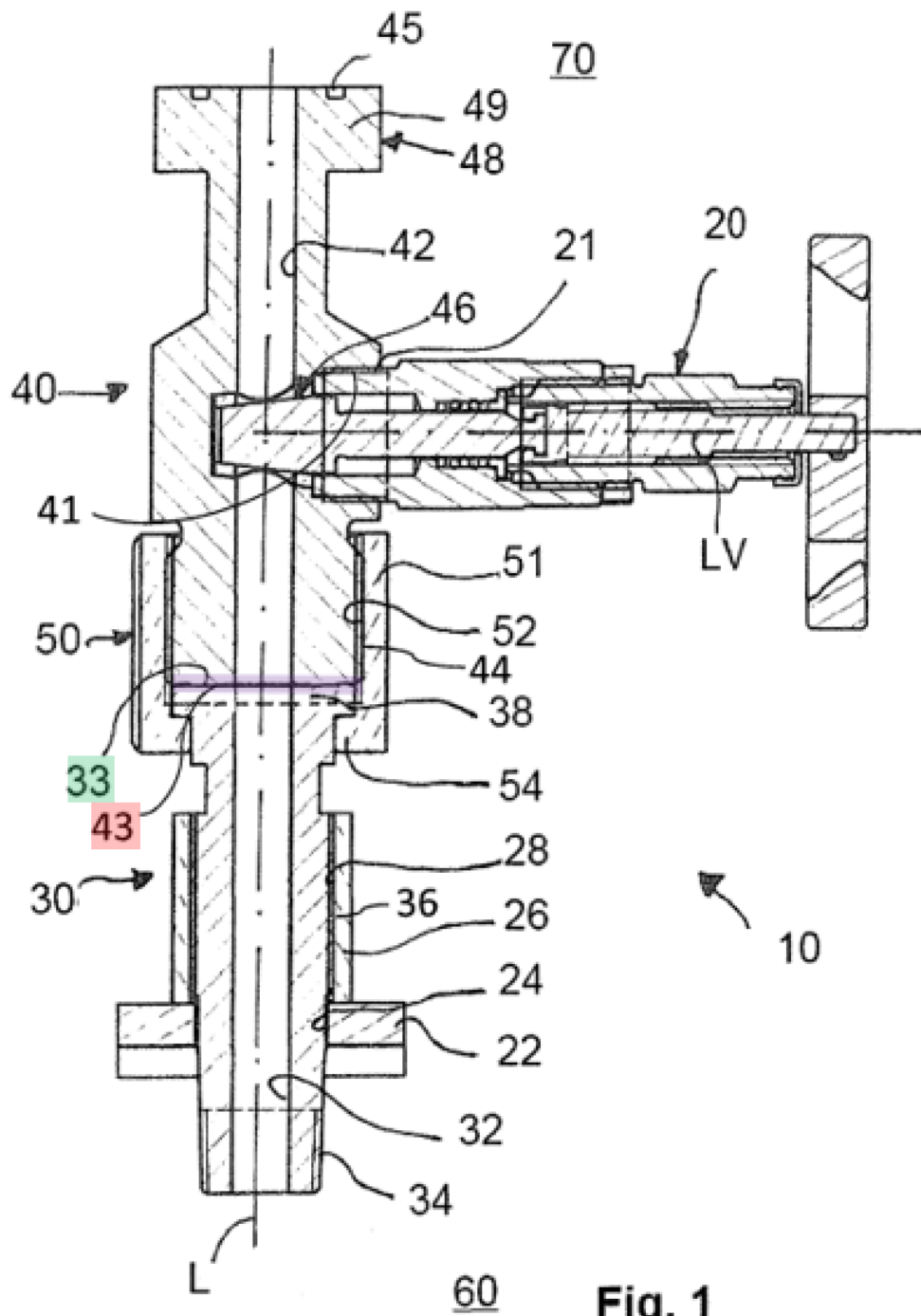


Fig. 1

Id. at Fig. 1; col. 3, ll. 32-34 (“the end-face sealing surfaces are clamped to each other with sealing effect”); col. 6, ll. 2-5; col. 7, ll. 2-3, 42-45 (“the end-face sealing surface **33** of the outer flange **38** of the first connecting device **30** comes to

bear with pressure on the end-face sealing surface **43** of the second connecting device **40**”).

Another advantage of the '030 Patent design is that the connecting apparatus can be assembled as “‘one’ component” and leak tested at the factory, as opposed to having to assemble multiple components of, or leak test, the connecting apparatus at the work site, where resources and location of interest on the pipeline may be difficult to access. *Id.* at col. 7, ll. 4-45.

III. PETITIONER FAILED TO DISCLOSE, LET ALONE EXPLAIN OR RECONCILE, ITS LITIGATION CLAIM CONSTRUCTION POSITIONS²

In regard to claim construction, Petitioner, in its April 25, 2024 Petition, stated to the Board that:

For purposes of this Petition, Petitioner does not believe any claim term requires a construction to find claims 1-7 invalid for the reasons provided herein. This Petition shows that the challenged claims are

² In Section IV *infra*, Patent Owner explains why Petitioner's failure to address claim construction of the “means” terms in claim 1 of the '030 Patent is fatal to the Petition. And in Section VI *infra*, Patent Owner (i) explains the materiality in this proceeding of certain claim terms Petitioner said should be construed in the parallel district court litigation and (ii) raises particular claim construction issues necessitated by but neglected in Petitioner's invalidity challenges.

unpatentable when construed in accordance with the ordinary and customary meaning as understood by one of ordinary skill in the art in light of the specification and prosecution history.

Petition, p. 10. Further, Dr. Rodgers, in his declaration supporting the Petition, did not identify any claim terms as requiring construction. Exh. 1002, ¶¶ 43-47.

But less than a week later, on May 1, 2024, Petitioner in the parallel district court litigation identified six claim terms “that should be construed or found indefinite by the Court.”³ Exh. 2001, p. 1. And Petitioner thereafter provided specific proposed claim constructions, indefinite positions, and extrinsic evidence (Exh. 2002, pp. 1-2; Exh. 2003). Notably, and as will be discussed in Section IV *infra*, Petitioner advocated that ***35 U.S.C. § 112(f) be applied*** to certain claim terms. Exh. 2002, pp. 1-2. Petitioner then followed with a claim construction brief advancing detailed argument why those six claim terms should be specifically construed or found indefinite (Exh. 2004).

And while Dr. Rodgers in this proceeding does not identify any claim terms as needing construction, he in the parallel litigation submitted a 33-page declaration with reasons underlying his “opinion that the [following six] claim terms would have been understood by a POSITA at the time of the alleged

³ All emphasis added unless otherwise noted.

invention”:

Disputed Claim Term	Understanding of a POSITA
the connecting unit is designed as a nut unit with a female thread and an inwardly pointing inner flange which is arranged in the lower edge region,” (claim 1)	Indefinite
“the outwardly pointing outer flange of the first connecting device fits behind the inner flange of the nut unit” (claim 1)	Indefinite
“...by means of the inner flange and the outer flange the end-face sealing surfaces are clamped together with sealing effect,” (claim 1)	<p>Subject to 35 U.S.C. §112(f) (means-plus function) <u>Function</u>: the first connecting device and the second connecting device are sealed together.</p> <p><u>Structure</u>: an outer flange and an inner flange clamped together by female threads of a nut engaging male threads of the second connecting device such that end-face sealing surface 43 clamps to end-face sealing surface 33 to create a seal, as shown in Fig 1.</p>
a longitudinal axis of which extends obliquely to a longitudinal axis of the apparatus,” (claim 1)	Indefinite
“the outer flange and the inner flange are provided in an encompassing manner on the first connecting device or on the nut unit,” (claim 1)	Indefinite
“sealing means are arranged between the end-face sealing surface of the first connecting device and the end-face sealing surface of the second connecting device” (claim 1)	<p>Subject to 35 U.S.C. §112(f) (means-plus function) <u>Function</u>: a seal is created between the end-face sealing surface of the first connecting device and the end-face sealing surface of the second connecting device.</p> <p><u>Structure</u>: O-rings consisting of sealing plastic such as PTFE, elastomer or graphite that are arranged inside a groove; an end-face coating made of sealing material; or a face-turned surface on the first connecting device and a projecting nose unit on the second connecting device.</p>

Exh. 2005, pp. 5-6 (¶ 20).

While Patent Owner acknowledges that Petitioner may not have been required to posit the same exact claim constructions in this proceeding and the parallel district court litigation, Petitioner should have disclosed and addressed to the Board its inconsistent positions in the parallel litigation.⁴ *Facebook, Inc. v. Sound View Innovations, LLC*, IPR2017-00998, Paper 13, at 17-18 (PTAB Sept. 5, 2017) (“At the very least, Petitioner’s failure to inform us of its differing claim construction arguments before the district court raises the specter of lack of candor.”); *OrthoPediatrics Corp. v. K2M, Inc.*, IPR2018-01546, Paper 10, at 12 (PTAB Feb. 14, 2019) (“By failing to reconcile its proffered claim construction here with its very different construction proffered in District Court—which the District Court agreed with—Petitioner fails to satisfy [its burden to show a reasonable likelihood of prevailing in showing that at least one claim is unpatentable].”).

Petitioner and Dr. Rodgers here provide no explanation whatsoever why and how the Board should apply “ordinary and customary meaning” to (i) four particular claim terms in the sole independent claim of the ’030 Patent which terms

⁴ And Petitioner should not be given leave to file a preliminary reply now to explain its litigation claim constructions.

Petitioner and Dr. Rodgers at the same time vigorously argued in the parallel litigation are indefinite and (ii) two terms that Petitioner and Dr. Rodgers advocated should be construed under 35 U.S.C. § 112(f). Petitioner's failure to provide such explanation should result in denial of the Petition:

Accordingly, Petitioner should have either provided reasons why these limitations are not governed by 35 U.S.C. § 112 ¶ 6 [, or Petitioner should have provided an explicit claim construction as required by our rules. Because of the unique circumstances of this proceeding, where Petitioner advocated for a different claim construction in the related district court litigation, we determine that construction of the claim term in dispute is necessary for the resolution of issues before us. Lacking such claim construction, the Petition fails to comply with 37 C.F.R. § 42.104(b)(3).

OrthoPediatrics, IPR2018-01546, Paper 10, at 11.

Moreover, Petitioner and Dr. Rodgers here do not even attempt to provide any alternative invalidity analysis under the claim construction positions they advanced in the parallel litigation.

At bottom, Petitioner's claim construction position in this proceeding is directly in contrast to its litigation position, which Petitioner did not even disclose to the Board, let alone try to reconcile with the position it takes here. On that basis, institution should be denied. *Facebook*, IPR2017-00998, Paper 13, at 18 (denying institution due in part to "Petitioner's failure to inform us of its seemingly

inconsistent claim construction positions or to provide us with means-plus-function constructions as required by our Rules”); *OrthoPediatrics*, IPR2018-01546, Paper 10, at 12 (denying institution because by failing to set forth certain claim constructions, petitioner “does not show how the challenged claims are to be construed in accordance with 37 C.F.R. § 42.104(b)(3), and also does not show how, as so construed, they are unpatentable under the statutory grounds identified in the Petition [under 37 C.F.R. § 42.104(b)(4)]”).

IV. INSTITUTION SHOULD BE DENIED BECAUSE THE PETITION UNQUESTIONABLY FAILS TO COMPLY WITH 37 C.F.R. § 42.104(B)(3), ESPECIALLY GIVEN PETITIONER’S LITIGATION POSITION THAT “MEANS” TERMS IN CLAIM 1 “MUST” BE CONSTRUED UNDER 35 U.S.C. § 112(F)

37 C.F.R. § 42.104(b)(3) requires that an IPR petition “must set forth”:

How the challenged claim is to be construed. Where the claim to be construed contains a means-plus-function or step-plus-function limitation as permitted under 35 U.S.C. 112(f), the construction of the claim must identify the specific portions of the specification that describe the structure, material, or acts corresponding to each claimed function[.]

Here, claim 1 of the '030 Patent contains the terms “by means of” and “sealing means,” both of which Petitioner and Dr. Rodgers in the parallel litigation

contended and reasoned should be construed under 35 U.S.C. § 112(f).⁵ Exh. 2002, pp. 1-2; Exh. 2004, pp. 14-16, 21-23; Exh. 2005, pp. 5-6 (¶ 20), 23-26 (¶¶ 81-87), 31-33 (¶¶ 113-119). But the Petition here completely ignores § 42.104(b)(3)'s requirement that Petitioner construe means-plus-function claim terms with identification of corresponding structure in the specification.⁶ ***That alone is fatal to the Petition***, not to mention that those means-plus-function claim terms materially impact the invalidity analysis (as further discussed in Sections VII-XI *infra*). Nor does Petitioner even try to argue why 35 U.S.C. § 112(f) should not apply despite the presumption that § 112(f) is invoked due to the express recital of “means” claim terms.

“Claim limitations that include the terms ‘means’ or ‘means for’ are

⁵ The Federal Circuit has held that § 112(f) “applies regardless of the context in which the interpretation of means-plus-function language arises, *i.e.*, whether as part of a patentability determination in the PTO or as part of a validity or infringement determination in a court.” *IPCom GmbH & Co. v. HTC Corp.*, 861 F.3d 1362, 1369–70 (Fed. Cir. 2017) (citations omitted).

⁶ Petitioner does not even attempt to identify corresponding structure and couch that as an “alternative” construction to its “ordinary and customary meaning” position (Petition, p. 10).

presumed to invoke 35 U.S.C. § 112(f).” *Samsung Electronics Co., Ltd., et al. v. Power2B Inc.*, IPR2022-01378, Paper 12, at 11 (Mar. 15, 2023) (citing *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015) (*en banc* in relevant part)). “The rules governing this *inter partes* review require that ‘[w]here the claim to be construed contains a means-plus-function . . . limitation as permitted under U.S.C. 112(f),’ the Petition has to ‘identify the specific portions of the specification that describe the structure, material, or acts corresponding to each claimed function.’” *Id.* at 11, 15-16 (denying institution based on reason that “[b]ecause Petitioner has not identified structure corresponding to the functions recited in claims 1 and 5, we cannot ascertain the differences between the claimed invention and the asserted prior art, as required”).

The Consolidated Trial Practice Guide⁷ also made Petitioner’s obligation clear:

Where claim language may be construed according to 35 U.S.C. §

7

<https://www.uspto.gov/sites/default/files/documents/tpgnov.pdf?MURL=TrialPracticeGuideConsolidated>;
<https://www.federalregister.gov/documents/2019/11/21/2019-25281/office-patent-trial-practice-guide-november-2019-edition>.

112(f), a petitioner must provide a construction that includes both the claimed function and the specific portions of the specification that describe the structure, material, or acts corresponding to each claimed function. 37 C.F.R. § 42.104(b)(3). A party may choose to elaborate why § 112(f) should or should not apply to the limitation at issue. See *Williamson v. Citrix Online, LLC*, 792 F.3d 1339 (Fed. Cir. 2015). A petitioner who chooses not to address construction under § 112(f) risks failing to satisfy the requirement of 37 C.F.R. § 42.104(b)(3).

Sole independent claim 1 of the '030 Patent recites “. . . by means of” and “sealing means,” the use of both of which creates a rebuttable presumption that 35 U.S.C. § 112(f) applies. *See Williamson*, 792 F.3d at 1348. Petitioner does not address that presumption, and more specifically, Petitioner does not provide any argument or evidence as to why the presumption is rebutted. For example, putting aside Petitioner's litigation position that those “means” terms should be construed under § 112(f), Petitioner here could have tried to argue, but they did not, that the presumption is rebutted because claim 1 recites exact structure to perform the “means” functions at issue.

Patent Owner emphasizes that unlike in other proceedings in which it was decided that § 112(f) does not apply and thus a petitioner's “ordinary and customary meaning” constructions were correct, here claim 1 of the '030 Patent expressly recites “. . . by means of” and “sealing means,” which terms are

improperly “eviscerated” by Petitioner’s “ordinary and customary meaning” construction. *Samsung*, IPR2022-01378, Paper 12, at 13 (“In the instant proceeding, unlike the cases relied on by Petitioner, the ‘sensing means’ limitations recite the word ‘means.’ Petitioner’s proposed construction eviscerates the word ‘means’ without explanation.”). Here, like in *Samsung*, “Petitioner provides a section entitled ‘CLAIM CONSTRUCTION,’ but does not identify any portions of the [challenged] patent specification that describe the structure, material, or acts corresponding to each claimed function, even as an alternative construction.”). *Id.*

Petitioner’s failure to comply with 37 C.F.R. § 42.104(b)(3) is particularly egregious as Petitioner and Dr. Rodgers, around the same time as the Petition, strongly argued in the parallel litigation why the “. . . by means of” and “sealing means” limitations of claim 1 of the ’030 Patent (i) raise the § 112(f) presumption, (ii) are not tied to corresponding structure in the claim (hence, the presumption is un rebutted), and thus, (iii) in Petitioner’s own words, “***must***” be construed under 35 U.S.C. § 112(f):

Claim term	Petitioner	Dr. Rodgers
“. . . by means of”	“The remaining two terms include the word ‘means,’ and <u>are thus presumptively</u>	“In my opinion as a POSITA, the language of this claim limitation is in

	<p><u>means-plus function claim terms</u> under 35 U.S.C. §112(f). <u>These ‘means’ terms must therefore be limited in scope to the function and structure disclosed in the ‘030 Patent related to the claim terms.”</u></p> <p>Exh. 2004, p. 4.</p>	<p>the form of a means-plus-function claim limitation for two reasons. . . .</p> <p>Specifically, while it recites an outer flange and an inner flange, <u>[the claim] does not describe the structure by which those flanges are clamped to have sealing effect.”</u> Exh. 2005, pp. 23-24 (¶ 81).</p>
<p>“sealing means”</p>		<p>“In my opinion as a POSITA, the language of this claim limitation is in the form of a means-plus-function claim limitation for two reasons. . . .</p> <p>Specifically, while it recites a ‘sealing means’, <u>[the</u></p>

		<u>claim]</u> does not recite any <u>structure</u> , such as types of materials that are used to form the seal.” Exh. 2005, p. 31 (¶ 113).
--	--	--

It is striking to say the least that Petitioner, without any explanation to the Board, so ardently took the litigation position that the “means” terms recited in claim 1 of the ’030 Patent had to be construed under § 112(f) while here Petitioner says nothing of the sort and by its “ordinary and customary meaning” construction effectively takes the opposite position that § 112(f) does not apply. Petitioner makes no effort at all to reconcile its markedly inconsistent positions—Petitioner chose not to even simply disclose to the Board its § 112(f) litigation claim construction positions.

Accordingly, in view of that Petitioner did not at all either (i) provide § 112(f) constructions as required by 37 C.F.R. § 42.104(b)(3) or (ii) address, let alone rebut, the § 112(f) presumption created by the express “means” terms in claim 1 (from which all other challenged claims depend), institution should be denied for the Petition’s failure to comply with § 42.104(b)(3). *Samsung*, IPR2022-01378, Paper 12, at 11-16 (denying institution for failure to comply with §

42.104(b)(3)); *Ebates Performance Marketing, Inc. d/b/a Rakuten Rewards v. International Business Machines Corp.*, IPR 2022-00439, Paper 11, at 12-13 (PTAB Oct. 3, 2022) (denying institution on same basis); *Pride Solutions, LLC v. Not Dead Yet Mfg., Inc.*, IPR2013-00627, Paper 14, at 11 (PTAB Mar. 17, 2014) (denying institution because: “Petitioner has not presented evidence, or argument, that the grounds alleged are shown in any of the prior art cited when ‘retention means’ is properly construed as a means-plus-function term. The record is, thus, devoid of evidence [from Petitioner] on the critical issue of equivalent structure.”); *Panel Claw, Inc. v. SunPower Corporation*, IPR2014-00388, Paper 10, at 9 (PTAB Jun. 30, 2014) (denying institution on claims for which “[b]y rule, Petitioner was required to [but did not] identify the corresponding structure in its Petition.”).

V. PETITIONER FAILS TO SHOW THAT ITS NON-PATENT REFERENCES WERE PUBLICLY ACCESSIBLE AT THE RELEVANT TIME, THUS FAILING TO QUALIFY AS PRINTED PUBLICATIONS UNDER 35 U.S.C. § 102

A reference is deemed a printed “publication” (accessible to the public) only upon “a satisfactory showing that the reference has been disseminated or otherwise made available such that persons interested and ordinarily skilled in the subject matter or art, exercising reasonable diligence, can locate it.” *Bruckelmyer v. Ground Heaters, Inc.*, 445 F.3d 1374, 1378 (Fed. Cir. 2006). “Public accessibility requires more than technical accessibility.” *First Solar, Inc. v. Rovshan Sade*,

IPR2023-00827, Paper 13, at 14-15 (PTAB Nov. 16, 2023) (citations omitted).

“[A]t the institution stage, the petition must identify, with particularity, evidence sufficient to establish a reasonable likelihood that the reference was publicly accessible before the critical date of the challenged patent and therefore that there is a reasonable likelihood that it qualifies as a printed publication.” *Hulu, LLC v. Sound View Innovations, LLC*, IPR2018-01039, Paper 29, at 13 (PTAB Dec. 20, 2019) (precedential). Under 35 U.S.C. § 312(a), the “with particularity” standard needed to establish a reference as a printed publication “is far more than is required in typical notice pleading, which only requires that a party make plausible claims.” *Id.* Moreover, “there is no presumption in favor of institution or in favor of finding a reference to be a printed publication under [any] authority.” *Id.* at 16.

As explained below, Petitioner and Dr. Rodgers, in their perfunctory approach toward the purported public accessibility of each of the two AS-Schneider catalogs (Exhs. 1006, 1008) and two Parker manuals (Exhs. 1010, 1011), fail to meet Petitioner's burden to establish those documents as printed publications under 35 U.S.C. § 102(a)(1). That failure alone should result in the Board's rejection of Petitioner's Grounds 2 and 4-6.⁸

⁸ Whether these non-patent references qualify as printed publications under § 102 is a threshold issue that Petitioner was aware of and should have fully addressed,

A. PETITIONER'S CURSORY "WAYBACK MACHINE" RELIANCE IS NOT SUFFICIENT TO SHOW PUBLIC ACCESSIBILITY OF THE AS-SCHNEIDER CATALOGS (EXHS. 1006, 1008) AND PARKER 2 MANUAL (EXH. 1011)

Petitioner's mere reliance on the "Wayback Machine" in attempt to establish the AS-Schneider and Parker 2 references as prior art printed publications is weaker than the factual basis presented by the petitioner in the relatively recent *First Solar* proceeding in which the Board found that petitioner's reliance on the "Wayback Machine" and a declaration from the Internet Archive to be insufficient to qualify the Wattsun reference in that proceeding as a printed publication. *First Solar*, IPR2023-00827, Paper 13, at 17-19. Indeed, the Internet Archive specifically states to users that "the Archive makes no warranty or representation regarding the accuracy, currency, completeness, reliability, or usefulness of the content in the Collections." Exh. 2006, p. 2.

Here, Petitioner's evidence is simply limited to printouts from the "Wayback Machine" (Exhs. 1007, 1009, 1012) and Dr. Rodgers's statements that the two AS-Schneider catalogs and Parker 2 manual at Exhs. 1006, 1008, and 1011 are what he downloaded from the "Wayback Machine" URLs shown on those printouts. Exh. 1002, ¶¶ 96, 103, 107.

with evidence, in its Petition. Petitioner should not now be allowed to again address that issue in reply.

But regardless of whether the purported archival of the documents at Exhs. 1007, 1009, and 1012 demonstrates “technical accessibility,” that is not the same as the “public accessibility” needed to qualify as prior art. *First Solar*, IPR2023-00827, Paper 13, at 18 (“public accessibility requires more than technical accessibility”). Here, in regard to public accessibility, there is:

- **no** declaration from Dr. Rodgers or anyone else attesting to personal knowledge of the existence of the documents prior to the critical date;
- **no** declaration from the Internet Archive (or “Alexa Crawls”⁹) regarding how it works or how the documents were obtained, stored, searchable, or otherwise publicly available prior to the critical date;
- **no** evidence that the documents were findable by an internet search engine prior to the critical date;
- **no** evidence, or even argument, that the contents of the documents were indexed or searchable;
- **no** identification of any search terms or search approach that would have with reasonable diligence located the documents prior to the critical date by “persons interested and ordinarily skilled in the subject matter or art”

⁹ Exhs. 2008 and 2010 show that the content in Exhs. 1007 and 1012, respectively, were “collected by” an entity named “Alexa Crawls.”

(*In re Lister*, 583 F.3d 1307, 1311 (Fed. Cir. 2009); *First Solar*, IPR2023-00827, Paper 13, at 19 (“Petitioner’s Wattsun Affidavit only indicates that the Wayback Machine is searchable ‘by URL,’ [] not by a query of a search engine before the critical date, using any combination of search words, that would have led to Wattsun appearing in the search.”));

- **no** evidence that a person interested in stabilized connector assemblies “would be independently aware of the web address for [the AS-Schneider catalogs and Parker 2 manual] or even of the company or its products” (*First Solar*, IPR2023-00827, Paper 13, at 18);
- **no** declaration from Dr. Rodgers that he independently searched and found the documents, as opposed to simply being provided a link by Petitioner to download the documents from the “Wayback Machine”; or
- **no** evidence of any dates in the two AS-Schneider catalogs (*Sophos Ltd., et al. v. Open Text Inc.*, IPR2023-00732, Paper 23, at 15 (PTAB Nov. 2, 2023) (“We can find no indication anywhere in Li itself evidencing a timeframe in which it might have been published.”)).¹⁰

¹⁰ Dates if present would be hearsay regardless as discussed below in Section V.B with respect to the Parker manuals.

Moreover, Petitioner has made no showing whatsoever, let alone “with particularity,” that the documents at Exhs. 1006, 1008, and 1011 were actually available at the web links on the dates indicated on Exhs. 1007, 1009, and 1012, respectively. Petitioner has not even attempted to show by any direct or circumstantial evidence—*e.g.*, a declaration attesting to personal knowledge—that Exhs. 1006, 1008, and 1011 were known to exist prior to the critical date, let alone that those very documents existed at the respective web links on or around the dates indicated in Exhs. 1007, 1009, and 1012. Even further, each of the following web links on Exhs. 1007, 1009, and 1012 have no indication of date or specific connection between the link and the actual respective documents at Exhs. 1006, 1008, and 1011:

Exh. 1007: https://www.as-schneider.com/en/hook-ups/schneider-hook-ups.pdf
Exh. 1009: https://www.as-schneider.com/en/instrumentation-products/schneider-products.pdf
Exh. 1012: http://www.pgiint.com/pdf/PGI-DMD.pdf

Going even further, the links noted for Exhs. 1007 and 1009 are unavailable, demonstrating the variability of content (or lack thereof) at a URL:

Not Found

The requested URL was not found on this server.

Exhs. 2014, 2015. And the link noted for Exh. 1012 redirects to a different link:

<https://www.parker.com/us/en/divisions/instrumentation-products-division.html>.

Exh. 2016.

Petitioner merely relies on the “crawl” dates that the Exhs. 1007, 1009, and 1012 links were captured and presents no evidence to verify that Exhs. 1006, 1008, and 1011 existed at those links, respectively, on the indicated capture dates. There is no evidence to show that Exhs. 1006, 1008, and 1011 are not updated or different documents that the above-listed links pointed to at a time after the “capture” dates shown on Exhs. 1007, 1009, and 1012. Indeed, because Exhs. 1006, 1008, and 1011 respectively ***do not exist*** at the links shown on Exhs. 1007, 1009, and 1012 (*see* Exhs. 2014-2016), there is no ability to review underlying HTML code to potentially discern history and dates of content of resources previously at those links. In other words, because the Petition does not evidence any HTML/source code underlying the webpages shown in Exhs. 1007, 1009, and 1012, it cannot be verified whether those pages statically linked to the documents in Exhs. 1006, 1008, and 1011 or were instead linked to resources that could be updated over time by AS-Schneider or Parker.

As Mark Graham, the Director of the “Wayback Machine,” noted:

One of the ways a web archive could be confusing is via anachronisms, displaying content from different dates and times than the user expects. For example, when a archived page is played back, it could include some images from the current web, making it look like the image came

from the past when it did not. We implemented Timestamps to provide users with more context about, and in turn hopefully greater confidence in, what they are seeing.

Exh. 2007, p. 2. **But here**, when one clicks on the top-right “About this capture” link on the “Wayback Machine” webpages shown on Exhs. 1007, 1009, and 1012, there is no timestamp information showing when the displayed PDF became available at the respective links listed above:

Excerpt of result from click of “About this capture” link on webpage shown on Exh. 1007:

There are no sub-resources in the page.

TIMESTAMP

Exh. 2008, p. 1.

Result from click of “About this capture” link on webpage shown on Exh. 1009:

There are no sub-resources in the page.

TIMESTAMP

Exh. 2009, p. 1.

Result from click of “About this capture” link on webpage shown on Exh. 1012:

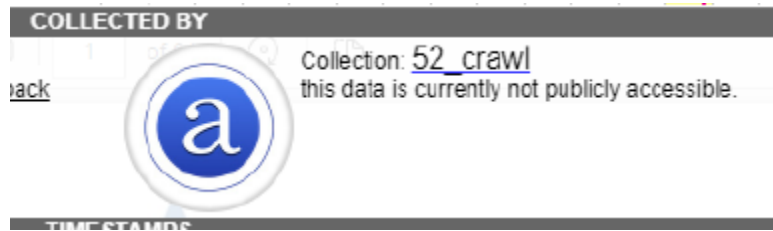
There are no sub-resources in the page.

TIMESTAMP

Exh. 2010, p. 1.

Petitioner in Exhs. 1007, 1009, and 1012 neglected to show this information (or lack thereof) at the “About this capture” links.

Further still, with respect to the Exh. 2008 result from clicking on the “About this capture” link on the webpage shown on Exh. 1007, it says that the crawl data is “not publicly accessible”:



Exh. 2008, p. 1.

Valve Corp. v. Ironburg Inventions, the sole Federal Circuit case referenced by Petitioner on use of the “Wayback Machine” (Petition, p. 14), is easily distinguishable. In that case, the Federal Circuit found that an IPR exhibit was a printed publication because the exhibit was substantively identical to a proven prior art reference (the “Burns article”) which an USPTO examiner was able to search for and locate on the “Wayback Machine” *before* the critical date. *Valve Corp. v. Ironburg Inventions*, 8 F.4th 1364, 1375-76 (Fed. Cir. 2021) (“If an examiner could access the article before the priority date, so could the general public.”). That evidence was in addition to the Burns article having been confirmed to have a publication date prior to the critical date, which was buttressed by an inventor (Simon Burgess) on the challenged patents having (i) testified that he “facilitated the publication of the Burns article and intended that the Burns article reach the general public” and (ii) “also declared the [] Burns article as dated October 20, 2010 [more than two years before the critical date].” *Id.* at 1373, 1375 (cleaned up). Here, neither the Petition nor Dr. Rodgers come close to presenting

the amount or type of evidence in the *Valve Corp.* case.

In view of all the shortcomings discussed above, Petitioner's sole reliance on the "Wayback Machine's" capture dates of the website links on Exhs. 1007, 1009, 1012 at which respectively Exhs. 1006, 1008, and 1011 were purportedly available prior to the critical date is insufficient to show public accessibility. As mentioned, Petitioner's evidence is even less than what the petitioner in the *First Solar* proceeding raised, in which proceeding the Board recently denied institution. At bottom, the Board has made clear that merely showing that a reference was available on the Internet, which is at most what Petitioner does here, does not establish "public accessibility." *First Solar*, IPR2023-00827, Paper 13, at 17-19.

Therefore, Petitioner has failed to meet its burden to "identify, with particularity, evidence sufficient to establish a reasonable likelihood that the [AS-Schneider catalogs and Parker 2 manual were] publicly accessible before the critical date of the challenged patent and therefore that there is a reasonable likelihood that [each of those documents] qualifies as a printed publication." *Hulu*, IPR2018-01039, Paper 29, at 13. On that basis, the Board should reject Grounds 2 and 4-6, which each rely on one or more of the two AS-Schneider catalogs and Parker 2 manual.

B. PETITIONER'S RELIANCE ON PRINTED DATES AND AN UNVERIFIABLE SEARCH RESULT IS NOT SUFFICIENT TO SHOW PUBLIC ACCESSIBILITY OF THE PARKER 1 AND 2 MANUALS (EXHS. 1010, 1011)

Petitioner's relied-upon "2013" date on the Parker 1 and 2 manuals (Petition, p. 18, Exh. 1002, ¶ 103) is hearsay and insufficient. A date on a non-patent reference is not proof that that reference was publicly accessible on that date, as the Board has previously found:

We acknowledge that the cover page of Barber includes a stamp reading "ARCHIVES MASSACHUSETTS INSTITUTE OF TECHNOLOGY APR 11 1996 LIBRARIES." []. That stamped date, however, would appear to be a hearsay statement to the extent that it would be offered for its truth (*see* Fed. R. Evid. 801). Further, even if Apple could establish either that the statement is excluded from hearsay or that an exception to the rule against hearsay should apply, such that we would admit the stamped date as evidence of when the thesis was archived, the stamp does not establish when, if ever, the thesis became publicly accessible.

* * *

In this case, Apple has not identified sufficient evidence on the record before us to qualify Barber as prior art.

Apple Inc. v. DSS Technology Management, Inc., IPR2015-00373, Paper 8, at 10-11 (PTAB Jun. 25, 2015); *see also In-Depth Geophysical, Inc. v. Conocophillips Co.*, IPR2019-00849, Paper 14 at 4-13 (PTAB Sept. 6, 2019) (concluding that a

conference paper, bearing a copyright date of 2012 and including a date of September 2012 on its cover, was insufficient to show public accessibility).

Moreover, Petitioner neither offers evidence nor argues that the “2013” dates on the Parker 1/2 manuals were added or confirmed by a third party publisher, let alone an established one. Nor has Petitioner provided any declaration attesting to the accuracy of the printed “2013” dates as being when the Parker 1/2 manuals were publicly accessible. At bottom:

Simply pointing to a date, alleged to be a “publication date,” even where that date cascaded through various patent references, without interpretation or explanation, does not meet the threshold standard to show that it is reasonably likely that a reference was publically accessible on that date.

In-Depth Geophysical, Inc. v. Conocophillips Co., IPR2019-00849, Paper 17 at 5 (PTAB Mar. 30, 2020) (denying petitioner’s rehearing request). Indeed, the unreliability of an uncorroborated date printed on a reference is exemplified by Petitioner on one hand pointing to the “2013” date on the Parker 2 manual (Exh. 1002, ¶ 103) ***but on the other hand*** relying on a date of March 2014 from the “Wayback Machine” (Exh. 1012).

Dr. Rodgers’s purported screenshot excerpt of a Google search in regard to the Parker 1 manual (Exh. 1002, ¶ 103) should also be discounted as hearsay and unsupported by evidence. Petitioner (i) not only fails to evince that search in the

form of an exhibit, but also (ii) does not explain what “Oct 3, 2013” means, let alone what information Google intends to convey by that date, (iii) does not show the URL for the search, *and most importantly* (iv) does not at all show that the document at the shown search result is actually the Parker 1 manual.

Thus, taken together, including Petitioner's insufficient reliance on the “Wayback Machine” in regard to the Parker 2 manual (*see* Section V.A *supra*), Petitioner's relied-upon indicia of purported public accessibility of each of the Parker 1/2 manuals prior to the critical date is weak (at best) and insufficient to meet Petitioner's burden to “identify, with particularity, evidence sufficient to establish a reasonable likelihood that the reference was publicly accessible before the critical date of the challenged patent and therefore that there is a reasonable likelihood that it qualifies as a printed publication.” *Hulu*, IPR2018-01039, Paper 29, at 13. On that basis, the Board should reject Grounds 4 and 5, which rely on Parker 1 and 2 manuals.

VI. CLAIM CONSTRUCTION REQUIRED DUE TO PETITIONER'S INVALIDITY ARGUMENTS

Although Patent Owner took the position in the parallel district court litigation that the claims of the '030 Patent did not require construction, Petitioner's invalidity arguments in the Petition raise disputes about the scope of the claims that need to be resolved in order to determine whether or not to institute

inter partes review. *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1361 (Fed. Cir. 2008) (“A determination that a claim term ‘needs no construction’ or has the ‘plain and ordinary meaning’ may be inadequate when a term has more than one ‘ordinary’ meaning or when reliance on a term’s ‘ordinary’ meaning does not resolve the parties’ dispute.”).

More specifically, as will be further evident from the discussion below and in Sections VII-XI *infra*, certain limitations in claim 1 of the '030 Patent relating to the sealing arrangement of the first and second connecting devices need to be construed due to Petitioner's misapplication of the claim to the alleged prior art, particularly the Craig reference.

A. THE “MEANS” TERMS IN CLAIM 1 SHOULD BE CONSTRUED AS PETITIONER SAID THEY “MUST” BE IN THE PARALLEL LITIGATION

The two “means” terms in claim 1 listed below have to do with (i) how the nut unit is sealingly arranged with the second connecting device and (ii) how the first and second connecting devices are sealingly arranged together. This is important because Patent Owner explains below in Sections VII.A and B *infra* why Craig does not disclose those “means” limitations. As discussed in Section IV *supra*, Petitioner said in the parallel district court litigation that these “means” terms “must [] be limited in scope to the function and structure disclosed in the '030 Patent.” Exh. 2004, p. 4; Exh. 2005, pp. 23-24 (¶ 81), 31 (¶ 113) (Dr.

Rodgers also stating that the “means” terms need to be construed under 35 U.S.C. § 112(f). And indeed both Petitioner and Dr. Rodgers said what those constructions should be:

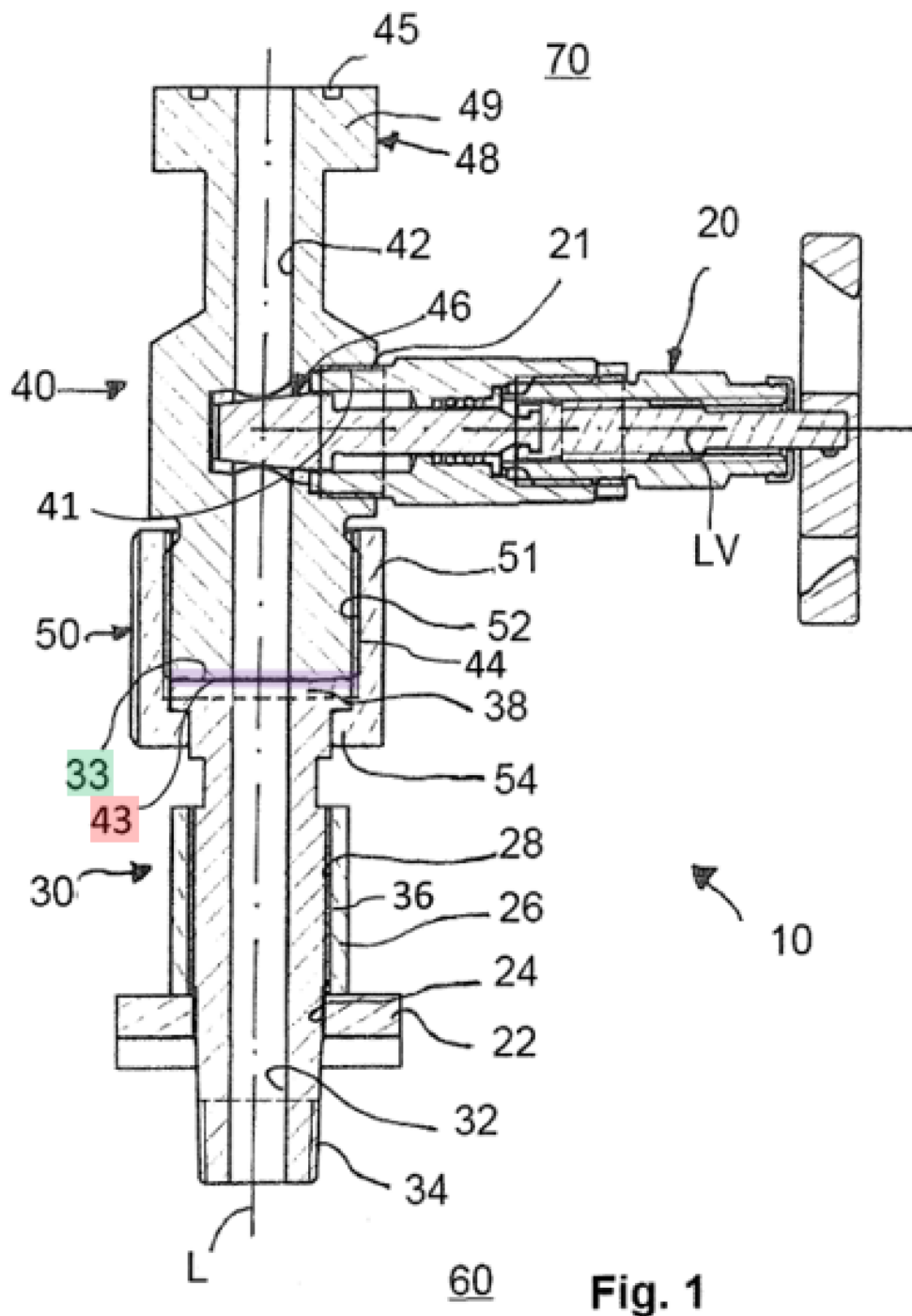
Claim 1 “means” term	Petitioner and Dr. Rodgers’s litigation constructions
“...by means of the inner flange and the outer flange the end-face sealing surfaces are clamped together with sealing effect”	Subject to 35 U.S.C. §112(f) (means-plus function) Function: the first connecting device and the second connecting device are sealed together Structure: an outer flange and an inner flange clamped together by female threads of a nut engaging male threads of the second connecting device such that end-face sealing surface 43 clamps to end-face sealing surface 33 to create a seal, as shown in Fig 1 Exh. 2002, pp. 1-2; Exh. 2004, pp. 14-16; Exh. 2005, pp. 23-26 (¶¶ 81-87).
“sealing means are arranged between the end-face sealing surface of the first	Subject to 35 U.S.C. §112(f) (means-plus function) Function: a seal is created between the end-face sealing surface of the first connecting device and the end-face sealing surface of the second connecting device

connecting device and the end-face sealing surface of the second connecting device”	Structure: O-rings consisting of sealing plastic such as PTFE, elastomer or graphite that are arranged inside a groove; an end-face coating made of sealing material; or a face-turned surface on the first connecting device and a projecting nose unit on the second connecting device Exh. 2002, p. 2; Exh. 2004, pp. 21-23; Exh. 2005, pp. 31-33 (¶¶ 113-119).
---	---

1. The “by means . . . are clamped together” language should be construed to require the relevant surfaces to be clamped to each other as described in the specification

Patent Owner notes that in support of Petitioner's § 112(f) construction for the first “means” term listed above, Petitioner in the parallel litigation emphasized that the '030 Patent describes that the “**end-face sealing surfaces are clamped to each other with sealing effect.**” Exh. 2004, p. 12 (bold emphasis in original, underlining added) (citing Exh. 1001, col. 3, ll. 19-34). Indeed, Petitioner in its litigation construction specifically identified Fig. 1 of the '030 Patent as the corresponding structure for the claimed “means” term. Fig. 1 (reproduced below with color markings), which shows an assembled state of the connecting apparatus **10**, clearly illustrates that sealing surface **33 (green)** of the first connecting device **30** and sealing surface **43 (red)** of the second connecting device **40** are *clamped*

together (purple):



Thus, Petitioner in the parallel litigation relied on Fig. 1 and the “clamped to each other” language in the specification in support of its § 112(f) construction that

the surfaces “clamped together” claim language means that “sealing surface 43 clamps to end-face sealing surface 33.” That surfaces “clamped together” means that those surfaces are clamped to (touch) each another is repeatedly supported in the '030 Patent specification. Exh. 1001, Fig. 1; col. 3, ll. 32-34 (“the end-face sealing surfaces are clamped to each other with sealing effect”); col. 6, ll. 2-5; col. 7, ll. 2-3, 42-45 (“the end-face sealing surface **33** of the outer flange **38** of the first connecting device **30** comes to bear with pressure on the end-face sealing surface **43** of the second connecting device **40**”). The importance of this “means” element and its construction will be further evident from the discussion in, for example, Section VII.A *infra*.

2. The “sealing means” term should be construed to equate to the structures disclosed in the specification

Regarding the second above-listed “sealing means” term, the need for its construction here is due to Petitioner’s argument in Ground 1 that Craig’s dielectric gasket **15** discloses the claimed “sealing means.” Petition, p. 38. “Sealing means” contains the word “means” and thus there is a presumption that 35 U.S.C. § 112(f) applies. And because the claim only recites where the “sealing means” is arranged and not its structure, that presumption is not rebutted—Petitioner does not even try to rebut the presumption.

As will be discussed in Section VII.B *infra*, the gasket of Craig which is

used to purposefully create a gap/space (an electrical break) between two components is not at all the “sealing means” required by claim 1 of the '030 Patent. The claimed “sealing means” is such that it allows the surfaces of the components to be clamped together. That is why when the '030 Patent describes that if a sealing O-ring is as the “sealing means,” that O-ring is arranged “inside a groove” (consistent with the equivalent structure identified in Petitioner's litigation § 112(f) construction)—so that the surfaces can still be clamped to each other and otherwise not be spaced apart were a seal present between the surfaces without a groove in one of those surfaces for the seal to sit. Exh. 1001, col. 3, ll. 64-66.

* * *

Thus, in view of (i) the presumption that the above-listed “means” terms in claim 1 should be construed under § 112(f)—which presumption Petitioner has not rebutted by showing sufficient structure recited in the claim for those “means” function—and (ii) because Petitioner's invalidity arguments further call out how these terms should be applied with bearing on the Board's decision whether or not to institute as explained in, for example, Sections VII.A and B *infra*, Patent Owner agrees to have these terms construed as Petitioner said they “must” be in the parallel litigation. In other words, Patent Owner agrees here to Petitioner and Dr.

Rodgers’s § 112(f) litigation constructions.¹¹

B. DESPITE ITS VIGOROUS INDEFINITENESS LITIGATION POSITION, PETITIONER HERE SAYS NOTHING ABOUT WHAT IT MEANS FOR CLAIM 1 TO RECITE THAT THE OUTWARD FLANGE “FITS BEHIND” THE INNER FLANGE

Claim 1 of the ’030 Patent recites in part that “the outwardly pointing outer flange of the first connecting device fits behind the inner flange of the nut unit.”

Exh. 1001, col. 9, ll. 4-5. *Less than a month* after it filed the Petition in which Petitioner stated to the Board that a person of ordinary skill in the art would know the “ordinary and customary meaning” of this limitation (Petition, p. 10), Petitioner in the parallel district court litigation took the position that the limitation was indefinite (Exh. 2002, p. 1). Indeed, Petitioner then strongly argued in support of that position in its claim construction briefing to the district court:

Claim term	Petitioner’s IPR position	Petitioner’s litigation arguments
“the outwardly pointing outer	“ordinary and customary	“[T]he term ‘behind’ does not have a clear meaning in the claims or specification.”

¹¹ Because these are Petitioner and Dr. Rodgers’s own constructions, and in view of Petitioner’s failure to comply with 37 C.F.R. § 42.104(b)(3) as explained in Section IV *supra*, Petitioner should not be allowed to now belatedly address these constructions in a preliminary reply.

flange of the first connecting device fits behind the inner flange of the nut unit"	meaning"	<p>"The claim does not include any other language explaining the mechanical relationship between the outer flange and the inner flange."</p> <p>"[T]he term 'behind' has no special meaning in the field of mechanical or petroleum engineering."</p> <p>"Thus, without explanation, a POSITA would not know what it means for one component in a tool to be 'behind' another."</p> <p>The limitation "is ambiguous, has no discernable boundary, and fails to inform a POSITA about the scope of the claimed invention."</p> <p>Exh. 2004, pp. 9-11.</p>
---	----------	---

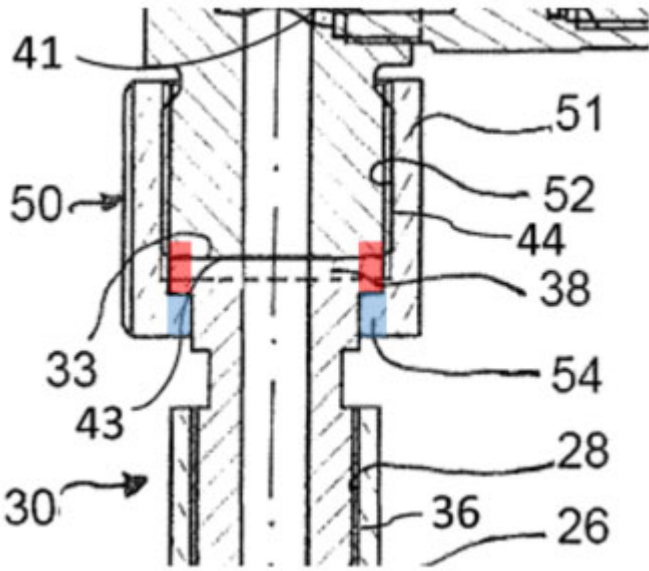
Dr. Rodgers took the same ardent indefiniteness stance in the parallel litigation. Exh. 2005, pp. 22-24 (¶¶ 70-80) (largely mirroring the language of Petitioner's arguments).

While Patent Owner did not believe the “fits behind” limitation had to be construed in the parallel litigation, Petitioner here is conspicuously silent on the meaning of “fits behind” when arguing that limitation is disclosed by the arrangement of purported outer and inner flanges in Craig, but which flanges as Patent Owner will clearly show in Section VII.C *infra* are not even next to each other, let alone fitting behind one another. Thus, regardless of whether the “fits behind” limitation needs to be specifically construed, there should be no question that its “ordinary” meaning needs to be discerned, especially in view of Petitioner’s vigorous litigation position that a POSITA would not know what that limitation means.¹²

While Petitioner and Dr. Rodgers in this proceeding make no effort to explain the “ordinary” meaning of “fits behind” (likely to avoid being inconsistent with their indefiniteness litigation positions), the content of the ’030 Patent is instructive. *Aylus Networks, Inc. v. Apple Inc.*, 856 F.3d 1353, 1358 (Fed. Cir.

¹² If the Board finds that it cannot discern the meaning of the “fits behind” limitation, the Board should deny institution. *Samsung Electronics America, Inc. v. Prisia Eng’g Corp.*, 948 F.3d 1342, 1353 (Fed. Cir. 2020) (“[T]he proper course for the Board to follow, if it cannot ascertain the scope of a claim with reasonable certainty for purposes of assessing patentability, is to decline to institute the IPR.”).

2017) (“Properly viewed, the ‘ordinary meaning’ of a claim term is its meaning to the ordinary artisan after reading the entire patent.”); *Aventis Pharm., Inc. v. Amino Chems. Ltd.*, 715 F.3d 1363, 1373 (Fed. Cir. 2013) (“The written description and other parts of the specification, for example, may shed contextual light on the plain and ordinary meaning.”). Specifically, the ’030 Patent shows in Fig. 1 (reproduced in part below with color markings) and describes in its specification the arrangement of the outwardly pointing (or outer) flange **38** (red) of the first connecting device **30** with the inwardly pointing (or inner) flange **54** (blue) of the nut unit **51**:

Fig. 1 excerpt	Specification
	<p>“The first connecting device is introduced into the nut unit in this case until the connecting flange comes to butt against the inner flange.”</p> <p>Exh. 1001, col. 3, ll. 36-38.</p> <p>“wherein the end position is formed by the abutment of the connecting flange 38 of the first</p>

	connecting device 30 against the inner flange 54 of the connecting unit 50” Exh. 1001, col. 7, ll. 11-14.
--	--

Thus, when read in view of ’030 Patent, the “fits behind” limitation in claim 1 means that the outer flange abuts against, or has a common boundary or border with, the inner flange.

VII. GROUND 1: CRAIG FAILS TO DISCLOSE A NUMBER OF MATERIAL LIMITATIONS IN CLAIM 1 OF THE ’030 PATENT

Craig discloses a valve that provides an electrical break in a pathway for liquid propane gas to flow from a storage tank to a building. Exh. 1005, ¶¶ 2-4. More specifically, Craig’s valve is placed external to the building and has dielectric inserts to electrically disconnect the building from a metallic fuel line used to bring the propane from the storage tank. *Id.* at ¶ 4. Patent Owner does not argue that Ground 1 should be rejected because Craig’s valve is for a different purpose than the connecting apparatus claimed in the ’030 Patent. But that difference—Craig’s objective to provide an electrical break and reduce the chance of spark-induced propane fires is not an objective of the ’030 Patent—is reason at least in part why Craig fails to disclose material limitations recited in claim 1 of

the '030 Patent as will be now be discussed.¹³

A. CRAIG DISCLOSES “SPACED APART FACES” IN STARK CONTRAST TO THE “CLAMPED TOGETHER” SURFACES REQUIRED BY THE '030 PATENT

With reference to Fig. 2 of Craig (reproduced below with color markings and annotation), there is a dielectric gasket **15** (**blue**) of discernible thickness between a face (**red**) of union end **13** and a face (**green**) of end connection **11**.¹⁴ That dielectric gasket **15** is positioned as such to provide an electrical break between union end **13** and end connection **11**. That is the main purpose of gasket **15**—to ensure a physical (and thus electrical) break between union end **13** and end connection **11**. Indeed, Craig specifically discloses that its “dielectric gasket **15** is interposed between spaced apart faces on the end connection **11** and union end **13**.” *Id.* at ¶ 8. It is thus abundantly clear in Craig that faces of the end connection

¹³ Because Petitioner has failed to show with reasonable likelihood that Craig anticipates claim 1 of the '030 Patent, Petitioner has similarly failed with respect to dependent claims 2, 6, and 7 also included in Ground 1.

¹⁴ Petitioner alleges (i) the union end **13** in Craig as disclosing the “first connecting device” recited in claim 1 of the '030 Patent and (ii) the end connection **11** of Craig as disclosing the “second connecting device” recited in claim 1 of the '030 Patent. Petition, p. 28.

11 and union end **13** do not make contact—and are forced to be “*spaced apart*” by the interposed dielectric gasket **15**.

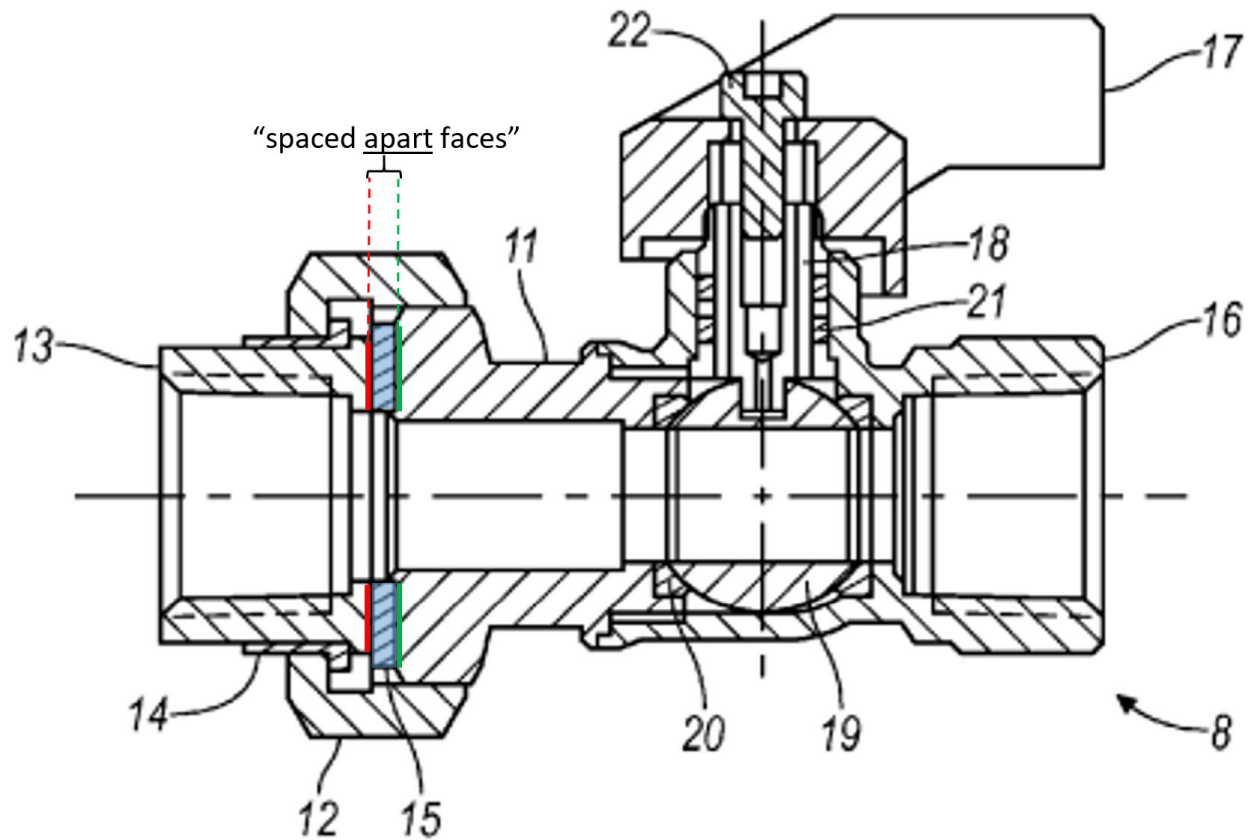


FIG. 2

Turning to claim 1 of the '030 Patent, it in part requires that “the end-face sealing surfaces are clamped together with sealing effect” “by means of the inner flange and the outer flange. Even though Craig specifically discloses that its union end **13** face (**red**) and end connection **11** face (**green**) are “*spaced apart*,” Petitioner argues that “[a] POSITA would understand that such a gasket 15 would inherently provide sealing between the end-face sealing surfaces of the connecting

devices 11 and 13 when clamped together by screwing nut 12 on to end connection 11.” Petition, p. 37. So Petitioner’s argument takes the position that the surfaces in Craig are “clamped together” even though those surfaces are “spaced apart” and thus do not touch. Petitioner’s interpretation of “clamped together” in this proceeding is at odds with Petitioner’s litigation position in which Petitioner emphasized that the ’030 Patent describes that the “**end-face sealing surfaces are clamped to each other with sealing effect.**” Exh. 2004, p. 12 (bold emphasis in original, underlining added) (citing Exh. 1001, col. 3, ll. 19-34). But the Petition does not at all address, let alone reconcile, this discrepancy.

Because Petitioner’s argument elevates the importance of the “clamped together” claim language and the “means” element in which it appears, that “means” element should be construed. 37 C.F.R. § 42.104(b)(4). And to that end, Patent Owner agrees with Petitioner’s litigation claim construction for that “means” element. *See* Section VI.A.1 *supra*. In that construction, Petitioner identified the corresponding structure under § 112(f) to in part be “that end-face sealing surface 43 clamps to end-face sealing surface 33 to create a seal, as shown in Fig 1.” Indeed, Fig. 1 of the ’030 Patent—which thus limits the “means” element under § 112(f)—specifically shows that end-facing sealing surfaces **33c (green)**, **43 (red)** are clamped “to each other” (**purple**) (the surfaces come to bear with pressure on one another):

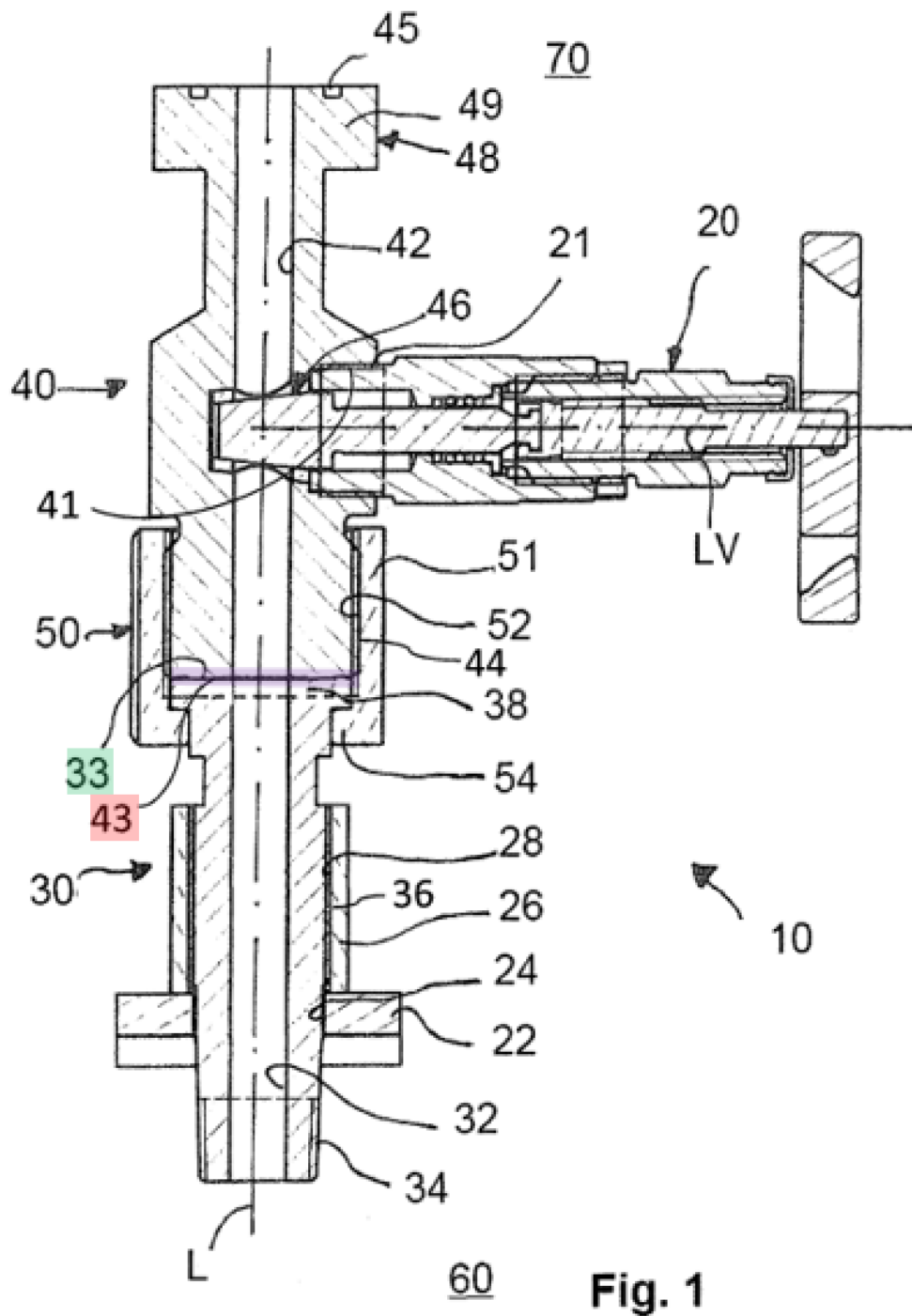


Fig. 1

Exh. 1001, Fig. 1; col. 3, ll. 32-34 (“the end-face sealing surfaces are clamped to each other with sealing effect”); col. 6, ll. 2-5; col. 7, ll. 2-3, 42-45 (“the end-face sealing surface **33** of the outer flange **38** of the first connecting device **30** comes to

bear with pressure on the end-face sealing surface **43** of the second connecting device **40**").

Thus, under Petitioner's § 112(f) litigation construction, which limits the "clamped together" means element to that which is shown in Fig. 1 of the '030 Patent, there is no reasonable dispute that the expressly "spaced apart faces" of the end connection **11** and union end **13** are not "clamped together."

Moreover, even if § 112(f) were not applied, Craig's "spaced apart faces" are not "clamped together" under the ordinary meaning of that term as informed by the '030 Patent to mean that the surfaces "are clamped to each other" or "come to bear with pressure" on one another. *Id.* at col. 3, ll. 32-34; col. 7, ll. 42-45; *Aylus Networks, Inc. v. Apple Inc.*, 856 F.3d 1353, 1358 (Fed. Cir. 2017) ("Properly viewed, the 'ordinary meaning' of a claim term is its meaning to the ordinary artisan after reading the entire patent."); *Aventis Pharm., Inc. v. Amino Chems. Ltd.*, 715 F.3d 1363, 1373 (Fed. Cir. 2013) ("The written description and other parts of the specification, for example, may shed contextual light on the plain and ordinary meaning.").

Accordingly, the Board should reject Ground 1 due to Petitioner's failure to show with reasonable likelihood that Craig discloses the first "means" term in claim 1 of the '030 Patent, particularly in view that Petitioner was required to but did not identify how that term should be construed beyond simply asserting

“ordinary” meaning, let alone under 35 U.S.C. § 112(f). *OrthoPediatrics Corp. v. K2M, Inc.*, IPR2018-01546, Paper 10, at 12 (denying institution because by failing to set forth certain claim constructions, petitioner “does not show how the challenged claims are to be construed in accordance with 37 C.F.R. § 42.104(b)(3), and also does not show how, as so construed, they are unpatentable under the statutory grounds identified in the Petition [under 37 C.F.R. § 42.104(b)(4)]”).

B. CRAIG’S DIELECTRIC GASKET IS NOT THE CLAIMED “SEALING MEANS”

Claim 1 of the ’030 Patent also in part requires that “sealing means are arranged between the end-face sealing surface of the first connecting device and the end-face sealing surface of the second connecting device.” As discussed in Section VI.A.2 *supra*, the “sealing means” limitation is particularly relevant in view of Petitioner’s argument that Craig’s dielectric gasket **15** discloses that limitation. Petition, p. 38 (Petitioner: Craig’s “gasket 15 . . . inherently provides a sealing means”).¹⁵ But in view of (i) the presumption that 35 U.S.C. § 112(f)

¹⁵ Notably, Petitioner’s statement that Craig’s gasket **15** *inherently* provides a sealing means does not cite to any evidence in support of that position. And Dr.

applies to “sealing means” and (ii) Petitioner’s failure to rebut that presumption by showing that claim 1 recites sufficient structure to carry out the “sealing means” function,¹⁶ “sealing means” should be construed under § 112(f) as Petitioner argued it should be in the parallel district court litigation. And under that construction of Petitioner’s, neither Craig’s dielectric gasket **15** nor any other part of Craig discloses the claimed “sealing means”:

Claim 1 “sealing means” term	Petitioner and Dr. Rodgers’s litigation constructions	Craig
“sealing means are arranged between the end-face sealing surface of the first connecting	Subject to 35 U.S.C. §112(f) (means-plus function) <u>Function</u> : a seal is created between the end-face sealing surface of the first connecting device and the end-face sealing surface of the second connecting	Gasket 15 <i>not described or shown</i> as being “ <u>arranged inside a groove</u> ” of either the end surface of end connection 11 or union end 13 . ➤ <i>No disclosure</i> of “ <u>an</u>

Rodgers in his declaration basically mirrors Petitioner’s language. Exh. 1002, ¶ 131.

¹⁶ The “sealing means” element recites where the “sealing means” is arranged but not the structure of the “sealing means.” *See* Section VI.A.2 *supra*.

device and the end-face sealing surface of the second connecting device”	device <u>Structure</u> : O-rings consisting of sealing plastic such as PTFE, elastomer or graphite <i>that are</i> <i>arranged inside a groove</i> ; an end-face coating made of sealing material; or a face-turned surface on the first connecting device and a projecting nose unit on the second connecting device Exh. 2002, p. 2; Exh. 2004, pp. 21-23; Exh. 2005, pp. 31-33 (¶¶ 113-119).	end-face coating made of sealing material.” ➤ <i>No disclosure</i> of “a face-turned surface on the first connecting device and a projecting nose unit on the second connecting device.”
---	--	---

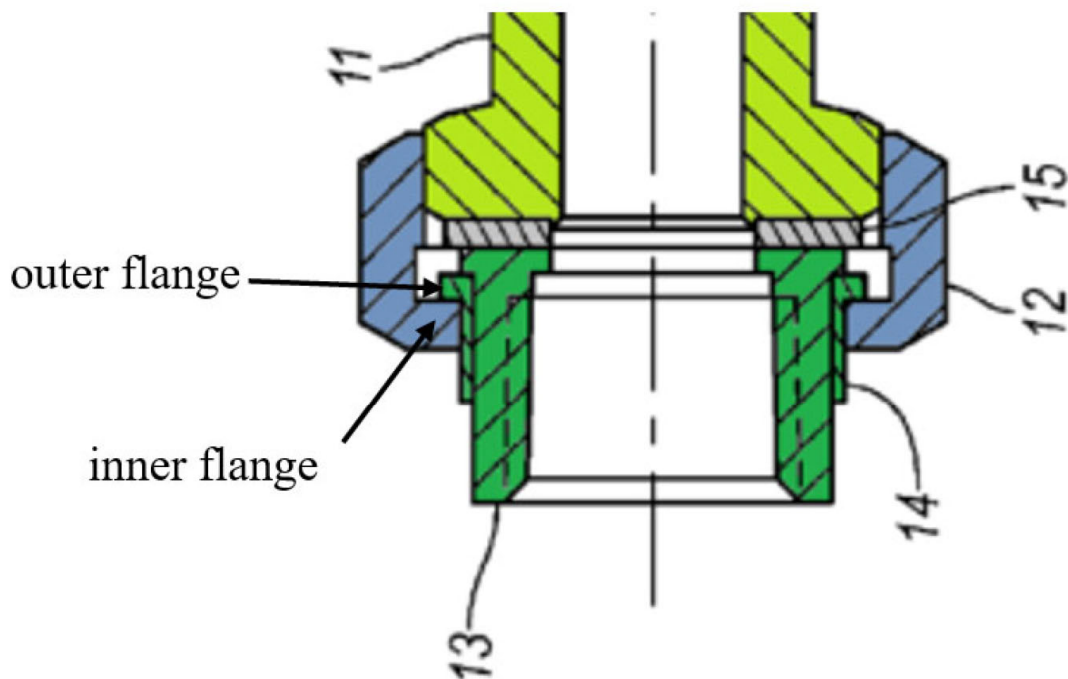
Accordingly, the Board should reject Ground 1 due to Petitioner's failure to show with reasonable likelihood that Craig discloses the “sealing means” term in claim 1 of the '030 Patent, particularly in view that Petitioner was required to but did not identify how that term should be construed beyond simply asserting “ordinary” meaning, let alone under 35 U.S.C. § 112(f).

C. CONTRARY TO PETITIONER'S MISLEADING COLORING, THE CRAIG VALVE'S PURPORTED OUTER FLANGE DOES NOT "FIT BEHIND" THE PURPORTED INNER FLANGE

As discussed, the "fits behind" limitation in claim 1 of the '030 Patent should be construed to mean that the outer flange of the first connecting device "abuts against," or has a common boundary or border with, the inner flange of the nut unit. *See* Section VI.B *supra* (citing Exh. 1001, col. col. 3, ll. 36-38 ("the connecting flange comes to butt against the inner flange"); col. 7, ll. 11-14 (referring to Fig. 1 of the '030 Patent: "wherein the end position is formed by the abutment of the connecting flange **38** of the first connecting device **30** against the inner flange **54** of the connecting unit **50**")).

In its Petition, Petitioner at p. 36 provided a single conclusory statement as to Craig's disclosure of the "fits behind" limitation with reference to the following Petitioner-annotated and colored reproduction of Fig. 2 of Craig:

Petitioner's reproduction at Petition, p. 36



Partial view of Craig Fig. 2 (annotated with color/text)

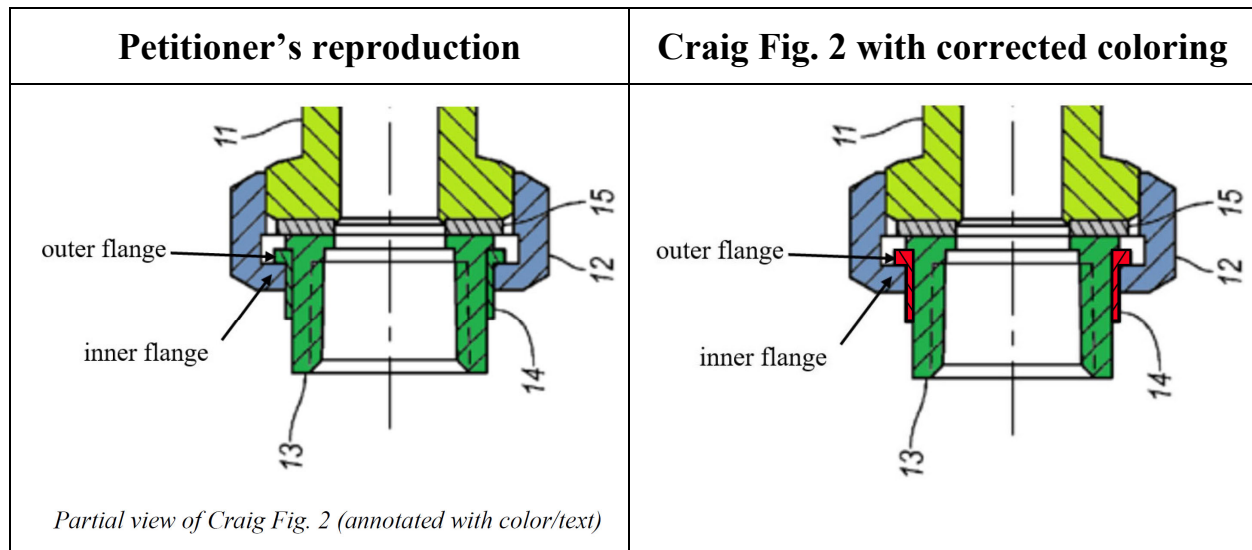
But Petitioner's coloring of Craig Fig. 2 is misleading because Petitioner colors green both the union end **13** and the dielectric ring **14**. ***Those are not a single or the same component.*** Indeed, as discussed, the main purpose of Craig is to provide an electrical break between union end **13** and end connection **11** using interposed dielectric components:

a dielectric ring **14** is provided about the periphery of dielectric union **8** and a dielectric gasket **15** is interposed between spaced apart faces on the end connection **11** and union end **13**

Exh. 1005, ¶ 8. Thus, it is misleading at best for Petitioner to have colored

dielectric ring **14** the same color as union end **13** and suggest that dielectric ring **14** is part of or the same as union end **13**. Moreover, Petitioner elsewhere in its Petition even acknowledged that “union end 13 and ring 14 are two pieces assembled together[.]” Petition, p. 32.

When using a different color for dielectric ring **14**, as shown below in **red**, it is abundantly clear that **no part** of union end **13** “fits behind” or “abuts against” a part of nut **12**.



Indeed, union end **13** and nut **12** are specifically arranged in Craig not to touch, let alone fit behind one another. The above shown separation due to dielectric ring **14** is specifically intended in Craig to provide an electrical break between—to isolate—the metal components of its union valve. Exh. 1005, ¶ 4 (“The dielectric union valve has internal dielectric components isolating the metallic inlet and outlet connections of the valve.”).

Accordingly, the Board should reject Ground 1 due to Petitioner's failure to show with reasonable likelihood that Craig discloses an outer flange of union end **13** that "fits behind"—"abuts against"—an inner flange of nut **12**, particularly in view that Petitioner was required to but did not identify how the "fits behind" term should be construed (while also arguing in the parallel district court litigation that "fits behind" is indefinite).

VIII. GROUND 3 FALLS WITH GROUND 1

That Petitioner in Ground 3 has to resort to the purported "common knowledge" of a POSITA in combination with Craig suggests that Craig is deficient, or at best weak, as an anticipatory reference in Ground 1. Regardless, because the Petitioner's arguments in Ground 3 do not address or show as obvious the missing claim limitations discussed in Section VII *supra*, Ground 3 is deficient for at least the same reasons as Ground 1.¹⁷

¹⁷ Because Petitioner has failed to show with reasonable likelihood that Craig renders obvious claim 1 of the '030 Patent, Petitioner has similarly failed with respect to dependent claims 2, 6, and 7 also included in Ground 3.

IX. GROUND 2: PETITIONER'S RELIANCE ON A SINGLE DIAGRAM WITH NO DISCUSSION IN THE AS-SCHNEIDER "HOOK-UPS" CATALOG IS CONSPICUOUSLY DEFICIENT¹⁸

A. PETITIONER'S REPEATED REFERENCES TO THE KNOWLEDGE OF A POSITA FOR ANTICIPATION IS TELLING

The weakness of Ground 2 as an anticipation challenge is evident from the fact that Petitioner's invalidity argument *23 times* relies on what a "POSITA would understand [or other similar wording]" about the single PRG08 diagram on page 37 of the AS-Schneider "Hooks-up" catalog (Exh. 1006). Petition, pp. 40-53. Without being able to identify a secondary prior art reference to combine and fill in the manifest deficiencies in the PRG08 diagram, Petitioner repeatedly and self-servingly injects its own interpretation and assumptions about the PRG08 diagram when there is no express discussion at all in the catalog about how that assembly is arranged for use. And Petitioner's purported evidentiary support for its conclusory statements about what a POSITA would know is limited to no more than Dr.

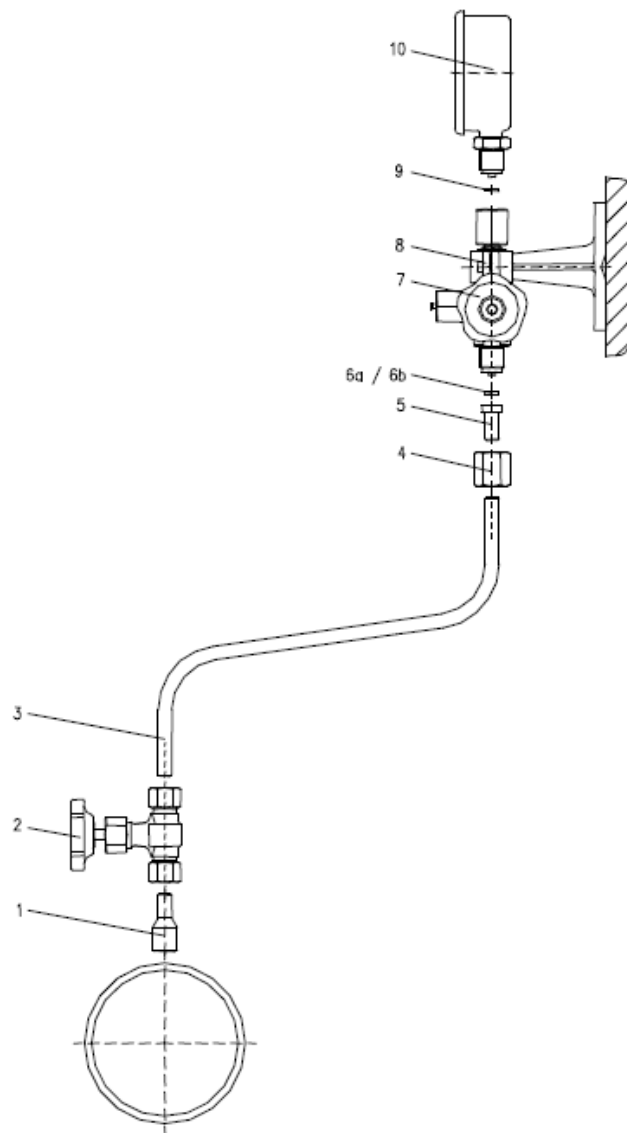
¹⁸ Ground 2 is based on the diagram shown on page 37 of Exh. 1006. Though Petitioner refers to that diagram as "PR08," there is no such reference on that page or anywhere else in the catalog—page 37 refers to "PRG08" (top right of page). For accuracy, Patent Owner will refer to the diagram on page 37 as the "PRG08" diagram.

Rodgers's mirrored, unsubstantiated statements (Exh. 1002, ¶¶ 135-159). *Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9, at 18 (PTAB Aug. 24, 2022) (precedential) (determining that an expert declaration is entitled to little weight when it contains an exact restatement of the petition's arguments without any additional supporting evidence or reasoning).

Petitioner's numerous references to what a POSITA would understand and unsubstantiated remarks about what was purportedly inherent about the PRG08 diagram emphasize Petitioner's failure to show with reasonable likelihood that Exh. 1006 itself discloses all the limitations of claim 1 of the '030 Patent. *Nidec Motor Corporation v. Zhongshan Broad Ocean Motor Co. Ltd*, 851 F.3d 1270, 1274-75 (Fed. Cir. 2017) ("Board [is not permitted] to fill in missing limitations simply because a skilled artisan would [purportedly] immediately envision them.").

B. THE PRG08 DIAGRAM DOES NOT SHOW VARIOUS CLAIM 1 LIMITATIONS

With reference to the PRG08 diagram (reproduced below), Exh. 1006 fails to disclose at least the following bolded numerous limitations in claim 1 of the '030 Patent.



Exh. 1006, p. 37.

“a first connecting device that is connectable to a pipeline or to a metering orifice device . . .”

Impulse line 3, which Petitioner characterizes as the “first connecting device” (Petition, p. 42), is shown to be connectable to “primary isolation valve” 2 (Exh. 1006, p. 37 (parts description on bottom))—not to a pipeline or metering

orifice device.

“a connecting unit that provides a sealing connection to the first and second connecting devices”

Petitioner characterizes union nut 4 as the “connecting unit.” Petition, p. 43. But PRG08 only shows that union nut 4 is positioned between impulse line 3 and nipple 5, *which are shown as separate parts*. Exh. 1006, p. 37 (showing impulse line 3 and nipple 5 with different part numbers). It is thus misleading for Petitioner to have repeatedly colored impulse line 3 and nipple 5 with the same green color. Petition, pp. 41, 46, 49. There is no disclosure that nipple 5 is physically part of impulse line 3. And in any event, there is no disclosure in the PRG08 diagram that union nut 4 seals impulse line 3 and valve 7 (which Petitioner characterizes as the “second connection device” (*id.*, p. 40)).

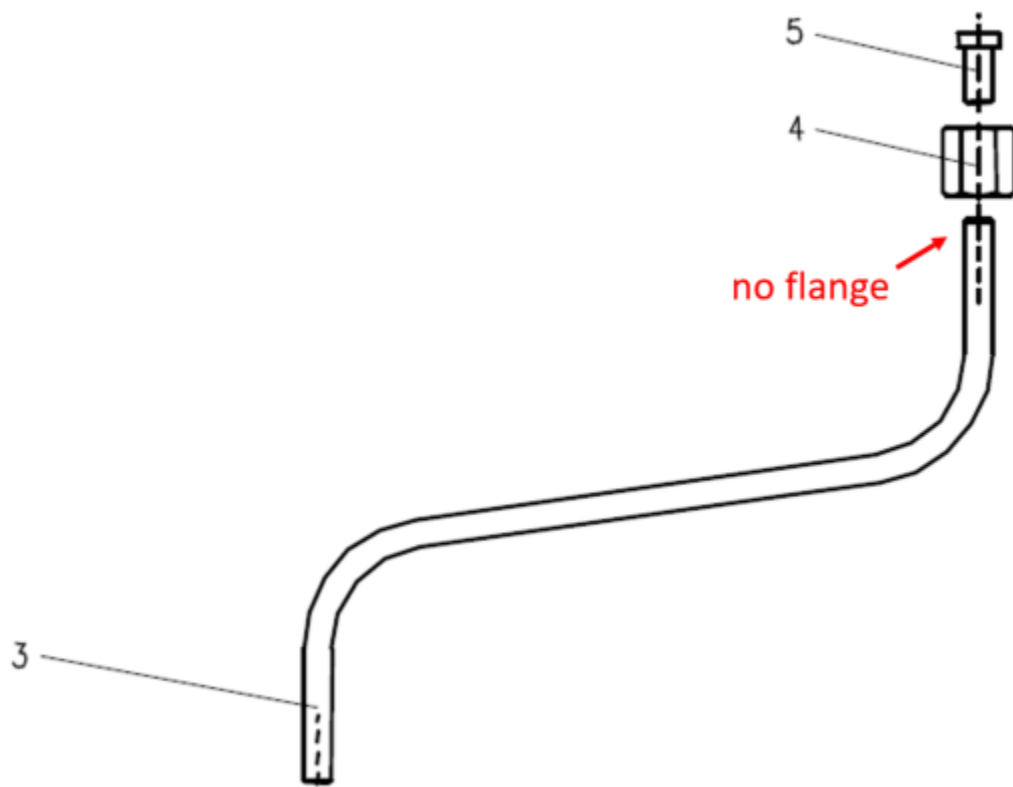
“the connecting unit is designed so that the sealing connection can be created solely by rotation of the connecting unit without rotating the first and second connecting devices”

There is no disclosure whatsoever as to whether the PRG08 assembly can be sealed solely by rotating union nut 4 and without rotating, for example, valve 7.

“an upper edge region of the first connecting device has an outwardly pointing outer flange and an end-face sealing surface”

Impulse line 3, which as discussed above is separate from nipple 5, is not

shown as having an outer flange (annotated in **red** below):



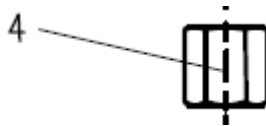
“a lower edge region of the second connecting device has a male thread and an end-face sealing surface”

There is no disclosure in the PRG08 diagram of the lower region of valve 7 having a male thread or end-face sealing surface.

“the connecting unit is designed as a nut unit with a female thread and an inwardly pointing inner flange which is arranged in the lower edge region, the outwardly pointing outer flange of the first connecting device fits behind the inner flange of the nut unit, the female thread of the nut unit is screwed onto the male thread of the

second connecting device so that by means of the inner flange and the outer flange the end-face sealing surfaces are clamped together with sealing effect”

There is no disclosure in the PRG08 diagram of the inside of union nut 4 (reproduced below), let alone disclosure of an inner flange in the lower region of the nut:



Thus, it follows that there is no disclosure of how if at all union nut 4 connects to impulse line 3 (regardless of whether nipple 5 is included), let alone by an outer/inner flanged connection. Nor is there any disclosure of how if at all union nut 4 connects to valve 7, let alone disclosure that screwing of union nut 4 causes impulse line 3 and valve 7 to be sealingly clamped together due to an outer flange of impulse line 3 (which flange again is not disclosed) and inner flange of union nut 4 (which flange again is not disclosed).

Moreover, in view of these various disclosure shortcomings, there certainly is no disclosure of the “. . . by means” and “fits behind” claim limitations as proposed to be construed in Sections VI.A.1 and VI.B *supra*.

“sealing means are arranged between the end-face sealing surface of the first connecting device and the end-face sealing surface of the second connecting device”

Petitioner characterizes sealing washer 6a/6b in the PRG08 diagram as the claimed “sealing means” Petition, p. 53. But that sealing washer 6a/6b is shown to be positioned between nipple 5 and valve 7, not between impulse line 3—which Petitioner characterizes to be the claimed “first connecting device”—and valve 7. Moreover, there certainly is no disclosure of the “sealing means” as proposed to be construed in Section VI.A.2 *supra*.

* * *

The various above deficiencies in the PRG08 diagram relative to the requirements of claim 1 of the '030 Patent cannot be remedied by Petitioner's dozens of references to what a POSITA would understand about the diagram. That is not anticipation. Indeed, that Petition has to so resort to speculation, interpretation, and assumptions about the PRG08 diagram highlights Petitioner's failure to show with reasonable likelihood that Exh. 1006 itself discloses all the limitations of claim 1 of the '030 Patent. Accordingly, Ground 2 should be rejected.¹⁹

¹⁹ Because Petitioner has failed to show with reasonable likelihood that the AS-Schneider “Hooks-up” catalog anticipates claim 1 of the '030 Patent, Petitioner has similarly failed with respect to dependent claim 7 also included in Ground 2.

**X. GROUND 4, 5: THE PARKER MANUALS AND AS-SCHNEIDER
“ACCESSORIES” CATALOG COLLECTIVELY FAIL TO
DISCLOSE LIMITATIONS IN CLAIM 1 OF THE '030 PATENT**

A. NO DISCLOSURE OF FIRST “MEANS” TERM

Petitioner admits that the relied-upon AK-147 Direct-Mount Duo assembly in the Parker 1/2 manuals (Exhs. 1010, 1011) did not have a connecting unit as recited in claim 1 of the '030 Patent:

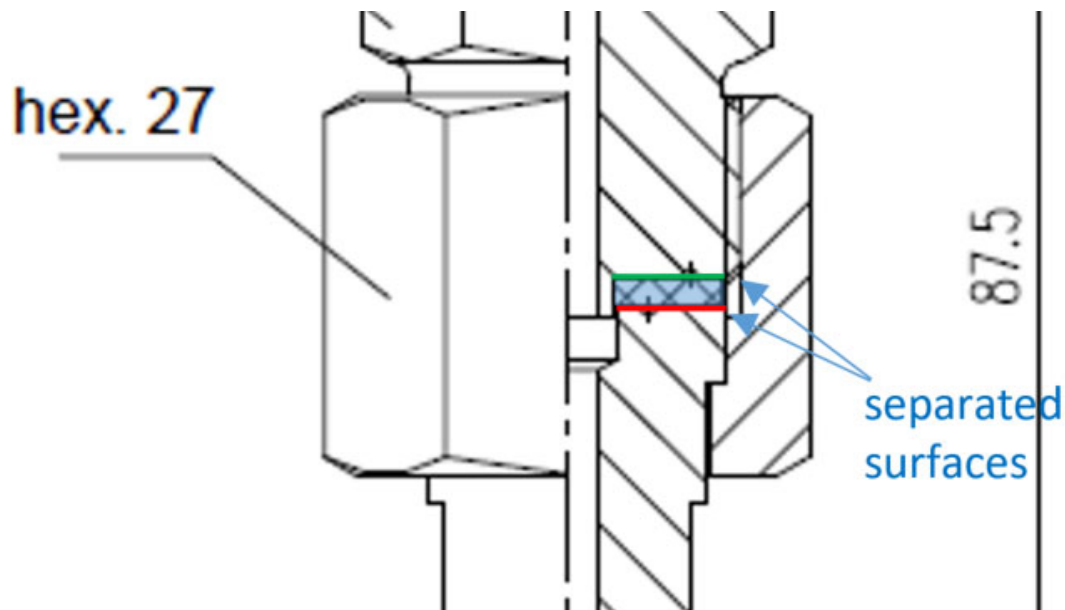
[T]he union nut does not couple to each of the stabilized connector and the block valve in the identical manner to the connecting apparatus of claim 1 of the '030 patent. In short, the union nut of Parker-1/Parker-2 is reversed – it has outer/male threads rather than inner/female threads for engaging the second connecting device (i.e. the block valve). As such, it also does not have an inner flange that engages an outer flange of the first connecting device (i.e. the stabilized connector).

Petition, p. 59.

By that admission, Petitioner effectively concedes that the Parker 1/2 manuals *do not disclose*—among other claim 1 limitations relating to the “connecting unit”—that “the female thread of the nut unit is screwed onto the male thread of the second connecting device so that by means of the inner flange and the outer flange the end-face sealing surfaces are clamped together with sealing effect.”

In attempt to remedy that shortcoming in the Parker 1/2 manuals, Petitioner

resorts to a combination with the AS-Schneider “Accessories” catalog, particularly the “Type 2b” “Swivel gauge adaptor” on page 111 of Exh. 1008. Petition, pp. 74-79. “The swivel gauge adaptor enables the easy positioning of the gauge in any direction through 360°.” Exh. 1008, p. 111. But as shown in the colored and annotated reproduction of that adaptor below, an end surface (**red**) of the purported first connecting device and an end surface (**green**) of the purported connecting device *are not clamped together* by the purported union nut:



The above-emphasized surfaces are clearly separated (**blue**). Petitioner and Dr. Rodgers completely ignore any discussion of this separation in the “swivel gauge adaptor,” let alone attempt to reconcile that adaptor’s purpose with that of the Parker AK-147 Direct-Mount Duo, which is not disclosed in the Parker 1/2 manuals as intended or able to allow for a swivel connection. It was incumbent on

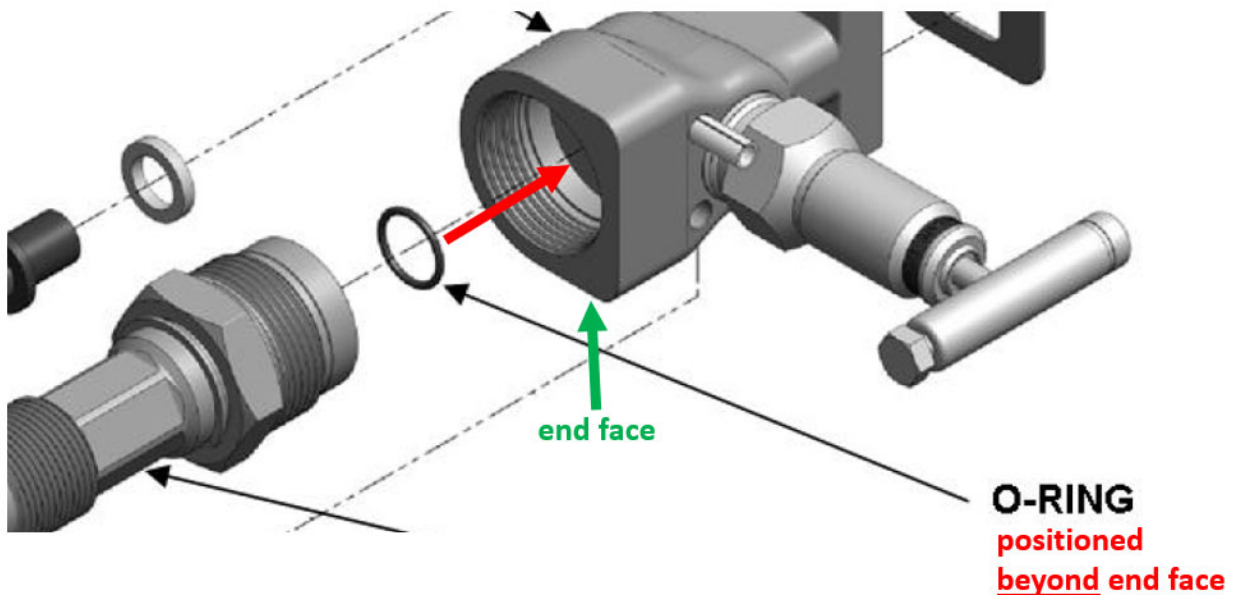
Petitioner to show that a “swivel gauge adaptor” in the AS-Schneider “Accessories” catalog would be a known substitute for the non-swivel connection mechanism of the Parker AK-147 Direct-Mount Duo assembly. But Petitioner failed to make that showing, instead simply, generally, and insufficiently stating “various types of hardware [] can be substituted or adapted to tools in this industry.” Petition, p. 79.

Therefore, the AS-Schneider “Accessories” catalog, like the Parker 1/2 manuals, fails to disclose a connecting unit with an inner flange that engages with an outer flange (of a first connecting device) to “clamp[] together” a surface of the first connecting device with a surface of a second connecting device. That failure is particularly evident under the proposed § 112(f) construction of that claim limitation discussed above. *See* Section VI.A.1 *supra* (citing Exh. 1001, Fig. 1; col. 3, ll. 32-34 (“the end-face sealing surfaces are clamped to each other with sealing effect”); col. 6, ll. 2-5; col. 7, ll. 2-3, 42-45 (“the end-face sealing surface **33** of the outer flange **38** of the first connecting device **30** comes to bear with pressure on the end-face sealing surface **43** of the second connecting device **40**”))).

B. NO DISCLOSURE OF “SEALING MEANS”

As discussed in Section VI.A.2 *supra*, the claimed “sealing means” should be construed under § 112(f) to correspond to certain structure in the '030 Patent specification to perform the function that “a seal is created between the end-face

sealing surface of the first connecting device and the end-face sealing surface of the second connecting device.” In the Parker 1/2 manuals, as annotated below, the O-ring that Petitioner points to (Petition, p. 80) fits inside (**red**) the purported second connecting device—*i.e.*, beyond its end-face (**green**):²⁰



Thus, the Parker 1/2 manuals fail to disclose “sealing means” between end-faces of the first and second connecting devices as required by claim 1 of the ’030 Patent.

²⁰ Patent Owner notes that with respect to Petitioner’s discussion of the Parker O-ring in the first paragraph on page 73 of the Petition, it appears the last sentence is a mistaken copy/paste from Petitioner’s Ground 2 discussion of the AS-Schneider “Hooks-up” Catalog which is not included in Grounds 4 and 5.

Turning to the AS-Schneider “Accessories” catalog, Petitioner points its self-serving annotation of “sealing washer” (Petition, p. 80) as being the claimed “sealing means.” Putting aside that page 111 of Exh. 1008 does not identify a “sealing washer” as positioned in the separation between the purported first and second connecting devices, Petitioner does not at all show or even argue that that “sealing washer” is “arranged inside a groove” as required by the “sealing means” construction discussed in Section VI.A.2 *supra*.

* * *

Accordingly, because the Parker 1/2 manuals and the AS-Schneider “Accessories” catalog together fail to disclose at least the two “means” terms in claim 1 of the ’030 Patent, Grounds 4 and 5 should be rejected.²¹ *See, e.g., SMR Automotive Systems USA, Inc. v. Magna Mirrors of America, Inc.*, IPR2018-00505, Paper 10, at 24-25 (PTAB Jun. 28, 2018) (denying institution in part because asserted combination did not disclose all claim limitations).

²¹ Because Petitioner has failed to show with reasonable likelihood that the Parker 1/2 Manuals and the AS-Schneider “Accessories” catalog render obvious claim 1 of the ’030 Patent, Petitioner has similarly failed with respect to dependent claims 2 and 4-7 also included in Grounds 4 and 5.

XI. GROUND 6: THE AS-SCHNEIDER CATALOGS COLLECTIVELY FAIL TO DISCLOSE LIMITATIONS IN CLAIM 1 OF THE '030 PATENT

Petitioner admits that the relied-upon “DPD” product on page 52 of Exh. 1006 (AS-Schneider “Hooks-up” catalog) does not disclose “a union nut connection between the first and second connecting devices.” Petition, p. 89. Therefore, Petitioner effectively concedes that the “DPD” product diagram necessarily does not disclose that “the female thread of the nut unit is screwed onto the male thread of the second connecting device so that by means of the inner flange and the outer flange the end-face sealing surfaces are clamped together with sealing effect,” as required by claim 1 of the '030 Patent. And as discussed above in Section X.A *supra*, the AS-Schneider “Accessories” catalog (Exh. 1008) fails to disclose a connecting unit with an inner flange that engages with an outer flange (of a first connecting device) to “clamp[] together” a surface of the first connecting device with a surface of a second connecting device.

With respect to the “sealing means” element of claim 1, Petitioner points to seal ring 4 in the “DPD” product diagram. Petition, p. 101. But seal ring 4 is not at all disclosed, let alone does Petitioner argue, as being “arranged in a groove” as required by the “sealing means” as construed under § 112(f) (Section VI.A.2 *supra*). With respect to the AS-Schneider “Accessories” catalog, Patent Owner has already discussed that the “swivel gauge adapter” relied upon by Petitioner does

not have the claimed “sealing means.” *See* Section X.B *supra*.

Accordingly, because the AS-Schneider catalogs together fail to disclose all the limitations of claim 1—at least not the two “means” elements—Ground 6 should be rejected.²² *See, e.g., SMR Automotive*, IPR2018-00505, Paper 10, at 24-25 (denying institution in part because asserted combination did not disclose all claim limitations).

XII. THE PETITION FAILS TO ADDRESS KNOWN ALLEGED EVIDENCE OF PETITIONER'S COPYING

The Petition does not bring to the Board's attention and thus ignores Patent Owner's prior pre-suit and post-suit allegations that Petitioner with its “AXIS” stabilized connector copied Patent Owner's stabilized connector product covered by the '030 Patent. *See* Exh. 2011, p. 2 (AS-Schneider: “Our careful investigation of your product leads us to believe that RJ Machine has obtained (or otherwise learned of) and copied AS-Schneider's patented connector units.”) (emphasis in original); Exh. 2012, p. 1 (RJ Machine confirming receipt of AS-Schneider's July 7, 2023 letter containing charge of copying); Exh. 1004, pp. 8-9 (“[] RJ Machine

²² Because Petitioner has failed to show with reasonable likelihood that the AS-Schneider catalogs render obvious claim 1 of the '030 Patent, Petitioner has similarly failed with respect to dependent claims 2, 3, 6, and 7 also included in Ground 6.

has copied AS-Schneider's stabilized connector product covered by the '030 Patent[.]"); Exh. 1004 (AS-Schneider's September 20, 2023 Complaint), pp. 8-9 (alleging that RJ Machine "copied" AS-Schneider's stabilized connector product covered by the '030 Patent), pp. 28-32 (charting evidence of copying); Exh. 2013 (AS-Schneider's March 6, 2024 Preliminary Infringement Contentions), pp. 14-20 (charting evidence of copying).

Such pre-Petition known evidence of copying should be considered by the Board. *See Robert Bosch Tool Corp. v. SD3 LLC*, IPR2016-01751, Paper 15, at 24 (PTAB Mar. 22, 2017) ("Further, our Trial Practice Guide explains, '[t]he Board expects that most petitions will raise issues of obviousness. In determining whether the subject matter of a claim would have been obvious over the prior art, the Board will review any objective evidence of nonobviousness proffered by the patent owner where appropriate.'") (citing *Office Patent Trial Practice Guide*, 77 Fed. Reg. 48,756, 48763 (Aug. 14, 2012))²³; *see also id.* at 25 (Board considering secondary considerations evidence "before us that was also presented during the ITC proceeding – evidence the Petitioner was aware of before filing the current

²³ The same language appears in the 2019 Trial Practice Guide:

<https://www.uspto.gov/sites/default/files/documents/tpgnov.pdf?MURL=TrialPracticeGuideConsolidated>.

Petition”).

The required nexus between the claimed invention and the evidence of copying is manifest from RJ Machine’s “AXIS” stabilized connector being a copy of AS-Schneider’s stabilized connector covered by the ’030 Patent. Exh 1004, pp. 28-32 (charting and repeatedly illustrating RJ Machine’s alleged “copying of AS product specifications” and dimensions); Exh. 2013, pp. 14-20 (showing that measurements of RJ Machine’s “AXIS” components “evinced RJ Machine’s copying of the patented AS-Schneider stabilized connector”).

Petitioner’s failure to address alleged evidence of copying it was made aware of by Patent Owner *prior to* the Petition—*e.g.*, by Exh. 1004 (pp. 28-32) and Exh. 2013 (pp. 14-20) showing components of RJ Machine’s “AXIS” connector directly juxtaposed against the specifications of the patented AS-Schneider product—should lead to the rejection of obviousness Grounds 3-6. *See Stryker Corp. v. KFXMedical, LLC*, IPR2019-00817, Paper 10, at 28-29 (PTAB Sep. 16, 2019) (“We have cautioned petitioners in prior proceedings that petitions may be denied if they do not address known evidence of secondary. [] Petitioner’s failure to address the known evidence of secondary considerations further weighs in favor of denying institution.”) (citations omitted); *Robert Bosch Tool Corp.*, IPR2016-01751, Paper 15, at 23 (denying institution based on “patent owner’s potential objective indicia of nonobviousness . . . that was introduced during the related ITC

proceeding against Petitioner”).

XIII. CONCLUSION

For the foregoing reasons which establish the following deficiencies in the Petition, the Board should deny institution:

	Failure to comply with 37 C.F.R. § 42.104(b)(3) (Section IV <i>supra</i>)	Failure to disclose or address litigation claim constructions (Section III <i>supra</i>)	Failure to establish non-patent reference(s) as a printed publication (Section V <i>supra</i>)	Failure to disclose material limitations in claim 1 of 030 Patent (Sections VII-XI <i>supra</i>)	Failure to address known evidence of copying (Section XII <i>supra</i>)
Ground 1	X	X		X	
Ground 2	X	X	X	X	
Ground 3	X	X		X	X
Ground 4	X	X	X	X	X
Ground 5	X	X	X	X	X
Ground 6	X	X	X	X	X

Date: August 30, 2024

Respectfully submitted,

By: /Wasif H. Qureshi/
Wasif H. Qureshi
USPTO Reg. No. 51,048
Counsel for Patent Owner

CERTIFICATE OF WORD COUNT

The undersigned hereby certifies that the above-captioned PATENT OWNER'S PRELIMINARY RESPONSE has 13,893 words (exclusive of the portions identified in 37 C.F.R. § 42.24(a)(1)), in compliance with the 14,000 word limit set forth in 37 C.F.R. § 42.24(b)(1). This word count was prepared using Microsoft Word 2016, in addition to a manual count of the 291 words contained in the screenshotted table in Section III.

Date: August 30, 2024

Respectfully submitted,

By: /Wasif H. Qureshi/
Wasif H. Qureshi
USPTO Reg. No. 51,048
Counsel for Patent Owner

CERTIFICATE OF SERVICE

The undersigned hereby certifies that the foregoing PATENT OWNER'S PRELIMINARY RESPONSE and all supporting exhibits were served by filing the documents through the Patent Trial and Appeal Case Tracking System (P-TACTS) on August 30, 2024, and courtesy copies were also served via electronic mail on the following:

Domingo M. Llagostera (domingo.llagostera@blanktome.com)
Russell T. Wong (russell.wong@blankrome.com)
Megan R. Wood (megan.wood@blankrome.com)
Tara L. Marcus (tara.marcus@blankrome.com)

/s/ Pam Collins
Pam Collins
2323 Ross Ave., Suite 600
Dallas, TX 75201
Tel: 214-953-5973