

Champion Laboratories, Inc. and First Brands Group, LLC v. Hengst SE
IPR2024-00603

Patent Owner Hengst SE's *Oral Argument*

US Patent No. 9,023,203

The U.S. Patent & Trademark Office
Patent Trial and Appeal Board
June 18, 2025

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Background of the Invention

The '203 Patent is directed towards, *inter alia*, a “filter insert [that] includes a filter material body surrounded by front panels. A blocking element for the outlet is arranged on one front panel, and positioning elements are provided on the filter insert and on the housing.” [Ex. 1001, Abstract](#).

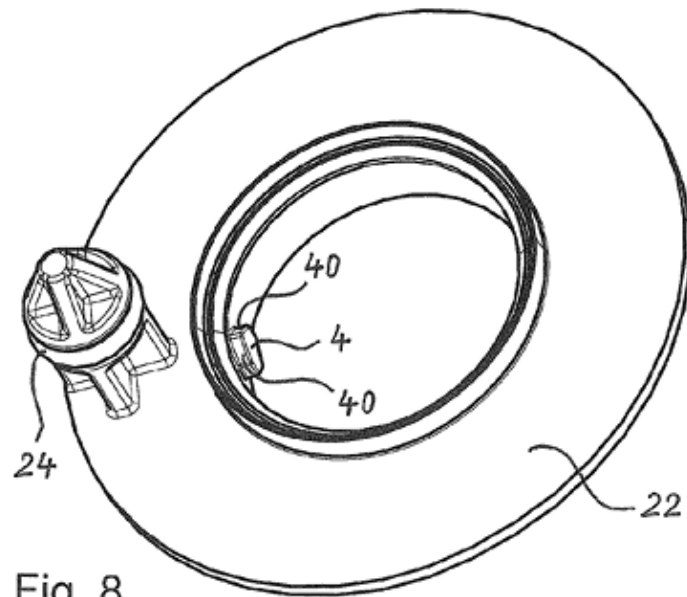


Fig. 8

[Ex. 1001, FIG. 8](#)

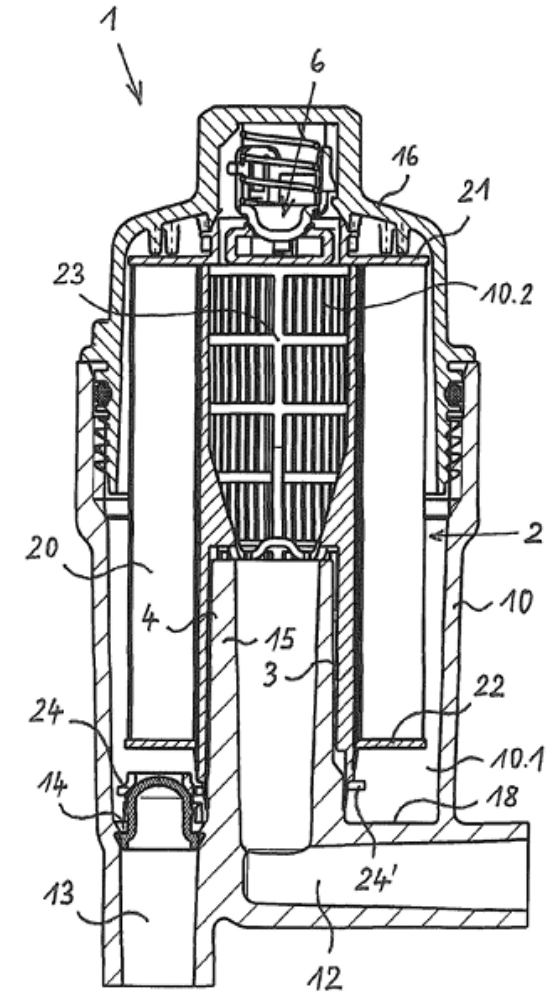


Fig. 1

[Ex. 1001, FIG. 1](#)

Background of the Invention

Problem Addressed:

It is to be considered to be a disadvantage of this known filter that, in response to the installation of the ring filter insert into the filter housing, an operator must actively establish the correct rotational position between these two parts, wherein experience shows that errors can be made easily. 45

Ex. 1001, col. 2, ln. 43-47; POR, p. 3

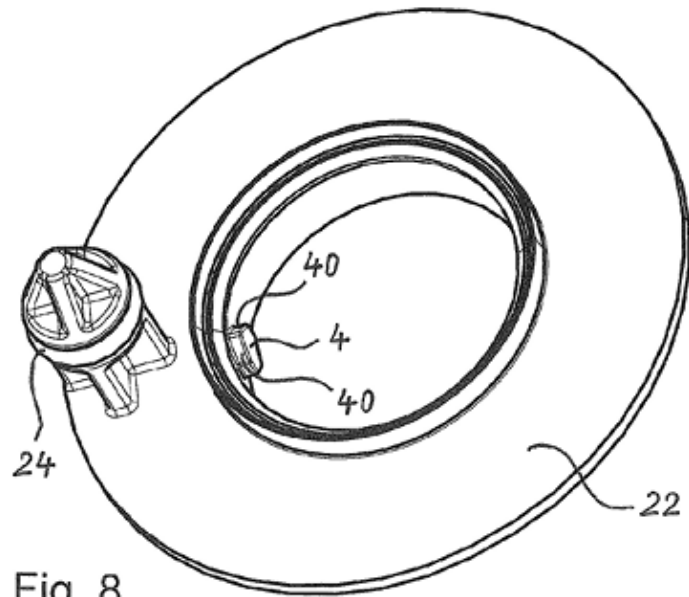
Object of the Invention:

It is thus an object of the instant invention to create a liquid filter of the afore-mentioned type, which avoids the defined disadvantages and in the case of which a reliable automatic engagement-compatible positioning of blocking element and outlet is ensured in response to the installation of the ring filter insert in the filter housing in response to a space-saving construction. 25

Ex. 1001, col. 3, ln. 22-28; POR, p. 3

Background of the Invention

When necessary, the '203 Patent's self-alignment feature addresses this problem by facilitating the alignment of the eccentric blocking element 24 in its correct rotational position within a filter housing.



rotational position relative thereto. By rotating the ring filter insert about itself, which might be necessary, the positioning means guide the 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.

Ex. 1001, col. 3, ln. 6-13

When the filter insert 2 encompasses a rotational position, which does not match for the engagement of the blocking element 24 with the corresponding seat 14 in response to the installation of the filter insert 2, the nose 4 initially impacts the inclined plane 3, here one of its partial planes 3.1 or 3.2. In

Ex. 1001, col. 8, ln. 36-40

Background of Proceedings – Asserted Grounds

- I. Ground I: Yokoyama renders obvious Claims 15-17, 19, 23, 25, 30 of the '203 Patent under 35 U.S.C. § 103.
- II. Ground II: Yokoyama in view of Cline renders obvious Claims 15-17, 19, 23-25, and 28-30 of the '203 Patent under 35 U.S.C. § 103.
- III. Ground III: Honermann in view of Cline renders obvious Claims 1, 3, 5, 8-11, 15, 17, 19, 23-25, 28-30 of the '203 Patent under 35 U.S.C. § 103.

Pet., pp. i-iii

Aspects of Designing Oil Filter Inserts a POSITA Takes Into Consideration

- Engine space is a critical consideration when designing components for intricate engine systems.
 - “[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. 1003](#), ¶ 39; [POR](#), p. 41.
 - “[A]vailable space within the engine compartment must accommodate components while ensuring accessibility for hands and tools during installation and maintenance. [Ex. 2017](#), ¶ 67; [POR](#), p. 41.
 - “It is disadvantageous here that the bottom of the filter housing is occupied with the ramp and that thus hinders the arrangement of other elements, such as channels or valves.” [Ex. 1001](#), col. 1, ln. 59-61.
- Thus, the construction and arrangement of each element of filter systems are critical design considerations.
 - The filter insert of the ‘203 Patent provides the advantage of “a space-saving construction.” [Ex. 1001](#), col. 2, ln. 27-28.

Aspects of Designing Oil Filter Inserts a POSITA Takes Into Consideration

- Spilling and/or leakage upon replacing an oil filter insert is to be avoided.
 - Petitioners' expert confirming as such (POR, ¶ 32):

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.

- “While removing the bowl from the filter head, the fact that the bowl has this liquid in it can lead to spills, drips, and inconvenience regarding disposal of this liquid. Improvements in filter design are desired to deal with these issues.” Ex. 1006, ¶ 0004 (Honermann).
- “It is desirable that [the technician] does not receive any oil splashes and that the oil does not flow onto the outer walls of the filter housing and onto the other engine components. It is also desirable that a minimum amount of oil be lost when changing the filter element. Pet., p. 53.

Ground I – Yokoyama

1. Petitioners did not allege any motivation to invert Yokoyama's filter system. POR, pp. 25-34; Sur-Reply, pp. 14-16.
2. Yokoyama fails to disclose an "eccentric blocking element." POR, pp. 18-24; Sur-Reply, pp. 9-11.
3. Yokoyama fails to disclose an "eccentric opening." POR, pp. 24-25; Sur-Reply, pp. 12-14.

Ground I: Summary of the § 103 Assertion

- Petitioner's modification to Yokoyama under § 103: inverting Yokoyama's filter device. See Pet., p. 25-44.

1008, ¶18. Although Yokoyama depicts the *top front panel* on the bottom of the filter medium and the *bottom front panel* on the top of the filter medium, a POSITA would understand that this merely reflects the orientation of the filter medium as depicted, and the orientation of the insertable filter medium could be upside-down. Ex. 1003, ¶91. Moreover, a POSITA would understand that the entire filter device would operate in an identical manner if upside-down. *Id.*

Pet., p. 31

Ground I: Petitioners Offer No Motivation to Reorient Yokoyama

- “Although Yokoyama depicts the top front panel on the bottom of the filter medium and the bottom front panel on the top of the filter medium, a POSITA would understand that this merely reflects the orientation of the filter medium as depicted, and the orientation of the insertable filter medium could be upside-down.” [Pet., p. 31](#).
- “Moreover, a POSITA would understand that the entire filter device would operate in an identical manner if upside-down.” [Pet., p. 31](#).
- “In any case, the filter device would work properly if it was oriented upside-down.” [Pet., p. 48](#).
- “It was well understood that filter housings are oriented differently based on the spacing and servicing needs particular to a vehicle.” [Reply, p. 13](#).
- “But, as discussed above, there is more than sufficient motivation to do so when the POSITA is confronted with an inverted housing for the Yokoyama filter insert.” [Reply, p. 14](#).

Ground I: Petitioners Offer No Motivation to Reorient Yokoyama

- The Petition merely states that “the orientation of the insertable filter medium could be upside-down.” [Pet.](#), p. 31.
- This assertion fails to meet the standard for obviousness under 35 U.S.C. § 103. [POR](#), p. 26.
- After PO addressed this failure in the POR, Petitioners’ state in their Reply that the Yokoyama filter device “can operate when inverted.” [Reply](#), p. 13.
- Nowhere – not in the Petition or Reply – do Petitioners provide any technical reason or advantage showing *why* a POSITA would invert the filtration system of Yokoyama. [POR](#), p. 26.
 - Petitioners asserting that a modification “could be” made is not enough. [Sur-Reply](#), p. 14.

Ground I: No Motivation to Reorient Yokoyama

- Yokoyama already discloses a drain mechanism, including a drain plug, located on the bottom of the filter device. [Ex. 1008, FIG. 3](#).
- The Petition rests on the false assumption that Yokoyama does not disclose a drain mechanism. [POR, p. 29](#).
- This drain plug would be rendered useless in Petitioners' proposed modification. [POR, p. 27](#).
- Petitioners seemingly recognize on Reply that Yokoyama discloses a drain plug. [Reply, p. 21](#) ("Yokoyama's drain plug in the inverted configuration").

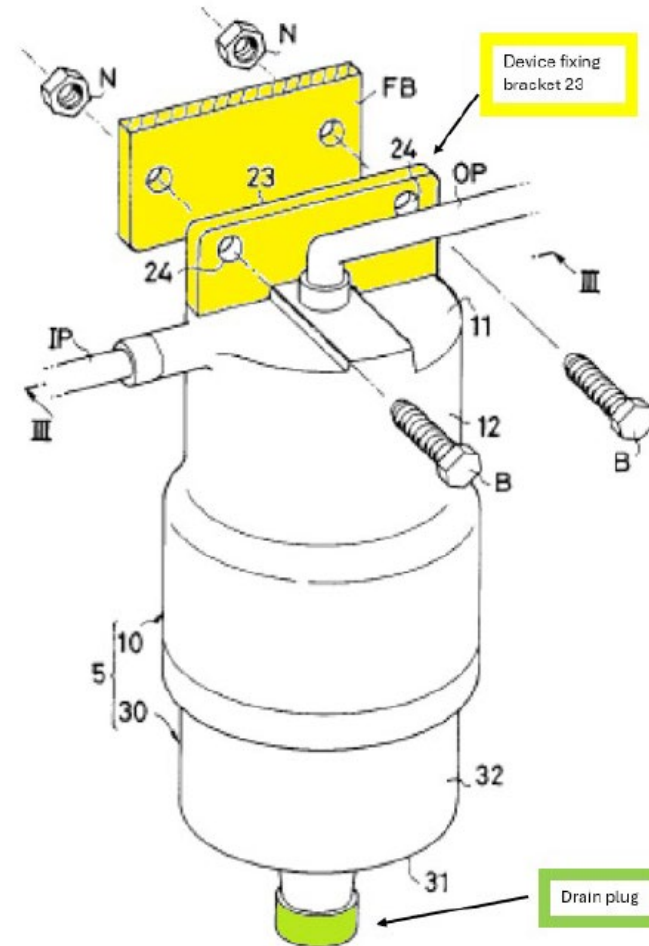
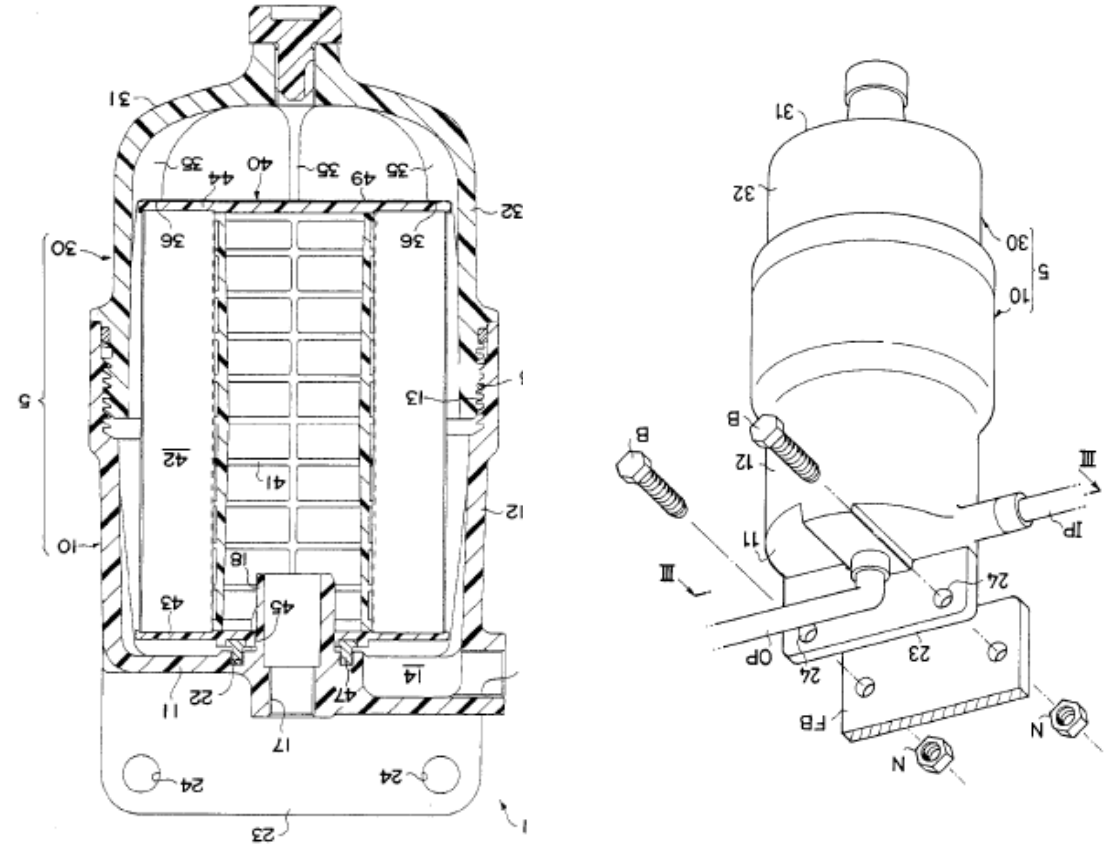


Figure taken from POR, p. 7

Ground I: No Motivation to Reorient Yokoyama

- Inverting the Yokoyama filter device would undeniably cause excess oil to be spilled each time the filter element is replaced. [Sur-Reply, p. 14.](#)
- If Yokoyama's filter were inverted, gravity would drain fluid through the inlet and/or outflow. [Ex. 2017, pp. 27-26; Sur-Reply, p. 16.](#)
- Yokoyama teaches a filter device 1 that is screwed upward into device fixing bracket 23. Without the pressure from the lower case 30 on the filter element 40, in the inverted configuration, is likely to wobble – something Yokoyama is seeking to avoid. [Ex. 1008, FIG. 1; POR, pp. 32-33.](#)



Ex. 1008, FIGS. 1-2

Ground I: No Motivation to Reorient Yokoyama

- In their Reply, Petitioners state that the positioning of the drain plug in Yokoyama is “simply a matter of design criteria,” and if the device was to be inverted, “an eccentric drain would be necessary.” [Reply, p. 15.](#)
- Petitioners argue Cline’s drain mechanism is necessary for Yokoyama to function inverted. [Reply, p. 15.](#)
- Ground I fails where Petitioners concede that Yokoyama by itself fails to disclose or suggest all claimed features. [Sur-Reply, p. 14.](#)

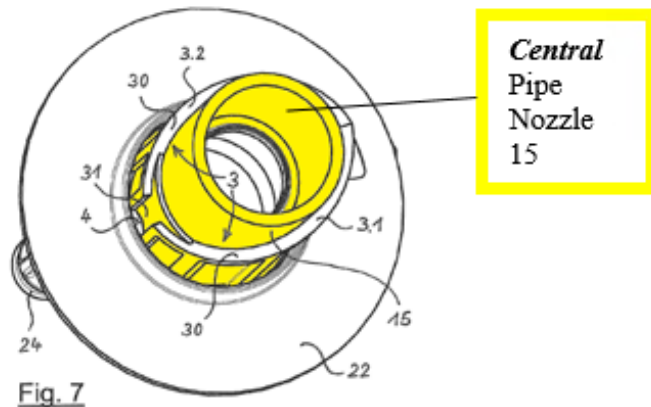
Ground I: Definition of “Eccentric”

Petitioner Definition	Patent Owner Definition
Located elsewhere than at the geometric <i>center</i> Reply, pp. 3-4	Having an axis not located in a geometric <i>center</i> POR, p. 18 Sur-Reply, at pp. 3, 9

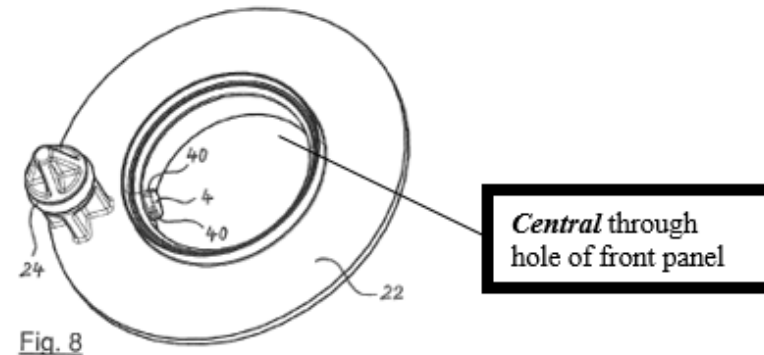
Ground I: Definition of “Eccentric”

Where the ‘203 Patent positions “centrally” described elements is imperative for determining the positioning of “eccentric” elements that must be, under either party’s construction, positioned based on a center. [Reply at p. 4.](#)

“...a **central** pipe nozzle 15...” [Ex. 1001, 7:13-14; Sur-Reply, p. 4.](#)

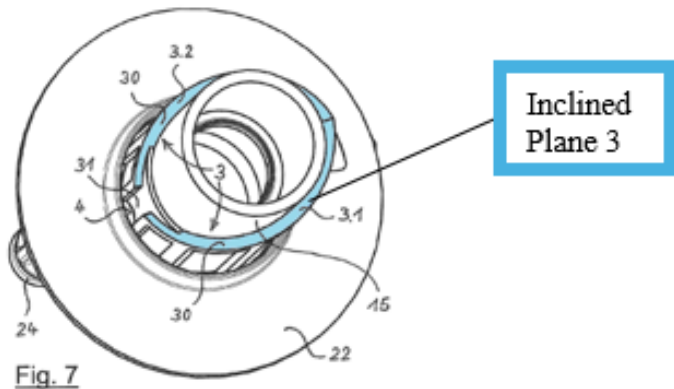


“In its **center**, the front panel 22 has a **through hole**...” [Ex. 1001, 7:65-66; Sur-Reply, p. 4.](#)

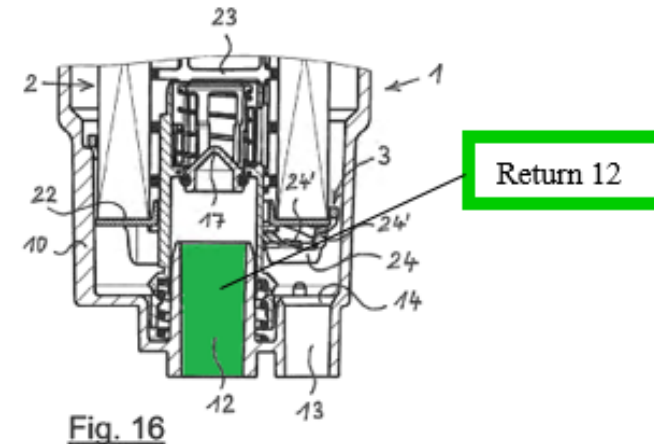


Ground I: Definition of “Eccentric”

“The **inclined plane 3** with its two partial planes 3.1 and 3.2 is again visible **in the center of the filter insert 2.**” Ex. 1001, 8:12-14; Sur-Reply, p. 5.



“The **return 12** is visible **in the center of the bottom 18 of the filter housing 10.**” Ex. 1001, 9:21-22; Sur-Reply, p. 5.

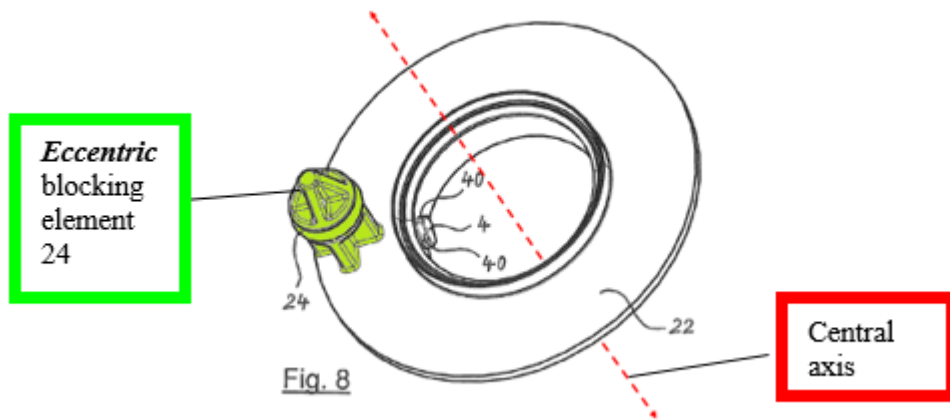


Ground I: Definition of “Eccentric”

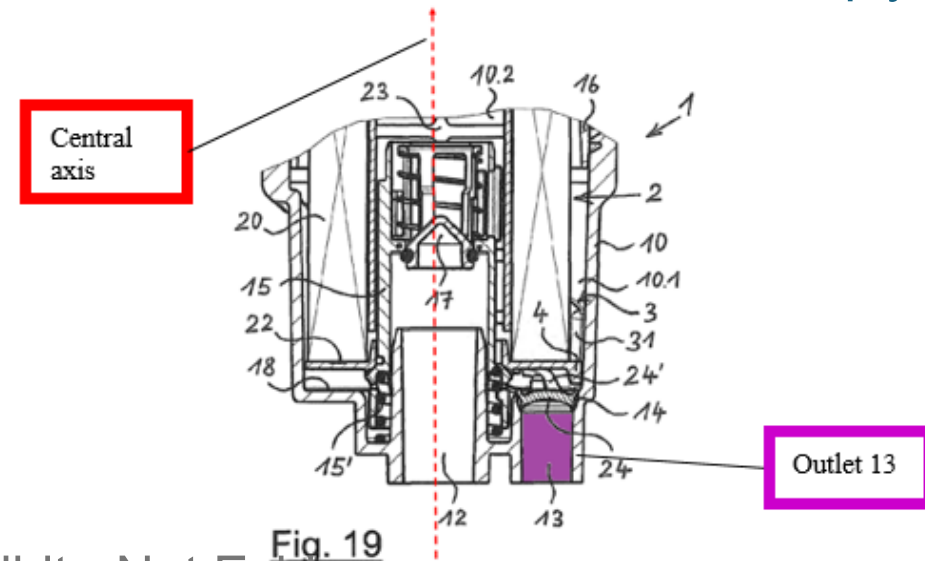
The ‘203 Patent Specification teaches for the “eccentric” elements to be aligned *away* from the central axis around which the centrally located elements are positioned.

“...wherein an **eccentric blocking element** for the outlet is arranged on the front panel facing the bottom...”

Ex. 1001, 1:19-21; Sur-Reply, p. 6.



“...in the center of which the return 12 and, **eccentrically thereto**, the outlet 13...” Ex. 1001, 10:28-29; Sur-Reply, p. 6.

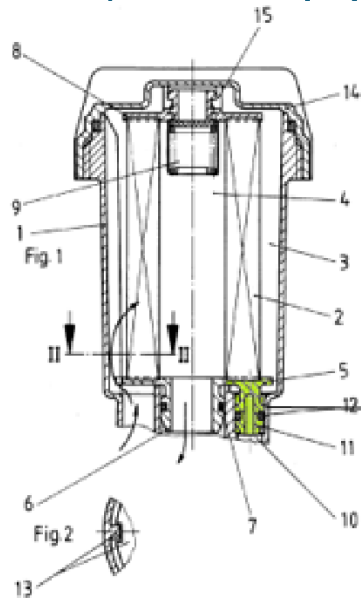


Demonstrative Exhibit - Not Evidence

Ground I: Definition of “Eccentric”

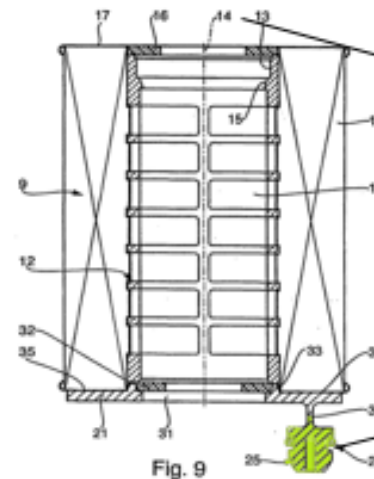
The construction of the term “eccentric” is further made clear by the Specification’s description of other patents in the prior art.

DE 39 03 675 C2: “On its lower front panel, the ring filter insert has an **eccentric bolt**” [Ex. 1001, 1:26, 1:28-30; Sur-Reply, p. 7.](#)



Eccentric Bolt

EP 1 229 985 B1: “the ring filter insert has an **eccentric bolt** for closing an outlet.” [Ex. 1001, 1:48-53; Sur-Reply, p. 7.](#)



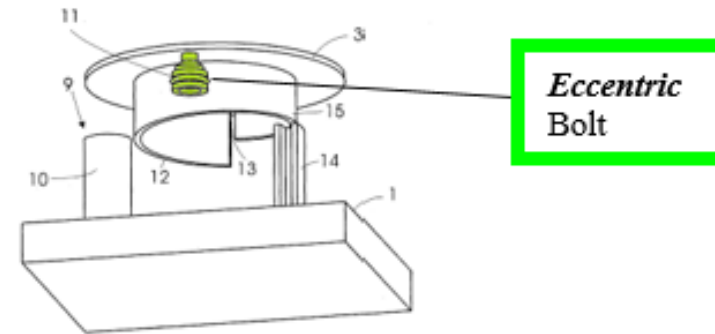
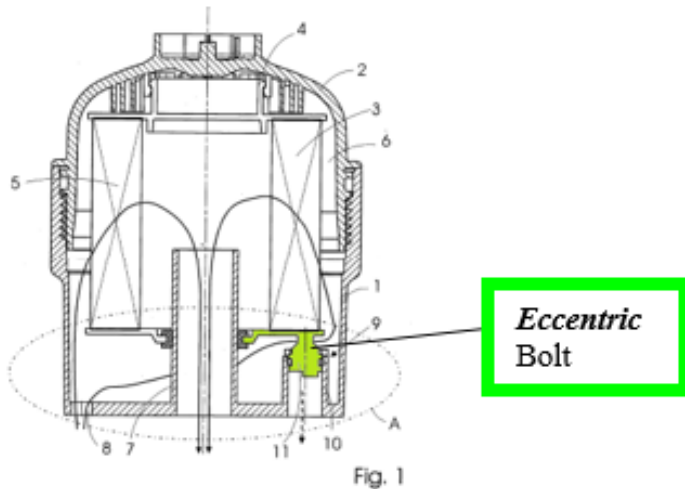
“Longitudinal axis” 14

Eccentric Bolt

Demonstrative Exhibit - Not Evidence

Ground I: Definition of “Eccentric”

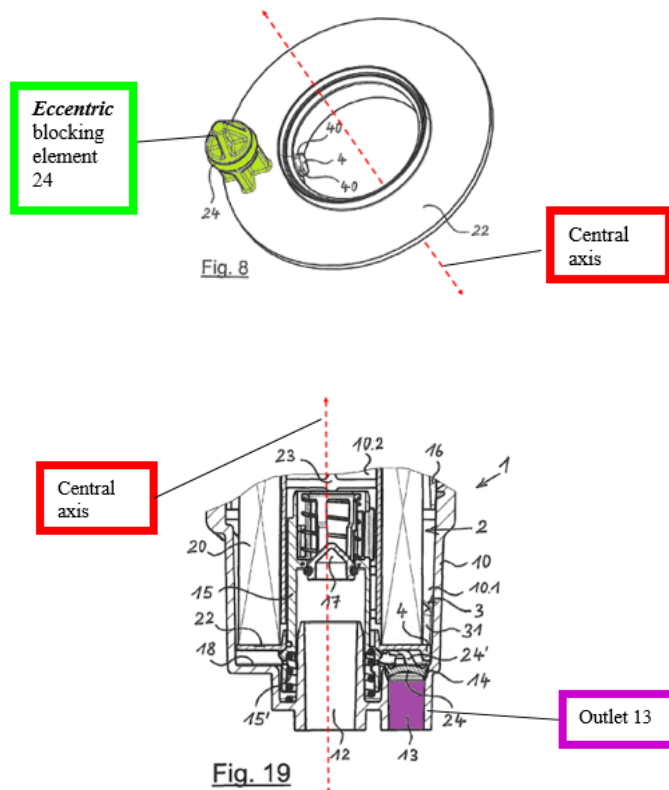
DE 103 53 424 A1: “...an **eccentric bolt** on its lower front panel...” [Ex. 1001](#), 1:65, 1:66-67; [Sur-Reply](#), p. 8.



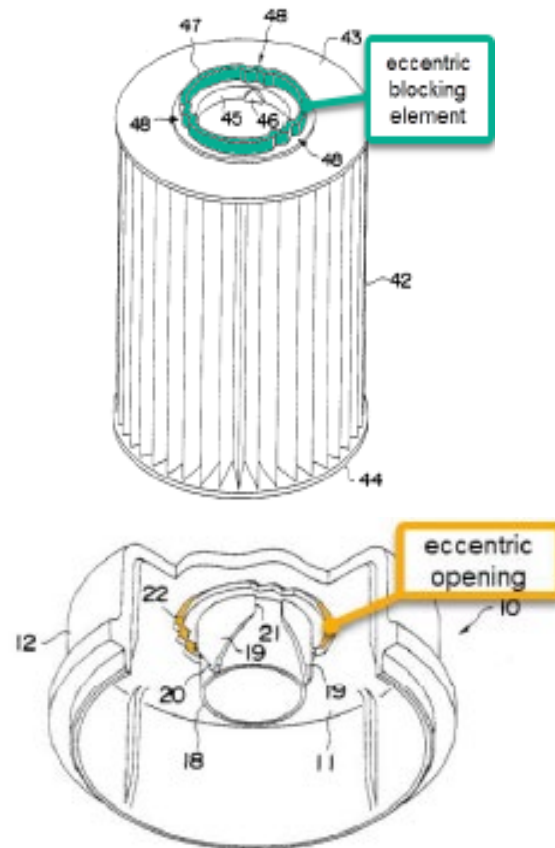
See also Cline: “The quick-drain valve member 56 is spaced apart from the central axis of the center tube.” [Ex. 1009](#), ¶ 26.

Ground I: Definition of “Eccentric”

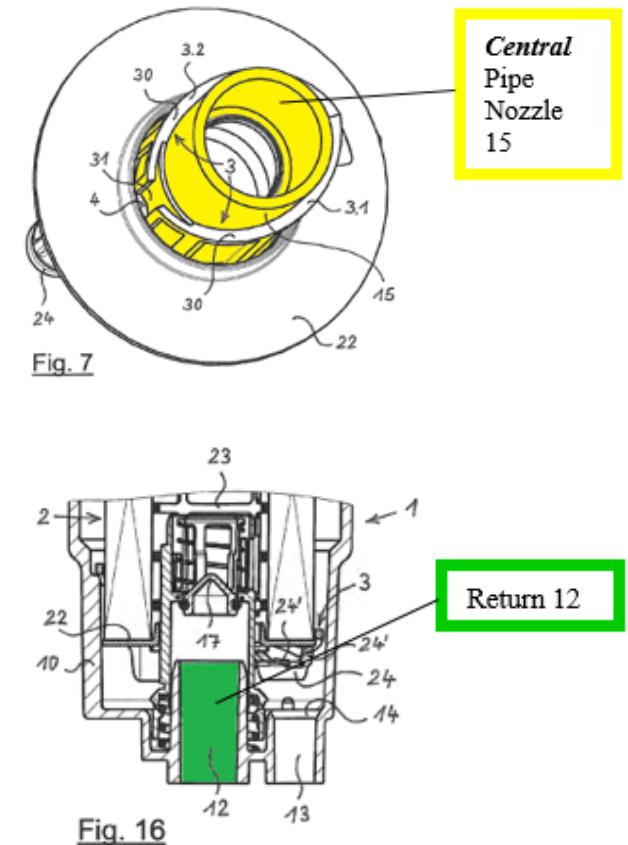
“Eccentric” Elements Described in the Specification



Petitioners’ Alleged “Eccentric” Elements of Yokoyama



“Central” Elements Described in the Specification



Ground I: Failure to Disclose an “Eccentric Blocking Element”

Petitioners fail to identify with particularity the element of Yokoyama that discloses the ‘203 Patent’s eccentric blocking element. In the Petition, Petitioners identify the “sealing member 47” as the claimed eccentric blocking element, while in the Reply, Petitioners identify the “W-shaped portions 48.” [Pet.](#), p. 33; [Reply](#), p. 9.

“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). [Sur-Reply](#), p. 9.

Ground I: Failure to Disclose an “Eccentric Blocking Element”

Sealing Member 47

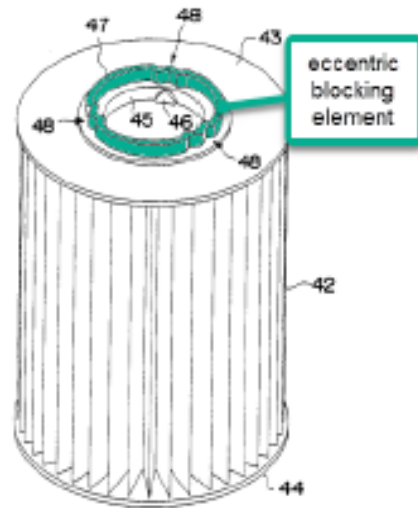


Figure from *Pet.*, p. 28

W-Shaped Portions 48

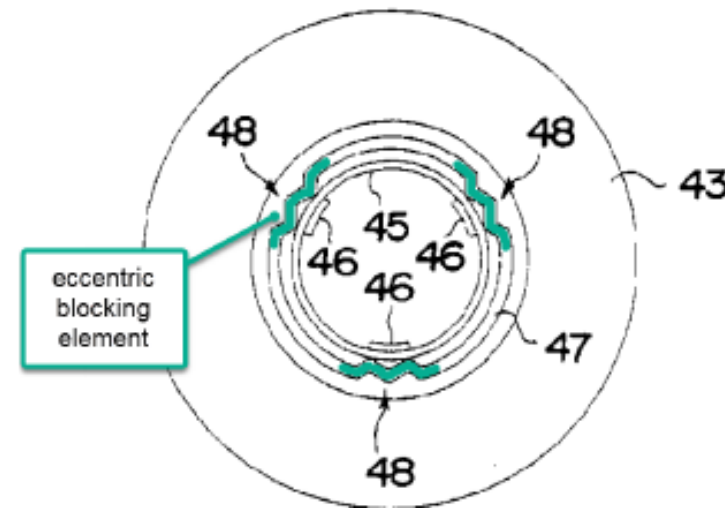


Figure from *Reply*, p. 7

“...it is preferable that a **ring-shaped sealing member having a W-shape at three locations** is provided on the upper surface side of the upper plate, **surrounding the opening** and protruding upward...” [Ex. 1008, ¶ 0011](#); [Sur-Reply](#), p. 11.

Ground I: Failure to Disclose an “Eccentric Blocking Element”

Partial Planes 3.1 and 3.2

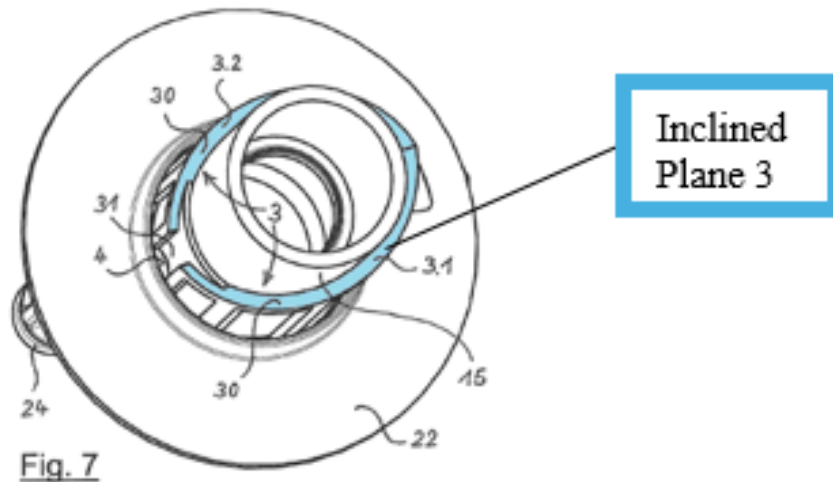


Figure from *Sur-Reply*, p. 5

- “The inclined plane 3 with its two partial planes 3.1 and 3.2 is again visible in the center of the filter insert 2.” *Ex. 1001*, 8:12-14; *Sur-Reply*, p. 5.

Demonstrative Exhibit - Not Evidence

W-Shaped Portions 48

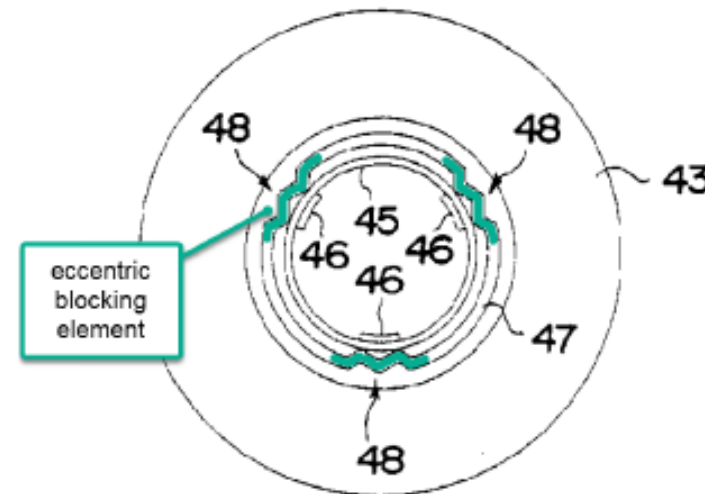


Figure from *Reply*, p. 7

- Portions of the concentrically arranged sealing member 47. *Reply*, p. 7.
- The entire structure of the sealing member 47 (which includes the W-shaped portions 48) is required to perform sealing function. *Sur-Reply*, p. 11.

Ground I: The Eccentric Blocking Element of Yokoyama is Not Configured “for engaging an eccentric opening.”

The identified “eccentric opening” is concentrically arranged in a similar manner to the identified “eccentric blocking” element. [Sur-Reply, p. 12.](#)

Additionally, the “grooves 22” are not an opening. [POR, pp. 24-25.](#)

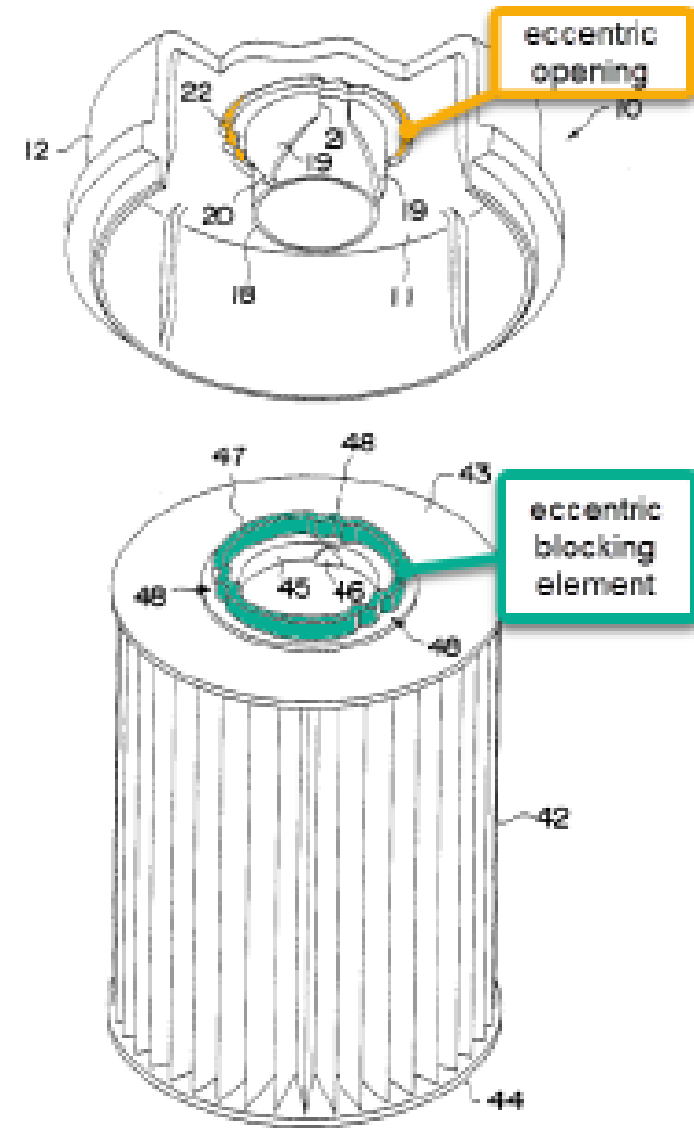
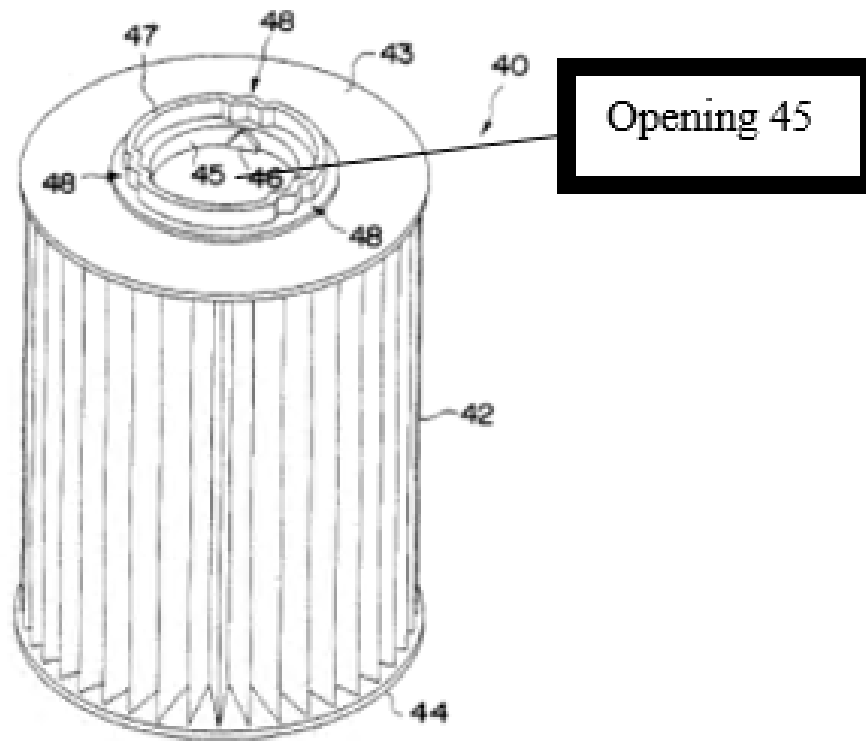


Figure from *Pet.*, p. 35

Ground I: The Eccentric Blocking Element of Yokoyama is Not Configured “for engaging an eccentric opening.”



“...the pipe portion of the upper case half is ***inserted through the opening*** provided in the upper plate of the filter element...” Ex. 1008, ¶ 0037; Sur-Reply, p. 13.

Figure from Sur-Reply, p. 13

Ground II: Yokoyama in view of Cline

1. Petitioners did not allege motivation to invert Yokoyama's filter system. [POR](#), p. 34-41; [Sur-Reply](#), pp. 21-22.
2. A POSITA would be discouraged from making Petitioners' proposed modification. [POR](#), pp. 34-37; [Sur-Reply](#), pp. 16-20.

Ground II: No Motivation was Provided to Invert Yokoyama's Filter System

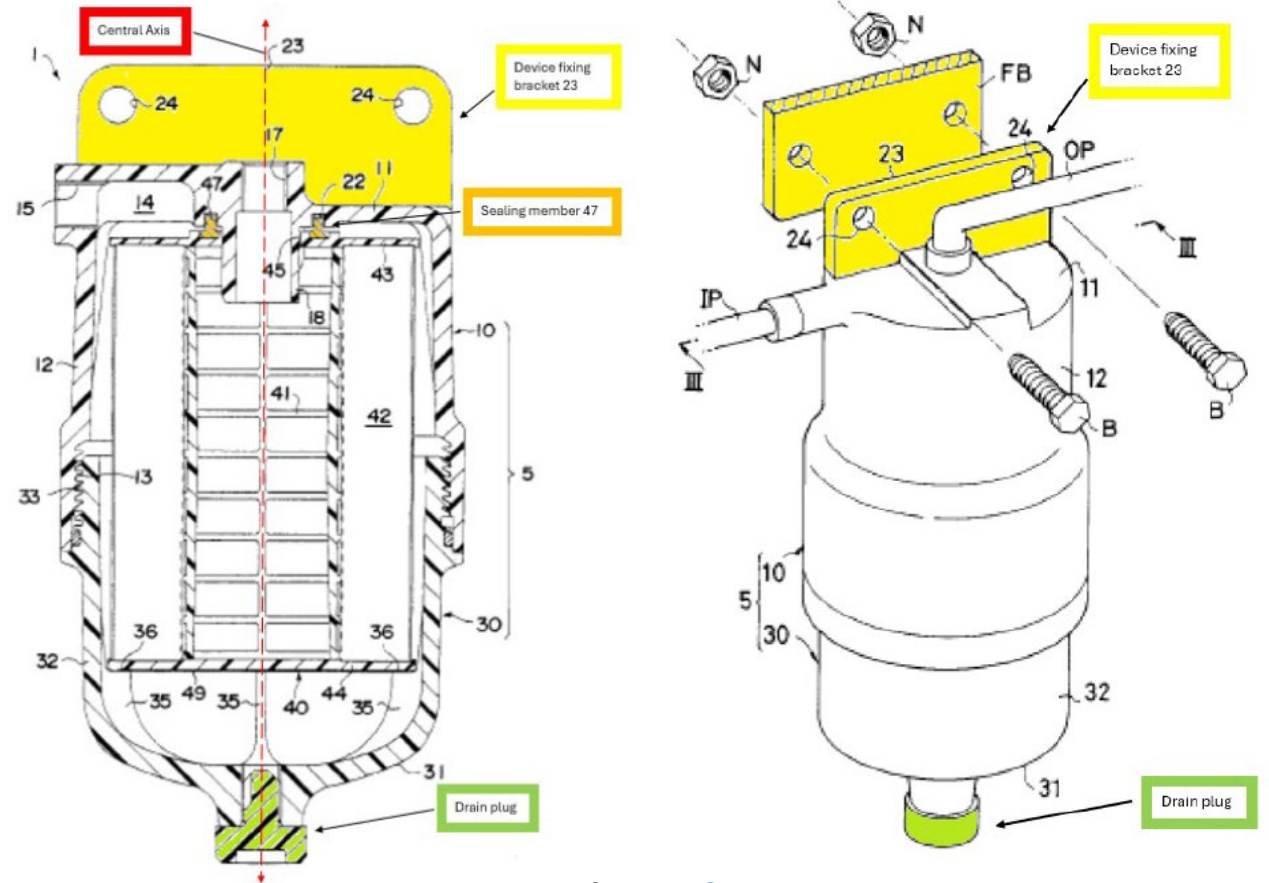
- “Yokoyama’s filter *could be* re-oriented so that removal of the filter insert opens the valve and allows liquid to flow out for safe disposal via the pull of gravity.” [Pet.](#), p. 58; *see also* [Reply](#), p. 20.
- Petitioners’ assertions that a POSITA could make the modification fails to meet the standard for obviousness under 35 U.S.C. § 103. [Sur-Reply](#), p. 22.
- Petitioners argue that a “POSITA would have been motivated to combine Cline’s drain mechanism with Yokoyama’s inverted orientation” as if Yokoyama explicitly discloses an embodiment of the device operating inverted, which it does not. [Reply](#), pp. 19-20; [Sur-Reply](#), p. 21.
- Petitioners failed to articulate a single reason as to why a POSITA would invert Yokoyama in the Petition or the Reply. [Sur-Reply](#), p. 21.

Ground II: No Motivation was Provided to Invert Yokoyama's Filter System

- PO recognizes that the Petition alleged certain reasons as to why a POSITA would use the *flow blocker* of Cline. [Pet.](#), pp 52-58.
- But the Petition failed to even attempt to provide motivation for *inverting* the filter element. [Sur-Reply](#), p. 21.
- The Petition thus failed to allege facts sufficient to invalidate claims of the '203 Patent under 35 U.S.C. § 103. [Sur-Reply](#), p. 22.

Ground II: No Motivation was Provided to Invert Yokoyama's Filter System

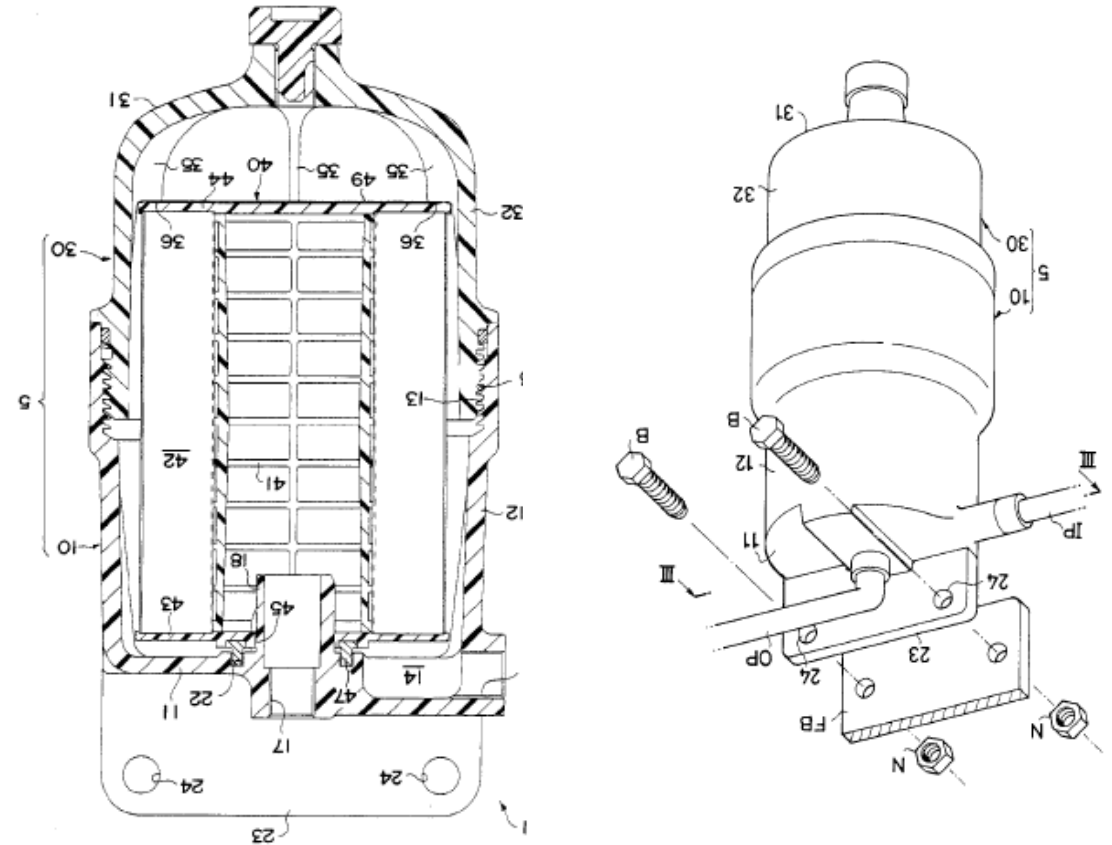
- The Petition's allegations are based on the false assumption that Yokoyama does not already disclose a drain plug. [POR, pp. 28-29.](#)
- The Petition does not address this feature. [POR, p. 29.](#)



Figures from [POR](#), pp. 7, 36

Ground II: A POSITA Would be Discouraged from Making the Proposed Modification

- As proposed, the modification of Yokoyama would cause oil to spill when the insert is changed. [POR, p. 32; Ex. 2017, p. 13.](#)
- Changing proportions of the upper case half 10 and lower case half 30 is not supported in the Petition and will still result in some spillage. [Sur-Reply, p. 18.](#)



Ex. 1008, FIG. 2-3

Ground II: A POSITA Would be Discouraged from Making the Proposed Modification

- Petitioners, on Reply, recognize that oil would spill if Yokoyama were to be inverted unmodified. [Reply, p. 19.](#)
- After PO showed that inverted Yokoyama would spill oil, Petitioners stated in their Reply that Yokoyama would “only” need to be modified further: “it would be a trivial variation for a POSITA to make the upper case half 10 smaller to accommodate additional fluid.” [Reply, p. 19.](#)
- This was not alleged in the Petition, and Ground II should be rejected based on Petitioners’ admission and failure. [Sur-Reply, p. 20.](#)

Ground II: A POSITA Would be Discouraged from Making the Proposed Modification

Petitioners' Motivations to Combine Arise Only After Yokoyama is Inverted

- Petitioners' motivation: "prevents fluid from draining until the filter needs to be replaced." Reply, p. 18, Pet., p. 58; Ex. 1003, ¶ 38.
- The drain plug of Yokoyama already achieves this function, so this issue arises after the theoretical comprehensive redesign of Yokoyama is made. Sur-Reply, pp. 16-17.
- Based on the proposed modification, the fluid is not drained **until after** the filter insert is removed from the housing – the technician would need to reach into the housing filled with fluid to remove the filter insert. Sur-Reply, pp. 19-20.

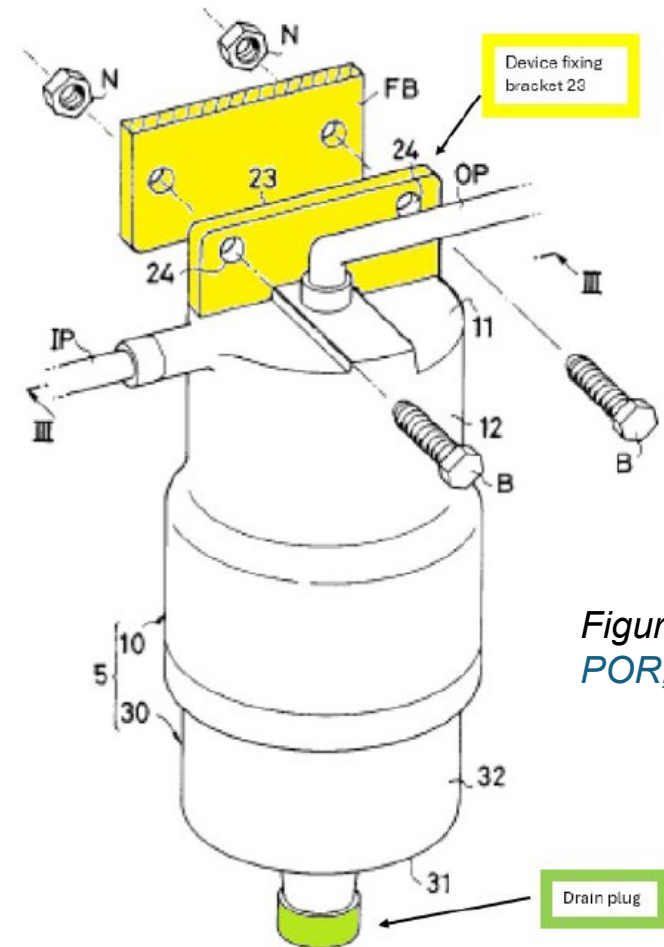
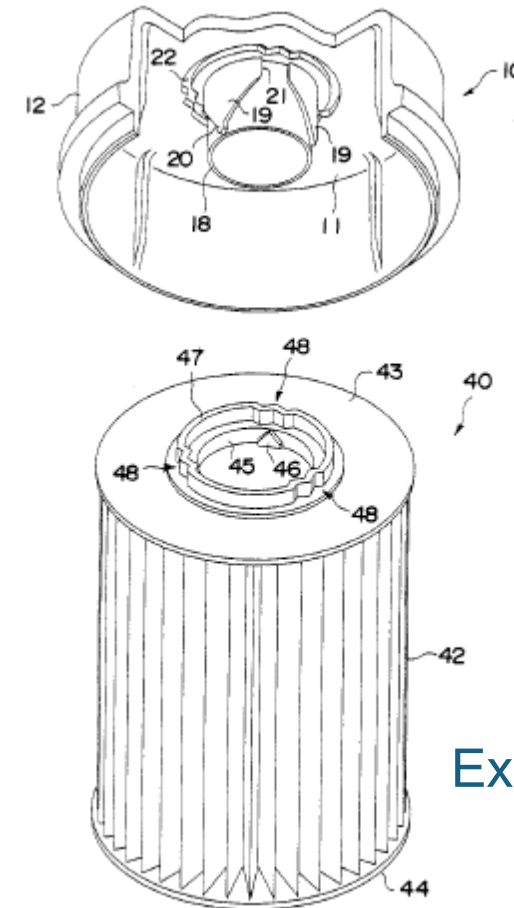


Figure from
POR, p. 7

Ground II: A POSITA Would be Discouraged from Making the Proposed Modification

Petitioners' Motivations to Combine Arise Only After the Combination is Made

- Petitioners' motivation: Cline's flow blocker "can be made of any size or shape to better fit the quick-drain outlet." [Pet.](#), p. 54.
- There is no need for resizing any filter element part of Yokoyama to begin with. [Sur-Reply](#), p. 17.
- The filter element of Yokoyama is designed to fit in a specific filter housing with a specific outlet such that the filter insert can be "replaced many times." [Ex. 1008](#), ¶12.



[Ex. 1008](#), FIG. 1

Ground III: Honermann in view of Cline

1. The Petition failed to identify Honermann describing *rotating the ring filter insert*. POR, pp. 43-46; Sur-Reply, p. 23.
2. Petitioners' new argument in reply should not be considered. Sur-Reply, pp. 23-24.
3. Petitioners' new argument on reply fails. Sur-Reply, pp. 25-26.
4. A POSITA would not combine Honermann and Cline as proposed. POR, pp. 50-52, Sur-Reply, pp. 26-30.

Ground III: Rotating the Ring Filter Insert

- Honermann fails to disclose or suggest “rotating the ring filter insert relative to the filter housing.” [POR, p. 42](#).
- The Petition identifies the filter bowl 36 and the inner assembly 364, which includes basket 304, as the filter housing. [Pet., p. 79](#).
- The Petition states that “because the basket is part of the filter housing, the ring filter insert has rotated relative to the filter housing.” [Pet., p. 98](#).
- Petitioners’ expert testified that the ring filter insert must rotate ([Ex. 2018, p. 65, ln. 10 – p. 66, ln. 9](#)):

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.

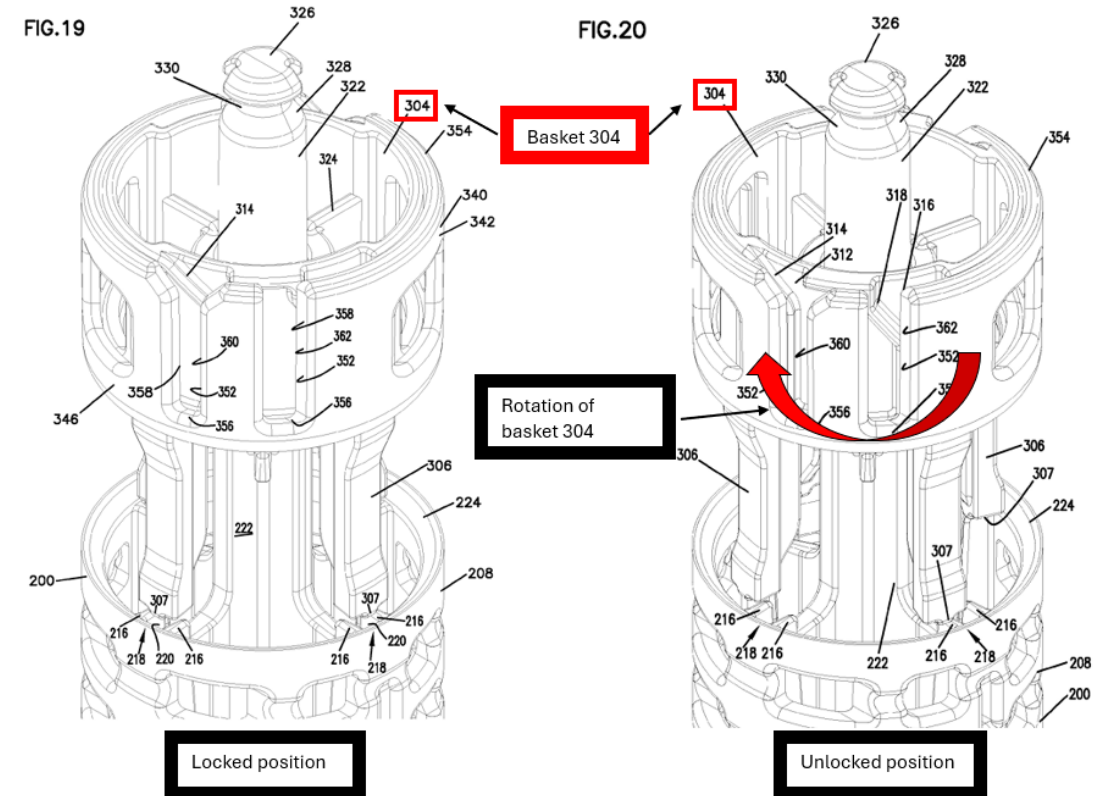
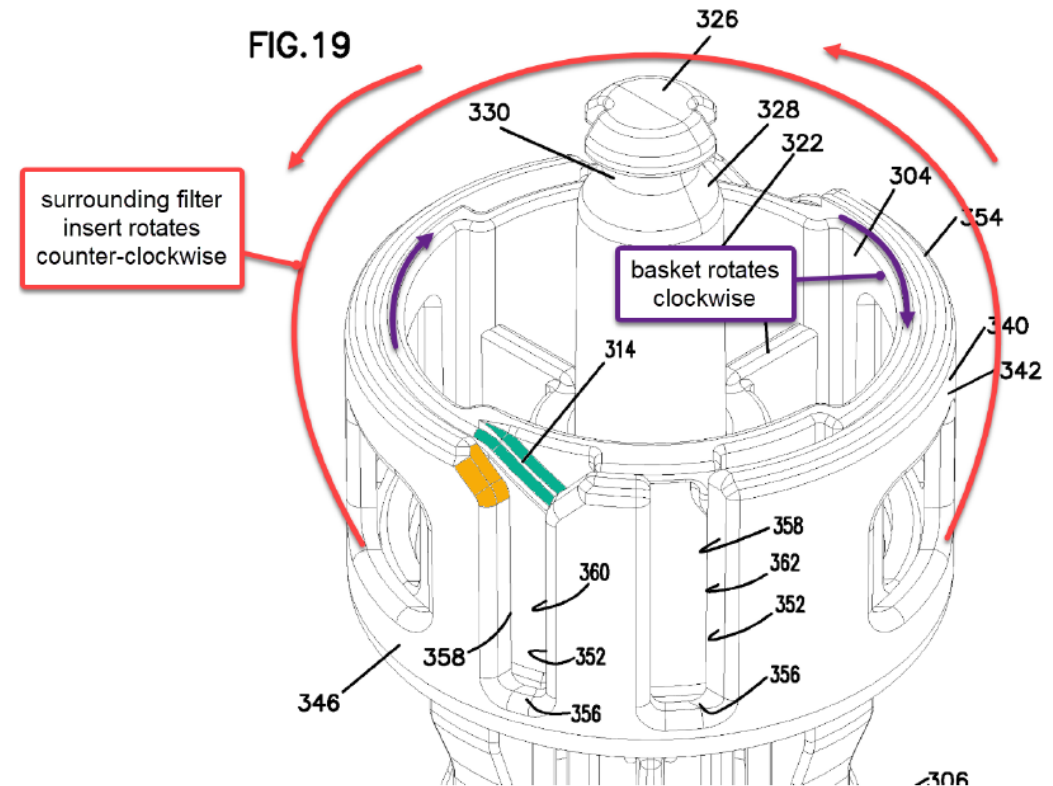


Figure from [POR, p. 45](#)

Ground III: Rotating the Ring Filter Insert – New Argument in Reply

- In Reply, Petitioners assert that the protrusions interact with a tapered opening and slide surface, causing a rotation of the filter cartridge. [Reply](#), pp. 27-28.
- The Board should not allow Petitioners to correct the deficiencies of the Petition in their Reply and should not consider this new theory of unpatentability. [Sur-Reply](#), p. 24.



New annotated figure, [Reply](#), pp. 27-28.

Ground III: Rotating the Ring Filter Insert – New Argument in Reply

rotation of the filter. For limitation 1[k], the Petition expressly states that “in the Honermann-Cline combination, the blocking element enters the eccentric opening when the filter cartridge has been properly rotated and inserted into the filter bowl.” [Pet. 97](#). And the next limitation 1[l] goes on to explain that in the combination, “the *proper insertion of the filter cartridge* results in Cline’s blocking element entering its eccentric opening.” [Pet. 98](#). Thus, the

[Reply, p. 27](#)

- “Honermann discloses that ‘[a]s the first protrusion 121 [i.e. nose] engages this first slide surface 314 [i.e. inclined plane], it **causes the basket 304 to rotate.**’ Ex. 1006, ¶178. **This rotation puts the basket** in a ‘second locked position,’ which allows the ‘second protrusion 122 [to] engage the second slide surface 318,’ which **further causes the basket to rotate** to an unlocked position. *Id.*, ¶179. **Because the basket is part of the filter housing, the ring filter insert has rotated relative to the filter housing.** Ex. 1003, ¶214.”

[Pet., pp. 97-98.](#)

- “in the Honermann-Cline combination, the blocking element enters the eccentric opening when the filter cartridge has been properly rotated and inserted into the filter bowl” [Petition, p. 97](#).
- This is a conclusory statement made assessing a claim limitation which does not involve rotation. [Sur-Reply, p. 24](#).

Ground III: Rotating the Ring Filter Insert – New Argument in Reply Fails

- “The first protrusion 121 engages the first slide surface 314, which rotates the basket 304 clockwise.” Ex. 1006, ¶143; POR, p. 46.

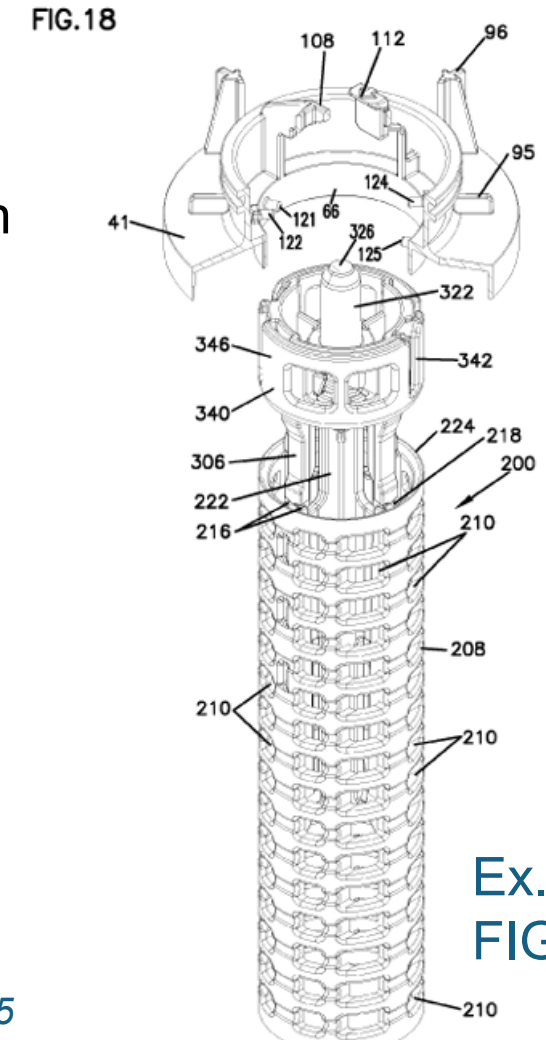
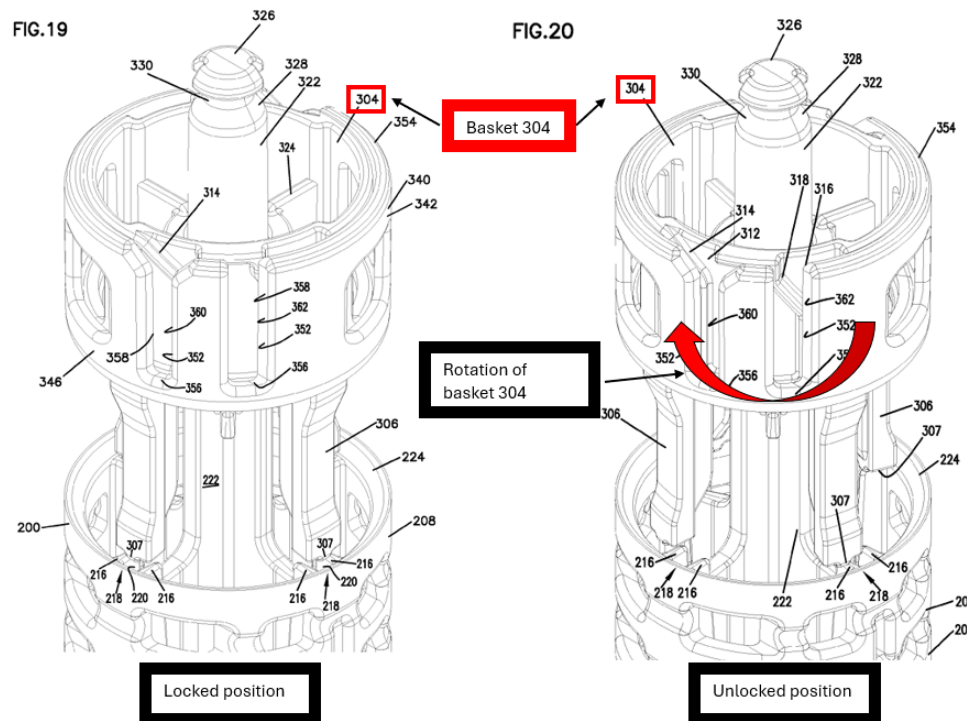
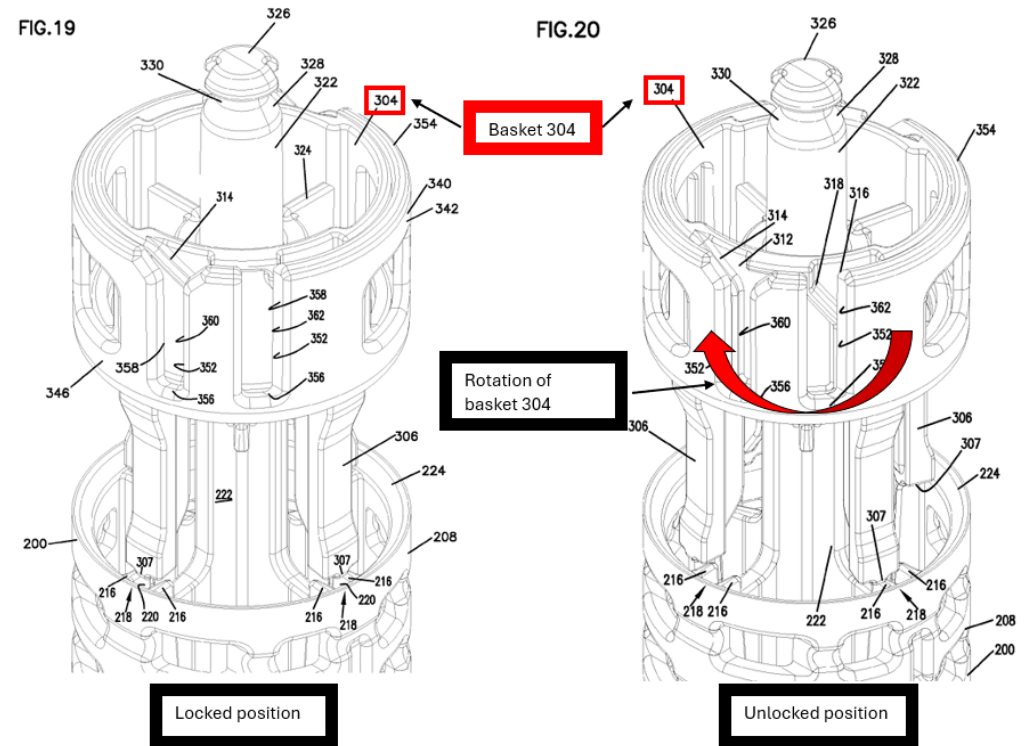


Figure from *POR*, p. 45

Ex. 1006,
FIG. 18.

Ground III: Rotating the Ring Filter Insert – New Argument in Reply Fails

- The slide channel 358 is specifically designed to prevent rotation of the filter element and instead cause rotation of the basket. [Reply](#), p. 25; [Ex. 2017](#), pp. 40-41.
- As best understood from Petitioners' new argument, if the filter element were to rotate, the basket 304 could not rotate as intended. [Reply](#), p. 25.



POR, p. 45

Ground III: Rotating the Ring Filter Insert – New Argument in Reply Fails

- The first slide surface is “constructed and arranged to engage the filter cartridge 38 and rotate the basket 30.” [Sur-Reply, p. 23; Ex. 1006, ¶143.](#)
- The claim language *which are arranged to bring the blocking element into engagement with the eccentric opening* is also not disclosed. [Sur-Reply, p. 23.](#)

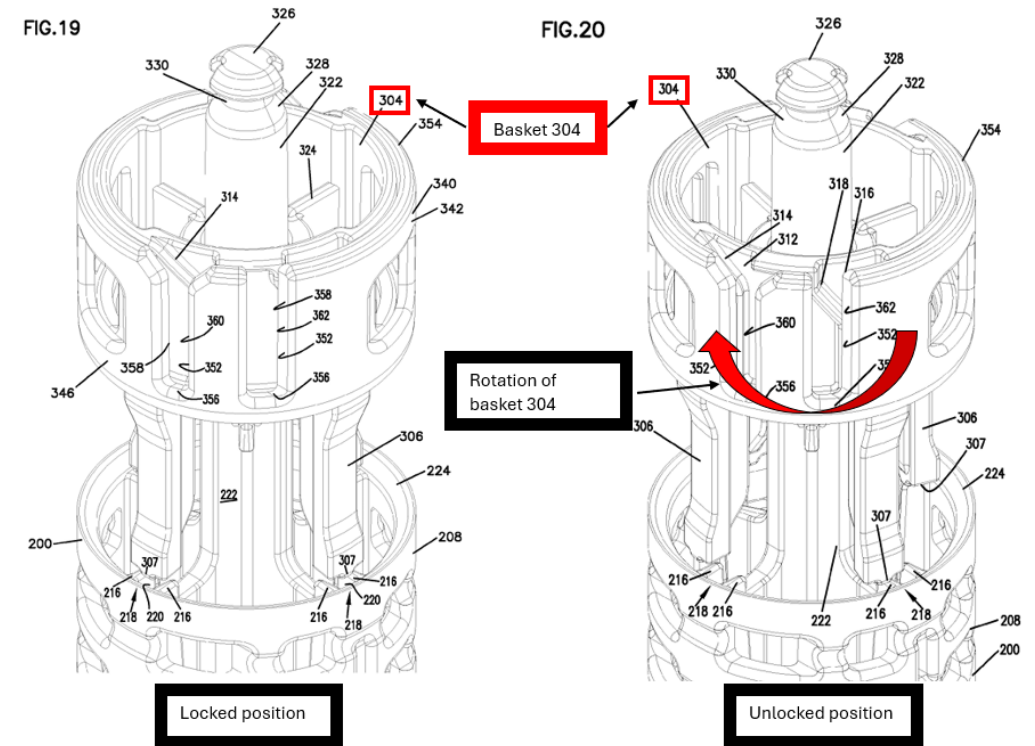
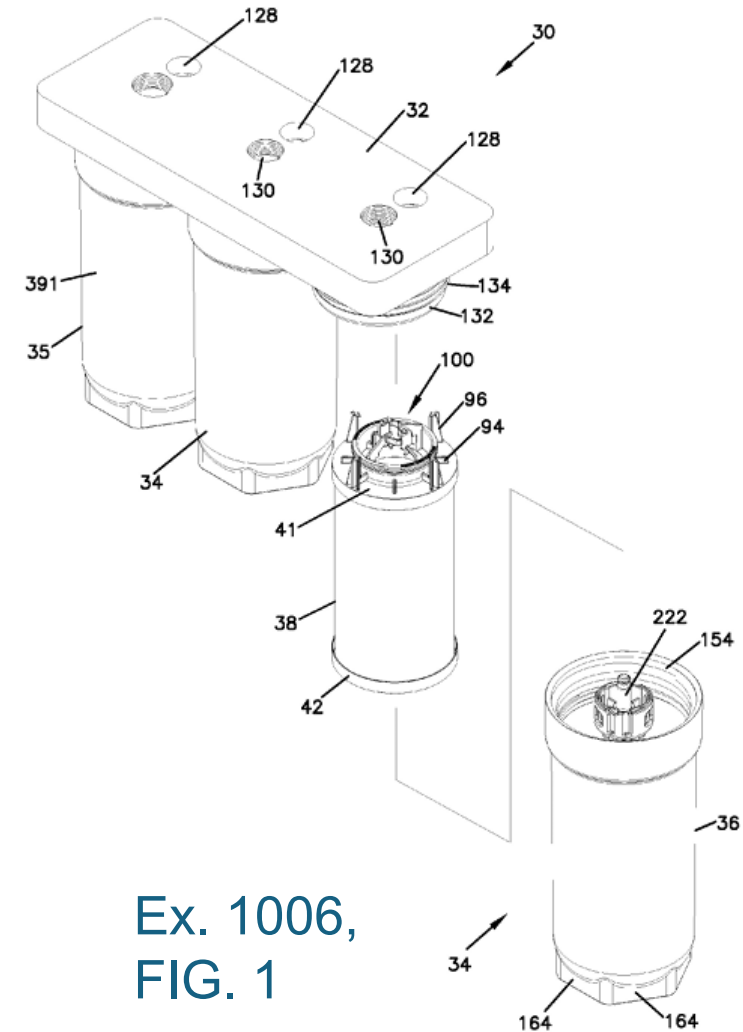


Figure from [POR, p. 45](#)

Ground III: Rotating the Ring Filter Insert – New Argument in Reply Fails

- It is the technician who “while orienting, [pushes] the filter cartridge against the basket to rotate the basket.” [Sur-Reply, p. 26; Ex. 1006, Claim 86.](#)
- Thus, the protrusions and basket do not *bring the blocking element into engagement with the eccentric opening, by rotating the ring filter insert relative to the filter housing.* [Sur-Reply, p. 26.](#)
- Asserting the protrusions would cause a *de minimis* rotation of the filter cartridge 38 is speculative at best, especially considering that the protrusions must not rotate to enable the rotation of the basket. [Sur-Reply, p. 25.](#)

FIG.1



Ex. 1006,
FIG. 1

Ground III: No POSITA Would Make the Proposed Modification

- Petitioners' assert that Honermann and Cline could be combined because "this is how" Cline, Deschamps, and Brisson operate. [Reply, p. 30](#).
 - But Cline, Deschamps, and Brisson all disclose standard automobile filter systems with a filter housing formed integrally with the engine, and a removable cap coupled to the filter housing. [Sur-Reply, p. 27](#).
 - In contrast, Honermann discloses a top-mounted cartridge-bowl type filter system. [Sur-Reply, p. 27](#).

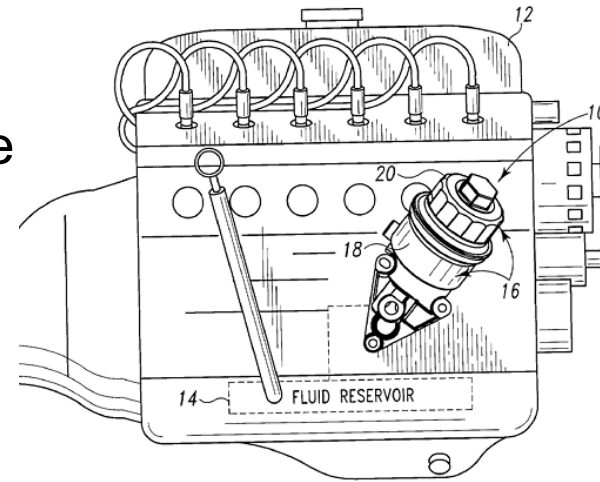
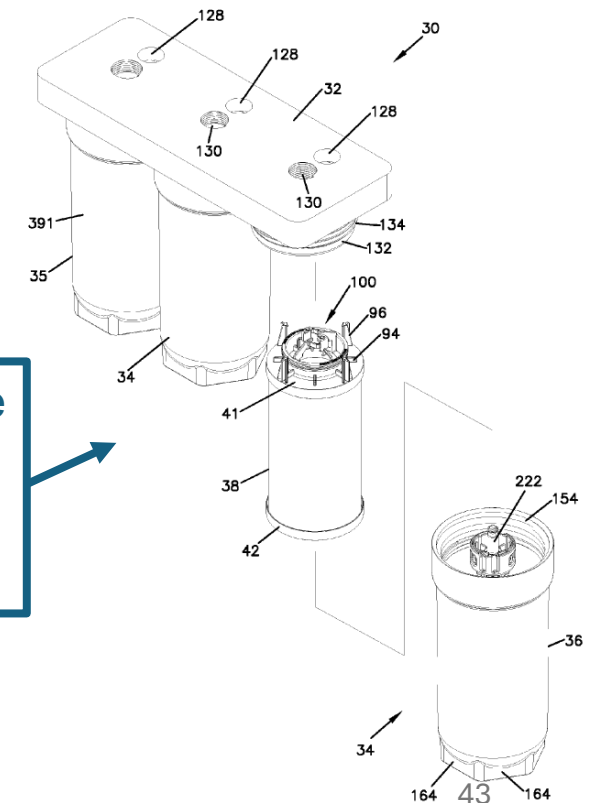


Fig. 1

Filter systems
integral with engine
housing (Cline)
Ex. 1009, FIG. 1.

FIG. 1



Top-mounted cartridge
bowl type filter system
(Honermann)
Ex. 1006, FIG. 1.

Ground III: No POSITA Would Make the Proposed Modification

- Honermann, because it is top-mounted cartridge bowl filter system, includes an auto-drain feature. [Sur-Reply, p. 29; Ex. 1006, ¶¶190, 194.](#)
- The auto-drain feature enables fluid to be drained by “partially unscrewing the bowl 36,” such that draining occurs when the bowl is still connected to filter head 32. [Sur-Reply, p. 29; Ex. 1006, ¶¶190, 194.](#)
- Petitioners’ modification removes the auto-drain mechanism of Honermann and replaces it with the flow blocker of Cline. [Pet., pp. 92-93.](#)

Cline’s flow blocker
[Pet., p. 92.](#)

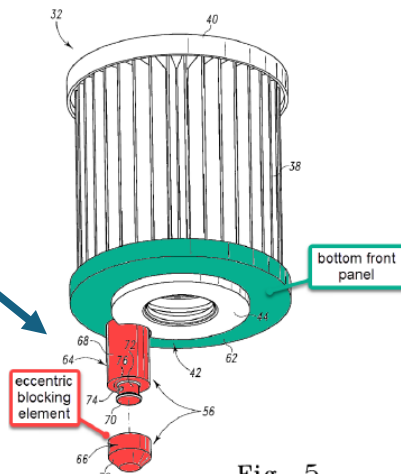
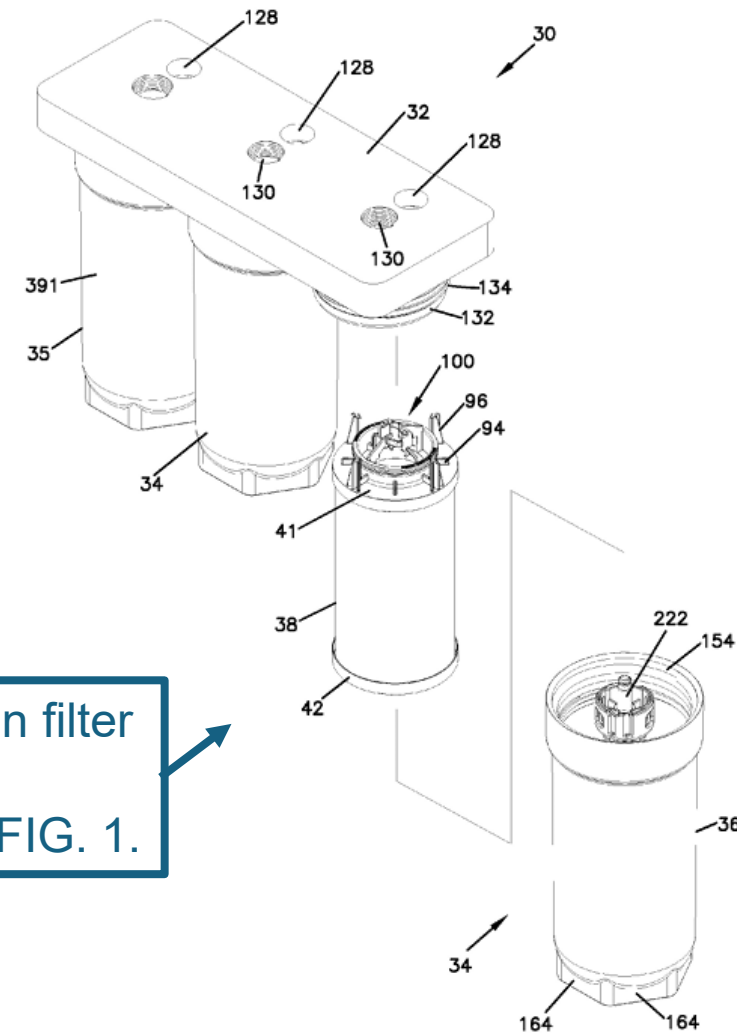


Fig. 5

Honermann filter system
[Ex. 1006, FIG. 1.](#)

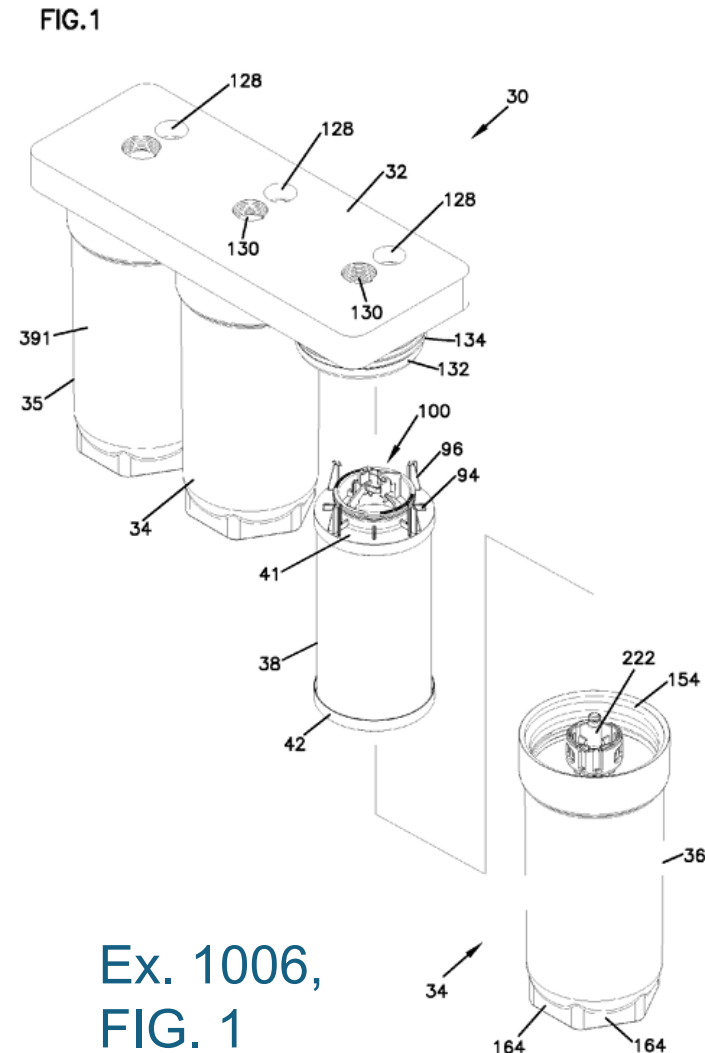
FIG. 1



Demonstrative Exhibit - Not Evidence

Ground III: No POSITA Would Make the Proposed Modification

- Petitioners' modification of Honermann removes the auto-drain feature and requires that the entire bowl to be completely unscrewed and removed from the filter head **while still filled with oil**. [Sur-Reply, p. 29](#).
- The modification contradicts the goals of Honermann, and would lead to more “spills, drips, and inconvenience regarding disposal of this liquid.” [Sur-Reply, p. 29; Ex. 1006, ¶190](#).



Ground III: Additional Claim 1 Elements

- *the filter housing including at least one inlet for raw liquid to be filtered (Ex. 1001, Claim 1)*
 - The Petition identified a portion of the open mouth 154 of Honermann as the inlet. Reply, 34; Ex. 1006, FIG. 3.
 - The identified portion of the open mouth 154 is an arbitrary volume within the filter bowl 36, not an inlet. Sur-Reply, p. 30.
 - Fluid in the open mouth 154 has already passed into the identified “*filter housing*” through the inlet conduit 128 of the identified “*removable cover.*” POR, p. 53.

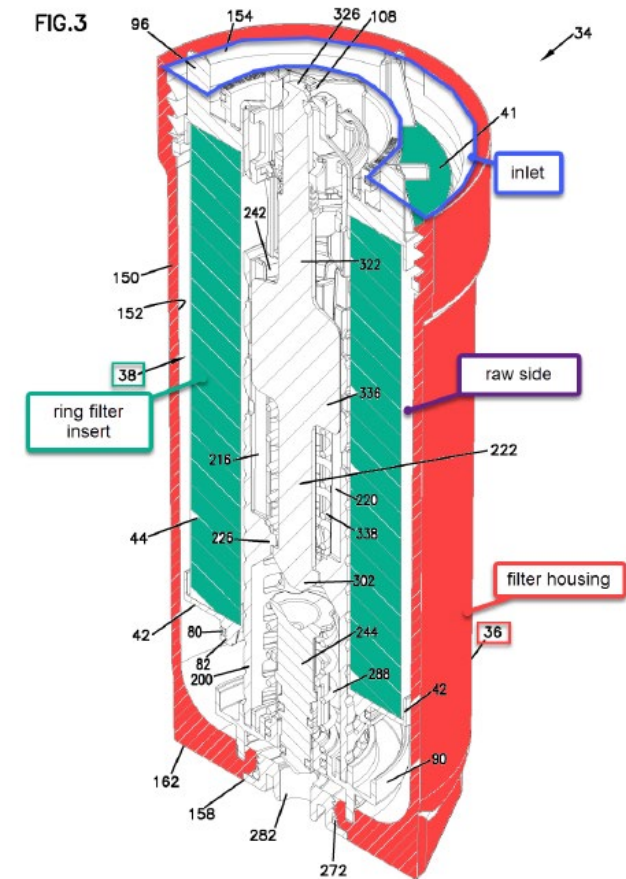


Figure from Pet., p. 83