

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CHAMPION LABORATORIES, INC.,
FIRST BRANDS GROUP, LLC

Petitioners

v.

HENGST SE

Patent Owner

Case No. IPR2024-00603
Patent No. 9,023,203

PATENT OWNER'S RESPONSE UNDER 37 C.F.R. § 42.120

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1001	U.S. Patent No. 9,023,203 B2
1002	File History for U.S. Patent No. 9,023,203 B2
1003	Declaration of Mr. Michael Nranian
1004	European Patent No. 1,714,688
1005	Certified Translation of European Patent No. 1,714,688 to Brisson ("Brisson")
1006	U.S. Patent Pub. No. 20100044295 A1 ("Honermann")
1007	JP Application 2002-303171
1008	Certified Translation of JP Application 2002-303171 ("Yokoyama")
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1010	U.S. Patent Pub. No. 20120261326 ("Deschamps")
1011	<i>Curriculum Vitae</i> of Mr. Michael Nranian
1012	Plaintiff's Final Infringement Contentions, <i>Hengst SE v. Champion Laboratories, Inc.</i> , No. 23-cv-00794 (Jan. 16, 2024)
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2001	Defendant's Initial Non-Infringement and Invalidity Contentions
2002	Plaintiff's Response to Initial Invalidity Contentions
2003	Defendant's Final Invalidity Contentions
2004	Plaintiff's Response to Final Invalidity Contentions
2005	District Court Amended Scheduling Order
2006	Defendant's Opening Claim Construction Brief
2007	Plaintiff's Responsive Claim Construction Brief
2008	Defendant's Claim Construction Reply Brief
2009	Minute Entry Setting Markman Hearing
2010	United States District Court for the Northern District of Illinois Estimated Patent Schedule
2011	Waiver of Service
2012	German Patent Application DE 202007001227
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2015	District Court Scheduling Order
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2017	Declaration of Dr. Medhi Basirat
2018	Transcript of the Deposition of Michael Nranian
2019	U.S. Patent Pub. No 2007/0193936 (“Almasian”)
2020	U.S. Patent No. 6,752,924 (“Gustafson”)
2021	U.S. Patent Pub. No 2004/0144734 (“Suzumori”)
2022	U.S. Patent No. 4,372,847 (“Lewis”)

I. INTRODUCTION

In this action, Champion Laboratories, Inc. and First Brands Group, LLC (“Petitioners”) requested *inter partes* review (the “Petition”) of claims of U.S. Patent No. 9,023,203 (the “’203 Patent”) on February 22, 2024. Patent Owner Hengst SE (“Patent Owner” or “Hengst”) hereby submits this response under 37 C.F.R. § 42.120.

In the Petition, Petitioners assert that claims of the ‘203 Patent are rendered invalid as obvious under 35 U.S.C. § 103 by: (I) Japanese Application No. 2002-313171 to Yokoyama *et al.* (“Yokoyama”); (II) Yokoyama in view of U.S. Patent Pub. No. 2010/0044295 to Cline *et al.* (“Cline”); and (III) U.S. Patent Pub. No. 2010/0044295 to Honermann *et al.* (“Honermann”) in view of Cline. Petitioners have failed to meet their burden on each ground.

With respect to Ground I, Yokoyama fails to disclose or suggest the claimed eccentric blocking element. The Petition identifies a concentric sealing member 47 as the eccentric blocking element in the claims. Petition, p. 33. However, both the Petition and accompanying Declaration of Michael Nranian fail to address the plain and ordinary meaning of “eccentric blocking element” when read in light of the Specification of the ‘203 Patent. Additionally, a Person of Ordinary Skill in the Art (hereafter, “POSITA”) would be deterred from modifying Yokoyama such that it employed an “upside down” orientation, as asserted in the Petition. Petition, p. 31.

As for Ground II of the Petition, Claim 15 of the '203 Patent is not rendered unpatentable by Yokoyama in view of Cline because Yokoyama already discloses a drain mechanism, and a POSITA would not be motivated to combine the references to include a drain as alleged because there already is a drain. Moreover, there is nothing in the record that would motivate a POSITA to destroy the depicted drain of Yokoyama and add another, different drain. Additionally, as with Ground I, a POSITA would not modify Yokoyama in the asserted "upside down" orientation.

Finally in Ground III, Honermann in view of Cline does not render the independent claims of the '203 Patent invalid because Honermann fails to disclose or suggest "rotating the ring filter insert relative to the filter housing" as specified in both independent Claims 1 and 15 of the '203 Patent. Ex. 1001, Claims 1, 15. Instead, only a subcomponent of the filter housing of Honermann rotates during installation of the filter insert in which the relevant structures engage. Additionally, the alleged combination of Honermann and Cline fails to include any disclosure or suggestion for first positioning means "which are arranged to bring the [[modified]] blocking element into engagement with the eccentric opening" as specified in both independent claims 1 and 15 of the '203 Patent. Ex. 1001, Claims 1, 15.

Additional deficiencies associated with Grounds I to III of the Petition are also included in detail below.

II. THE '203 PATENT

The '203 Patent is directed towards a ring filter insert for use in an oil filter of an internal combustion engine. Ex. 1001, col. 1, ln. 5-24. A problem found in some filter inserts of the prior art is that “an operator must actively establish the correct rotational position” of the filter insert during installation due to an eccentric blocking element on the filter insert. *Id.*, col. 3, ln. 43-47. The '203 Patent addresses this issue:

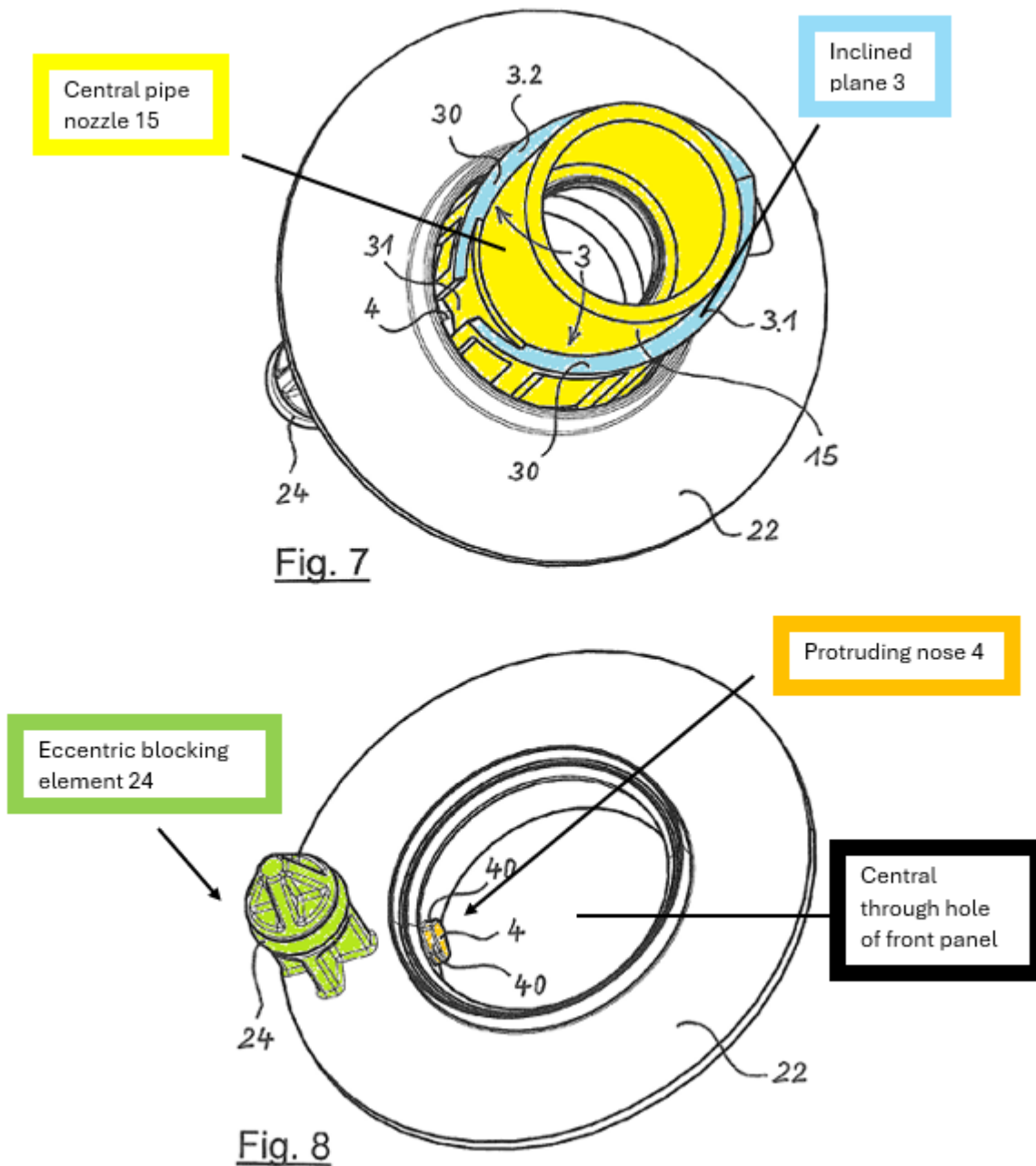
“By rotating the ring filter insert about itself, which might be necessary, the positioning means guide the [eccentric] blocking element arranged thereon to the outlet in an engagement-compatible manner as soon as the positioning means come into contact with each other. Special attention of the operator, who installs the filter insert, is not required hereby, whereby installation errors are virtually eliminated.”

Id., col. 3, ln. 6-13. Specifically, the '203 Patent provides a ring filter insert having positioning means which allow for “the filter insert [to be] brought into its engagement-compatible rotational position for the [eccentric] blocking element relative to the outlet.” *Id.*, col. 3, ln. 31-35. Following this, “it is attained with this that the filter insert is brought into its engagement-compatible rotational position for the blocking element relative to the outlet virtually solely by means of the force of gravity.” *Id.*, col. 3, ln. 31-35.

In other words, the invention has a self-alignment feature for the eccentric blocking element not previously disclosed in the prior art. This feature thereby

requires minimal effort on the part of an individual to align and install the filter insert into the engine. This in turn exponentially reduces the risk of installation errors and, in automotive applications where design is constrained by limited engine space, provides a compact filter housing in the engine.

When the filter insert 2 is inserted into the filter housing, the self-alignment feature functions to bring the eccentric blocking element 24 into engagement with the eccentric outlet 43. Ex. 1001, FIGS. 1 and 8. In other words, these concentrically arranged components, including the located protruding nose 4 and the inclined plane 3 cooperate to bring the eccentric blocking element into the correct rotational engagement. The '203 Patent states that "the nose 4, which protrudes radially inward and which interacts with the inclined plane 3, which is provided on the central pipe nozzle 15 on the outer circumference thereof, is located in the central through hole of the front panel 22 at the inner circumference thereof." *Id.*, col. 14, ln. 14-20. These features, including the central pipe nozzle 15, the inclined plane 3, the protruding nose 4, the central through hole, and the eccentric blocking element 24 are shown in the below.



Ex. 1001, FIG. 7-8.

One particular advantage realized with the centrally located protruding nose 4 of the filter insert 2 and the centrally located inclined plane 3 of the filter housing

10 is the reduction of space as compared to existing designs. Ex. 1001, col. 2 lns 52-65. Thus, the invention of the '203 patent covering both the filter assembly (claim 1) and the filter insert (claim 15) provides advantages over the existing designs and systems.

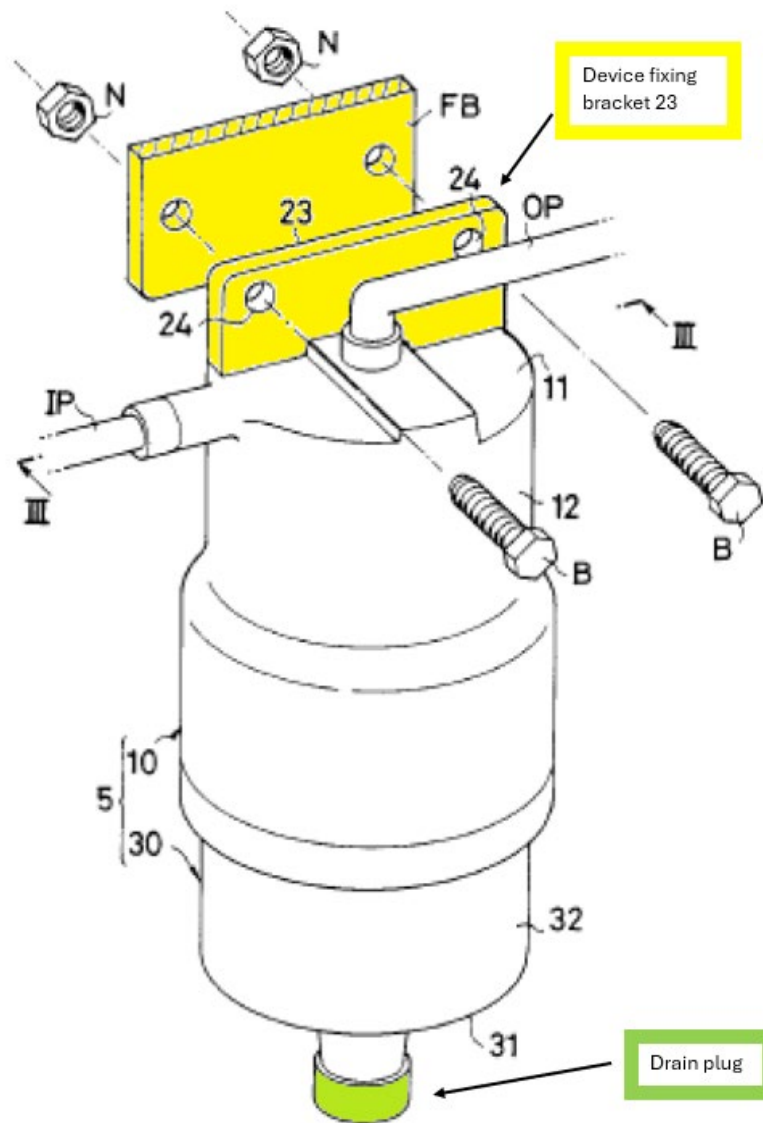
The application for the '203 Patent was filed on June 5, 2012. Ex. 1001, Ex. 1002. Information Disclosure Statements ("IDS") were provided by Patent Owner on June 5, 2012, November 20, 2014, and March 30, 2015. Ex. 1002, p. 34, 60, 292. A Notice of Allowance was issued by the USPTO on December 10, 2014. *Id.*, p. 45. After consideration of the March 30, 2015 IDS, the USPTO issued a second Notice of Allowance on April 6, 2015, and the '203 Patent issued on May 5, 2015. *Id.*, p. 5.

III. OVERVIEW OF THE PRIOR ART

A. Yokoyama

Japanese Application No. 2002-313171, Yokoyama, discloses a bowl-type fluid filter device with a filter element 40 and a filter case housing 5 having a lower case half 30 and an upper case half 10. Ex. 1008, FIG. 2; *Id.*, p. 10. In Yokoyama, the "upper case half 10 is fixed to the filter device fixing part FB." *Id.*, FIG. 1, ¶ 17. The upper case half 10 includes a fuel inflow pipe IP and a fluid outflow pipe OP. *Id.* On the lower case half 30, a drain plug is shown for the removal of fluids. *Id.*, FIGS. 2, 3. These features are shown in the Figure below.

[FIG. 2]

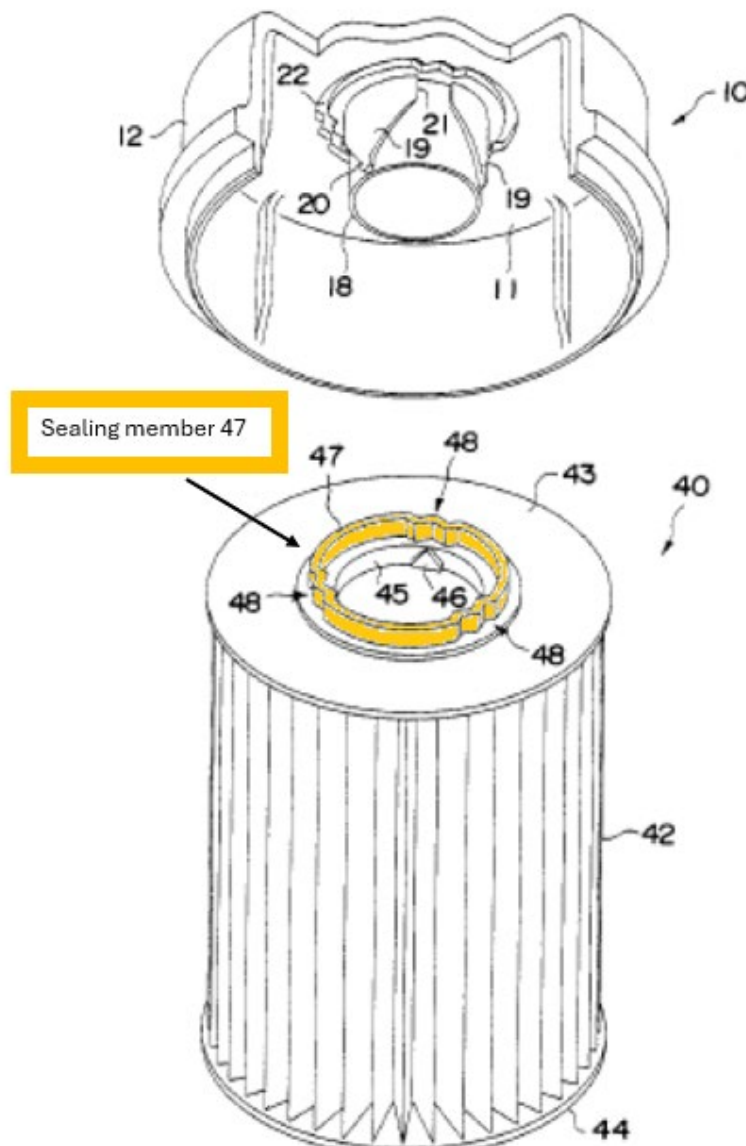


Ex. 1008, FIG. 2.

Within the filter case housing 5, the filter element 40 includes an “upper plate 43” and a “lower plate 44.” Ex. 1008, FIG. 3, *Id.*, pages 10-11 (“Explanation of References”). “A circular opening 45 is provided in the center of the upper plate 43” and is surrounded by a sealing member 47, which is also formed on the center

of the upper plate 43. *Id.*, ¶ 0018; *Id.*, FIG. 1. The upper plate 43 and, in particular, the sealing member 47 and locking protrusions 46, interact with grooves 22 and “a cylindrical pipe portion 18 [that] is formed in the center of the ceiling portion 11 of the upper case 10.” *Id.*, ¶ 15. These features interact when the lower case half 30 is threaded onto the upper case half 10. The aforementioned features are shown in the Figure below.

[FIG. 1]



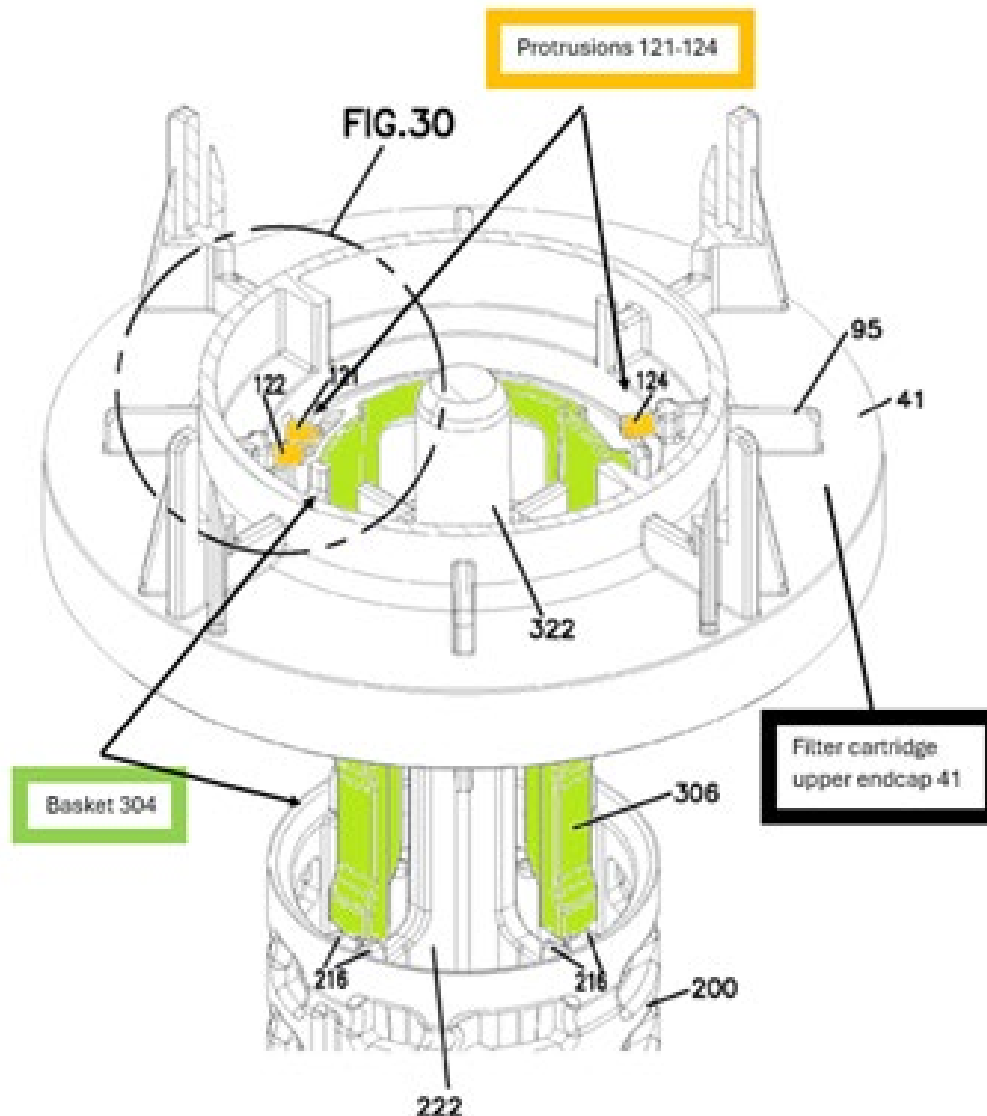
Ex. 1008, Fig. 1.

The locking protrusions 46 are provided in Yokoyama so that “there is no possibility that the sealing member will be damaged due to relative rotation with the pipe portion, or that the sealing function will be deteriorated due to an increase in the inner diameter.” Ex. 1008, ¶ 0037. Yokoyama achieves this goal by resting the

filter element 40 on the filter element mounting part 36 while the lower case 30 is threaded onto the upper case half 10 so that the sealing member 47 interacts with grooves 22. *Id.*, ¶ 24. Finally, the sealing member 47 is provided to “firmly seal[] between the upper half case 10 and the filter element 40.” *Id.*, ¶ 24.

B. Honermann

U.S. Patent Pub. No. 2010/0044295, Honermann, discloses a filter system 30 having a filter head 32 and several filter assemblies 34. Ex. 1006, FIG. 1. The filter system 30 includes a lock-out mechanism to ensure “that the filter system 30 cannot be operated unless the filter cartridge 38 has been operably assembled within the filter bowl 36.” *Id.*, ¶ 174. The auto-lock mechanism functions via the engagement between protrusions 121, 122 of the filter cartridge 38 with the basket 304 of the filter housing. *Id.*, FIGS. 7 and 8. As detailed in Honermann, “as the first protrusion 121 engages this first slide surface 314, it causes the basket 304 to rotate ... This rotates the basket 304 from the first locked position (FIGS. 19 and 30) to the second unlocked position (FIG. 20).” *Id.*, ¶ 178. These features are shown in the figure below.



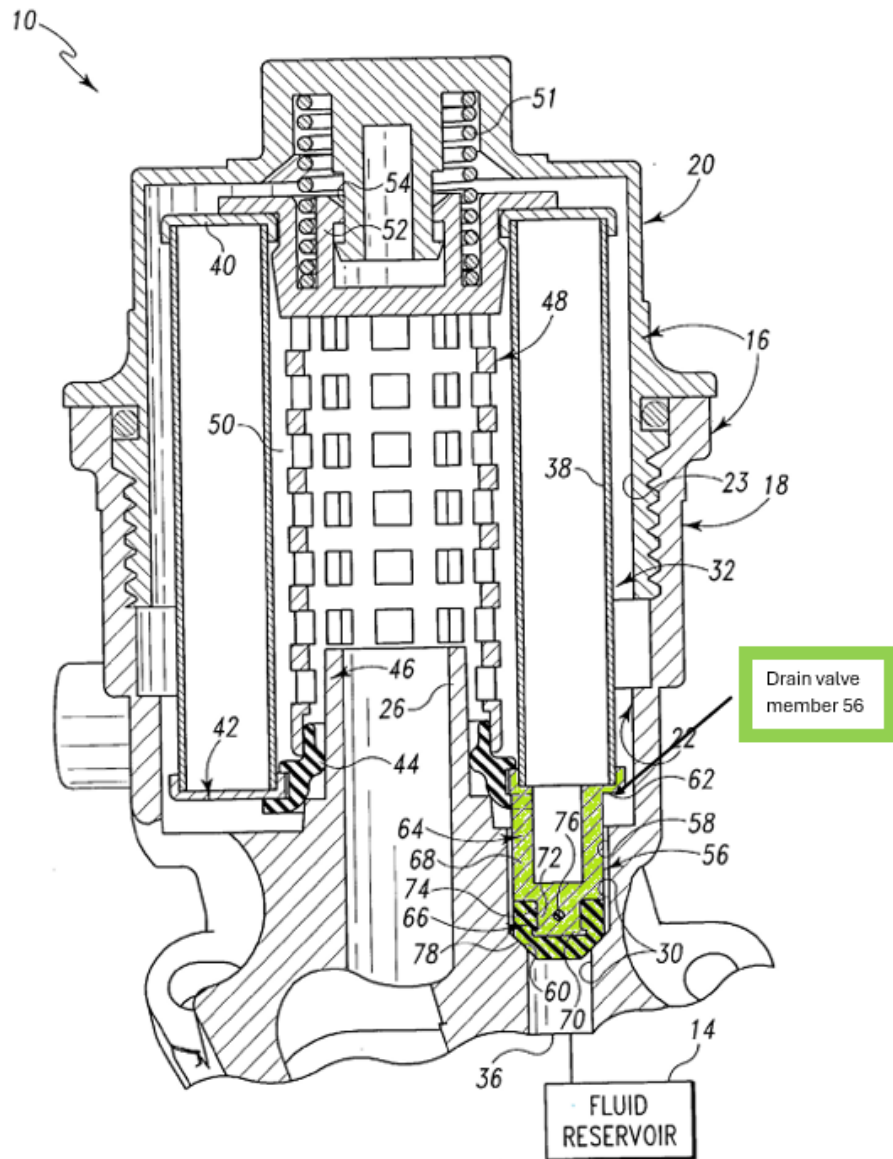
Ex. 1006, FIG. 30.

Additionally, Honermann discloses an auto-drain valve mechanism “to allow liquid in the complete assembly to automatically be drained during the servicing of the system 30.” Ex. 1006, ¶ 185. To accomplish this auto-drain feature, the plug

244 engages with core piece 222 to selectively seal drain port 282 and automatically drain the filter assembly 34 when it is removed from the filter head 32 during servicing. *Id.*, FIGS. 10 to 12.

C. Cline

U.S. Patent Pub. No. 2004/0232063, "Cline" discloses a filter apparatus 10 for an engine 12. Ex. 1009, FIG. 1. In Cline, the filter apparatus 10 includes a filter element 32 disposed within a housing base 18 and cover 20. *Id.*, FIG. 3. The filter 32 includes a drain valve member 56 that is seated within a valve chamber 58 of the filter housing when the filter apparatus 10 is assembled. *Id.* When the filter element needs 32 to be replaced, the filter element and drain valve member are removed from the base and fluid is drained to a fluid reservoir 14 located within the engine 12. *Id.*, FIG. 1. These features are shown in the Figure below.



Ex. 1009, FIG. 6.

D. Deschamps

U.S. Patent Pub. No. 2012/0261326 to Deschamps *et al.* (“Deschamps”) was cited by Petitioners “to illustrate how the ‘203 Patent was known and obvious.” Petition, p. 16. Petitioners’ expert nevertheless opines that Deschamps “discloses or

renders obvious claims 1 and 15. Ex. 1003, ¶ 248. However, Deschamps is not prior art relative to the '203 Patent under pre-AIA 35 U.S.C. § 102 and certainly is not alleged as one of the three Grounds in the Petition.

Petitioners previously asserted that the '203 Patent was rendered invalid in the parallel district court proceeding by Deschamps. Ex. 2003. After Patent Owner plainly demonstrated that Deschamps was disqualified from being prior art under pre-AIA 35 U.S.C. § 102, Petitioners' assertions were withdrawn in the parallel district court proceeding.¹ Petitioners clearly recognize that Deschamps is not prior art to the '203 Patent, stating that "Petitioners are not able to firmly establish that Deschamps is prior art." Petition, p. 19. However, Petitioners still cite Deschamps "to illustrate how the '203 Patent was known and obvious." *Id.*, p. 16. Moreover, the Declaration of Petitioners' expert unscrupulously includes a section entitled "DESCHAMPS RENDERS OBVIOUS CLAIMS 1, 2-3, 5-6, 8-11, 15-17, 19, 23-25, 28-30." Ex. 1002, p. 134. This is a completely baseless and improper use of Deschamps, and the Board should not consider any of Petitioners' arguments related to Deschamps.

IV. LEVEL OF SKILL IN THE RELEVANT FIELD OF ART

Hengst submits that a POSITA would have at least a bachelor's degree in

¹ Petitioner withdrew its assertion that the '203 Patent was invalid over Deschamps on April 23, 2024 in the parallel district court proceeding.

mechanical or automotive engineering and/or five or more years of experience in the automotive industry designing, developing, testing, and engineering automotive components or practical experience servicing, assembling, repairing, and/or developing internal combustion engines and/or engine oil filters.

V. LEGAL STANDARD

“In an [inter partes review], the petitioner has the burden from the onset to show with particularity why the patent [claims] it challenges [are] unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring inter partes review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)); *Twitter, Inc. v. VidStream LLC*, 825 F. App'x 844, 851 (Fed. Cir. 2020) (explaining that it is the petitioner's burden “to establish the scope and content of a prior art reference by a preponderance of the evidence”). This burden of persuasion never shifts to the patent owner. *See Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). The petitioner cannot satisfy its burden of proving obviousness by employing “mere conclusory statements.” *In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016). Relatedly, expert testimony is given little weight when it merely repeats the petitioner's conclusory argument for which the testimony was offered to prove and does not provide any additional evidence or technical reasoning to support the arguments. *See Xerox*

Corp. v. Bytemark, Inc., No. IPR2022-00624, 2022 WL 3648989, at *5-6 (PTAB Aug. 24, 2022); *Xerox Corp. v. Bytemark, Inc.*, No. IPR2022-00624, Paper 12 at 3-6 (PTAB Feb. 10, 2023) (Director Vidal designating the Board's decision as precedential and affirming the decision because little weight should be given to declarations that "do[] not provide any technical detail, explanation, or statements supporting why the" expert's position is correct).

Additionally, the petitioner's case-in-chief must be made in the petition, and "[the] [p]etitioner may not submit new evidence or argument in reply that it could have presented earlier," e.g., to make out a prima facie case of unpatentability. *VidStream LLC v. Twitter, Inc.*, 981 F.3d 1060, 1064 (Fed. Cir. 2020) (quoting U.S. Patent Trial and Appeal Board, Consolidated Trial Practice Guide 73 (Nov. 2019)); 35 U.S.C. § 312(a)(3) ("the petition" must identify supporting evidence "*with particularity*" (emphasis added)); 37 C.F.R. § 42.104(b)(4) ("The petition must specify where each element of the claim is found in the prior art . . ."). Moreover, the Board has noted that it "will not consider arguments that are not made in the [p]etition, but are instead incorporated by reference to the cited paragraphs . . . of [the petitioner's expert's declaration]." *Cisco Sys., Inc. v. C-Cation Techs., LLC*, No. IPR2014-00454, Paper 12 at 10 (PTAB Aug. 29, 2014) (informative); see also 37 C.F.R. § 42.6(a)(3) ("Arguments must not be incorporated by reference from one document into another document.").

VI. CLAIM CONSTRUCTION

Hengst does not dispute Champion's claim construction positions set forth in the Petition at pages 7-13 for the purposes of this proceeding and submits that the Board need not make a determination on claim construction in assessing the validity of the '203 Patent in Grounds I-III.

However, as will be discussed below, Hengst does dispute the self-serving claim constructions and interpretations that Petitioners and their expert utilize which fail to include any analysis of the '203 Patent when construing the terms. Indeed, when confronted with one such inconsistency, Petitioners' expert stated "it says that [the partial inclined planes 3.1 and 3.2 of the '203 Patent are centered] on column 8, column 8, line 12 to line 14. But, you know, to me they are not in the center." Ex. 2018, p. 52, ln. 11-14. But how the Patent defines the terms is the issue and not what the expert would have called something. An analysis of how certain terms are used in the '203 Patent requires at least some consideration of the claim language as used in the Specification. Petitioners and their expert provide none.

VII. GROUND I: YOKOYAMA DOES NOT RENDER CLAIM 15 UNPATENTABLE

The '203 Patent is not rendered invalid as obvious by Yokoyama because: (1) Yokoyama fails to disclose or suggest an eccentric blocking element and eccentric opening; and (2) there is nothing beyond mere conclusory statements that would

support a POSITA from modifying Yokoyama such that it employed an “upside down” orientation, as asserted in the Petition. Notably, in the parallel district court proceeding, Petitioners did not assert that the sealing member 47 and the grooves 42 disclosed, respectively, the eccentric blocking element and eccentric opening, as asserted in Ground I of the Petition. Ex. 2001; Ex. 2003.

Yokoyama was cited in the IDS submitted on March 30, 2015, and was considered by the Examiner during examination of the ‘203 Patent. Ex. 1002, p. 34. Like the Examiner found during prosecution of the ‘203 Patent, the Board should find that the ‘203 Patent is not rendered invalid by Yokoyama for the reasons provided below.

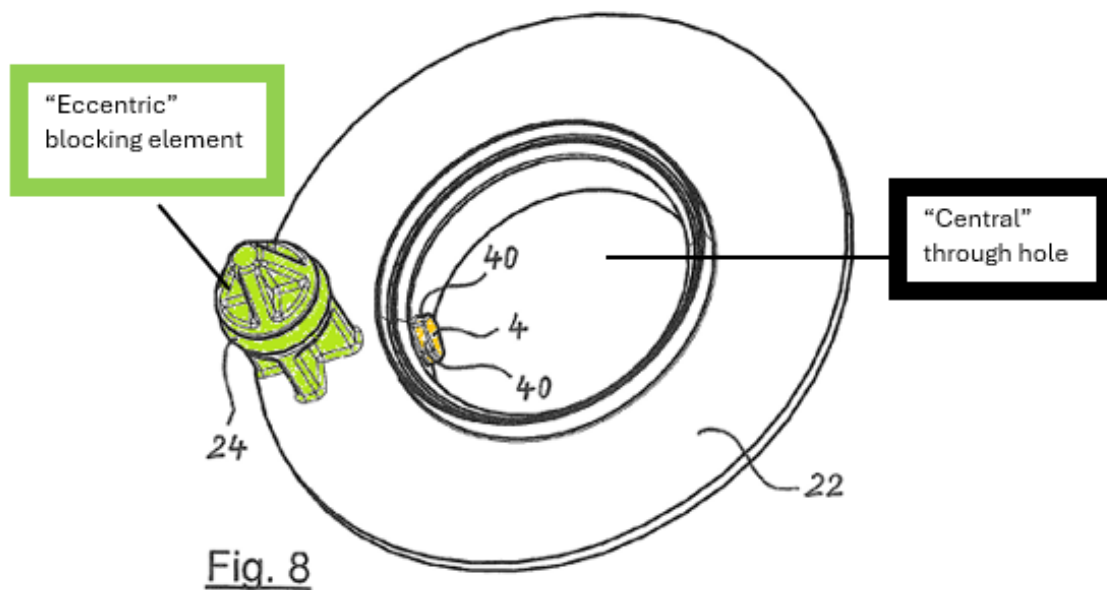
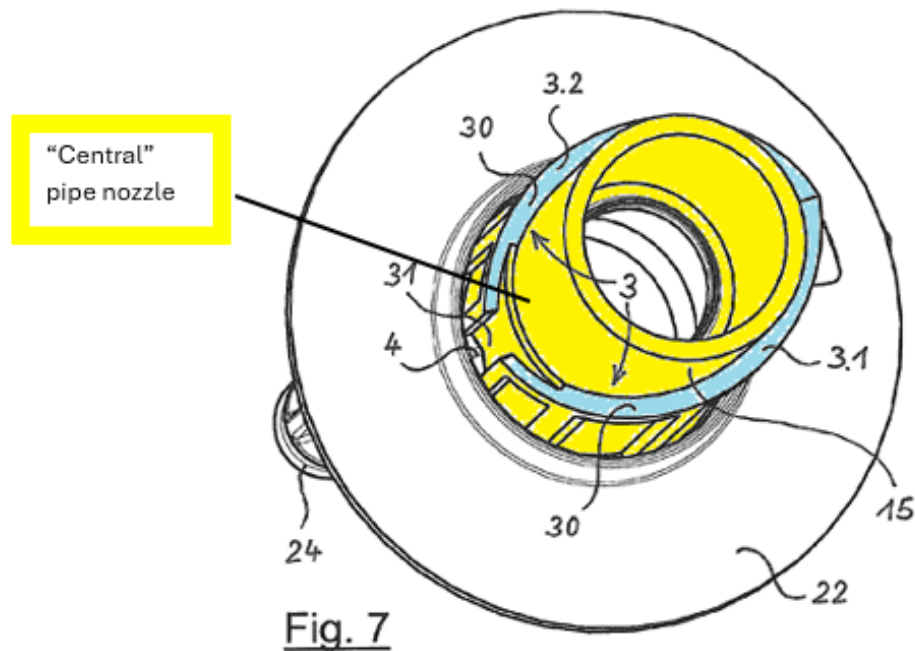
A. Yokoyama fails to disclose or suggest the claimed eccentric blocking element and eccentric opening.

First, Yokoyama does not disclose or suggest any blocking element or opening that is *eccentric*. The Petition states that “POSITA would understand that the blocking element and opening are *eccentric* because they are not located at the center of the filter insert.” Petition, p. 25. However, the ‘203 Patent consistently and repeatedly shows an eccentric blocking element that has an axis not located at the geometric center of the filter element. Ex. 1001, FIGS. 1-3, 5-7, 15-16. This is consistent with the plain meaning of the word *eccentric*, which is defined² as

² “Eccentric,” Merriam-Webster, <https://www.merriam-webster.com/dictionary/eccentric>, Accessed December 18, 2024.

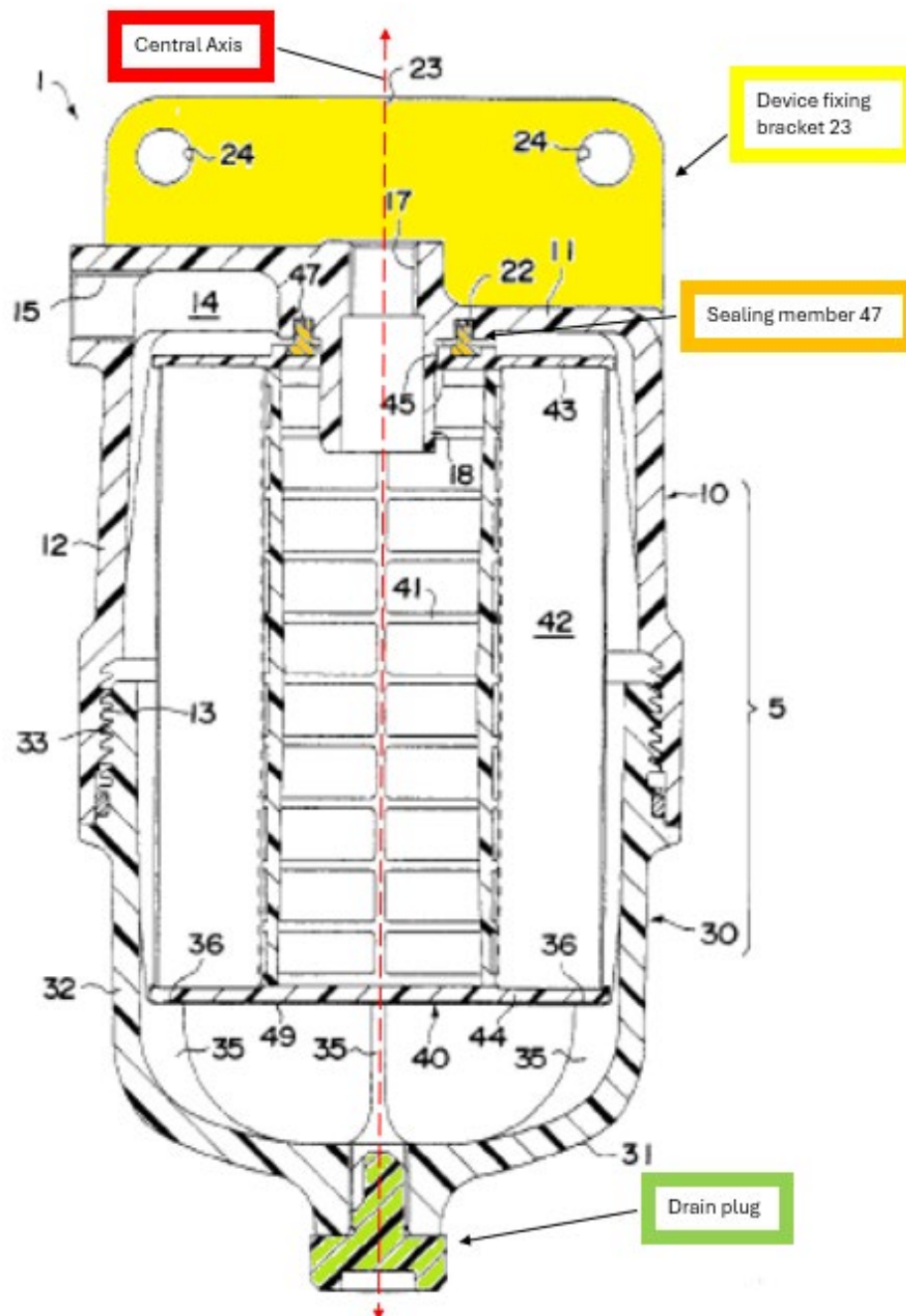
“located elsewhere than at the geometric center; *also: having the axis or support so located.*”

Moreover, it is clear that a POSITA would understand that the eccentric features of the ‘203 Patent have an axis not located in a geometric center due to the plain and clear teachings in the Specification and Figures contrasting “central” with “eccentric”. Ex. 1001 (“central pipe nozzle 15,” col. 7, ln 13-14; “central through hole,” col. 12, ln. 49; “inclined plane 3 with its two partial planes 3.1 and 3.2 is again visible in the center of the filter insert,” col. 8, ln. 12-14; “the bottom 18 of the housing 10, in the center of which the return 12 and, eccentrically thereto, the outlet 13” col. 10., ln. 27-29; and “eccentric blocking element” col. 1, ln. 19-20). As stated in the Declaration of Dr. Medhi Basirat and consistent with the above, a “POSITA would understand that ‘eccentric’ in the context of ‘203 patent, means that central axis is located elsewhere than at the geometric center[;] not placed centrally or not having its axis or other part placed centrally.” Ex. 2017, ¶ 33. Some of these central and eccentric features described in the Specification are shown in the Figure below.



Thus, several non-eccentric features of the '203 Patent are described as centrally located, even when “they are not located at the center of the filter insert” as set forth in Petitioners’ arguments.

In contrast to the '203 Patent, Yokoyama discloses no blocking element or opening that is eccentric. The Petition identifies sealing member 47 of Yokoyama as the claimed eccentric blocking element. Petition, p. 33. The sealing member 47 of Yokoyama clearly has a central axis located at the geometric center of the filter element 1. Ex. 1008, FIG. 3; Ex. 2017, ¶ 20 (the term eccentric is discussed in “the '203 patent several times which is consistent with a POSITA understanding of eccentric ... my conclusion that the ‘sealing member (47)’ [of Yokoyama] is not eccentric”). Likewise, the “opening” 45 of Yokoyama has this same central axis located at the geometric center of the filter element 1. *Id.* Thus, Yokoyama fails to disclose or suggest the claimed eccentric blocking element and eccentric opening. This central axis of Yokoyama, of which the sealing member 47 and the outlet for the drainage plug are located, is shown in the Figure below.



The Petition and accompanying Declaration of Michael Nranian erroneously interpret the meaning of “eccentric” without considering the disclosure of the ‘203 Patent. Ex. 1003 ¶¶ 93 – 96; Petition pp. 33-35. These two documents merely parrot

each other and never make any citation to the '203 Patent to analyze how the '203 Patent uses that term.

“The person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005). The Petitioners' expert testified that “it says that [the partial inclined planes 3.1 and 3.2 of the '203 Patent are centered] on column 8, column 8, line 12 to line 14. But, you know, to me they are not in the center.” Ex. 2018, p. 52, ln. 11-14. This testimony shows that the conclusions made as to eccentric and centrally-located features in Yokoyama are not at all based on what the '203 Patent explains, but instead what Petitioner and their expert wanted it to mean. Simply put, these conclusions were not assessed “in the context of the entire patent, including the specification.” *Phillips*, 415 F.3d at 1313.

The Petition only identifies sealing member 47 as the element of Yokoyama that discloses the claimed eccentric blocking element. Petition, p. 33. However, the Petition later states that “if the blocking element only consisted of the “W-shaped portions 48” and the opening only consisted of the corresponding W-shaped portions, then each W-shaped portion would undeniably be eccentric.” *Id.*, p. 35. The Petition does not allege that W-shaped portions 48 of Yokoyama are the eccentric blocking element, but instead asserts that the sealing member 47 is the

eccentric blocking element. *Id.* Since Petitioners have not alleged that the W-shaped portions 48 of Yokoyama are the eccentric blocking element, the Board should not consider the above hypothetical consideration to be included in its Petition. *Harmonic Inc.*, 815 F.3d at 1363 (Fed. Cir. 2016) (“In an [inter partes review], the petitioner has the burden from the onset to show with particularity why the patent [claims] it challenges [are] unpatentable.”).

However, even assuming *arguendo* that the Petition did allege this, W-shaped portions 48 form the concentrically arranged sealing member 47, and thus also share the axis located at the geometrical center of the filter element 40 of Yokoyama. Ex. 1008, FIG. 4; *see also* Ex. 2017, ¶ 36 (“the eccentric and concentric axis are applicable to the whole object, not to a segment of a body. For example, W shaped portion (48) which is a small section of the ‘sealing member (47)’ cannot be eccentric because the center axis of W shaped portion (48) still coincide[s] with the center axis of ‘sealing member (47)’”). Additionally, in order to prohibit the flow of fluid, the entire structure must be considered – not simply a single W shaped portion. Ex. 1008, ¶ 0024. Without the remaining portions of the concentrically arranged sealing member 47, the sealing function would not exist.

Second, Yokoyama does not disclose or suggest an eccentric *opening*, as a POSITA would understand having read the claims and specification. First, for the reasons detailed above, the grooves 22 of Yokoyama which interact with the sealing

member 47 are not eccentrically located. Ex. 1008, FIG. 3. Moreover, while Yokoyama teaches a slot, in grooves 22, for receiving the sealing member 47, this feature is not an eccentric *opening* as a POSITA would understand in the context of the '203 Patent. As the '203 Patent repeatedly describes and shows, the eccentric opening is an opening in the filter housing through which fluid may flow, and the '203 Patent repeatedly shows the eccentric opening as the outlet 13. Ex. 1001, FIGS. 1-2, 14-16; col. 6, ln. 59-63 (“The filter housing 10 furthermore has an outlet 13, through which an emptying of the filter housing 10 is carried out in response to a replacement of the filter insert 2”). Claim 1 also clarifies that “the eccentric opening [is] an outlet for emptying the filter housing when the filter insert is removed.” *Id.*, Claim 1. The grooves 22 of Yokoyama do not form an opening in the housing, as described and claimed in the '203 Patent and understood by a POSITA. Accordingly, Yokoyama does not disclose or suggest the claimed eccentric opening.

B. A POSITA would find no motivation to modify Yokoyama such that it employed an “upside down” orientation.

Yokoyama discloses a filter element 40 with a specific orientation including expressly defining an “upper” plate 43 oriented on top and a “lower” plate 44 oriented on the bottom. Ex. 1008, FIG. 3; *see also* ¶ 13 (“ceiling part 13”). This orientation is opposite to that claimed by and described in the '203 Patent. Because Yokoyama fails to disclose the claimed orientation of the '203 Patent, Petitioners

allege that it would have been obvious to orient the filter device 1 “upside-down” in comparison to the orientation shown in the Figures of Yokoyama. Petition, p. 31.

The Petition contends that the filter shown in the figures of Yokoyama “merely reflects the orientation of the filter medium as depicted, and the orientation of the insertable filter medium could be upside-down.” Petition, p. 30. However, features of Yokoyama would discourage a POSITA from making such a modification. Moreover, as explained below, Yokoyama teaches a filter device 1 in which the orientation is critical to the stated goals of Yokoyama and must be arranged as depicted. A POSITA would find no motivation to destroy the claimed advantageous features of Yokoyama and render certain components meaningless.

With automotive filters, the filter orientation is critical and the meaning of terms such as “top” and “bottom,” as included in the claims of the ‘203 Patent, confirms the importance of filter orientation. In the ‘203 patent, the top (or upper) front panel 21 and bottom (or lower) front panel 22 are located on the top and bottom sides of the filter, respectively. Ex. 1001, FIG. 13-14. Likewise, in Yokoyama, the filter includes “upper plate 43,” “lower plate 44,” upper case half “10” and “lower case half 30.” Ex. 1008, FIG. 3. Like in the ‘203 Patent, these terms all have meaning and provide for the specific orientation shown in FIG. 3 of Yokoyama. Petitioners’ analysis and position with respect to Yokoyama ignores how a POSITA would understand this term and would require using the opposite meanings of the

terms, as evidenced by the '203 Patent and Yokoyama.

Furthermore, in the automotive industry, there are specific directional terms like "front" and "rear" that do not lose their meaning depending on your orientation or the direction of movement of a vehicle. For example, as testified by the Petitioners' expert:

Q. If you were standing and looking at the rear end of the car, would you say [that the rear bumper is] the rear bumper?

A. Yeah.

Q. You wouldn't say it was the front bumper just because it's the one that was in front of you; is that correct?

A. Right. Yeah.

Q. And if you're driving your car in reverse, you wouldn't say the rear bumper is the front bumper because it's the direction the car is currently traveling; is that correct?

A. That's right.

Ex. 2018, p. 19, ln. 19 – p. 20, ln. 6.

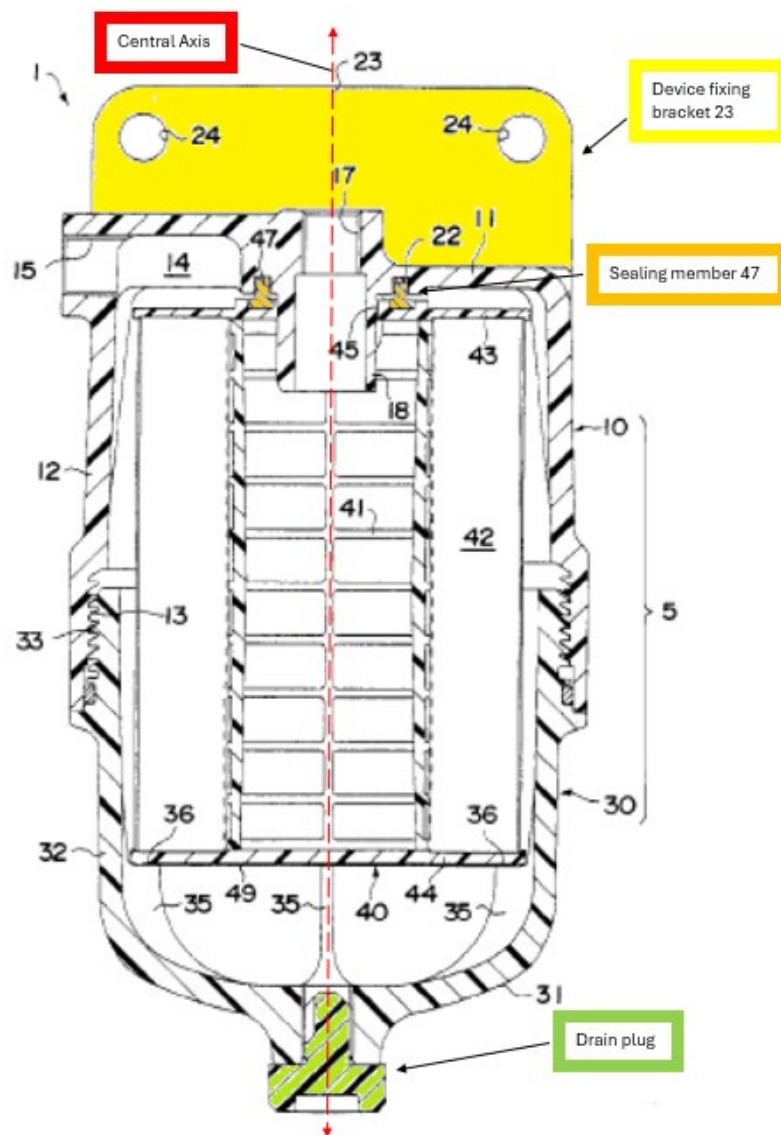
The Petition provides only brief conclusory statement that the filter device 1 of Yokoyama could be oriented "upside-down." Petition, p. 30. This conclusory statement is unsupported by *any* technical explanation or reasoning, in the Petition and in Petitioners' Expert Declaration. *Id.*; Ex. 1003, p. 55. Thus, yet again, the Petition and its Expert fail to provide any citation to the '203 Patent about how ignoring these terms and why using the opposite meanings would be done - instead choosing to merely parrot themselves. The petitioner cannot satisfy its burden of proving obviousness by employing "mere conclusory statements." *In re Magnum*

Oil Tools Int'l, Ltd., 829 F.3d at 1380 (Fed. Cir. 2016). Moreover, expert testimony is given little weight when it merely repeats the petitioner's conclusory argument for which the testimony was offered to prove and does not provide any additional evidence or technical reasoning to support the arguments. *See Xerox Corp.*, 2022 WL 3648989, at *5-6 (PTAB Aug. 24, 2022).

Petitioners have not satisfied its burden in showing why a POSITA would be motivated to orient the filter device 1 of Yokoyama "upside-down." Petitioners' Expert Declaration likewise should be afforded little to no weight for merely regurgitating the unsupported conclusory argument in the Petition, which is devoid of any technical analysis or reasoning. Ex. 1003, ¶ 91.

Notwithstanding the foregoing failure which should end the issue, below is technical analysis and reasoning which would prevent a POSITA from making such a modification.

More specifically, a POSITA would not find any motivation or suggestion as Yokoyama already discloses a drain mechanism, including a drain plug, located on the bottom of the filter device. Ex. 1008, FIG. 3. This drain plug would be rendered useless in Petitioners' proposed modification. The figure below shows this drain plug.

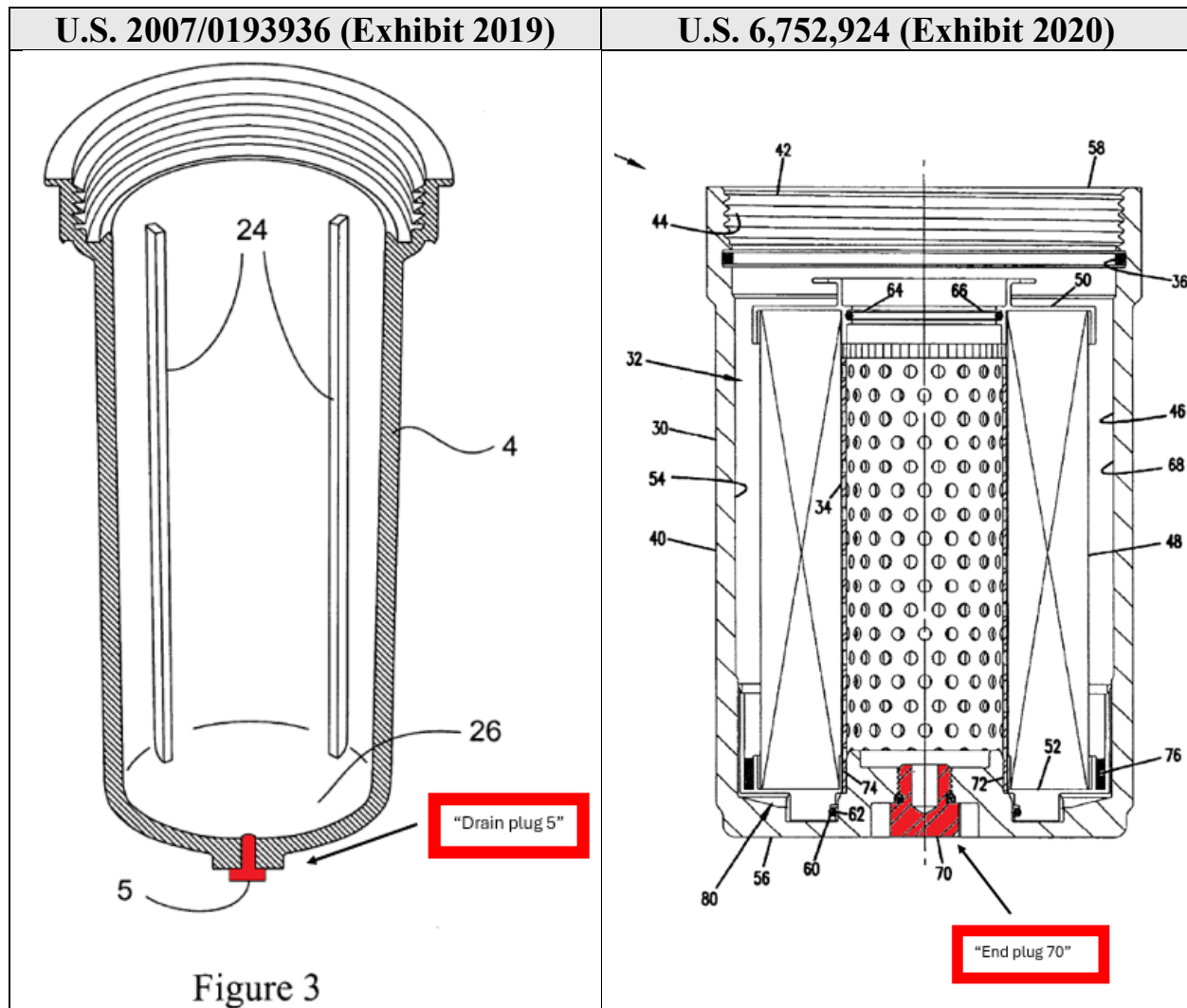


Ex. 1008, FIG. 3.

A POSITA would easily recognize the drain plug of Yokoyama and would be discouraged from changing from the orientation which allows it to properly function. Ex. 1008, FIG. 3; Ex. 2017, ¶ 47 (“Yokoyama’s design already incorporates a central drain plug ... the drain and drain plug are designed at the lowest point of the filter system. This placement aligns with standard practices in liquid systems, where a

drain at the lowest point is essential for effectively removing debris and dirt”).

Despite the straightforward and readily apparent disclosure of the drain plug in Figures 2 and 3 of Yokoyama, Petitioners' expert failed to testify that this structure showed a drain. Ex. 2018, p. 43, ln. 14-15 (“Q. But it's possible this is a drain plug? A. I guess.”). There is an abundance of other patents with similar structures and clearly defining components on the bottom of a filter housing as drain plugs and structures. *See, e.g.*, Ex. 2019-2022. To deny that a POSITA would not recognize this as most likely a drain plug is disingenuous, even while the specification of Yokoyama does not explicitly describe it. Two of the many examples of cartridge-type filter systems with drain mechanisms located at the bottom of the filter housing, as in Yokoyama, are shown below:



Ex. 2019, FIG. 3; Ex. 2020, FIG. 3. See also, Ex. 2021, FIG. 1, ¶ 97 (“drain bolt 20 has a plug portion 22”); Ex. 2022, FIG. 2 (drain plug 25).

In sum, there can be no doubt that Yokoyama includes a drain. The Petition does not provide any detail or explanation on how the filter device 1 of Yokoyama could be drained with the drain valve located on the top of the proposed modified filter device. A POSITA would immediately recognize that gravity could no longer

drain the filter device of Yokoyama with the drain plug oriented on the top of the filter in this proposed nonsensical orientation, and the excess oil would spill each time the filter element 40 is replaced. *See* Ex. 2017, ¶ 47 (“the drain and drain plug are designed at the lowest point of the filter system. This placement aligns with standard practices in liquid systems, where a drain at the lowest point is essential for effectively removing debris and dirt”). Petitioners’ Expert recognizes the desire to avoid spilling the oil:

Q. Would it be bad to get fluid, spill fluid?

A. Yeah.

Q. That's something you would want to avoid?

A. Yep.

Ex. 2018, p. 42, ln. 12-15.

For this reason, a POSITA would not find motivation to modify Yokoyama in the “upside down” orientation proposed in the Petition and would instead be discouraged from doing so.

Additionally, a POSITA would find not motivation to modify Yokoyama as asserted due to the specific relationship between the upper case half 10 and the lower case half 30. Ex. 1008, FIG. 1. Yokoyama teaches a filter device 1 that is screwed upward into device fixing bracket 23. *Id.* This orientation is critical to achieve the goal of Yokoyama: “there is no possibility that the sealing member will be damaged due to relative rotation with the pipe portion, or that the sealing function will be

deteriorated due to an increase in the inner diameter.” *Id.*, ¶ 24. Yokoyama achieves this goal by resting the filter element 40 on the filter element mounting part 36 while the lower case 30 is threaded onto the upper case half 10. *Id.* In Petitioners’ proposed orientation, the filter element 40 would already be resting on the upper case half 10 when the filter is assembled. Thus, the filter element mounting part 36 would not achieve the same function of mitigating wear on the sealing member. In other words, without the pressure from the lower case 30 on the filter element 40, in the upside down configuration, is likely to wobble – something Yokoyama is seeking to avoid. For this additional reason, a POSITA would not find motivation to modify Yokoyama in the “upside down” orientation proposed in the Petition.

Finally, assuming *arguendo* that one inverted the filter device of Yokoyama, it would not function “in an identical manner” as alleged. Clearly one of ordinary skill in the art would understand that the fluid flow would change within the housing. *See Ex. 2017*, ¶ 47 (“These connections dictate the flow path of oil through the filter and ensure proper filtration. Inverting the filter would disrupt this flow path, potentially causing backflow, leaks, or incomplete filtration”). Moreover, when it came time to change the filter insert, with the housing filled with oil, no oil could be drained since Yokoyama does not have a drain on the “top.” Accordingly, when the cover 31 was unscrewed, the oil would spill out – which is something to avoid. *See Ex. 2018*, p. 42, ln. 12-15. Thus, the assertion that Yokayama would function

identically when upside down is simply unsupported and would be clearly appreciated by a POSITA as such, leading one away from the orientation necessarily relied on for Ground I of the Petition.

In sum, the Petitioners have failed to meet their burden with respect to Ground I of the Petition.

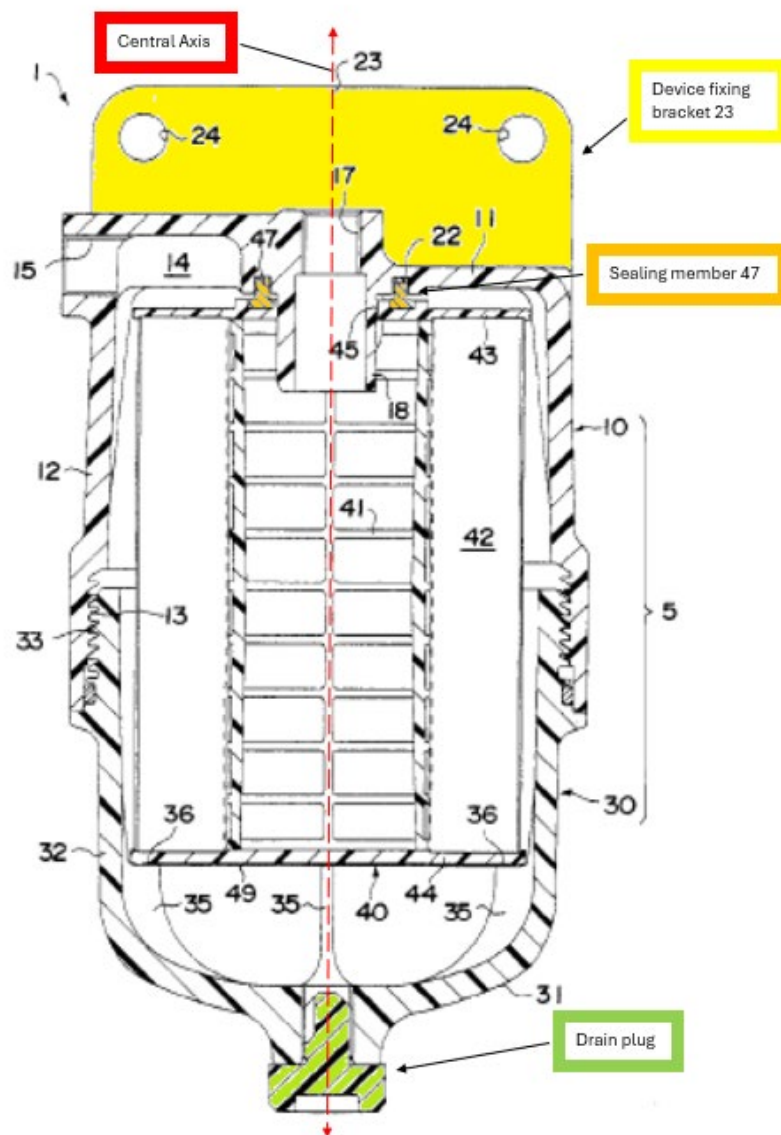
VIII. GROUND II: YOKOYAMA IN VIEW OF CLINE DOES NOT RENDER CLAIM 15 UNPATENTABLE

Claim 15 of the '203 Patent is not rendered unpatentable by Yokoyama in view of Cline because (A) Yokoyama already discloses a drain mechanism, (B) a POSITA would not modify Yokoyama in the asserted “upside down” orientation, and (C) the Yokoyama-Cline assertion fails to disclose first positioning means which are arranged to bring the modified blocking element into engagement with the eccentric opening.

A. A POSITA would find no motivation to modify Yokoyama with Cline because Yokoyama already discloses a drain mechanism.

The Petition states that a POSITA would find motivation to combine Yokoyama and Cline because “Yokoyama does not disclose any such draining mechanism.” Petition, p. 53. However, as explained above, Yokoyama teaches a drain plug for the removal of fluid from the filter device 1 during servicing. Ex. 1008, FIG. 3; Ex. 2017, ¶ 47 (“Yokoyama’s design already incorporates a central

drain plug.”). Indeed, Petitioners’ expert acknowledged that the structure could be a drain. Ex. 2018, p. 43, ln. 14-15 (“Q. But it's possible this is a drain plug? A. I guess.”). This is quite different from the statement in the Petition that “Yokoyama does not describe such a draining mechanism.” Ex. 1003, ¶ 130. The Petition fails to even address this feature, and much less explain how and why this feature should be eliminated from Yokoyama and replaced with the drain valve mechanism 56 of Cline. The drain plug of Yokoyama is shown again below.



Ex. 1008, FIG. 3.

The “petitioner has the burden from the onset to show with particularity why the patent [claims] it challenges [are] unpatentable.” *Harmonic Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016). The Petitioners have not met this burden, or even provided any explanation as to why the drain plug of Yokoyama should be removed and replaced with the more complex drain valve mechanism 56 of Yokoyama. The

Petition fails to address the drain plug of Yokoyama at all, let alone in providing the asserted reasoning for combining Yokoyama with Cline. Petition, p. 52-59.

Indeed, even the Petition explains that it is desirable to have a drainage mechanism in which the service technician “does not receive any oil splashes and that the oil does not flow onto the outer walls of the filter housing.” Petition, p. 53. The Petition also asserts that a “POSITA would have also been motivated to make this modification because of the known benefits from Cline’s relatively simple design,” which would be “more reliable and less prone to damage compared to other designs.” Petition, p. 54, 55. The design of Yokoyama already includes these advantages.

As an example, the drain plug of Yokoyama would be operated before the upper case half 10 and lower case half 30 were separated during servicing, so there would be no concern that oil would spill or splash onto the filter housing or other components. *See* Ex. 1008, FIG. 3.

Moreover, the drain plug of Yokoyama is a concentrically arranged plug; it cannot be said that the eccentric drain valve mechanism 56 of Cline is a simpler design than that already disclosed in Yokoyama. Ex. 2017, ¶ 62 (“Yokoyama’s design prioritizes simplicity and reliability ... adding Cline’s drain mechanism [would] increase[] the risk of misalignment or failure ... [and] complicate[] assembly and disassembly, contradicting Yokoyama’s goal of ease of replacement

“). As such, a POSITA would not find motivation combine Yokoyama and Cline as asserted in the Petition, and Petitioners have not met their burden in even attempting to explain why the drain plug of Yokoyama should be replaced with the teachings of Cline.

B. A POSITA would find no motivation to modify Yokoyama with Cline in the asserted “upside down” orientation.

Yokoyama specifically discloses that the filter element 40 includes an “upper” plate 43 and a “lower” plate 44. Ex. 1008, ¶ 18, FIG. 3. This orientation is opposite to that claimed by and described in the ‘203 Patent. Because of Yokoyama fails to disclose the claimed orientation of the ‘203 Patent, Petitioners again allege that it would have been obvious to orient the filter device 1 “upside-down” in comparison to the orientation shown in the Figures of Yokoyama, as with Ground I.

The Petition again contends that the filter shown in the figures of Yokoyama merely reflects the orientation of the filter medium as depicted, and the orientation of the insertable filter medium could be upside-down. Petition, pp. 57 -58. Specifically, Petitioners assert that the drain valve could be added to the upper plate 43 of Yokoyama. *Id.* Again, features of Yokoyama would discourage a POSITA from making such a modification. Moreover, Yokoyama teaches a filter device 1 in which the orientation is critical to the stated goals of Yokoyama and must be arranged as depicted. See, Section VII(B), above. A POSITA would find no

motivation to destroy the claimed advantageous features of Yokoyama and render certain components meaningless.

Here, the Petition again provides only a brief conclusory statement that the filter device 1 of Yokoyama could be oriented “upside-down.” Ex. 1003, p. 71; Petition, p. 58. This conclusory statement is unsupported by *any* technical explanation or reasoning in the Petition and in Petitioners’ Expert Declaration. *Id.* The Petitioners cannot satisfy its burden of proving obviousness by employing “mere conclusory statements.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d at 1380 (Fed. Cir. 2016). Moreover, expert testimony is given little weight when it merely repeats the petitioner’s conclusory argument for which the testimony was offered to prove and does not provide any additional evidence or technical reasoning to support the arguments. *See Xerox Corp. v. Bytemark, Inc.*, 2022 WL 3648989, at *5-6 (PTAB Aug. 24, 2022).

Notwithstanding this failure, the below technical analysis and reasoning which shows that a POSITA would be discouraged from making such a modification, Petitioners have not satisfied their burden in showing why a POSITA would be motivated to orient the filter device 1 of Yokoyama “upside-down.” Petitioners’ Expert Declaration should likewise be afforded little to no weight for merely regurgitating the unsupported conclusory argument in the Petition, which is again devoid of any technical analysis or reasoning.

A POSITA would not find motivation as Yokoyama already discloses a drain mechanism, including a drain plug, located on the bottom of the filter device. See Section VII(B). This feature would be easily recognized by a POSITA, who would be discouraged from removing this feature, replacing it with the drain valve mechanism 56 of Cline, and needlessly complicating the design.

The proposed modification of Yokoyama with the drain valve mechanism 56 of Cline would complicate the design of Yokoyama's filter device 1. The Petition does not allege with particularity how the drain valve mechanism 56 of Cline would be employed on the filter device 1 of Yokoyama but, regardless, it would add complexity to the filter insert 1. *In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d at 1380 (Fed. Cir. 2016). ("The petitioner cannot satisfy its burden of proving obviousness by employing "mere conclusory statements.").

In Yokoyama, the upper case half 10 of Yokoyama includes features critical to the design, including pleated portions 19, protrusions 20, and depressions 22, when cooperate with the filter element 40 during installation to minimize wear on the seal. Ex. 1008, FIG. 1. The upper case half 10 also already includes a fuel inflow pipe IP and a fluid outflow pipe OP. *Id.* The addition of the drain valve mechanism 56 of Cline to the upper case half 10 of Yokoyama would add complexity this already-intricate upper case half 10, and a POSITA would be deterred from doing so. When designing components for automotive engines, optimizing space is a

critical consideration. Ex. 1003, ¶ 39 (“a POSITA would have readily recognized that vehicle engine compartments contain multiple components, and packaging these components in the limited space available is constraining); Ex. 2017, ¶ 67 (“available space within the engine compartment must accommodate components while ensuring accessibility for hands and tools during installation and maintenance”). Modifying Yokoyama with an eccentric blocking element would not only increase the size and complexity of the filter housing itself, but would also complicate the filter insert and its relational engagement with the filter housing. Ex. 2017, ¶¶ 67-68 (The combination of references “present[s] a significant spatial conflict ... adjusting the design to merge these systems would require major reconfiguration of the filter housing and surrounding components.”). This increased complexity results in a greater likelihood of part failures and would require significantly more testing and effort in the design process. *See generally*, Ex. 2017, ¶¶ 49-74.

Additionally, like in Ground I, a POSITA would find no motivation to modify Yokoyama with Cline as asserted due to the specific relationship between the upper case half 10 and the lower case half 30. Yokoyama teaches a filter device 1 that is screwed upward into device fixing bracket 23. Ex. 1008, FIG. 1. This orientation is critical to achieve the goal of Yokoyama: “there is no possibility that the sealing member will be damaged due to relative rotation with the pipe portion, or that the sealing function will be deteriorated due to an increase in the inner diameter.” *Id.*, ¶

24. Yokoyama achieves this goal by resting the filter element 40 on the filter element mounting part 36 while the lower case 30 is threaded onto the upper case half 10. *Id.* In Petitioners' proposed orientation, the filter element 40 would already be resting on the upper case half 10 when the filter is assembled. Thus, the filter element mounting part 36 would not achieve the same function of mitigating wear on the sealing member. For this additional reason, a POSITA would not find motivation to modify Yokoyama in the "upside down" orientation proposed in the Petition.

C. Yokoyama modified by Cline fails to disclose first positioning means which are arranged to bring the blocking element into engagement with the eccentric opening.

Even when considered in combination with Cline, Yokoyama fails to disclose first positioning means which are arranged to bring the blocking element into engagement with the eccentric opening. As stated in Yokoyama, the "locking protrusion formed inside the opening is positioned within the depressions between the pleated portions provided on the outer periphery of the tube. Therefore, when the lower case half is screwed into the upper case half later, even if the lower case half comes into contact with the filter element, the filter element will not rotate relative to the upper case half, and the filter element will not wobble and become unstable." Ex. 1008, ¶ 8. As described by Yokoyama, the locking protrusions 46 are designed to *prevent* rotation while the filter halves are screwed. *Id.* Yokoyama teaches three

locking protrusions 46 interacting with three depressions 21. *Id.*, FIG. 1 and FIG. 4. The purpose of this arrangement with three locking protrusions is to reduce friction and the abrasion of the sealing member. *Id.*, ¶ 11. In the arrangement taught by Yokoyama, there would be no means to consistently bring the drain valve mechanism 56 of Cline into the correct angular orientation such that it aligned with an eccentric opening. Thus, no person of skill in the art would make such a modification.

Accordingly, Ground II of the Petition fail as well.

IX. GROUND III: HONERMANN IN VIEW OF CLINE DOES NOT RENDER ANY INDEPENDENT CLAIM UNPATENTABLE

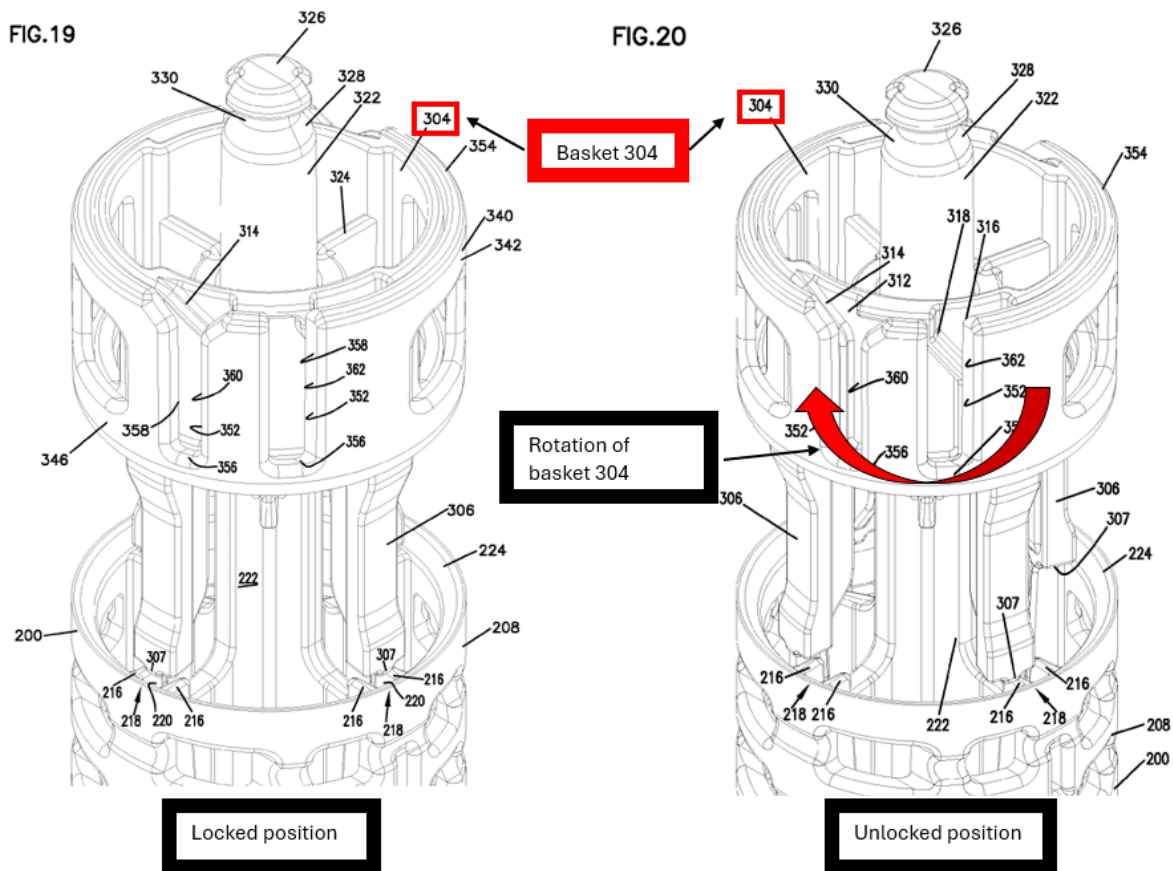
Honermann in view of Cline does not render the independent claims of the '203 Patent invalid because (1) Honermann fails to disclose or suggest "rotating the ring filter insert relative to the filter housing," (2) Honermann and Cline fail to disclose or suggest first positioning means "which are arranged to bring the blocking element into engagement with the eccentric opening," and (3) A POSITA would not find motivation to combine Honermann with Cline as asserted in the Petition. These arguments are addressed below.

A. Claim 15

1. Honermann fails to disclose or suggest "rotating the ring filter insert relative to the filter housing."

Both independent claims 1 and 15 of the '203 Patent recite “the inclined plane and the nose arranged to be [moved] in relation to each other in such a way that they slide along each other and bring the blocking element into engagement with the eccentric opening, *by rotating the ring filter insert relative to the filter housing*” (emphasis added). Ex. 1001, Claims 1 and 15. Honermann fails to disclose this feature.

The Petition identifies the filter bowl 36 and the inner assembly 364, which includes basket 304, as the filter housing. Petition, p. 79. In Honermann, when the filter cartridge 38 is inserted into the filter bowl 36, the basket 304 is rotated relative to the ring filter insert by the protrusions 121, 123. Honermann describes that “as the first protrusion 121 engages this first slide surface 314, it causes the basket 304 to rotate ... This rotates the basket 304 from the first locked position (FIGS. 19 and 30) to the second unlocked position (FIG. 20).” Ex. 1006, ¶ 178. This rotation of the basket 304 is shown in the Figure below.



Ex. 1006, FIG. 19-20.

Accordingly, Honermann teaches that a portion of the filter housing, basket 304, rotates relative to the filter bowl 36. Ex. 1006, FIG. 3. However, the independent claims of the '203 Patent claim the opposite: "by rotating the ring filter insert relative to the filter housing." Ex. 1001, Claims 1 and 15. Accordingly, Honermann fails to disclose this feature. *See also*, Ex. 2017, ¶ 79 ("the 'filter cartridge (38)' rotates the 'basket (304)' ...Honermann does not teach rotating the filter [cartridge 38] relative to filter housing").

The Petition states that "because the basket is part of the filter housing, the

ring filter insert *has rotated* relative to the filter housing.” Petition, p. 98. This argument fails. The plain language of “by *rotating* the ring filter insert relative to the filter housing” indicates that it is the filter insert that rotates. This is reinforced by the Specification and Figures of the ‘203 Patent which emphasizes the need to rotate the filter insert to the “engagement-compatible rotational position for the blocking element.” ‘203 Patent, col. 3, ln. 33-34. Petitioners’ expert later recognized and testified that the ‘203 Patent requires the ring filter insert to rotate:

“Q. The claim does not say by rotating the filter housing relative to the ring filter insert; is that correct?

A. It says by rotating the ring filter insert relative to the filter housing.

Q. So that specifies the ring filter insert rotates?

A. Relative to the filter housing; right.

...

A. The claim says by rotating the ring filter insert relative to the filter housing.

Q. And this specifies the filter insert rotating?

A. Right, relative to the filter housing. Yes.

Q. But it rotates?

A. Yes.”

Ex. 2018, p. 65, ln. 10 – p. 66, ln. 9.

Petitioners acknowledge that basket 304 of Honermann forms part of the filter housing and is the *only* element that rotates. Petition, p. 69 (“basket [] is part of the filter housing”). While the protrusions 121, 123 of the filter cartridge 38 cause the rotation of the basket 304 to rotate, the ring filter insert (filter cartridge 38) itself does not rotate. Ex. 1006, ¶ 178. Accordingly, Honermann fails to disclose rotating the ring filter insert relative to the filter housing, as recited in the independent claims

of the '203 Patent.

2. The combination of Honermann and Cline fails to disclose or suggest first positioning means "which are arranged to bring the blocking element into engagement with the eccentric opening."

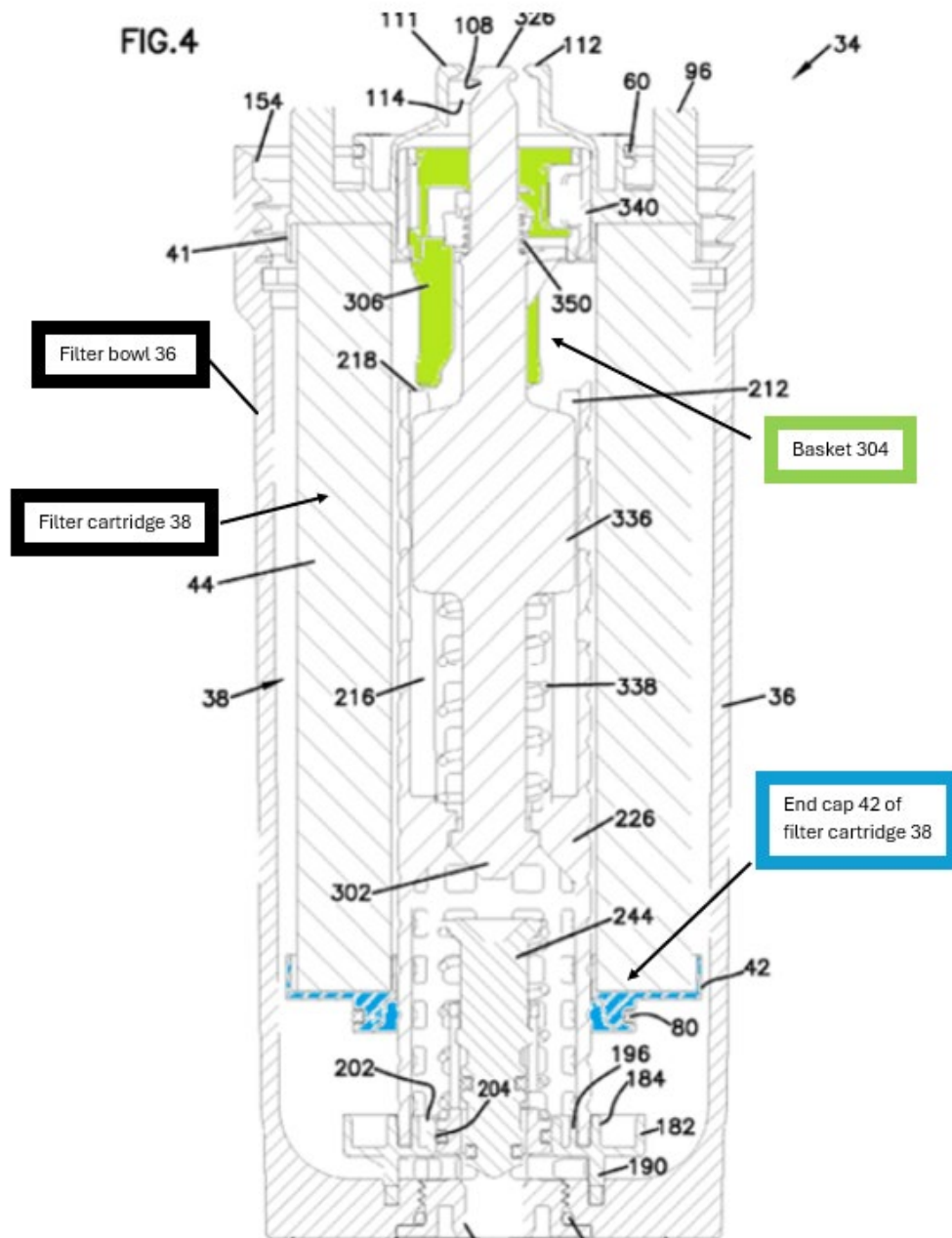
Both independent claims 1 and 15 of the '203 Patent recite "first positioning means ... which are arranged to bring the blocking element into engagement with the eccentric opening." Ex. 1001, Claims 1 and 15. The proposed combination of Honermann and Cline fails to disclose or suggest this feature.

The protrusions 121, 123 are identified in the Petition as the first positioning means. As detailed above, the Petition is clear that the protrusions 121, 123 of Honermann do not rotate relative to the filter housing, and instead facilitate the rotation of basket 304, which is a portion of the filter housing. Ex. 1006, ¶ 178. Honermann discloses no rotation of the filter cartridge 38 or the bowl 36, and much less a rotation of the filter cartridge 38 caused by the protrusions 121, 123. *Id.* As discussed above, the protrusions 121, 123 rotate only the basket 304 to disengage the auto-lock mechanism in Honermann. *Id.*

In the asserted combination of Honermann and Cline, it is entirely unclear and unsupported as to how Petitioners allege these protrusions 121, 123 would rotate a drain valve member 56 of Cline added to the bottom panel 42 of the filter insert in Honermann. Ex. 1006, FIG. 4. The Petition merely states that in "the Honermann-Cline combination, the proper insertion of the filter cartridge results in Cline's

blocking element entering its eccentric opening.” Petition, p. 98. The petitioner cannot satisfy its burden of proving obviousness by employing “mere conclusory statements.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d at 1380 (Fed. Cir. 2016).

Despite Petition’s conclusory assertion that the protrusions 121, 123 of Honermann would rotate the drain valve member 56 of Cline, the protrusions 121, 123 of Honermann interact *only* with the basket 304, which is an independent rotatable portion of the inner assembly 364. *See* Ex. 1006, ¶ 178, FIG. 24. Protrusions 121, 123 simply cannot facilitate rotation of the filter cartridge 38. *Id.* For clarity, the figure below shows basket 304 which is the only element of the filter assembly 34 that rotates, in relation to the stationary end cap 42 of Honermann, which would include the drain valve member 56 of Cline in Petitioners’ asserted combination.



Ex. 1006, FIG. 4.

Even if the basket 304 theoretically could somehow facilitate rotation of the end cap 42 of Honermann, the device would be rendered useless. “Even if an eccentric blocking element were integrated into Honermann, it would need to engage

with the eccentric opening in the housing ... [and thus rotation of basket 304 would no longer be possible because] the eccentric blocking element would inherently prevent any further rotation [of the basket 304] due to its functional purpose. Ex. 2017, ¶ 79.

Accordingly, the combination of Honermann and Cline fails to disclose or suggest “first positioning means ... which are arranged to bring the blocking element into engagement with the eccentric opening.”

3. A POSITA would not find motivation to combine Honermann with Cline as asserted in the Petition.

As proposed by Petitioners, inclusion of drain valve member 56 of Cline would destroy essential structure and function of Honermann. In Honermann, second endcap 42 and drain valve assembly 236 of Honermann provides essential structure for the valve of Honermann. Ex. 1006, FIG. 10. Petitioners' proposed modification of Honermann with Cline would replace this structure with the drain valve member 56 of Cline.

The drain valve assembly 236 of Honermann is provided to advantageously “allow liquid in the complete assembly to automatically be drained during the servicing of the system 30” when the filter assembly is removed from the filter head 32. Ex. 1006, ¶ 124. The drain valve assembly 236 achieves this advantage by engaging with core piece 222. *Id.*, ¶ 188, FIG. 12. Petitioners' proposed

modification of Honermann eliminates this auto-drain engagement feature of the plug 244. *See* Ex. 2017, ¶ 88 (“Honermann’s design is inherently concentric, relying on ‘core piece (222)’, internal basket [304], central outlet to maintain a central interaction with the drain mechanism [160]. This is incompatible with systems requiring eccentric (off-center) engagement like Cline”). If Honermann were to be modified such that the drain valve member 56 of Cline were included, it would be at an eccentric location and would be unable to interact with any concentrically located element of the filter system 30 of Honermann. A user would need to completely remove the bowl 36 from the filter head 32 during servicing before fluid could be drained. Moreover, because modified Honermann would no longer include an auto-engage feature biasing the plug in the outlet, the filter system 30 would be prone to leaking, inconsistent draining, and more effort required by the user. A POSITA would be deterred from making such a modification.

In Honermann, the “second seal member 80 (of the bottom front panel 42) forms a releasable seal 88 (FIG. 12) with a disk 90. The disk 90 is secured to the bowl 36.” Ex 1006, ¶ 90, FIG. 10. This second seal member 80, provided on the second endcap 82, separates the filtered fluid from the unfiltered fluid in the filter assembly 34 of Honermann. Similarly, the plug 244 includes both a first plug seal 240 to separate the filtered fluid from the unfiltered fluid as well as a second plug seal 240 to prevent fluid from leaving the outlet. Ex. 1006, FIG. 10, ¶ 187. The

proposed modification of Honermann with Cline would eliminate these elements. If the seal were to be located at an eccentric location with the drain valve assembly 238 removed in Honermann, the filtered fluid and unfiltered fluid would be mixed, and the filter would be rendered useless. Ex. 2017, ¶ 100 (There will be “leakage due to disruption of seals around drain valve [238]”). As such, a POSITA would not be motivated to make this proposed modification. Ex. 2017, ¶ 99 (“In this case, integrating Cline’s eccentric blocking element into Honermann’s filter design does not provide any clear functional or operational benefit. Instead, it undermines the core functionality of Honermann’s rotational locking mechanism.”)

B. Claim 1

The reasons set forth as to why Honermann modified by Cline does not render Claim 15 of the ‘203 Patent invalid are reasserted here. In addition to these reasons, Honermann modified by Cline also fails to disclose or suggest the following additional features in Claim 1.

1. Honermann fails to disclose “a removable cover.”

The Petition identified the filter head 32 of Honermann as disclosing the claimed removable cover. Petition, p. 80. However, in Honermann the filter head 32 is a fixed element to which the filter assemblies are removably attached. Honermann, FIG. 1. As stated in Honermann, “each of the filter assemblies 34, 35 is selectively connectable and mountable on the filter head 32.” Honermann, ¶ 79.

Accordingly, Honermann fails to disclose or suggest “a removable cover” as recited in Claim 1.

2. Honermann fails to disclose “the filter housing including at least one inlet for raw liquid to be filtered, which inlet leads into a raw side of the filter housing.”

The Petition also alleges that an upper circumference of the filter housing 34 discloses the “inlet” of Claim 1. Petition, p. 83. However, the inlet conduit 128 of Honermann is disposed on the filter head 32, not the filter assembly 34. Honermann, FIG. 1. While Honermann discloses that the inlet is on the element identified by Petitioners as the “removable cover,” Honermann fails to disclose an inlet on the filter housing. Accordingly, Honermann fails to disclose or suggest “the filter housing including at least one inlet” as recited in Claim 1.

3. Honermann fails to disclose “the inclined plane comprising an incline which excludes a self-locking”

Finally, Claim 1 states that the inclined plane “excludes self-locking.” Ex. 1001, Claim 1. The ‘203 Patent makes clear that this self-locking feature is allowing for the filter insert to be automatically brought into engagement-compatible rotational position for the blocking element. As stated in the ‘203 Patent, “self-locking is excluded in response to the movement and rotation of the filter insert 2 during its installation into the filter housing 10; the filter insert 10 thus falls into its correct position virtually on its own.” Ex. 1001, col. 9, ln. 50-54. Petitioners identify

the auto-lock mechanism in Honermann as disclosing this feature. Petition, p. 102. However, as detailed above, the auto-lock feature of Honermann ensures “that the filter system 30 cannot be operated unless the filter cartridge 38 has been operably assembled within the filter bowl 36.” *Id.*, ¶ 174. The auto-lock feature of Honermann is completely unrelated to the rotational positioning of the filter assemblies 34. Accordingly, Honermann fails to disclose or suggest “the inclined plane comprising an incline which excludes a self-locking” as recited in Claim 1.

X. CONCLUSION

For the forgoing reasons, Hengst submits that the ‘203 Patent is not rendered invalid by the grounds asserted in the Petition.

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CERTIFICATION OF WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), the undersigned hereby certifies that the foregoing Patent Owner's Preliminary Response is produced using a 14-point Times New Roman font and contains approximately 10,812 words, which is less than the 14,000 total words permitted by the U.S. Patent Trial and Appeal Board rules. Counsel relies on the word count of the computer program used to prepare the response on December 20, 2024.

CERTIFICATE OF SERVICE

I hereby certify that on the 20th day of December 2024, I served a copy of the foregoing, via email directed to counsel of record for Petitioners at the following:

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