

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD., SAMSUNG ELECTRONICS
AMERICA, INC.,

Petitioners

v.

WHIRLPOOL CORPORATION

Patent Owner

Case IPR2026-00337
Patent 10,512,385

PATENT OWNER'S PRELIMINARY RESPONSE

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EXHIBIT LIST

Exhibit	Description
EX2001	Complaint for Patent Infringement, <i>Whirlpool Corporation v. Samsung Electronics Co., Ltd. et al.</i> , No. 2:25-cv-01042, Dkt. No. 1, filed Oct. 10, 2025 (E.D. Tex.)
EX2002	Amended Complaint for Patent Infringement, <i>Whirlpool Corporation v. Samsung Electronics Co., Ltd. et al.</i> , No. 2:25-cv-01042, Dkt. No. 38, filed Feb. 9, 2026 (E.D. Tex.)
EX2003	Plaintiff's Motion for Preliminary Injunction, <i>Whirlpool Corporation v. Samsung Electronics Co., Ltd. et al.</i> , No. 2:25-cv-01042, Dkt. No. 4, filed Oct. 10, 2025 (E.D. Tex.)
EX2004	Samsung's Opposition to Whirlpool's Motion for Preliminary Injunction (Redacted), <i>Whirlpool Corporation v. Samsung Electronics Co., Ltd. et al.</i> , No. 2:25-cv-01042, Dkt. No. 24, filed Dec. 15, 2025 (E.D. Tex.)
EX2005	Expert Declaration of Dr. Kimberly K. Cameron Regarding Non-infringement and Invalidity of the Asserted Patents, <i>Whirlpool Corporation v. Samsung Electronics Co., Ltd. et al.</i> , No. 2:25-cv-01042, Dkt. No. 70-1, filed May 27, 2026 (E.D. Tex.)
EX2006	Expert Declaration of Dr. Kimberly K. Cameron Regarding Non-infringement and Invalidity of U.S. Patent No. 12,543,922 (Redacted), <i>Whirlpool Corporation v. Samsung Electronics Co., Ltd. et al.</i> , No. 2:25-cv-01042, Dkt. No. 70-2, filed May 27, 2026 (E.D. Tex.)
EX2007	Expert Declaration of Dr. Kimberly K. Cameron Regarding Non-infringement and Invalidity of the Asserted Patents (Redacted), <i>Whirlpool Corporation v. Samsung Electronics Co., Ltd. et al.</i> , No. 2:25-cv-01042, Dkt. No. 70-3, filed May 27, 2026 (E.D. Tex.)
EX2008	Transcript of Evidentiary Hearing Held April 8, 2026 (Redacted), <i>Whirlpool Corporation v. Samsung Electronics Co., Ltd. et al.</i> , No. 2:25-cv-01042, Dkt. No. 76, filed June 10, 2026 (E.D. Tex.)
EX2009	Plaintiff's Post-hearing Brief in Support of Motion for a Preliminary Injunction, <i>Whirlpool Corporation v. Samsung Electronics Co., Ltd. et al.</i> , No. 2:25-cv-01042, Dkt. No. 65, filed May 5, 2026 (E.D. Tex.)
EX2010	Samsung's Post-hearing Responsive Brief in Opposition to Motion for a Preliminary Injunction (Redacted), <i>Whirlpool Corporation v. Samsung Electronics Co., Ltd. et al.</i> , No. 2:25-cv-01042, Dkt. No. 70, filed May 27, 2026 (E.D. Tex.)
EX2011	Plaintiff's Post-hearing Reply Brief in Support of Motion for a Preliminary Injunction (Redacted), <i>Whirlpool Corporation v. Samsung</i>

	<i>Electronics Co., Ltd. et al.</i> , No. 2:25-cv-01042, Dkt. No. 75, filed June 10, 2026 (E.D. Tex.)
EX2012	Declaration Of Justin DeLapa In Support Of Patent Owner's Discretionary Denial Briefing Pursuant To The Director's March 26, 2025 Memorandum
EX2013	Docket Report, <i>Whirlpool Corporation v. Samsung Electronics Co., Ltd. et al.</i> , No. 2:25-cv-01042 (E.D. Tex.) last accessed June 11, 2026
EX2014	Whirlpool Corporation Product Marking Page, available at https://www.patent-listing.com/index.html (last accessed June 10, 2026)
EX2015	Docket Control Order, <i>Whirlpool Corporation v. Samsung Electronics Co., Ltd. et al.</i> , No. 2:25-cv-01042, Dkt. No. 78, filed June 12, 2026 (E.D. Tex.)
EX2016	Declaration of William B. Collier, Jr. in Support of Patent Owner's Notice of Intent to Designate Provisionally Recognized Attorney William B. Collier, Jr. as Back-Up Counsel Under 37 C.F.R. § 42.10(c)
EX2017	Declaration of Dr. Emad Tanbour
EX2018	RESERVED
EX2019	Declaration of Dr. Emad Tanbour, <i>Whirlpool Corporation v. Samsung Electronics Co., Ltd. et al.</i> , No. 2:25-cv-01042, Dkt. No. 65-6, filed May 5, 2026 (E.D. Tex.) (signed Oct. 10, 2025)
EX2020	Samsung, Bespoke AI Smart Dishwasher, https://www.samsung.com/us/dishwashers/freestanding/38-dba-bespoke-auto-open-door-dish (Last accessed July 11, 2026)
EX2021	Curriculum Vitae of Dr. Emad Tanbour

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I. Introduction

Patent Owner Whirlpool Corporation (“Whirlpool” or “Patent Owner”) respectfully requests that the Board deny Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc.’s (collectively “Samsung” or “Petitioner”) Petition to institute inter partes review of U.S. Patent No. 10,512,385 (the “’385 Patent”).

The ’385 Patent discloses a unique dishwasher design recently introduced by Whirlpool in its premium product line. Specifically, the ’385 Patent discloses and claims a dishwasher with a third level dish rack configuration that includes inclined portions to cradle glasses along their side wall. In conjunction with this positioning of glasses in a supported inclined position, the dish rack also includes a specifically shaped bottom wall with a curved mounting portion and adjacent spray tube configured to spray into the interior of the inclined glasses.

The Petitioner relies on Bosch (EX1007) in view of Ochoa (EX1011) to challenge claims 13 and 17, the only independent claims at issue in this proceeding. In its arguments, Petitioner constructs a perspective model allegedly combining various aspects of Bosch and Ochoa in a self-styled Bosch-Ochoa combination. But Petitioner’s model is not an accurate rendition of the teachings of Bosch and Ochoa, and the absence of any motivation to make this Bosch-Ochoa combination makes it

evident that Petitioner has improperly resorted to an improper hindsight reconstruction of the Whirlpool patented invention.

Even if some motivation existed to combine Bosch and Ochoa in the hindsight manner proposed by Petitioner, the resulting model still fails to satisfy the requirements of Claims 13 and 17. Specifically, Petitioner fails to reasonably identify any structure in either Bosch or Ochoa that would have rendered obvious the curved mounting portion defined by the bottom wall of the dish rack, next to which the spray tube is located as required in both Claims 13 and 17. Instead, Petitioner's model identifies features that are not disclosed in Bosch or Ochoa and which are fundamentally inconsistent with those references.

Petitioner's Bosch-Ochoa combination also attempts to redefine various portions of the Bosch rack as constituting a "bottom wall" structure in an attempt to satisfy the detailed requirements of the challenged claims. Petitioner's identification of the bottom wall assembly in Bosch strains credibility and includes not just the lower portion of the Bosch rack, but even some portions that are formed in the top of the Bosch rack. No skilled artisan would refer to these upper portions of the rack as a "bottom wall" as Petitioner and its expert have done. Bosch certainly does not describe these various portions of its rack as the bottom wall in its design. Instead, Bosch describes a flat bottom wall formed by a grid of horizontal wires that support

a set of “dish holders” attached above the wires, and not the many other features that Petitioner unreasonably seeks to recast as a bottom wall.

Petitioner’s Bosch-Ochoa combination should be rejected as an unreasonable hindsight reconstruction of the ’385 patent. Further, the many unsupported assumptions and re-designs of the Bosch and Ochoa combination upon which Petitioner relies make that combination figure unreliable as relevant evidence in this proceeding. In light of these failures of proof, the Petition fails to establish a reasonable likelihood that the claims of the ’385 Patent are obvious.

II. Background

A. Technology

Household dishwashers are a common appliance in American homes. The dishwasher defines an interior space commonly referred to as the “dishwasher tub” where washing activity occurs. EX1001, 1:18-20. Within the tub, dishwashers typically include dish racks for holding various types of dishware. *Id.* Traditionally, dishwashers have included only two racks: an upper dish rack for small items, such as glassware and small dishes, and a lower rack for larger items, such as plates. *Id.* 1:20-22. These two racks typically occupy most of the space in the dishwasher tub. *Id.* 1:22-24. More recently, some dishwashers have begun to include a small third top rack that can accommodate silverware or other flat-laying utensils, but little else. *Id.* 1:24-25.

B. The '385 Patent Invention

The '385 Patent is titled "Glasses Rack For Dishwasher." EX1001, cover. It was invented by inventors employed by Whirlpool Corporation. *Id.* The '385 Patent was filed on March 30, 2018, and claims priority through a chain of continuation applications to February 12, 2015. *Id.* The '385 Patent issued on December 24, 2019. *Id.*

The inventors of the '385 Patent sought to improve existing dishwasher spray systems and dish racks. *Id.* One solution described by the '385 Patent is an improved dishwasher with a tub, a spray system, and a movable dish rack. *Id.* 11:65-12:23. This dish rack includes a bottom wall with inclined or angled portions. The inclined portions are configured to support and secure (or "cradle") a glass, cup or wine glass on its side wall, as shown for example in Figure 3. *Id.* at 8:59-65; 12:47-50. Figure 3 shows a wine glass 72 and tall glass 74 positioned at angles A and B relative to the horizontal in a cradling configuration "to retain the glasses 72, 74 in a particular location and prevent the glasses 72, 74 from rolling within the dish rack 20." *Id.* at 4:36-57; 5:1-9.

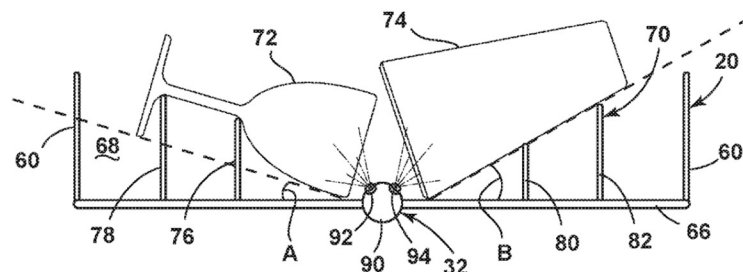


FIG. 3

Id., Fig. 3. A spray tube is mounted next to a “curved portion” of the dish rack such that the spray tube can spray washing fluid along the angled portion and into the interior of any cups or glasses placed along the inclined portion in the dish rack.

A further embodiment of this claim is illustrated in Figures 8 and 9, in which inclined portions 67 retain each of the glasses 74 in a particular location and prevent the glasses from rolling within the dish rack:

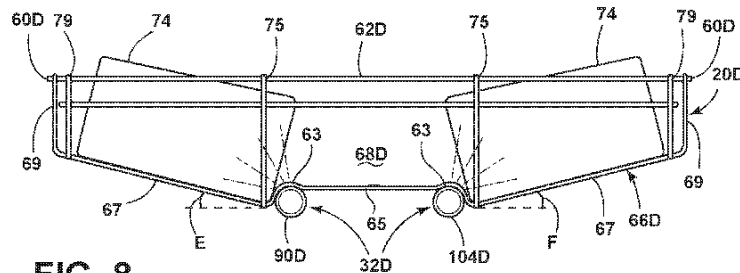


FIG. 8

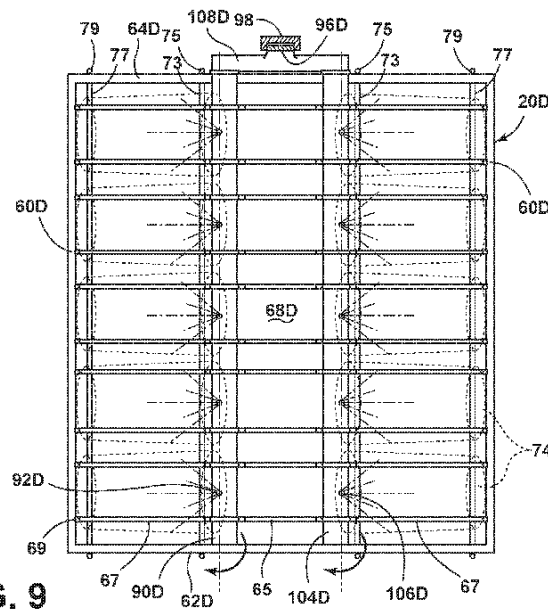


FIG. 9

Id., Figs. 8, 9, 8:59-65. As shown in Figures 8 and 9, a curved spray tube mount portion 63 is provided adjacent spray tube 90. The glasses 74 abut the curved spray tube mount portion 63 to also prevent the glasses 74 from sliding down the inclined

portions 67. *Id.* at 8:65-9:13. Thus, the curved mounting portion provides an additional mechanism to retain the inclined glasses in position during a dishwasher cycle, while protecting the spray tube 90. *Id.* Figs. 8, 9.

The patented inventions are reflected in claims 13 and 17, the only independent claims of the '385 Patent challenged in the Petition:

13[pre]. A dishwasher, comprising:

- [a] a tub defining a treating chamber receiving dishes for treatment;
- [b] a spray system providing treating liquid to the treating chamber; and
- [c(i)] a dish rack located in the tub and selectively moveable between a loading position, where at least a portion of the dish rack extends exteriorly of the tub, and a treating position where the dish rack is located entirely within the treating chamber and [c(ii)] having a bottom wall, a side wall extending upwardly from the bottom wall and terminating in an upper edge, the bottom wall including a flat central portion, curved mounting portions at opposing ends of the flat central portion and opposing inclined portions, [c(iii)] each of the opposing inclined portions extending from one of the curved mounting portions to respective portions of the side wall, the opposing inclined portions configured to support a side wall of a glass; and
- [d(i)] a spray tube having nozzles configured to emit spray along each of the opposing inclined portions into an interior of

the glass, [d(ii)] the spray tube located directly adjacent to one of the curved mounting portions of the bottom wall and carried with the dish rack between the loading position and the treating position.

Id., 11:65-12:23.

17[pre]. A dishwasher, comprising:

- [a] a tub defining a treating chamber receiving dishes for treatment;
- [b] a spray system providing treating liquid to the treating chamber; and
- [c(i)] a dish rack located in the tub and selectively moveable into and out of the tub, [c(ii)] the dish rack having a bottom wall, a side wall extending upwardly from the bottom wall and terminating in an upper edge, [c(iii)] with an upwardly angled portion formed in the bottom wall comprising a plurality of spaced apart inclined portions forming the bottom wall and terminating at the side wall, [c(iv)] wherein two adjacent inclined portions of the plurality of spaced apart inclined portions are configured to cradle a glass at an inclined angle and prevent the glass from rolling and a contoured portion formed in the bottom wall configured to prevent glasses from sliding down the inclined angle; and
- [d(i)] a spray tube having nozzles emitting spray along the angled portion;

[d(ii)]wherein the contoured portion is further configured to form
a curved mounting portion adjacent which the spray tube
is mounted such that the spray tube is carried with the dish
rack.

Id., 12:35-58.

C. Effective Filing Date of the '385 Patent

The '385 Patent claims priority to February 28, 2014, as a continuation of application No. 15/416,687, filed on January 26, 2017, which is a continuation of application No. 14/620,688, filed on February 12, 2015. EX1001, cover. The '385 Patent also claims priority to provisional application No. 61/946,101 filed February 28, 2014. *Id.* Petitioner does not dispute that the priority date of the '385 Patent is at least February 12, 2015, but does not address (or even acknowledge) the provisional application. Pet., 7. For the purposes of this Response only, Patent Owner applies Petitioner's proposed priority date of February 12, 2015.

D. Level of Ordinary Skill in the Art

For purposes of this Preliminary Response, Patent Owner does not contest Petitioner's recitation of the level of skill in the art, because even under Petitioner's proposed level of skill (Pet., 6-7), Petitioner has failed to demonstrate a reasonable likelihood of success. Patent Owner reserves the right to propose its own definition of a person of ordinary skill in the art in the future if necessary.

E. Petitioner's References

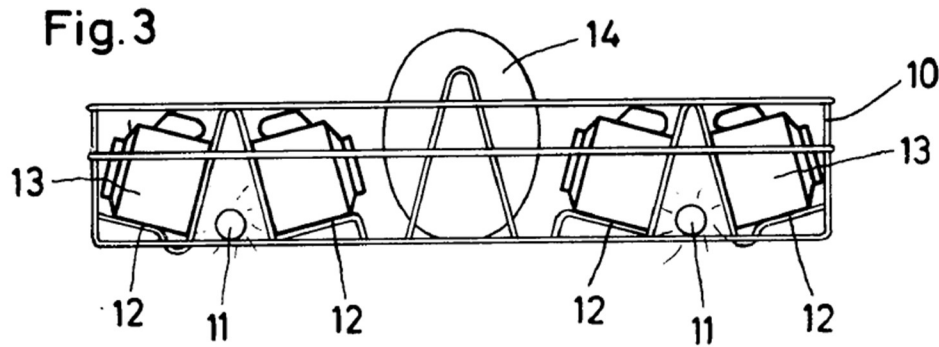
Petitioner asserts four grounds of invalidity based on combinations of three references: (1) Bosch; (2) Ochoa; and (3) Schessl. Pet., 3. Both Grounds 1 and 2 rely on Bosch in view of Ochoa as the primary combination, combined with Schessl in Ground 2. *Id.*

Ground	Claims	Statute	References
1	13-17 and 21	§ 103	Bosch and Ochoa
2	18–20	§ 103	Bosch, Ochoa, and Schessl

Id.

1. Bosch

Bosch is a translation of German patent application No. 6810173, simply titled “Dishwasher.” EX1007, 0002-0003. It was filed with the German Patent Office in December 1968. Ex-1007, 0002. Bosch focuses on the configuration of spray nozzles in a dishwasher and aims to prevent lightweight hollow vessels such as cups and glasses from being jostled and damaged during washing. *Id.* 0003-0004. To remedy this problem, Bosch discloses arranging the dish rack and spraying device so that the spray jets strike the interior of the hollow vessels “at least approximately horizontally,” which Bosch states keeps the vessels from being lifted. *Id.* 0004-0005. It illustrates two dish rack configurations, and the Petitioner primarily relies on the second of these, as illustrated in Figure 3:



Id., Fig. 3. In Figure 3, Bosch depicts a dish rack 10 with spray tubes 11 positioned between inclined dish holders 12 that accommodate hollow vessels 13, and a dish holder for plates 14. *Id.* 0006-0007. Bosch teaches that the spray tubes 11 may be arranged “fixedly or so as to rotate about their longitudinal axis,” with rotation caused “by the recoil effect of the spray jets” or by an electric drive motor. Ex-1007, 0007. Bosch's figures are front-elevation views. Ex-1007, 0010.

As Figure 3 confirms, Bosch does not describe a “curved mounting portion” adjacent to the spray tubes. Instead, the spray tube is apparently secured on top of the horizontal grid of wires that form the bottom of the Bosch dish rack. Bosch also does not describe an angled or contoured bottom wall. Instead, the bottom wall in the Bosch dish rack is formed by a flat grid of wires supporting the dish holders 12 and dish holder for plates 14.

2. Ochoa

Ochoa is U.S. Patent No. 6,869,029, titled “Water Spray System for a Dishwasher” and issued on March 22, 2005. EX1011, cover. It describes a water spray system for a dishwasher having upper and lower dish racks:

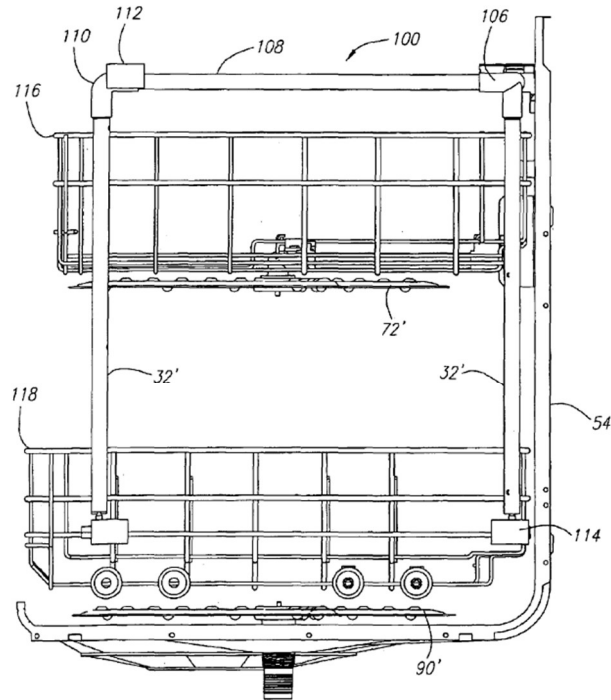


FIG. 20

Id., Fig. 20. One objective of Ochoa is to provide more even water distribution so that the lateral sides and corners of a wide dishwasher receive spray comparable to the center. *Id.* 1:26–29. Ochoa includes several configurations, but generally, Ochoa’s water spraying system includes a spinner 72 positioned on the underside of an upper rack, and water spray tubes 32. *Id.* Figure 20, 3:15-46; 5:8-20. The Ochoa spray tubes 32 include spray outlets spaced such that they cause the tube to rotate when water is forced through them. EX1011, Abstract, 3:2–19. This configuration is discussed in greater detail in section IV, below.

3. Schessl

Schessl is U.S. Patent No. 10,045,681, titled “Cutlery Basket for a Dishwasher and Dishwasher” and issued on August 14, 2018. EX1012, cover. It claims priority

to a German application filed November 23, 2006. *Id.* Schessl is directed to a cutlery basket for a dishwasher having a floor area whose sections have different clearance heights. *Id.*, Abstract. Schessl discloses that the floor area may comprise a first part area and a second part area arranged at an oblique angle to one another, giving the basket an “arrow-shaped design” in which the clearance height below the basket varies. *Id.*, 2:10-15. Schessl teaches that this angled arrangement provides flexibility in loading and, by storing cutlery items at an angle rather than horizontally. *Id.*, 2:15-21.

III. Claim Construction

Neither party has yet proposed any terms for construction in the underlying litigation. However, Petitioner contends that Patent Owner has asserted implied claim construction arguments in the litigation. Pet at 7-8. Petitioner then sets forth its own construction of several terms in its Petition. *Id.* For the purposes of this Preliminary Response, Patent Owner applies Petitioner’s proposed constructions but reserves the right to challenge those constructions in other proceedings or in a Patent Owner’s response should this proceeding be instituted.

IV. Arguments

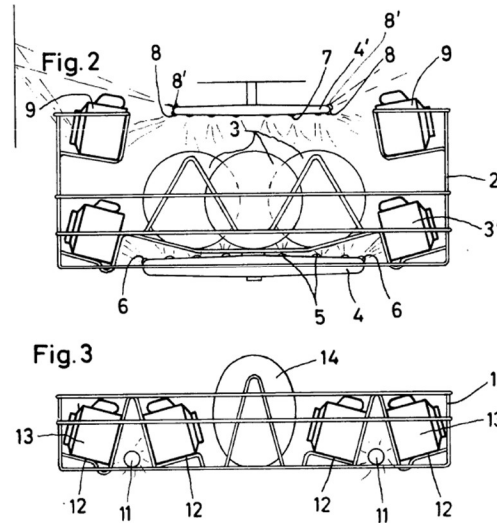
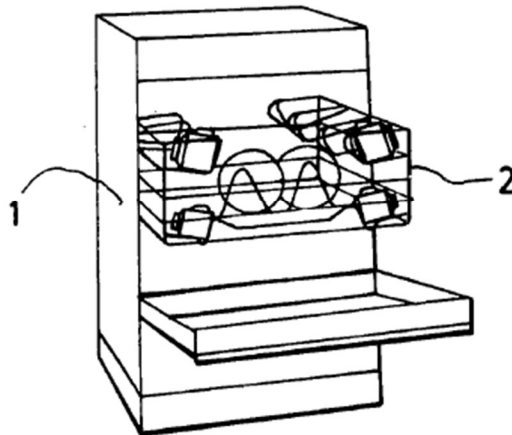
Petitioner has failed to show a reasonable likelihood that any of its proposed grounds would have rendered claims 13 and 17 of the ’385 Patent obvious. Accordingly, institution should be denied.

The centerpiece of Petitioner's challenge rests on a figure that it created, which it calls "Bosch-Ochoa combined Figure 3." All of Petitioner's challenges are based on this figure, which plainly is designed to operate as a substitute for the teachings of the references upon which it relies. Petitioner created this figure allegedly by interpreting Bosch and adding elements taught by Ochoa. But the Bosch-Ochoa model that Petitioner has created reflects several assumptions and additions that are neither disclosed nor reasonable conclusions to be drawn from its cited references.

Further, neither Bosch nor Ochoa provide support or motivation for this Bosch-Ochoa combination. Instead, the teachings of both references are inconsistent with Petitioner's proposed modifications and reasoning. The only basis for Petitioner's proposed combination arises from Petitioner's improper use of hindsight, and without it, the Petition fails to show a reasonable likelihood that Petitioner will succeed on any grounds.

As noted above, Bosch focuses on the arrangement of spray arms in the dish rack such that they horizontally spray jets inside cups and similar items placed on their side in the dish rack. *See, e.g.*, EX1007, 0008, claims 1-3. Bosch provides little detail regarding its embodiments beyond this general requirement. The three figures from Bosch are provided below:

Fig. 1

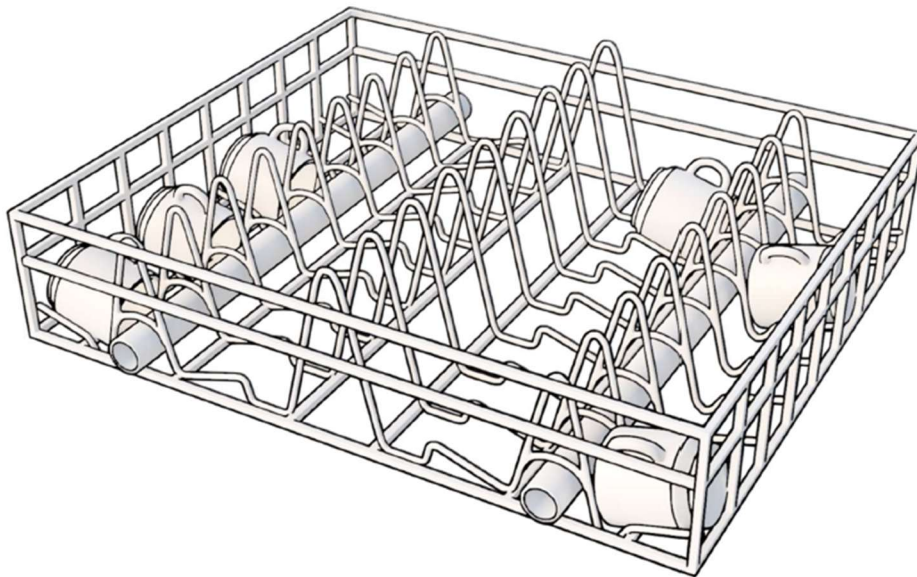


Id., 0010. As shown in Figure 2, a lower spray arm 4 and upper spray arm 4' have spray nozzles configured to spray washing liquid into “hollow vessels” placed in two dish holders, arranged one above the other. *Id.*, 0006. Figure 3 depicts a dish rack 10 that includes two spray tubes 11 between dish holders 12 for accommodating hollow vessels. The spray tubes “can be arranged in the dish rack 10 fixedly or so as to rotate about their longitudinal axis.” *Id.* 0007. Separate from dish holders 12, there is a dish holder for plates 14, positioned in the center of the dish rack.

As Petitioner recognizes, Bosch’s drawings and description do not disclose numerous aspects of its proposed combination dish rack. Pet. 14-15. For example, Bosch does not illustrate the configuration of the bottom wall of dish rack 10 or where dish holders 12 and 14 connect to that bottom wall. Bosch also does not explain whether the dish holders are connected to the front wall or spaced from it or how they are supported by the bottom wall. As a result, Bosch itself does not

anticipate or render obvious claims 13 and 17 of the '385 Patent, as Petitioner recognizes.

In an attempt to reconstruct a dishwasher design that is closer to the challenged claims of the '385 Patent, Petitioner turns to Ochoa. The resulting combination, according to Petitioner, is its Bosch-Ochoa combined Figure 3':



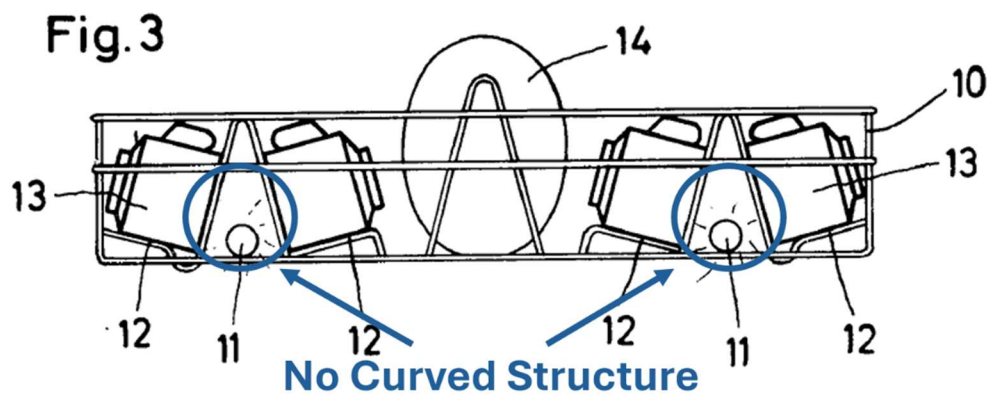
Petitioner-Created Figure 3' (does not exist in Bosch or Ochoa)

Pet. 18. But Ochoa does not teach or provide motivation for the proposed combination that Petitioner relies upon in its self-constructed Bosch-Ochoa Figure 3'. As explained below, this Petitioner-Created Figure 3' includes numerous assumptions and additions which are not supported in either the Bosch or Ochoa references.

A. All Grounds: Bosch and Ochoa do not render obvious the claimed curved mounting portion

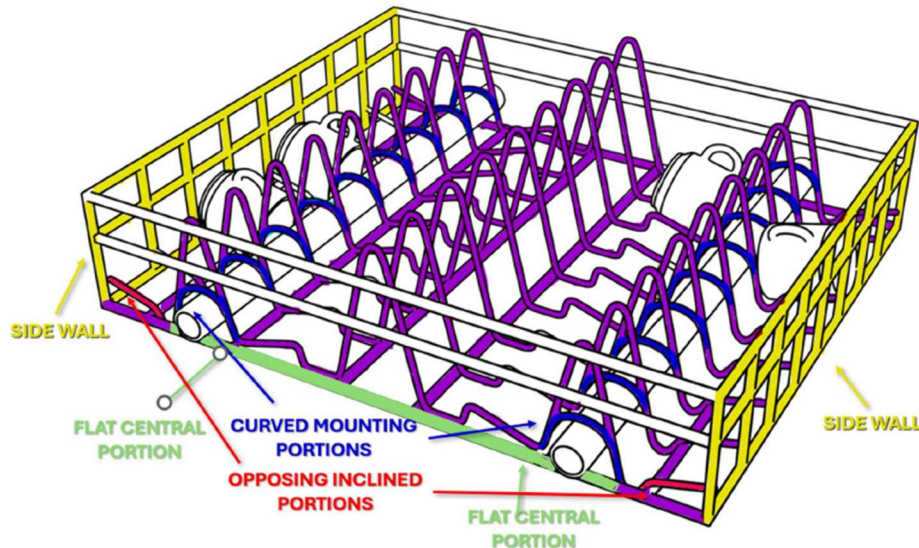
Both claims 13 and 17 require a “curved mounting portion,” which the ’385 patent teaches can be used to prevent the glasses from sliding down the inclined portions. ’385 Patent at 8:65-9:1. This curved mounting portion is positioned adjacent to the spray tube to separate the spray tube from glasses. *Id.* 12:20-23 (cl. 13) (“the spray tube located directly adjacent to one of the curved mounting portions of the bottom wall”), 12:56-57 (cl. 17) (“a curved mounting portion adjacent which [sic] the spray tube is mounted”). For the reasons explained below, Bosch and Ochoa would not render this element obvious, either alone or in combination. Nor do either Bosch or Ochoa provide a motivation to include a curved mounting portion adjacent to a spray tube to prevent glasses from sliding down the inclined portions. Ochoa and Bosch both fail to disclose providing “additional support” to the spray tube.

As Petitioner recognizes, Bosch’s Figure 3 does not describe anything resembling the claimed curved mounting portion adjacent to the spray tube:



Bosch Figure 3 (Patent Owner’s Annotations)

EX1007, Fig. 3 (annotated). Instead, Petitioner imports what Petitioner calls “integrated curved-wire sprayer supports,” which it contends are disclosed in Ochoa, into Bosch. The alleged resulting curved mounting portion can be seen in blue in Petitioner’s Figure 3’:



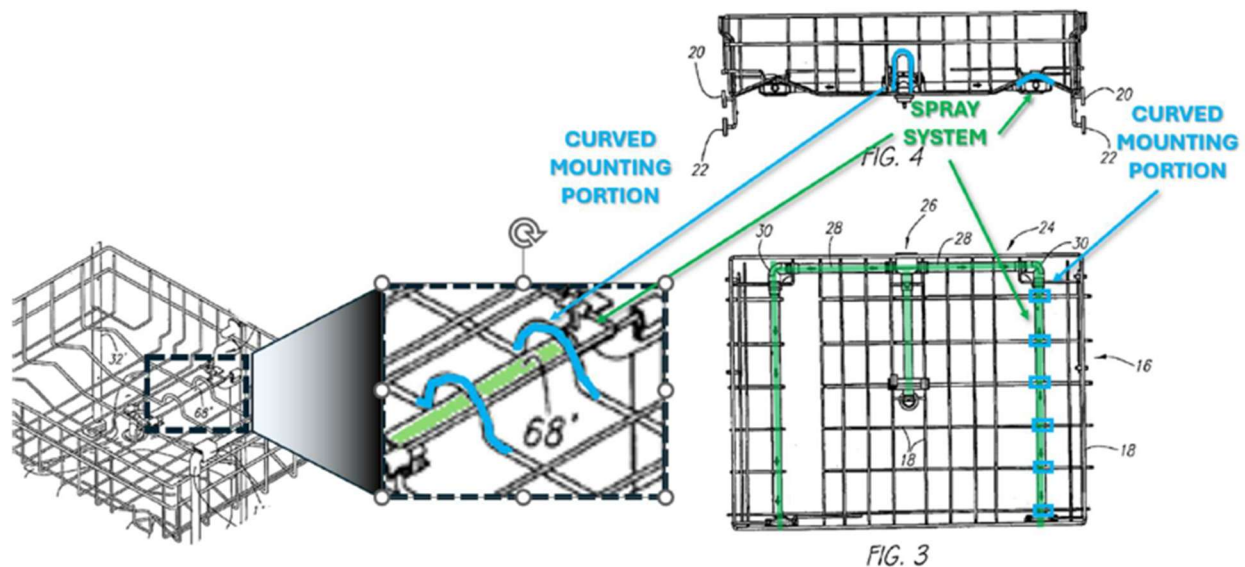
Petitioner-Created Figure 3’ (Petitioner’s Annotations)

Pet. 28. But, Petitioner’s reasoning for this modification to Bosch is not supported or motivated by either Bosch or Ochoa and can only be based on Petitioner’s improper use of hindsight. EX2017 ¶52.

Ochoa describes a number of spray tube configurations in a dish washer. EX1011, 1:4-8, Figs. 11, 21-23. Petitioner focuses on figures 3, 4, 5, and 19 of Ochoa. Pet. 16. Figure 19, an isometric view of Ochoa, is depicted below:

Id., Fig. 19. Despite Ochoa's greater detail compared to Bosch, Petitioner makes several incorrect assumptions about its teachings.

¹ Neither Figure 3 nor 4 show the “curved mounting portion” that Petitioner identifies in its Petition.



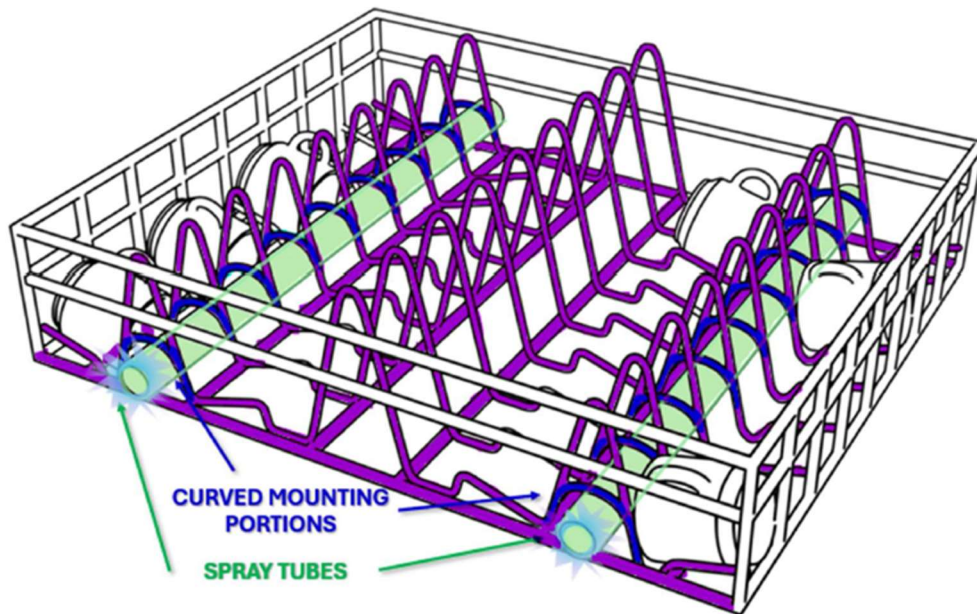
Id. (Ochoa Figures with Petitioner’s annotations). Though these parts are unlabeled in Ochoa, Petitioner describes these parts as “integrated curved-wire sprayer supports.”² There is absolutely nothing in Ochoa that teaches that these wires function as “mounting portions.” Rather, a POSITA would understand that these curved wires exist to create space for the spray tubes to pass through, not to provide any mounting function. EX2017 ¶¶49-50, 59. Also, the curved wires are unnecessary in the Bosch configuration, given the manner in which the spray tube is positioned and secured in Bosch. EX2017 ¶59. As explained below, Ochoa teaches a specific mounting system that secures its spray tubes to the front end of the dish rack, and

² Petitioner cites nothing from Ochoa supporting this description. Petitioner’s only support is its expert’s declaration, which does not use this phrase.

the curved wire identified by Petitioner plays no role in mounting Ochoa's sprayer.

Id. ¶¶59-60.

Based on the presence of these wires in Figure 19 of Ochoa, Petitioner proposes modifying Bosch by including the “curved wires” from Ochoa, and using them as mounting portions:



Petitioner-Created Figure 3' (Petitioner's Annotations)

Pet. 50.

Petitioner argues that because both Bosch and Ochoa “depict that the end of the spray tube is supported at least on the ends from its underside,” “[a] POSITA would have been motivated [to] provide additional support on the top from Ochoa to further constrain the tube as it rotates longitudinally about its axes. Without this mounting support along its depth, the tube may be displaced as it rotates.” Pet. 16-17. However, neither Bosch nor Ochoa identifies the need for additional mounting

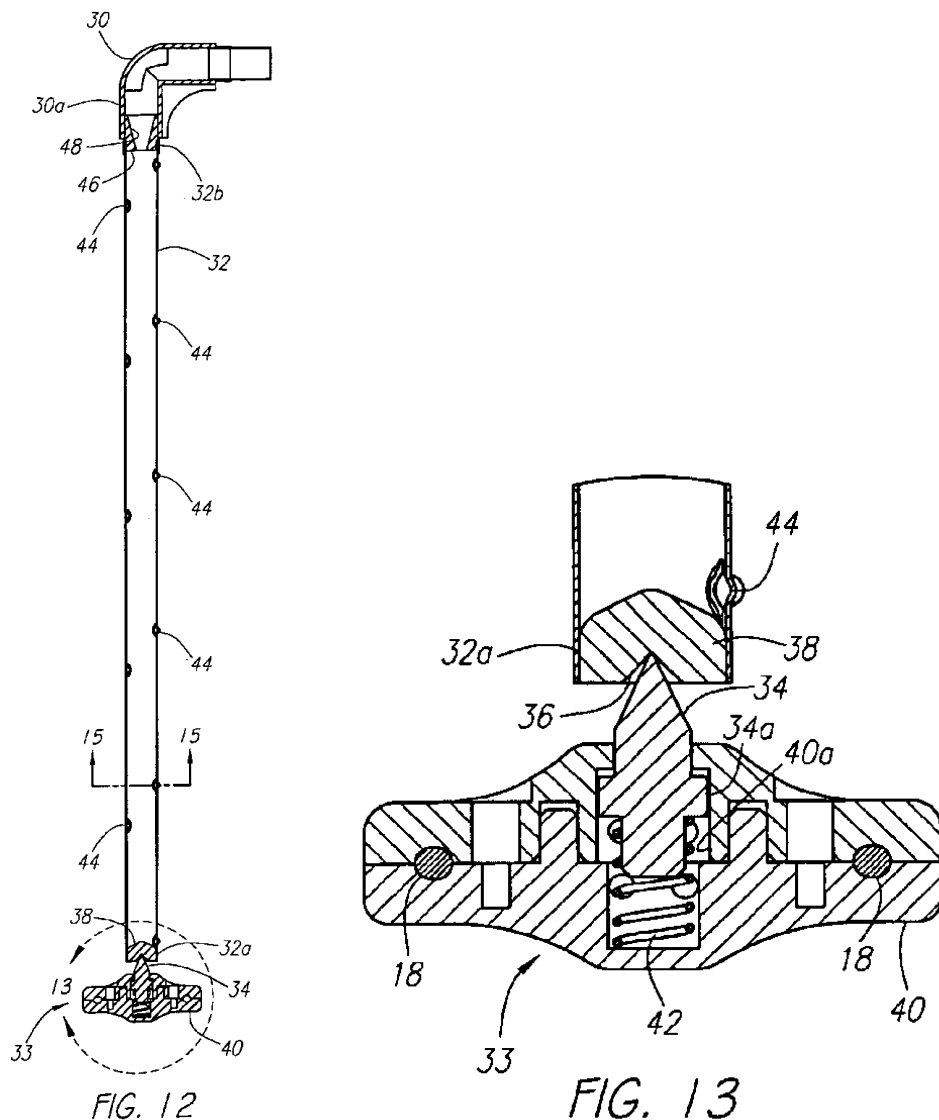
support, and their teachings suggest a different conclusion than Petitioner's Bosch-Ochoa combination. EX2017 ¶¶ 59-60.

First, as Petitioner acknowledges, both Bosch and Ochoa already mount spray tubes in their dish racks without any “additional support.” Pet. 16. And nothing in either reference suggests providing any additional mounting support for the spray tubes. EX2017 ¶¶ 59-60. Consequently, this limitation is not disclosed in either prior art reference. *Id.* The only source for this missing limitation comes from Petitioner's expert, which is improper. *Shockwave Med., Inc. v. Cardiovascular Sys.*, 142 F.4th 1371, 1380 (Fed. Cir. 2025) (claim limitations novel to the invention may not be supplied by “general background knowledge”); *see also* https://www.uspto.gov/sites/default/files/documents/aapa_memo_final_signed.pdf (limitations must be mapped to the prior art and may not be supplied by the expert).

Second, Petitioner recognizes that the spray tube may rotate about its longitudinal axis. Pet. 16-17; *see also* EX1007, 0007; EX1011, 1:41-57. Yet, Petitioner proposes placing additional supports along the tube without explaining how those supports would avoid interference with the rotation of the tube.

Third, Ochoa teaches a specific mounting system that secures its spray tubes and allows them to rotate. This system does not use the curved wires to mount the tube, as Petitioner now proposes. *See* Pet. 16. Instead, Ochoa's dish rack rotatably supports the spray tube at its end. EX1011, 3:25-34. Specifically, Ochoa's spray tube

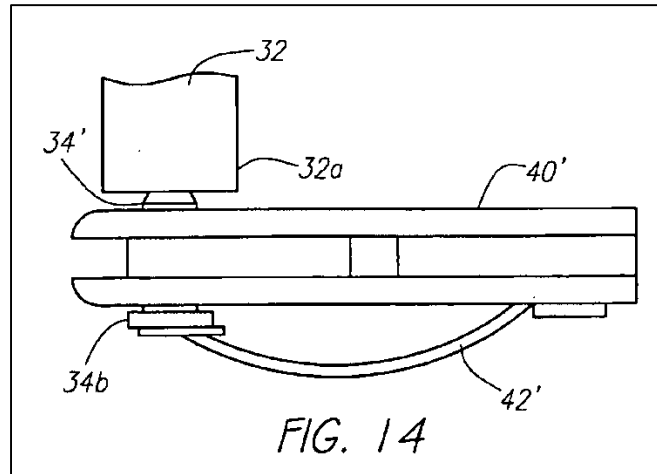
32 is “rotatably supported by any convenient support mechanism 33, such as a pointed pin 34 engaging in a conical depression 36 in a plug 38 fixedly mounted in the front end 32a of spray tube 32.” *Id.* This spray tube configuration is illustrated in Figure 12, with the support mechanism 33 at the bottom of that figure, and the support mechanism is detailed in Figure 13:



Ochoa Figures 12 and 13

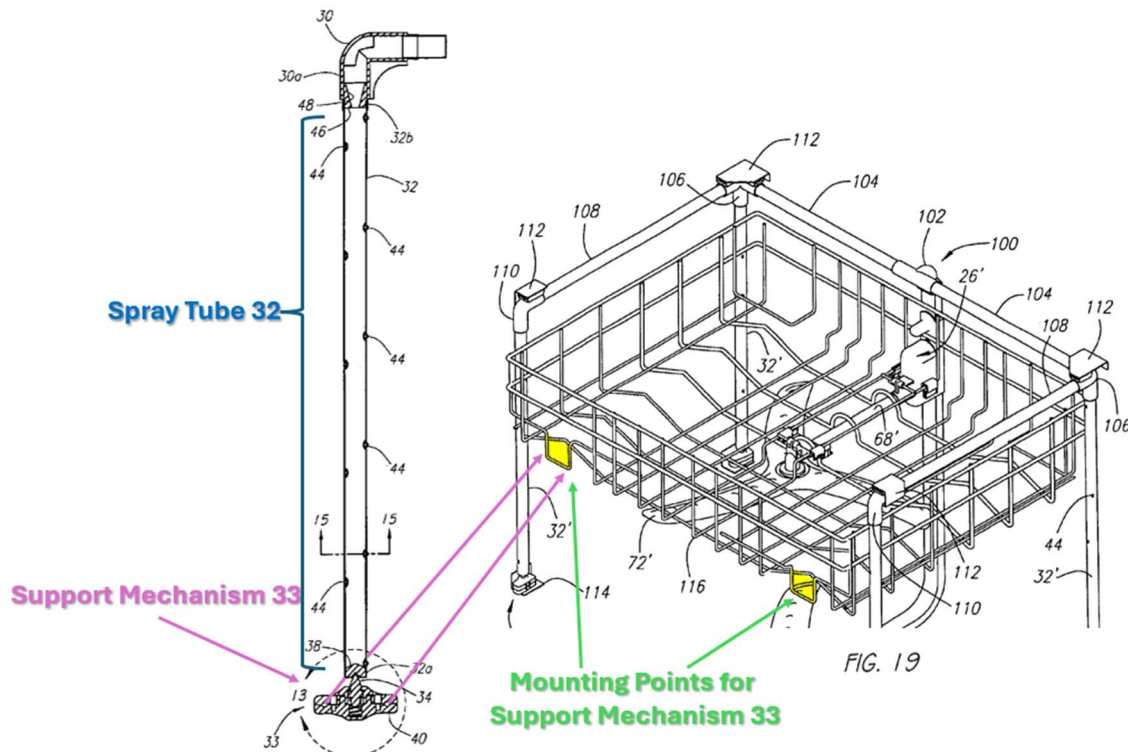
Id. Figs. 12, 13. In these figures, pointed pin 34 can be seen engaging with conical depression 36 on spray tube 32, both securing the spray tube and allowing it to rotate “in a very simple and inexpensive manner and yet the friction against rotation is minimized by the pointed pin 34 engagement with the conical depression 36.” *Id.* 3:42-46.

The only alternative support structure for the end of spray tube 32 detailed in Ochoa is that depicted in Figure 14:



In this embodiment, “a pointed pin 34” is slidably mounted in a through hole in a bracket 40' and an end flange 34b of the pin 34' is engaged by a leaf spring 42' which has its other end secured to the bracket 40' for resiliently urging the pin 34' toward the tube 32. The pointed end of the pin 34' engages the same or a similar conical depression in a plug 38 in the end 32a of the spray tube 32, as shown in FIG. 13.” *Id.* 3:47-55.

Thus, the only teaching in Ochoa for supporting a spray tube is to secure the spray tube at its ends and to do so in a way that permits the spray tube to rotate as shown in Figures 12 and 19:



Ochoa Figures 12 and 19 (Patent Owner's Annotations)

Id. Figs. 12, 19 (annotated); *see id.*, 3:56-62; EX2017 ¶¶ 59-60.

There is no support in either the Ochoa or Bosch reference for supporting the spray tubes in the manner contemplated in Petitioner's combination Figure 3'. EX2017 ¶¶ 59-60. Petitioner's suggestion that Ochoa's teachings support this modification to Bosch can only be explained by hindsight and must be rejected. *See Graham v. John Deere Co.*, 383 U.S. 1, 36, 86 S. Ct. 684, 703 (1966) (instructing practitioners to "resist the temptation to read into the prior art the teachings of the

invention in issue.”); EX2017 ¶52. Accordingly, the Petition fails to show a reasonable likelihood that Bosch in view of Ochoa renders claims 13 and 17 (and their dependents) obvious.

B. All Grounds: Bosch and Ochoa do not render obvious the claimed bottom wall with angled portions or inclined portions.

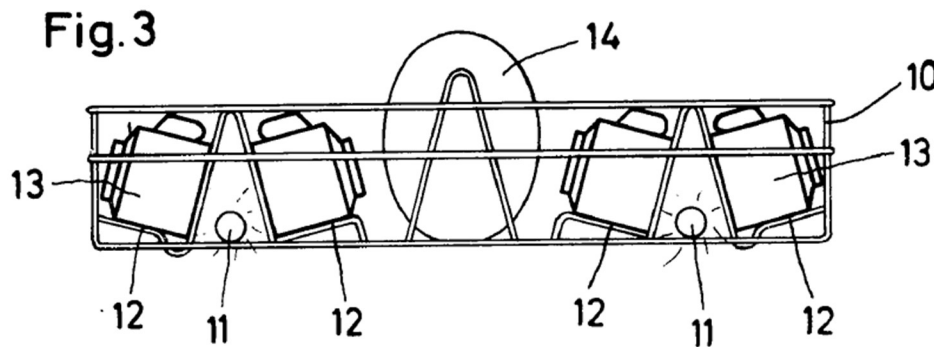
Claims 13 and 17 include elements directed to specific configurations of the bottom wall of the dish rack. For example, in the case of claim 13, the bottom wall includes “a flat central portion, curved mounting portions at opposing ends of the flat central portion and opposing inclined portions.” In claim 17, the bottom wall includes “an upwardly angled portion formed in the bottom wall comprising a plurality of spaced apart inclined portions forming the bottom wall and terminating at the side wall.”

Petitioner argues that Bosch in view of Ochoa renders obvious the “bottom wall” of claims 13 and 17. As with other elements, Petitioner relies on its Figure 3’ to support its arguments that the claims of the ’385 Patent would have been obvious. But this interpretation of the art is not correct, nor does it map to any reasonable reading of the claim language. Petitioner’s arguments fail to show a reasonable likelihood that Bosch in view of Ochoa render obvious the claimed bottom wall.

1. Petitioner's Figure 3' should be entirely rejected as inaccurate and unreliable.

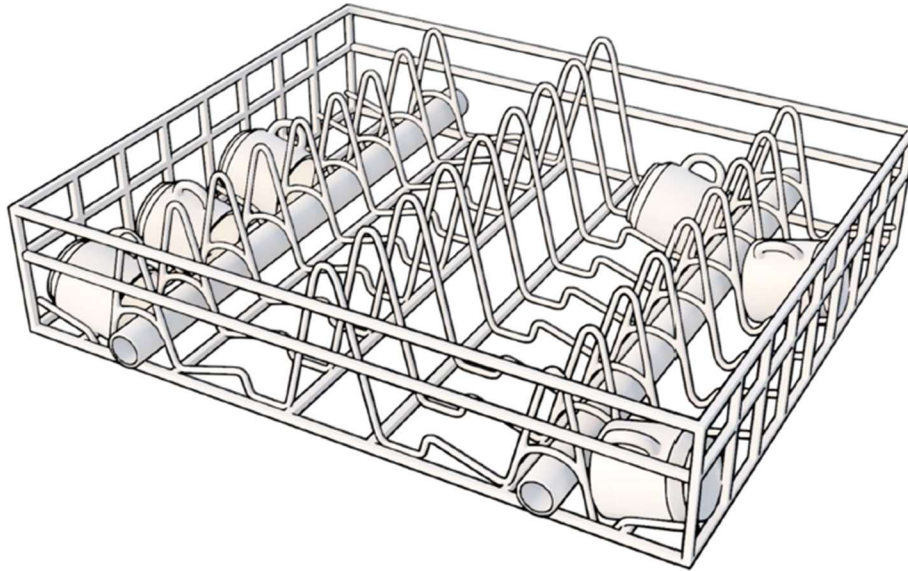
In creating Figure 3', Petitioner and its expert made several self-serving and incorrect assumptions and additions in its attempt to recreate the claimed invention. Because of these errors, Figure 3' is not reliable evidence and cannot show a reasonable likelihood that the challenged claims of the '385 Patent are obvious in light of Bosch and Ochoa, and the Board should deny institution.

As noted above, Petitioner contends Figure 3' was based on Bosch's Figure 3:



Bosch Figure 3

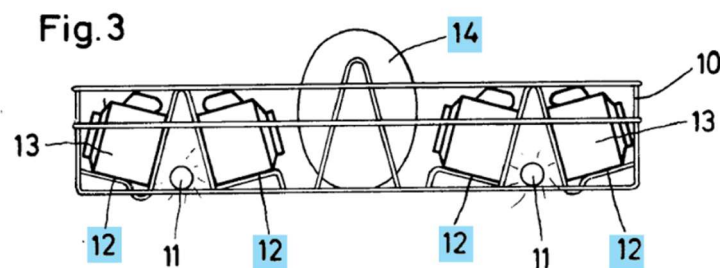
See Pet. 14. But this simple figure does not, and cannot, support Petitioner's conclusion that, in three dimensions, Bosch's dish rack would be interpreted to look like Figure 3':



Petitioner-Created Figure 3' (does not exist in Bosch or Ochoa)

Instead, Figure 3' is the result of a series of unsupported assumptions. EX2017 ¶¶52; *see also id.* ¶¶53-58.

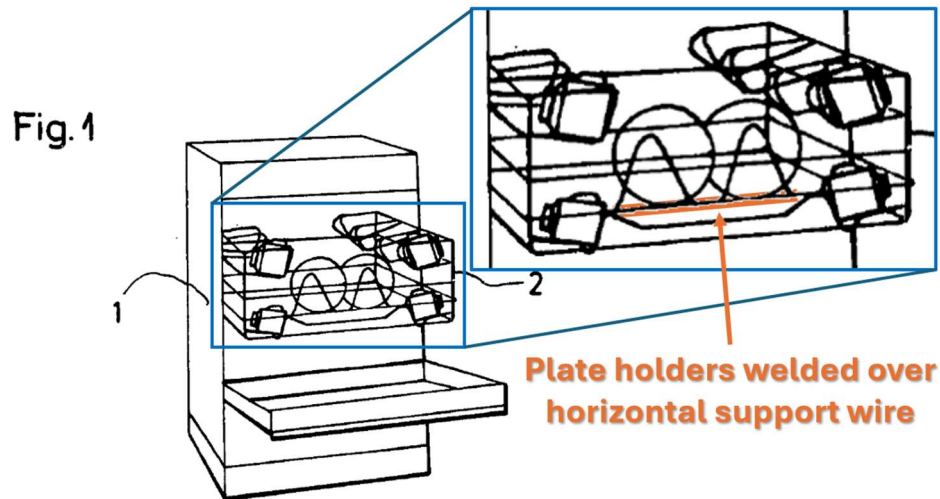
For example, Petitioner assumes that Bosch Figure 3's four dish holders 12 and one dish holder for plates 14 are formed by a single bent wire:



Bosch Figure 3 (Patent Owner's Annotations)

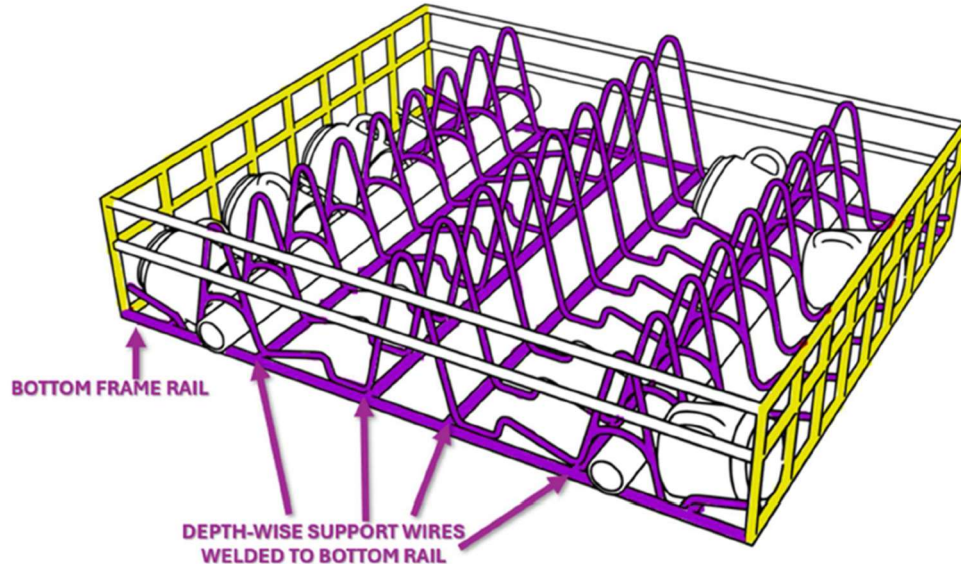
EX1007, Fig. 3. That is not what Bosch teaches.

Figure 1 in Bosch shows how the dish holder for plates 14 is formed. Figure 1 shows that the plate holders are welded to a horizontal support wire (which in Figure 3 is part of the bottom wall of the rack):



Bosch Figure 1 (Patent Owner's Annotations)

The Petition omits the horizontal support wire without explanation in favor of what it calls “depth-wise support wires welded to bottom rail,” which find no support in Bosch:

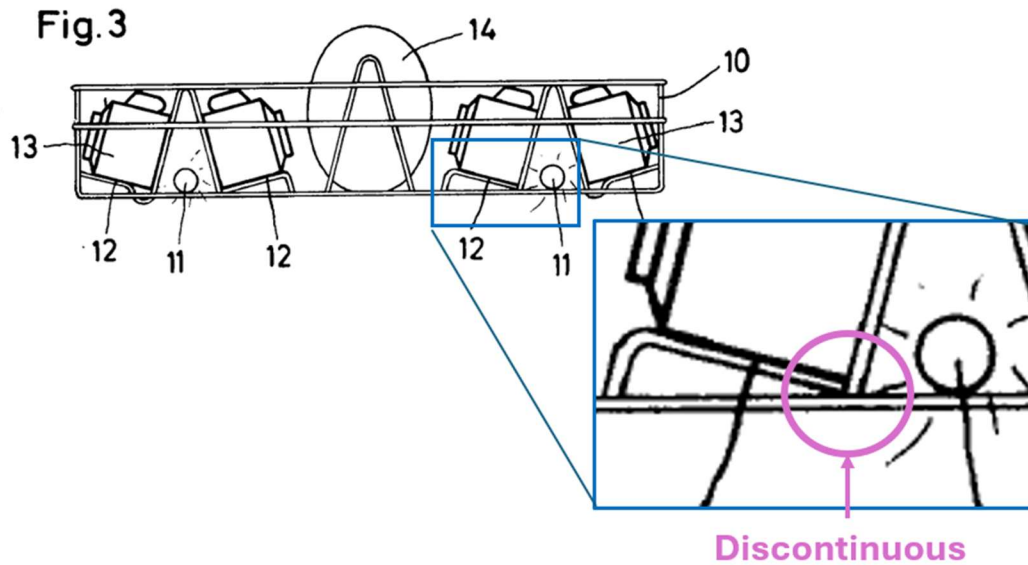


Petitioner Created Figure 3'

The Bosch-Ochoa combination includes various other assumptions that are unsupported. For example, Petitioner assumes the dish holders are uniformly

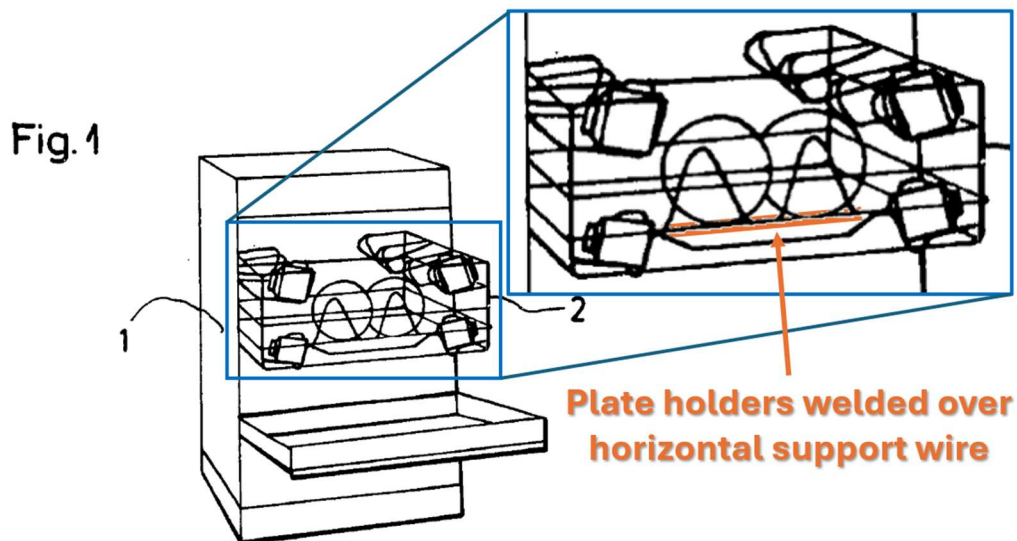
repeated from the front to the back of the dish rack such that each wire forms four dish holders 12 and one dish holder 14. Bosch is silent regarding the layout and arrangement of the holders 12 and 14 in its Figure 3, while none of the individual wires shown in Figure 1 form four dish holders 12 and one dish holder 14 as in Petitioners' Figure 3'.

A POSITA reviewing Bosch would not make these same assumptions. First, a POSITA would assume the dish holders are welded to flat left-to-right wires running on the bottom of the dish rack, similar to the structure of Ochoa. EX2017 ¶¶45-46, 56-57. And if the bottom of Bosch's dish rack is a grid of flat horizontal wires, Bosch's dish holders 12 cannot teach the "bottom wall" elements of the challenged claims. *Id.* ¶57. Second, because Bosch illustrates the four dish holders 12 and dish holder for plates 14 as separate items, a POSITA would assume they are made of separate wires. *Id.* ¶57. This can be seen in Bosch's Figure 3, where a discontinuity is illustrated between the adjacent dish holders 12:



Bosch Figure 3 (Patent Owner's Annotations)

EX1007, Fig. 3 (annotated). It is also shown in Figure 1, where the plate holders are clearly separate wires that are welded to horizontal wires:



Bosch Figure 1 (Patent Owner's Annotations)

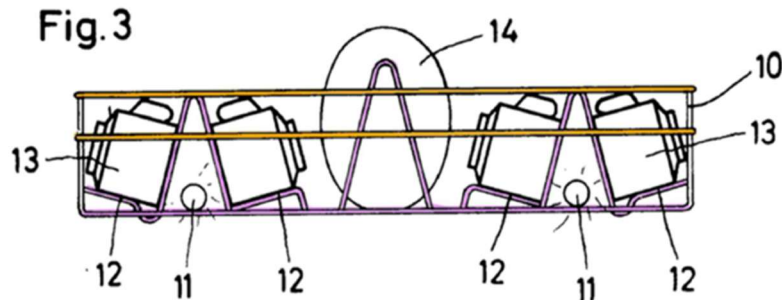
EX1007, Fig. 1 (annotated). Third, because dish holders 12 and 14 are separate parts, a POSITA would assume that dish holders 12 and 14 are placed in a staggered

arrangement, front to back, so that the dishes do not contact each other, as also shown in Figure 1. EX2017 ¶57.

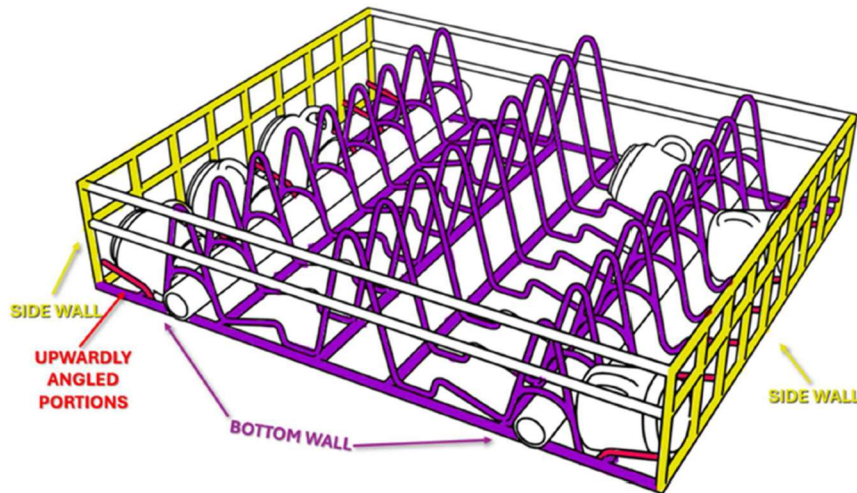
Because Petitioner's Figure 3' is not a reasonable interpretation of Bosch in view of Ochoa, the remainder of its analysis is unreliable and cannot be relied on to explain how Bosch (alone or in view of Ochoa) renders the challenged claims obvious.

2. Bosch in view of Ochoa does not render obvious the specially configured “bottom wall” of claims 13 and 17.

Even if Figure 3' was reliable, Petitioner's arguments fail to show that the “bottom wall” of claims 13 and 17 would have been obvious in light of the cited art. As noted above, Petitioner contends that Bosch teaches a bottom wall that comprises all of the lower wire of the front wall, the dish holders 12 and dish holders for plates 14, and the wires on which the dish holders are supported. *See* Pet. 39-40. The Petition includes numerous images illustrating this argument:



Petitioner's Annotations to Bosch Figure 3³



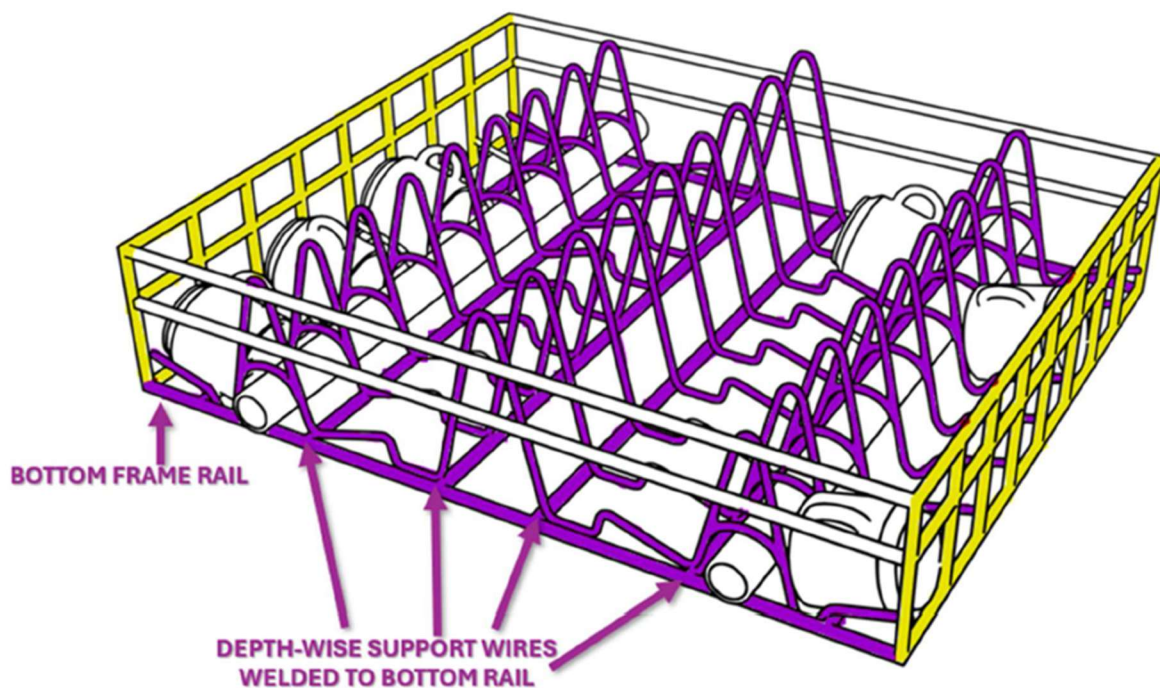
Petitioner-Created Figure 3'

Pet., 25, 36, 40 (highlighting the alleged bottom wall in purple) (annotations original); *see also id.*, 26. Despite petitioner's arguments, the claimed "bottom wall"

³ Petitioner does not appear to consistently include the bottom wire as part of the bottom wall in its annotations to Bosch's Figure 3. However, Petitioner includes that bottom wire of the front wall as part of the bottom wall in Petitioner-created Bosch-Ochoa combination Figure 3'. Petitioner must do so because it contends that the bottom wire describes the "flat central portion" of the bottom wall of claim 13. Pet. 27.

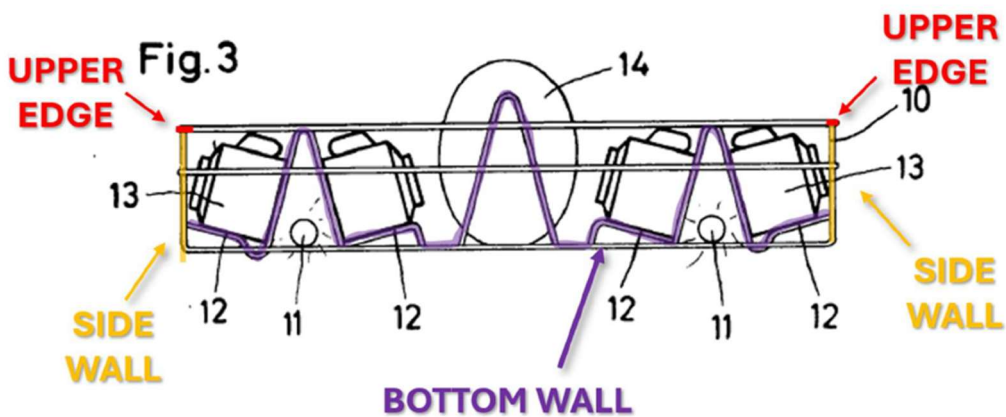
is not present in the structure Petitioner highlights in purple in either Bosch or Petitioner-created Figure 3', above. EX2017 ¶¶45-46, 54-58.

Petitioner's image strains credibility in the structures it identifies as forming the "bottom wall." First, Petitioner's alleged "bottom wall" is comprised of parts that are distinct from and mostly *above* the actual bottom wall of the reference. For example, in the image below (Petitioner Created Figure 3'), Petitioner contends "bottom wall" includes the "bottom frame rail" and "depth-wise support wires" that all form the base of the "bottom wall":



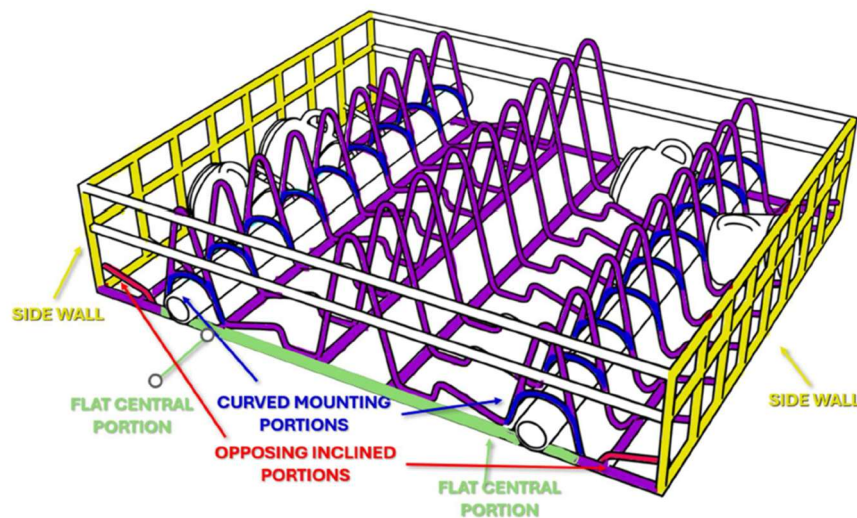
Petitioner-Created Figure 3'

Pet. 43 (annotations original). But at the same time, Petitioner contends that the dish holder for plates 14, the *highest point of the dish rack*, is also part of the bottom wall:



Petitioner's Annotations to Bosch Figure 3

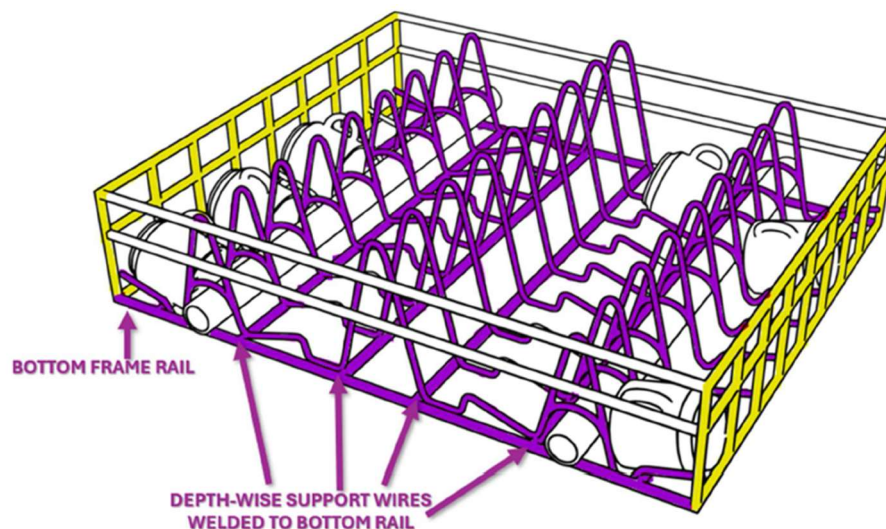
Pet. 25 (Bosch Fig. 3 with Petitioner's annotations). Calling the topmost part of the rack the "bottom wall" defies common logic and is facially unreasonable. EX2017 ¶55. Similarly, the parts of Figure 3' Petitioner points to for the "curved mounting portion," "opposing inclined portions," "upwardly angled portions," "curved mounting portions," and "contoured portions" are all *above* the bottom of the dish rack, and even above the lowest portions of the side walls:



Petitioner-Created Figure 3'

Pet. 27 (annotations original), see also 36, 37 45. Petitioner’s arguments that any of these subparts of Figure 3’—essentially the entirety of the rack regardless of vertical positioning relative to other parts—are part of the “bottom wall” is illogical and inconsistent with the recitations of claims 13 and 17. EX2017 ¶¶54-55.

Second, a POSITA would not consider Bosch’s dish holders 12 and dish holder for plates 14 to be part of the bottom wall. EX2017 ¶¶45-46, 54-58. The dish holders 12 and dish holders for plates 14 are added-on or welded shapes, distinct from the bottom wall grid of horizontal wires. *Id.* ¶¶56-57. The Bosch holders 12, 14 therefore do not form part of the “bottom wall structure.” *Id.*; see Pet. 39. Even Petitioner’s own Figure 3’ combination shows the dish and plate holders attached ***on top*** of the bottom wall structure (what Petitioner identifies as “Bottom Frame Rail” and “Depth-Side Support Rails”):



Petitioner-Created Figure 3’

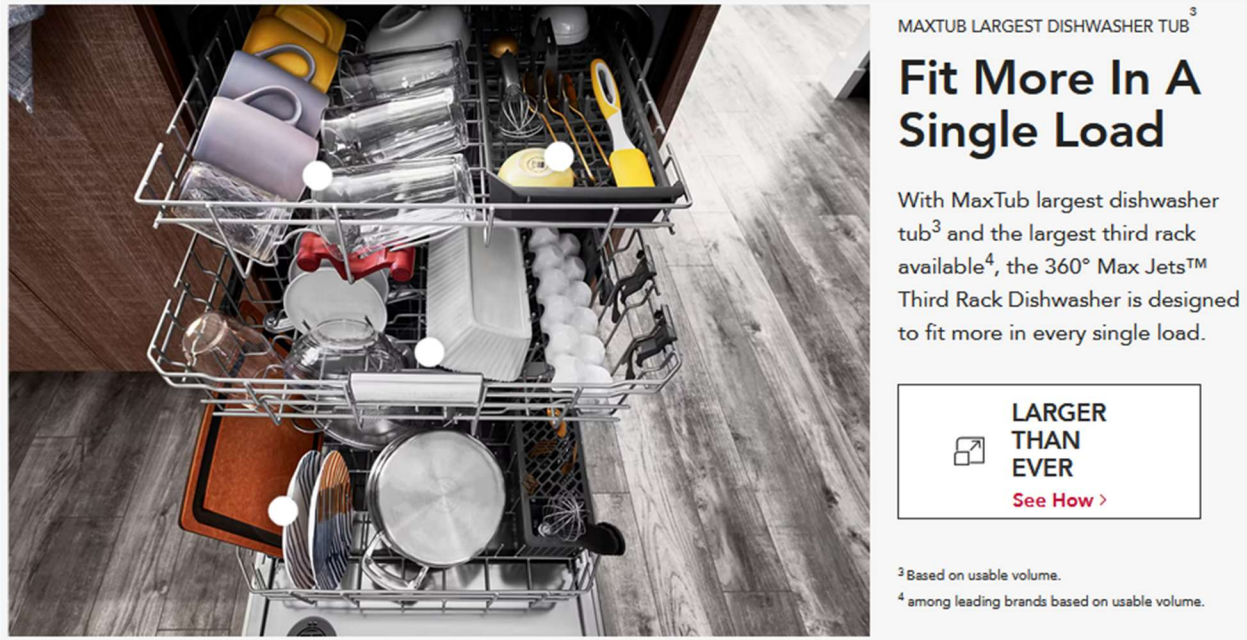
Pet. 43 (annotations original). A POSITA would understand that this flat wire wall is the “bottom wall” of Bosch, and the dish holders and plate holder above, whatever their configuration, are not part of the bottom wall. EX2017 ¶¶45-46, 54-58.

Accordingly, the Petition fails to show that Bosch in view of Ochoa teaches or renders obvious the bottom wall of claims 13 and 17.

C. Secondary considerations show that the ’385 Patent is not obvious.

Objective indicia of nonobviousness also shows that the claimed invention of the ’385 Patent would not have been obvious to a person of ordinary skill in the art. Here, the invention of the ’385 Patent, which is used in Patent Owner Whirlpool’s premium dish washers, was copied by Petitioner Samsung for use in its own dishwasher and sold throughout the United States. The sales by both parties establish commercial success of the ’385 Patent and, along with Samsung’s copying the patented invention, reinforce the nonobviousness of the ’385 Patent.

Whirlpool dishwashers sold under the KitchenAid brand practice the claims of the ’385 Patent. EX2012 ¶7. These dishwashers are three-rack dishwashers with enhanced top racks that can hold both drinkware and utensils. *Id.* This third rack includes a sprayer that is dedicated to cleaning drinkware in the cup. *Id.* An example of this third rack is illustrated below:



Id. These dishwashers first went on sale in 2020, EX2008 44:7-11, and Whirlpool has considered them a “hero feature” of their KitchenAid brand dishwashers. *Id.* 46:7-23. Since its release, Whirlpool has sold 1.7 Million of these premium dishwashers. *Id.* 48:17-20.

Samsung and Whirlpool are long term competitors in the premium household dishwasher segment. EX2012 ¶8. Samsung, in an attempt to compete with Whirlpool, copied this third-rack design as its DW90 range of household dishwashers, which it released in 2025. EX2008 49:15-50:1. Samsung’s copied design can be seen below, mirroring Whirlpool’s design:



EX2019 ¶39 (showing Samsung’s third rack as a mirror image of Whirlpool’s). And as Whirlpool has asserted in the district court litigation, Samsung’s copy infringes the ’385 Patent. *See id.* ¶¶42-62.

Samsung’s marketing specifically highlights the copied “3rd Rack Washing System.” *See* EX2020. In fact, Samsung’s website plays a short video highlighting this rack and the benefits enabled by the claims of the ’385 Patent. <https://images.samsung.com/is/content/samsung/p6pim/us/feature/166669398/us-feature-dw90f24t-dw90f89p0usraa-550411969.mp4> (last accessed July 11, 2026). According to Samsung, it provides a “dedicated area for drinkware, cutlery, and

utensils,” allows users to “place cups on the 3rd rack to free up space,” and includes “dedicated wash jets...to thoroughly clean” glasses.

The sales campaigns by both Whirlpool and Samsung highlight the benefits of dishwashers with the claimed third rack and indicate that their sales success is tied to the claimed features. Similarly, that Samsung copied Whirlpool’s design within a few years of its initial release suggests that the design was not obvious and, in fact, was a significant improvement over existing dishwasher designs.

As the Board is aware, a patentee is entitled to a presumption of nexus “when the patentee shows that the asserted objective evidence is tied to a specific product and that product embodies the claimed features, and is coextensive with them.” *Fox Factory, Inc. v. SRAM, LLC*, 944 F.3d 1366, 1373 (Fed. Cir. 2019) (quotation omitted). Here, the claims are directed to an automatic dishwasher with the claimed dish rack. EX1001, 10:57-13:7. As the “hero feature” of these dishwashers, both Whirlpool’s and Samsung’s dishwashers embody this invention and are coextensive with it.

Even if a nexus cannot be presumed, the above evidence shows there is a nexus between these considerations and the ’385 Patent. The copying, sales, and marketing discussed above is all directed towards the benefits of the dish rack found in the claims of the ’385 Patent. Samsung’s marketing specifically highlights the advantages of the dish rack, such as the greater versatility of the claimed

configuration. *See, e.g.*, EX1001, 8:47-58, 9:14-22. These considerations further show that the claims of the '385 Patent are not obvious. *See Leo Pharm. Prods. v. Rea*, 726 F.3d 1346, 1358 (Fed. Cir. 2013) (“Objective indicia can be the most probative evidence of nonobviousness in the record, and enables the court to avert the trap of hindsight.”) (quotation omitted).

V. Conclusion

Whirlpool respectfully requests that the Board deny institution of *inter partes* review for the reasons stated herein.

Dated: July 16, 2026

Respectfully submitted,

/Michael F. Heim /

Michael F. Heim (Reg. No. 32,702)

Attorney for Patent Owner

Whirlpool Corporation

CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24(d), the undersigned hereby certifies that this brief complies with the type-volume limitation of 37 C.F.R. § 42.24 because this brief contains 6,332 words as calculated by Microsoft Word, excluding the items exempted under 37 C.F.R. § 42.24.

Dated: July 16, 2026

Respectfully submitted,
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Whirlpool Corporation

CERTIFICATE OF SERVICE

The undersigned certifies that pursuant to 37 C.F.R. § 42.6(e), a true copy of the foregoing PATENT OWNER'S PRELIMINARY RESPONSE was served on the date below to the following lead counsel for Petitioners via e-mail:

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