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Application Number	TO BE DETERMINED
Filing Date	2018-03-30
First Named Inventor	BARRY E. TULLER
Title	GLASSES RACK FOR DISHWASHER
Art Unit	
Examiner Name	
Attorney Docket Number	SUB-05031-US-CNT2

SIGNATURE of Applicant or Patent Practitioner

Signature	/Patrick J Burns/	Date (Optional)	2018-03-30
Name	Patrick J. Burns	Registration Number	73,687
Title (if Applicant is a juristic entity)	Authorized Attorney		
Applicant Name (if Applicant is a juristic entity)	Whirlpool Corporation		

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I hereby revoke all previous powers of attorney given in the application identified in either the attached transmittal letter or the boxes below.

Application Number	Filing Date

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I am the Applicant (if the Applicant is a juristic entity, list the Applicant name in the box):

Whirlpool Corporation

☐ Inventor or Joint Inventor (title not required below)

☐ Legal Representative of a Deceased or Legally Incapacitated Inventor (title not required below)

☑ Assignee or Person to Whom the Inventor is Under an Obligation to Assign (provide signer's title if applicant is a juristic entity)

☐ Person Who Otherwise Shows Sufficient Proprietary Interest (e.g., a petition under 37 CFR 1.46(b)(2) was granted in the application or is concurrently being filed with this document) (provide signer's title if applicant is a juristic entity)

SIGNATURE of Applicant for Patent

The undersigned (whose title is supplied below) is authorized to act on behalf of the applicant (e.g., where the applicant is a juristic entity).

Signature	/Joel M. Van Winkle/	Date (Optional)	
Name	Joel M. Van Winkle		
Title	Group Counsel and Chief Patent Counsel - Whirlpool Corporation		

NOTE: Signature - This form must be signed by the applicant in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. If more than one applicant, use multiple forms.

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	WHIRLPOOL CORPORATION
For:	GLASSES RACK FOR DISHWASHER
Docket No.	SUB-050310-US-CNT2

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
PO Box 1450
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Sir:

The references listed on the attached Form PTO-SB08 are submitted herewith pursuant to 37 C.F.R. §§ 1.97-1.99 in accordance with Applicants' duty of disclosure as set forth at 37 C.F.R. § 1.56.

The PTO/SB/08 lists references filed and cited by the Examiner during prosecution in the parent application Serial No. 15/416,687 (Attorney Docket No. SUB-05031-US-CNT). Because this application is a continuation of Serial No. 15/416,687, copies of the listed references are not enclosed herewith. The list is submitted so that the information is printed on the patent.

The submission of the accompanying information is not intended to imply that more pertinent prior disclosures may not exist, nor is it an admission by that any one or more of the documents submitted herewith form a part of the scope and content of the prior art.

This Information Disclosure Statement is submitted with the filing of the above-referenced application.

Respectfully submitted,
WHIRLPOOL CORPORATION

Date: March 30, 2018

By: /Patrick J Burns/

Patrick J. Burns, Reg. No, 73,687
McGARRY BAIR PC
45 Ottawa Ave. SW, Suite 700
Grand Rapids, Michigan 49503
(616) 742-3500

Petitioner Samsung Ex-1004, 0003

PTO/SB/08a (03-15)
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Application Number	
Filing Date	2018-03-30
First Named Inventor	Barry E. Tuller
Art Unit	
Examiner Name	
Attorney Docket Number	SUB-05031-US-CNT2

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	1	4134414	A1	1979-01-16	Jarvis	
	2	2646809		1953-07-28	L. E. Van Hise	
	3	2907470		1959-10-06	C. F. Abresch	
	4	2910207		1959-10-27	M. J. Andrew	
	5	3258127		1966-06-28	D. S. Cushing	
	6	3464566		1969-09-02	R. J. Gilson	
	7	6907998	B2	2005-06-21	Deiss	
	8	7594513	B2	2009-09-29	VanderRoest et al.	

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	Filing Date	2018-03-30
	First Named Inventor	Barry E. Tuller
	Art Unit	
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	Attorney Docket Number	SUB-05031-US-CNT2

	9	4064887		1977-12-27	Geiger et al.	

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	2	20050109378	A1	2005-05-26	Landsiedel	
	3	20120292270	A1	2012-11-22	Klump	
	4	20130098406	A1	2013-04-25	Beshears	
	5	20100051069	A1	2010-03-04	Schessl et al.	
	6	20130002107	A1	2013-01-03	Paschini et al	
	7	20120138106	A1	2012-06-07	Fountain et al.	

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	Application Number	
	Filing Date	2018-03-30
	First Named Inventor	Barry E. Tuller
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SUB-05031-US-CNT2

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	1	19960496	DE	A1	2001-07-12	BSH Bosch Siemens Hausgeraete		
	2	2002065562	JP	A1	2002-03-05	Fukushima Yoshiya et al.		
	3	10332149	DE	B3	2005-05-04	Ballmann et al		
	4	5006715	JP	B2	2012-08-22	Santo Shinji		
	5	2594186	EP	A1	2013-05-22	Milani et al.		
	6	5006716	JP	AB	2012-08-22	Tachikawa Isao		

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	Art Unit	
	Examiner Name	
	Attorney Docket Number	SUB-05031-US-CNT2

EXAMINER SIGNATURE			
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	Application Number	
	Filing Date	2018-03-30
	First Named Inventor	Barry E. Tuller
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SUB-05031-US-CNT2

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

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OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☒ See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick J Burns/	Date (YYYY-MM-DD)	2018-03-30
Name/Print	Patrick J. Burns	Registration Number	73,687

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The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Petitioner Samsung Ex-1004, 0009

GLASSES RACK FOR DISHWASHER

ABSTRACT OF THE DISCLOSURE

A dishwasher can include a tub defining a treating chamber receiving dishes for treatment, a spray system providing treating liquid to the treating chamber, a first dish rack located in the tub and having a bottom wall tiered to form multiple levels defining an effective inclination angle for the bottom wall, and a second dish rack located below the first dish rack and having an inclined non-tiered bottom wall.

Petitioner Samsung Ex-1004, 0010

CLAIMS

What is claimed is:

1. A dishwasher comprising:

a tub defining a treating chamber receiving dishes for treatment;

a spray system providing treating liquid to the treating chamber;

a first dish rack located in the tub and having a bottom wall tiered to form multiple levels defining an effective inclination angle for the bottom wall; and

a second dish rack located below the first dish rack and having a non-tiered bottom wall inclined at an angle matching the effective inclination angle and parallel to the first dish rack bottom wall.

2. The dishwasher according to claim 1 wherein the second dish rack is configured to hold glasses at an incline angled less than about 45 degrees relative to horizontal.

3. The dishwasher according to claim 2 wherein the spray system comprises a sprayer mounted to the second dish rack and positioned to spray treating liquid into the interior of the glasses.

4. The dishwasher according to claim 3 wherein the second dish rack is slidably mounted to the tub, the spray system further comprises a supply conduit located in the tub, and the sprayer selectively docks with the supply conduit during sliding movement of the second dish rack.

5. The dishwasher according to claim 2 wherein the inclined angle of the glasses is about 15 degrees.

6. The dishwasher according to claim 1 wherein the second dish rack has at least one side wall, extending upwardly from the non-tiered bottom wall, and terminates in an upper edge inclined at an angle matching the effective inclination angle.

7. The dishwasher according to claim 6 comprising a third dish rack located below the second dish rack.

Petitioner Samsung Ex-1004, 0011

8. The dishwasher according to claim 7 wherein the spray system comprises a first sprayer above the first dish rack, a second sprayer between the first and second dish racks, and a third sprayer below the third dish rack.

9. The dishwasher according to claim 7 wherein the third dish rack has a bottom wall and a side wall terminating in an upper edge.

10. The dishwasher according to claim 8 wherein at least one of the bottom wall or upper edge of the third dish rack is horizontal.

11. A dishwasher comprising:

a tub defining a treating chamber receiving dishes for treatment;

a spray system providing treating liquid to the treating chamber; and

a dish rack located in the tub and having a bottom wall, a side wall extending upwardly from the bottom wall and terminating in an upper edge, with an angled portion formed in the bottom wall; and

a spray tube carried by the bottom wall and having nozzles emitting spray along the angled portion.

12. The dishwasher of claim 11 wherein the dish rack is a low profile dish rack where the length of the angled portion is greater than a shortest height of an upstanding portion of the side wall.

13. The dishwasher of claim 12 wherein at least one of the nozzles is located above a portion of the angled portion.

14. The dishwasher of claim 12 wherein the shortest height is located along a portion of the side wall transverse to the angled portion.

15. The dishwasher of claim 11 wherein at least one of the nozzles is located above a portion of the angled portion.

16. The dishwasher of claim 12 wherein the spray tube is located exteriorly of the bottom wall.

17. The dishwasher of claim 16 wherein the spray tube is located below the bottom wall.

Petitioner Samsung Ex-1004, 0012

18. The dishwasher of claim 17 wherein the spray tube is located within a contoured portion formed in the bottom wall to form a mount for the spray tube.

19. The dishwasher of claim 11 wherein the spray tube is configured to rotate about a longitudinal axis.

20. The dishwasher the claim 11 wherein the bottom wall defines a flat portion and the angled portion terminates at the flat portion.

21. The dishwasher of claim 20 further comprising a second angled portion located on an opposite side of the flat portion.

22. The dishwasher of claim 21 wherein the angled portions have the same angle.

23. The dishwasher of claim 22 wherein the angled portions begin at the side wall and terminate at the flat portion.

24. The dishwasher of claim 23 wherein the flat is located above a terminal end of at least one of the angled portions.

25. The dishwasher of claim 24 wherein the spray tube is located below the flat portion.

26. The dishwasher of claim 25 further comprising multiple spray tubes located below the flat portion.

Petitioner Samsung Ex-1004, 0013

GLASSES RACK FOR DISHWASHER

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application is a continuation of U.S. Application No. 15/416,687, filed January 26, 2017, which is a continuation of U.S. Application No. 14/620,688, filed February 12, 2015, entitled "Glasses Rack for Dishwasher," which claims the benefit of U.S. Provisional Patent Application No. 61/946,101, filed February 28, 2014, all of which are incorporated herein by reference in their entirety.

BACKGROUND

[0002] Household dishwashers typically include one or more dish racks for holding various types of dishes in the dishwasher tub. Traditionally, a dishwasher includes an upper rack that holds glassware and small dishes, and a lower rack that holds larger dishes, such as plates. These two dish racks usually consume most of the space inside the dishwasher tub. Some dishwashers may also include a third dish rack, often for silverware and other low profile utensils.

SUMMARY

[0003] In one aspect, the present disclosure relates to a dishwasher including a tub defining a treating chamber receiving dishes for treatment, a spray system providing treating liquid to the treating chamber, a first dish rack located in the tub and having a bottom wall tiered to form multiple levels defining an effective inclination angle for the bottom wall, and a second dish rack located below the first dish rack and having a non-tiered bottom wall inclined at an angle matching the effective inclination angle and parallel to the first dish rack bottom wall.

[0004] In another aspect, the present disclosure relates to a dishwasher including a tub defining a treating chamber receiving dishes for treatment, a spray system providing treating liquid to the treating chamber, and a dish rack located in the tub and having a bottom wall, a side wall extending upwardly from the bottom wall and terminating in an upper edge, with an angled portion formed in the bottom wall, and a spray tube carried by the bottom wall and having nozzles emitting spray along the angled portion.

Petitioner Samsung Ex-1004, 0014

BRIEF DESCRIPTION OF THE DRAWINGS

[0005] In the drawings:

[0006] Figure 1 is a schematic side view of a dishwasher with a glasses dish rack according to one embodiment.

[0007] Figure 2 is a schematic diagram of a control system for the dishwasher of Figure 1.

[0008] Figure 3 is a schematic front view of the glasses dish rack of Figure 1.

[0009] Figure 4 is a schematic top view of the glasses dish rack of Figure 1.

[0010] Figure 5 is a schematic top view of a glasses dish rack according to another embodiment.

[0011] Figure 6 is a schematic top view of a glasses dish rack according to another embodiment.

[0012] Figure 7 is a schematic front view of a dishwasher tub with a glasses dish rack according to another embodiment for use below a tiered dish rack.

[0013] Figure 8 is a schematic front view of a dish rack according to another embodiment.

[0014] Figure 9 is a schematic top view of the dish rack of Figure 8.

DESCRIPTION OF EMBODIMENTS OF THE INVENTION

[0015] Figure 1 illustrates a perspective view of an exemplary automated dishwasher 10 according to a first embodiment. The dishwasher 10 shares many features of a conventional automated dishwasher, which will not be described in detail herein except as necessary for a complete understanding of the invention. A chassis 12 may define an interior of the dishwasher 10 and may include a frame, with or without panels mounted to the frame. For built-in dishwashers, outer panels are typically not needed. For dishwashers that are not built into existing cabinetry, the chassis 12 may include the panels mounted to the frame to form a cabinet for the dishwasher 10. An open-faced tub 14 may be provided within the chassis 12 and may at least partially define a treating chamber 16 for washing or otherwise treating dishes. The open face of the tub 14 defines an access opening for the treating chamber 16.

[0016] A closure element, such as a door assembly 18, may be movably mounted to the dishwasher 10 for movement between opened and closed positions to selectively open and close the treating chamber access opening defined by the open face of the tub 14. Thus, the door assembly 18 provides accessibility to the treating chamber 16 for the loading and unloading of dishes or other washable items. It should be appreciated that the door assembly 18 may be

Petitioner Samsung Ex-1004, 0015

secured to the lower front edge of the chassis 12 or to the lower front edge of the tub 14 via a hinge assembly (not shown) configured to pivot the door assembly 18. When the door assembly 18 is closed, user access to the treating chamber 16 may be prevented, whereas user access to the treating chamber 16 may be permitted when the door assembly 18 is open. Alternatively, the closure element may be slidable relative to the chassis 12, such as in a drawer-type dishwasher, wherein the access opening for the treating chamber 16 is formed by an open-top tub. Other configurations of the closure element relative to the chassis 12 and the tub 14 are also within the scope of the invention.

[0017] Dish holders, illustrated in the form of upper, middle, and lower dish racks 20, 22, 24, may be located within the treating chamber 16 and receive dishes for treatment, such as washing. The upper, middle, and lower racks 20, 22, 24 are typically mounted for slidable movement in and out of the treating chamber 16 for ease of loading and unloading. Other dish holders may be provided, such as a silverware basket, separate from or combined with the upper, middle, and lower racks 20, 22, 24. As used in this description, the term “dish(es)” is intended to be generic to any item, single or plural, that may be treated in the dishwasher 10, including, without limitation, dishes, plates, pots, bowls, pans, glassware, and silverware.

[0018] A spray system may be provided for spraying liquid in the treating chamber 16 and may be provided in the form of, for example, an upper spray assembly 26, a middle spray assembly 28, and a lower spray assembly 30. The upper spray assembly 26, the middle spray assembly 28, and the lower spray assembly 30 are located, respectively, above the upper rack assembly 20, beneath the middle rack assembly 22, and beneath the lower rack assembly 24 and are illustrated as rotating spray arms by example but are not limited to such positions and sprayer type. The spray system may further include a rack spray assembly 32 coupled to the upper dish rack 20; the rack spray assembly 32 will be discussed in further detail below. Furthermore, the spray system may include additional and/or alternative spray assemblies. For example, a distribution header or spray manifold may be located at the rear of the tub 14 at any vertical position. An exemplary spray manifold is set forth in detail in U.S. Patent No. 7,594,513, issued September 29, 2009, and titled "Multiple Wash Zone Dishwasher," which is incorporated herein by reference in its entirety.

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[0019] A recirculation system may be provided for recirculating liquid from the treating chamber 16 to the spray system. The recirculation system may include a sump 34 and a pump assembly 36. The sump 34 collects the liquid sprayed in the treating chamber 16 and may be formed by a sloped or recess portion of a bottom wall of the tub 14. The pump assembly 36 may include both a drain pump 38 and a recirculation pump 40. The drain pump 38 may draw liquid from the sump 34 and pump the liquid out of the dishwasher 10 to a household drain line (not shown). The recirculation pump 40 may draw liquid from the sump 34, and the liquid may be simultaneously or selectively pumped through a supply conduit or tube 42 to each of the spray assemblies 26, 28, 30, 32 for selective spraying. While not shown, a liquid supply system may include a water supply conduit coupled with a household water supply for supplying water to the treating chamber 16.

[0020] A heating system including a heater 44 may be located, for example, within the sump 34 for heating the liquid contained in the sump 34.

[0021] A control system including a controller 46 may also be included in the dishwasher 10, which may be operably coupled with various components of the dishwasher 10 to implement a cycle of operation. The controller 46 may be located within the door assembly 18 as illustrated, or it may alternatively be located somewhere within the chassis 12. The controller 46 may also be operably coupled with a control panel or user interface 48 for receiving user-selected inputs and communicating information to the user. The user interface 48 may include operational controls such as dials, lights, switches, and displays enabling a user to input commands, such as a cycle of operation, to the controller 46 and receive information.

[0022] As illustrated schematically in Figure 2, the controller 46 may be coupled with the heater 44 for heating the wash liquid during a cycle of operation, the drain pump 38 for draining liquid from the treating chamber 16, and the recirculation pump 40 for recirculating the wash liquid during the cycle of operation. The controller 46 may be provided with a memory 50 and a central processing unit (CPU) 52. The memory 50 may be used for storing control software that may be executed by the CPU 52 in completing a cycle of operation using the dishwasher 10 and any additional software. For example, the memory 50 may store one or more pre-programmed cycles of operation that may be selected by a user and completed by the dishwasher 10. The

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controller 46 may also receive input from one or more sensors 54. Non-limiting examples of sensors that may be communicably coupled with the controller 46 include a temperature sensor and turbidity sensor to determine the soil load associated with a selected grouping of dishes, such as the dishes associated with a particular area of the treating chamber 16.

[0023] The dishwasher 10 may include all of the above exemplary systems, a selection of the above exemplary systems, and/or other systems not listed above as desired. Further, some of the systems may be combined with other systems and/or may share components with other systems. Examples of other systems that the dishwasher may further include are a dispensing system that supplies one or more treating agents or chemistries to the treating chamber 16 and an air supply system that may provide air, which may be heated or not heated, to the treating chamber 16, such as for drying and/or cooling the dishes. An exemplary air supply system is set forth in U.S. Patent Application No. 12/959,673, filed December 3, 2010 and published as U.S. Patent Application Publication No. 2012/0138106 on June 7, 2012, both of which are incorporated herein by reference in their entireties.

[0024] Referring now to Figure 3, the upper dish rack 20 may be particularly configured to hold drinking vessels, such as, for example, tall and short tumblers, including old fashioned glasses, rocks glasses, and highballs, stemware, such as wine glasses, martini glasses, and tulip and saucer champagne glasses, snifters, goblets, bottles, mugs, and the like, which are hereinafter referred to as "glasses" with it being understand that "glasses" includes those exemplary drinking dishes listed above in addition to others not listed herein. The glasses may be made of any suitable material, including glass, ceramics, plastic, and metals and are not limited to glass materials. While the glasses dish rack 20 may be located near the top of the tub 14, the glasses dish rack 20 need not be the uppermost dish rack in the tub 14 and is only heretofore referred to as "upper" for convenience.

[0025] The glasses dish rack 20 may be constructed of a wire frame effectively forming opposing side walls 60, a front wall 62 (Figure 4), a rear wall 64 (Figure 4), and a bottom wall 66 that together define an open-top glasses holding compartment 68. The bottom wall 66 may be completely flat, as illustrated by example, to form a flat bottom dish rack or may have a varied configuration comprising a plurality of inclined and, possibly, flat walls that effectively forms an

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overall horizontal bottom or an inclined bottom as will be described in more detail below. Additionally, a plurality of glass supports 70, such as a panel, tines, or other structures, may extend upwardly from the bottom wall 66 and/or the side walls 60, the front wall 62, and the rear wall 64 to support various glasses, such as, for example, a wine glass 72 and a tall tumbler 74. If panels are used for forming the glass supports 70, the panels may have through openings for the easy passing of liquid. The glass supports 70 may be configured to position the glasses 72, 74 at angles A, B less than about 45 degrees relative to the horizontal. In this embodiment, the horizontal is about coincident with the bottom wall 66 of the dish rack 20. The angle A, B may be defined as the angle between the side wall of the glass and horizontal. If the side wall of the glass is curved, then the angle may be defined as the angle between a line tangent to the glass side wall and the horizontal. The particular angles A, B at which the glasses 72, 74 are inclined, which may be equal or not equal, are a compromise between (1) the overall height of the dish rack 20 and the portion of the glasses 72, 74 extending above the dish rack 20 and (2) suitable draining of liquid from the interior and exterior surfaces of the glasses 72, 74. As the angles A, B increase to improve draining, the overall height increases, thereby consuming more valuable space within the tub 14. On the other hand, as the angles A, B decrease to reduce height and minimize the space required within the tub 14, draining performance may decrease. Exemplary preferred glass inclination angles range from about 5 to 45 degrees, with a preferred angle being about 15 degrees. The preferred inclination angle may vary for different types of glasses as the draining behavior may differ due to inherent structural differences, such as the contour and inclination of the side wall of the glasses.

[0026] To accomplish the inclined positioning in the illustrated exemplary embodiment, the wine glass 72 is supported by a first row of glass supports 76 shorter than a second row of glass supports 78, and the tall tumbler 74 is supported by a third row of glass supports 80 shorter than a fourth row of glass supports 82. Optionally, the glass supports 70 may form a cradle or notch for each of the glasses 72, 74 to retain the glasses 72, 74 in a particular location and prevent the glasses 72, 74 from rolling within the dish rack 20. As seen in Figure 4, the dish rack 20 may be configured to hold multiple rows of glasses 72, 74, and the illustrated embodiment includes a first row of multiple wine glasses 72 supported by the first and second rows of glass supports 76,

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78 and a second row of multiple tall tumblers 74 and multiple wine glasses 72 supported by the third and fourth rows of glass supports 80, 82. The glass supports 70 may be configured to best hold a specific type of glass, such as the wine glasses 72 in the first row, or may be configured to more generically hold multiple types of glasses, such as the wine glasses 72 and the tall tumblers 74 in the second row. The glass supports may be adjustable, which would allow the user to individually place different sized glasses and ensure that the minimum angle needed to drain water from the item is achieved. The glass rack 20 may further be configured to automatically pivot each glass to a desired position.

[0027] Optionally, the glasses dish rack 20 may be equipped with the rack spray assembly 32 adapted to provide treating liquid to the interior of the glasses 72, 74. While the glasses 72, 74 may be subjected to the treating liquid provided by the other spray assemblies, such as the upper spray assembly 26 (Figure 1), the inclined orientation of the glasses 72, 74 faces the openings for the glasses 72, 74 generally downward (*i.e.*, relative to the horizontal) such that the other spray assemblies, such as the upper spray assembly 26 (Figure 1), may provide an insufficient amount of liquid into the glasses 72, 74 to properly treat the interior of the glasses 72, 74. The rack spray assembly 32 may include any suitable type of sprayer and is shown by example as a stationary spray tube 90 with a first row of spray nozzles 92 facing the first row of glasses and a second row of spray nozzles 94 facing the second row of glasses. The spray nozzles 92, 94 may be positioned to spray treating liquid into the interior of the glasses 72, 74, and the volume and velocity of the treating liquid emitted from the spray nozzles 92, 94 may be set based on the type of glasses, may be generic for all types of glasses, and/or may be variable from one treating cycle of operation to another and/or within a single treating cycle of operation. Additionally, the spray nozzles 92, 94 may spray liquid alternately (*e.g.*, between rows - one row at a time wherein the rows are sequenced on and off, within rows – sets of nozzles within a row sequenced on and off), continuously, and/or intermittently.

[0028] The rack spray assembly 32 may be fixedly mounted to the glasses dish rack 20 for movement therewith when the dish rack 20 is slid relative to the tub 14, as illustrated, or the rack spray assembly may be fixedly mounted to the tub 14 so as to retain its position relative to the tub 14 upon movement of the dish rack 20. In the former case, the rack spray assembly 32 may

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dock with the supply tube 42 (Figure 1) or other structure of the liquid supply and/or recirculation systems when the glasses dish rack 20 is slid to its most rearward position in the tub 14 to establish fluid communication with the liquid supply and/or recirculation systems. By example, the illustrated rack spray assembly 32 includes a connector 96 located at the rear end of the spray tube 90 and adapted to mate or dock with a receiver 98 in the tub 14. The receiver 98 may be mounted at the rear of the tub 14, such as to the supply tube 42 (Figure 1), or in any other suitable location.

[0029] The glasses dish rack 20 may be modified to accommodate any type or arrangement of glasses. Such modifications may include, for example, employing multiple sprayers of the same type or different types and rearranging the glass supports and/or the sprayer(s). While numerous variations of the glasses dish rack 20 are feasible, exemplary alternative embodiments of the glasses dish rack are illustrated in Figures 5 and 6. In the following description of the alternative embodiments, elements similar to those of previous embodiments are identified with the same reference numeral bearing a letter, *e.g.*, 20A, 20B, etc.

[0030] Referring to Figure 5, the glasses dish rack 20A has been modified to hold a greater number of shorter glasses, shown by example as short tumblers 100 and mugs 102. The glasses 100, 102 are arranged in four rows, with each row supported by a corresponding one of the first, second, third, or fourth rows of glass supports 76A, 78A, 80A, 82A. The glass supports 70A are arranged to orient the glasses 100, 102 in an inclined position less than about 45 degrees relative to the horizontal, as in the previous embodiment. To accommodate the increased number of glasses, the rack spray assembly 32A of the dish rack 20A includes a second spray tube 104 in addition to the first spray tube 90A. The first spray tube 90A is located between the first and second rows of glasses to spray treating liquid into the glasses 100, 102 in these two rows, while the second spray tube 104 is positioned between the third and fourth rows of glasses to spray treating liquid into the glasses 100, 102 in these two rows. Each of the spray tubes 90A, 104 includes a single row of spray nozzles 92A, 106, and the spray tubes 90A, 104 may rotate about their respective longitudinal axes such that the spray nozzles 92A, 106 spray treating liquid into their adjacent rows of glasses alternately. By rotating the spray tubes 90A, 104, the treating fluid may be sprayed in multiple spray angles and trajectories. Optionally, the spray tubes 90A, 104

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may include a plurality of rows of the spray nozzles 92A, 106, or the spray nozzles 92A, 106 may have an arrangement other than in rows. Alternatively, the spray tubes 90A, 104 may be stationary with multiple sets of spray nozzles, as in the previous embodiment, or another type of sprayer. The spray tubes 90A, 104 may be fluidly coupled by a manifold 108 that includes the connector 96A for docking with the receiver 98 in the tub 14. Alternatively, each of the spray tubes 90A, 104 may independently dock with a corresponding receiver in the tub.

[0031] Referring now to Figure 6, the glasses dish rack 20B is a hybrid of the glasses dish rack 20 of Figure 4 and the glasses dish rack 20A of Figure 5. The left side of the glasses dish rack 20B is essentially identical to the left side of the glasses dish rack 20A in that it has two rows of the shorter glasses, *i.e.*, the short tumblers 100 and the mugs 102, with the rotating spray tube 90B therebetween. The right side of the glasses dish rack 20B is essentially identical to the right side of the glasses dish rack 20, with a single row of the taller glasses, *i.e.*, the wine glasses 72 and the tall tumblers 74, and the stationary spray tube 104 oriented to spray treating liquid into that row. The spray tubes 90B, 104B may be fluidly coupled by the manifold 108B that includes the connector 96B for docking with the receiver 98 in the tub. Alternatively, each of the spray tubes 90B, 104B may independently dock with a corresponding receiver in the tub.

[0032] The glasses dish rack may also be modified for use below a tiered dish rack. As shown in the alternative embodiment in Figure 7, a tiered dish rack 22C may be positioned as the uppermost rack in the tub 14C. Figure 7 schematically shows the bottom wall of the tiered dish rack 22C as a diagonal line, while in reality, the bottom wall may include multiple tiers, each having a generally horizontal bottom wall, at differing vertical heights, as in a stepped configuration. An exemplary tiered dish rack is set forth in U.S. Patent No. 8,287,660, issued October 16, 2012, which is incorporated herein by reference in its entirety. Nonetheless, the multiple steps of the tiered bottom wall define an effective inclination with an angle C relative to the horizontal for the tiered dish rack 22C, which is represented by the diagonal line at the bottom of the tiered dish rack 22C in the schematic Figure 7.

[0033] The glasses dish rack 20C located below the tiered dish rack 22C, particularly the bottom wall 66C, may be inclined at an angle D relative to the horizontal from one of the side walls 60C to the opposite side wall 60C, and the angle D of the inclination may be near to or match the

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inclination angle C of the tiered dish rack 22C. Exemplary inclination angles for the angle D may be less than about 45 degrees, such as within a range of about 10 to 40 degrees. In one embodiment the angle D may be about 15 degrees. Additionally, the inclination angle of the glasses dish rack 22C may advantageously correspond to a desired inclination of the glasses, such as the exemplary illustrated glasses 72, 74, 100 in Figure 7, such that glass supports or other structures may not be needed to support the glasses in the desired position; the glasses may rest on the bottom wall 66C of the dish rack 20C. Because the glasses can be positioned closer to and possibly even flat with the bottom wall 66C when the bottom wall 66C itself is inclined, the overall height of the glasses dish rack 20C and any portion of the glasses that may extend above the glasses dish rack 20C, of which there is none in the illustrated embodiment, may be reduced. Glass supports or other structures may still be employed to prevent the glasses from rolling and/or sliding in the glasses dish rack 20C, if desired. Further, while any suitable configuration of the rack spray assembly 32C may be employed, because the glasses must be facing the same direction, *i.e.*, downward, so that the treating liquid will flow out of the glasses, each row of the glasses may have its own dedicated spray tube. For example, a first row of the glasses, represented by the tall tumbler 74, may receive liquid from the spray nozzles 92C on the spray tube 90C, a second row of the glasses, represented by the wine glass 72, may receive liquid from the spray nozzles 106C on the spray tube 104C, and a third row of the glasses, represented by the short tumbler 100, may receive liquid from spray nozzles 110 on a spray tube 112.

[0034] Referring now to Figure 8, the dish rack 20D is a modified hybrid version of the glasses dish rack 20 of Figures 3 and 4 and the glasses dish rack 20A of Figure 5. The dish rack 20D has been modified to include a contoured bottom wall 66D. The dish rack 20D is constructed of a wire frame effectively forming an upper perimeter wall having opposing side walls 60D, a front wall 62D (Figure 9), a rear wall 64D (Figure 9), and a plurality of bottom walls 66D that together define an open-top glasses holding compartment 68D. The bottom walls 66D may be contoured, as illustrated by example, to form a curved spray tube mounting portions 63, flat central portions 65, opposing inclined portions 67 and opposing upstanding portions 69. The opposing upstanding portions 69 attach to the opposing side walls 60D to rigidly support the upper perimeter wall. Additionally, a plurality of upstanding wire supports 75, 79, may extend

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upwardly from the bottom walls 66D and attach to the front wall 62D (Figure 9) and rear wall 64D (Figure 9). Furthermore, lateral wire supports 73, 77 (Figure 9) may extend between corresponding upstanding wire supports 75, 79, transverse to the bottom walls 66D and attach to the bottom walls 66D to provide additional rigidity to the wire frame of the dish rack 20D.

[0035] The opposing inclined portions 67 may be configured to position the glasses 74 at angles E, F less than about 45 degrees relative to the horizontal. In this embodiment, the horizontal is about coincident with the lateral wire supports 73, 77 of the dish rack 20D. The angle E, F may be defined as the angle between the inclined portions 67 and horizontal or the side wall of the glass and horizontal. If the side wall of the glass is curved, then the angle may be defined as the angle between a line tangent to the glass side wall and the horizontal. The particular angles E, F at which the glasses 74 are inclined, which may be equal or not equal, are a compromise between (1) the overall height of the dish rack 20D and the portion of the glasses 74 extending above the dish rack 20D and (2) suitable draining of liquid from the interior and exterior surfaces of the glasses 74. As the angles E, F increase to improve draining, the overall height increases, thereby consuming more valuable space within the tub. On the other hand, as the angles E, F decrease to reduce height and minimize the space required within the tub, draining performance may decrease. Exemplary preferred glass inclination angles range from about 5 to 45 degrees, with a preferred angle being about 15 degrees. The preferred inclination angle may vary for different types of glasses as the draining behavior may differ due to inherent structural differences, such as the contour and inclination of the side wall of the glasses.

[0036] The opposing inclined portions 67 may form a cradle for each of the glasses 74 to retain the glasses 74 in a particular location and prevent the glasses 74 from rolling within the dish rack 20D, as seen in Figure 9, where the plurality of opposing inclined portions 67 are spaced apart to allow the glasses 74 to rest on two adjacent inclined portions 67 in order to prevent the glasses 74 from rolling. Furthermore, the glasses 74 may abut the curved spray tube mount portions 63 (Figure 8) to prevent the glasses 74 from sliding down the inclined portions 67. The dish rack 20D may be configured to hold multiple rows of glasses 74, and the illustrated embodiment includes a first row of multiple glasses 74 supported by the plurality of one side of the opposing inclined portions 67 and a second row of multiple glasses 74 supported by the plurality of the

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other side of the opposing inclined portions 67. The inclined portions 67 may be configured to best hold a specific type of glass, such as the wine glasses in the first row, or may be configured to more generically hold multiple types of glasses, such as the wine glasses and the tall tumblers in the second row. The glass rack 20D may further be configured to automatically pivot each glass to a desired position.

[0037] The flat central portions 65 provide an area between the first and second rows defined by the inclined portions 67 to define a third row to provide a location to place additional items to be cleaned such as glasses, cutlery, cooking utensils, dishes, plates, pots, bowls, pans, lids, containers, glassware, and silverware. The items to be cleaned in the third row are supported by the adjacent flat central portions 65 of the bottom walls 66D. The rack can also be used to wash items other than glasses by placing the items on surfaces 67.

[0038] Optionally, the dish rack 20D may be equipped with the rack spray assembly 32D adapted to provide treating liquid to the interior of the glasses 74. The rack spray assembly 32D may include a first spray tube 90D and a second spray tube 104D similar to the spray assembly 32A illustrated in Figure 5. The first and second spray tubes 90D, 104D are located under the curved spray tube mounting portion 63 (Figure 8) on opposing sides of the flat central portions 65 between first and second rows of glasses to spray treating liquid into the glasses 74 in these two rows. Each of the spray tubes 90D, 104D includes a single row of spray nozzles 92A, 106D, and the spray tubes 90D, 104D may rotate about their respective longitudinal axes such that the spray nozzles 92D, 104D may spray treating liquid in the direction of the flat central portions 65. By rotating the spray tubes 90D, 104D, the treating fluid may be sprayed in multiple spray angles and trajectories. Optionally, the spray tubes 90D, 104D may include a plurality of rows of the spray nozzles 92D, 106D, or the spray nozzles 92D, 106D may have an arrangement other than in rows. Alternatively, the spray tubes 90D, 104D may be stationary with multiple sets of spray nozzles, as in the previous embodiment, or another type of sprayer. The spray tubes 90D, 104D may be fluidly coupled by a manifold 108D that includes the connector 96D for docking with the receiver 98 in the tub. Alternatively, each of the spray tubes 90D, 104D may independently dock with a corresponding receiver in the tub.

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[0039] The dish rack 20 according to the different embodiments of the invention may be modified to accommodate any type or arrangement of glasses. Such modifications may include, for example, employing multiple sprayers of the same type or different types and rearranging the glass supports and/or the sprayer(s). While numerous variations of the glasses dish rack 20 are feasible, exemplary alternative embodiments of the glasses dish rack are illustrated in Figures 5, 6, 8 and 9. In the following description of the alternative embodiments, elements similar to those of previous embodiments are identified with the same reference numeral bearing a letter, *e.g.*, 20A, 20B, etc.

[0040] Other modifications may be made to the glasses dish rack and to the arrangement of the glasses dish rack 20 in the dishwasher 10. For example, the glasses dish rack 20 may be arranged at the uppermost position in the dishwasher tub 14, as shown in Figure 1, or in other positions, examples of which include below the uppermost dish rack (*i.e.*, as a middle dish rack) and as the lowermost dish rack. Additionally, more than one of the glasses dish rack 20 may be arranged in the tub 14. For example, one or more of the conventional dish racks 22, 24 may be removed and replaced with multiple glasses dish racks 20 in a stacked configuration. The dishwasher 10 may be equipped with the appropriate structure (*e.g.*, multiple receivers 98) to allow a user to swap one or more of the conventional dish racks 22, 24 for multiple glasses dish racks 20 when desired, such as when the user has a large amount of glasses to treat compared to other dishes commonly placed in the conventional dish racks 22, 24. In such a construction, the receivers that are not used when the conventional dish racks 22, 24 are employed can be configured to selectively close when not coupled with the rack spray assembly 32. When multiple glasses racks 20 are used with one of the conventional dish racks 22, 24 at the same time, the multiple glasses racks 20 may be stacked above or below the one of the conventional dish racks 22, 24. If the dishwasher is sufficiently tall, multiple glasses racks 20 may be used in combination with multiple conventional dish racks, and numerous configurations of the dish racks are feasible.

[0041] In another embodiment, the glasses dish rack 20 may include an air dispenser operably coupled with the air supply system so as to deliver heated or non-heated air to the glasses for drying and/or cooling the glasses. The air dispenser may be a tube with nozzles, similar to the

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exemplary rack spray assemblies described above, or may have any other suitable configuration. Optionally, air may be supplied through the spray system, either through the same conduits and nozzles that supply liquid or through additional conduits and nozzles integrated with the spray system. Further, the air dispenser may be mounted to the glasses dish rack 20 for movement therewith and dock with appropriate components of the air supply system when the glasses dish rack 20 is in its most rearward position in the tub 14, or the air dispenser may be mounted to tub 14. If the glasses dish rack 20 includes the air dispenser, then the glasses 72, 74 may be oriented at an angle closer to the horizontal, at the horizontal, or possibly even below the horizontal because gravity flow of the liquid from the glasses 72, 74 is no longer required or at least would not be the only mechanism for drying the glasses 72, 74.

[0042] The rack spray assembly 32 has been shown and described as having stationary and rotating spray tubes with spray nozzles, and other numbers of spray tubes, such as up to five spray tubes, or other types of sprayers are acceptable for use with the rack spray assembly 32. Examples of other types of sprayers include, but are not limited to, rotating spray arms, individual spray nozzles, stationary spray heads with multiple spray nozzles, spray discs, flexible spray tubes, translating front to back sprayers, etc.

[0043] The glasses dish rack 20 may also be modified to hold other types of dishes, such as utensils. As an example, the glasses dish rack 20 may be configured by the user, depending on the user's needs, to hold glasses only, glasses and utensils or other types of dishes, or only utensils and other types of dishes. Further, the glass supports 70 and/or other supporting structure may be modular and/or replaceable such that the user can configure the glasses dish rack 20 to hold a particular type of glasses, if desired. The glass supports 70 and/or other supporting structure may be removable and replaced with alternative glass supports and/or other supporting structure, and the glass supports 70 and/or other supporting structure may be converted to an alternative configuration.

[0044] While the invention has been specifically described in connection with certain specific embodiments thereof, it is to be understood that this is by way of illustration and not of limitation, and the scope of the appended claims should be construed as broadly as the prior art will permit.

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Electronic Patent Application Fee Transmittal

Application Number:	
Filing Date:	
Title of Invention:	GLASSES RACK FOR DISHWASHER
First Named Inventor/Applicant Name:	Barry E. Tuller
Filer:	Patrick Joseph Burns/Johanne Hrycuna
Attorney Docket Number:	SUB-05031-US-CNT2

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
UTILITY APPLICATION FILING	1011	1	300	300
UTILITY SEARCH FEE	1111	1	660	660
UTILITY EXAMINATION FEE	1311	1	760	760
Pages:				
Claims:				
CLAIMS IN EXCESS OF 20	1202	6	100	600
Miscellaneous-Filing:				
Petition:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		**2320**

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EFS ID:	32210689
Application Number:	15941761
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Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Application Data Sheet	G1186524.PDF	1793688 431034bba48df796a5beedd17792ba2fa191a16c	no	10
Warnings:					
Information:					
2	Drawings-only black and white line drawings	G1206750.PDF	136036 328adb63392f4ea55fadab20af91f5cb0375346e	no	7
Warnings:					
Information:					
3	Oath or Declaration filed	G1206765.PDF	2588746 e12c79fbdbf2adfbf878f40a6b8e9f2ed04d94c1	no	7
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5	Transmittal Letter	G1206761.PDF	85619 7d7c6e764d6192f35df6a9ec761590fc60d49816	no	1
Warnings:					
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6	Information Disclosure Statement (IDS) Form (SB08)	G1206754.PDF	1007736 2131bfbe0a36d0b61e123255c31a0032877b77a9	no	6
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7		G1206788.PDF	186107 7e4132913cded9f73ebaa8f663248739f526d6e0	yes	18

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Document Description	**Start**	**End**
Abstract	18	18
Claims	15	17
Specification	1	14

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8	Fee Worksheet (SB06)	fee-info.pdf	36704 2f3d4df7e058c6efc6ca99da8158192963790e21	no	2

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	SUB-05031-US-CNT2
	Application Number	
Title of Invention	GLASSES RACK FOR DISHWASHER	

The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76.
This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.

Secrecy Order 37 CFR 5.2:

☐ Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.)

Inventor Information:

Inventor 1 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Barry	E.	Tuller	

Residence Information (Select One) ● US Residency Non US Residency Active US Military Service

City	Stevensville	State/Province	MI	Country of Residence	US

Mailing Address of Inventor:

Address 1	2000 NORTH M-63		
Address 2			
City	Benton Harbor	State/Province	MI
Postal Code	49022	Country	US

Inventor 2 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Steven	B.	Balinski	

Residence Information (Select One) ◉ US Residency Non US Residency Active US Military Service

City	Saint Joseph	State/Province	MI	Country of Residence	US

Mailing Address of Inventor:

Address 1	2000 North M-63		
Address 2			
City	Benton Harbor	State/Province	MI
Postal Code	49022	Country	US

Inventor 3 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	David	Jason	Brightbill	

Residence Information (Select One) ◉ US Residency Non US Residency Active US Military Service

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	SUB-05031-US-CNT2
	Application Number	
Title of Invention	GLASSES RACK FOR DISHWASHER	

City	Benton Harbor	State/Province	MI	Country of Residence	US

Mailing Address of Inventor:

Address 1	2000 North M-63
Address 2	
City	Benton Harbor
State/Province	MI
Postal Code	49022
Country	US

Inventor 4 — Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Frederick	Thomas	Roderick	

Residence Information (Select One) ◉ US Residency ○ Non US Residency ○ Active US Military Service

City	Coloma	State/Province	MI	Country of Residence	US

Mailing Address of Inventor:

Address 1	2000 North M-63
Address 2	
City	Benton Harbor
State/Province	MI
Postal Code	49022
Country	US

Inventor 5 — Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Joseph	T.	Ferencevich	

Residence Information (Select One) ◉ US Residency ○ Non US Residency ○ Active US Military Service

City	Saint Joseph	State/Province	MI	Country of Residence	US

Mailing Address of Inventor:

Address 1	2000 North M-63
Address 2	
City	Benton Harbor
State/Province	MI
Postal Code	49022
Country	US

Inventor 6 — Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Ryan	Kevin	Roth	

Residence Information (Select One) ◉ US Residency ○ Non US Residency ○ Active US Military Service

City	Benton Harbor	State/Province	MI	Country of Residence	US

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	Application Number	
Title of Invention	GLASSES RACK FOR DISHWASHER	

Mailing Address of Inventor:

Address 1	2000 North M-63		
Address 2			
City	Benton Harbor	**State/Province**	MI
Postal Code	49022	**Country**	US

Inventor 7 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	William	J.	Snell	

Residence Information (Select One) ◉ US Residency ○ Non US Residency ○ Active US Military Service

City	Elkhart	**State/Province**	IN	**Country of Residence**	US

Mailing Address of Inventor:

Address 1	2000 North M-63		
Address 2			
City	Benton Harbor	**State/Province**	MI
Postal Code	49022	**Country**	US

All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the **Add** button. Add

Correspondence Information:

Enter either Customer Number or complete the Correspondence Information section below.
For further information see 37 CFR 1.33(a).

☐ **An Address is being provided for the correspondence Information of this application.**

Customer Number	130348		
Email Address		Add Email	Remove Email

Application Information:

Title of the Invention	GLASSES RACK FOR DISHWASHER		
Attorney Docket Number	SUB-05031-US-CNT2	**Small Entity Status Claimed**	☐
Application Type	Nonprovisional		
Subject Matter	Utility		
Total Number of Drawing Sheets (if any)	7	**Suggested Figure for Publication (if any)**	

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	Application Number	
Title of Invention	GLASSES RACK FOR DISHWASHER	

Filing By Reference:

Only complete this section when filing an application by reference under 35 U.S.C. 111(c) and 37 CFR 1.57(a). Do not complete this section if application papers including a specification and any drawings are being filed. Any domestic benefit or foreign priority information must be provided in the appropriate section(s) below (i.e., "Domestic Benefit/National Stage Information" and "Foreign Priority Information").

For the purposes of a filing date under 37 CFR 1.53(b), the description and any drawings of the present application are replaced by this reference to the previously filed application, subject to conditions and requirements of 37 CFR 1.57(a).

Application number of the previously filed application	Filing date (YYYY-MM-DD)	Intellectual Property Authority or Country

Publication Information:

☐ Request Early Publication (Fee required at time of Request 37 CFR 1.219)

☐ **Request Not to Publish.** I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application **has not and will not** be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.

Representative Information:

Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32).
Either enter Customer Number or complete the Representative Name section below. If both sections are completed the customer Number will be used for the Representative Information during processing.

Please Select One:	● Customer Number	US Patent Practitioner	○ Limited Recognition (37 CFR 11.9)
Customer Number	130348		

Domestic Benefit/National Stage Information:

This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, 365(c), or 386(c) or indicate National Stage entry from a PCT application. Providing benefit claim information in the Application Data Sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78.
When referring to the current application, please leave the "Application Number" field blank.

Prior Application Status	Pending		Remove
Application Number	Continuity Type	Prior Application Number	Filing or 371(c) Date (YYYY-MM-DD)
	Continuation of	15/416687	2017-01-26

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	SUB-05031-US-CNT2
	Application Number	
Title of Invention	GLASSES RACK FOR DISHWASHER	

Prior Application Status	Abandoned		Remove
Application Number	Continuity Type	Prior Application Number	Filing or 371(c) Date (YYYY-MM-DD)
15/416687	Continuation of	14/620688	2015-02-12
Prior Application Status	Expired		Remove
Application Number	Continuity Type	Prior Application Number	Filing or 371(c) Date (YYYY-MM-DD)
14/620688	Claims benefit of provisional	61/946101	2014-02-28
Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the **Add** button.			Add

Foreign Priority Information:

This section allows for the applicant to claim priority to a foreign application. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55. When priority is claimed to a foreign application that is eligible for retrieval under the priority document exchange program (PDX)[i] the information will be used by the Office to automatically attempt retrieval pursuant to 37 CFR 1.55(i)(1) and (2). Under the PDX program, applicant bears the ultimate responsibility for ensuring that a copy of the foreign application is received by the Office from the participating foreign intellectual property office, or a certified copy of the foreign priority application is filed, within the time period specified in 37 CFR 1.55(g)(1).

			Remove
Application Number	Country[i]	Filing Date (YYYY-MM-DD)	Access Code[i] (if applicable)
Additional Foreign Priority Data may be generated within this form by selecting the **Add** button.			Add

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications

☐ This application (1) claims priority to or the benefit of an application filed before March 16, 2013 and (2) also contains, or contained at any time, a claim to a claimed invention that has an effective filing date on or after March 16, 2013.
NOTE: By providing this statement under 37 CFR 1.55 or 1.78, this application, with a filing date on or after March 16, 2013, will be examined under the first inventor to file provisions of the AIA.

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	Application Number	
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Authorization or Opt-Out of Authorization to Permit Access:

When this Application Data Sheet is properly signed and filed with the application, applicant has provided written authority to permit a participating foreign intellectual property (IP) office access to the instant application-as-filed (see paragraph A in subsection 1 below) and the European Patent Office (EPO) access to any search results from the instant application (see paragraph B in subsection 1 below).

Should applicant choose not to provide an authorization identified in subsection 1 below, applicant **must opt-out** of the authorization by checking the corresponding box A or B or both in subsection 2 below.

NOTE: This section of the Application Data Sheet is **ONLY** reviewed and processed with the **INITIAL** filing of an application. After the initial filing of an application, an Application Data Sheet cannot be used to provide or rescind authorization for access by a foreign IP office(s). Instead, Form PTO/SB/39 or PTO/SB/69 must be used as appropriate.

1. Authorization to Permit Access by a Foreign Intellectual Property Office(s)

A. Priority Document Exchange (PDX) - Unless box A in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the State Intellectual Property Office of the People's Republic of China (SIPO), the World Intellectual Property Organization (WIPO), and any other foreign intellectual property office participating with the USPTO in a bilateral or multilateral priority document exchange agreement in which a foreign application claiming priority to the instant patent application is filed, access to: (1) the instant patent application-as-filed and its related bibliographic data, (2) any foreign or domestic application to which priority or benefit is claimed by the instant application and its related bibliographic data, and (3) the date of filing of this Authorization. See 37 CFR 1.14(h)(1).

B. Search Results from U.S. Application to EPO - Unless box B in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the EPO access to the bibliographic data and search results from the instant patent application when a European patent application claiming priority to the instant patent application is filed. See 37 CFR 1.14(h)(2).

The applicant is reminded that the EPO's Rule 141(1) EPC (European Patent Convention) requires applicants to submit a copy of search results from the instant application without delay in a European patent application that claims priority to the instant application.

2. Opt-Out of Authorizations to Permit Access by a Foreign Intellectual Property Office(s)

☐ A. Applicant **DOES NOT** authorize the USPTO to permit a participating foreign IP office access to the instant application-as-filed. If this box is checked, the USPTO will not be providing a participating foreign IP office with any documents and information identified in subsection 1A above.

☐ B. Applicant **DOES NOT** authorize the USPTO to transmit to the EPO any search results from the instant patent application. If this box is checked, the USPTO will not be providing the EPO with search results from the instant application.

NOTE: Once the application has published or is otherwise publicly available, the USPTO may provide access to the application in accordance with 37 CFR 1.14.

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	SUB-05031-US-CNT2
	Application Number	
Title of Invention	GLASSES RACK FOR DISHWASHER	

Applicant Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

Applicant 1 — Remove

If the applicant is the inventor (or the remaining joint inventor or inventors under 37 CFR 1.45), this section should not be completed. The information to be provided in this section is the name and address of the legal representative who is the applicant under 37 CFR 1.43; or the name and address of the assignee, person to whom the inventor is under an obligation to assign the invention, or person who otherwise shows sufficient proprietary interest in the matter who is the applicant under 37 CFR 1.46. If the applicant is an applicant under 37 CFR 1.46 (assignee, person to whom the inventor is obligated to assign, or person who otherwise shows sufficient proprietary interest) together with one or more joint inventors, then the joint inventor or inventors who are also the applicant should be identified in this section.

Clear

● Assignee	Legal Representative under 35 U.S.C. 117	Joint Inventor
Person to whom the inventor is obligated to assign.	Person who shows sufficient proprietary interest	

If applicant is the legal representative, indicate the authority to file the patent application, the inventor is:

Name of the Deceased or Legally Incapacitated Inventor:

If the Applicant is an Organization check here. ☒

Organization Name: WHIRLPOOL CORPORATION

Mailing Address Information For Applicant:

Address 1	2000 NORTH M-63		
Address 2			
City	Benton Harbor	**State/Province**	MI
Country	US	Postal Code	49022
Phone Number		Fax Number	
Email Address			

Additional Applicant Data may be generated within this form by selecting the Add button. Add

Assignee Information including Non-Applicant Assignee Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

PTO/AIA/14 (11-15)
Approved for use through 04/30/2017. OMB 0651-0032
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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	SUB-05031-US-CNT2
	Application Number	
Title of Invention	GLASSES RACK FOR DISHWASHER	

Assignee 1

Complete this section if assignee information, including non-applicant assignee information, is desired to be included on the patent application publication. An assignee-applicant identified in the "Applicant Information" section will appear on the patent application publication as an applicant. For an assignee-applicant, complete this section only if identification as an assignee is also desired on the patent application publication.

Remove

If the Assignee or Non-Applicant Assignee is an Organization check here. ☐

Prefix	**Given Name**	Middle Name	**Family Name**	Suffix

Mailing Address Information For Assignee including Non-Applicant Assignee:

Address 1			
Address 2			
City		**State/Province**	
Country i		Postal Code	
Phone Number		Fax Number	
Email Address			

Additional Assignee or Non-Applicant Assignee Data may be generated within this form by selecting the Add button. Add

Signature:

Remove

NOTE: This Application Data Sheet must be signed in accordance with 37 CFR 1.33(b). **However, if this Application Data Sheet is submitted with the INITIAL filing of the application and either box A or B is not checked in subsection 2 of the "Authorization or Opt-Out of Authorization to Permit Access" section, then this form must also be signed in accordance with 37 CFR 1.14(c).**

This Application Data Sheet **must** be signed by a patent practitioner if one or more of the applicants is a **juristic entity** (e.g., corporation or association). If the applicant is two or more joint inventors, this form must be signed by a patent practitioner, **all** joint inventors who are the applicant, or one or more joint inventor-applicants who have been given power of attorney (e.g., see USPTO Form PTO/AIA/81) on behalf of **all** joint inventor-applicants.

See 37 CFR 1.4(d) for the manner of making signatures and certifications.

Signature	/Patrick J Burns/			Date (YYYY-MM-DD)	2018-03-30
First Name	Patrick J.	Last Name	Burns	Registration Number	73,687

Additional Signature may be generated within this form by selecting the Add button. Add

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	SUB-05031-US-CNT2
	Application Number	
Title of Invention	GLASSES RACK FOR DISHWASHER	

This collection of information is required by 37 CFR 1.76. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 23 minutes to complete, including gathering, preparing, and submitting the completed application data sheet form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1 The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3 A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the PatentCooperationTreaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Petitioner Samsung Ex-1004, 0042

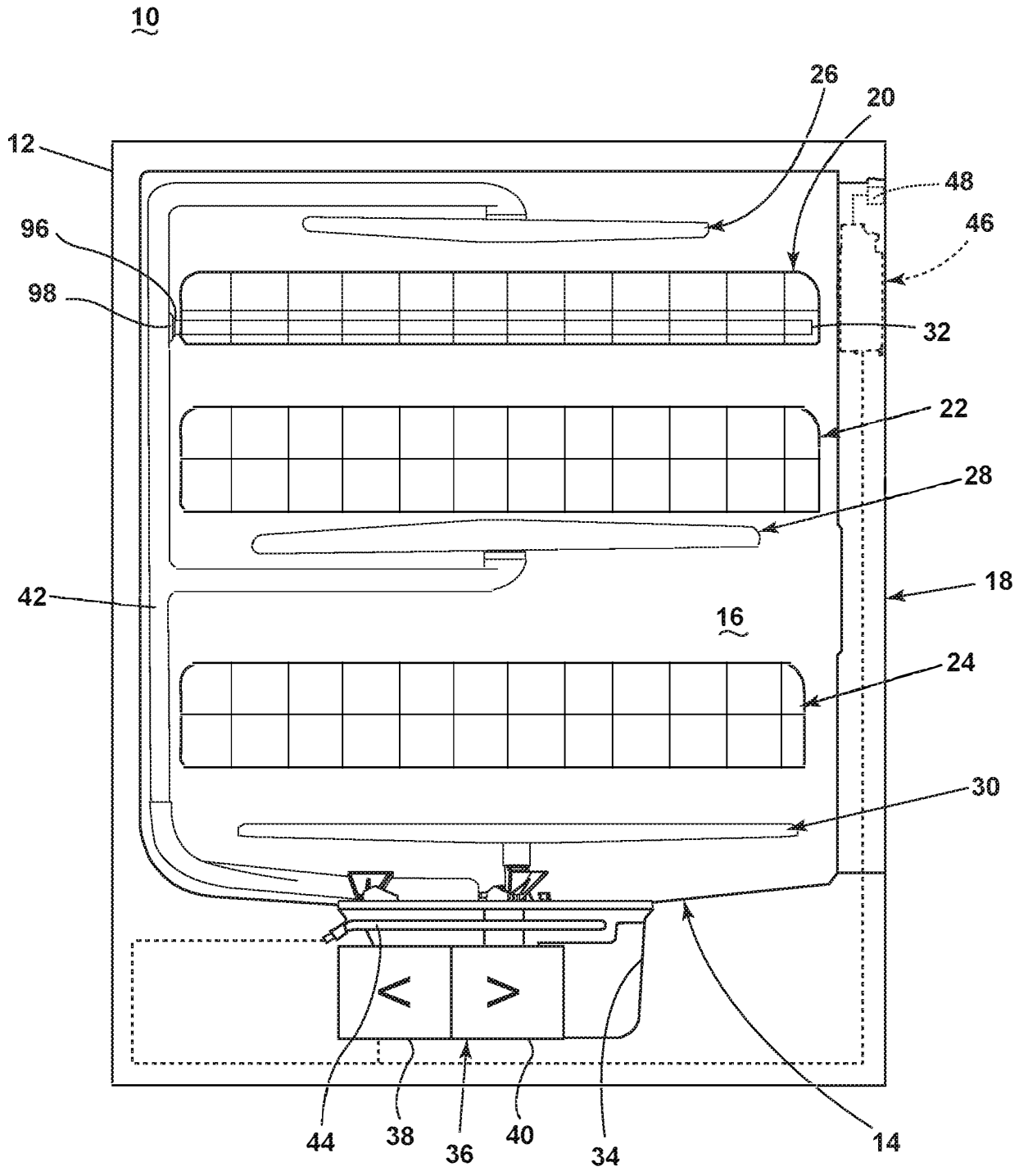


FIG. 1

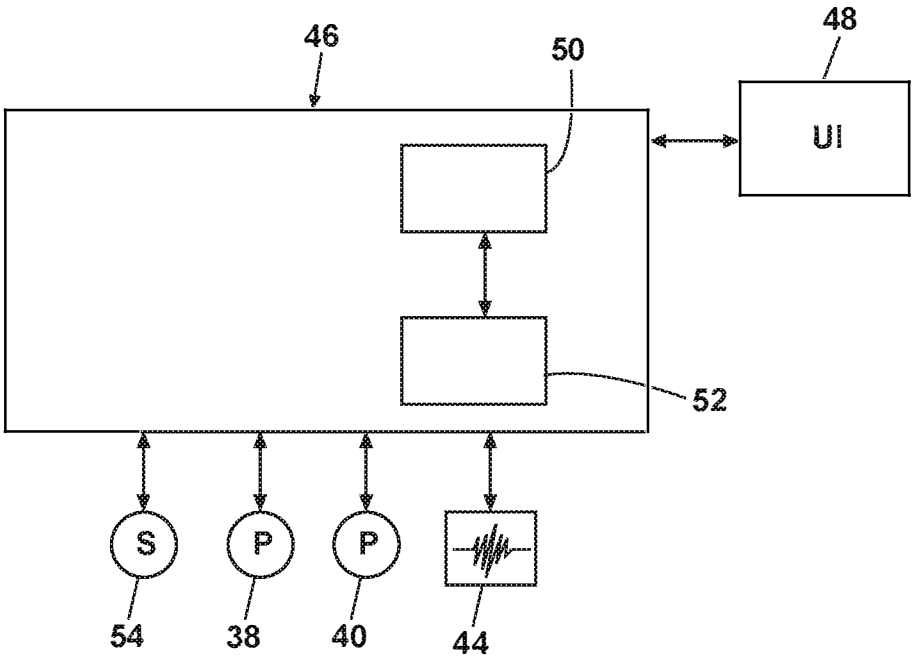


FIG. 2

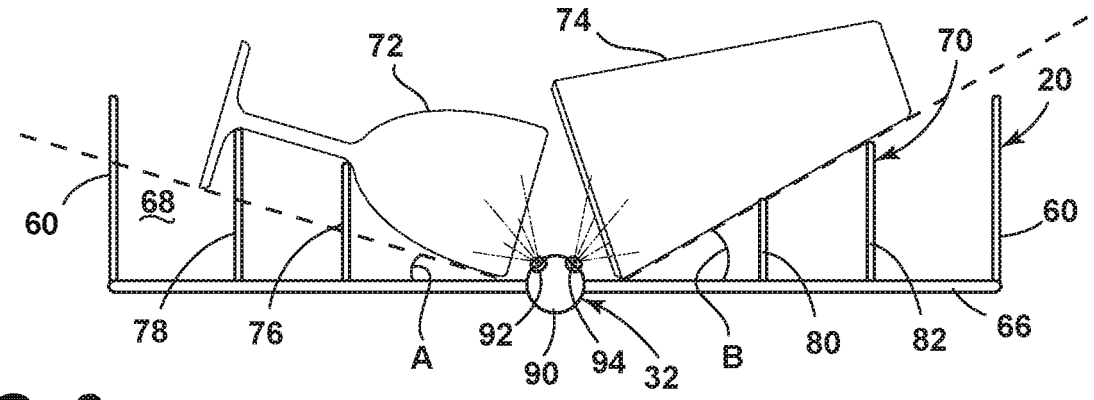

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FIG. 3

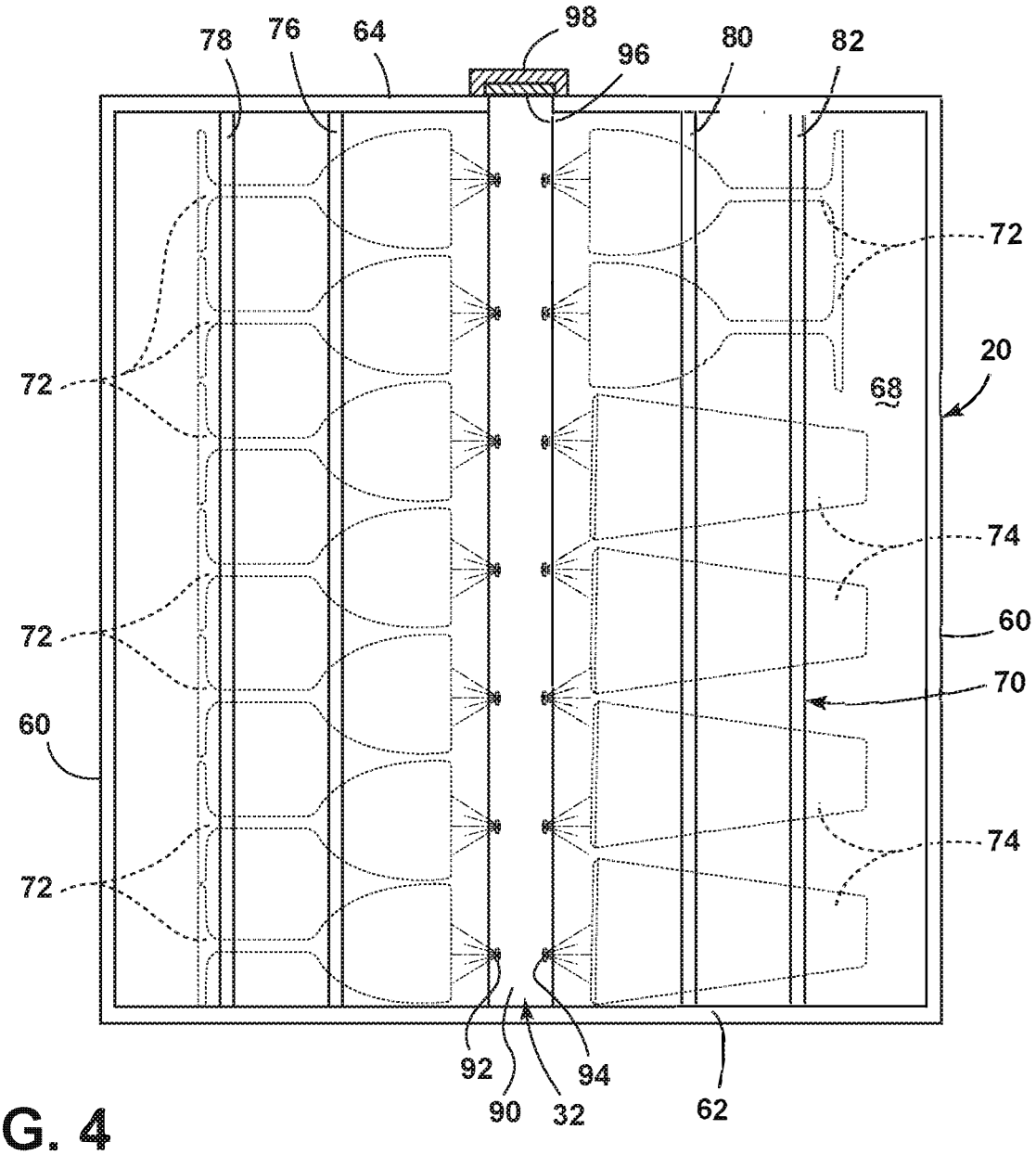

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FIG. 4

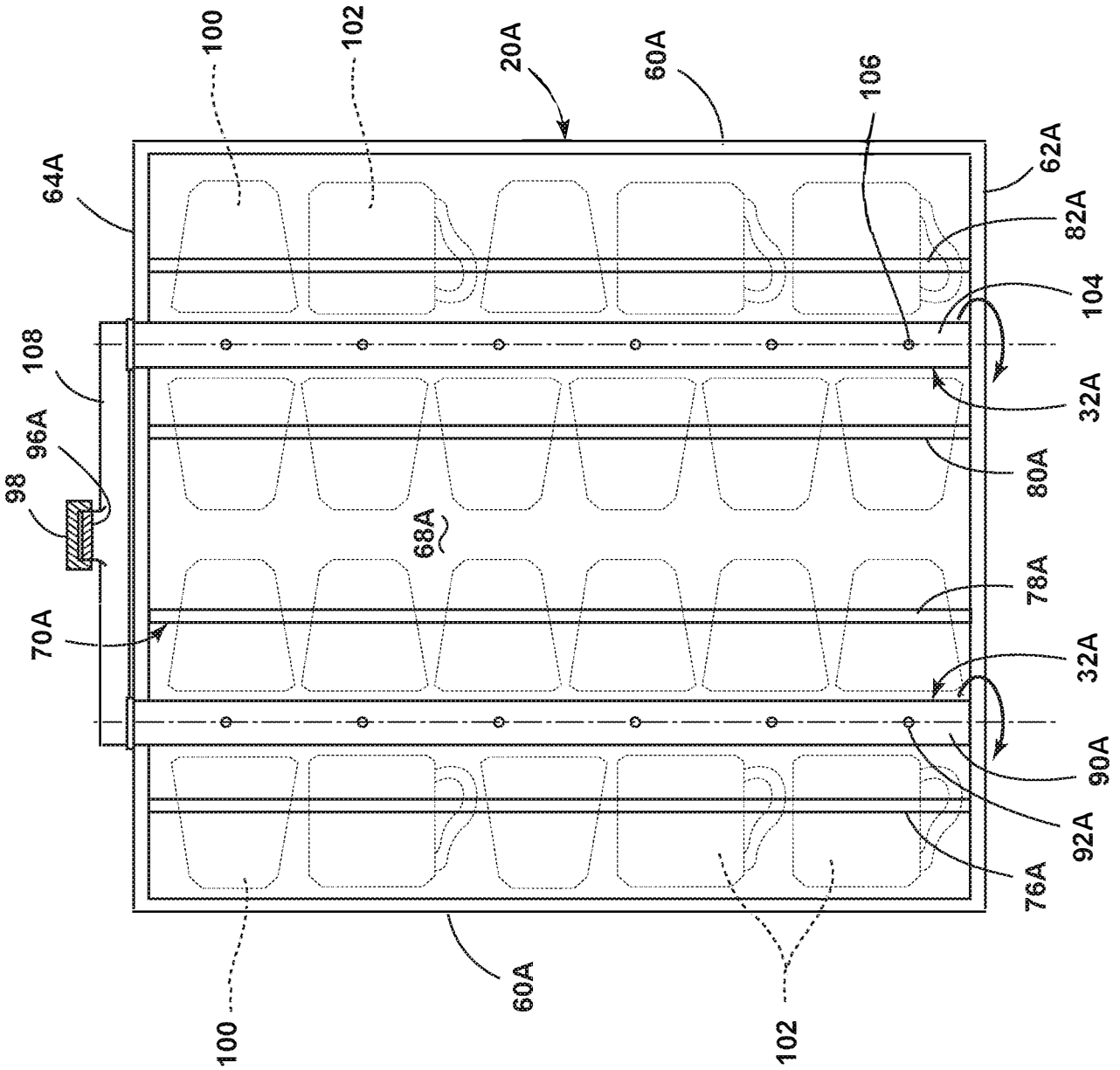


FIG. 5

Petitioner Samsung Ex-1004, 0046

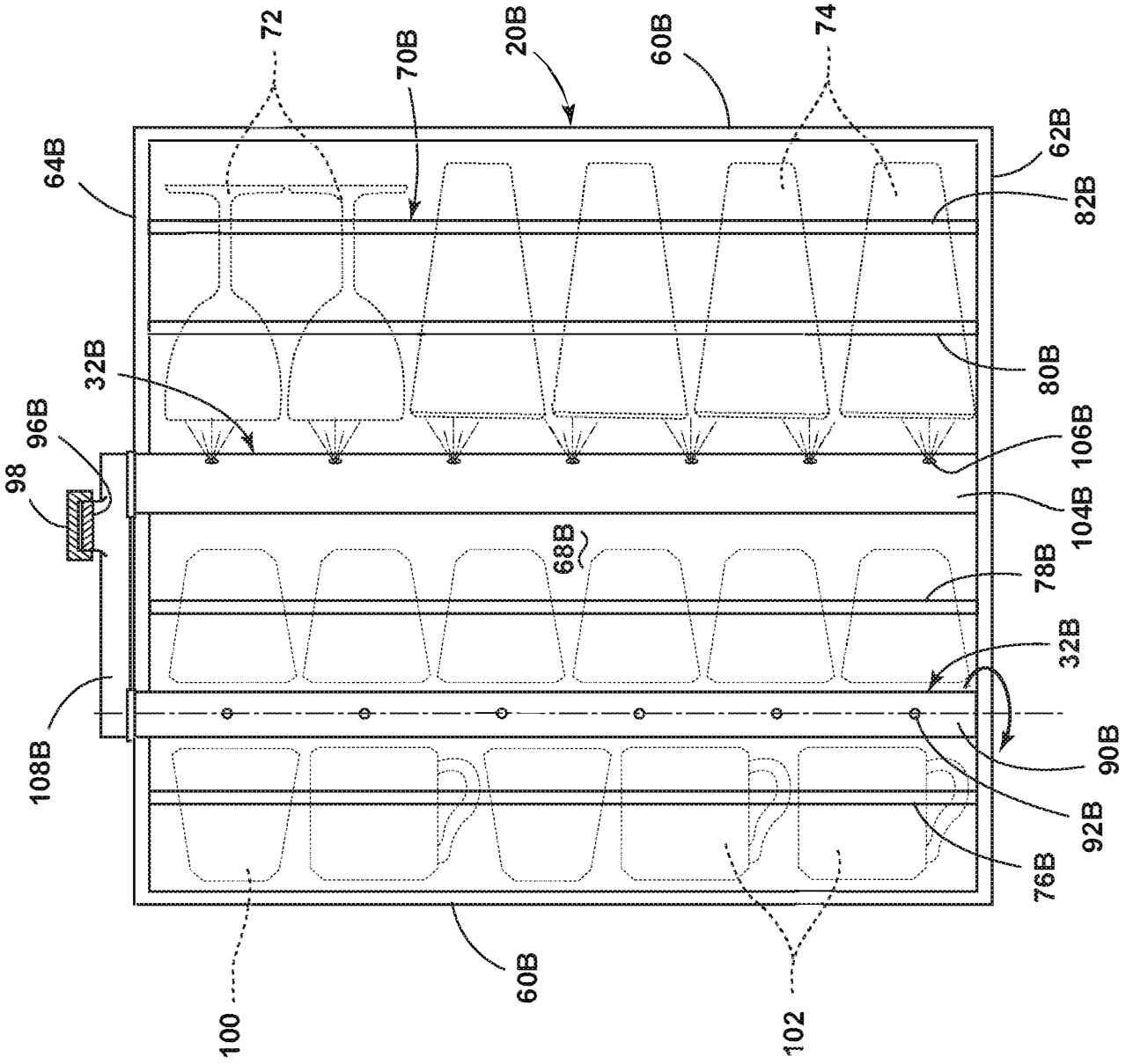

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FIG. 6

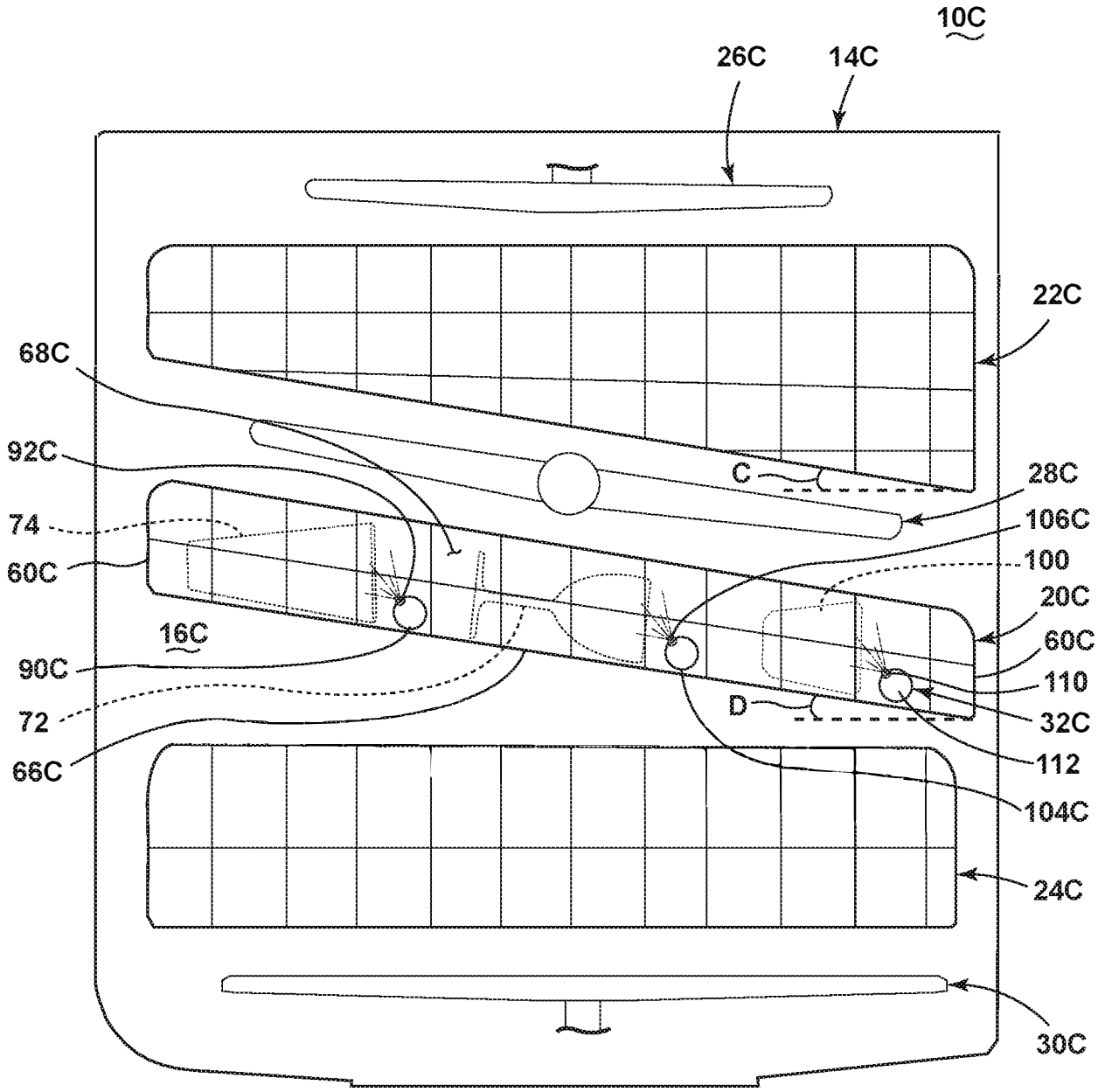

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FIG. 7

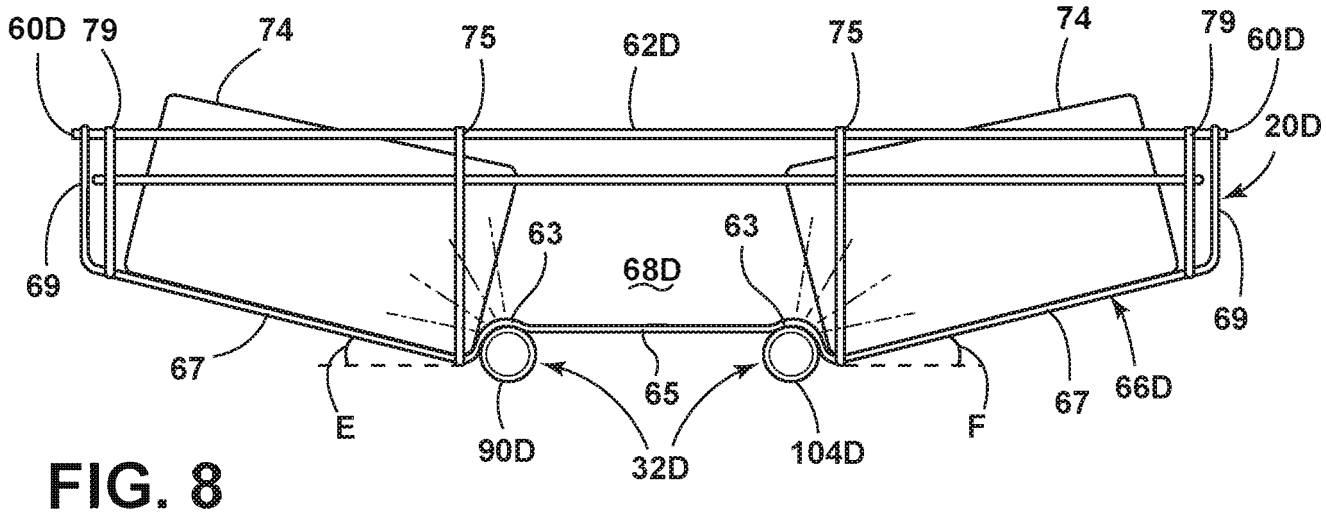

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32D
104D
F

FIG. 8

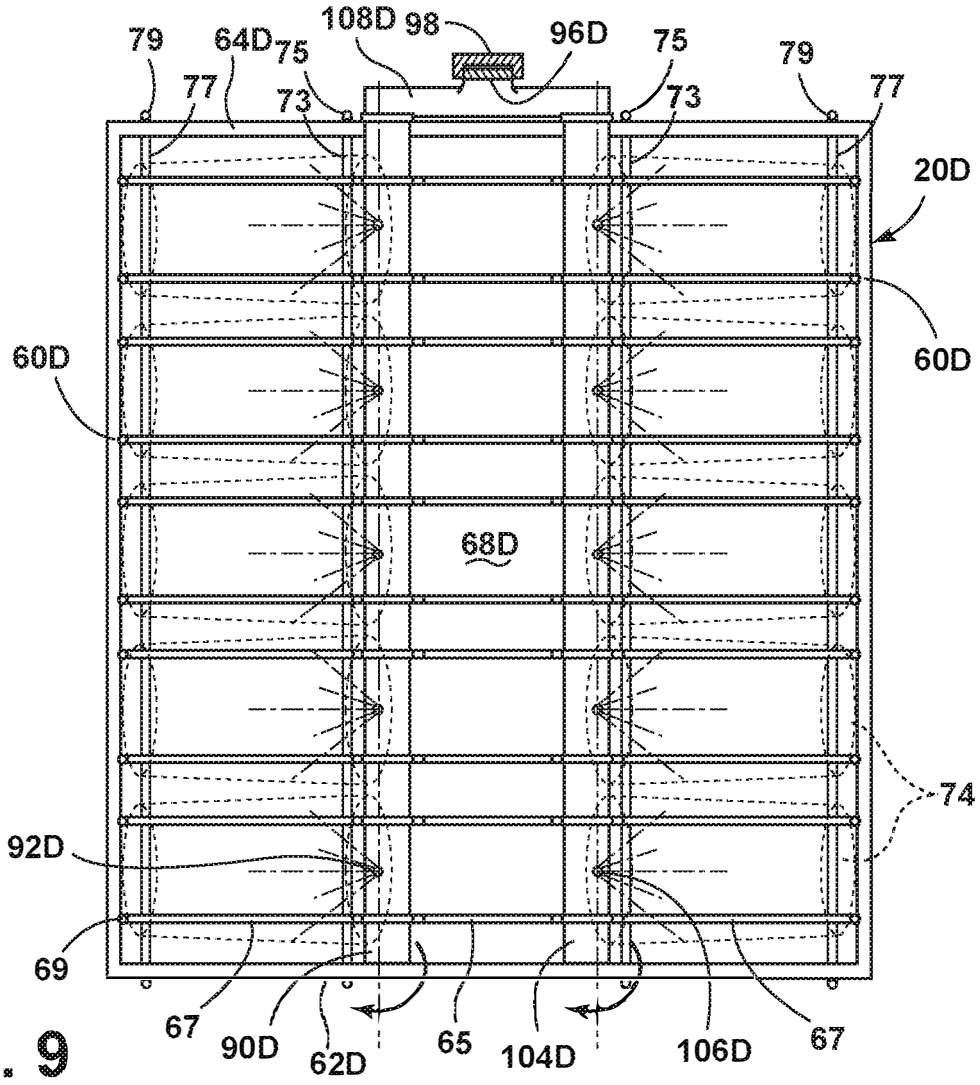

79
64D
75
108D
98
96D
75
79
77
77
73
73
20D
60D
60D
68D
74
92D
69
67
90D
62D
65
104D
106D
67

FIG. 9

COMBINED ASSIGNMENT AND DECLARATION FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET

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Title of Invention	GLASSES RACK FOR DISHWASHER

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LEGAL NAME OF INVENTOR

Inventor: Barry E. Tuller Signature: Barry E Tuller

Date: 3-29-18

Atty Docket: SUB-05031-US-CNT2

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LEGAL NAME OF INVENTOR

Inventor: **Steven B. Balinski** Signature: _____

Date: 2-7-18

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LEGAL NAME OF INVENTOR

Inventor: David Jason Brightbill Signature: David Jason Brightbill

Date: 3-2-2018

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LEGAL NAME OF INVENTOR

Inventor: **Frederick Thomas Roderick** Signature: _____

Date: 3/20/14

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LEGAL NAME OF INVENTOR

Inventor: Joseph T. Ferencevich Signature: Joseph T. Ferencevich

Date: 15 MAR 18

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LEGAL NAME OF INVENTOR

Inventor: **Ryan Kevin Roth** Signature: 

Date: 3/15/2013

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LEGAL NAME OF INVENTOR

Inventor: **William J. Snell** Signature: William J Snell

Date: 28-FEB-2018

PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number: 15/941,761

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY FEE($)
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	300
SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	660
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	760
TOTAL CLAIMS (37 CFR 1.16(i))	26 minus 20 =	* 6			OR	x 100 =	600
INDEPENDENT CLAIMS (37 CFR 1.16(h))	2 minus 3 =	*				x 460 =	0.00
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						0.00
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							0.00
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	2320

APPLICATION AS AMENDED - PART II

AMENDMENT A

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY ADDITIONAL FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE($)
Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
Independent (37CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
Application Size Fee (37 CFR 1.16(s))									
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

AMENDMENT B

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE($)	ADDITIONAL FEE($)		RATE($)	ADDITIONAL FEE($)
Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
Independent (37CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
Application Size Fee (37 CFR 1.16(s))									
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.

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www.uspto.gov

APPLICATION NUMBER	FILING or 371(c) DATE	GRPART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
15/941,761	03/30/2018	1711	2320	SUB-05031-US-CNT2	26	2

CONFIRMATION NO. 4804

130348
Whirlpool Corporation / McGarry Bair PC
2000 North M63
Benton Harbor, MI 49022

FILING RECEIPT

OC000000099167038

Date Mailed: 05/01/2018

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

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Domestic Priority data as claimed by applicant

This application is a CON of 15/416,687 01/26/2017
which is a CON of 14/620,688 02/12/2015 ABN
which claims benefit of 61/946,101 02/28/2014

Foreign Applications for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see http://www.uspto.gov for more information.) - None.
Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.

Permission to Access Application via Priority Document Exchange: Yes

Permission to Access Search Results: Yes

Petitioner Samsung Ex-1004, 0058

Applicant may provide or rescind an authorization for access using Form PTO/SB/39 or Form PTO/SB/69 as appropriate.

If Required, Foreign Filing License Granted: 04/25/2018

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 15/941,761**

Projected Publication Date: 08/09/2018

Non-Publication Request: No

Early Publication Request: No

Title

GLASSES RACK FOR DISHWASHER

Preliminary Class

134

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No

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Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/941,761	03/30/2018	Barry E. Tuller	SUB-05031-US-CNT2	4804

130348 7590 06/15/2018

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UNITED STATES OF AMERICA

EXAMINER
BUCCI, THOMAS

ART UNIT	PAPER NUMBER
1711	

NOTIFICATION DATE	DELIVERY MODE
06/15/2018	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Petitioner Samsung Ex-1004, 0062

Office Action Summary	Application No. 15/941,761	Applicant(s) Tuller et al.	
	Examiner THOMAS BUCCI	Art Unit 1711	AIA Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☑ Responsive to communication(s) filed on 3/30/2018.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL.** 2b) ☑ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5) ☑ Claim(s) 1-26 is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6) ☐ Claim(s) _____ is/are allowed.

7) ☑ Claim(s) 1-26 is/are rejected.

8) ☐ Claim(s) _____ is/are objected to.

9) ☐ Claim(s) _____ are subject to restriction and/or election requirement

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to **PPHfeedback@uspto.gov.**

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☑ The drawing(s) filed on 3/30/2018 is/are: a)☐ accepted or b)☑ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☑ Notice of References Cited (PTO-892)

2) ☑ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date 3/30/2018.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date ____.

4) ☐ Other: ____.

Petitioner Samsung Ex-1004, 0063

DETAILED ACTION

Notice of Pre-AIA or AIA Status

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:

[Fig 5]: **60A, 62A, 64A, 68A;**

[Fig 6]: **32B, 60B, 62B, 64B, 70B, 76B, 78B, 80B, 82B, 92B, 106B;**

[Fig 7]: **10C, 24C, 26C, 28C, 30C, 68C;**

[Fig 9]: **106D**.

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "**bottom wall *tiered to form multiple levels***" [claim 1] must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "**20**" has been used to designate both "**dish rack**" and "**glasses rack"**. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the

immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

5. The following is a quotation of 35 U.S.C. 112(b):

> (b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

> The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:
> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. **Claims 24-26 are rejected under 35 U.S.C. 112(b)** or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

Claim 24 recites the limitation "the flat" in line 1. There is insufficient antecedent basis for this limitation in the claim. For the purposes of examination, Examiner has interpreted said limitation as “the flat portion”.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having

ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1-10 are rejected under 35 U.S.C. 103** as being unpatentable over US Pub. 2003/0226580 to Welch ("Welch") in view of US Pat. 4,064,887 to Geiger et al. ("Geiger").

Regarding claim 1,

Welch discloses a dishwasher (10) [Fig. 1; ¶0015] comprising:

a tub (12) defining a treating chamber receiving dishes for treatment [Fig. 1; ¶0015];

a spray system (32) providing treating liquid to the treating chamber [Fig. 4; ¶0017];

a first dish rack (18) located in the tub and having a bottom wall tiered to form multiple levels defining an effective inclination angle for the bottom wall [Fig. 1, 4; ¶0019]; and

a second dish rack (16) located below the first dish rack and having a bottom wall inclined at an angle matching the effective inclination angle for the first dish rack bottom wall [Fig. 1, 4; ¶0019].

Welch does not teach that bottom walls of the first and second dish racks are parallel. Rather, the first and second dish racks are mirror images of one another, wherein the configurations are similar, but are inclined in opposite directions. However, it would have been obvious for a person having ordinary skill in the art at time of invention to modify the shape of the second dish rack such that it resemble (duplicate) the first rack in order to provide for a larger minimum clearance between the first and second racks that allows larger items to fit at the shallow portion of the second rack

(right-hand side, laterally) [see Fig. 4], since it has been held that a change in shape was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the claimed configuration was significant . *In re Dailey,* 357 F.2d 669, 149 USPQ 47 (CCPA 1966), see MPEP 2144.04 (IV)(B). Additionally, it has been held that mere duplication of essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.,* 193 USPQ 8, see MPEP 2144.04 (VI)(B).

Welch teaches that the second dish rack (16) has "a *sloped or stepped* bottom portion" (52), wherein Figure 1 illustrates said second dish rack (16) accommodating a plate on an inclined, non-tiered left portion of the bottom wall [Fig. 1; ¶0019]. Welch does not explicitly teach that said second dish rack has "a *non-tiered* bottom wall". However it is old and well-known in the art to utilize dish racks having a non-tiered bottom wall. For example, Geiger teaches a similar dishwasher comprising a dish rack (25) having a non-tiered bottom wall inclined at an angle [see Fig. 12; col. 3, lines 48-68]. Therefore it would have been obvious to one having ordinary skill in the art at the time of filing to utilize a non-tiered bottom wall for the second dish rack (16) as taught by Geiger in order to predictably receive and support items to be washed [Geiger: Fig. 12; col. 3, lines 48-68]. Furthermore, it also would have been obvious for a person having ordinary skill in the art at time of invention to modify the tiered right side of the second dish rack to resemble the non-tiered left side of the second dish rack since it has been held that a change in shape was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the claimed

configuration was significant. *In re Dailey,* 357 F.2d 669, 149 USPQ 47 (CCPA 1966) (see MPEP 2144.04).

Regarding claim 2,

Welch in view of Geiger discloses the dishwasher according to claim 1, wherein it is noted that the recitation "wherein the second dish rack is configured to hold glasses at an incline angled less than about 45 degrees relative to horizontal" is a statement of intended use which does not patentably distinguish over the cited prior art since Welch meets all the structural elements of the claim(s) and is capable of said intended use if so desired. See MPEP 2114. Furthermore, it can be seen from Figures 1-5 of Welch that the second dish rack (16) is capable of holding glasses at an incline angled less than 45 degrees relative to horizontal [Welch: Fig. 1, 4; ¶0019-¶0020].

Regarding claim 3,

Welch in view of Geiger discloses the dishwasher according to claim 2, wherein Welch teaches that the spray system comprises a sprayer (36) mounted to the second dish rack and positioned to spray treating liquid into the interior of the glasses [Fig. 4; ¶0017].

Regarding claim 4,

Welch in view of Geiger discloses the dishwasher according to claim 3, wherein Welch teaches that the second dish rack is slidably mounted to the tub, the spray system further comprises a supply conduit (32) located in the tub, and the sprayer (36) selectively docks (48) with the supply conduit during sliding movement of the second dish rack [Fig. 4; ¶0017, ¶0020].

Regarding claim 5,

Welch in view of Geiger discloses the dishwasher according to claim 2, wherein it is noted that the recitation "wherein the inclined angle of the glasses is about 15 degrees" is a statement of intended use which does not patentably distinguish over the cited prior art since Welch meets all the structural elements of the claim(s) and is capable of said intended use if so desired. See MPEP 2114. It is fundamental that an apparatus claim defines the structure of the invention and not how the structure is used in a process, or what materials the structure houses in carrying out the process. *Ex parte Masham*, 2 USPQ2d 1647, 1648 (BPAI 1987). See also *In re Yanush*, 477 F.2d 958, 959, 177 USPQ 705,706 (CCPA 1973); *In re Finsterwalder*, 436 F.2d 1028, 1032, 168 USPQ 530, 534 (CCPA 1971); *In re Casey*, 370 F.2d 576, 580, 152 USPQ 235,238 (CCPA 1967). As long as the apparatus of Welch is capable of holding glasses at an inclined angle of about 15 degrees, the prior art apparatus meet the requirements of the claimed feature. Given that Welch teaches that the second dish rack is vertically adjustable on both sides of the rack (via 58), Welch is capable of holding glasses at an inclined angle of about 15 degrees [Fig. 4; ¶0020].

Regarding claim 6,

Welch in view of Geiger discloses the dishwasher according to claim 1, wherein Welch teaches that the second dish rack has at least one side wall, extending upwardly from the bottom wall, and terminates in an upper edge [Fig. 4; ¶0019], but does not explicitly teach that the upper edge is inclined at an angle matching the effective inclination angle. However it is old and well-known in the art to utilize dish racks having a side wall, extending upwardly from the non-tiered bottom wall, and terminating in an upper edge inclined at an angle matching the effective inclination angle. For example,

Geiger teaches a similar dishwasher comprising a dish rack (25) having at least one side wall, extending upwardly from the non-tiered bottom wall inclined at an effective angle, and terminating in an upper edge inclined at an angle matching the effective inclination angle [see Fig. 12; col. 3, lines 48-68]. Therefore it would have been obvious to one having ordinary skill in the art at the time of filing to utilize an upper edge inclined at an angle matching the effective inclination angle for the second dish rack, as taught by Geiger, in order to predictably receive and support items to be washed [Geiger: Fig. 12; col. 3, lines 48-68].

Regarding claim 7,

Welch in view of Geiger discloses the dishwasher according to claim 6, wherein Welch teaches a third dish rack (14) located below the second dish rack [Fig. 4; ¶0016].

Regarding claim 8,

Welch in view of Geiger discloses the dishwasher according to claim 7, wherein Welch teaches that the spray system comprises a first sprayer (40) above the first dish rack (18), a second sprayer (38) between the first (18) and second (16) dish racks, and a third sprayer (34) below the third dish rack [Fig. 4; ¶0017].

Regarding claims 9 and 10,

Welch in view of Geiger discloses the dishwasher according to claim 7, wherein Welch teaches the third dish rack (14) has a bottom wall and a side wall terminating in an upper edge, and wherein at least one of the bottom wall or upper edge of the third dish rack is horizontal [Fig. 4; ¶0018].

9. **Claims 11-26 are rejected under 35 U.S.C. 103** as being unpatentable over US Pat. 2,910,207 to Andrew ("Andrew") in view of US Pub. 2003/0192578 to Ochoa et al. ("Ochoa").

Regarding claim 11,

Andrew discloses a dishwasher (10) comprising:

a tub (11) defining a treating chamber receiving dishes for treatment [Fig. 2; col. 2, lines 38-43];

a spray system providing treating liquid to the treating chamber (via spray tube 13) [Fig. 1, 2, 5; col. 2, lines 43-47]; and

a dish rack (14) located in the tub and having a bottom wall, a side wall (at 29) extending upwardly from the bottom wall and terminating in an upper edge, with an angled portion (at 28) formed in the bottom wall [Fig. 4-5; col. 3, lines 7-19]; and

a spray tube (13) extending along the bottom wall and having nozzles emitting spray along the angled portion [Fig. 1, 2, 5; col. 2, lines 43-47; col. 3, lines 57-62].

Andrew does not explicitly teach that said spray tube is *carried* by the bottom wall. However it is old and well-known in the art to utilize such a spray system configuration wherein the spray tube is carried by the bottom wall of a dish rack for selective docking with a supply conduit. For example, Ochoa similarly discloses a dishwasher having a spray system (24) comprising a spray tube (32) that is mounted to a dish rack (via clips 31) such that the spray tube is selectively docked (via 26) with a supply conduit (54) when the rack is in a retracted position [Fig. 2, 11; ¶0029, ¶0034]. Therefore it would have been obvious to one having ordinary skill in the art to modify the spray system configuration of Andrew such that the fixed spray tube configuration is

substituted with a spray tube mounted (via clips) to the bottom wall of the dish rack, as taught by Ochoa, in order to predictably allow for selective docking with the supply conduit when the rack is in a retracted position [Ochoa: Fig. 2, 11; ¶0029, ¶0034].

Regarding claim 12,

Andrew in view of Ochoa discloses the dishwasher of claim 11, wherein Andrew teaches that the dish rack is a low profile dish rack where the length of the angled portion (at 28) is greater than a shortest height of an upstanding portion of the side wall (at 29) [Fig. 5; col. 3, lines 7-19].

Regarding claims 13 and 15,

Andrew in view of Ochoa discloses the dishwasher of claims 11 and 12, wherein Andrew teaches that at least one of the nozzles is located above a portion of the angled portion [Fig. 5; col. 3, lines 57-62].

Regarding claim 14,

Andrew in view of Ochoa discloses the dishwasher of claim 12, wherein Andrew teaches that the shortest height is located along a portion of the side wall transverse to the angled portion [Fig. 5; col. 3, lines 7-19].

Regarding claims 16 and 17,

Andrew in view of Ochoa discloses the dishwasher of claim 12, wherein Andrew teaches that the spray tube is located exteriorly below the bottom wall [Fig. 5; col. 3, lines 57-62].

Regarding claim 18,

Andrew in view of Ochoa discloses the dishwasher of claim 17, wherein Andrew teaches that the spray tube is located within a contoured portion formed in the bottom wall to form a mount for the spray tube [Fig. 5; col. 3, lines 57-62].

Regarding claim 19,

Andrew in view of Ochoa discloses the dishwasher of claim 11, wherein Ochoa teaches that the spray tube is configured to rotate about a longitudinal axis [Fig. 11-12; ¶0029].

Regarding claim 20,

Andrew in view of Ochoa discloses the dishwasher of claim 11, wherein Andrew teaches that the bottom wall defines a flat portion (at 31) and the angled portion terminates at the flat portion [Fig. 5; col. 3, lines 7-12].

Regarding claims 21-23,

Andrew in view of Ochoa discloses the dishwasher of claim 20, wherein Andrew further teaches a second angled portion (at 28) located on an opposite side of the flat portion, wherein the angled portions have the same angle, and wherein the angled portions begin at the side wall and terminate at the flat portion [Fig. 5; col. 3, lines 7-19].

Regarding claim 24,

Andrew in view of Ochoa discloses the dishwasher of claim 23, wherein Andrew teaches that the flat [portion] (at 31) is located above a terminal end of at least one of the angled portions [Fig. 5; col. 3, lines 7-12].

Regarding claim 25,

Andrew in view of Ochoa discloses the dishwasher of claim 24, wherein Andrew teaches that the spray tube is located below the flat portion [Fig. 5; col. 3, lines 57-62].

Regarding claim 26,

Andrew in view of Ochoa discloses the dishwasher of claim 24, wherein Andrew teaches a single spray tube located below the flat portion [Fig. 5; col. 3, lines 57-62], but does not explicitly teach multiple spray tubes located below the flat portion. However Ochoa teaches a spray system comprising multiple spray tubes (32) for enhanced spraying coverage of items to be cleaned positioned within the rack [Fig. 11; ¶0032-¶0034]. Therefore it would have been obvious to one having ordinary skill in the art at the time of invention to further modify the spray system to include multiple spray tubes located below the flat portion for enhanced spraying coverage of items to be cleaned positioned within the rack [Ochoa: ¶0032-¶0034]. Additionally, it would have been obvious to one having ordinary skill in the art at the time of invention to include multiple spray tubes located below the flat portion, since it has been held that mere duplication of essential working parts of a device involves only routine skill in the art. See MPEP 2144.04(VI)(B).

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS BUCCI whose telephone number is (571)270-5406. The examiner can normally be reached on Mon-Fri 8:00 - 5:00.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an

interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at http://www.uspto.gov/interviewpractice.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/THOMAS BUCCI/
Examiner, Art Unit 1711
/DAVID G CORMIER/
Primary Examiner, Art Unit 1711

Notice of References Cited	Application/Control No. 15/941,761	Applicant(s)/Patent Under Reexamination Tuller et al.	
	Examiner THOMAS BUCCI	Art Unit 1711	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-20030226580-A1	12-2003	Welch, Rodney M.	A47L15/50	134/172
*	B	US-4064887-A	12-1977	Geiger; Paul B.	A47L15/23	134/144
*	C	US-2910207-A	10-1959	ANDREW MARGARET J	A47L15/50	134/151
*	D	US-20030192578-A1	10-2003	Ochoa, Orlando P. SR.	A47L15/508	134/176
	E					
	F					
	G					
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	J					
	K					
	L					
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FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15/941,761	Tuller et al.
	Examiner	Art Unit
	THOMAS BUCCI	1711

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

CLAIMS

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	06/11/2018								
	1	✓								
	2	✓								
	3	✓								
	4	✓								
	5	✓								
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	26	✓								

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Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15/941,761	Tuller et al.
	Examiner	Art Unit
	THOMAS BUCCI	1711

CPC - Searched*		
Symbol	Date	Examiner
A47L15/50, A47L15/508, A47L15/23, A47L15/22, A47L15/505	06/11/2018	TB

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner
134	170, 56D, 176, 200, 172, 198, 58D, 135, 179, 57D, 144, 199, 165, 137, 177, 103.2	06/11/2018	TB
211	41.8, 41.9, 41.4, 181.1	06/11/2018	TB

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
Comprehensive search performed in EAST, attached	06/11/2018	TB
Class/subclass search in USPC and CPC	06/11/2018	TB
Inventor search in EAST	06/11/2018	TB
Interference search in EAST	06/11/2018	TB
All IDS references considered	06/11/2018	TB

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner
134	170, 56D, 176, 200, 172, 198, 58D, 135, 179, 57D, 144, 199, 165, 137, 177, 103.2	06/11/2018	TB
211	41.8, 41.9, 41.4, 181.1	06/11/2018	TB

/THOMAS BUCCI/ Examiner, Art Unit 1711	

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Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15/941,761	Tuller et al.
	Examiner	**Art Unit**
	THOMAS BUCCI	1711

/THOMAS BUCCI/ Examiner, Art Unit 1711	

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EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	217	"7594513"	US-PGPUB; USPAT	OR	OFF	2018/06/11 12:08
L2	106	"7594513"	USPAT	OR	OFF	2018/06/11 12:09
S1	1	"14620688"	US-PGPUB; USPAT	OR	OFF	2016/03/14 08:47
S2	11	("20030226580" | "2646809" | "2907470" | "2910207" | "3258127" | "3464566" | "6907998" | "7594513" | "20100051069" | "20130002107" | "20120138106").PN.	US-PGPUB; USPAT	OR	OFF	2016/03/14 09:00
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S4	14	"10332149"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/03/14 09:03
S5	10	"5006715"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/03/14 09:04
S6	86	"5006716"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/03/14 09:04
S7	23	"2594186"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/03/14 09:05
S8	6	"19960496"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2016/03/14 09:06

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S15	2	"20130098406"	US-PGPUB; USPAT	OR	OFF	2016/03/14 14:27
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S17	2	"20130087173"	US-PGPUB; USPAT	OR	OFF	2016/03/14 14:28
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S19	1	"9259138"	US-PGPUB; USPAT	OR	OFF	2016/03/14 14:31
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S22	179	S20 AND ((D06F39/088 OR D06F35/005 OR D06F35/006 OR D06F39/083 OR D06F2204/08 OR D06F2202/08 OR D06F39/08 OR B08B3/02 OR B08B3/04 OR	US-PGPUB; USPAT	OR	OFF	2016/03/14 14:42

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		B08B9/20 OR B08B9/093 OR B08B5/02 OR B08B9/34 OR B08B3/024).CPC.)				
S23	1970	S20 AND ((134/56D OR 134/25.2 OR 134/57D OR 134/58D OR 134/18 OR 134/200 OR 134/198 OR 134/111 OR 134/10 OR 134/115R OR 134/184 OR 134/172 OR 134/179 OR 134/176 OR 134/135 OR 134/99.2 OR 134/108 OR 134/95.3 OR 134/56R OR 134/183 OR 134/137 OR 134/180 OR 134/36 OR 134/178 OR 134/182 OR 134/103.2 OR 134/174 OR 134/72 OR 134/99.1 OR 134/144 OR 134/191 OR 134/166R OR 134/133 OR 134/131 OR 134/165 OR 134/153 OR 134/60 OR 134/170 OR 134/32 OR 134/22.1 OR 134/148 OR 134/103.3 OR 134/151 OR 134/98.1 OR 134/85 OR 134/138 OR 134/88 OR 134/169R OR 134/92 OR 134/167R OR 134/168R OR 134/23 OR 134/117 OR 134/59 OR 134/125 OR 134/129 OR 134/52 OR 134/82).CCLS.)	US-PGPUB; USPAT	OR	OFF	2016/03/14 14:48
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		or WO-2009083576-$).did. or (DE-10332149-$ or DE-19960496-$ or GB-2321590-$).did. or (JP-2002065562-$).did. or (JP-2002065562-$ or DE-10332149-$ or JP-2009005925-$ or JP-2009005930-$ or EP-2594186-$ or DE-19960496-$ or DE-29800479-$).did.				
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S31	9	("2799285" | "3951683" | "3969137").PN. OR ("4134414").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2016/06/11 13:10
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S33	5	"19960496"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/08/20 12:27
S34	24	"2594186"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/08/20 12:28
S35	2	"20030226580"	US-PGPUB; USPAT	OR	OFF	2016/08/20 12:47
S36	4	("2003/0226580").URPN.	USPAT	OR	OFF	2016/08/20 12:48
S37	18	dishwasher and (tine with height)	US-PGPUB; USPAT	OR	ON	2016/08/20 14:40
S38	0	"15416687"	US-PGPUB; USPAT	OR	OFF	2017/05/15 08:27
S39	15	("4134414" | "2646809" | "2907470" | "2910207" | "3258127" | "3464566" | "6907998" | "7594513" | "20030226580" | "20050109378" | "20120292270" | "20130098406" | "20100051069" | "20130002107" | "20120138106").PN.	US-PGPUB; USPAT	OR	OFF	2017/05/15 08:28
S40	6	"19960496"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/15 08:29
S41	17	"2002065562"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/15 08:29
S42	16	"10332149"	US-PGPUB; USPAT;	OR	OFF	2017/05/15 08:30

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S44	27	"2594186"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/15 08:30
S45	86	"5006716"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/15 08:31
S46	2	"20030226580"	US-PGPUB; USPAT	OR	OFF	2017/05/15 09:23
S47	2	"20130098406"	US-PGPUB; USPAT	OR	OFF	2017/05/15 09:46
S48	2	"20050109378"	US-PGPUB; USPAT	OR	OFF	2017/05/15 09:49
S49	103	(US-20150245762-$ or US-20130002107-$ or US-20120138106-$ or US-20100051069-$ or US-20030226580-$ or US-20070246090-$ or US-20120097199-$ or US-20120125383-$ or US-20120138111-$ or US-20130000673-$ or US-20140137909-$ or US-20140137911-$ or US-20150359412-$ or US-20120138100-$ or US-20130087173-$ or US-20130098406-$ or US-20140076363-$ or US-20060144424-$ or US-20120138107-$ or US-20050109378-$ or US-20060108298-$ or US-20060219271-$ or US-20060289038-$ or US-20090065455-$ or US-20110030742-$ or US-20120291827-$).did. or (US-20120292269-$ or US-20120292270-$ or US-20120298155-$ or US-20130104944-$ or US-20130299438-$).did. or (US-7594513-$ or US-6907998-$ or US-3464566-$ or US-3258127-$ or US-2910207-$ or US-2907470-$ or US-2646809-$ or US-8753454-$ or US-9119517-$ or US-9259138-$ or US-5662744-$ or US-6460555-$ or US-D481179-$ or US-D488594-$ or US-8347898-$ or US-4653520-$ or US-4134414-$ or US-3951684-$ or US-3951683-$ or US-3444870-$ or US-8192557-$ or US-7455066-$ or US-7410228-$).did. or (DE-10332149-$ or JP-	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	OFF	2017/10/28 14:15

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S52	307	((211/41.8).CCLS.)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	OFF	2017/10/28 14:18
S53	17	("2003/0205258" | "2004/0020876" | "2004/0079713").URPN.	USPAT	OR	OFF	2017/10/28 14:25
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S58	28	"4064887"	US-PGPUB; USPAT	OR	OFF	2017/12/20 13:13
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		$ or US-20120138107-$ or US-20050109378-$ or US-20060108298-$ or US-20060219271-$ or US-20060289038-$ or US-20090065455-$ or US-20110030742-$ or US-20120291827-$).did. or (US-20120292269-$ or US-20120292270-$ or US-20120298155-$ or US-20130104944-$ or US-20130299438-$ or US-20160095497-$ or US-20160007824-$ or US-20140021149-$ or US-20120293054-$ or US-20120139399-$ or US-20100314977-$ or US-20090090680-$ or US-20080169009-$ or US-20050241686-$ or US-20040108283-$ or US-20040079713-$ or US-20030089672-$ or US-20170135547-$).did. or (US-7594513-$ or US-6907998-$ or US-3464566-$ or US-3258127-$ or US-2910207-$ or US-2907470-$ or US-2646809-$ or US-8753454-$ or US-9119517-$ or US-9259138-$ or US-5662744-$ or US-6460555-$ or US-D481179-$ or US-D488594-$ or US-8347898-$ or US-4653520-$ or US-4134414-$ or US-3951684-$ or US-3951683-$ or US-3444870-$ or US-8192557-$ or US-7455066-$ or US-7410228-$ or US-8701898-$ or US-8567882-$ or US-8534471-$).did. or (US-7445128-$ or US-7418967-$ or US-7032604-$ or US-5918749-$ or US-5657878-$ or US-5205419-$ or US-4064887-$ or US-3752322-$ or US-3303934-$ or US-3288302-$ or US-3269548-$ or US-3126098-$ or US-2739025-$ or US-1562614-$ or US-0372123-$).did. or (DE-10332149-$ or JP-5006715-$ or JP-5006715-$ or JP-5006715-$ or JP-5006716-$ or JP-5006716-$ or JP-5006716-$ or EP-2594186-$ or EP-2754377-$ or DE-19960496-$ or EP-2912983-$ or CA-2071423-$ or CA-2094466-$ or CA-2094466-$ or CA-2353655-$ or CA-2431612-$ or CA-2432235-$ or CA-2444311-$ or CA-2445170-$ or CA-2473527-$ or DE-102010061215-$ or DE-102011054149-$ or DE-102012102184-$ or DE-102013111240-$ or DE-102013111241-$ or EP-2896343-$).did. or (EP-2912983-$ or GB-2321590-$ or WO-2009083576-$ or JP-2594186-$ or JP-2594186-$).did. or (DE-10332149-$ or DE-19960496-$ or GB-2321590-$ or EP-372342-$).did. or (JP-2002065562-$).did. or (JP-2002065562-$ or DE-10332149-$ or JP-2009005925-$ or JP-2009005930-$ or EP-2594186-$ or DE-19960496-$ or DE-29800479-$ or US-8567882-$ or DE-102012102189-$ or US-20120139399-$ or DE-102010043272-$ or DE-102008015713-$ or DE-102004057018-$ or US-20060108298-$ or WO-2006015932-$ or WO-2005107570-$ or WO-03055375-$ or US-4606464-$ or US-4064887-$).did.			
S61	1	"20080156358"	US-PGPUB;	OR	OFF	2018/04/30

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			USPAT			05:44
S62	1	"20150201823"	US-PGPUB; USPAT	OR	OFF	2018/04/30 05:45
S63	6	"2910207"	US-PGPUB; USPAT	OR	OFF	2018/04/30 05:46
S64	53	"3752322"	US-PGPUB; USPAT	OR	OFF	2018/04/30 05:48
S65	2	"20030226580"	US-PGPUB; USPAT	OR	OFF	2018/04/30 10:26
S66	6	"2910207"	US-PGPUB; USPAT	OR	OFF	2018/04/30 10:27
S67	185	(US-20150245762-$ or US-20130002107-$ or US-20120138106-$ or US-20100051069-$ or US-20030226580-$ or US-20070246090-$ or US-20120097199-$ or US-20120125383-$ or US-20120138111-$ or US-20130000673-$ or US-20140137909-$ or US-20140137911-$ or US-20150359412-$ or US-20120138100-$ or US-20130087173-$ or US-20130098406-$ or US-20140076363-$ or US-20060144424-$ or US-20120138107-$ or US-20050109378-$ or US-20060108298-$ or US-20060219271-$ or US-20060289038-$ or US-20090065455-$ or US-20110030742-$ or US-20120291827-$).did. or (US-20120292269-$ or US-20120292270-$ or US-20120298155-$ or US-20130104944-$ or US-20130299438-$ or US-20160095497-$ or US-20160007824-$ or US-20140021149-$ or US-20120293054-$ or US-20120139399-$ or US-20100314977-$ or US-20090090680-$ or US-20080169009-$ or US-20050241686-$ or US-20040108283-$ or US-20040079713-$ or US-20030089672-$ or US-20170135547-$ or US-20080156358-$ or US-20150201823-$).did. or (US-7594513-$ or US-6907998-$ or US-3464566-$ or US-3258127-$ or US-2910207-$ or US-2907470-$ or US-2646809-$ or US-8753454-$ or US-9119517-$ or US-9259138-$ or US-5662744-$ or US-6460555-$ or US-D481179-$ or US-D488594-$ or US-8347898-$ or US-4653520-$ or US-4134414-$ or US-3951684-$ or US-3951683-$ or US-3444870-$ or US-8192557-$ or US-7455066-$ or US-7410228-$ or US-8701898-$ or US-8567882-$ or US-8534471-$).did. or (US-7445128-$ or US-7418967-$ or US-7032604-$ or US-5918749-$ or US-5657878-$ or US-5205419-$ or US-4064887-$ or US-3752322-$ or US-3303934-$ or US-3288302-$ or US-3269548-$ or US-3126098-$ or US-2739025-$ or US-1562614-$ or US-0372123-$ or US-D506855-$ or US-6666220-$ or US-9345382-$ or US-8353412-$ or US-5567029-$ or US-4238035-$ or US-7644826-$ or US-5601195-$ or US-	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	OFF	2018/04/30 11:12

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		8356719-$ or US-8651287-$ or US-8196593-$).did. or (US-6786339-$ or US-7228975-$ or US-7231929-$ or US-8714371-$ or US-7931155-$ or US-D398092-$ or US-D796750-$ or US-5351837-$ or US-8104628-$ or US-5480035-$ or US-4917248-$ or US-6571965-$ or US-4606464-$ or US-9949613-$ or US-5158185-$ or US-8960452-$ or US-5497890-$ or US-6325220-$ or US-6848585-$ or US-7766175-$ or US-7682465-$ or US-9877632-$ or US-9615722-$).did. or (DE-10332149-$ or JP-5006715-$ or JP-5006715-$ or JP-5006715-$ or JP-5006716-$ or JP-5006716-$ or JP-5006716-$ or EP-2594186-$ or EP-2754377-$ or DE-19960496-$ or EP-2912983-$ or CA-2071423-$ or CA-2094466-$ or CA-2094466-$ or CA-2353655-$ or CA-2431612-$ or CA-2432235-$ or CA-2444311-$ or CA-2445170-$ or CA-2473527-$ or DE-102010061215-$ or DE-102011054149-$ or DE-102012102184-$ or DE-102013111240-$ or DE-102013111241-$ or EP-2896343-$).did. or (EP-2912983-$ or GB-2321590-$ or WO-2009083576-$ or JP-2594186-$ or JP-2594186-$).did. or (DE-10332149-$ or DE-19960496-$ or GB-2321590-$ or EP-372342-$).did. or (JP-2002065562-$).did. or (JP-2002065562-$ or DE-10332149-$ or JP-2009005925-$ or JP-2009005930-$ or EP-2594186-$ or DE-19960496-$ or DE-29800479-$ or US-8567882-$ or DE-102012102189-$ or US-20120139399-$ or DE-102010043272-$ or DE-102008015713-$ or DE-102004057018-$ or US-20060108298-$ or WO-2006015932-$ or WO-2005107570-$ or WO-03055375-$ or US-4606464-$ or US-4064887-$).did.				
S68	0	"15941761"	US-PGPUB; USPAT	OR	OFF	2018/06/10 16:19
S69	16	("20030226580" | "20050109378" | "20100051069" | "20120138106" | "20120292270" | "20130002107" | "20130098406" | "2646809" | "2907470" | "2910207" | "3258127" | "3464566" | "4064887" | "4134414" | "6907998" | "7594513").PN.	US-PGPUB; USPAT	OR	OFF	2018/06/10 16:20
S70	6	"19960496"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/06/10 16:20
S71	18	"2002065562"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2018/06/10 16:20

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			IBM_TDB			
S72	16	"10332149"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/06/10 16:21
S73	12	"5006715"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/06/10 16:21
S74	29	"2594186"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/06/10 16:21
S75	88	"5006716"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/06/10 16:22
S76	6	"8287660"	US-PGPUB; USPAT	OR	OFF	2018/06/11 06:13
S77	2	"201600 58264"	US-PGPUB; USPAT	OR	OFF	2018/06/11 07:49
S78	1	"20030192578"	US-PGPUB; USPAT	OR	OFF	2018/06/11 07:50
S79	9	"3051183"	US-PGPUB; USPAT	OR	OFF	2018/06/11 07:50
S80	477	(US-201600 58264-$ or US-200 80163904-$ or US-20140150831-$ or US-20120138106-$ or US-20120097200-$ or US-20120138092-$ or US-20120138096-$ or US-20120138110-$ or US-20120138111-$ or US-20120249467-$ or US-20140251378-$ or US-20150245762-$ or US-20150257623-$ or US-20170055799-$ or US-20170135547-$ or US-20170156563-$ or US-20170172370-$ or US-20170273535-$ or US-20100154846-$ or US-20110197937-$ or US-20110197938-$ or US-20120125381-$ or US-20120125382-$ or US-20030183255-$ or US-20030192578-$ or US-20040069332-$).did. or (US-20050133070-$ or US-20050241680-$ or US-20050241686-$ or US-20070006903-$ or US-20070158472-$ or US-20070235063-$ or US-20070246078-$ or US-20070251553-$ or US-20070289615-$ or US-20080142056-$ or US-20080156358-$ or US-20080169009-$ or US-20080173730-$ or US-20080271765-$ or US-20090159101-$ or US-20090159103-$ or	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2018/06/11 07:53

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		US-20100051071-$ or US-20100101611-$ or US-20100139719-$ or US-20100194254-$ or US-20110030742-$ or US-20110155190-$ or US-20120279530-$ or US-20120285490-$ or US-20120285491-$ or US-20120291827-$ or US-20120325277-$).did. or (US-20130068265-$ or US-20140070025-$ or US-20140137909-$ or US-20140196756-$ or US-20140261584-$ or US-20140345654-$ or US-20150007861-$ or US-20150122298-$ or US-20150136189-$ or US-20150182103-$ or US-20150201823-$ or US-20150230687-$ or US-20150250374-$ or US-20150272421-$ or US-20150366430-$ or US-20160000295-$ or US-20160066765-$ or US-20160106295-$ or US-20160106297-$ or US-20040255992-$ or US-20170135548-$ or US-20040194810-$ or US-20080110480-$ or US-20080110481-$ or US-20030226580-$ or US-20050109378-$ or US-20130098406-$).did. or (US-20030089672-$ or US-20040079713-$ or US-20060219271-$ or US-20100314977-$ or US-20120139399-$ or US-20130104944-$ or US-20140076363-$ or US-20040250837-$ or US-20110203619-$ or US-20120031432-$ or US-20120175431-$ or US-20140373883-$ or US-20150208897-$ or US-20160198927-$ or US-20160316992-$ or US-20170007094-$ or US-20170181600-$ or US-20170188790-$ or US-20170245727-$ or US-20170258290-$ or US-20170265707-$ or US-20170265713-$ or US-20170273534-$ or US-20140332042-$ or US-20090255560-$ or US-20080276975-$).did. or (US-9010345-$ or US-6969029-$ or US-3146953-$ or US-3213866-$ or US-3051183-$ or US-2980120-$ or US-2973907-$ or US-2734520-$ or US-2031816-$ or US-7594513-$ or US-9532699-$ or US-8454762-$ or US-9119517-$ or US-9259138-$ or US-7947132-$ or US-8137479-$ or US-8187390-$ or US-9295368-$ or US-5944037-$ or US-9375128-$ or US-9414736-$ or US-9492055-$ or US-9532701-$ or US-9693672-$ or US-9706896-$ or US-9839340-$).did. or (US-D741556-$ or US-D750854-$ or US-D750855-$ or US-8881748-$ or US-9133574-$ or US-9480389-$ or US-3064664-$ or US-3064665-$ or US-3348775-$ or US-3841342-$ or US-4046261-$ or US-4064887-$ or US-4145002-$ or US-4257559-$ or US-4735222-$ or US-4884585-$ or US-4993444-$ or US-5211190-$ or US-5267582-$ or US-5415350-$ or US-5507877-$ or US-5546968-$ or US-5577665-$ or US-5730370-$ or US-5823211-$ or US-5904166-$ or US-5927616-$).did. or (US-5983908-$ or US-				

		6053185-$ or US-6325220-$ or US-6955179-$ or US-8287660-$ or US-8696827-$ or US-4038103-$ or US-4611759-$ or US-4836230-$ or US-5582742-$ or US-3960328-$ or US-5964232-$ or US-7032604-$ or US-6431188-$ or US-7055537-$ or US-7225818-$ or US-8166983-$ or US-8191560-$ or US-9138126-$ or US-9167953-$ or US-1562614-$ or US-2646809-$ or US-2739025-$ or US-2907470-$ or US-2910207-$ or US-3126098-$ or US-3288302-$).did. or (US-3752322-$ or US-8347898-$ or US-2016880-$ or US-2956572-$ or US-3006557-$ or US-3884263-$ or US-3934822-$ or US-4135532-$ or US-4175575-$ or US-4807654-$ or US-5842492-$ or US-6112754-$ or US-6869029-$ or US-7509963-$ or US-7673639-$ or US-7754024-$ or US-7896977-$ or US-8333207-$ or US-8778094-$ or US-8801863-$ or US-9668635-$ or US-8905053-$ or US-9034114-$ or US-9375127-$ or US-9420938-$ or US-9474430-$ or US-9480386-$).did. or (US-9675232-$ or US-9736123-$ or US-9801523-$ or US-4582259-$ or US-1701066-$ or US-3342421-$ or US-5488965-$ or US-6390106-$ or US-3210010-$ or US-5609174-$ or US-4798017-$ or US-3691577-$ or US-9486819-$ or US-5787910-$ or US-3176697-$ or US-4405087-$ or US-D778667-$ or US-6766864-$ or US-4420005-$ or US-4298015-$ or US-3719323-$ or US-9827600-$ or US-7331356-$ or US-9480385-$ or US-9301670-$ or US-7695571-$ or US-2904265-$).did. or (US-2407533-$).did. or (US-3460548-$ or US-3210010-$ or US-0321025-$ or US-3446219-$ or US-2904265-$ or US-2808842-$ or US-2664902-$ or US-2407533-$ or US-2320133-$).did. or (EP-2454983-$ or EP-3222191-$ or EP-1277430-$ or GB-2322067-$ or KR-20050122359-$ or KR-101248098-$ or EP-3222192-$ or WO-2015000512-$ or EP-1632166-$ or EP-1632166-$ or DE-10039880-$ or EP-1183983-$).did. or (GB-2322067-$).did. or (JP-11253381-$).did. or (EP-2454983-$ or GB-2322067-$ or JP-11253381-$ or DE-202004013786-$ or CN-204467992-$).did.				
S81	247	(US-20160058264-$ or US-20080163904-$ or US-20140150831-$ or US-20120138106-$ or US-20120097200-$ or US-20120138092-$ or US-20120138096-$ or US-20120138110-$ or US-20120138111-$ or US-20120249467-$ or US-20140251378-$ or US-20150245762-$ or US-20150257623-$ or US-20170055799-$ or US-20170135547-$ or US-20170156563-$	US-PGPUB; USPAT	OR	OFF	2018/06/11 07:53

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		or US-20170172370-$ or US-20170273535-$ or US-20100154846-$ or US-20110197937-$ or US-20110197938-$ or US-20120125381-$ or US-20120125382-$ or US-20030183255-$ or US-20030192578-$ or US-20040069332-$).did. or (US-20050133070-$ or US-20050241680-$ or US-20050241686-$ or US-20070006903-$ or US-20070158472-$ or US-20070235063-$ or US-20070246078-$ or US-20070251553-$ or US-20070289615-$ or US-20080142056-$ or US-20080156358-$ or US-20080169009-$ or US-20080173730-$ or US-20080271765-$ or US-20090159101-$ or US-20090159103-$ or US-20100051071-$ or US-20100101611-$ or US-20100139719-$ or US-20100194254-$ or US-20110030742-$ or US-20110155190-$ or US-20120279530-$ or US-20120285490-$ or US-20120285491-$ or US-20120291827-$ or US-20120325277-$).did. or (US-20130068265-$ or US-20140070025-$ or US-20140137909-$ or US-20140196756-$ or US-20140261584-$ or US-20140345654-$ or US-20150007861-$ or US-20150122298-$ or US-20150136189-$ or US-20150182103-$ or US-20150201823-$ or US-20150230687-$ or US-20150250374-$ or US-20150272421-$ or US-20150366430-$ or US-20160000295-$ or US-20160066765-$ or US-20160106295-$ or US-20160106297-$ or US-20040255992-$ or US-20170135548-$ or US-20040194810-$ or US-20080110480-$ or US-20080110481-$ or US-20030226580-$ or US-20050109378-$ or US-20130098406-$).did. or (US-20030089672-$ or US-20040079713-$ or US-20060219271-$ or US-20100314977-$ or US-20120139399-$ or US-20130104944-$ or US-20140076363-$ or US-20040250837-$ or US-20110203619-$ or US-20120031432-$ or US-20120175431-$ or US-20140373883-$ or US-20150208897-$ or US-20160198927-$ or US-20160316992-$ or US-20170007094-$ or US-20170181600-$ or US-20170188790-$ or US-20170245727-$ or US-20170258290-$ or US-20170265707-$ or US-20170265713-$ or US-20170273534-$ or US-20140332042-$ or US-20090255560-$ or US-20080276975-$).did. or (US-9010345-$ or US-6969029-$ or US-3146953-$ or US-3213866-$ or US-3051183-$ or US-2980120-$ or US-2973907-$ or US-2734520-$ or US-2031816-$ or US-7594513-$ or US-9532699-$ or US-8454762-$ or US-9119517-$ or US-9259138-$ or US-7947132-$ or US-8137479-$ or US-8187390-$ or US-9295368-$ or US-5944037-$ or US-9375128-$ or US-9414736-$ or US-9492055-$ or US-9532701-$ or US-				

		9706896-$ or US-9839340-$).did. or (US-D741556-$ or US-D750854-$ or US-D750855-$ or US-8881748-$ or US-9133574-$ or US-9480389-$ or US-3064664-$ or US-3064665-$ or US-3348775-$ or US-3841342-$ or US-4046261-$ or US-4064887-$ or US-4145002-$ or US-4257559-$ or US-4735222-$ or US-4884585-$ or US-4993444-$ or US-5211190-$ or US-5267582-$ or US-5415350-$ or US-5507877-$ or US-5546968-$ or US-5577665-$ or US-5730370-$ or US-5823211-$ or US-5904166-$ or US-5927616-$).did. or (US-5983908-$ or US-6053185-$ or US-6325220-$ or US-6955179-$ or US-8287660-$ or US-8696827-$ or US-4038103-$ or US-4611759-$ or US-4836230-$ or US-5582742-$ or US-3960328-$ or US-5964232-$ or US-7032604-$ or US-6431188-$ or US-7055537-$ or US-7225818-$ or US-8166983-$ or US-8191560-$ or US-9138126-$ or US-9167953-$ or US-1562614-$ or US-2646809-$ or US-2739025-$ or US-2907470-$ or US-2910207-$ or US-3126098-$ or US-3288302-$).did. or (US-3752322-$ or US-8347898-$ or US-2016880-$ or US-2956572-$ or US-3006557-$ or US-3884263-$ or US-3934822-$ or US-4135532-$ or US-4175575-$ or US-4807654-$ or US-5842492-$ or US-6112754-$ or US-6869029-$ or US-7509963-$ or US-7673639-$ or US-7754024-$ or US-7896977-$ or US-8333207-$ or US-8778094-$ or US-8801863-$ or US-9668635-$ or US-8905053-$ or US-9034114-$ or US-9375127-$ or US-9420938-$ or US-9474430-$ or US-9480386-$).did. or (US-9675232-$ or US-9736123-$ or US-9801523-$ or US-4582259-$ or US-1701066-$ or US-3342421-$ or US-5488965-$ or US-6390106-$ or US-3210010-$ or US-5609174-$ or US-4798017-$ or US-3691577-$ or US-9486819-$ or US-5787910-$ or US-3176697-$ or US-4405087-$ or US-D778667-$ or US-6766864-$ or US-4420005-$ or US-4298015-$ or US-3719323-$ or US-9827600-$ or US-7331356-$ or US-9480385-$ or US-9301670-$ or US-7695571-$ or US-2904265-$).did. or (US-2407533-$).did. or (US-3460548-$ or US-3210010-$ or US-0321025-$ or US-3446219-$ or US-2904265-$ or US-2808842-$ or US-2664902-$ or US-2407533-$ or US-2320133-$).did. or (EP-2454983-$ or EP-3222191-$ or EP-1277430-$ or GB-2322067-$ or KR-20050122359-$ or KR-101248098-$ or EP-3222192-$ or WO-2015000512-$ or EP-				

		1632166-$ or EP-1632166-$ or DE-10039880-$ or EP-1183983-$).did. or (GB-2322067-$).did. or (JP-11253381-$).did. or (EP-2454983-$ or GB-2322067-$ or JP-11253381-$ or DE-202004013786-$ or CN-204467992-$).did.				
S82	14	("3126098").URPN.	USPAT	OR	OFF	2018/06/11 08:16
S83	2	"20130098406"	US-PGPUB; USPAT	OR	OFF	2018/06/11 08:30
S84	2	"20120292270"	US-PGPUB; USPAT	OR	OFF	2018/06/11 08:32
S85	2	"20050109378"	US-PGPUB; USPAT	OR	OFF	2018/06/11 08:32
S86	8	"4134414"	US-PGPUB; USPAT	OR	OFF	2018/06/11 08:49
S87	20	"3126098"	US-PGPUB; USPAT	OR	OFF	2018/06/11 09:56

6/11/2018 12:15:00 PM
C:\Users\tbucci\Documents\EAST\Workspaces\15941761.wsp

Petitioner Samsung Ex-1004, 0095

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (03-15)
Approved for use through 07/31/2016. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	2018-03-30
First Named Inventor	Barry E. Tuller
Art Unit	
Examiner Name	
Attorney Docket Number	SUB-05031-US-CNT2

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	4134414	A1	1979-01-16	Jarvis	
	2	2646809		1953-07-28	L. E. Van Hise	
	3	2907470		1959-10-06	C. F. Abresch	
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	2018-03-30
	First Named Inventor	Barry E. Tuller
	Art Unit	
	Examiner Name	
	Attorney Docket Number	SUB-05031-US-CNT2

	9	4064887		1977-12-27	Geiger et al.	

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Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20030226580	A1	2003-12-11	Welch	
	2	20050109378	A1	2005-05-26	Landsiedel	
	3	20120292270	A1	2012-11-22	Klump	
	4	20130098406	A1	2013-04-25	Beshears	
	5	20100051069	A1	2010-03-04	Schessl et al.	
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	2018-03-30
First Named Inventor	Barry E. Tuller
Art Unit	
Examiner Name	
Attorney Docket Number	SUB-05031-US-CNT2

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1	19960496	DE	A1	2001-07-12	BSH Bosch Siemens Hausgeraete		
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Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	2018-03-30
First Named Inventor	Barry E. Tuller
Art Unit	
Examiner Name	
Attorney Docket Number	SUB-05031-US-CNT2

EXAMINER SIGNATURE			
Examiner Signature	/THOMAS BUCCI/	Date Considered	06/10/2018

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	2018-03-30
First Named Inventor	Barry E. Tuller
Art Unit	
Examiner Name	
Attorney Docket Number	SUB-05031-US-CNT2

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☒ See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Patrick J Burns/	Date (YYYY-MM-DD)	2018-03-30
Name/Print	Patrick J. Burns	Registration Number	73,687

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
15/941,761	03/30/2018	Barry E. Tuller	SUB-05031-US-CNT2

CONFIRMATION NO. 4804

130348
Whirlpool Corporation / McGarry Bair PC
2000 North M63
Benton Harbor, MI 49022

PUBLICATION NOTICE

OC000000101590144

Title:GLASSES RACK FOR DISHWASHER

Publication No.US-2018-0220862-A1
Publication Date:08/09/2018

NOTICE OF PUBLICATION OF APPLICATION

The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seq. The patent application publication number and publication date are set forth above.

The publication may be accessed through the USPTO's publically available Searchable Databases via the Internet at www.uspto.gov. The direct link to access the publication is currently http://www.uspto.gov/patft/.

The publication process established by the Office does not provide for mailing a copy of the publication to applicant. A copy of the publication may be obtained from the Office upon payment of the appropriate fee set forth in 37 CFR 1.19(a)(1). Orders for copies of patent application publications are handled by the USPTO's Public Records Division. The Public Records Division can be reached by telephone at (571) 272-3150 or (800) 972-6382, by facsimile at (571) 273-3250, by mail addressed to the United States Patent and Trademark Office, Public Records Division, Alexandria, VA 22313-1450 or via the Internet.

In addition, information on the status of the application, including the mailing date of Office actions and the dates of receipt of correspondence filed in the Office, may also be accessed via the Internet through the Patent Electronic Business Center at www.uspto.gov using the public side of the Patent Application Information and Retrieval (PAIR) system. The direct link to access this status information is currently https://portal.uspto.gov/pair/PublicPair. Prior to publication, such status information is confidential and may only be obtained by applicant using the private side of PAIR.

Further assistance in electronically accessing the publication, or about PAIR, is available by calling the Patent Electronic Business Center at 1-866-217-9197.

Office of Data Managment, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

Petitioner Samsung Ex-1004, 0102

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Whirlpool Corporation	
For:	GLASSES RACK FOR DISHWASHER	
Application No.:	15/941,761	Examiner: Thomas Bucci
Filed:	March 30, 2018	Group Art Unit: 1711
Atty. Docket:	SUB-05031-US-CNT2	Confirmation No: 4804

CERTIFICATE OF MAILING/TRANSMISSION (37 CFR 1.8(a))

I hereby certify that this correspondence is, on the date shown below, being:

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/Johanne Hrycuna/
Signature

Date: September 5, 2018

Johanne Hrycuna
(type or print name of person certifying)

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

AMENDMENT AND RESPONSE TO OFFICE ACTION

In response to the Office Action mailed June 15, 2018, kindly amend the above-identified application as follows:

Amendments to the Specification begin on page 2 of this paper.

Amendments to the Claims appear in the complete listing of claims which begins on page 6 of this paper.

Amendments to the Drawings begin on page 10 of this paper.

Remarks begin on page 11 of this paper.

AMENDMENTS TO THE SPECIFICATION

Please amend paragraph [0024] of the specification as filed as shown below:

[0024] Referring now to Figure 3, the upper dish rack 20 may be particularly configured to hold drinking vessels, such as, for example, tall and short tumblers, including old fashioned glasses, rocks glasses, and highballs, stemware, such as wine glasses, martini glasses, and tulip and saucer champagne glasses, snifters, goblets, bottles, mugs, and the like, which are hereinafter referred to as "glasses" with it being understand that "glasses" includes those exemplary drinking dishes listed above in addition to others not listed herein. Therefore it may be referred to as a dish rack, glasses dish rack, or glasses rack and those terms are used interchangeably herein. The glasses may be made of any suitable material, including glass, ceramics, plastic, and metals and are not limited to glass materials. While the glasses dish rack 20 may be located near the top of the tub 14, the glasses dish rack 20 need not be the uppermost dish rack in the tub 14 and is only heretofore referred to as "upper" for convenience.

Please amend paragraphs [0030]-[0032] of the specification as filed as shown below:

[0030] Referring to Figure 5, the glasses dish rack 20A has been modified to hold a greater number of shorter glasses, shown by example as short tumblers 100 and mugs 102. The dish rack 20A is similar to the dish rack 20 of FIG. 4 and elements similar to those of previous embodiments are identified with the same reference numeral bearing a letter A, thus it will be understood that the dish rack 20A also includes a wire frame effectively forming opposing side walls 60A, a front wall 62A, a rear wall 64A, and a bottom wall 66A that together define an open-top glasses holding compartment 68A. The glasses 100, 102 are arranged in four rows, with each row supported by a corresponding one of the first, second, third, or fourth rows of glass supports 76A, 78A, 80A, 82A. The glass supports 70A are arranged to orient the glasses 100, 102 in an inclined position less than about 45 degrees relative to the horizontal, as in the previous embodiment. To accommodate the increased number of glasses, the rack spray assembly 32A of the dish rack 20A includes a second spray tube 104 in addition to the first spray tube 90A. The

first spray tube 90A is located between the first and second rows of glasses to spray treating liquid into the glasses 100, 102 in these two rows, while the second spray tube 104 is positioned between the third and fourth rows of glasses to spray treating liquid into the glasses 100, 102 in these two rows. Each of the spray tubes 90A, 104 includes a single row of spray nozzles 92A, 106, and the spray tubes 90A, 104 may rotate about their respective longitudinal axes such that the spray nozzles 92A, 106 spray treating liquid into their adjacent rows of glasses alternately. By rotating the spray tubes 90A, 104, the treating fluid may be sprayed in multiple spray angles and trajectories. Optionally, the spray tubes 90A, 104 may include a plurality of rows of the spray nozzles 92A, 106, or the spray nozzles 92A, 106 may have an arrangement other than in rows. Alternatively, the spray tubes 90A, 104 may be stationary with multiple sets of spray nozzles, as in the previous embodiment, or another type of sprayer. The spray tubes 90A, 104 may be fluidly coupled by a manifold 108 that includes the connector 96A for docking with the receiver 98 in the tub 14. Alternatively, each of the spray tubes 90A, 104 may independently dock with a corresponding receiver in the tub.

[0031] Referring now to Figure 6, ~~the~~ a glasses dish rack 20B and a rack spray assembly 32B are shown, the glasses dish rack 20B is a hybrid of the glasses dish rack 20 of Figure 4 and the glasses dish rack 20A of Figure 5. The elements similar to those of previous embodiments are identified with the same reference numeral bearing a letter B, thus it will be understood that the dish rack 20A also includes a wire frame effectively forming opposing side walls 60B, a front wall 62B, a rear wall 64B, and a bottom wall 66B that together define an open-top glasses holding compartment 68B. Glass supports 70B are arranged such that are arranged in four rows, with each row supported by a corresponding one of the first, second, third, or fourth rows of glass supports 76B, 78B, 80B, 82B. The left side of the glasses dish rack 20B is essentially identical to the left side of the glasses dish rack 20A in that it has two rows of the shorter glasses, *i.e.*, the short tumblers 100 and the mugs 102, with the rotating spray tube 90B therebetween. The right side of the glasses dish rack 20B is essentially identical to the right side of the glasses dish rack 20, with a single row of the taller glasses, *i.e.*, the wine glasses 72 and the tall tumblers 74, and the stationary spray tube 104 oriented to spray treating liquid into that row. The spray

tubes 90B, 104B may be fluidly coupled by the manifold 108B that includes the connector 96B for docking with the receiver 98 in the tub. Alternatively, each of the spray tubes 90B (having nozzles 92B), 104B (having spray nozzles 106B) may independently dock with a corresponding receiver in the tub.

[0032] The glasses dish rack may also be modified for use below a tiered dish rack. As shown in the alternative embodiment in Figure 7, a tiered dish rack 22C may be positioned as the uppermost rack in the tub 14C of dishwasher 10C. Figure 7 schematically shows the bottom wall of the tiered dish rack 22C as a diagonal line D, while in reality, the bottom wall may include multiple tiers, each having a generally horizontal bottom wall, at differing vertical heights, as in a stepped configuration. An exemplary tiered dish rack is set forth in U.S. Patent No. 8,287,660, issued October 16, 2012, which is incorporated herein by reference in its entirety. Exemplary tiers have been schematically illustrated in phantom line slightly offset from the diagonal line and labeled as a first tier T1, a second tier T2, and a third tier T3. Corresponding sloped portions have also been labeled for completeness as a first sloped portion S1, a second sloped portion S2, a third sloped portion S3, and a fourth sloped portion S4. Nonetheless, the multiple steps of the tiered bottom wall define an effective inclination with an angle C relative to the horizontal for the tiered dish rack 22C, which is represented by the diagonal line D at the bottom of the tiered dish rack 22C in the schematic Figure 7. A lowermost dish rack 24C, upper spray assembly 26C, middle spray assembly 28C, and the lower spray assembly 30C can also be included in the dishwasher 10C.

Please amend paragraph [0038] of the specification as filed as shown below:

[0038] Optionally, the dish rack 20D may be equipped with the rack spray assembly 32D adapted to provide treating liquid to the interior of the glasses 74. The rack spray assembly 32D may include a first spray tube 90D and a second spray tube 104D (having spray nozzles 106D) similar to the spray assembly 32A illustrated in Figure 5. The first and second spray tubes 90D, 104D are located under the curved spray tube mounting portion 63 (Figure 8) on opposing sides of the flat central portions 65 between first and second rows of glasses to spray treating liquid

into the glasses 74 in these two rows. Each of the spray tubes 90D, 104D includes a single row of spray nozzles 92A, 106D, and the spray tubes 90D, 104D may rotate about their respective longitudinal axes such that the spray nozzles 92D, 104D may spray treating liquid in the direction of the flat central portions 65. By rotating the spray tubes 90D, 104D, the treating fluid may be sprayed in multiple spray angles and trajectories. Optionally, the spray tubes 90D, 104D may include a plurality of rows of the spray nozzles 92D, 106D, or the spray nozzles 92D, 106D may have an arrangement other than in rows. Alternatively, the spray tubes 90D, 104D may be stationary with multiple sets of spray nozzles, as in the previous embodiment, or another type of sprayer. The spray tubes 90D, 104D may be fluidly coupled by a manifold 108D that includes the connector 96D for docking with the receiver 98 in the tub. Alternatively, each of the spray tubes 90D, 104D may independently dock with a corresponding receiver in the tub.

AMENDMENTS TO THE CLAIMS

Please amend the claims as shown below in the complete listing of claims. This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A dishwasher, comprising:

a tub defining a treating chamber receiving dishes for treatment;

a spray system providing treating liquid to the treating chamber;

a first dish rack located in the tub and having a bottom wall tiered to form multiple levels, the bottom wall tiered to form multiple levels defining an effective inclination angle for the bottom wall of the first dish rack; and

a second dish rack located below the first dish rack, the second dish rack ~~and~~ having a non-tiered bottom wall that is inclined at an angle matching the effective inclination angle for the bottom wall of the first dish rack and parallel to the effective inclination angle for the bottom wall of the first dish rack ~~bottom wall~~.

2. (Original) The dishwasher according to claim 1 wherein the second dish rack is configured to hold glasses at an incline angled less than about 45 degrees relative to horizontal.

3. (Currently Amended) The dishwasher according to claim 2 wherein the spray system comprises a sprayer mounted to the second dish rack and positioned to spray treating liquid into ~~the~~ an interior of the glasses.

4. (Original) The dishwasher according to claim 3 wherein the second dish rack is slidably mounted to the tub, the spray system further comprises a supply conduit located in the tub, and the sprayer selectively docks with the supply conduit during sliding movement of the second dish rack.

5. (Currently Amended) The dishwasher according to claim 2 wherein the inclined angle of the glasses is about 15 degrees.

6. (Original) The dishwasher according to claim 1 wherein the second dish rack has at least one side wall, extending upwardly from the non-tiered bottom wall, and terminates in an upper edge inclined at an angle matching the effective inclination angle.

7. (Original) The dishwasher according to claim 6 comprising a third dish rack located below the second dish rack.

8. (Original) The dishwasher according to claim 7 wherein the spray system comprises a first sprayer above the first dish rack, a second sprayer between the first and second dish racks, and a third sprayer below the third dish rack.

9. (Original) The dishwasher according to claim 7 wherein the third dish rack has a bottom wall and a side wall terminating in an upper edge.

10. (Original) The dishwasher according to claim 8 wherein at least one of the bottom wall or upper edge of the third dish rack is horizontal.

11. (Currently Amended) A dishwasher comprising:

a tub defining a treating chamber receiving dishes for treatment;

a spray system providing treating liquid to the treating chamber; and

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 having a bottom wall, a side wall extending upwardly from the bottom wall and terminating in an upper edge, with an angled portion and a flat portion formed in the bottom wall; and

a spray tube ~~carried by the bottom wall and~~ having nozzles emitting spray along the angled portion, the spray tube located directly adjacent to the bottom wall and carried with the dish rack between the loading position and the treating position.

12. (Currently Amended) The dishwasher of claim ~~11~~ 27 wherein the dish rack is a low profile dish rack where the length of the angled portion is greater than a shortest height of an upstanding portion of the side wall.

13. (Original) The dishwasher of claim 12 wherein at least one of the nozzles is located above a portion of the angled portion.

14. (Original) The dishwasher of claim 12 wherein the shortest height is located along a portion of the side wall transverse to the angled portion.

15. (Currently Amended) The dishwasher of claim ~~11~~ 27 wherein at least one of the nozzles is located above a portion of the angled portion.

16-18. (Canceled).

19. (Original) The dishwasher of claim 11 wherein the spray tube is configured to rotate about a longitudinal axis.

20. (Currently Amended) The dishwasher ~~the~~ of claim 11, further comprising a curved portion formed in the bottom wall directly between the ~~wherein the bottom wall defines a flat portion and the~~ angled portion and ~~terminates at~~ the flat portion.

21. (Currently Amended) The dishwasher of claim 20 further comprising a second angled portion and a second curved portion formed in the bottom wall and wherein the second curved portion and the second angled portion are located on an opposite side of the flat portion from the curved portion and the angled portion.

22. (Original) The dishwasher of claim 21 wherein the angled portions have the same angle.

23. (Canceled)

24. (Currently Amended) The dishwasher of claim ~~23~~ 21 wherein the flat portion is located above a terminal end of at least one of the angled portions.

25. (Original) The dishwasher of claim 24 wherein the spray tube is located below the flat portion.

26. (Original) The dishwasher of claim 25 further comprising multiple spray tubes located below the flat portion.

27. (New) A dishwasher comprising:

a tub defining a treating chamber receiving dishes for treatment;

a spray system providing treating liquid to the treating chamber; and

a dish rack located in the tub and selectively moveable into and out of the tub, the dish rack having a bottom wall, a side wall extending upwardly from the bottom wall and terminating in an upper edge, with an angled portion formed in the bottom wall and a contoured portion formed in the bottom wall; and

a spray tube having nozzles emitting spray along the angled portion;

wherein the contoured portion is 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.

28. (New) The dishwasher of claim 21 wherein the angled portion begins at the side wall and terminates at the curved portion.

29. (New) The dishwasher of claim 21 wherein the spray tube is mounted adjacent the curved portion and further comprising a second spray tube mounted adjacent the second curved portion.

Petitioner Samsung Ex-1004, 0111

AMENDMENTS TO THE DRAWINGS

Kindly replace the drawing sheet containing FIG. 7 with the attached Replacement Sheet containing FIG. 7. Annotated Sheet for FIG. 7 is included to supplement explanation of the changes discussed in the Remarks below.

Attachments: Replacement Sheet for FIG. 7.
Annotated Sheet for FIG. 7.

REMARKS

Claims 1-26 are currently pending in the application. By the present amendment, claims 1, 3, 5, 11-12, 15, 20-21, and 24 are amended, claims 17-18 and 23 are canceled, and new claims 27-29 are added. Support for amendments to the claims can be found at least in paragraphs [0019], [0034], and [0036], as well as FIG. 7 and FIG. 8. Therefore, the Applicant believes the amendments made herein add no new matter. Any amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based on prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to be attached thereto.

Further consideration and examination of the application is respectfully requested in view of the amendments and the following remarks.

Interview Summary

Applicant kindly thanks the Examiner for the telephonic interview with Applicant's representative on August 29, 2018, at 10:00 AM EST. During the telephone interview, the Applicant's representative and the Examiner discussed a proposed amendment sent to the Examiner prior to the interview. No agreement regarding allowability was reached.

Objections to the Drawings

The Examiner objected to the drawings under 37 CFR 1.84(p)(5) because they include reference character(s) not mentioned in the description.

As is stated in amended paragraph [0031] of the application: "In the following description of the alternative embodiments, elements similar to those of previous embodiments are identified with the same reference numeral bearing a letter, *e.g.*, 20A, 20B, etc." This statement in the specification is for brevity. The parts corresponding to those pointed out by the Examiner have not changed in the newly introduced implementations and can accordingly be interpreted as first presented.

Accordingly, applicant respectfully submits that the specification and drawings adequately address all of the foregoing objections. However, Applicant has provided specific

literal support in the amendments to the specification provided herein. Again as they are merely elements previously introduced no new matter has been added.

The Examiner has further objected to the drawings under 37 CFR §1.83(a) that the drawings must show every feature of the invention specified in the claims.

Figure 7 has been amended to call out the specific tiers and slopes of the bottom wall. Support for such amendments were located in the Specification as filed at ¶[0034] and therefore no new matter has been added. "Figure 7 schematically shows the bottom wall of the tiered dish rack 22C as a diagonal line D, while in reality, the bottom wall may include multiple tiers, each having a generally horizontal bottom wall, at differing vertical heights, as in a stepped configuration. An exemplary tiered dish rack is set forth in U.S. Patent No. 8,287,660, issued October 16, 2012, which is incorporated herein by reference in its entirety." Applicant, therefore respectfully requests reconsideration and withdrawal of the objections to the drawings.

The applicant believes that the drawings do show every feature of the invention specified per the amended claims.

The Examiner objected to the drawings under 37 CFR 1.84(p)(4) because the Examiner believes that different parts include the same reference numeral. As was explained in the specification as filed at ¶[0024], "the upper dish rack 20 may be particularly configured to hold drinking vessels, such as, for example, tall and short tumblers, including old fashioned glasses, rocks glasses, and highballs, stemware, such as wine glasses, martini glasses, and tulip and saucer champagne glasses, snifters, goblets, bottles, mugs, and the like, which are hereinafter referred to as "glasses" with it being understand that "glasses" includes those exemplary drinking dishes listed above in addition to others not listed herein." Further still a statement has been added to the specification to make clear that the "dish rack, glasses dish rack, or glasses rack are used interchangeably." Applicant, therefore respectfully requests reconsideration and withdrawal of the objections to the drawings.

Rejections Under 35 U.S.C. §112

Claims 24-26 are rejected under 35 U.S.C. §112(a) or 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter. The rejection is respectfully traversed.

Claim 24 has been amended to provide proper antecedent basis. It is believed that the rejection is now moot and should be withdrawn.

Rejections under 35 U.S.C. §103

Claims 1-10 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Publication No. 2003/0226580 to Welch in view of U.S. Patent No. 4,064,887 to Geiger et al.

To properly combine references, there must be some reason for combining them and that reason must be based on factual findings that are drawn from the references. A rejection cannot establish a *prima facie* case that a claim is obvious "merely by demonstrating that each of its elements was, independently, known in the prior art." *KSR International Co. v. Teleflex Inc.* (*KSR*), 550 U.S. 398, 418 (2007). "Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *Id.* citing *In re Kahn*, 44 F.3d 977, 988 (Fed. Cir. 2006).

The rejection fails to provide any logical reasoning supported in fact drawn from the references themselves for combining the disclosures of Welch '580 and Geiger et al. '887 in such a manner as to reach Appellants' claimed invention. No attempt is made to support the combination other to say that such is obvious. Further, the inclusion of Geiger et al. '887 is merely supported by the Examiner stating that it is old and well known to use dish racks having a non-tiered bottom wall; therefore it would have been obvious to use the non-tiered bottom wall of Geiger. See *Office Action*, p. 6. This appears to be the circular reasoning discussed in In re Chaganti. "It is not enough to say that . . . to do so would 'have been obvious to one of ordinary skill.' Such circular reasoning is not sufficient–more is needed to sustain an obviousness rejection." *In re Chaganti*, 2014, WL 274514, *4 (Fed. Cir. 2014). Accordingly, it is

respectfully submitted that the combination is in error and respectfully requested that the rejection be withdrawn.

Further still, the Examiner cites mere duplication and change in shape; however, the claimed invention is not such a mere duplication as parts. At best the statement made by the Examiner is a conclusory statement with no rational underpinning to support the legal conclusion of obviousness. Accordingly, it is respectfully submitted that the combination is in error and respectfully requested that the rejection be withdrawn.

There appears to be no logical reason to combine the references except for an effort to force fit the references together to meet Appellants' claimed invention. An inspection of the references in question discloses that they themselves offer no such factual basis for making the combination. Thus, the basis provided by the Examiner is made up for the sole purpose of forcing the combination.

Appellant respectfully submits that the combination of Welch '580 and Geiger et al. '887 is improper because the Office Action relies on information gleaned solely from Appellants' specification. MPEP § 2142 states that "impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of **the facts gleaned from the prior art"** (emphasis added). "'Any judgement on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and **does not include knowledge gleaned only from applicant's disclosure**, such a reconstruction is proper'" (MPEP § 2145(X)(A), quoting *In re McLaughlin*, 443 F.2d 1392, 1395 (CCPA 1971), (emphasis added).

In the present case, the obviousness statement made by the Examiner on pages 5-6 of the Office Action does not rely on reasoning drawn from the references themselves to allegedly support the combination of Welch '580 and Geiger et al. '887. Instead the Examiner specifically includes knowledge gleaned directly from Appellants' disclosure. The idea that the combination of such parts would have a first dish rack located in the tub and having *a bottom wall tiered to form multiple levels, the bottom wall tiered to form multiple levels defining an effective inclination angle for the bottom wall* of the first dish rack and a second dish rack located below

the first dish rack, the second dish rack having a non-tiered bottom wall that is inclined at an angle matching the effective inclination angle for the bottom wall of the first dish rack and parallel to the effective inclination angle for the bottom wall of the first dish rack is absent from the cited art and is taken directly from the claim language of Appellants' claim. There is simply no other conclusion than the Examiner has included knowledge gleaned from the Appellants' disclosure as the reasoning is based on a mere recitation of the claim language itself.

The only discussion of such features is only present in Appellants' specification as filed and in the claims. Thus, it logically follows that the Examiner has improperly gleaned from Appellants' own specification and that the combination of Welch '580 and Geiger et al. '887 is an exercise of impermissible hindsight. Without the claimed invention as a guide, the Examiner would not, looking at the references alone, come up with the forced reason for making the combination. This is the essence of impermissible hindsight. Accordingly, it is respectfully submitted that the combination is in error and respectfully requested that the rejection be withdrawn.

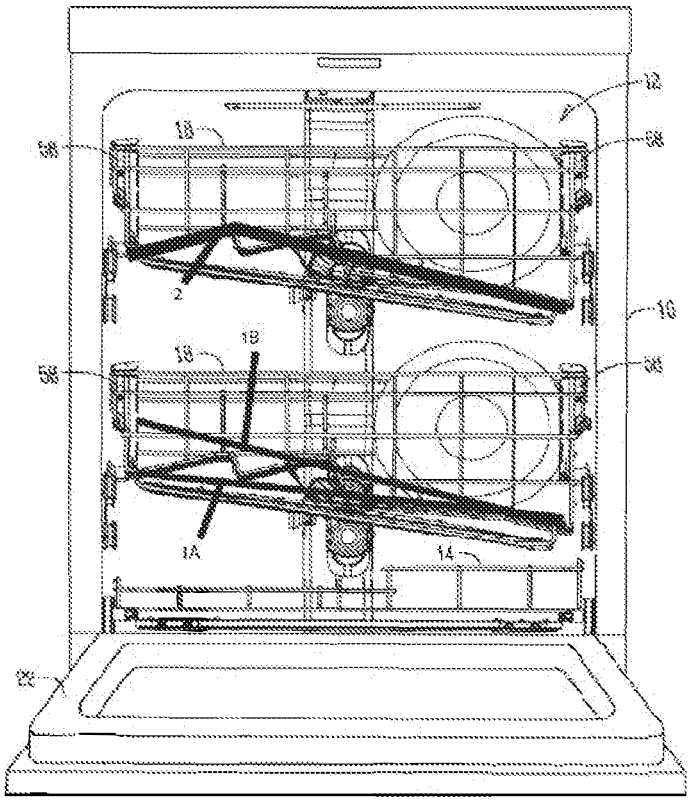
When properly combined, the combination fails to reach claim 1 because claim 1 calls for, among other things, a first dish rack located in the tub and having *a bottom wall tiered to form multiple levels, the bottom wall tiered to form multiple levels defining an effective inclination angle for the bottom wall* of the first dish rack and a second dish rack located below the first dish rack, the second dish rack having a non-tiered bottom wall that is inclined at an angle matching the effective inclination angle for the bottom wall of the first dish rack and parallel to the effective inclination angle for the bottom wall of the first dish rack.

Welch '580 does not teach a first dish rack with *a bottom wall tiered to form multiple levels defining an effective inclination angle for the bottom wall* of the first dish rack and a second dish rack located below the first dish rack, the second dish rack having a non-tiered bottom wall that is inclined at an angle matching the effective inclination angle for the bottom wall of the first dish rack and parallel to the effective inclination angle for the bottom wall of the first dish rack as claimed by claim 1. Instead Welch teaches identical first and second dish racks

that are mirrored each having a sloped or stepped bottom portion with an oppositely stepped upper portion. *See Welch '580, FIG. 1.*

Geiger et al. '887 also does not teach a first dish rack with *a bottom wall tiered to form multiple levels defining an effective inclination angle for the bottom wall* of the first dish rack and a second dish rack located below the first dish rack, the second dish rack having a non-tiered bottom wall that is inclined at an angle matching the effective inclination angle for the bottom wall of the first dish rack and parallel to the effective inclination angle for the bottom wall of the first dish rack. Geiger et al. '887 merely teaches in the cited Figure a dish rack that has an a central portion that is inclined at one angle and end portions that are angled separately. See *Geiger et al. '887, FIG. 12.*

The Examiner's combination would result, at best, in a dishwasher having a lower rack with 1) a bottom wall that either had a first angled center portion with two end portions at differing angles or 2) perhaps a highly angled bottom wall to match an angle of one of the slopes in Welch '580. Applicant has annotated FIG. 1 of Welch '580 with the second option (the bottom rack of welch has been mirrored as explained in the Office Action although there is no teaching of this in Welch '580). Two potential bottom wall angles have been annotated as 1A and 1B. As the upper rack of Welch '580 includes only a sloped bottom portion and includes an oppositely formed upper portion at best the bottom wall effectively forms an obtuse angle of sorts as annotated with the numeral 2. This is not the same as the claimed first dish rack with *a bottom wall tiered to form multiple levels defining an effective inclination angle for the bottom wall* of the first dish rack and a second dish rack located below the first dish rack, the second dish rack having a non-tiered bottom wall that is inclined at an angle matching the effective inclination angle for the bottom wall of the first dish rack and parallel to the effective inclination angle for the bottom wall of the first dish rack.



Annotated FIG. 1 of Welch '580

As the references forming the combination do not disclose all of the elements of claim 1, the combination of Welch '580 and *Geiger et al. '887*, regardless of how they are combined, will not include the limitations of claim 1. Further still, one of ordinary skill in the art would not look at the alleged combination and then decide to have a dishwasher with first and second dish racks as claimed. Applicants respectfully request withdrawal of the rejection and the allowance of claim 1. Claims 2-10 depend from claim 1 and are patentable over any combination of Welch '580 and *Geiger et al. '887* based at least on their dependency on claim 1. Applicants respectfully request withdrawal of the rejection and the allowance of claims 2-10.

Claims 11-26 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 2,910,207 to Andrew in view of U.S. Publication 2003/0192578 to Ochoa et al.

Claim 18 has been canceled; therefore, the rejection with respect to that claim is moot.

Appellant respectfully submits that the combination of Andrew '207 and Ochoa et al. '578 is improper because the Office Action relies on information gleaned solely from Appellants' specification. MPEP § 2142 states that "impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of **the facts gleaned from the prior art"** (emphasis added). "'Any judgement on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and **does not include knowledge gleaned only from applicant's disclosure**, such a reconstruction is proper'" (MPEP § 2145(X)(A), quoting *In re McLaughlin*, 443 F.2d 1392, 1395 (CCPA 1971), (emphasis added).

In the present case, the obviousness statement made by the Examiner on page 10 of the Office Action does not rely on reasoning drawn from the references themselves to allegedly support the combination of Andrew '207 and Ochoa et al. '578. The Examiner states that "Andrew does not explicitly teach that said spray tube is *carried* by the bottom wall. However it is old and well-known in the art to utilize such a spray system configuration wherein the spray tube is carried by the bottom wall of a dish rack for selective docking with a supply conduit." Office action, p. 10 (emphasis in original). Andrew does not explicitly teach that nor could it teach such a carrying by the rack because that would result in the bizarre situation where the tube extends directly from the rear wall of the compartment (See Andrew '207, Col. 2, ln. 44-46) and the dish rack would be coupled to the tube causing the dish rack to be unmovable.

This highlights that the Examiner specifically includes knowledge gleaned directly from Appellants' disclosure. The idea that the combination of such parts would have 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 having a bottom wall, a side wall extending upwardly from the bottom wall and terminating in an upper edge, with an angled portion formed

in the bottom wall and a spray tube having nozzles emitting spray along the angled portion, the spray tube located directly adjacent to the bottom wall and carried with the dish rack between the loading position and the wash position is absent from the cited art and is taken directly from the claim language of Appellants' claim. There is simply no other conclusion than the Examiner has included knowledge gleaned from the Appellants' disclosure as the reasoning is based on a mere recitation of the claim language itself.

The only discussion of such features is only present in Appellants' specification as filed and in the claims. Thus, it logically follows that the Examiner has improperly gleaned from Appellants' own specification and that the combination of Andrew '207 and Ochoa et al. '578 is an exercise of impermissible hindsight. Without the claimed invention as a guide, the Examiner would not, looking at the references alone, come up with the forced reason for making the combination. This is the essence of impermissible hindsight. Accordingly, it is respectfully submitted that the combination is in error and respectfully requested that the rejection be withdrawn.

When properly combined, the combination fails to reach claim 11 because claim 11 calls for, among other things, 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 having a bottom wall, a side wall extending upwardly from the bottom wall and terminating in an upper edge, with an angled portion formed in the bottom wall and a spray tube having nozzles emitting spray along the angled portion, *the spray tube located directly adjacent to the bottom wall and carried with the dish rack between the loading position and the wash position*. As the references forming the combination do not disclose all of the elements of claim 11, the combination of Andrew '207 and Ochoa et al. '578, regardless of how they are combined, will not include the limitations of claim 11. One of ordinary skill in the art would not look at the alleged combination and then decide to have a dishwasher as claimed. Applicant respectfully requests withdrawal of the rejection and the allowance of claim 11. Claims 12-17 and 19-26 depend from claim 11 and

are patentable over any combination of Andrew '207 and Ochoa et al. '578 based at least on their dependency on claim 11. Applicants respectfully request withdrawal of the rejection and the allowance of claims 12-17 and 19-26. Further still claims 20-21, 26, and 28-29 are independently patentable over the combination because none of the prior art teaches nor makes obvious further comprising a curved portion formed in the bottom wall directly between the angled portion the flat portion (claim 20), further comprising a second angled portion and a second curved formed in the bottom wall and wherein the second curved portion and the second angled portion are located on an opposite side of the flat portion from the curved portion and the angled portion (claim 21), further comprising multiple spray tubes located below the flat portion (claim 26), wherein the angled portion begins at the side wall and terminates at the curved portion (claim 28), wherein the spray tube is mounted adjacent the curved portion and further comprising a second spray tube mounted adjacent the second curved portion (claim 29).

Conclusion

In view of the following remarks, it is submitted that all of the claims in the application are in condition for allowance. Early notification of allowability is respectfully requested. If the Examiner believes that there are some issues remaining in this application that can be expedited by a telephone interview, the courtesy of a telephone call to the undersigned representative is respectfully requested.

Respectfully submitted,

WHIRLPOOL CORPORATION

Date: September 5, 2018

By: /Sara L Haas/

Sara L. Haas, Reg. No. 64,796
McGARRY BAIR PC
45 Ottawa Ave. SW, Suite 700
Grand Rapids, Michigan 49503
(616) 742-3500

Annotated Sheet

Added callouts, D,S1,T1,S2,T2, S3,T3,S4

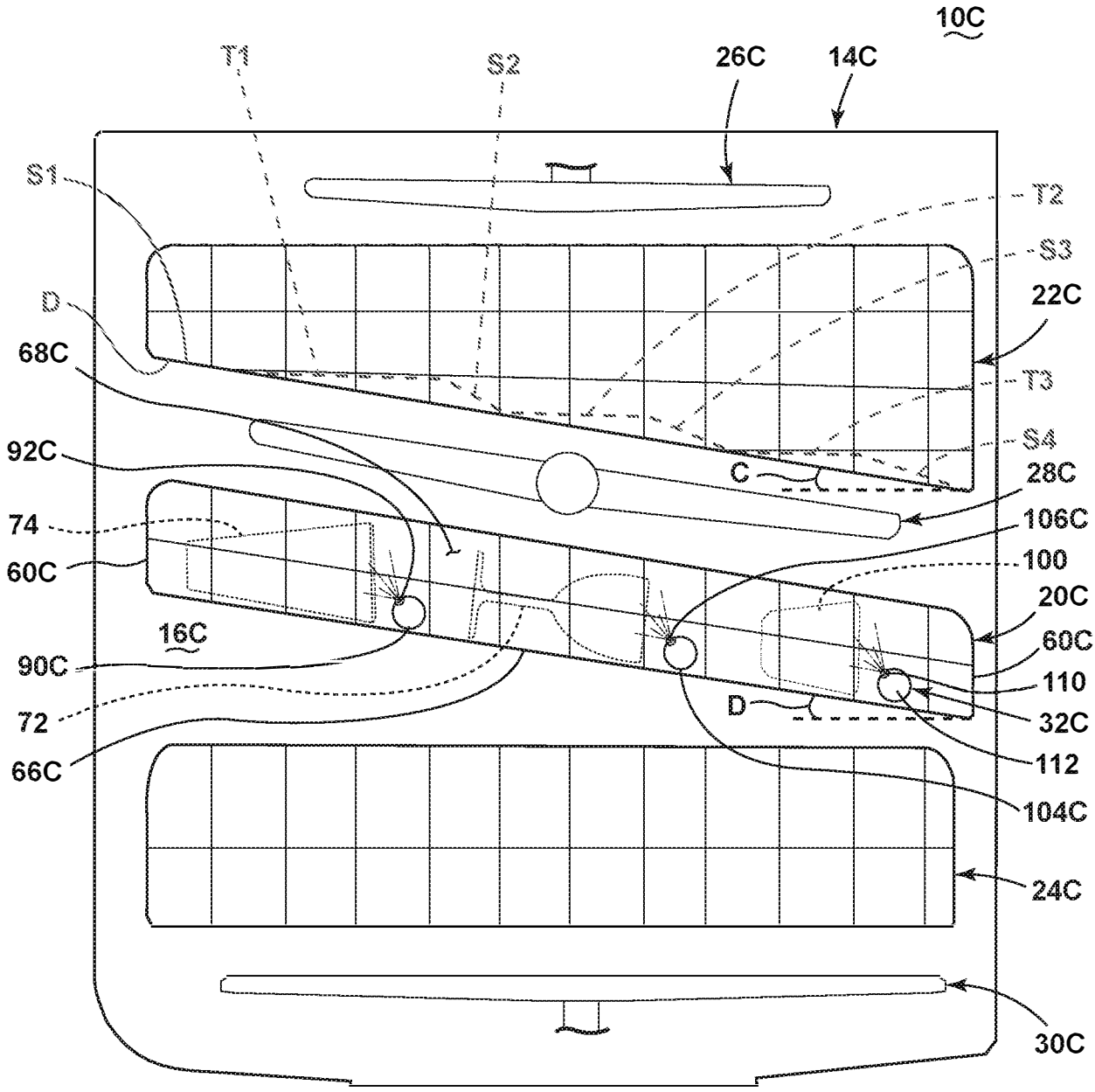


FIG. 7

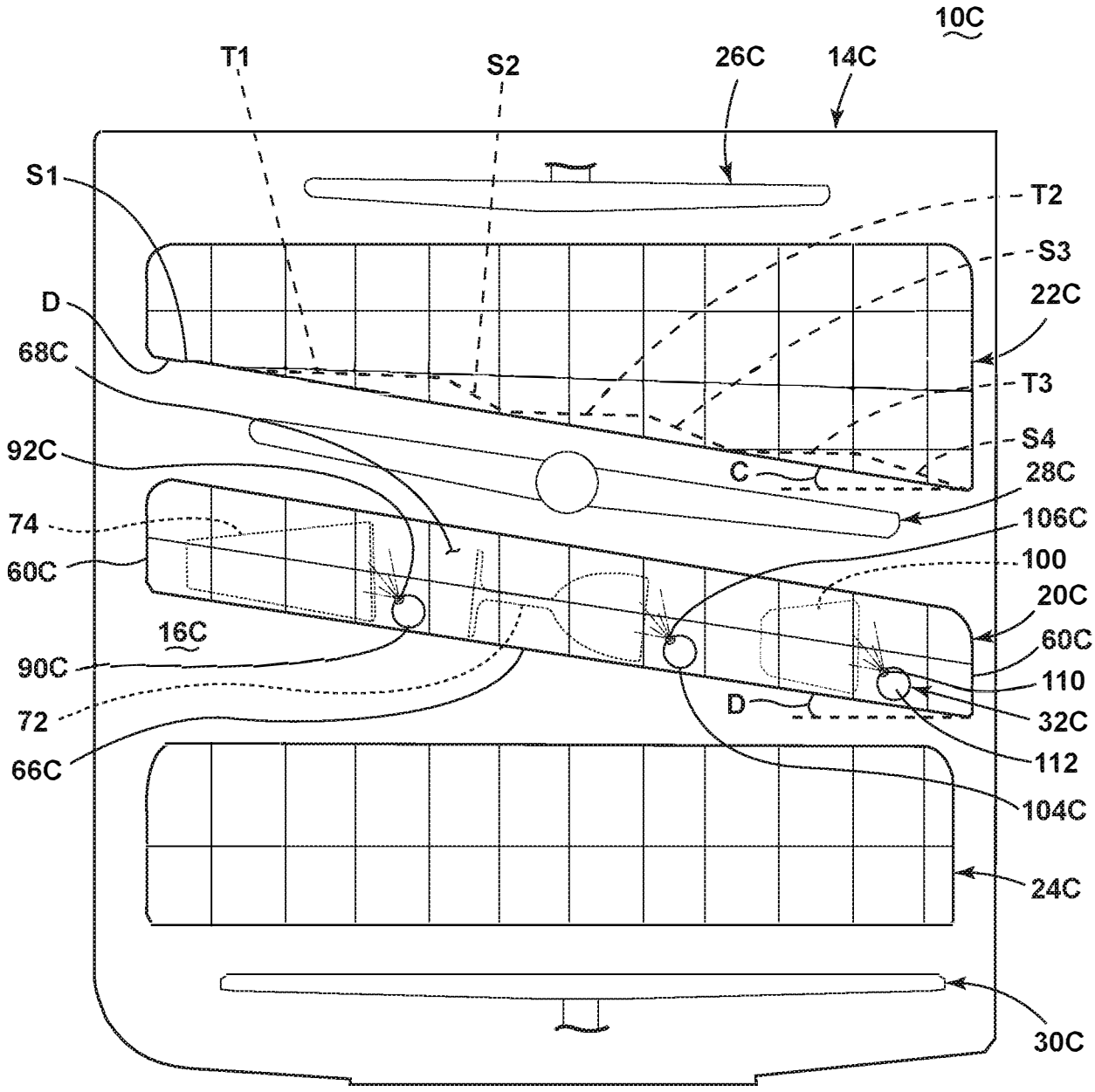

10C
T1
S2
26C
14C
S1
T2
S3
D
22C
68C
T3
S4
92C
C
28C
74
106C
60C
100
20C
16C
60C
90C
110
D
72
32C
66C
112
104C
24C
30C

FIG. 7

Electronic Acknowledgement Receipt

EFS ID:	33630149
Application Number:	15941761
International Application Number:	
Confirmation Number:	4804
Title of Invention:	GLASSES RACK FOR DISHWASHER
First Named Inventor/Applicant Name:	Barry E. Tuller
Customer Number:	130348
Filer:	Sara Lynn Haas
Filer Authorized By:	
Attorney Docket Number:	SUB-05031-US-CNT2
Receipt Date:	05-SEP-2018
Filing Date:	30-MAR-2018
Time Stamp:	13:57:34
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		G1245712.PDF	468832 39e16e4183656774eb731ebe4faf80cc6db6a30c	yes	20

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Specification	2	5
	Claims	6	9
	Applicant Arguments/Remarks Made in an Amendment	10	20

Warnings:					
Information:					
2	Drawings-only black and white line drawings	G1243896.PDF	467387 346436d712193b6870cfca603a6961434e85c21b	no	1
Warnings:					
Information:					
3	Drawings-only black and white line drawings	G1245648.PDF	462933 c5622fa44378d4be0583b4cbc187f9dc23892290	no	1
Warnings:					
Information:					
		Total Files Size (in bytes):	1399152		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 15/941,761	Filing Date 03/30/2018	☐ To be Mailed

ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	x $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	x $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT	09/05/2018	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 25	Minus	** 26	= 0	x $100 =	0
	Independent (37 CFR 1.16(h))	* 3	Minus	***3	= 0	x $460 =	0
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	**0**

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=	x $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x $ =	
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

SLIE
MARIDOL GARCIA JOY

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/941,761	03/30/2018	Barry E. Tuller	SUB-05031-US-CNT2	4804

130348 7590 09/05/2018

Whirlpool Corporation / McGarry Bair PC
2000 North M63
Benton Harbor, MI 49022

EXAMINER
BUCCI, THOMAS

ART UNIT	PAPER NUMBER
1711	

NOTIFICATION DATE	DELIVERY MODE
09/05/2018	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

deborah_tomaszewski@whirlpool.com
mike_lafrenz@whirlpool.com
patents@mcgarrybair.com

Petitioner Samsung Ex-1004, 0128

Applicant-Initiated Interview Summary	**Application No.** 15/941,761	**Applicant(s)** Tuller et al.	
	Examiner THOMAS BUCCI	**Art Unit** 1711	**AIA Status** Yes

All participants (applicant, applicants representative, PTO personnel):

(1) THOMAS BUCCI. (3) ____.

(2) SARA HAAS. (4) ____.

Date of Interview: 29 August 2018.

Type: ☑ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☑ No.
If Yes, brief description: ____.

Issues Discussed ☐101 ☐112 ☐102 ☑103 ☑Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: 1 and 11.

Identification of prior art discussed: Welch, Geiger, Andrew, Ochoa.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

Applicant's representative has been newly appointed to work on this application and sought to clarify any outstanding issues from previous prosecution. Examiner explained how the combination of Welch and Geiger arrives at the invention of claim 1, and how the combination of Andrew in view of Ochoa arrives at the invention of claim 11, as rejected under 35 USC 103 in the previous Non-Final office action. Applicant further acknowledged the objection to the drawings, indicating that replacement drawings will be drafted and submitted with a future reply. No formal agreements were reached..

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

/THOMAS BUCCI/ Examiner, Art Unit 1711	/DAVID G CORMIER/ Primary Examiner, Art Unit 1711

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiners responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicants correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,-
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicants record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiners version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, Interview Record OK on the paper recording the substance of the interview along with the date and the examiners initials.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/941,761	03/30/2018	Barry E. Tuller	SUB-05031-US-CNT2	4804

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Whirlpool Corporation / McGarry Bair PC
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EXAMINER
BUCCI, THOMAS

ART UNIT	PAPER NUMBER
1711	

NOTIFICATION DATE	DELIVERY MODE
01/28/2019	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

deborah_tomaszewski@whirlpool.com
mike_lafrenz@whirlpool.com
patents@mcgarrybair.com

Petitioner Samsung Ex-1004, 0131

Office Action Summary	**Application No.** 15/941,761	**Applicant(s)** Tuller et al.	
	Examiner THOMAS BUCCI	**Art Unit** 1711	**AIA Status** Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☑ Responsive to communication(s) filed on 9/5/18.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☑ This action is **FINAL.** 2b) ☐ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5) ☑ Claim(s) 1-15,19-22 and 24-29 is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6) ☐ Claim(s) ____ is/are allowed.

7) ☑ Claim(s) 1-15,19-22 and 24-29 is/are rejected.

8) ☐ Claim(s) ____ is/are objected to.

9) ☐ Claim(s) ____ are subject to restriction and/or election requirement

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to **PPHfeedback@uspto.gov.**

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☑ The drawing(s) filed on 9/5/18 is/are: a)☑ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. ____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date ____.

4) ☐ Other: ____.

Petitioner Samsung Ex-1004, 0132

DETAILED ACTION

Notice of Pre-AIA or AIA Status

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

2. Office Action is in response to Applicant's amendments/remarks filed 9/5/18. The drawings and specification were amended; claims 1, 3, 5, 11, 12, 15, 20, 21, and 24 were amended; claims 16-18 and 23 are cancelled; and claims 27-29 are newly added. Claims 1-15, 19-22, and 24-29 are presently pending and are presented for examination.

Response to Arguments

3. Applicant's arguments, see pages 11-12 of Remarks, filed 9/5/18, with respect to the objection to the drawings have been fully considered and are persuasive. **The objection to the drawings has been withdrawn**.

4. Applicant's arguments, see page 13 of Remarks, filed 9/5/18, with respect to the rejections of claims 24-26 under 35 USC 112(b) have been fully considered and are persuasive. **The rejections of claims 24-26 under 35 USC 112(b) have been withdrawn**.

5. Applicant's arguments, see pages 13-17 of Remarks, filed 9/5/18, with respect to **the rejections of claims 1-10 under 35 USC 103 have been fully considered but they are not persuasive**.

Applicant argues that the rejection fails to provide logical reasoning supported in fact drawn from the references themselves for combining Welch '580 and Geiger '887 to arrive at the claimed invention, wherein said combination is improper because the Office

Action relied on impermissible hindsight. Examiner respectfully disagrees. As the Supreme Court noted in *KSR*, "[r]igid preventative rules that deny factfinders recourse to common sense, however, are neither necessary under our case law nor consistent with it" (*KSR Intl. Co. v. Teleflex, Inc.*, 550 U.S. 398, 421 (2007)). The fact that a motivation is not present in the cited art alone does not necessarily mean that the Examiner has improperly gleaned the motivation from Applicant's own specification. Motivations for combinations may be gleaned implicitly from the cited art or from "common sense". As per *MPEP 2143*, exemplary rationales supporting a conclusion of obviousness include "...*(B) Simple substitution of one known element for another to obtain predictable results*". Welch teaches that the second dish rack (16) has "a *sloped or stepped* bottom portion" (52), wherein Figure 1 illustrates said second dish rack (16) accommodating a plate on an inclined, non-tiered left portion of the bottom wall [Fig. 1; ¶0019]. Welch does not explicitly teach that said second dish rack has "a *non-tiered* bottom wall". However it is old and well-known in the art to utilize dish racks having a non-tiered bottom wall. For example, Geiger teaches a similar dishwasher comprising a dish rack (25) having a non-tiered bottom wall inclined at an angle [see Fig. 12; col. 3, lines 48-68]. Therefore it would have been obvious to one having ordinary skill in the art at the time of filing to substitute a non-tiered bottom wall configuration for the second dish rack (16) as taught by Geiger in order to predictably receive and support items to be washed [Geiger: Fig. 12; col. 3, lines 48-68]. Additionally, it also would have been obvious for a person having ordinary skill in the art at time of invention to modify the tiered right side of the second dish rack to resemble the non-tiered left side of the second dish rack, as is commonly known, since it has been held that a change in shape

was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the claimed configuration was significant. *In re Dailey,* 357 F.2d 669, 149 USPQ 47 (CCPA 1966) (see MPEP 2144.04).

Applicant argues that the rejection cites mere duplication of parts with no rational underpinning to support the legal conclusion of obviousness. Examiner respectfully disagrees. Welch does not teach that bottom walls of the first and second dish racks are parallel. Rather, the first and second dish racks are mirror images of one another, wherein the configurations are similar, but are inclined in opposite directions. However, it would have been obvious for a person having ordinary skill in the art at time of invention to modify the shape of the second dish rack such that it resemble (duplicate) the first rack *in order to provide for a larger minimum clearance between the first and second racks that allows larger items to fit at the shallow portion of the second rack (right-hand side, laterally)* [see Fig. 4], since it has been held that a change in shape was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the claimed configuration was significant .*In re Dailey,* 357 F.2d 669, 149 USPQ 47 (CCPA 1966), see MPEP 2144.04 (IV)(B). Additionally, it has been held that mere duplication of essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.,* 193 USPQ 8, see MPEP 2144.04 (VI)(B).

On this basis, the rejection of claim 1 under 35 USC 103 in view of Welch and Geiger is maintained.

6. Applicant's arguments, see pages 18-20 of Remarks, filed 9/5/18, with respect to **the rejections of claims 11-26 under 35 USC 103 have been fully considered but they are not persuasive**.

Applicant argues that the combination of Andrew '207 and Ochoa '578 is improper because the Office Action relied on impermissible hindsight. Examiner respectfully disagrees. As the Supreme Court noted in *KSR*, "[r]igid preventative rules that deny factfinders recourse to common sense, however, are neither necessary under our case law nor consistent with it" (*KSR Intl. Co. v. Teleflex, Inc.*, 550 U.S. 398, 421 (2007)). The fact that a motivation is not present in the cited art alone does not necessarily mean that the Examiner has improperly gleaned the motivation from Applicant's own specification. Motivations for combinations may be gleaned implicitly from the cited art or from "common sense". As per *MPEP 2143*, exemplary rationales supporting a conclusion of obviousness include "...*(B) Simple substitution of one known element for another to obtain predictable results*". Andrew teaches a spray tube (13) extending along the bottom wall and having nozzles emitting spray along the angled portion [Fig. 1, 2, 5; col. 2, lines 43-47; col. 3, lines 57-62], but does not explicitly teach that said spray tube is *carried with the dish rack between the loading position and the treating position*. However it is old and well-known in the art to utilize such a spray system configuration wherein the spray tube is carried with the dish rack between the loading position and the treating position for selective docking with a supply conduit. For example, Ochoa similarly discloses a dishwasher having a spray system (24) comprising a spray tube (32) that is mounted to a dish rack (via clips 31) such that the spray tube is selectively docked (via 26) with a supply conduit (54) when the rack is in a

retracted position [Fig. 2, 11; ¶0029, ¶0034]. Therefore it would have been obvious to one having ordinary skill in the art to modify the spray system configuration of Andrew such that the fixed spray tube configuration is substituted with a spray tube mounted (via clips) to the bottom wall of the dish rack, as taught by Ochoa, such that the spray tube is carried with the dish rack between the loading position and the treating position in order to predictably allow for selective docking with the supply conduit when the rack is in a retracted position [Ochoa: Fig. 2, 11; ¶0029, ¶0034]. On this basis, the rejection of claim 11 under 35 USC 103 in view of Andrew and Ochoa is maintained.

Drawings

7. The drawings were received on 9/5/18. These drawings are acceptable.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 1-10 are rejected under 35 U.S.C. 103** as being unpatentable over US Pub. 2003/0226580 to Welch ("Welch") in view of US Pat. 4,064,887 to Geiger et al. ("Geiger").

Regarding claim 1,

Welch discloses a dishwasher (10) [Fig. 1; ¶0015] comprising:

a tub (12) defining a treating chamber receiving dishes for treatment [Fig. 1; ¶0015];

a spray system (32) providing treating liquid to the treating chamber [Fig. 4; ¶0017];

a first dish rack (18) located in the tub and having a bottom wall tiered to form multiple levels, the bottom wall tiered to form multiple levels defining an effective inclination angle for the bottom wall of the first dish rack [Fig. 1, 4; ¶0019]; and

a second dish rack (16) located below the first dish rack, the second dish rack having a bottom wall inclined at an angle matching the effective inclination angle for the bottom wall of first dish rack bottom wall [Fig. 1, 4; ¶0019].

Welch does not teach that bottom walls of the first and second dish racks are parallel. Rather, the first and second dish racks are mirror images of one another, wherein the configurations are similar, but are inclined in opposite directions. However, it would have been obvious for a person having ordinary skill in the art at time of invention to modify the shape of the second dish rack such that it resemble (duplicate) the first rack in order to provide for a larger minimum clearance between the first and second racks that allows larger items to fit at the shallow portion of the second rack (right-hand side, laterally) [see Fig. 4], since it has been held that a change in shape was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the claimed configuration was significant .*In re Dailey,* 357 F.2d 669, 149 USPQ 47 (CCPA 1966), see MPEP 2144.04 (IV)(B). Additionally, it has been held that mere duplication of essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.,* 193 USPQ 8, see MPEP 2144.04 (VI)(B).

Welch teaches that the second dish rack (16) has "a *sloped or stepped* bottom portion" (52), wherein Figure 1 illustrates said second dish rack (16) accommodating a plate on an inclined, non-tiered left portion of the bottom wall [Fig. 1; ¶0019]. Welch does not explicitly teach that said second dish rack has "a *non-tiered* bottom wall". However it is old and well-known in the art to utilize dish racks having a non-tiered bottom wall. For example, Geiger teaches a similar dishwasher comprising a dish rack (25) having a non-tiered bottom wall inclined at an angle [see Fig. 12; col. 3, lines 48-68]. Therefore it would have been obvious to one having ordinary skill in the art at the time of filing to substitute a non-tiered bottom wall for the second dish rack (16) as taught by Geiger in order to predictably receive and support items to be washed [Geiger: Fig. 12; col. 3, lines 48-68]. Additionally, it also would have been obvious for a person having ordinary skill in the art at time of invention to modify the tiered right side of the second dish rack to resemble the non-tiered left side of the second dish rack, as is commonly known, since it has been held that a change in shape was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the claimed configuration was significant. *In re Dailey,* 357 F.2d 669, 149 USPQ 47 (CCPA 1966) (see MPEP 2144.04).

Regarding claim 2,

Welch in view of Geiger discloses the dishwasher according to claim 1, wherein it is noted that the recitation "wherein the second dish rack is configured to hold glasses at an incline angled less than about 45 degrees relative to horizontal" is a statement of intended use which does not patentably distinguish over the cited prior art since Welch meets all the structural elements of the claim(s) and is capable of said intended use if

so desired. See MPEP 2114. Furthermore, it can be seen from Figures 1-5 of Welch that the second dish rack (16) is capable of holding glasses at an incline angled less than 45 degrees relative to horizontal [Welch: Fig. 1, 4; ¶0019-¶0020].

Regarding claim 3,

Welch in view of Geiger discloses the dishwasher according to claim 2, wherein Welch teaches that the spray system comprises a sprayer (36) mounted to the second dish rack and positioned to spray treating liquid into an interior of the glasses [Fig. 4; ¶0017].

Regarding claim 4,

Welch in view of Geiger discloses the dishwasher according to claim 3, wherein Welch teaches that the second dish rack is slidably mounted to the tub, the spray system further comprises a supply conduit (32) located in the tub, and the sprayer (36) selectively docks (48) with the supply conduit during sliding movement of the second dish rack [Fig. 4; ¶0017, ¶0020].

Regarding claim 5,

Welch in view of Geiger discloses the dishwasher according to claim 2, wherein it is noted that the recitation "wherein the incline angle of the glasses is about 15 degrees" is a statement of intended use which does not patentably distinguish over the cited prior art since Welch meets all the structural elements of the claim(s) and is capable of said intended use if so desired. See MPEP 2114. It is fundamental that an apparatus claim defines the structure of the invention and not how the structure is used in a process, or what materials the structure houses in carrying out the process. *Ex parte Masham*, 2 USPQ2d 1647, 1648 (BPAI 1987). See also *In re Yanush*, 477 F.2d 958, 959, 177

USPQ 705,706 (CCPA 1973); *In re Finsterwalder*, 436 F.2d 1028, 1032, 168 USPQ 530, 534 (CCPA 1971); *In re Casey*, 370 F.2d 576, 580, 152 USPQ 235,238 (CCPA 1967). As long as the apparatus of Welch is capable of holding glasses at an inclined angle of about 15 degrees, the prior art apparatus meet the requirements of the claimed feature. Given that Welch teaches that the second dish rack is vertically adjustable on both sides of the rack (via 58), Welch is capable of holding glasses at an inclined angle of about 15 degrees [Fig. 4; ¶0020].

Regarding claim 6,

Welch in view of Geiger discloses the dishwasher according to claim 1, wherein Welch teaches that the second dish rack has at least one side wall, extending upwardly from the bottom wall, and terminates in an upper edge [Fig. 4; ¶0019], but does not explicitly teach that the upper edge is inclined at an angle matching the effective inclination angle. However it is old and well-known in the art to utilize dish racks having a side wall, extending upwardly from the non-tiered bottom wall, and terminating in an upper edge inclined at an angle matching the effective inclination angle. For example, Geiger teaches a similar dishwasher comprising a dish rack (25) having at least one side wall, extending upwardly from the non-tiered bottom wall inclined at an effective angle, and terminating in an upper edge inclined at an angle matching the effective inclination angle [see Fig. 12; col. 3, lines 48-68]. Therefore it would have been obvious to one having ordinary skill in the art at the time of filing to utilize an upper edge inclined at an angle matching the effective inclination angle for the second dish rack, as taught by Geiger, in order to predictably receive and support items to be washed [Geiger: Fig. 12; col. 3, lines 48-68].

Regarding claim 7,

Welch in view of Geiger discloses the dishwasher according to claim 6, wherein Welch teaches a third dish rack (14) located below the second dish rack [Fig. 4; ¶0016].

Regarding claim 8,

Welch in view of Geiger discloses the dishwasher according to claim 7, wherein Welch teaches that the spray system comprises a first sprayer (40) above the first dish rack (18), a second sprayer (38) between the first (18) and second (16) dish racks, and a third sprayer (34) below the third dish rack [Fig. 4; ¶0017].

Regarding claims 9 and 10,

Welch in view of Geiger discloses the dishwasher according to claim 7, wherein Welch teaches the third dish rack (14) has a bottom wall and a side wall terminating in an upper edge, and wherein at least one of the bottom wall or upper edge of the third dish rack is horizontal [Fig. 4; ¶0018].

10. **Claims 11-15, 19-22, and 24-29 are rejected under 35 U.S.C. 103** as being unpatentable over US Pat. 2,910,207 to Andrew ("Andrew") in view of US Pub. 2003/0192578 to Ochoa et al. ("Ochoa").

Regarding claim 11,

Andrew discloses a dishwasher (10) comprising:

a tub (11) defining a treating chamber receiving dishes for treatment [Fig. 2; col. 2, lines 38-43];

a spray system providing treating liquid to the treating chamber (via spray tube 13) [Fig. 1, 2, 5; col. 2, lines 43-47]; and

a dish rack (14) 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 having a bottom wall, a side wall (at 29) extending upwardly from the bottom wall and terminating in an upper edge, with an angled portion (at 28) and a flat portion (at 31) formed in the bottom wall [Fig. 4-5; col. 3, lines 7-19]; and

a spray tube (13) extending along the bottom wall and having nozzles emitting spray along the angled portion, the spray tube located directly adjacent to the bottom wall [Fig. 1, 2, 5; col. 2, lines 43-47; col. 3, lines 57-62].

Andrew does not explicitly teach that said spray tube is *carried with the dish rack between the loading position and the treating position*. However it is old and well-known in the art to utilize such a spray system configuration wherein the spray tube is carried with the dish rack between the loading position and the treating position for selective docking with a supply conduit. For example, Ochoa similarly discloses a dishwasher having a spray system (24) comprising a spray tube (32) that is mounted to a dish rack (via clips 31) such that the spray tube is selectively docked (via 26) with a supply conduit (54) when the rack is in a retracted position [Fig. 2, 11; ¶0029, ¶0034]. Therefore it would have been obvious to one having ordinary skill in the art to modify the spray system configuration of Andrew such that the fixed spray tube configuration is substituted with a spray tube mounted (via clips) to the bottom wall of the dish rack, as taught by Ochoa, such that the spray tube is carried with the dish rack between the loading position and the treating position in order to predictably allow for selective

docking with the supply conduit when the rack is in a retracted position [Ochoa: Fig. 2, 11; ¶0029, ¶0034].

Regarding claim 12,

Andrew in view of Ochoa discloses the dishwasher of claim 27, wherein Andrew teaches that the dish rack is a low profile dish rack where the length of the angled portion (at 28) is greater than a shortest height of an upstanding portion of the side wall (at 29) [Fig. 5; col. 3, lines 7-19].

Regarding claims 13 and 15,

Andrew in view of Ochoa discloses the dishwasher of claims 12 and 27, wherein Andrew teaches that at least one of the nozzles is located above a portion of the angled portion [Fig. 5; col. 3, lines 57-62].

Regarding claim 14,

Andrew in view of Ochoa discloses the dishwasher of claim 12, wherein Andrew teaches that the shortest height is located along a portion of the side wall transverse to the angled portion [Fig. 5; col. 3, lines 7-19].

Regarding claim 19,

Andrew in view of Ochoa discloses the dishwasher of claim 11, wherein Ochoa teaches that the spray tube is configured to rotate about a longitudinal axis [Fig. 11-12; ¶0029].

Regarding claim 20,

Andrew in view of Ochoa discloses the dishwasher of claim 11, wherein Andrew further teaches a curved portion formed in the bottom wall directly between the angled portion (at 28) and the flat portion (at 31) [Fig. 5; col. 3, lines 7-12].

Regarding claims 21 and 22,

Andrew in view of Ochoa discloses the dishwasher of claim 20, wherein Andrew further teaches a second angled portion (at 28) and a second curved portion formed in the bottom wall and wherein the second curved portion and the second angled portion are located on an opposite side of the flat portion (at 31) from the curved portion and the angled portion, and wherein the angled portions have the same angle [Fig. 5; col. 3, lines 7-19].

Regarding claim 24,

Andrew in view of Ochoa discloses the dishwasher of claim 23, wherein Andrew teaches that the flat portion (at 31) is located above a terminal end of at least one of the angled portions [Fig. 5; col. 3, lines 7-12].

Regarding claim 25,

Andrew in view of Ochoa discloses the dishwasher of claim 24, wherein Andrew teaches that the spray tube is located below the flat portion [Fig. 5; col. 3, lines 57-62].

Regarding claim 26,

Andrew in view of Ochoa discloses the dishwasher of claim 25, wherein Andrew teaches a single spray tube located below the flat portion [Fig. 5; col. 3, lines 57-62], but does not explicitly teach multiple spray tubes located below the flat portion. However Ochoa teaches a spray system comprising multiple spray tubes (32) for enhanced spraying coverage of items to be cleaned positioned within the rack [Fig. 11; ¶0032-¶0034]. Therefore it would have been obvious to one having ordinary skill in the art at the time of invention to further modify the spray system to include multiple spray tubes located below the flat portion for enhanced spraying coverage of items to be cleaned

positioned within the rack [Ochoa: ¶0032-¶0034]. Additionally, it would have been obvious to one having ordinary skill in the art at the time of invention to include multiple spray tubes located below the flat portion, since it has been held that mere duplication of essential working parts of a device involves only routine skill in the art. See MPEP 2144.04(VI)(B).

Regarding claim 27,

Andrew discloses a dishwasher (10) comprising:

a tub (11) defining a treating chamber receiving dishes for treatment [Fig. 2; col. 2, lines 38-43];

a spray system providing treating liquid to the treating chamber (via spray tube 13) [Fig. 1, 2, 5; col. 2, lines 43-47]; and

a dish rack (14) located in the tub and selectively moveable into and out of the tub, the dish rack having a bottom wall, a side wall (at 29) extending upwardly from the bottom wall and terminating in an upper edge, with an angled portion (at 28) formed in the bottom wall and a contoured portion (at 31) formed in the bottom wall [Fig. 4-5; col. 3, lines 7-19]; and

a spray tube (13) having nozzles emitting spray along the angled portion [Fig. 1, 2, 5; col. 2, lines 43-47; col. 3, lines 57-62];

Andrew does not explicitly teach that the contoured portion is 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.* However it is old and well-known in the art to utilize such a spray system configuration wherein the bottom wall of a dish rack comprises a contoured portion forming a curved mounting portion to which the spray tube is mounted

such that the spray tube is carried with the dish rack between the loading position and the treating position for selective docking with a supply conduit. For example, Ochoa similarly discloses a dishwasher having a spray system (24) comprising a spray tube (32) that is mounted to a dish rack (via clips 31) such that the spray tube is selectively docked (via 26) with a supply conduit (54) when the rack is in a retracted position [Fig. 2, 11; ¶0029, ¶0034], wherein Figure 19 illustrates an embodiment wherein the spray tube (68') is mounted at a contoured portion forming a curved mounting portion of the bottom wall of the dish rack (116) [see Fig. 19; ¶0037]. Therefore it would have been obvious to one having ordinary skill in the art to modify the spray system/dish rack configuration of Andrew such that the fixed spray tube configuration is substituted with a spray tube mounted (via clips) at a contoured portion forming a curved mounting portion of the bottom wall of the dish rack, as taught by Ochoa, such that the spray tube is carried with the dish rack between the loading position and the treating position in order to predictably allow for selective docking with the supply conduit when the rack is in a retracted position [Ochoa: Fig. 2, 11; ¶0029, ¶0034].

Regarding claim 28,

Andrew in view of Ochoa discloses the dishwasher of claim 21, wherein Andrew teaches that the angled portion begins at the side wall (at 29) and terminates at the curved portion [Fig. 5; col. 3, lines 7-19].

Regarding claim 29,

Andrew in view of Ochoa discloses the dishwasher of claim 21, wherein the spray tube (13) is mounted adjacent the curved portion [Andrew: Fig. 5; col. 3, lines 7-19], but does not explicitly teach a second spray tube mounted adjacent the second

curved portion. However Ochoa teaches a spray system comprising multiple spray tubes (32) for enhanced spraying coverage of items to be cleaned positioned within the rack [Fig. 11; ¶0032-¶0034]. Therefore it would have been obvious to one having ordinary skill in the art at the time of invention to further modify the spray system to include a second spray tube mounted adjacent the second curved portion for enhanced spraying coverage of items to be cleaned positioned within the rack [Ochoa: ¶0032-¶0034]. Additionally, it would have been obvious to one having ordinary skill in the art at the time of invention to include two spray tubes under the curved portions, since it has been held that mere duplication of essential working parts of a device involves only routine skill in the art. See MPEP 2144.04(VI)(B).

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS BUCCI whose telephone number is (571)270-5406. The examiner can normally be reached on Mon-Fri 8:00 - 5:00.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at http://www.uspto.gov/interviewpractice.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/THOMAS BUCCI/
Examiner, Art Unit 1711
/DAVID G CORMIER/
Primary Examiner, Art Unit 1711

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15/941,761	Tuller et al.
	Examiner	Art Unit
	THOMAS BUCCI	1711

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

CLAIMS

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	06/11/2018	01/19/2019							
	1	✓	✓							
	2	✓	✓							
	3	✓	✓							
	4	✓	✓							
	5	✓	✓							
	6	✓	✓							
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	22	✓	✓							
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	24	✓	✓							
	25	✓	✓							
	26	✓	✓							
	27		✓							
	28		✓							
	29		✓							

Petitioner Samsung Ex-1004, 0151

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15/941,761	Tuller et al.
	Examiner	**Art Unit**
	THOMAS BUCCI	1711

CPC - Searched*		
Symbol	**Date**	**Examiner**
A47L15/50, A47L15/508, A47L15/23, A47L15/22, A47L15/505	06/11/2018	TB
ABOVE UPDATED	01/19/2019	TB

CPC Combination Sets - Searched*		
Symbol	**Date**	**Examiner**

US Classification - Searched*			
Class	**Subclass**	**Date**	**Examiner**
134	170, 56D, 176, 200, 172, 198, 58D, 135, 179, 57D, 144, 199, 165, 137, 177, 103.2	06/11/2018	TB
211	41.8, 41.9, 41.4, 181.1	06/11/2018	TB
ABOVE	UPDATED	01/19/2019	TB

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	**Date**	**Examiner**
Comprehensive search performed in EAST, attached	06/11/2018	TB
Class/subclass search in USPC and CPC	06/11/2018	TB
Inventor search in EAST	06/11/2018	TB
Interference search in EAST	06/11/2018	TB
All IDS references considered	06/11/2018	TB
ABOVE UPDATED, ATTACHED	01/19/2019	TB

/THOMAS BUCCI/ Examiner, Art Unit 1711	/THOMAS BUCCI/ Examiner, Art Unit 1711

Petitioner Samsung Ex-1004, 0152

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15/941,761	Tuller et al.
	Examiner	**Art Unit**
	THOMAS BUCCI	1711

Interference Search			
US Class/CPC Symbol	**US Subclass/CPC Group**	**Date**	**Examiner**
134	170, 56D, 176, 200, 172, 198, 58D, 135, 179, 57D, 144, 199, 165, 137, 177, 103.2	06/11/2018	TB
211	41.8, 41.9, 41.4, 181.1	06/11/2018	TB
ABOVE	UPDATED	01/19/2019	TB

/THOMAS BUCCI/ Examiner, Art Unit 1711	/THOMAS BUCCI/ Examiner, Art Unit 1711

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EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	1	"14620688"	US-PGPUB; USPAT	OR	OFF	2016/03/14 08:47
S2	11	("20030226580" | "2646809" | "2907470" | "2910207" | "3258127" | "3464566" | "6907998" | "7594513" | "20100051069" | "20130002107" | "20120138106").PN.	US-PGPUB; USPAT	OR	OFF	2016/03/14 09:00
S3	15	"2002065562"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/03/14 09:02
S4	14	"10332149"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/03/14 09:03
S5	10	"5006715"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/03/14 09:04
S6	86	"5006716"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/03/14 09:04
S7	23	"2594186"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/03/14 09:05
S8	6	"19960496"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/03/14 09:06
S9	168	(barry near2 tuller).inv.	US-PGPUB; USPAT;	OR	OFF	2016/03/14 09:56

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			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
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S17	2	"20130087173"	US-PGPUB; USPAT	OR	OFF	2016/03/14 14:28
S18	59	"2321590"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/03/14 14:29
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S22	179	S20 AND ((D06F39/088 OR D06F35/005 OR D06F35/006 OR D06F39/083 OR D06F2204/08 OR D06F2202/08 OR D06F39/08 OR B08B3/02 OR B08B3/04 OR B08B9/20 OR B08B9/093 OR B08B5/02 OR B08B9/34 OR B08B3/024).CPC.)	US-PGPUB; USPAT	OR	OFF	2016/03/14 14:42
S23	1970	S20 AND ((134/56D OR 134/25.2 OR 134/57D OR 134/58D OR 134/18 OR	US-PGPUB; USPAT	OR	OFF	2016/03/14 14:48

		134/200 OR 134/198 OR 134/111 OR 134/10 OR 134/115R OR 134/184 OR 134/172 OR 134/179 OR 134/176 OR 134/135 OR 134/99.2 OR 134/108 OR 134/95.3 OR 134/56R OR 134/183 OR 134/137 OR 134/180 OR 134/36 OR 134/178 OR 134/182 OR 134/103.2 OR 134/174 OR 134/72 OR 134/99.1 OR 134/144 OR 134/191 OR 134/166R OR 134/133 OR 134/131 OR 134/165 OR 134/153 OR 134/60 OR 134/170 OR 134/32 OR 134/22.1 OR 134/148 OR 134/103.3 OR 134/151 OR 134/98.1 OR 134/85 OR 134/138 OR 134/88 OR 134/169R OR 134/92 OR 134/167R OR 134/168R OR 134/23 OR 134/117 OR 134/59 OR 134/125 OR 134/129 OR 134/52 OR 134/82).CCLS.)				
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S30	22	"3951684"	US-PGPUB; USPAT	OR	OFF	2016/06/11 13:05
S31	9	("2799285" | "3951683" | "3969137").PN. OR ("4134414").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2016/06/11 13:10
S32	28	("1893979" | "3064664" | "3444870" | "3722895" | "3785566").PN. OR ("3951684").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2016/06/11 13:14
S33	5	"19960496"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/08/20 12:27
S34	24	"2594186"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/08/20 12:28
S35	2	"20030226580"	US-PGPUB; USPAT	OR	OFF	2016/08/20 12:47
S36	4	("2003/0226580").URPN.	USPAT	OR	OFF	2016/08/20 12:48
S37	18	dishwasher and (tine with height)	US-PGPUB; USPAT	OR	ON	2016/08/20 14:40
S38	0	"15416687"	US-PGPUB; USPAT	OR	OFF	2017/05/15 08:27
S39	15	("4134414" | "2646809" | "2907470" | "2910207" | "3258127" | "3464566" | "6907998" | "7594513" | "20030226580" | "20050109378" | "20120292270" | "20130098406" | "20100051069" | "20130002107" | "20120138106").PN.	US-PGPUB; USPAT	OR	OFF	2017/05/15 08:28
S40	6	"19960496"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/15 08:29
S41	17	"2002065562"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/15 08:29
S42	16	"10332149"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/15 08:30

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S43	12	"5006715"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/15 08:30
S44	27	"2594186"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/15 08:30
S45	86	"5006716"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/15 08:31
S46	2	"20030226580"	US-PGPUB; USPAT	OR	OFF	2017/05/15 09:23
S47	2	"20130098406"	US-PGPUB; USPAT	OR	OFF	2017/05/15 09:46
S48	2	"20050109378"	US-PGPUB; USPAT	OR	OFF	2017/05/15 09:49
S49	103	(US-20150245762-$ or US-20130002107-$ or US-20120138106-$ or US-20100051069-$ or US-20030226580-$ or US-20070246090-$ or US-20120097199-$ or US-20120125383-$ or US-20120138111-$ or US-20130000673-$ or US-20140137909-$ or US-20140137911-$ or US-20150359412-$ or US-20120138100-$ or US-20130087173-$ or US-20130098406-$ or US-20140076363-$ or US-20060144424-$ or US-20120138107-$ or US-20050109378-$ or US-20060108298-$ or US-20060219271-$ or US-20060289038-$ or US-20090065455-$ or US-20110030742-$ or US-20120291827-$).did. or (US-20120292269-$ or US-20120292270-$ or US-20120298155-$ or US-20130104944-$ or US-20130299438-$).did. or (US-7594513-$ or US-6907998-$ or US-3464566-$ or US-3258127-$ or US-2910207-$ or US-2907470-$ or US-2646809-$ or US-8753454-$ or US-9119517-$ or US-9259138-$ or US-5662744-$ or US-6460555-$ or US-D481179-$ or US-D488594-$ or US-8347898-$ or US-4653520-$ or US-4134414-$ or US-3951684-$ or US-3951683-$ or US-3444870-$ or US-8192557-$ or US-7455066-$ or US-7410228-$).did. or (DE-10332149-$ or JP-5006715-$ or JP-5006715-$ or JP-5006715-$ or JP-5006716-$ or JP-5006716-$ or JP-5006716-$ or EP-2594186-$ or EP-2754377-$ or DE-19960496-$ or EP-2912983-$ or CA-2071423-$ or CA-	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	OFF	2017/10/28 14:15

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S51	2191	((134/135 OR 211/41.8 OR 211/41.9 OR 211/181.1).CCLS.)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	OFF	2017/10/28 14:18
S52	307	((211/41.8).CCLS.)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	OFF	2017/10/28 14:18
S53	17	("2003/0205258" | "2004/0020876" | "2004/0079713").URPN.	USPAT	OR	OFF	2017/10/28 14:25
S54	1	"15416687"	US-PGPUB; USPAT	OR	OFF	2017/10/28 15:11
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S58	28	"4064887"	US-PGPUB; USPAT	OR	OFF	2017/12/20 13:13
S59	2	"20050109378"	US-PGPUB; USPAT	OR	OFF	2017/12/20 13:20
S60	147	(US-20150245762-$ or US-20130002107-$ or US-20120138106-$ or US-20100051069-$ or US-20030226580-$ or US-20070246090-$ or US-20120097199-$ or US-20120125383-$ or US-20120138111-$ or US-20130000673-$ or US-20140137909-$ or US-20140137911-$ or US-20150359412-$ or US-20120138100-$ or US-20130087173-$ or US-20130098406-$ or US-20140076363-$ or US-20060144424-$ or US-20120138107-$ or US-20050109378-$ or US-20060108298-$ or US-20060219271-$ or US-20060289038-$ or US-20090065455-$ or US-20110030742-$ or US-20120291827-$).did. or (US-	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	OFF	2018/01/29 17:59

		20120292269-$ or US-20120292270-$ or US-20120298155-$ or US-20130104944-$ or US-20130299438-$ or US-20160095497-$ or US-20160007824-$ or US-20140021149-$ or US-20120293054-$ or US-20120139399-$ or US-20100314977-$ or US-20090090680-$ or US-20080169009-$ or US-20050241686-$ or US-20040108283-$ or US-20040079713-$ or US-20030089672-$ or US-20170135547-$).did. or (US-7594513-$ or US-6907998-$ or US-3464566-$ or US-3258127-$ or US-2910207-$ or US-2907470-$ or US-2646809-$ or US-8753454-$ or US-9119517-$ or US-9259138-$ or US-5662744-$ or US-6460555-$ or US-D481179-$ or US-D488594-$ or US-8347898-$ or US-4653520-$ or US-4134414-$ or US-3951684-$ or US-3951683-$ or US-3444870-$ or US-8192557-$ or US-7455066-$ or US-7410228-$ or US-8701898-$ or US-8567882-$ or US-8534471-$).did. or (US-7445128-$ or US-7418967-$ or US-7032604-$ or US-5918749-$ or US-5657878-$ or US-5205419-$ or US-4064887-$ or US-3752322-$ or US-3303934-$ or US-3288302-$ or US-3269548-$ or US-3126098-$ or US-2739025-$ or US-1562614-$ or US-0372123-$).did. or (DE-10332149-$ or JP-5006715-$ or JP-5006715-$ or JP-5006715-$ or JP-5006716-$ or JP-5006716-$ or JP-5006716-$ or EP-2594186-$ or EP-2754377-$ or DE-19960496-$ or EP-2912983-$ or CA-2071423-$ or CA-2094466-$ or CA-2094466-$ or CA-2353655-$ or CA-2431612-$ or CA-2432235-$ or CA-2444311-$ or CA-2445170-$ or CA-2473527-$ or DE-102010061215-$ or DE-102011054149-$ or DE-102012102184-$ or DE-102013111240-$ or DE-102013111241-$ or EP-2896343-$).did. or (EP-2912983-$ or GB-2321590-$ or WO-2009083576-$ or JP-2594186-$ or JP-2594186-$).did. or (DE-10332149-$ or DE-19960496-$ or GB-2321590-$ or EP-372342-$).did. or (JP-2002065562-$).did. or (JP-2002065562-$ or DE-10332149-$ or JP-2009005925-$ or JP-2009005930-$ or EP-2594186-$ or DE-19960496-$ or DE-29800479-$ or US-8567882-$ or DE-102012102189-$ or US-20120139399-$ or DE-102010043272-$ or DE-102008015713-$ or DE-102004057018-$ or US-20060108298-$ or WO-2006015932-$ or WO-2005107570-$ or WO-03055375-$ or US-4606464-$ or US-4064887-$).did.				
S61	1	"20080156358"	US-PGPUB; USPAT	OR	OFF	2018/04/30 05:44
S62	1	"20150201823"	US-PGPUB; USPAT	OR	OFF	2018/04/30 05:45
S63	6	"2910207"	US-PGPUB;	OR	OFF	2018/04/30

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			USPAT			05:46
S64	53	"3752322"	US-PGPUB; USPAT	OR	OFF	2018/04/30 05:48
S65	2	"20030226580"	US-PGPUB; USPAT	OR	OFF	2018/04/30 10:26
S66	6	"2910207"	US-PGPUB; USPAT	OR	OFF	2018/04/30 10:27
S67	185	(US-20150245762-$ or US-20130002107-$ or US-20120138106-$ or US-20100051069-$ or US-20030226580-$ or US-20070246090-$ or US-20120097199-$ or US-20120125383-$ or US-20120138111-$ or US-20130000673-$ or US-20140137909-$ or US-20140137911-$ or US-20150359412-$ or US-20120138100-$ or US-20130087173-$ or US-20130098406-$ or US-20140076363-$ or US-20060144424-$ or US-20120138107-$ or US-20050109378-$ or US-20060108298-$ or US-20060219271-$ or US-20060289038-$ or US-20090065455-$ or US-20110030742-$ or US-20120291827-$).did. or (US-20120292269-$ or US-20120292270-$ or US-20120298155-$ or US-20130104944-$ or US-20130299438-$ or US-20160095497-$ or US-20160007824-$ or US-20140021149-$ or US-20120293054-$ or US-20120139399-$ or US-20100314977-$ or US-20090090680-$ or US-20080169009-$ or US-20050241686-$ or US-20040108283-$ or US-20040079713-$ or US-20030089672-$ or US-20170135547-$ or US-20080156358-$ or US-20150201823-$).did. or (US-7594513-$ or US-6907998-$ or US-3464566-$ or US-3258127-$ or US-2910207-$ or US-2907470-$ or US-2646809-$ or US-8753454-$ or US-9119517-$ or US-9259138-$ or US-5662744-$ or US-6460555-$ or US-D481179-$ or US-D488594-$ or US-8347898-$ or US-4653520-$ or US-4134414-$ or US-3951684-$ or US-3951683-$ or US-3444870-$ or US-8192557-$ or US-7455066-$ or US-7410228-$ or US-8701898-$ or US-8567882-$ or US-8534471-$).did. or (US-7445128-$ or US-7418967-$ or US-7032604-$ or US-5918749-$ or US-5657878-$ or US-5205419-$ or US-4064887-$ or US-3752322-$ or US-3303934-$ or US-3288302-$ or US-3269548-$ or US-3126098-$ or US-2739025-$ or US-1562614-$ or US-0372123-$ or US-D506855-$ or US-6666220-$ or US-9345382-$ or US-8353412-$ or US-5567029-$ or US-4238035-$ or US-7644826-$ or US-5601195-$ or US-8807352-$ or US-8356719-$ or US-8651287-$ or US-8196593-$).did. or (US-6786339-$ or US-7228975-$ or US-7231929-$ or US-8714371-$ or US-7931155-$ or US-D398092-$ or US-D796750-$ or US-	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	OFF	2018/04/30 11:12

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		5351837-$ or US-8104628-$ or US-5480035-$ or US-4917248-$ or US-6571965-$ or US-4606464-$ or US-9949613-$ or US-5158185-$ or US-8960452-$ or US-5497890-$ or US-6325220-$ or US-6848585-$ or US-7766175-$ or US-7682465-$ or US-9877632-$ or US-9615722-$).did. or (DE-10332149-$ or JP-5006715-$ or JP-5006715-$ or JP-5006715-$ or JP-5006716-$ or JP-5006716-$ or JP-5006716-$ or EP-2594186-$ or EP-2754377-$ or DE-19960496-$ or EP-2912983-$ or CA-2071423-$ or CA-2094466-$ or CA-2094466-$ or CA-2353655-$ or CA-2431612-$ or CA-2432235-$ or CA-2444311-$ or CA-2445170-$ or CA-2473527-$ or DE-102010061215-$ or DE-102011054149-$ or DE-102012102184-$ or DE-102013111240-$ or DE-102013111241-$ or EP-2896343-$).did. or (EP-2912983-$ or GB-2321590-$ or WO-2009083576-$ or JP-2594186-$ or JP-2594186-$).did. or (DE-10332149-$ or DE-19960496-$ or GB-2321590-$ or EP-372342-$).did. or (JP-2002065562-$).did. or (JP-2002065562-$ or DE-10332149-$ or JP-2009005925-$ or JP-2009005930-$ or EP-2594186-$ or DE-19960496-$ or DE-29800479-$ or US-8567882-$ or DE-102012102189-$ or US-20120139399-$ or DE-102010043272-$ or DE-102008015713-$ or DE-102004057018-$ or US-20060108298-$ or WO-2006015932-$ or WO-2005107570-$ or WO-03055375-$ or US-4606464-$ or US-4064887-$).did.				
S68	0	"15941761"	US-PGPUB; USPAT	OR	OFF	2018/06/10 16:19
S69	16	("20030226580" | "20050109378" | "20100051069" | "20120138106" | "20120292270" | "20130002107" | "20130098406" | "2646809" | "2907470" | "2910207" | "3258127" | "3464566" | "4064887" | "4134414" | "6907998" | "7594513").PN.	US-PGPUB; USPAT	OR	OFF	2018/06/10 16:20
S70	6	"19960496"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/06/10 16:20
S71	18	"2002065562"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/06/10 16:20
S72	16	"10332149"	US-PGPUB; USPAT; USOCR;	OR	OFF	2018/06/10 16:21

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			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S73	12	"5006715"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/06/10 16:21
S74	29	"2594186"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/06/10 16:21
S75	88	"5006716"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/06/10 16:22
S76	6	"8287660"	US-PGPUB; USPAT	OR	OFF	2018/06/11 06:13
S77	2	"20160058264"	US-PGPUB; USPAT	OR	OFF	2018/06/11 07:49
S78	1	"20030192578"	US-PGPUB; USPAT	OR	OFF	2018/06/11 07:50
S79	9	"3051183"	US-PGPUB; USPAT	OR	OFF	2018/06/11 07:50
S80	477	(US-20160058264-$ or US-20080163904-$ or US-20140150831-$ or US-20120138106-$ or US-20120097200-$ or US-20120138092-$ or US-20120138096-$ or US-20120138110-$ or US-20120138111-$ or US-20120249467-$ or US-20140251378-$ or US-20150245762-$ or US-20150257623-$ or US-20170055799-$ or US-20170135547-$ or US-20170156563-$ or US-20170172370-$ or US-20170273535-$ or US-20100154846-$ or US-20110197937-$ or US-20110197938-$ or US-20120125381-$ or US-20120125382-$ or US-20030183255-$ or US-20030192578-$ or US-20040069332-$).did. or (US-20050133070-$ or US-20050241680-$ or US-20050241686-$ or US-20070006903-$ or US-20070158472-$ or US-20070235063-$ or US-20070246078-$ or US-20070251553-$ or US-20070289615-$ or US-20080142056-$ or US-20080156358-$ or US-20080169009-$ or US-20080173730-$ or US-20080271765-$ or US-20090159101-$ or US-20090159103-$ or US-20100051071-$ or US-20100101611-$ or US-20100139719-$ or US-20100194254-$ or US-20110030742-$ or US-20110155190-$ or US-20120279530-$ or	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2018/06/11 07:53

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		US-20120285490-$ or US-20120285491-$ or US-20120291827-$ or US-20120325277-$).did. or (US-20130068265-$ or US-20140070025-$ or US-20140137909-$ or US-20140196756-$ or US-20140261584-$ or US-20140345654-$ or US-20150007861-$ or US-20150122298-$ or US-20150136189-$ or US-20150182103-$ or US-20150201823-$ or US-20150230687-$ or US-20150250374-$ or US-20150272421-$ or US-20150366430-$ or US-20160000295-$ or US-20160066765-$ or US-20160106295-$ or US-20160106297-$ or US-20040255992-$ or US-20170135548-$ or US-20040194810-$ or US-20080110480-$ or US-20080110481-$ or US-20030226580-$ or US-20050109378-$ or US-20130098406-$).did. or (US-20030089672-$ or US-20040079713-$ or US-20060219271-$ or US-20100314977-$ or US-20120139399-$ or US-20130104944-$ or US-20140076363-$ or US-20040250837-$ or US-20110203619-$ or US-20120031432-$ or US-20120175431-$ or US-20140373883-$ or US-20150208897-$ or US-20160198927-$ or US-20160316992-$ or US-20170007094-$ or US-20170181600-$ or US-20170188790-$ or US-20170245727-$ or US-20170258290-$ or US-20170265707-$ or US-20170265713-$ or US-20170273534-$ or US-20140332042-$ or US-20090255560-$ or US-20080276975-$).did. or (US-9010345-$ or US-6969029-$ or US-3146953-$ or US-3213866-$ or US-3051183-$ or US-2980120-$ or US-2973907-$ or US-2734520-$ or US-2031816-$ or US-7594513-$ or US-9532699-$ or US-8454762-$ or US-9119517-$ or US-9259138-$ or US-7947132-$ or US-8137479-$ or US-8187390-$ or US-9295368-$ or US-5944037-$ or US-9375128-$ or US-9414736-$ or US-9492055-$ or US-9532701-$ or US-9693672-$ or US-9706896-$ or US-9839340-$).did. or (US-D741556-$ or US-D750854-$ or US-D750855-$ or US-8881748-$ or US-9133574-$ or US-9480389-$ or US-3064664-$ or US-3064665-$ or US-3348775-$ or US-3841342-$ or US-4046261-$ or US-4064887-$ or US-4145002-$ or US-4257559-$ or US-4735222-$ or US-4884585-$ or US-4993444-$ or US-5211190-$ or US-5267582-$ or US-5415350-$ or US-5507877-$ or US-5546968-$ or US-5577665-$ or US-5730370-$ or US-5823211-$ or US-5904166-$ or US-5927616-$).did. or (US-5983908-$ or US-6053185-$ or US-6325220-$ or US-6955179-$ or US-8287660-$ or US-8696827-$ or US-4038103-$ or US-4611759-$ or US-4836230-$ or US-				

		5582742-$ or US-3960328-$ or US-5964232-$ or US-7032604-$ or US-6431188-$ or US-7055537-$ or US-7225818-$ or US-8166983-$ or US-8191560-$ or US-9138126-$ or US-9167953-$ or US-1562614-$ or US-2646809-$ or US-2739025-$ or US-2907470-$ or US-2910207-$ or US-3126098-$ or US-3288302-$).did. or (US-3752322-$ or US-8347898-$ or US-2016880-$ or US-2956572-$ or US-3006557-$ or US-3884263-$ or US-3934822-$ or US-4135532-$ or US-4175575-$ or US-4807654-$ or US-5842492-$ or US-6112754-$ or US-6869029-$ or US-7509963-$ or US-7673639-$ or US-7754024-$ or US-7896977-$ or US-8333207-$ or US-8778094-$ or US-8801863-$ or US-9668635-$ or US-8905053-$ or US-9034114-$ or US-9375127-$ or US-9420938-$ or US-9474430-$ or US-9480386-$).did. or (US-9675232-$ or US-9736123-$ or US-9801523-$ or US-4582259-$ or US-1701066-$ or US-3342421-$ or US-5488965-$ or US-6390106-$ or US-3210010-$ or US-5609174-$ or US-4798017-$ or US-3691577-$ or US-9486819-$ or US-5787910-$ or US-3176697-$ or US-4405087-$ or US-D778667-$ or US-6766864-$ or US-4420005-$ or US-4298015-$ or US-3719323-$ or US-9827600-$ or US-7331356-$ or US-9480385-$ or US-9301670-$ or US-7695571-$ or US-2904265-$).did. or (US-2407533-$).did. or (US-3460548-$ or US-3210010-$ or US-0321025-$ or US-3446219-$ or US-2904265-$ or US-2808842-$ or US-2664902-$ or US-2407533-$ or US-2320133-$).did. or (EP-2454983-$ or EP-3222191-$ or EP-1277430-$ or GB-2322067-$ or KR-20050122359-$ or KR-101248098-$ or EP-3222192-$ or WO-2015000512-$ or EP-1632166-$ or EP-1632166-$ or DE-10039880-$ or EP-1183983-$).did. or (GB-2322067-$).did. or (JP-11253381-$).did. or (EP-2454983-$ or GB-2322067-$ or JP-11253381-$ or DE-202004013786-$ or CN-204467992-$).did.				
S81	247	(US-20160058264-$ or US-20080163904-$ or US-20140150831-$ or US-20120138106-$ or US-20120097200-$ or US-20120138092-$ or US-20120138096-$ or US-20120138110-$ or US-20120138111-$ or US-20120249467-$ or US-20140251378-$ or US-20150245762-$ or US-20150257623-$ or US-20170055799-$ or US-20170135547-$ or US-20170156563-$ or US-20170172370-$ or US-20170273535-$ or US-20100154846-$ or US-20110197937-$ or US-20110197938-$ or US-20120125381-$ or US-20120125382-$	US-PGPUB; USPAT	OR	OFF	2018/06/11 07:53

		or US-20030183255-$ or US-20030192578-$ or US-20040069332-$).did. or (US-20050133070-$ or US-20050241680-$ or US-20050241686-$ or US-20070006903-$ or US-20070158472-$ or US-20070235063-$ or US-20070246078-$ or US-20070251553-$ or US-20070289615-$ or US-20080142056-$ or US-20080156358-$ or US-20080169009-$ or US-20080173730-$ or US-20080271765-$ or US-20090159101-$ or US-20090159103-$ or US-20100051071-$ or US-20100101611-$ or US-20100139719-$ or US-20100194254-$ or US-20110030742-$ or US-20110155190-$ or US-20120279530-$ or US-20120285490-$ or US-20120285491-$ or US-20120291827-$ or US-20120325277-$).did. or (US-20130068265-$ or US-20140070025-$ or US-20140137909-$ or US-20140196756-$ or US-20140261584-$ or US-20140345654-$ or US-20150007861-$ or US-20150122298-$ or US-20150136189-$ or US-20150182103-$ or US-20150201823-$ or US-20150230687-$ or US-20150250374-$ or US-20150272421-$ or US-20150366430-$ or US-20160000295-$ or US-20160066765-$ or US-20160106295-$ or US-20160106297-$ or US-20040255992-$ or US-20170135548-$ or US-20040194810-$ or US-20080110480-$ or US-20080110481-$ or US-20030226580-$ or US-20050109378-$ or US-20130098406-$).did. or (US-20030089672-$ or US-20040079713-$ or US-20060219271-$ or US-20100314977-$ or US-20120139399-$ or US-20130104944-$ or US-20140076363-$ or US-20040250837-$ or US-20110203619-$ or US-20120031432-$ or US-20120175431-$ or US-20140373883-$ or US-20150208897-$ or US-20160198927-$ or US-20160316992-$ or US-20170007094-$ or US-20170181600-$ or US-20170188790-$ or US-20170245727-$ or US-20170258290-$ or US-20170265707-$ or US-20170265713-$ or US-20170273534-$ or US-20140332042-$ or US-20090255560-$ or US-20080276975-$).did. or (US-9010345-$ or US-6969029-$ or US-3146953-$ or US-3213866-$ or US-3051183-$ or US-2980120-$ or US-2973907-$ or US-2734520-$ or US-2031816-$ or US-7594513-$ or US-9532699-$ or US-8454762-$ or US-9119517-$ or US-9259138-$ or US-7947132-$ or US-8137479-$ or US-8187390-$ or US-9295368-$ or US-5944037-$ or US-9375128-$ or US-9414736-$ or US-9492055-$ or US-9532701-$ or US-9693672-$ or US-9706896-$ or US-9839340-$).did. or (US-D741556-$ or US-D750854-$ or US-D750855-$ or US-8881748-$ or US-9133574-$ or US-9480389-$ or US-				

		3064664-$ or US-3064665-$ or US-3348775-$ or US-3841342-$ or US-4046261-$ or US-4064887-$ or US-4145002-$ or US-4257559-$ or US-4735222-$ or US-4884585-$ or US-4993444-$ or US-5211190-$ or US-5267582-$ or US-5415350-$ or US-5507877-$ or US-5546968-$ or US-5577665-$ or US-5730370-$ or US-5823211-$ or US-5904166-$ or US-5927616-$).did. or (US-5983908-$ or US-6053185-$ or US-6325220-$ or US-6955179-$ or US-8287660-$ or US-8696827-$ or US-4038103-$ or US-4611759-$ or US-4836230-$ or US-5582742-$ or US-3960328-$ or US-5964232-$ or US-7032604-$ or US-6431188-$ or US-7055537-$ or US-7225818-$ or US-8166983-$ or US-8191560-$ or US-9138126-$ or US-9167953-$ or US-1562614-$ or US-2646809-$ or US-2739025-$ or US-2907470-$ or US-2910207-$ or US-3126098-$ or US-3288302-$).did. or (US-3752322-$ or US-8347898-$ or US-2016880-$ or US-2956572-$ or US-3006557-$ or US-3884263-$ or US-3934822-$ or US-4135532-$ or US-4175575-$ or US-4807654-$ or US-5842492-$ or US-6112754-$ or US-6869029-$ or US-7509963-$ or US-7673639-$ or US-7754024-$ or US-7896977-$ or US-8333207-$ or US-8778094-$ or US-8801863-$ or US-9668635-$ or US-8905053-$ or US-9034114-$ or US-9375127-$ or US-9420938-$ or US-9474430-$ or US-9480386-$).did. or (US-9675232-$ or US-9736123-$ or US-9801523-$ or US-4582259-$ or US-1701066-$ or US-3342421-$ or US-5488965-$ or US-6390106-$ or US-3210010-$ or US-5609174-$ or US-4798017-$ or US-3691577-$ or US-9486819-$ or US-5787910-$ or US-3176697-$ or US-4405087-$ or US-D778667-$ or US-6766864-$ or US-4420005-$ or US-4298015-$ or US-3719323-$ or US-9827600-$ or US-7331356-$ or US-9480385-$ or US-9301670-$ or US-7695571-$ or US-2904265-$).did. or (US-2407533-$).did. or (US-3460548-$ or US-3210010-$ or US-0321025-$ or US-3446219-$ or US-2904265-$ or US-2808842-$ or US-2664902-$ or US-2407533-$ or US-2320133-$).did. or (EP-2454983-$ or EP-3222191-$ or EP-1277430-$ or GB-2322067-$ or KR-20050122359-$ or KR-101248098-$ or EP-3222192-$ or WO-2015000512-$ or EP-1632166-$ or EP-1632166-$ or DE-10039880-$ or EP-1183983-$).did. or (GB-2322067-$).did. or (JP-11253381-$).did. or (EP-2454983-$ or GB-2322067-$ or JP-				

		11253381-$ or DE-202004013786-$ or CN-204467992-$).did.				
S82	14	("3126098").URPN.	USPAT	OR	OFF	2018/06/11 08:16
S83	2	"20130098406"	US-PGPUB; USPAT	OR	OFF	2018/06/11 08:30
S84	2	"20120292270"	US-PGPUB; USPAT	OR	OFF	2018/06/11 08:32
S85	2	"20050109378"	US-PGPUB; USPAT	OR	OFF	2018/06/11 08:32
S86	8	"4134414"	US-PGPUB; USPAT	OR	OFF	2018/06/11 08:49
S87	20	"3126098"	US-PGPUB; USPAT	OR	OFF	2018/06/11 09:56
S68	217	"7594513"	US-PGPUB; USPAT	OR	OFF	2018/06/11 12:08
S89	106	"7594513"	USPAT	OR	OFF	2018/06/11 12:09
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		3210010-$ or US-3146953-$ or US-4735222-$ or US-5546968-$ or US-2734520-$ or US-2980120-$ or US-5944037-$ or US-D383880-$ or US-5462348-$ or US-8191560-$).did. or (US-9480389-$ or US-6755490-$ or US-9138126-$ or US-9962063-$).did. or (DE-10332149-$ or JP-5006715-$ or JP-5006715-$ or JP-5006715-$ or JP-5006716-$ or JP-5006716-$ or JP-5006716-$ or EP-2594186-$ or EP-2754377-$ or DE-19960496-$ or EP-2912983-$ or CA-2071423-$ or CA-2094466-$ or CA-2094466-$ or CA-2353655-$ or CA-2431612-$ or CA-2432235-$ or CA-2444311-$ or CA-2445170-$ or CA-2473527-$ or DE-102010061215-$ or DE-102011054149-$ or DE-102012102184-$ or DE-102013111240-$ or DE-102013111241-$ or EP-2896343-$).did. or (EP-2912983-$ or GB-2321590-$ or WO-2009083576-$ or JP-2594186-$ or JP-2594186-$).did. or (DE-10332149-$ or DE-19960496-$ or GB-2321590-$ or EP-372342-$).did. or (JP-2002065562-$).did. or (JP-2002065562-$ or DE-10332149-$ or JP-2009005925-$ or JP-2009005930-$ or EP-2594186-$ or DE-19960496-$ or DE-29800479-$ or US-8567882-$ or DE-102012102189-$ or US-20120139399-$ or DE-102010043272-$ or DE-102008015713-$ or DE-102004057018-$ or US-20060108298-$ or WO-2006015932-$ or WO-2005107570-$ or WO-03055375-$ or US-4606464-$ or US-4064887-$).did.				
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Petitioner Samsung Ex-1004, 0172

Doc Code: A.NE.AFCP
Document Description: After Final Consideration Pilot Program Request

PTO/SB/434 (05-13)

CERTIFICATION AND REQUEST FOR CONSIDERATION UNDER THE AFTER FINAL CONSIDERATION PILOT PROGRAM 2.0

Practitioner Docket No.:	Application No.:	Filing Date:
SUB-05031-US-CNT2	15/941,761	2018-03-30

First Named Inventor:	Title:
Barry E. Tuller	GLASSES RACK FOR DISHWASHER

APPLICANT HEREBY CERTIFIES THE FOLLOWING AND REQUESTS CONSIDERATION UNDER THE AFTER FINAL CONSIDERATION PILOT PROGRAM 2.0 (AFCP 2.0) OF THE ACCOMPANYING RESPONSE UNDER 37 CFR 1.116.

1. The above-identified application is (i) an original utility, plant, or design nonprovisional application filed under 35 U.S.C. 111(a) [a continuing application (*e.g.*, a continuation or divisional application) is filed under 35 U.S.C. 111(a) and is eligible under (i)], or (ii) an international application that has entered the national stage in compliance with 35 U.S.C. 371(c).
2. The above-identified application contains an outstanding final rejection.
3. Submitted herewith is a response under 37 CFR 1.116 to the outstanding final rejection. The response includes an amendment to at least one independent claim, and the amendment does not broaden the scope of the independent claim in any aspect.
4. This certification and request for consideration under AFCP 2.0 is the only AFCP 2.0 certification and request filed in response to the outstanding final rejection.
5. Applicant is willing and available to participate in any interview requested by the examiner concerning the present response.
6. This certification and request is being filed electronically using the Office's electronic filing system (EFS-Web).
7. Any fees that would be necessary consistent with current practice concerning responses after final rejection under 37 CFR 1.116, *e.g.*, extension of time fees, are being concurrently filed herewith. [There is no additional fee required to request consideration under AFCP 2.0.]
8. By filing this certification and request, applicant acknowledges the following:
   - Reissue applications and reexamination proceedings are not eligible to participate in AFCP 2.0.
   - The examiner will verify that the AFCP 2.0 submission is compliant, *i.e.*, that the requirements of the program have been met (see items 1 to 7 above). For compliant submissions:
     - The examiner will review the response under 37 CFR 1.116 to determine if additional search and/or consideration (i) is necessitated by the amendment and (ii) could be completed within the time allotted under AFCP 2.0. If additional search and/or consideration is required but cannot be completed within the allotted time, the examiner will process the submission consistent with current practice concerning responses after final rejection under 37 CFR 1.116, *e.g.*, by mailing an advisory action.
     - If the examiner determines that the amendment does not necessitate additional search and/or consideration, or if the examiner determines that additional search and/or consideration is required and could be completed within the allotted time, then the examiner will consider whether the amendment places the application in condition for allowance (after completing the additional search and/or consideration, if required). If the examiner determines that the amendment does not place the application in condition for allowance, then the examiner will contact the applicant and request an interview.
       - The interview will be conducted by the examiner, and if the examiner does not have negotiation authority, a primary examiner and/or supervisory patent examiner will also participate.
       - If the applicant declines the interview, or if the interview cannot be scheduled within ten (10) calendar days from the date that the examiner first contacts the applicant, then the examiner will proceed consistent with current practice concerning responses after final rejection under 37 CFR 1.116.

Signature	Date
/Sara L Haas/	2019-03-27
Name (Print/Typed) Sara L. Haas	Practitioner Registration No. 64,796

***Note**: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.*

☐ * Total of _____ forms are submitted.

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

REMARKS

Claims 1-26 are currently pending in the application. By the present amendment, claims 1-2, 5-7, 11, 24, and 27 are amended, claims 20-22, 25-26, and 28-29 are canceled, and new claims 30-32 are added. Support for amendments to the claims can be found at least in paragraphs [0019], [0034]-[0035], and [0036], as well as FIG. 7 and FIG. 8. Therefore, the Applicant believes the amendments made herein add no new matter. Any amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based on prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to be attached thereto.

Further consideration and examination of the application is respectfully requested in view of the amendments and the following remarks.

Applicant has filed a Request for After Final Consideration under AFCP 2.0 with this paper to allow the Examiner additional time to consider the following remarks and amendments. The claims have been amended to narrow the scope of the independent claim. Applicant is willing and available to participate in an interview initiated by the Examiner concerning the accompanying response.

Rejections under 35 U.S.C. §103

Claims 1-10 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Publication No. 2003/0226580 to Welch in view of U.S. Patent No. 4,064,887 to Geiger et al. The alleged combination is not supportable.

To properly combine references, there must be some reason for combining them and that reason must be based on factual findings that are drawn from the references. A rejection cannot establish a prima facie case that a claim is obvious "merely by demonstrating that each of its elements was, independently, known in the prior art." *KSR International Co. v. Teleflex Inc.* (KSR), 550 U.S. 398, 418 (2007). "Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *Id.* citing *In re Kahn*, 44 F.3d 977, 988 (Fed. Cir. 2006).

In attempting to support the rejection, the Office Action states:

"(B) Simple substitution of one known element for another to obtain predictable results". Welch teaches that the second dish rack (16) has "a sloped or stepped bottom portion" (52), wherein Figure 1 illustrates said second dish rack (16) accommodating a plate on an inclined, non-tiered left portion of the bottom wall [Fig. 1;¶0019]. Welch does not explicitly teach that said second dish rack has "a non-tiered bottom wall"."

As discussed in more detail below, the rationale relied upon in the Office Action is faulty. First, the bottom walls of Welch are mirror images of each other. The Examiner's combination require the bottom rack to be flipped, which decreases the available height available not increases it as suggested by the Examiner. The Examiner's combination would also require either that the bottom rack be substituted or re-shaped. None of which is supported in the prior art. The Examiner merely relies upon merely identifying individual elements of Applicant's invention as set forth in claim 1 and conclusory statements of generic benefits or reasons for obviousness without articulating factual findings that are drawn from the references themselves as to why one of ordinary skill in the art would modify Welch '580 in such a way to reach Applicant's invention as set forth in claim 1.

(1) The combination relies on impermissible hindsight.

To guard against hindsight reconstruction, it can be important that the Examiner "identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does." *KSR Int'l v. Teleflex Inc*., 550 U.S. 398, 418 (2007). The rationale relied on in support of the combination of Welch '580 and Geiger et al. '887 is based on picking and choosing individual elements from each reference that overlap with elements disclosed in Applicant's specification and claims. Applicant, for the sake of brevity will not repeat the arguments made in the response filed on September 5, 2018, but incorporate them herein in their entirety and conclude that without the claimed invention as a guide, the Examiner would not, looking at the references alone, come up with the forced reason for making the combination. This is the essence of impermissible hindsight. Accordingly, it is

respectfully submitted that the combination is in error and respectfully requested that the rejection be withdrawn.

(2) The combination has not been properly supported with evidence.

The Examiner uses common knowledge to support that it "would have been obvious for a person having ordinary skill in the art at time of invention to modify the tiered right side of the second dish rack to resemble the non-tiered left side of the second dish rack, as is commonly known," in the office action at page. If the Examiner is attempting to rely on common knowledge, Applicant maintains that the rejection is improper because the Examiner has failed to provide any documentary evidence to support his conclusions that the missing limitations would be obvious. According to section 2144.03 of the MPEP, it is not appropriate for the Examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well-known. Assertions of technical facts in areas of esoteric technology or specific knowledge of the prior art must always be supported by citation to some reference work recognized as standard in the pertinent art. Facts that are normally subject to the possibility of rational disagreement among reasonable men are not amenable to the taking of official notice. As further set forth in the MPEP:

"It is never appropriate to rely solely on "common knowledge" in the art without evidentiary support in the record, as the principal evidence upon which a rejection was based. *Zurko*, 258 F.3d at 1385, 59 USPQ2d at 1697 ("[T]he Board cannot simply reach conclusions based on its own understanding or experience-or on its assessment of what would be basic knowledge or common sense. Rather, the Board must point to some concrete evidence in the record in support of these findings."). While the court explained that, "as an administrative tribunal the Board clearly has expertise in the subject matter over which it exercises jurisdiction," it made clear that such "expertise may provide sufficient support for conclusions [only] as to peripheral issues." *Id.* at 1385-86, 59 USPQ2d at 1697. As the court held in Zurko, an assessment of basic knowledge and common sense that is not based on any evidence in the record lacks substantial evidence support. *Id.* at 1385, 59 USPQ2d at 1697. **"

The Examiner states that anything lacking in the teachings or Welch '580 or the combination of Welch '580 and Geiger et al. '887 are a matter of obvious choice, change in shape, or duplication of parts. To support a conclusion that a claim is directed to obvious subject matter, i.e., that a feature is an obvious matter of design choice, an Examiner must present a 'convincing line of reasoning' as to why one of ordinary skill in the art would have found the claimed feature to have been obvious. *Ex parte Clapp*, 227 U.S.P.Q. 972, 973 (BPAI 1985). When determining whether a rejection based on design choice is appropriate, the Examiner must *review the Specification and ascertain if the limitation in question is disclosed as serving any advantage or particular purpose, or whether it solves a stated problem.* The Examiner also should explain the reasoning used to determine that the prior art would have performed equally as well as the claimed invention. These two steps help present the aforementioned 'convincing line of reasoning.' *Ex parte Clapp*, 227 U.S.P.Q. at 973. A finding of obvious design choice is precluded where the claimed structure and the function it performs are different from the prior art. *In re Gal*, 980 F.2d 717 (Fed.Cir.1992). If the applicant has demonstrated the criticality of a specific limitation, it would not be appropriate to rely solely on case law as the rationale to support an obviousness rejection. (MPEP 2144.04)

Here the Examiner (1) fails to review the Specification and ascertain if the limitations in question serve any advantage or particular purpose, or whether they solve a stated problem, and (2) fails to explain how the prior art would have performed equally as well as the claimed invention. Rather, for the second dish rack limitation, the Examiner appears to rely solely upon legal precedent as the source of supporting rationale, i.e., *St. Regis Paper Co. v. Bemis Co., 193 USPQ 8 and In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966)*, cited in the office action. But had the Examiner read the Specification he would have noted that the referenced elements are more than simply a duplication and/or a change in shape. Incorporating a second dish rack having a non-tiered, flat bottom wall that is inclined at an angle from a first side wall to an opposite side wall, wherein the angle matches the effective inclination angle for the bottom wall of the first dish rack and is parallel to the effective inclination angle for the bottom wall of the first dish rack is more than a simple duplication of parts and change in shape.

First, the second rack limitation is not a duplication of the first rack because the first rack of claim 1 is tiered and the second rack has a flat bottom that is inclined at an angle. The flat bottom that is inclined at an angle accommodates glasses on their side in a desired position without the need for glass supports or other additional structures. *See specification as filed*, ¶ [0035]. Thus, the flat bottom at the same inclined angle provides a functional benefit and is not merely a design choice where any shape can be substituted for another.

In fact, the Examiner's finding of obvious design choice is precluded because the claimed structure and the functions performed are different from the prior art. *In re Gal*, 980 F.2d 717 (Fed.Cir.1992). The Office Action has not met the criteria for establishing a *prima facie* case of obviousness.

(3). *The alleged combination fails to inherently result in the limitations of claim 1.*

Even assuming, *arguendo*, that the combination can be made, the combination does not reach the limitations as called for in amended claim 1. Applicant submits that in addition to no teaching, suggestion, or motivation to combine the teachings of Welch '580 and *Geiger et al. '887*, both teaches away from making the combination because neither teach a flat bottom wall at an incline. When properly combined, the combination fails to reach claim 1 because claim 1 calls for, among other things, a first dish rack located in the tub and having *a bottom wall tiered to form multiple levels, the bottom wall tiered to form multiple levels defining an effective inclination angle for the bottom wall* of the first dish rack and a second dish rack located below the first dish rack, the second dish rack having a *non-tiered, flat bottom wall that is inclined at an angle from a first side wall to an opposite side wall,* wherein the angle matches the effective inclination angle for the bottom wall of the first dish rack and is parallel to the effective inclination angle for the bottom wall of the first dish rack.

Welch '580 does not teach a first dish rack with *a bottom wall tiered to form multiple levels defining an effective inclination angle for the bottom wall* of the first dish rack let alone a flat bottom wall inclined at an angle. Instead Welch teaches identical first and second dish racks that are mirrored each having a sloped or stepped bottom portion with an oppositely stepped upper portion. *See Welch '580, FIG. 1.*

Geiger et al. '887 also does not teach such a second dish rack. Geiger et al. '887 merely teaches that the dish rack has a central portion that is inclined at one angle and end portions that are angled separately. See *Geiger et al. '887, FIG. 12.*

The Examiner's combination would result, at best, in a dishwasher having a lower rack with 1) a bottom wall that either had a first angled center portion with two end portions at differing angles or 2) perhaps a highly angled bottom wall to match an angle of one of the slopes in Welch '580. Even switching the lower dish rack in welch '580 to a non-mirrored condition would limit the height of plates allowed in that rack over all as compared to the original reference, which would teach away from one of ordinary skill in the art making such a change.

For all of the reasons above, one of ordinary skill in the art would not look at the alleged combination and then decide to have a dishwasher with first and second dish racks as claimed. Applicants respectfully request withdrawal of the rejection and the allowance of claim 1. Claims 2-10 depend from claim 1 and are patentable over any combination of Welch '580 and Geiger et al. '887 based at least on their dependency on claim 1. Applicants respectfully request withdrawal of the rejection and the allowance of claims 2-10.

Claims 11-15, 19-22, and 24-29 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 2,910,207 to Andrew in view of U.S. Publication 2003/0192578 to Ochoa et al.

Claims 20-22, 25-26, and 28-29 have been canceled; therefore, the rejection with respect to those claims is moot.

Appellant respectfully submits that the combination of Andrew '207 and Ochoa et al. '578 is improper because the Office Action relies on information gleaned solely from Appellants' specification. MPEP § 2142 states that "impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of **the facts gleaned from the prior art"** (emphasis added). "'Any judgement on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and **does not include**

knowledge gleaned only from applicant's disclosure, such a reconstruction is proper'" (MPEP § 2145(X)(A), quoting *In re McLaughlin*, 443 F.2d 1392, 1395 (CCPA 1971), (emphasis added).

In the present case, the obviousness statement made by the Examiner on page 10 of the Office Action does not rely on reasoning drawn from the references themselves to allegedly support the combination of Andrew '207 and Ochoa et al. '578. The Examiner states that "Andrew does not explicitly teach that said spray tube is *carried* by the bottom wall. However it is old and well-known in the art to utilize such a spray system configuration wherein the spray tube is carried by the bottom wall of a dish rack for selective docking with a supply conduit." Office action, p. 10 (emphasis in original). Andrew does not explicitly teach that nor could it teach such a carrying by the rack because that would result in the bizarre situation where the tube extends directly from the rear wall of the compartment (See Andrew '207, Col. 2, ln. 44-46) and the dish rack would be coupled to the tube causing the dish rack to be unmovable.

This highlights that the Examiner specifically includes knowledge gleaned directly from Appellants' disclosure. The idea that the combination of such parts would have 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 having a bottom wall, a side wall extending upwardly from the bottom wall and terminating in an upper edge, with an angled portion formed in the bottom wall and a spray tube having nozzles emitting spray along the angled portion, the spray tube located directly adjacent to the bottom wall and carried with the dish rack between the loading position and the wash position is absent from the cited art and is taken directly from the claim language of Appellants' claim. There is simply no other conclusion than the Examiner has included knowledge gleaned from the Appellants' disclosure as the reasoning is based on a mere recitation of the claim language itself.

The only discussion of such features is only present in Appellants' specification as filed and in the claims. Thus, it logically follows that the Examiner has improperly gleaned from Appellants' own specification and that the combination of Andrew '207 and Ochoa et al. '578 is an exercise of impermissible hindsight. Without the claimed invention as a guide, the Examiner

would not, looking at the references alone, come up with the forced reason for making the combination. This is the essence of impermissible hindsight. Accordingly, it is respectfully submitted that the combination is in error and respectfully requested that the rejection be withdrawn.

When properly combined, the combination fails to reach amended claim 11 because claim 11 calls for, among other things, 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 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, 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 a spray tube having nozzles configured to emit spray along the inclined portion into an interior of the glass, 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.

Neither Andrew ‘207 nor Ochoa et al. ‘578 teach the details of the contoured bottom wall. While Andrew ‘207 does teach a bottom wall with a flat central portion, Andrew ‘207 does not teach *curved mounting portions at opposing ends of the flat central portion and opposing inclined portions, each of the opposing inclined portions extending from one of the curved mounting portions to respective portions of the side wall.* Ochoa et al. ‘578 also does not teach such features. As the references forming the combination do not disclose all of the elements of claim 11, the combination of Andrew ‘207 and Ochoa et al. ‘578, regardless of how they are combined, will not include the limitations of claim 11. One of ordinary skill in the art would not look at the alleged combination and then decide to have a dishwasher as claimed. Applicant respectfully requests withdrawal of the rejection and the allowance of claim 11.

Further still, the combination fails to reach amended claim 27 because 27 calls for, among other things, 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, 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. Neither Andrew ‘207 nor Ochoa et al. ‘578 teach the details of 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, wherein two adjacent inclined portions of the plurality of spaced apart inclined portions are configured to cradle a glass at an inclined angle and contoured portion. As the references forming the combination do not disclose all of the elements of claim 27, the combination of Andrew ‘207 and Ochoa et al. ‘578, regardless of how they are combined, will not include the limitations of claim 27. One of ordinary skill in the art would not look at the alleged combination and then decide to have a dishwasher as claimed. Applicant respectfully requests withdrawal of the rejection and the allowance of claim 27.

Claims 12-15, 19, and 24 depend from claims 11 and 27, respectively and are patentable over any combination of Andrew ‘207 and Ochoa et al. ‘578 based at least on their dependency thereon. Applicants respectfully request withdrawal of the rejection and the allowance of claims 12-15, 19, and 24.

Conclusion

In view of the following remarks, it is submitted that all of the claims in the application are in condition for allowance. Early notification of allowability is respectfully requested. If the Examiner believes that there are some issues remaining in this application that can be expedited by a telephone interview, the courtesy of a telephone call to the undersigned representative is respectfully requested.

Respectfully submitted,

WHIRLPOOL CORPORATION

Date: March 27, 2019

By: /Sara L Haas/

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AMENDMENTS TO THE CLAIMS

Please amend the claims as shown below in the complete listing of claims. This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A dishwasher, comprising:

a tub defining a treating chamber receiving dishes for treatment;

a spray system providing treating liquid to the treating chamber;

a first dish rack located in the tub and having a bottom wall tiered to form multiple levels, the bottom wall tiered to form multiple levels defining an effective inclination angle for the bottom wall of the first dish rack; and

a second dish rack located below the first dish rack, the second dish rack having a non-tiered, flat bottom wall that is inclined at an angle from a first side wall to an opposite side wall, wherein the angle ~~matching~~ matches the effective inclination angle for the bottom wall of the first dish rack and is parallel to the effective inclination angle for the bottom wall of the first dish rack.

2. (Currently Amended) The dishwasher according to claim 1 wherein the angle of the non-tiered, flat bottom wall of the second dish rack is configured to hold glasses at an incline angled less than about 45 degrees relative to horizontal.

3. (Previously Presented) The dishwasher according to claim 2 wherein the spray system comprises a sprayer mounted to the second dish rack and positioned to spray treating liquid into an interior of the glasses.

4. (Original) The dishwasher according to claim 3 wherein the second dish rack is slidably mounted to the tub, the spray system further comprises a supply conduit located in the tub, and

the sprayer selectively docks with the supply conduit during sliding movement of the second dish rack.

5. (Currently Amended) The dishwasher according to claim 2 wherein the ~~incline~~ angle of the non-tiered, flat bottom wall of the second dish rack is configured to hold glasses at ~~is an~~ incline angle of about 15 degrees.

6. (Currently Amended) The dishwasher according to claim 1 wherein ~~the second dish rack has at least one side wall, extending upwardly from the non-tiered bottom wall, and terminates in~~ an upper edge of the second dish rack is inclined at ~~an~~ a second angle matching the effective inclination angle.

7. (Currently Amended) The dishwasher according to claim 6, further comprising a third dish rack located below the second dish rack.

8. (Original) The dishwasher according to claim 7 wherein the spray system comprises a first sprayer above the first dish rack, a second sprayer between the first and second dish racks, and a third sprayer below the third dish rack.

9. (Original) The dishwasher according to claim 7 wherein the third dish rack has a bottom wall and a side wall terminating in an upper edge.

10. (Original) The dishwasher according to claim 8 wherein at least one of the bottom wall or upper edge of the third dish rack is horizontal.

11. (Currently Amended) A dishwasher, comprising:

a tub defining a treating chamber receiving dishes for treatment;

a spray system providing treating liquid to the treating chamber; and

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 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, 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~~with an angled portion and a flat portion formed in the bottom wall~~; and

a spray tube having nozzles configured to emit~~ting~~ spray along the ~~angled~~ inclined portion into an interior of the glass, 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.

12. (Previously Presented) The dishwasher of claim 27 wherein the dish rack is a low profile dish rack where the length of the angled portion is greater than a shortest height of an upstanding portion of the side wall.

13. (Original) The dishwasher of claim 12 wherein at least one of the nozzles is located above a portion of the angled portion.

14. (Original) The dishwasher of claim 12 wherein the shortest height is located along a portion of the side wall transverse to the angled portion.

15. (Previously Presented) The dishwasher of claim 27 wherein at least one of the nozzles is located above a portion of the angled portion.

16-18. (Canceled).

19. (Original) The dishwasher of claim 11 wherein the spray tube is configured to rotate about a longitudinal axis.

20-23. (Canceled).

24. (Currently Amended) The dishwasher of claim ~~21~~ 11 wherein the flat central portion is located above a terminal end of at least one of the ~~angled~~ opposing inclined portions.

25-26. (Canceled)

27. (Currently Amended) A dishwasher, comprising:

a tub defining a treating chamber receiving dishes for treatment;

a spray system providing treating liquid to the treating chamber; and

a dish rack located in the tub and selectively moveable into and out of the tub, the dish rack having a bottom wall, a side wall extending upwardly from the bottom wall and terminating in an upper edge, 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, 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

a spray tube having nozzles emitting spray along the angled portion;

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.

28-29. (Canceled)

30. (New) The dishwasher of claim 11, further comprising a second spray tube configured to emit spray along an other of the inclined portions, the second spray tube located directly adjacent to an other of the curved mounting portions of the bottom wall and carried with the dish rack between the loading position and the treating position.

31. (New) The dishwasher of claim 1 wherein the spray system comprises a plurality of spray tubes positioned to spray treating liquid into an interior of the second dish rack.

32. (New) The dishwasher of claim 31 wherein the non-tiered, flat bottom wall of the second dish rack is configured to accommodate separate rows glasses, each of the separate rows of glasses corresponding to one of the plurality of spray tubes.

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Whirlpool Corporation	
For:	GLASSES RACK FOR DISHWASHER	
Application No.:	15/941,761	Examiner: Thomas Bucci
Filed:	March 30, 2018	Group Art Unit: 1711
Atty. Docket:	SUB-05031-US-CNT2	Confirmation No: 4804

CERTIFICATE OF MAILING/TRANSMISSION (37 CFR 1.8(a))

I hereby certify that this correspondence is, on the date shown below, being:

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/Johanne Hrycuna/
Signature

Date: March 27, 2019

Johanne Hrycuna
(type or print name of person certifying)

Commissioner for Patents
PO Box 1450
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AMENDMENT AND RESPONSE TO OFFICE ACTION

In response to the Office Action mailed January 28, 2019, kindly amend the above-identified application as follows:

Amendments to the Claims appear in the complete listing of claims, which begins on page 2 of this paper.

Remarks begin on page 6 of this paper.

Electronic Acknowledgement Receipt

EFS ID:	35542789
Application Number:	15941761
International Application Number:	
Confirmation Number:	4804
Title of Invention:	GLASSES RACK FOR DISHWASHER
First Named Inventor/Applicant Name:	Barry E. Tuller
Customer Number:	130348
Filer:	Sara Lynn Haas
Filer Authorized By:	
Attorney Docket Number:	SUB-05031-US-CNT2
Receipt Date:	27-MAR-2019
Filing Date:	30-MAR-2018
Time Stamp:	16:10:33
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	After Final Consideration Program Request	G1295103.PDF	225988 d968d211ea033b0cfe5aa55bddd49d44b75a0acf	no	2

Warnings:

Information:					
2		G1295382.PDF	286141 d94b525a8b0ee6cb0558206e6512c9a7b8ae63b9	yes	15

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Applicant Arguments/Remarks Made in an Amendment	6	15
	Claims	2	5
	Response After Final Action	1	1

Warnings:	
Information:	
Total Files Size (in bytes):	512129

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (09-11)
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 15/941,761	Filing Date 03/30/2018	☐ To be Mailed

ENTITY: ☑ LARGE ☐ SMALL ☐ MICRO

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A		N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A		N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*		x $100 =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*		x $460 =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).				
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))					
* If the difference in column 1 is less than zero, enter "0" in column 2.				TOTAL	

APPLICATION AS AMENDED - PART II

		(Column 1)		(Column 2)	(Column 3)			
AMENDMENT	03/27/2019	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 21	Minus	** 26	= 0		x $100 =	0
	Independent (37 CFR 1.16(h))	* 3	Minus	*** 3	= 0		x $460 =	0
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	0

		(Column 1)		(Column 2)	(Column 3)			
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=		x $0 =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=		x $0 =	
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.	LIE
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".	/JERMAINE D MINOR/
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".	
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.	

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/941,761	03/30/2018	Barry E. Tuller	SUB-05031-US-CNT2	4804

130348 7590 04/11/2019

Whirlpool Corporation / McGarry Bair PC
2000 North M63
Benton Harbor, MI 49022

EXAMINER	
BUCCI, THOMAS	

ART UNIT	PAPER NUMBER
1711	

NOTIFICATION DATE	DELIVERY MODE
04/11/2019	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PatentDocketing@whirlpool.com
deborah_tomaszewski@whirlpool.com
patents@mcgarrybair.com

Petitioner Samsung Ex-1004, 0193

Advisory Action Before the Filing of an Appeal Brief	**Application No.** 15/941,761	**Applicant(s)** Tuller et al.	
	Examiner THOMAS BUCCI	**Art Unit** 1711	**AIA (FITF) Status** Yes

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 27 March 2019 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

NO NOTICE OF APPEAL FILED

1. ☑ The reply was filed after a final rejection. No Notice of Appeal has been filed. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114 if this is a utility or plant application. Note that RCEs are not permitted in design applications. The reply must be filed within one of the following time periods:
   a) ☐ The period for reply expires ____ months from the mailing date of the final rejection.
   b) ☑ The period for reply expires on: (1) the mailing date of this Advisory Action; or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
   c) ☐ A prior Advisory Action was mailed more than 3 months after the mailing date of the final rejection in response to a first after-final reply filed within 2 months of the mailing date of the final rejection.The current period for reply expires ____ months from the mailing date of *the prior Advisory Action* or SIX MONTHS from the mailing date of the final rejection, whichever is earlier.
   Examiner Note: If box 1 is checked, check either box (a), (b) or (c). ONLY CHECK BOX (b) WHEN THIS ADVISORY ACTION IS THE FIRST RESPONSE TO APPLICANTS FIRST AFTER-FINAL REPLY WHICH WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. ONLY CHECK BOX (c) IN THE LIMITED SITUATION SET FORTH UNDER BOX (c). See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) or (c) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37CFR 41.37(a).

AMENDMENTS

3. ☑ The proposed amendments filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   a) ☑ They raise new issues that would require further consideration and/or search (see NOTE below);
   b) ☐ They raise the issue of new matter (see NOTE below);
   c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.
   NOTE: See Continuation Sheet (See 37CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicants reply has overcome the following rejection(s): _____
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☑ For purposes of appeal, the proposed amendment(s):(a) ☑ will not be entered, or (b) ☐ will be entered, and an explanation of how the new or amended claims would be rejected is provided below or appended.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on ____
9. ☐ The affidavit or other evidence filed after final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
10. ☐ The affidavit or other evidence filed after the date of filing the Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
11. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

12. ☑ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: The request for reconsideration relies upon the amended claims which have NOT been entered..
13. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
14. ☑ Other: PTO-2323.

STATUS OF CLAIMS

15. The status of the claim(s) is (or will be) as follows:
    Claim(s) allowed:_____.
    Claim(s) objected to:_____.
    Claim(s) rejected:1-15,19-22 and 24-29.
    Claim(s) withdrawn from consideration:_____.

/THOMAS BUCCI/ Examiner, Art Unit 1711	/DAVID G CORMIER/ Primary Examiner, Art Unit 1711

Petitioner Samsung Ex-1004, 0194

Continuation of 3. NOTE: Proposed amendments to claims 1, 2, 5, 6, 7, 11, 24, and 27 along with newly added claims 30-32 differ in scope from the limitations found in the prior claim set and therefore further search and consideration would be required. Given that the proposed amendments would require additional search and consideration that cannot be completed within the allotted time of the program, the amendments filed 3/27/19 are NOT ENTERED.

AFCP 2.0 Decision

Application No.	Applicant(s)	
15/941,761	Tuller et al.	
Examiner	**Art Unit**	**AIA (FITF) Status**
THOMAS BUCCI	1711	Yes

This is in response to the After Final Consideration Pilot request filed 27 March 2019.

1. **Improper Request** – The AFCP 2.0 request is improper for the following reason(s) and the after final amendment submitted with the request will be treated under pre-pilot procedure.

   ☐ An AFCP 2.0 request form PTO/SB/434 (or equivalent document) was not submitted.

   ☐ A non-broadening amendment to at least one independent claim was not submitted.

   ☐ A proper AFCP 2.0 request was submitted in response to the most recent final rejection.

   ☐ Other: _____

2. **Proper Request**

   A. After final amendment submitted with the request will not be treated under AFCP 2.0.
   The after final amendment cannot be reviewed and a search conducted within the guidelines of the pilot program.

   ☑ The after final amendment will be treated under pre-pilot procedure.

   B. Updated search and/or completed additional consideration.
   The examiner performed an updated search and/or completed additional consideration of the after final amendment within the time authorized for the pilot program. The result(s) of the updated search and/or completed additional consideration are:

   ☐ 1. All of the rejections in the most recent final Office action are overcome and a Notice of Allowance is issued herewith.

   ☐ 2. The after final amendment would not overcome all of the rejections in the most recent final Office action . See attached interview summary for further details.

   ☐ 3. The after final amendment was reviewed, and it raises a new issue(s). See attached interview summary for further details.

   ☐ 4. The after final amendment raises new issues, but would overcome all of the rejections in the most recent final Office action. A decision on determining allowability could not be made within the guidelines of the pilot. See attached interview summary for further details, including any newly discovered prior art.

   ☐ 5. Other: _____

   Examiner Note: Please attach an interview summary when necessary as described above.

Petitioner Samsung Ex-1004, 0196

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Whirlpool Corporation	
For:	GLASSES RACK FOR DISHWASHER	
Application No.:	15/941,761	Examiner: Thomas Bucci
Filed:	March 30, 2018	Group Art Unit: 1711
Atty. Docket:	SUB-05031-US-CNT2	Confirmation No: 4804

CERTIFICATE OF MAILING/TRANSMISSION (37 CFR 1.8(a))

I hereby certify that this correspondence is, on the date shown below, being:

☐ deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to the Commissioner for Patents, PO Box 1450, Alexandria, VA, 22313-1450.

☒ transmitted via EFS-Web to the Patent and Trademark Office.

/Johanne Hrycuna/
Signature

Date: March 27, 2019

Johanne Hrycuna
(type or print name of person certifying)

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

AMENDMENT AND RESPONSE TO OFFICE ACTION

In response to the Office Action mailed January 28, 2019, kindly amend the above-identified application as follows:

Amendments to the Claims appear in the complete listing of claims, which begins on page 2 of this paper.

Remarks begin on page 6 of this paper.

DO NOT ENTER: /T.B/

Doc code: RCEX
Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
(Submitted Only via EFS-Web)

Application Number	15/941,761	Filing Date	2018-03-30	Docket Number (if applicable)	SUB-05031-US-CNT2	Art Unit	1711
First Named Inventor	Barry E. Tuller			Examiner Name	Thomas Bucci		

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

SUBMISSION REQUIRED UNDER 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the orde in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s entered, applicant must request non-entry of such amendment(s).

☒ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____

☒ Other Response to Final Office Action previously filed March 27, 2019

☐ Enclosed

☐ Amendment/Reply

☐ Information Disclosure Statement (IDS)

☐ Affidavit(s)/ Declaration(s)

☐ Other _____

MISCELLANEOUS

☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months _____ (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

☐ Other _____

FEES

The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.

☒ The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to Deposit Account No 502003

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

X Patent Practitioner Signature

Applicant Signature

EFS - Web 2.1.16

PTO/SB/30EFS (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Signature of Registered U.S. Patent Practitioner			
Signature	/Sara L Haas/	Date (YYYY-MM-DD)	2019-04-15
Name	Sara L. Haas	Registration Number	64796

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is t file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Tim will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions fo reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Petitioner Samsung Ex-1004, 0200

Electronic Patent Application Fee Transmittal

Application Number:	15941761
Filing Date:	30-Mar-2018
Title of Invention:	GLASSES RACK FOR DISHWASHER
First Named Inventor/Applicant Name:	Barry E. Tuller
Filer:	Sara Lynn Haas/Johanne Hrycuna
Attorney Docket Number:	SUB-05031-US-CNT2

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
RCE- 1ST REQUEST	1801	1	1300	1300
		Total in USD ($)		**1300**

Electronic Acknowledgement Receipt

EFS ID:	35730453
Application Number:	15941761
International Application Number:	
Confirmation Number:	4804
Title of Invention:	GLASSES RACK FOR DISHWASHER
First Named Inventor/Applicant Name:	Barry E. Tuller
Customer Number:	130348
Filer:	Sara Lynn Haas/Johanne Hrycuna
Filer Authorized By:	Sara Lynn Haas
Attorney Docket Number:	SUB-05031-US-CNT2
Receipt Date:	15-APR-2019
Filing Date:	30-MAR-2018
Time Stamp:	16:57:30
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	$1300
RAM confirmation Number	041619INTEFSW00004203502003
Deposit Account	502003
Authorized User	Johanne Hrycuna

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

37 CFR 1.16 (National application filing, search, and examination fees)

37 CFR 1.17 (Patent application and reexamination processing fees)

37 CFR 1.19 (Document supply fees)

37 CFR 1.20 (Post Issuance fees)

37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Continued Examination (RCE)	G1304627.PDF	1349950 e2657988c2c28db7d1bebf4ac3ffad8f1e13a42b	no	3
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30413 99061063eb0f74cd10c3d25c38ec977f99e58e50	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	1380363		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/941,761	03/30/2018	Barry E. Tuller	SUB-05031-US-CNT2	4804

130348 7590 05/08/2019

Whirlpool Corporation / McGarry Bair PC
2000 North M63
Benton Harbor, MI 49022

EXAMINER	
BUCCI, THOMAS	

ART UNIT	PAPER NUMBER
1711	

NOTIFICATION DATE	DELIVERY MODE
05/08/2019	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PatentDocketing@whirlpool.com
deborah_tomaszewski@whirlpool.com
patents@mcgarrybair.com

Petitioner Samsung Ex-1004, 0205

Office Action Summary	Application No. 15/941,761	Applicant(s) Tuller et al.	
	Examiner THOMAS BUCCI	Art Unit 1711	AIA (FITF) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☑ Responsive to communication(s) filed on 3/27/19.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL.** 2b) ☑ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5) ☑ Claim(s) 1-15,19,24,27 and 30-32 is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6) ☑ Claim(s) 1-10 and 31-32 is/are allowed.

7) ☑ Claim(s) 11-15,19,24,27 and 30 is/are rejected.

8) ☐ Claim(s) _____ is/are objected to.

9) ☐ Claim(s) _____ are subject to restriction and/or election requirement

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to **PPHfeedback@uspto.gov.**

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☑ The drawing(s) filed on 9/5/18 is/are: a)☑ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☑ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date _____.

4) ☐ Other: _____.

DETAILED ACTION

Notice of Pre-AIA or AIA Status

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

2. Office Action is in response to Applicant's amendments/remarks filed 3/27/19. Claims 1, 2, 5-7, 11, 24, and 27 were amended; claims 20-23, 25-26, and 28-29 are cancelled; and claims 30-32 are newly added. Claims 1-15, 19, 24, 27 and 30-32 are presently pending and are presented for examination.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/15/19 has been entered.

Response to Arguments

4. Applicant's arguments, see pages 6-11 of Remarks, filed 3/27/19, with respect to the rejections of claims 1-10 under 35 USC 103 have been fully considered and are persuasive. **The rejections of claims 1-10 under 35 USC 103 have been withdrawn**.

5. Applicant's arguments, see pages 11-14 of Remarks, filed 3/27/19, with respect to the rejections of claims 11-15, 19-22, and 24-29 under 35 USC 103 have been fully considered and are persuasive. **The rejections of claims 11-15, 19-22, and 24-29 under 35 USC 103 have been withdrawn**.

Claim Objections

6. **Claim 5 is objected** to because of the following informalities:

Regarding claim 5,

Lines 2-3 contain a typographical error reciting "at an *incline* angle" which should be amended to instead recite "at an *inclined* angle".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of 35 U.S.C. 112(b):
(b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. **Claims 11-15, 19, 24, 27, and 30 are rejected under 35 U.S.C. 112(b)** or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

Regarding claim 11,

Lines 13-14 recite: "a spray tube having nozzles configured to emit spray along *the inclined portion* into an interior of the glass…" which renders the claim indefinite. The claim limitation "*the inclined portion*" lacks proper antecedent basis in the claim; it is unclear if said spray tube having nozzles is configured to emit spray along *one of* the inclined portions or *each of* the inclined portions.

Regarding claim 27,

Lines 6-11 recite: "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, *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*". It is unclear what is defined by "*two **adjacent** inclined portions of the plurality of **spaced apart** inclined portions*" wherein it is seemingly paradoxical that two inclined portions can simultaneously be *adjacent* **and** *spaced apart*. It is further unclear how said two "adjacent" inclined portions are "configured to cradle a glass at *an inclined angle*...and a contoured portion formed in the bottom wall configured to prevent glasses from sliding down *the inclined angle*" since seemingly two adjacent inclined portions form ***two*** *inclined angles*, not *an inclined angle* [singular] as claimed. Therefore in this context the claim limitation "*the inclined portion*" lacks proper antecedent basis in the claim.

Allowable Subject Matter

9. **Claims 1-10 and 31-32 are allowed**.

10. The following is an examiner's statement of reasons for allowance:

Regarding claims 1-10 and 31-32,

As persuasively argued by Applicant on pages 6-11 of Remarks, filed 3/27/19, newly amended independent claim 1 overcomes the previous grounds of rejection of claims 1-10 under 35 USC 103 in view of Welch (US Pub. 2003/0226580) and Geiger (US Pat. 4,064,887). Upon a comprehensive updated search, no available prior art was able to teach or fairly suggest, singly or in combination, all features of independent

claim 1. For at least the above reasons, claims 1-10 and 31-32 are in condition for allowance.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

11. **Claims 11 and 27** would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), 2nd paragraph, set forth in this Office action.

12. **Claims 12-15, 19, 24, and 30** would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

13. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 11, 19, 24, and 30,

As persuasively argued by Applicant on pages 11-13 of Remarks, filed 3/27/19, newly amended independent claim 11 overcomes the previous grounds of rejection under 35 USC 103 in view of Andrew (US Pat. 2,910,207) and Ochoa (US Pub. 2003/0192578). Upon a comprehensive updated search, no available prior art was able to teach or fairly suggest, singly or in combination, all features of independent claim 11. For at least the above reasons, claims 11, 19, 24, and 30 contain allowable subject matter.

Regarding claims 12-15 and 27,

As persuasively argued by Applicant on pages 11-13 of Remarks, filed 3/27/19, newly amended independent claim 27 overcomes the previous grounds of rejection under 35 USC 103 in view of Andrew (US Pat. 2,910,207) and Ochoa (US Pub. 2003/0192578). Upon a comprehensive updated search, no available prior art was able to teach or fairly suggest, singly or in combination, all features of independent claim 27. For at least the above reasons, claims 12-15 and 30 contain allowable subject matter.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS BUCCI whose telephone number is (571)270-5406. The examiner can normally be reached on Mon-Fri 8:00 - 5:00.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at http://www.uspto.gov/interviewpractice.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/THOMAS BUCCI/
Examiner, Art Unit 1711
/DAVID G CORMIER/
Primary Examiner, Art Unit 1711

Notice of References Cited	Application/Control No. 15/941,761	Applicant(s)/Patent Under Reexamination Tuller et al.	
	Examiner THOMAS BUCCI	Art Unit 1711	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-20030226580-A1	12-2003	Welch, Rodney M.	A47L15/50	134/172
*	B	US-4064887-A	12-1977	Geiger; Paul B.	A47L15/23	134/144
*	C	US-2910207-A	10-1959	ANDREW MARGARET J	A47L15/50	134/151
*	D	US-20030192578-A1	10-2003	Ochoa, Orlando P. SR.	A47L15/508	134/176
	E					
	F					
	G					
	H					
	I					
	J					
	K					
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FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15/941,761	Tuller et al.
	Examiner	Art Unit
	THOMAS BUCCI	1711

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

CLAIMS

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	06/11/2018	01/19/2019	05/03/2019						
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	2	✓	✓	=						
	3	✓	✓	=						
	4	✓	✓	=						
	5	✓	✓	=						
	6	✓	✓	=						
	7	✓	✓	=						
	8	✓	✓	=						
	9	✓	✓	=						
	10	✓	✓	=						
	11	✓	✓	✓						
	12	✓	✓	✓						
	13	✓	✓	✓						
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	25	✓	✓	-						
	26	✓	✓	-						
	27		✓	✓						
	28		✓	-						
	29		✓	-						
	30			✓						
	31			=						
	32			=						

Petitioner Samsung Ex-1004, 0214

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15/941,761	Tuller et al.
	Examiner	Art Unit
	THOMAS BUCCI	1711

CPC - Searched*		
Symbol	**Date**	**Examiner**
A47L15/50, A47L15/508, A47L15/23, A47L15/22, A47L15/505	06/11/2018	TB
ABOVE UPDATED	01/19/2019	TB
ABOVE UPDATED	05/03/2019	TB

CPC Combination Sets - Searched*		
Symbol	**Date**	**Examiner**

US Classification - Searched*			
Class	**Subclass**	**Date**	**Examiner**
134	170, 56D, 176, 200, 172, 198, 58D, 135, 179, 57D, 144, 199, 165, 137, 177, 103.2	06/11/2018	TB
211	41.8, 41.9, 41.4, 181.1	06/11/2018	TB
ABOVE	UPDATED	01/19/2019	TB
ABOVE	UPDATED	05/03/2019	TB

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	**Date**	**Examiner**
Comprehensive search performed in EAST, attached	06/11/2018	TB
Class/subclass search in USPC and CPC	06/11/2018	TB
Inventor search in EAST	06/11/2018	TB
Interference search in EAST	06/11/2018	TB
All IDS references considered	06/11/2018	TB
ABOVE UPDATED, ATTACHED	01/19/2019	TB
ABOVE UPDATED, ATTACHED	05/03/2019	TB

/THOMAS BUCCI/ Examiner, Art Unit 1711	/THOMAS BUCCI/ Examiner, Art Unit 1711

Petitioner Samsung Ex-1004, 0215

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15/941,761	Tuller et al.
	Examiner	Art Unit
	THOMAS BUCCI	1711

Interference Search			
US Class/CPC Symbol	**US Subclass/CPC Group**	**Date**	**Examiner**
134	170, 56D, 176, 200, 172, 198, 58D, 135, 179, 57D, 144, 199, 165, 137, 177, 103.2	06/11/2018	TB
211	41.8, 41.9, 41.4, 181.1	06/11/2018	TB
ABOVE	UPDATED	01/19/2019	TB
ABOVE	UPDATED	05/03/2019	TB

/THOMAS BUCCI/ Examiner, Art Unit 1711	/THOMAS BUCCI/ Examiner, Art Unit 1711

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EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
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Petitioner Samsung Ex-1004, 0217

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S18	59	"2321590"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/03/14 14:29
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			IBM_TDB			
S42	16	"10332149"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/15 08:30
S43	12	"5006715"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/15 08:30
S44	27	"2594186"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/15 08:30
S45	86	"5006716"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/15 08:31
S46	2	"20030226580"	US-PGPUB; USPAT	OR	OFF	2017/05/15 09:23
S47	2	"20130098406"	US-PGPUB; USPAT	OR	OFF	2017/05/15 09:46
S48	2	"20050109378"	US-PGPUB; USPAT	OR	OFF	2017/05/15 09:49
S49	103	(US-20150245762-$ or US-20130002107-$ or US-20120138106-$ or US-20100051069-$ or US-20030226580-$ or US-20070246090-$ or US-20120097199-$ or US-20120125383-$ or US-20120138111-$ or US-20130000673-$ or US-20140137909-$ or US-20140137911-$ or US-20150359412-$ or US-20120138100-$ or US-20130087173-$ or US-20130098406-$ or US-20140076363-$ or US-20060144424-$ or US-20120138107-$ or US-20050109378-$ or US-20060108298-$ or US-20060219271-$ or US-20060289038-$ or US-20090065455-$ or US-20110030742-$ or US-20120291827-$).did. or (US-20120292269-$ or US-20120292270-$ or US-20120298155-$ or US-20130104944-$ or US-20130299438-$).did. or (US-7594513-$ or US-6907998-$ or US-3464566-$ or US-3258127-$ or US-2910207-$ or US-2907470-$ or US-2646809-$ or US-8753454-$ or US-9119517-$ or US-9259138-$ or US-5662744-$ or US-6460555-$ or US-D481179-$ or US-D488594-$ or US-8347898-$ or US-4653520-$ or US-	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	OFF	2017/10/28 14:15

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		4134414-$ or US-3951684-$ or US-3951683-$ or US-3444870-$ or US-8192557-$ or US-7455066-$ or US-7410228-$).did. or (DE-10332149-$ or JP-5006715-$ or JP-5006715-$ or JP-5006715-$ or JP-5006716-$ or JP-5006716-$ or JP-5006716-$ or EP-2594186-$ or EP-2754377-$ or DE-19960496-$ or EP-2912983-$ or CA-2071423-$ or CA-2094466-$ or CA-2094466-$ or CA-2353655-$ or CA-2431612-$ or CA-2432235-$ or CA-2444311-$ or CA-2445170-$ or CA-2473527-$ or DE-102010061215-$ or DE-102011054149-$ or DE-102012102184-$ or DE-102013111240-$ or DE-102013111241-$ or EP-2896343-$).did. or (EP-2912983-$ or GB-2321590-$ or WO-2009083576-$ or JP-2594186-$ or JP-2594186-$).did. or (DE-10332149-$ or DE-19960496-$ or GB-2321590-$).did. or (JP-2002065562-$).did. or (JP-2002065562-$ or DE-10332149-$ or JP-2009005925-$ or JP-2009005930-$ or EP-2594186-$ or DE-19960496-$ or DE-29800479-$).did.				
S50	3871	((A47L15/50 OR A47L15/502 OR A47L15/504 OR A47L15/14 OR A47L15/507).CPC.)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	OFF	2017/10/28 14:16
S51	2191	((134/135 OR 211/41.8 OR 211/41.9 OR 211/181.1).CCLS.)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	OFF	2017/10/28 14:18
S52	307	((211/41.8).CCLS.)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	OFF	2017/10/28 14:18
S53	17	("2003/0205258" | "2004/0020876" | "2004/0079713").URPN.	USPAT	OR	OFF	2017/10/28 14:25
S54	1	"15416687"	US-PGPUB; USPAT	OR	OFF	2017/10/28 15:11
S55	2	"20030226580"	US-PGPUB; USPAT	OR	OFF	2017/10/28 15:33
S56	28	"4064887"	USPAT	OR	OFF	2017/10/28 17:08
S57	2	"20030226580"	US-PGPUB; USPAT	OR	OFF	2017/12/20 13:12
S58	28	"4064887"	US-PGPUB; USPAT	OR	OFF	2017/12/20 13:13
S59	2	"20050109378"	US-PGPUB; USPAT	OR	OFF	2017/12/20 13:20
S60	147	(US-20150245762-$ or US-20130002107-$ or US-20120138106-$ or US-20100051069-$ or US-20030226580-$ or US-20070246090-$ or US-20120097199-$ or US-20120125383-$ or US-20120138111-$ or US-20130000673-$ or US-20140137909-	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	OFF	2018/01/29 17:59

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		$ or US-20140137911-$ or US-20150359412-$ or US-20120138100-$ or US-20130087173-$ or US-20130098406-$ or US-20140076363-$ or US-20060144424-$ or US-20120138107-$ or US-20050109378-$ or US-20060108298-$ or US-20060219271-$ or US-20060289038-$ or US-20090065455-$ or US-20110030742-$ or US-20120291827-$).did. or (US-20120292269-$ or US-20120292270-$ or US-20120298155-$ or US-20130104944-$ or US-20130299438-$ or US-20160095497-$ or US-20160007824-$ or US-20140021149-$ or US-20120293054-$ or US-20120139399-$ or US-20100314977-$ or US-20090090680-$ or US-20080169009-$ or US-20050241686-$ or US-20040108283-$ or US-20040079713-$ or US-20030089672-$ or US-20170135547-$).did. or (US-7594513-$ or US-6907998-$ or US-3464566-$ or US-3258127-$ or US-2910207-$ or US-2907470-$ or US-2646809-$ or US-8753454-$ or US-9119517-$ or US-9259138-$ or US-5662744-$ or US-6460555-$ or US-D481179-$ or US-D488594-$ or US-8347898-$ or US-4653520-$ or US-4134414-$ or US-3951684-$ or US-3951683-$ or US-3444870-$ or US-8192557-$ or US-7455066-$ or US-7410228-$ or US-8701898-$ or US-8567882-$ or US-8534471-$).did. or (US-7445128-$ or US-7418967-$ or US-7032604-$ or US-5918749-$ or US-5657878-$ or US-5205419-$ or US-4064887-$ or US-3752322-$ or US-3303934-$ or US-3288302-$ or US-3269548-$ or US-3126098-$ or US-2739025-$ or US-1562614-$ or US-0372123-$).did. or (DE-10332149-$ or JP-5006715-$ or JP-5006715-$ or JP-5006715-$ or JP-5006716-$ or JP-5006716-$ or JP-5006716-$ or EP-2594186-$ or EP-2754377-$ or DE-19960496-$ or EP-2912983-$ or CA-2071423-$ or CA-2094466-$ or CA-2094466-$ or CA-2353655-$ or CA-2431612-$ or CA-2432235-$ or CA-2444311-$ or CA-2445170-$ or CA-2473527-$ or DE-102010061215-$ or DE-102011054149-$ or DE-102012102184-$ or DE-102013111240-$ or DE-102013111241-$ or EP-2896343-$).did. or (EP-2912983-$ or GB-2321590-$ or WO-2009083576-$ or JP-2594186-$ or JP-2594186-$).did. or (DE-10332149-$ or DE-19960496-$ or GB-2321590-$ or EP-372342-$).did. or (JP-2002065562-$).did. or (JP-2002065562-$ or DE-10332149-$ or JP-2009005925-$ or JP-2009005930-$ or EP-2594186-$ or DE-19960496-$ or DE-29800479-$ or US-8567882-$ or DE-102012102189-$ or US-20120139399-$ or DE-102010043272-$ or DE-102008015713-$ or DE-102004057018-$ or US-				

		20060108298-$ or WO-2006015932-$ or WO-2005107570-$ or WO-03055375-$ or US-4606464-$ or US-4064887-$).did.				
S61	1	"20080156358"	US-PGPUB; USPAT	OR	OFF	2018/04/30 05:44
S62	1	"20150201823"	US-PGPUB; USPAT	OR	OFF	2018/04/30 05:45
S63	6	"2910207"	US-PGPUB; USPAT	OR	OFF	2018/04/30 05:46
S64	53	"3752322"	US-PGPUB; USPAT	OR	OFF	2018/04/30 05:48
S65	2	"20030226580"	US-PGPUB; USPAT	OR	OFF	2018/04/30 10:26
S68	6	"2910207"	US-PGPUB; USPAT	OR	OFF	2018/04/30 10:27
S67	185	(US-20150245762-$ or US-20130002107-$ or US-20120138106-$ or US-20100051069-$ or US-20030226580-$ or US-20070246090-$ or US-20120097199-$ or US-20120125383-$ or US-20120138111-$ or US-20130000673-$ or US-20140137909-$ or US-20140137911-$ or US-20150359412-$ or US-20120138100-$ or US-20130087173-$ or US-20130098406-$ or US-20140076363-$ or US-20060144424-$ or US-20120138107-$ or US-20050109378-$ or US-20060108298-$ or US-20060219271-$ or US-20060289038-$ or US-20090065455-$ or US-20110030742-$ or US-20120291827-$).did. or (US-20120292269-$ or US-20120292270-$ or US-20120298155-$ or US-20130104944-$ or US-20130299438-$ or US-20160095497-$ or US-20160007824-$ or US-20140021149-$ or US-20120293054-$ or US-20120139399-$ or US-20100314977-$ or US-20090090680-$ or US-20080169009-$ or US-20050241686-$ or US-20040108283-$ or US-20040079713-$ or US-20030089672-$ or US-20170135547-$ or US-20080156358-$ or US-20150201823-$).did. or (US-7594513-$ or US-6907998-$ or US-3464566-$ or US-3258127-$ or US-2910207-$ or US-2907470-$ or US-2646809-$ or US-8753454-$ or US-9119517-$ or US-9259138-$ or US-5662744-$ or US-6460555-$ or US-D481179-$ or US-D488594-$ or US-8347898-$ or US-4653520-$ or US-4134414-$ or US-3951684-$ or US-3951683-$ or US-3444870-$ or US-8192557-$ or US-7455066-$ or US-7410228-$ or US-8701898-$ or US-8567882-$ or US-8534471-$).did. or (US-7445128-$ or US-7418967-$ or US-7032604-$ or US-5918749-$ or US-5657878-$ or US-5205419-$ or US-4064887-$ or US-3752322-$ or US-3303934-$ or US-3288302-$ or US-3269548-$ or US-3126098-$ or US-2739025-$ or US-1562614-$ or US-0372123-$ or US-D506855-$ or US-	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	OFF	2018/04/30 11:12

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		6666220-$ or US-9345382-$ or US-8353412-$ or US-5567029-$ or US-4238035-$ or US-7644826-$ or US-5601195-$ or US-8807352-$ or US-8356719-$ or US-8651287-$ or US-8196593-$).did. or (US-6786339-$ or US-7228975-$ or US-7231929-$ or US-8714371-$ or US-7931155-$ or US-D398092-$ or US-D796750-$ or US-5351837-$ or US-8104628-$ or US-5480035-$ or US-4917248-$ or US-6571965-$ or US-4606464-$ or US-9949613-$ or US-5158185-$ or US-8960452-$ or US-5497890-$ or US-6325220-$ or US-6848585-$ or US-7766175-$ or US-7682465-$ or US-9877632-$ or US-9615722-$).did. or (DE-10332149-$ or JP-5006715-$ or JP-5006715-$ or JP-5006715-$ or JP-5006716-$ or JP-5006716-$ or JP-5006716-$ or EP-2594186-$ or EP-2754377-$ or DE-19960496-$ or EP-2912983-$ or CA-2071423-$ or CA-2094466-$ or CA-2094466-$ or CA-2353655-$ or CA-2431612-$ or CA-2432235-$ or CA-2444311-$ or CA-2445170-$ or CA-2473527-$ or DE-102010061215-$ or DE-102011054149-$ or DE-102012102184-$ or DE-102013111240-$ or DE-102013111241-$ or EP-2896343-$).did. or (EP-2912983-$ or GB-2321590-$ or WO-2009083576-$ or JP-2594186-$ or JP-2594186-$).did. or (DE-10332149-$ or DE-19960496-$ or GB-2321590-$ or EP-372342-$).did. or (JP-2002065562-$).did. or (JP-2002065562-$ or DE-10332149-$ or JP-2009005925-$ or JP-2009005930-$ or EP-2594186-$ or DE-19960496-$ or DE-29800479-$ or US-8567882-$ or DE-102012102189-$ or US-20120139399-$ or DE-102010043272-$ or DE-102008015713-$ or DE-102004057018-$ or US-20060108298-$ or WO-2006015932-$ or WO-2005107570-$ or WO-03055375-$ or US-4606464-$ or US-4064887-$).did.				
S68	0	"15941761"	US-PGPUB; USPAT	OR	OFF	2018/06/10 16:19
S69	16	("20030226580" | "20050109378" | "20100051069" | "20120138106" | "20120292270" | "20130002107" | "20130098406" | "2646809" | "2907470" | "2910207" | "3258127" | "3464566" | "4064887" | "4134414" | "6907998" | "7594513").PN.	US-PGPUB; USPAT	OR	OFF	2018/06/10 16:20
S70	6	"19960496"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/06/10 16:20
S71	18	"2002065562"	US-PGPUB; USPAT;	OR	OFF	2018/06/10 16:20

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			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S72	16	"10332149"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/06/10 16:21
S73	12	"5006715"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/06/10 16:21
S74	29	"2594186"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/06/10 16:21
S75	88	"5006716"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/06/10 16:22
S76	6	"8287660"	US-PGPUB; USPAT	OR	OFF	2018/06/11 06:13
S77	2	"20160058264"	US-PGPUB; USPAT	OR	OFF	2018/06/11 07:49
S78	1	"20030192578"	US-PGPUB; USPAT	OR	OFF	2018/06/11 07:50
S79	9	"3051183"	US-PGPUB; USPAT	OR	OFF	2018/06/11 07:50
S80	477	(US-20160058264-$ or US-20080163904-$ or US-20140150831-$ or US-20120138106-$ or US-20120097200-$ or US-20120138092-$ or US-20120138096-$ or US-20120138110-$ or US-20120138111-$ or US-20120249467-$ or US-20140251378-$ or US-20150245762-$ or US-20150257623-$ or US-20170055799-$ or US-20170135547-$ or US-20170156563-$ or US-20170172370-$ or US-20170273535-$ or US-20100154846-$ or US-20110197937-$ or US-20110197938-$ or US-20120125381-$ or US-20120125382-$ or US-20030183255-$ or US-20030192578-$ or US-20040069332-$).did. or (US-20050133070-$ or US-20050241680-$ or US-20050241686-$ or US-20070006903-$ or US-20070158472-$ or US-20070235063-$ or US-20070246078-$ or US-20070251553-$ or US-20070289615-$ or	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2018/06/11 07:53

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		US-20080142056-$ or US-20080156358-$ or US-20080169009-$ or US-20080173730-$ or US-20080271765-$ or US-20090159101-$ or US-20090159103-$ or US-20100051071-$ or US-20100101611-$ or US-20100139719-$ or US-20100194254-$ or US-20110030742-$ or US-20110155190-$ or US-20120279530-$ or US-20120285490-$ or US-20120285491-$ or US-20120291827-$ or US-20120325277-$).did. or (US-20130068265-$ or US-20140070025-$ or US-20140137909-$ or US-20140196756-$ or US-20140261584-$ or US-20140345654-$ or US-20150007861-$ or US-20150122298-$ or US-20150136189-$ or US-20150182103-$ or US-20150201823-$ or US-20150230687-$ or US-20150250374-$ or US-20150272421-$ or US-20150366430-$ or US-20160000295-$ or US-20160066765-$ or US-20160106295-$ or US-20160106297-$ or US-20040255992-$ or US-20170135548-$ or US-20040194810-$ or US-20080110480-$ or US-20080110481-$ or US-20030226580-$ or US-20050109378-$ or US-20130098406-$).did. or (US-20030089672-$ or US-20040079713-$ or US-20060219271-$ or US-20100314977-$ or US-20120139399-$ or US-20130104944-$ or US-20140076363-$ or US-20040250837-$ or US-20110203619-$ or US-20120031432-$ or US-20120175431-$ or US-20140373883-$ or US-20150208897-$ or US-20160198927-$ or US-20160316992-$ or US-20170007094-$ or US-20170181600-$ or US-20170188790-$ or US-20170245727-$ or US-20170258290-$ or US-20170265707-$ or US-20170265713-$ or US-20170273534-$ or US-20140332042-$ or US-20090255560-$ or US-20080276975-$).did. or (US-9010345-$ or US-6969029-$ or US-3146953-$ or US-3213866-$ or US-3051183-$ or US-2980120-$ or US-2973907-$ or US-2734520-$ or US-2031816-$ or US-7594513-$ or US-9532699-$ or US-8454762-$ or US-9119517-$ or US-9259138-$ or US-7947132-$ or US-8137479-$ or US-8187390-$ or US-9295368-$ or US-5944037-$ or US-9375128-$ or US-9414736-$ or US-9492055-$ or US-9532701-$ or US-9693672-$ or US-9706896-$ or US-9839340-$).did. or (US-D741556-$ or US-D750854-$ or US-D750855-$ or US-8881748-$ or US-9133574-$ or US-9480389-$ or US-3064664-$ or US-3064665-$ or US-3348775-$ or US-3841342-$ or US-4046261-$ or US-4064887-$ or US-4145002-$ or US-4257559-$ or US-4735222-$ or US-4884585-$ or US-4993444-$ or US-5211190-$ or US-5267582-$ or US-5415350-$ or US-				

		5507877-$ or US-5546968-$ or US-5577665-$ or US-5730370-$ or US-5823211-$ or US-5904166-$ or US-5927616-$).did. or (US-5983908-$ or US-6053185-$ or US-6325220-$ or US-6955179-$ or US-8287660-$ or US-8696827-$ or US-4038103-$ or US-4611759-$ or US-4836230-$ or US-5582742-$ or US-3960328-$ or US-5964232-$ or US-7032604-$ or US-6431188-$ or US-7055537-$ or US-7225818-$ or US-8166983-$ or US-8191560-$ or US-9138126-$ or US-9167953-$ or US-1562614-$ or US-2646809-$ or US-2739025-$ or US-2907470-$ or US-2910207-$ or US-3126098-$ or US-3288302-$).did. or (US-3752322-$ or US-8347898-$ or US-2016880-$ or US-2956572-$ or US-3006557-$ or US-3884263-$ or US-3934822-$ or US-4135532-$ or US-4175575-$ or US-4807654-$ or US-5842492-$ or US-6112754-$ or US-6869029-$ or US-7509963-$ or US-7673639-$ or US-7754024-$ or US-7896977-$ or US-8333207-$ or US-8778094-$ or US-8801863-$ or US-9668635-$ or US-8905053-$ or US-9034114-$ or US-9375127-$ or US-9420938-$ or US-9474430-$ or US-9480386-$).did. or (US-9675232-$ or US-9736123-$ or US-9801523-$ or US-4582259-$ or US-1701066-$ or US-3342421-$ or US-5488965-$ or US-6390106-$ or US-3210010-$ or US-5609174-$ or US-4798017-$ or US-3691577-$ or US-9486819-$ or US-5787910-$ or US-3176697-$ or US-4405087-$ or US-D778667-$ or US-6766864-$ or US-4420005-$ or US-4298015-$ or US-3719323-$ or US-9827600-$ or US-7331356-$ or US-9480385-$ or US-9301670-$ or US-7695571-$ or US-2904265-$).did. or (US-2407533-$).did. or (US-3460548-$ or US-3210010-$ or US-0321025-$ or US-3446219-$ or US-2904265-$ or US-2808842-$ or US-2664902-$ or US-2407533-$ or US-2320133-$).did. or (EP-2454983-$ or EP-3222191-$ or EP-1277430-$ or GB-2322067-$ or KR-20050122359-$ or KR-101248098-$ or EP-3222192-$ or WO-2015000512-$ or EP-1632166-$ or EP-1632166-$ or DE-10039880-$ or EP-1183983-$).did. or (GB-2322067-$).did. or (JP-11253381-$).did. or (EP-2454983-$ or GB-2322067-$ or JP-11253381-$ or DE-202004013786-$ or CN-204467992-$).did.				
S81	247	(US-20160058264-$ or US-20080163904-$ or US-20140150831-$ or US-20120138106-$ or US-20120097200-$ or US-20120138092-$ or US-20120138096-$ or US-20120138110-$ or US-20120138111-$	US-PGPUB; USPAT	OR	OFF	2018/06/11 07:53

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		or US-20120249467-$ or US-20140251378-$ or US-20150245762-$ or US-20150257623-$ or US-20170055799-$ or US-20170135547-$ or US-20170156563-$ or US-20170172370-$ or US-20170273535-$ or US-20100154846-$ or US-20110197937-$ or US-20110197938-$ or US-20120125381-$ or US-20120125382-$ or US-20030183255-$ or US-20030192578-$ or US-20040069332-$).did. or (US-20050133070-$ or US-20050241680-$ or US-20050241686-$ or US-20070006903-$ or US-20070158472-$ or US-20070235063-$ or US-20070246078-$ or US-20070251553-$ or US-20070289615-$ or US-20080142056-$ or US-20080156358-$ or US-20080169009-$ or US-20080173730-$ or US-20080271765-$ or US-20090159101-$ or US-20090159103-$ or US-20100051071-$ or US-20100101611-$ or US-20100139719-$ or US-20100194254-$ or US-20110030742-$ or US-20110155190-$ or US-20120279530-$ or US-20120285490-$ or US-20120285491-$ or US-20120291827-$ or US-20120325277-$).did. or (US-20130068265-$ or US-20140070025-$ or US-20140137909-$ or US-20140196756-$ or US-20140261584-$ or US-20140345654-$ or US-20150007861-$ or US-20150122298-$ or US-20150136189-$ or US-20150182103-$ or US-20150201823-$ or US-20150230687-$ or US-20150250374-$ or US-20150272421-$ or US-20150366430-$ or US-20160000295-$ or US-20160066765-$ or US-20160106295-$ or US-20160106297-$ or US-20040255992-$ or US-20170135548-$ or US-20040194810-$ or US-20080110480-$ or US-20080110481-$ or US-20030226580-$ or US-20050109378-$ or US-20130098406-$).did. or (US-20030089672-$ or US-20040079713-$ or US-20060219271-$ or US-20100314977-$ or US-20120139399-$ or US-20130104944-$ or US-20140076363-$ or US-20040250837-$ or US-20110203619-$ or US-20120031432-$ or US-20120175431-$ or US-20140373883-$ or US-20150208897-$ or US-20160198927-$ or US-20160316992-$ or US-20170007094-$ or US-20170181600-$ or US-20170188790-$ or US-20170245727-$ or US-20170258290-$ or US-20170265707-$ or US-20170265713-$ or US-20170273534-$ or US-20140332042-$ or US-20090255560-$ or US-20080276975-$).did. or (US-9010345-$ or US-6969029-$ or US-3146953-$ or US-3213866-$ or US-3051183-$ or US-2980120-$ or US-2973907-$ or US-2734520-$ or US-2031816-$ or US-7594513-$ or US-9532699-$ or US-8454762-$ or US-9119517-$ or US-9259138-$ or US-7947132-$ or US-8137479-$ or US-				

		8187390-$ or US-9295368-$ or US-5944037-$ or US-9375128-$ or US-9414736-$ or US-9492055-$ or US-9532701-$ or US-9693672-$ or US-9706896-$ or US-9839340-$).did. or (US-D741556-$ or US-D750854-$ or US-D750855-$ or US-8881748-$ or US-9133574-$ or US-9480389-$ or US-3064664-$ or US-3064665-$ or US-3348775-$ or US-3841342-$ or US-4046261-$ or US-4064887-$ or US-4145002-$ or US-4257559-$ or US-4735222-$ or US-4884585-$ or US-4993444-$ or US-5211190-$ or US-5267582-$ or US-5415350-$ or US-5507877-$ or US-5546968-$ or US-5577665-$ or US-5730370-$ or US-5823211-$ or US-5904166-$ or US-5927616-$).did. or (US-5983908-$ or US-6053185-$ or US-6325220-$ or US-6955179-$ or US-8287660-$ or US-8696827-$ or US-4038103-$ or US-4611759-$ or US-4836230-$ or US-5582742-$ or US-3960328-$ or US-5964232-$ or US-7032604-$ or US-6431188-$ or US-7055537-$ or US-7225818-$ or US-8166983-$ or US-8191560-$ or US-9138126-$ or US-9167953-$ or US-1562614-$ or US-2646809-$ or US-2739025-$ or US-2907470-$ or US-2910207-$ or US-3126098-$ or US-3288302-$).did. or (US-3752322-$ or US-8347898-$ or US-2016880-$ or US-2956572-$ or US-3006557-$ or US-3884263-$ or US-3934822-$ or US-4135532-$ or US-4175575-$ or US-4807654-$ or US-5842492-$ or US-6112754-$ or US-6869029-$ or US-7509963-$ or US-7673639-$ or US-7754024-$ or US-7896977-$ or US-8333207-$ or US-8778094-$ or US-8801863-$ or US-9668635-$ or US-8905053-$ or US-9034114-$ or US-9375127-$ or US-9420938-$ or US-9474430-$ or US-9480386-$).did. or (US-9675232-$ or US-9736123-$ or US-9801523-$ or US-4582259-$ or US-1701066-$ or US-3342421-$ or US-5488965-$ or US-6390106-$ or US-3210010-$ or US-5609174-$ or US-4798017-$ or US-3691577-$ or US-9486819-$ or US-5787910-$ or US-3176697-$ or US-4405087-$ or US-D778667-$ or US-6766864-$ or US-4420005-$ or US-4298015-$ or US-3719323-$ or US-9827600-$ or US-7331356-$ or US-9480385-$ or US-9301670-$ or US-7695571-$ or US-2904265-$).did. or (US-2407533-$).did. or (US-3460548-$ or US-3210010-$ or US-0321025-$ or US-3446219-$ or US-2904265-$ or US-2808842-$ or US-2664902-$ or US-2407533-$ or US-2320133-$).did. or (EP-				

		2454983-$ or EP-3222191-$ or EP-1277430-$ or GB-2322067-$ or KR-20050122359-$ or KR-101248098-$ or EP-3222192-$ or WO-2015000512-$ or EP-1632166-$ or EP-1632166-$ or DE-10039880-$ or EP-1183983-$).did. or (GB-2322067-$).did. or (JP-11253381-$).did. or (EP-2454983-$ or GB-2322067-$ or JP-11253381-$ or DE-202004013786-$ or CN-204467992-$).did.				
S82	14	("3126098").URPN.	USPAT	OR	OFF	2018/06/11 08:16
S83	2	"20130098406"	US-PGPUB; USPAT	OR	OFF	2018/06/11 08:30
S84	2	"20120292270"	US-PGPUB; USPAT	OR	OFF	2018/06/11 08:32
S85	2	"20050109378"	US-PGPUB; USPAT	OR	OFF	2018/06/11 08:32
S86	8	"4134414"	US-PGPUB; USPAT	OR	OFF	2018/06/11 08:49
S87	20	"3126098"	US-PGPUB; USPAT	OR	OFF	2018/06/11 09:56
S88	217	"7594513"	US-PGPUB; USPAT	OR	OFF	2018/06/11 12:08
S89	106	"7594513"	USPAT	OR	OFF	2018/06/11 12:09
S90	264	(US-20150245762-$ or US-20130002107-$ or US-20120138106-$ or US-20100051069-$ or US-20030226580-$ or US-20070246090-$ or US-20120097199-$ or US-20120125383-$ or US-20120138111-$ or US-20130000673-$ or US-20140137909-$ or US-20140137911-$ or US-20150359412-$ or US-20120138100-$ or US-20130087173-$ or US-20130098406-$ or US-20140076363-$ or US-20060144424-$ or US-20120138107-$ or US-20050109378-$ or US-20060108298-$ or US-20060219271-$ or US-20060289038-$ or US-20090065455-$ or US-20110030742-$ or US-20120291827-$).did. or (US-20120292269-$ or US-20120292270-$ or US-20120298155-$ or US-20130104944-$ or US-20130299438-$ or US-20160095497-$ or US-20160007824-$ or US-20140021149-$ or US-20120293054-$ or US-20120139399-$ or US-20100314977-$ or US-20090090680-$ or US-20080169009-$ or US-20050241686-$ or US-20040108283-$ or US-20040079713-$ or US-20030089672-$ or US-20170135547-$ or US-20080156358-$ or US-20150201823-$ or US-20160058264-$ or US-20030192578-$ or US-20140196756-$ or US-20120249467-$ or US-20100194254-$ or US-20140373883-$ or US-20150208897-$).did. or (US-20050241680-$ or US-20160316992-$ or US-20150272421-$ or US-20160106295-$ or US-20100139719-$ or US-20100101611-$ or US-20070235063-$ or US-20050133070-$ or US-	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	OFF	2018/06/11 12:15

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		20150257623-$ or US-20170172370-$ or US-20120138110-$ or US-20120138092-$ or US-20170181600-$ or US-20120285490-$ or US-20170245727-$ or US-20120285491-$ or US-20140251378-$ or US-20090159103-$ or US-20170273535-$ or US-20150182103-$ or US-20090159101-$ or US-20110155190-$ or US-20120031432-$ or US-20170055799-$ or US-20150122298-$ or US-20140345654-$ or US-20150136189-$).did. or (US-20160198927-$ or US-20150230687-$ or US-20150007861-$ or US-20120175431-$ or US-20160000295-$ or US-20130068265-$ or US-20120279530-$ or US-20070289615-$ or US-20080271765-$ or US-20030183255-$).did. or (US-7594513-$ or US-6907998-$ or US-3464566-$ or US-3258127-$ or US-2910207-$ or US-2907470-$ or US-2646809-$ or US-8753454-$ or US-9119517-$ or US-9259138-$ or US-5662744-$ or US-6460555-$ or US-D481179-$ or US-D488594-$ or US-8347898-$ or US-4653520-$ or US-4134414-$ or US-3951684-$ or US-3951683-$ or US-3444870-$ or US-8192557-$ or US-7455066-$ or US-7410228-$ or US-8701898-$ or US-8567882-$ or US-8534471-$).did. or (US-7445128-$ or US-7418967-$ or US-7032604-$ or US-5918749-$ or US-5657878-$ or US-5205419-$ or US-4064887-$ or US-3752322-$ or US-3303934-$ or US-3288302-$ or US-3269548-$ or US-3126098-$ or US-2739025-$ or US-1562614-$ or US-0372123-$ or US-D506855-$ or US-6666220-$ or US-9345382-$ or US-8353412-$ or US-5567029-$ or US-4238035-$ or US-7644826-$ or US-5601195-$ or US-8807352-$ or US-8356719-$ or US-8651287-$ or US-8196593-$).did. or (US-6786339-$ or US-7228975-$ or US-7231929-$ or US-8714371-$ or US-7931155-$ or US-D398092-$ or US-D796750-$ or US-5351837-$ or US-8104628-$ or US-5480035-$ or US-4917248-$ or US-6571965-$ or US-4606464-$ or US-9949613-$ or US-5158185-$ or US-8960452-$ or US-5497890-$ or US-6325220-$ or US-6848585-$ or US-7766175-$ or US-7682465-$ or US-9877632-$ or US-9615722-$ or US-8287660-$ or US-9801523-$ or US-3051183-$ or US-7055537-$).did. or (US-3006557-$ or US-9480385-$ or US-5823211-$ or US-8881748-$ or US-6431188-$ or US-9167953-$ or US-2407533-$ or US-2031816-$ or US-2904265-$ or US-9827600-$ or US-5927616-$ or US-3348775-$ or US-4257559-$ or US-5582742-$ or US-				

		5904166-$ or US-2973907-$ or US-3210010-$ or US-3146953-$ or US-4735222-$ or US-5546968-$ or US-2734520-$ or US-2980120-$ or US-5944037-$ or US-D383880-$ or US-5462348-$ or US-8191560-$).did. or (US-9480389-$ or US-6755490-$ or US-9138126-$ or US-9962063-$).did. or (DE-10332149-$ or JP-5006715-$ or JP-5006715-$ or JP-5006715-$ or JP-5006716-$ or JP-5006716-$ or JP-5006716-$ or EP-2594186-$ or EP-2754377-$ or DE-19960496-$ or EP-2912983-$ or CA-2071423-$ or CA-2094466-$ or CA-2094466-$ or CA-2353655-$ or CA-2431612-$ or CA-2432235-$ or CA-2444311-$ or CA-2445170-$ or CA-2473527-$ or DE-102010061215-$ or DE-102011054149-$ or DE-102012102184-$ or DE-102013111240-$ or DE-102013111241-$ or EP-2896343-$).did. or (EP-2912983-$ or GB-2321590-$ or WO-2009083576-$ or JP-2594186-$ or JP-2594186-$).did. or (DE-10332149-$ or DE-19960496-$ or GB-2321590-$ or EP-372342-$).did. or (JP-2002065562-$).did. or (JP-2002065562-$ or DE-10332149-$ or JP-2009005925-$ or JP-2009005930-$ or EP-2594186-$ or DE-19960496-$ or DE-29800479-$ or US-8567882-$ or DE-102012102189-$ or US-20120139399-$ or DE-102010043272-$ or DE-102008015713-$ or DE-102004057018-$ or US-20060108298-$ or WO-2006015932-$ or WO-2005107570-$ or WO-03055375-$ or US-4606464-$ or US-4064887-$).did.				
S91	264	(US-20150245762-$ or US-20130002107-$ or US-20120138106-$ or US-20100051069-$ or US-20030226580-$ or US-20070246090-$ or US-20120097199-$ or US-20120125383-$ or US-20120138111-$ or US-20130000673-$ or US-20140137909-$ or US-20140137911-$ or US-20150359412-$ or US-20120138100-$ or US-20130087173-$ or US-20130098406-$ or US-20140076363-$ or US-20060144424-$ or US-20120138107-$ or US-20050109378-$ or US-20060108298-$ or US-20060219271-$ or US-20060289038-$ or US-20090065455-$ or US-20110030742-$ or US-20120291827-$).did. or (US-20120292269-$ or US-20120292270-$ or US-20120298155-$ or US-20130104944-$ or US-20130299438-$ or US-20160095497-$ or US-20160007824-$ or US-20140021149-$ or US-20120293054-$ or US-20120139399-$ or US-20100314977-$ or US-20090090680-$ or US-20080169009-$ or US-20050241686-$ or US-20040108283-$ or US-20040079713-$ or US-20030089672-$ or US-20170135547-$ or US-20080156358-$ or US-20150201823-$ or US-20160058264-$ or US-20030192578-$ or US-20140196756-$ or	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	OFF	2018/06/12 12:22

Petitioner Samsung Ex-1004, 0235

		US-20120249467-$ or US-20100194254-$ or US-20140373883-$ or US-20150208897-$).did. or (US-20050241680-$ or US-20160316992-$ or US-20150272421-$ or US-20160106295-$ or US-20100139719-$ or US-20100101611-$ or US-20070235063-$ or US-20050133070-$ or US-20150257623-$ or US-20170172370-$ or US-20120138110-$ or US-20120138092-$ or US-20170181600-$ or US-20120285490-$ or US-20170245727-$ or US-20120285491-$ or US-20140251378-$ or US-20090159103-$ or US-20170273535-$ or US-20150182103-$ or US-20090159101-$ or US-20110155190-$ or US-20120031432-$ or US-20170055799-$ or US-20150122298-$ or US-20140345654-$ or US-20150136189-$).did. or (US-20160198927-$ or US-20150230687-$ or US-20150007861-$ or US-20120175431-$ or US-20160000295-$ or US-20130068265-$ or US-20120279530-$ or US-20070289615-$ or US-20080271765-$ or US-20030183255-$).did. or (US-7594513-$ or US-6907998-$ or US-3464566-$ or US-3258127-$ or US-2910207-$ or US-2907470-$ or US-2646809-$ or US-8753454-$ or US-9119517-$ or US-9259138-$ or US-5662744-$ or US-6460555-$ or US-D481179-$ or US-D488594-$ or US-8347898-$ or US-4653520-$ or US-4134414-$ or US-3951684-$ or US-3951683-$ or US-3444870-$ or US-8192557-$ or US-7455066-$ or US-7410228-$ or US-8701898-$ or US-8567882-$ or US-8534471-$).did. or (US-7445128-$ or US-7418967-$ or US-7032604-$ or US-5918749-$ or US-5657878-$ or US-5205419-$ or US-4064887-$ or US-3752322-$ or US-3303934-$ or US-3288302-$ or US-3269548-$ or US-3126098-$ or US-2739025-$ or US-1562614-$ or US-0372123-$ or US-D506855-$ or US-6666220-$ or US-9345382-$ or US-8353412-$ or US-5567029-$ or US-4238035-$ or US-7644826-$ or US-5601195-$ or US-8807352-$ or US-8356719-$ or US-8651287-$ or US-8196593-$).did. or (US-6786339-$ or US-7228975-$ or US-7231929-$ or US-8714371-$ or US-7931155-$ or US-D398092-$ or US-D796750-$ or US-5351837-$ or US-8104628-$ or US-5480035-$ or US-4917248-$ or US-6571965-$ or US-4606464-$ or US-9949613-$ or US-5158185-$ or US-8960452-$ or US-5497890-$ or US-6325220-$ or US-6848585-$ or US-7766175-$ or US-7682465-$ or US-9877632-$ or US-9615722-$ or US-8287660-$ or US-9801523-$ or US-3051183-$ or US-7055537-$).did. or (US-3006557-$ or US-				

		9480385-$ or US-5823211-$ or US-8881748-$ or US-6431188-$ or US-9167953-$ or US-2407533-$ or US-2031816-$ or US-2904265-$ or US-9827600-$ or US-5927616-$ or US-3348775-$ or US-4257559-$ or US-5582742-$ or US-2956572-$ or US-5904166-$ or US-2973907-$ or US-3210010-$ or US-3146953-$ or US-4735222-$ or US-5546968-$ or US-2734520-$ or US-2980120-$ or US-5944037-$ or US-D383880-$ or US-5462348-$ or US-8191560-$).did. or (US-9480389-$ or US-6755490-$ or US-9138126-$ or US-9962063-$).did. or (DE-10332149-$ or JP-5006715-$ or JP-5006715-$ or JP-5006715-$ or JP-5006716-$ or JP-5006716-$ or JP-5006716-$ or EP-2594186-$ or EP-2754377-$ or DE-19960496-$ or EP-2912983-$ or CA-2071423-$ or CA-2094466-$ or CA-2094466-$ or CA-2353655-$ or CA-2431612-$ or CA-2432235-$ or CA-2444311-$ or CA-2445170-$ or CA-2473527-$ or DE-102010061215-$ or DE-102011054149-$ or DE-102012102184-$ or DE-102013111240-$ or DE-102013111241-$ or EP-2896343-$).did. or (EP-2912983-$ or GB-2321590-$ or WO-2009083576-$ or JP-2594186-$ or JP-2594186-$).did. or (DE-10332149-$ or DE-19960496-$ or GB-2321590-$ or EP-372342-$).did. or (JP-2002065562-$).did. or (JP-2002065562-$ or DE-10332149-$ or JP-2009005925-$ or JP-2009005930-$ or EP-2594186-$ or DE-19960496-$ or DE-29800479-$ or US-8567882-$ or DE-102012102189-$ or US-20120139399-$ or DE-102010043272-$ or DE-102008015713-$ or DE-102004057018-$ or US-20060108298-$ or WO-2006015932-$ or WO-2005107570-$ or WO-03055375-$ or US-4606464-$ or US-4064887-$).did.				
S92	1	"15941761"	US-PGPUB; USPAT	OR	OFF	2019/01/16 12:27
S93	1	"15941761"	US-PGPUB; USPAT	OR	OFF	2019/01/16 12:44
S94	1	"15941761"	US-PGPUB; USPAT	OR	OFF	2019/01/18 17:38

5/3/2019 12:38:42 PM
C:\Users\tbucci\Documents\EAST\Workspaces\15941761.wsp

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PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 15/941,761	Filing Date 03/30/2018	☐ To be Mailed

ENTITY: ☑ LARGE ☐ SMALL ☐ MICRO

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A		N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A		N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*		x $100 =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*		x $460 =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).				
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))					
* If the difference in column 1 is less than zero, enter "0" in column 2.				TOTAL	

APPLICATION AS AMENDED - PART II

		(Column 1)		(Column 2)	(Column 3)			
AMENDMENT	07/24/2019	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 21	Minus	** 26	= 0		x $100 =	0
	Independent (37 CFR 1.16(h))	* 3	Minus	*** 3	= 0		x $460 =	0
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	0

		(Column 1)		(Column 2)	(Column 3)			
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=		x $0 =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=		x $0 =	
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.	LIE
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".	/DIANE FLOYD/
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".	
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.	

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Whirlpool Corporation		
For:	GLASSES RACK FOR DISHWASHER		
Application No.:	15/941,761	Examiner:	Thomas Bucci
Filed:	March 30, 2018	Group Art Unit:	1711
Atty. Docket:	SUB-05031-US-CNT2	Confirmation No:	4804

CERTIFICATE OF MAILING/TRANSMISSION (37 CFR 1.8(a))

I hereby certify that this correspondence is, on the date shown below, being:

☐ deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to the Commissioner for Patents, PO Box 1450, Alexandria, VA, 22313-1450.

☒ transmitted via EFS-Web to the Patent and Trademark Office.

/Johanne Hrycuna/
Signature

Date: July 24, 2019

Johanne Hrycuna
(type or print name of person certifying)

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

AMENDMENT AND RESPONSE TO OFFICE ACTION

In response to the Office Action mailed May 8, 2019, kindly amend the above-identified application as follows:

Amendments to the Claims appear in the complete listing of claims, which begins on page 2 of this paper.

Remarks begin on page 6 of this paper.

AMENDMENTS TO THE CLAIMS

Please amend the claims as shown below in the complete listing of claims. This listing of claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Previously Presented) A dishwasher, comprising:

a tub defining a treating chamber receiving dishes for treatment;

a spray system providing treating liquid to the treating chamber;

a first dish rack located in the tub and having a bottom wall tiered to form multiple levels, the bottom wall tiered to form multiple levels defining an effective inclination angle for the bottom wall of the first dish rack; and

a second dish rack located below the first dish rack, the second dish rack having a non-tiered, flat bottom wall that is inclined at an angle from a first side wall to an opposite side wall, wherein the angle matches the effective inclination angle for the bottom wall of the first dish rack and is parallel to the effective inclination angle for the bottom wall of the first dish rack.

2. (Previously Presented) The dishwasher according to claim 1 wherein the angle of the non-tiered, flat bottom wall of the second dish rack is configured to hold glasses at an incline angled less than about 45 degrees relative to horizontal.

3. (Previously Presented) The dishwasher according to claim 2 wherein the spray system comprises a sprayer mounted to the second dish rack and positioned to spray treating liquid into an interior of the glasses.

4. (Original) The dishwasher according to claim 3 wherein the second dish rack is slidably mounted to the tub, the spray system further comprises a supply conduit located in the tub, and the sprayer selectively docks with the supply conduit during sliding movement of the second dish rack.

5. (Currently Amended) The dishwasher according to claim 2 wherein the angle of the non-tiered, flat bottom wall of the second dish rack is configured to hold glasses at an inclined angle of about 15 degrees.

6. (Previously Presented) The dishwasher according to claim 1 wherein an upper edge of the second dish rack is inclined at a second angle matching the effective inclination angle.

7. (Previously Presented) The dishwasher according to claim 6, further comprising a third dish rack located below the second dish rack.

8. (Original) The dishwasher according to claim 7 wherein the spray system comprises a first sprayer above the first dish rack, a second sprayer between the first and second dish racks, and a third sprayer below the third dish rack.

9. (Original) The dishwasher according to claim 7 wherein the third dish rack has a bottom wall and a side wall terminating in an upper edge.

10. (Original) The dishwasher according to claim 8 wherein at least one of the bottom wall or upper edge of the third dish rack is horizontal.

11. (Currently Amended) A dishwasher, comprising:

a tub defining a treating chamber receiving dishes for treatment;

a spray system providing treating liquid to the treating chamber; and

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 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, 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

a spray tube having nozzles configured to emit spray along each of the opposing inclined portions into an interior of the glass, 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.

12. (Previously Presented) The dishwasher of claim 27 wherein the dish rack is a low profile dish rack where the length of the angled portion is greater than a shortest height of an upstanding portion of the side wall.

13. (Original) The dishwasher of claim 12 wherein at least one of the nozzles is located above a portion of the angled portion.

14. (Original) The dishwasher of claim 12 wherein the shortest height is located along a portion of the side wall transverse to the angled portion.

15. (Previously Presented) The dishwasher of claim 27 wherein at least one of the nozzles is located above a portion of the angled portion.

16-18. (Canceled).

19. (Original) The dishwasher of claim 11 wherein the spray tube is configured to rotate about a longitudinal axis.

20-23. (Canceled).

24. (Previously Presented) The dishwasher of claim 11 wherein the flat central portion is located above a terminal end of at least one of the opposing inclined portions.

25-26. (Canceled)

27. (Previously Presented) A dishwasher, comprising:

a tub defining a treating chamber receiving dishes for treatment;

a spray system providing treating liquid to the treating chamber; and

a dish rack located in the tub and selectively moveable into and out of the tub, the dish rack having a bottom wall, a side wall extending upwardly from the bottom wall and terminating

in an upper edge, 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, 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

a spray tube having nozzles emitting spray along the angled portion;

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.

28-29. (Canceled)

30. (Previously Presented) The dishwasher of claim 11, further comprising a second spray tube configured to emit spray along an other of the inclined portions, the second spray tube located directly adjacent to an other of the curved mounting portions of the bottom wall and carried with the dish rack between the loading position and the treating position.

31. (Previously Presented) The dishwasher of claim 1 wherein the spray system comprises a plurality of spray tubes positioned to spray treating liquid into an interior of the second dish rack.

32. (Previously Presented) The dishwasher of claim 31 wherein the non-tiered, flat bottom wall of the second dish rack is configured to accommodate separate rows glasses, each of the separate rows of glasses corresponding to one of the plurality of spray tubes.

REMARKS

Claims 1-15, 19, 24, 27, and 30-32 are currently pending in the application. By the present amendment, claims 5 and 11 are amended. Applicant believes the amendments made herein add no new matter. Any amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based on prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to be attached thereto.

Further consideration and examination of the application is respectfully requested in view of the amendments and the following remarks.

Allowable Subject Matter

Applicant acknowledges with thanks the Examiner's determination that claims 1-10 and 31-32 are allowed and claims 11 and 27 would be allowable if rewritten to overcome the rejections under 35 U.S.C. §112(b) or 35 U.S.C. §112(pre-AIA), 2nd paragraph, set forth in the Office Action, and that claim 12-15, 19, 24, and 30 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. §112(b) or 35 U.S.C. §112(pre-AIA), 2nd paragraph, set forth in the Office Action and to include all of the limitations of the base claim and any intervening claims.

Interview Summary

Applicant's representative thanks the Examiner for the courtesy of a call on July 24, 2019, at 10 a.m. ET. During the interview, the §112 rejection of claim 27 was discussed along with the FIGs. 8 and 9 of the specification. It is believed that that all of the claims in the application are in condition for allowance.

Claim Objections

Claim 5 has been objected to on the basis of an informality. Claim 5 has been amended to correct the informality. Applicant kindly requests withdrawal of the objection to claim 5.

Rejections Under 35 U.S.C. §112

Claims 11-15, 19, 24, 27, and 30 are rejected under 35 U.S.C. §112(b) or 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter. The rejection is respectfully traversed.

Based on the interview, it is believed that no amendment is needed to claim 27 and that the term "two adjacent inclined portions of the plurality of spaced apart inclined portions" is definite. As discussed with the Examiner, the plurality of spaced apart inclined portions is illustrated in FIG. 9 along, for example, the depth of the right hand side of the rack. The plurality of spaced apart inclined portions forming the bottom of the rack from the front of the rack (where labeled in the bottom of the figure as 67) to the back of the rack (close to the numeral 73 at the top of the figure). As illustrated, two adjacent of the plurality of spaced apart inclined portions (front to back in the rack) can retain a glass in the space between the two adjacent portions as illustrated by the phantom glass 74.

Claim 11 has been amended to clarify the claim and provide proper antecedent basis. It is believed that the rejection is now moot and should be withdrawn.

Conclusion

In view of the following remarks, it is submitted that all of the claims in the application are in condition for allowance. Early notification of allowability is respectfully requested. If the Examiner believes that there are some issues remaining in this application that can be expedited by a telephone interview, the courtesy of a telephone call to the undersigned representative is respectfully requested.

Respectfully submitted,

WHIRLPOOL CORPORATION

Date: July 24, 2019

By: /Sara L Haas/

Sara L. Haas, Reg. No. 64,796
McGARRY BAIR PC
45 Ottawa Ave. SW, Suite 700
Grand Rapids, Michigan 49503
(616) 742-3500

Electronic Acknowledgement Receipt

EFS ID:	36675427
Application Number:	15941761
International Application Number:	
Confirmation Number:	4804
Title of Invention:	GLASSES RACK FOR DISHWASHER
First Named Inventor/Applicant Name:	Barry E. Tuller
Customer Number:	130348
Filer:	Sara Lynn Haas/Johanne Hrycuna
Filer Authorized By:	Sara Lynn Haas
Attorney Docket Number:	SUB-05031-US-CNT2
Receipt Date:	24-JUL-2019
Filing Date:	30-MAR-2018
Time Stamp:	14:36:20
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		G1346221.PDF	170369 fdc28f483db26865c13d162d7ed0a012584 9e736	yes	7

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Claims	2	5
	Applicant Arguments/Remarks Made in an Amendment	6	7
Warnings:			
Information:			
	Total Files Size (in bytes):	170369	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/941,761	03/30/2018	Barry E. Tuller	SUB-05031-US-CNT2	4804

130348 7590 08/22/2019

Whirlpool Corporation / McGarry Bair PC
2000 North M63
Benton Harbor, MI 49022

EXAMINER
BUCCI, THOMAS

ART UNIT	PAPER NUMBER
1711	

NOTIFICATION DATE	DELIVERY MODE
08/22/2019	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PatentDocketing@whirlpool.com
deborah_tomaszewski@whirlpool.com
patents@mcgarrybair.com

Petitioner Samsung Ex-1004, 0248

Applicant-Initiated Interview Summary	**Application No.** 15/941,761	**Applicant(s)** Tuller et al.	
	Examiner THOMAS BUCCI	**Art Unit** 1711	**AIA (FITF) Status** Yes

All participants (applicant, applicants representative, PTO personnel):

(1) THOMAS BUCCI. (3) ____.

(2) SARA HAAS. (4) _____.

Date of Interview: 24 July 2019.

Type: ☑ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☑ No.
If Yes, brief description: _____.

Issues Discussed ☐101 ☑112 ☐102 ☐103 ☐Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: 11 and 27.

Identification of prior art discussed: N/A.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

See Continuation Sheet.

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview.

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

/THOMAS BUCCI/ Examiner, Art Unit 1711	/DAVID G CORMIER/ Primary Examiner, Art Unit 1711

Petitioner Samsung Ex-1004, 0249

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiners responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicants correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,-
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicants record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiners version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, Interview Record OK on the paper recording the substance of the interview along with the date and the examiners initials.

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments:

Applicant's representative Sara Haas initiated interview to discuss the rejections of claims 11 and 27 under 35 USC 112(b). No proposed amendments were submitted prior to conducting the interview.

With regard to the rejection of claim 11 under 35 USC 112(b), Applicant indicated that "the inclined portion" (lines 13-14) would be amended to instead recite "each of the opposing inclined portions"; Examiner agreed that such an amendment would appear to overcome the previous ground of rejection under 35 USC 112.

With regard to the rejection of claim 27 under 35 USC 112(b), Applicant explained and clarified the term "two adjacent inclined portions of the plurality of spaced apart inclined portions" in view of FIG. 9 which illustrates two adjacent spaced apart inclined portions (front to back in the rack) can retain a glass (74). Examiner agrees with Applicant that the previous grounds of rejection of claim 27 under 35 USC 112 is improper and should be withdrawn without need for amendment.

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NOTICE OF ALLOWANCE AND FEE(S) DUE

130348 7590 09/05/2019

Whirlpool Corporation / McGarry Bair PC
2000 North M63
Benton Harbor, MI 49022

EXAMINER
BUCCI, THOMAS

ART UNIT	PAPER NUMBER
1711	

DATE MAILED: 09/05/2019

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/941,761	03/30/2018	Barry E. Tuller	SUB-05031-US-CNT2	4804

TITLE OF INVENTION: GLASSES RACK FOR DISHWASHER

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$1000	$0.00	$0.00	$1000	12/05/2019

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Maintenance fees are due in utility patents issuing on applications filed on or after Dec. 12, 1980. It is patentee's responsibility to ensure timely payment of maintenance fees when due. More information is available at www.uspto.gov/PatentMaintenanceFees.

Petitioner Samsung Ex-1004, 0252

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), by mail or fax, or via EFS-Web.

By mail, send to: Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

By fax, send to: (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

130348 7590 09/05/2019

Whirlpool Corporation / McGarry Bair PC
2000 North M63
Benton Harbor, MI 49022

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being transmitted to the USPTO via EFS-Web or by facsimile to (571) 273-2885, on the date below.

(Typed or printed name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/941,761	03/30/2018	Barry E. Tuller	SUB-05031-US-CNT2	4804

TITLE OF INVENTION: GLASSES RACK FOR DISHWASHER

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$1000	$0.00	$0.00	$1000	12/05/2019

EXAMINER	ART UNIT	CLASS-SUBCLASS
BUCCI, THOMAS	1711	134-170000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-09 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. Fees submitted: ❑ Issue Fee ❑ Publication Fee (if required) ❑ Advance Order - # of Copies _____

4b. Method of Payment: *(Please first reapply any previously paid fee shown above)*

❑ Electronic Payment via EFS-Web ❑ Enclosed check ❑ Non-electronic payment by credit card (Attach form PTO-2038)

❑ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. _____

5. **Change in Entity Status** (from status indicated above)

❑ Applicant certifying micro entity status. See 37 CFR 1.29

❑ Applicant asserting small entity status. See 37 CFR 1.27

❑ Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

Petitioner Samsung Ex-1004, 0253

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/941,761	03/30/2018	Barry E. Tuller	SUB-05031-US-CNT2	4804

130348 7590 09/05/2019

Whirlpool Corporation / McGarry Bair PC
2000 North M63
Benton Harbor, MI 49022

EXAMINER	
BUCCI, THOMAS	

ART UNIT	PAPER NUMBER
1711	

DATE MAILED: 09/05/2019

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

PTOL-85 (Rev. 02/11)

Petitioner Samsung Ex-1004, 0254

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 15/941,761	Applicant(s) Tuller et al.	
	Examiner THOMAS BUCCI	Art Unit 1711	AIA (FITF) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☑ This communication is responsive to 7/24/19.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

3. ☑ The allowed claim(s) is/are See Continuation Sheet . As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see **http://www.uspto.gov/patents/init_events/pph/index.jsp** or send an inquiry to **PPHfeedback@uspto.gov.**

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   Certified copies:

   a) ☐ All b) ☐ Some *c) ☐ None of the:

   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☑ Notice of References Cited (PTO-892)
2. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____.
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material _____.
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date. _____.
5. ☐ Examiner's Amendment/Comment
6. ☑ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/THOMAS BUCCI/ Examiner, Art Unit 1711	/DAVID G CORMIER/ Primary Examiner, Art Unit 1711

Petitioner Samsung Ex-1004, 0256

Continuation of 3. The allowed claim(s) is/are: 1-15,19,24,27 and 30-32

DETAILED ACTION

Notice of Pre-AIA or AIA Status

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

2. Office Action is in response to Applicant's amendments/remarks filed 7/24/19. Claims 5 and 11 were amended; claims 16-18, 20-23, 25-26, and 28-29 are cancelled. Claims 1-15, 19, 24, 27 and 30-32 are presently pending and are presented for examination.

Response to Arguments

3. Applicant's arguments, see page 7 of Remarks, filed 7/24/19, with respect to the rejections of claims 11-15, 19, 24, 27, and 30 under 35 USC 112(b) have been fully considered and are persuasive. **The rejections of claims 11-15, 19, 24, 27, and 30 under 35 USC 112(b) have been withdrawn**. Additionally, **the objection to claim 5 has been withdrawn.**

Allowable Subject Matter

4. **Claims 1-15, 19, 24, 27, and 30-32 are allowed**.

5. The following is an examiner's statement of reasons for allowance:

Regarding claims 1-10 and 31-32,

As previously persuasively argued by Applicant on pages 6-11 of Remarks, filed 3/27/19, independent claim 1 overcomes the previous grounds of rejection of claims 1-10 under 35 USC 103 in view of Welch (US Pub. 2003/0226580) and Geiger (US Pat. 4,064,887). Upon a comprehensive updated search, no available prior art was able to teach or fairly suggest, singly or in combination, all features of the dishwasher of

independent claim 1 comprising the specifically configured first and second dish racks in combination with all other features/elements defined by the claim. For at least the above reasons, independent claim 1 (and therefore dependent claims 2-10 and 31-32) are in condition for allowance.

Regarding claims 11, 19, 24, and 30,

As previously persuasively argued by Applicant on pages 11-13 of Remarks, filed 3/27/19, independent claim 11 overcomes the previous grounds of rejection under 35 USC 103 in view of Andrew (US Pat. 2,910,207) and Ochoa (US Pub. 2003/0192578). Upon a comprehensive updated search, no available prior art was able to teach or fairly suggest, singly or in combination, all features of independent claim 11 comprising the specifically configured dish rack and spray tube in combination with all other features/elements defined by the claim. Additionally, as noted in the 'Response to Arguments' above, the rejections of claims 11-15, 19, 24, 27, and 30 under 35 USC 112(b) have been withdrawn. For at least the above reasons, independent claim 11 (and therefore dependent claims 19, 24, and 30) are in condition for allowance.

Regarding claims 12-15, and 27,

As persuasively argued by Applicant on pages 11-13 of Remarks, filed 3/27/19, newly amended independent claim 27 overcomes the previous grounds of rejection under 35 USC 103 in view of Andrew (US Pat. 2,910,207) and Ochoa (US Pub. 2003/0192578). Upon a comprehensive updated search, no available prior art was able to teach or fairly suggest, singly or in combination, all features of independent claim 27 comprising the specifically configured dish rack and spray tube in combination with all other features/elements defined by the claim. Additionally, as noted in the 'Response to

Arguments' above, the rejections of claims 11-15, 19, 24, 27, and 30 under 35 USC 112(b) have been withdrawn. For at least the above reasons, independent claim 27 (and therefore dependent claims 12-15) are in condition for allowance.

The closest prior art references are:

US Pat. 2,910,207 to Andrew;

US Pub. 2003/0192578 to Ochoa;

US Pub. 2003/0226580 to Welch; and

US Pat. 4,064,887 to Geiger.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS BUCCI whose telephone number is (571)270-5406. The examiner can normally be reached on Mon-Fri 8:00 - 5:00.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at http://www.uspto.gov/interviewpractice.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/THOMAS BUCCI/
Examiner, Art Unit 1711
/DAVID G CORMIER/
Primary Examiner, Art Unit 1711

Notice of References Cited	Application/Control No. 15/941,761	Applicant(s)/Patent Under Reexamination Tuller et al.	
	Examiner THOMAS BUCCI	Art Unit 1711	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-20030226580-A1	12-2003	Welch, Rodney M.	A47L15/50	134/172
*	B	US-4064887-A	12-1977	Geiger; Paul B.	A47L15/23	134/144
*	C	US-2910207-A	10-1959	ANDREW MARGARET J	A47L15/50	220/488
*	D	US-20030192578-A1	10-2003	Ochoa, Orlando P. SR.	A47L15/508	134/176
	E					
	F					
	G					
	H					
	I					
	J					
	K					
	L					
	M					

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Petitioner Samsung Ex-1004, 0262

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15/941,761	Tuller et al.
	Examiner	Art Unit
	THOMAS BUCCI	1711

CPC - Searched*		
Symbol	**Date**	**Examiner**
A47L15/50, A47L15/508, A47L15/23, A47L15/22, A47L15/505	06/11/2018	TB
ABOVE UPDATED	01/19/2019	TB
ABOVE UPDATED	05/03/2019	TB
ABOVE UPDATED	08/23/2019	TB

CPC Combination Sets - Searched*		
Symbol	**Date**	**Examiner**

US Classification - Searched*			
Class	**Subclass**	**Date**	**Examiner**
134	170, 56D, 176, 200, 172, 198, 58D, 135, 179, 57D, 144, 199, 165, 137, 177, 103.2	06/11/2018	TB
211	41.8, 41.9, 41.4, 181.1	06/11/2018	TB
ABOVE	UPDATED	01/19/2019	TB
ABOVE	UPDATED	05/03/2019	TB
ABOVE	UPDATED	08/23/2019	TB

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

/THOMAS BUCCI/ Examiner, Art Unit 1711	/THOMAS BUCCI/ Examiner, Art Unit 1711

Petitioner Samsung Ex-1004, 0263

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15/941,761	Tuller et al.
	Examiner	Art Unit
	THOMAS BUCCI	1711

Search Notes		
Search Notes	**Date**	**Examiner**
Comprehensive search performed in EAST, attached	06/11/2018	TB
Class/subclass search in USPC and CPC	06/11/2018	TB
Inventor search in EAST	06/11/2018	TB
Interference search in EAST	06/11/2018	TB
All IDS references considered	06/11/2018	TB
ABOVE UPDATED, ATTACHED	01/19/2019	TB
ABOVE UPDATED, ATTACHED	05/03/2019	TB
ABOVE UPDATED, ATTACHED	08/23/2019	TB

Interference Search			
US Class/CPC Symbol	**US Subclass/CPC Group**	**Date**	**Examiner**
134	170, 56D, 176, 200, 172, 198, 58D, 135, 179, 57D, 144, 199, 165, 137, 177, 103.2	06/11/2018	TB
211	41.8, 41.9, 41.4, 181.1	06/11/2018	TB
ABOVE	UPDATED	01/19/2019	TB
ABOVE	UPDATED	05/03/2019	TB
ABOVE	UPDATED	08/23/2019	TB

/THOMAS BUCCI/ Examiner, Art Unit 1711	/THOMAS BUCCI/ Examiner, Art Unit 1711

Petitioner Samsung Ex-1004, 0264

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15/941,761	Tuller et al.
	Examiner	**Art Unit**
	THOMAS BUCCI	1711

CPC							
Symbol						**Type**	**Version**
A47L	/	15	/	0065		F	2013-01-01
A47L	/	15	/	14		I	2013-01-01
A47L	/	15	/	50		I	2013-01-01
A47L	/	15	/	508		I	2013-01-01
A47L	/	15	/	4285		I	2013-01-01

CPC Combination Sets								
Symbol						**Type**	**Set**	**Ranking**	**Version**
	/		/						

/THOMAS BUCCI/ Examiner, Art Unit 1711 (Assistant Examiner)	23 August 2019 (Date)	**Total Claims Allowed:** 21	
/DAVID G CORMIER/ Primary Examiner, Art Unit 1711 (Primary Examiner)	29 August 2019 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure Fig. 1

U.S. Patent and Trademark Office — Part of Paper No.: 20190819

Petitioner Samsung Ex-1004, 0265

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15/941,761	Tuller et al.
	Examiner	**Art Unit**
	THOMAS BUCCI	1711

INTERNATIONAL CLASSIFICATION				
CLAIMED				
A47L	/	15	/	14

NON-CLAIMED				
	/		/	

US ORIGINAL CLASSIFICATION	
CLASS	**SUBCLASS**
134	170

CROSS REFERENCES(S)						
CLASS	**SUBCLASS (ONE SUBCLASS PER BLOCK)**					
134	56D	198	200	135	58D	172
211	41.8	41.9	181.1	41.2	41.3	41.4
312	228.1					

/THOMAS BUCCI/ Examiner, Art Unit 1711 (Assistant Examiner)	23 August 2019 (Date)	**Total Claims Allowed:** 21	
/DAVID G CORMIER/ Primary Examiner, Art Unit 1711 (Primary Examiner)	29 August 2019 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure Fig. 1

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	15/941,761	Tuller et al.
	Examiner	**Art Unit**
	THOMAS BUCCI	1711

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIMS

Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
1	1	10	10	19	13										
2	2	11	31	20	14										
3	3	12	32	21	15										
4	4	13	11												
5	5	14	19												
6	6	15	24												
7	7	16	30												
8	8	17	27												
9	9	18	12												

/THOMAS BUCCI/ Examiner, Art Unit 1711 (Assistant Examiner)	23 August 2019 (Date)	**Total Claims Allowed:** 21	
/DAVID G CORMIER/ Primary Examiner, Art Unit 1711 (Primary Examiner)	29 August 2019 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure Fig. 1

U.S. Patent and Trademark Office Part of Paper No.: 20190819

Petitioner Samsung Ex-1004, 0267

Bibliographic Data

Application No: 15/941,761

Foreign Priority claimed: ○ Yes ◉ No

35 USC 119 (a-d) conditions met: ☐ Yes ☑ No ☐ Met After Allowance

Verified and Acknowledged: /THOMAS BUCCI/ [ ]

Examiner's Signature Initials

Title: GLASSES RACK FOR DISHWASHER

FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
03/30/2018	134	1711	SUB-05031-US-CNT2
RULE			

APPLICANTS

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William J. Snell Elkhart, IN, UNITED STATES

CONTINUING DATA

This application is a CON of 15416687 01/26/2017 PAT 10349804

15416687 is a CON of 14620688 02/12/2015ABN

14620688 has PRO of 61946101 02/28/2014

FOREIGN APPLICATIONS

IF REQUIRED, FOREIGN LICENSE GRANTED**

04/25/2018

STATE OR COUNTRY

UNITED STATES

ADDRESS

Whirlpool Corporation / McGarry Bair PC

2000 North M63

Benton Harbor, MI 49022

UNITED STATES

FILING FEE RECEIVED

$2,320

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L15	264	(US-20150245762-$ or US-20130002107-$ or US-20120138106-$ or US-20100051069-$ or US-20030226580-$ or US-20070246090-$ or US-20120097199-$ or US-20120125383-$ or US-20120138111-$ or US-20130000673-$ or US-20140137909-$ or US-20140137911-$ or US-20150359412-$ or US-20120138100-$ or US-20130087173-$ or US-20130098406-$ or US-20140076363-$ or US-20060144424-$ or US-20120138107-$ or US-20050109378-$ or US-20060108298-$ or US-20060219271-$ or US-20060289038-$ or US-20090065455-$ or US-20110030742-$ or US-20120291827-$).did. or (US-20120292269-$ or US-20120292270-$ or US-20120298155-$ or US-20130104944-$ or US-20130299438-$ or US-20160095497-$ or US-20160007824-$ or US-20140021149-$ or US-20120293054-$ or US-20120139399-$ or US-20100314977-$ or US-20090090680-$ or US-20080169009-$ or US-20050241686-$ or US-20040108283-$ or US-20040079713-$ or US-20030089672-$ or US-20170135547-$ or US-20080156358-$ or US-20150201823-$ or US-20160058264-$ or US-20030192578-$ or US-20140196756-$ or US-20120249467-$ or US-20100194254-$ or US-20140373883-$ or US-20150208897-$).did. or (US-20050241680-$ or US-20160316992-$ or US-20150272421-$ or US-20160106295-$ or US-20100139719-$ or US-20100101611-$ or US-20070235063-$ or US-20050133070-$ or US-20150257623-$ or US-20170172370-$ or US-20120138110-$ or US-20120138092-$ or US-20170181600-$ or US-20120285490-$ or US-20170245727-$ or US-20120285491-$ or US-20140251378-$ or US-20090159103-$ or US-20170273535-$ or US-20150182103-$ or US-20090159101-$ or US-20110155190-$ or US-20120031432-$ or US-20170055799-$ or US-20150122298-$ or US-20140345654-$ or US-20150136189-$).did. or (US-20160198927-$ or US-20150230687-$ or US-20150007861-$ or US-20120175431-$ or US-20160000295-$ or US-20130068265-$ or US-20120279530-$ or US-20070289615-$ or US-20080271765-$ or US-20030183255-$).did. or (US-7594513-$ or US-6907998-$ or US-3464566-$ or US-	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	OFF	2019/08/23 09:34

Petitioner Samsung Ex-1004, 0270

		3258127-$ or US-2910207-$ or US-2907470-$ or US-2646809-$ or US-8753454-$ or US-9119517-$ or US-9259138-$ or US-5662744-$ or US-6460555-$ or US-D481179-$ or US-D488594-$ or US-8347898-$ or US-4653520-$ or US-4134414-$ or US-3951684-$ or US-3951683-$ or US-3444870-$ or US-8192557-$ or US-7455066-$ or US-7410228-$ or US-8701898-$ or US-8567882-$ or US-8534471-$).did. or (US-7445128-$ or US-7418967-$ or US-7032604-$ or US-5918749-$ or US-5657878-$ or US-5205419-$ or US-4064887-$ or US-3752322-$ or US-3303934-$ or US-3288302-$ or US-3269548-$ or US-3126098-$ or US-2739025-$ or US-1562614-$ or US-0372123-$ or US-D506855-$ or US-6666220-$ or US-9345382-$ or US-8353412-$ or US-5567029-$ or US-4238035-$ or US-7644826-$ or US-5601195-$ or US-8807352-$ or US-8356719-$ or US-8651287-$ or US-8196593-$).did. or (US-6786339-$ or US-7228975-$ or US-7231929-$ or US-8714371-$ or US-7931155-$ or US-D398092-$ or US-D796750-$ or US-5351837-$ or US-8104628-$ or US-5480035-$ or US-4917248-$ or US-6571965-$ or US-4606464-$ or US-9949613-$ or US-5158185-$ or US-8960452-$ or US-5497890-$ or US-6325220-$ or US-6848585-$ or US-7766175-$ or US-7682465-$ or US-9877632-$ or US-9615722-$ or US-8287660-$ or US-9801523-$ or US-3051183-$ or US-7055537-$).did. or (US-3006557-$ or US-9480385-$ or US-5823211-$ or US-8881748-$ or US-6431188-$ or US-9167953-$ or US-2407533-$ or US-2031816-$ or US-2904265-$ or US-9827600-$ or US-5927616-$ or US-3348775-$ or US-4257559-$ or US-5582742-$ or US-2956572-$ or US-5904166-$ or US-2973907-$ or US-3210010-$ or US-3146953-$ or US-4735222-$ or US-5546968-$ or US-2734520-$ or US-2980120-$ or US-5944037-$ or US-D383880-$ or US-5462348-$ or US-8191560-$).did. or (US-9480389-$ or US-6755490-$ or US-9138126-$ or US-9962063-$).did. or (DE-10332149-$ or JP-5006715-$ or JP-5006715-$ or JP-5006715-$ or JP-5006716-$ or JP-5006716-$ or JP-5006716-$ or EP-2594186-$ or EP-2754377-$ or DE-19960496-$ or EP-2912983-$ or CA-2071423-$ or CA-2094466-$ or CA-2094466-$ or CA-2353655-$ or CA-2431612-$ or CA-2432235-$ or CA-2444311-$ or CA-2445170-$ or CA-2473527-$ or DE-102010061215-$ or DE-				

		102011054149-$ or DE-102012102184-$ or DE-102013111240-$ or DE-102013111241-$ or EP-2896343-$).did. or (EP-2912983-$ or GB-2321590-$ or WO-2009083576-$ or JP-2594186-$ or JP-2594186-$).did. or (DE-10332149-$ or DE-19960496-$ or GB-2321590-$ or EP-372342-$).did. or (JP-2002065562-$).did. or (JP-2002065562-$ or DE-10332149-$ or JP-2009005925-$ or JP-2009005930-$ or EP-2594186-$ or DE-19960496-$ or DE-29800479-$ or US-8567882-$ or DE-102012102189-$ or US-20120139399-$ or DE-102010043272-$ or DE-102008015713-$ or DE-102004057018-$ or US-20060108298-$ or WO-2006015932-$ or WO-2005107570-$ or WO-03055375-$ or US-4606464-$ or US-4064887-$).did.				
S1	1	"14620688"	US-PGPUB; USPAT	OR	OFF	2016/03/14 08:47
S2	11	("20030226580" | "2646809" | "2907470" | "2910207" | "3258127" | "3464566" | "6907998" | "7594513" | "20100051069" | "20130002107" | "20120138106").PN.	US-PGPUB; USPAT	OR	OFF	2016/03/14 09:00
S3	15	"2002065562"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/03/14 09:02
S4	14	"10332149"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/03/14 09:03
S5	10	"5006715"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/03/14 09:04
S6	86	"5006716"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/03/14 09:04
S7	23	"2594186"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/03/14 09:05
S8	6	"19960496"	US-PGPUB; USPAT;	OR	OFF	2016/03/14 09:06

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			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S9	168	(barry near2 tuller).inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/03/14 09:56
S11	9036	(dishwash$3 or dish$wash$3 or (dish near wash$3) or warewash$3 or ware$wash$3 or (ware near wash$3)) and (tray or rack or dishrack or basket or drawer) and (spray$3 or dispens$3 or sprinkl$3 or jet$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/03/14 13:47
S12	30	"5235994"	US-PGPUB; USPAT	OR	OFF	2016/03/14 14:02
S13	2	"20140076363"	US-PGPUB; USPAT	OR	OFF	2016/03/14 14:06
S14	1	"20060144424"	US-PGPUB; USPAT	OR	OFF	2016/03/14 14:06
S15	2	"20130098406"	US-PGPUB; USPAT	OR	OFF	2016/03/14 14:27
S16	1	"20120138107"	US-PGPUB; USPAT	OR	OFF	2016/03/14 14:27
S17	2	"20130087173"	US-PGPUB; USPAT	OR	OFF	2016/03/14 14:28
S18	59	"2321590"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/03/14 14:29
S19	1	"9259138"	US-PGPUB; USPAT	OR	OFF	2016/03/14 14:31
S20	5855	(dishwash$3 or dish$wash$3 or (dish near wash$3) or warewash$3 or ware$wash$3 or (ware near wash$3)) and (tray or rack or dishrack or basket or drawer) and (spray$3 or dispens$3 or sprinkl$3 or jet$4)	US-PGPUB; USPAT	OR	OFF	2016/03/14 14:33
S21	1401	S20 AND ((A47L15/4225 OR A47L15/4221 OR A47L15/505 OR A47L15/22 OR A47L15/4217 OR A47L15/16 OR A47L15/4282 OR A47L2501/03 OR A47L15/0084 OR A47L15/502 OR A47L15/241 OR A47L15/50 OR A47L15/4445 OR A47L15/507 OR A47L15/508 OR A47L2501/02 OR A47L15/504 OR A47L15/4236 OR A47L2601/02 OR A47L2501/20 OR A47L15/428 OR A47L15/501 OR A47L15/20 OR A47L2401/07 OR A47L11/4088).CPC.)	US-PGPUB; USPAT	OR	OFF	2016/03/14 14:39
S22	179	S20 AND ((D06F39/088 OR D06F35/005	US-PGPUB;	OR	OFF	2016/03/14

		OR D06F35/006 OR D06F39/083 OR D06F2204/08 OR D06F2202/08 OR D06F39/08 OR B08B3/02 OR B08B3/04 OR B08B9/20 OR B08B9/093 OR B08B5/02 OR B08B9/34 OR B08B3/024).CPC.)	USPAT			14:42
S23	1970	S20 AND ((134/56D OR 134/25.2 OR 134/57D OR 134/58D OR 134/18 OR 134/200 OR 134/198 OR 134/111 OR 134/10 OR 134/115R OR 134/184 OR 134/172 OR 134/179 OR 134/176 OR 134/135 OR 134/99.2 OR 134/108 OR 134/95.3 OR 134/56R OR 134/183 OR 134/137 OR 134/180 OR 134/36 OR 134/178 OR 134/182 OR 134/103.2 OR 134/174 OR 134/72 OR 134/99.1 OR 134/144 OR 134/191 OR 134/166R OR 134/133 OR 134/131 OR 134/165 OR 134/153 OR 134/60 OR 134/170 OR 134/32 OR 134/22.1 OR 134/148 OR 134/103.3 OR 134/151 OR 134/98.1 OR 134/85 OR 134/138 OR 134/88 OR 134/169R OR 134/92 OR 134/167R OR 134/168R OR 134/23 OR 134/117 OR 134/59 OR 134/125 OR 134/129 OR 134/52 OR 134/82).CCLS.)	US-PGPUB; USPAT	OR	OFF	2016/03/14 14:48
S24	48	S20 and tine	US-PGPUB; USPAT	OR	OFF	2016/03/14 14:49
S25	93	(US-20150245762-$ or US-20130002107-$ or US-20120138106-$ or US-20100051069-$ or US-20030226580-$ or US-20070246090-$ or US-20120097199-$ or US-20120125383-$ or US-20120138111-$ or US-20130000673-$ or US-20140137909-$ or US-20140137911-$ or US-20150359412-$ or US-20120138100-$ or US-20130087173-$ or US-20130098406-$ or US-20140076363-$ or US-20060144424-$ or US-20120138107-$ or US-20050109378-$ or US-20060108298-$ or US-20060219271-$ or US-20060289038-$ or US-20090065455-$ or US-20110030742-$ or US-20120291827-$).did. or (US-20120292269-$ or US-20120292270-$ or US-20120298155-$ or US-20130104944-$ or US-20130299438-$).did. or (US-7594513-$ or US-6907998-$ or US-3464566-$ or US-3258127-$ or US-2910207-$ or US-2907470-$ or US-2646809-$ or US-8753454-$ or US-9119517-$ or US-9259138-$ or US-5662744-$ or US-6460555-$ or US-D481179-$ or US-D488594-$ or US-8347898-$).did. or (DE-10332149-$ or JP-5006715-$ or JP-5006715-$ or JP-5006715-$ or JP-5006716-$ or JP-5006716-$ or JP-5006716-$ or EP-2594186-$ or EP-2754377-$ or DE-19960496-$ or EP-2912983-$ or CA-2071423-$ or CA-2094466-$ or CA-2094466-$ or CA-2353655-$ or CA-2431612-$ or CA-2432235-$ or CA-2444311-$ or CA-2445170-$ or CA-2473527-$ or DE-102010061215-$ or DE-102011054149-$ or	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	OFF	2016/03/14 17:37

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		DE-102012102184-$ or DE-102013111240-$ or DE-102013111241-$ or EP-2896343-$).did. or (EP-2912983-$ or GB-2321590-$ or WO-2009083576-$).did. or (DE-10332149-$ or DE-19960496-$ or GB-2321590-$).did. or (JP-2002065562-$).did. or (JP-2002065562-$ or DE-10332149-$ or JP-2009005925-$ or JP-2009005930-$ or EP-2594186-$ or DE-19960496-$ or DE-29800479-$).did.				
S30	22	"3951684"	US-PGPUB; USPAT	OR	OFF	2016/06/11 13:05
S31	9	("2799285" | "3951683" | "3969137").PN. OR ("4134414").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2016/06/11 13:10
S32	28	("1893979" | "3064664" | "3444870" | "3722895" | "3785566").PN. OR ("3951684").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2016/06/11 13:14
S33	5	"19960496"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/08/20 12:27
S34	24	"2594186"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/08/20 12:28
S35	2	"20030226580"	US-PGPUB; USPAT	OR	OFF	2016/08/20 12:47
S36	4	("2003/0226580").URPN.	USPAT	OR	OFF	2016/08/20 12:48
S37	18	dishwasher and (tine with height)	US-PGPUB; USPAT	OR	ON	2016/08/20 14:40
S38	0	"15416687"	US-PGPUB; USPAT	OR	OFF	2017/05/15 08:27
S39	15	("4134414" | "2646809" | "2907470" | "2910207" | "3258127" | "3464566" | "6907998" | "7594513" | "20030226580" | "20050109378" | "20120292270" | "20130098406" | "20100051069" | "20130002107" | "20120138106").PN.	US-PGPUB; USPAT	OR	OFF	2017/05/15 08:28
S40	6	"19960496"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/15 08:29
S41	17	"2002065562"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/15 08:29

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S42	16	"10332149"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/15 08:30
S43	12	"5006715"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/15 08:30
S44	27	"2594186"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/15 08:30
S45	86	"5006716"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/05/15 08:31
S46	2	"20030226580"	US-PGPUB; USPAT	OR	OFF	2017/05/15 09:23
S47	2	"20130098406"	US-PGPUB; USPAT	OR	OFF	2017/05/15 09:46
S48	2	"20050109378"	US-PGPUB; USPAT	OR	OFF	2017/05/15 09:49
S49	103	(US-20150245762-$ or US-20130002107-$ or US-20120138106-$ or US-20100051069-$ or US-20030226580-$ or US-20070246090-$ or US-20120097199-$ or US-20120125383-$ or US-20120138111-$ or US-20130000673-$ or US-20140137909-$ or US-20140137911-$ or US-20150359412-$ or US-20120138100-$ or US-20130087173-$ or US-20130098406-$ or US-20140076363-$ or US-20060144424-$ or US-20120138107-$ or US-20050109378-$ or US-20060108298-$ or US-20060219271-$ or US-20060289038-$ or US-20090065455-$ or US-20110030742-$ or US-20120291827-$).did. or (US-20120292269-$ or US-20120292270-$ or US-20120298155-$ or US-20130104944-$ or US-20130299438-$).did. or (US-7594513-$ or US-6907998-$ or US-3464566-$ or US-3258127-$ or US-2910207-$ or US-2907470-$ or US-2646809-$ or US-8753454-$ or US-9119517-$ or US-9259138-$ or US-5662744-$ or US-6460555-$ or US-D481179-$ or US-D488594-$ or US-8347898-$ or US-4653520-$ or US-4134414-$ or US-3951684-$ or US-	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	OFF	2017/10/28 14:15

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		3951683-$ or US-3444870-$ or US-8192557-$ or US-7455066-$ or US-7410228-$).did. or (DE-10332149-$ or JP-5006715-$ or JP-5006715-$ or JP-5006715-$ or JP-5006716-$ or JP-5006716-$ or JP-5006716-$ or EP-2594186-$ or EP-2754377-$ or DE-19960496-$ or EP-2912983-$ or CA-2071423-$ or CA-2094466-$ or CA-2094466-$ or CA-2353655-$ or CA-2431612-$ or CA-2432235-$ or CA-2444311-$ or CA-2445170-$ or CA-2473527-$ or DE-102010061215-$ or DE-102011054149-$ or DE-102012102184-$ or DE-102013111240-$ or DE-102013111241-$ or EP-2896343-$).did. or (EP-2912983-$ or GB-2321590-$ or WO-2009083576-$ or JP-2594186-$ or JP-2594186-$).did. or (DE-10332149-$ or DE-19960496-$ or GB-2321590-$).did. or (JP-2002065562-$).did. or (JP-2002065562-$ or DE-10332149-$ or JP-2009005925-$ or JP-2009005930-$ or EP-2594186-$ or DE-19960496-$ or DE-29800479-$).did.				
S50	3871	((A47L15/50 OR A47L15/502 OR A47L15/504 OR A47L15/14 OR A47L15/507).CPC.)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	OFF	2017/10/28 14:16
S51	2191	((134/135 OR 211/41.8 OR 211/41.9 OR 211/181.1).CCLS.)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	OFF	2017/10/28 14:18
S52	307	((211/41.8).CCLS.)	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	OFF	2017/10/28 14:18
S53	17	("2003/0205258" | "2004/0020876" | "2004/0079713").URPN.	USPAT	OR	OFF	2017/10/28 14:25
S54	1	"15416687"	US-PGPUB; USPAT	OR	OFF	2017/10/28 15:11
S55	2	"20030226580"	US-PGPUB; USPAT	OR	OFF	2017/10/28 15:33
S56	28	"4064887"	USPAT	OR	OFF	2017/10/28 17:08
S57	2	"20030226580"	US-PGPUB; USPAT	OR	OFF	2017/12/20 13:12
S58	28	"4064887"	US-PGPUB; USPAT	OR	OFF	2017/12/20 13:13
S59	2	"20050109378"	US-PGPUB; USPAT	OR	OFF	2017/12/20 13:20
S60	147	(US-20150245762-$ or US-20130002107-$ or US-20120138106-$ or US-20100051069-$ or US-20030226580-$ or US-20070246090-$ or US-20120097199-$ or US-20120125383-$ or US-20120138111-$ or US-20130000673-$ or US-20140137909-$ or US-20140137911-$ or US-	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	OFF	2018/01/29 17:59

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		20150359412-$ or US-20120138100-$ or US-20130087173-$ or US-20130098406-$ or US-20140076363-$ or US-20060144424-$ or US-20120138107-$ or US-20050109378-$ or US-20060108298-$ or US-20060219271-$ or US-20060289038-$ or US-20090065455-$ or US-20110030742-$ or US-20120291827-$).did. or (US-20120292269-$ or US-20120292270-$ or US-20120298155-$ or US-20130104944-$ or US-20130299438-$ or US-20160095497-$ or US-20160007824-$ or US-20140021149-$ or US-20120293054-$ or US-20120139399-$ or US-20100314977-$ or US-20090090680-$ or US-20080169009-$ or US-20050241686-$ or US-20040108283-$ or US-20040079713-$ or US-20030089672-$ or US-20170135547-$).did. or (US-7594513-$ or US-6907998-$ or US-3464566-$ or US-3258127-$ or US-2910207-$ or US-2907470-$ or US-2646809-$ or US-8753454-$ or US-9119517-$ or US-9259138-$ or US-5662744-$ or US-6460555-$ or US-D481179-$ or US-D488594-$ or US-8347898-$ or US-4653520-$ or US-4134414-$ or US-3951684-$ or US-3951683-$ or US-3444870-$ or US-8192557-$ or US-7455066-$ or US-7410228-$ or US-8701898-$ or US-8567882-$ or US-8534471-$).did. or (US-7445128-$ or US-7418967-$ or US-7032604-$ or US-5918749-$ or US-5657878-$ or US-5205419-$ or US-4064887-$ or US-3752322-$ or US-3303934-$ or US-3288302-$ or US-3269548-$ or US-3126098-$ or US-2739025-$ or US-1562614-$ or US-0372123-$).did. or (DE-10332149-$ or JP-5006715-$ or JP-5006715-$ or JP-5006715-$ or JP-5006716-$ or JP-5006716-$ or JP-5006716-$ or EP-2594186-$ or EP-2754377-$ or DE-19960496-$ or EP-2912983-$ or CA-2071423-$ or CA-2094466-$ or CA-2094466-$ or CA-2353655-$ or CA-2431612-$ or CA-2432235-$ or CA-2444311-$ or CA-2445170-$ or CA-2473527-$ or DE-102010061215-$ or DE-102011054149-$ or DE-102012102184-$ or DE-102013111240-$ or DE-102013111241-$ or EP-2896343-$).did. or (EP-2912983-$ or GB-2321590-$ or WO-2009083576-$ or JP-2594186-$ or JP-2594186-$).did. or (DE-10332149-$ or DE-19960496-$ or GB-2321590-$ or EP-372342-$).did. or (JP-2002065562-$).did. or (JP-2002065562-$ or DE-10332149-$ or JP-2009005925-$ or JP-2009005930-$ or EP-2594186-$ or DE-19960496-$ or DE-29800479-$ or US-8567882-$ or DE-102012102189-$ or US-20120139399-$ or DE-102010043272-$ or DE-102008015713-$ or DE-102004057018-$ or US-20060108298-$ or WO-2006015932-$ or				

		WO-2005107570-$ or WO-03055375-$ or US-4606464-$ or US-4064887-$).did.				
S61	1	"20080156358"	US-PGPUB; USPAT	OR	OFF	2018/04/30 05:44
S62	1	"20150201823"	US-PGPUB; USPAT	OR	OFF	2018/04/30 05:45
S63	6	"2910207"	US-PGPUB; USPAT	OR	OFF	2018/04/30 05:46
S64	53	"3752322"	US-PGPUB; USPAT	OR	OFF	2018/04/30 05:48
S65	2	"20030226580"	US-PGPUB; USPAT	OR	OFF	2018/04/30 10:26
S66	6	"2910207"	US-PGPUB; USPAT	OR	OFF	2018/04/30 10:27
S67	185	(US-20150245762-$ or US-20130002107-$ or US-20120138106-$ or US-20100051069-$ or US-20030226580-$ or US-20070246090-$ or US-20120097199-$ or US-20120125383-$ or US-20120138111-$ or US-20130000673-$ or US-20140137909-$ or US-20140137911-$ or US-20150359412-$ or US-20120138100-$ or US-20130087173-$ or US-20130098406-$ or US-20140076363-$ or US-20060144424-$ or US-20120138107-$ or US-20050109378-$ or US-20060108298-$ or US-20060219271-$ or US-20060289038-$ or US-20090065455-$ or US-20110030742-$ or US-20120291827-$).did. or (US-20120292269-$ or US-20120292270-$ or US-20120298155-$ or US-20130104944-$ or US-20130299438-$ or US-20160095497-$ or US-20160007824-$ or US-20140021149-$ or US-20120293054-$ or US-20120139399-$ or US-20100314977-$ or US-20090090680-$ or US-20080169009-$ or US-20050241686-$ or US-20040108283-$ or US-20040079713-$ or US-20030089672-$ or US-20170135547-$ or US-20080156358-$ or US-20150201823-$).did. or (US-7594513-$ or US-6907998-$ or US-3464566-$ or US-3258127-$ or US-2910207-$ or US-2907470-$ or US-2646809-$ or US-8753454-$ or US-9119517-$ or US-9259138-$ or US-5662744-$ or US-6460555-$ or US-D481179-$ or US-D488594-$ or US-8347898-$ or US-4653520-$ or US-4134414-$ or US-3951684-$ or US-3951683-$ or US-3444870-$ or US-8192557-$ or US-7455066-$ or US-7410228-$ or US-8701898-$ or US-8567882-$ or US-8534471-$).did. or (US-7445128-$ or US-7418967-$ or US-7032604-$ or US-5918749-$ or US-5657878-$ or US-5205419-$ or US-4064887-$ or US-3752322-$ or US-3303934-$ or US-3288302-$ or US-3269548-$ or US-3126098-$ or US-2739025-$ or US-1562614-$ or US-0372123-$ or US-D506855-$ or US-6666220-$ or US-9345382-$ or US-	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	OFF	2018/04/30 11:12

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		8353412-$ or US-5567029-$ or US-4238035-$ or US-7644826-$ or US-5601195-$ or US-8807352-$ or US-8356719-$ or US-8651287-$ or US-8196593-$).did. or (US-6786339-$ or US-7228975-$ or US-7231929-$ or US-8714371-$ or US-7931155-$ or US-D398092-$ or US-D796750-$ or US-5351837-$ or US-8104628-$ or US-5480035-$ or US-4917248-$ or US-6571965-$ or US-4606464-$ or US-9949613-$ or US-5158185-$ or US-8960452-$ or US-5497890-$ or US-6325220-$ or US-6848585-$ or US-7766175-$ or US-7682465-$ or US-9877632-$ or US-9615722-$).did. or (DE-10332149-$ or JP-5006715-$ or JP-5006715-$ or JP-5006715-$ or JP-5006716-$ or JP-5006716-$ or JP-5006716-$ or EP-2594186-$ or EP-2754377-$ or DE-19960496-$ or EP-2912983-$ or CA-2071423-$ or CA-2094466-$ or CA-2094466-$ or CA-2353655-$ or CA-2431612-$ or CA-2432235-$ or CA-2444311-$ or CA-2445170-$ or CA-2473527-$ or DE-102010061215-$ or DE-102011054149-$ or DE-102012102184-$ or DE-102013111240-$ or DE-102013111241-$ or EP-2896343-$).did. or (EP-2912983-$ or GB-2321590-$ or WO-2009083576-$ or JP-2594186-$ or JP-2594186-$).did. or (DE-10332149-$ or DE-19960496-$ or GB-2321590-$ or EP-372342-$).did. or (JP-2002065562-$).did. or (JP-2002065562-$ or DE-10332149-$ or JP-2009005925-$ or JP-2009005930-$ or EP-2594186-$ or DE-19960496-$ or DE-29800479-$ or US-8567882-$ or DE-102012102189-$ or US-20120139399-$ or DE-102010043272-$ or DE-102008015713-$ or DE-102004057018-$ or US-20060108298-$ or WO-2006015932-$ or WO-2005107570-$ or WO-03055375-$ or US-4606464-$ or US-4064887-$).did.				
S68	0	"15941761"	US-PGPUB; USPAT	OR	OFF	2018/06/10 16:19
S69	16	("20030226580" | "20050109378" | "20100051069" | "20120138106" | "20120292270" | "20130002107" | "20130098406" | "2646809" | "2907470" | "2910207" | "3258127" | "3464566" | "4064887" | "4134414" | "6907998" | "7594513").PN.	US-PGPUB; USPAT	OR	OFF	2018/06/10 16:20
S70	6	"19960496"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/06/10 16:20
S71	18	"2002065562"	US-PGPUB; USPAT; USOCR;	OR	OFF	2018/06/10 16:20

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			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S72	16	"10332149"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/06/10 16:21
S73	12	"5006715"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/06/10 16:21
S74	29	"2594186"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/06/10 16:21
S75	88	"5006716"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/06/10 16:22
S76	6	"8287660"	US-PGPUB; USPAT	OR	OFF	2018/06/11 06:13
S77	2	"20160058264"	US-PGPUB; USPAT	OR	OFF	2018/06/11 07:49
S78	1	"20030192578"	US-PGPUB; USPAT	OR	OFF	2018/06/11 07:50
S79	9	"3051183"	US-PGPUB; USPAT	OR	OFF	2018/06/11 07:50
S80	477	(US-20160058264-$ or US-20080163904-$ or US-20140150831-$ or US-20120138106-$ or US-20120097200-$ or US-20120138092-$ or US-20120138096-$ or US-20120138110-$ or US-20120138111-$ or US-20120249467-$ or US-20140251378-$ or US-20150245762-$ or US-20150257623-$ or US-20170055799-$ or US-20170135547-$ or US-20170156563-$ or US-20170172370-$ or US-20170273535-$ or US-20100154846-$ or US-20110197937-$ or US-20110197938-$ or US-20120125381-$ or US-20120125382-$ or US-20030183255-$ or US-20030192578-$ or US-20040069332-$).did. or (US-20050133070-$ or US-20050241680-$ or US-20050241686-$ or US-20070006903-$ or US-20070158472-$ or US-20070235063-$ or US-20070246078-$ or US-20070251553-$ or US-20070289615-$ or US-20080142056-$ or US-20080156358-$	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	OFF	2018/06/11 07:53

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		or US-20080169009-$ or US-20080173730-$ or US-20080271765-$ or US-20090159101-$ or US-20090159103-$ or US-20100051071-$ or US-20100101611-$ or US-20100139719-$ or US-20100194254-$ or US-20110030742-$ or US-20110155190-$ or US-20120279530-$ or US-20120285490-$ or US-20120285491-$ or US-20120291827-$ or US-20120325277-$).did. or (US-20130068265-$ or US-20140070025-$ or US-20140137909-$ or US-20140196756-$ or US-20140261584-$ or US-20140345654-$ or US-20150007861-$ or US-20150122298-$ or US-20150136189-$ or US-20150182103-$ or US-20150201823-$ or US-20150230687-$ or US-20150250374-$ or US-20150272421-$ or US-20150366430-$ or US-20160000295-$ or US-20160066765-$ or US-20160106295-$ or US-20160106297-$ or US-20040255992-$ or US-20170135548-$ or US-20040194810-$ or US-20080110480-$ or US-20080110481-$ or US-20030226580-$ or US-20050109378-$ or US-20130098406-$).did. or (US-20030089672-$ or US-20040079713-$ or US-20060219271-$ or US-20100314977-$ or US-20120139399-$ or US-20130104944-$ or US-20140076363-$ or US-20040250837-$ or US-20110203619-$ or US-20120031432-$ or US-20120175431-$ or US-20140373883-$ or US-20150208897-$ or US-20160198927-$ or US-20160316992-$ or US-20170007094-$ or US-20170181600-$ or US-20170188790-$ or US-20170245727-$ or US-20170258290-$ or US-20170265707-$ or US-20170265713-$ or US-20170273534-$ or US-20140332042-$ or US-20090255560-$ or US-20080276975-$).did. or (US-9010345-$ or US-6969029-$ or US-3146953-$ or US-3213866-$ or US-3051183-$ or US-2980120-$ or US-2973907-$ or US-2734520-$ or US-2031816-$ or US-7594513-$ or US-9532699-$ or US-8454762-$ or US-9119517-$ or US-9259138-$ or US-7947132-$ or US-8137479-$ or US-8187390-$ or US-9295368-$ or US-5944037-$ or US-9375128-$ or US-9414736-$ or US-9492055-$ or US-9532701-$ or US-9693672-$ or US-9706896-$ or US-9839340-$).did. or (US-D741556-$ or US-D750854-$ or US-D750855-$ or US-8881748-$ or US-9133574-$ or US-9480389-$ or US-3064664-$ or US-3064665-$ or US-3348775-$ or US-3841342-$ or US-4046261-$ or US-4064887-$ or US-4145002-$ or US-4257559-$ or US-4735222-$ or US-4884585-$ or US-4993444-$ or US-5211190-$ or US-5267582-$ or US-5415350-$ or US-5507877-$ or US-5546968-$ or US-				

		5577665-$ or US-5730370-$ or US-5823211-$ or US-5904166-$ or US-5927616-$).did. or (US-5983908-$ or US-6053185-$ or US-6325220-$ or US-6955179-$ or US-8287660-$ or US-8696827-$ or US-4038103-$ or US-4611759-$ or US-4836230-$ or US-5582742-$ or US-3960328-$ or US-5964232-$ or US-7032604-$ or US-6431188-$ or US-7055537-$ or US-7225818-$ or US-8166983-$ or US-8191560-$ or US-9138126-$ or US-9167953-$ or US-1562614-$ or US-2646809-$ or US-2739025-$ or US-2907470-$ or US-2910207-$ or US-3126098-$ or US-3288302-$).did. or (US-3752322-$ or US-8347898-$ or US-2016880-$ or US-2956572-$ or US-3006557-$ or US-3884263-$ or US-3934822-$ or US-4135532-$ or US-4175575-$ or US-4807654-$ or US-5842492-$ or US-6112754-$ or US-6869029-$ or US-7509963-$ or US-7673639-$ or US-7754024-$ or US-7896977-$ or US-8333207-$ or US-8778094-$ or US-8801863-$ or US-9668635-$ or US-8905053-$ or US-9034114-$ or US-9375127-$ or US-9420938-$ or US-9474430-$ or US-9480386-$).did. or (US-9675232-$ or US-9736123-$ or US-9801523-$ or US-4582259-$ or US-1701066-$ or US-3342421-$ or US-5488965-$ or US-6390106-$ or US-3210010-$ or US-5609174-$ or US-4798017-$ or US-3691577-$ or US-9486819-$ or US-5787910-$ or US-3176697-$ or US-4405087-$ or US-D778667-$ or US-6766864-$ or US-4420005-$ or US-4298015-$ or US-3719323-$ or US-9827600-$ or US-7331356-$ or US-9480385-$ or US-9301670-$ or US-7695571-$ or US-2904265-$).did. or (US-2407533-$).did. or (US-3460548-$ or US-3210010-$ or US-0321025-$ or US-3446219-$ or US-2904265-$ or US-2808842-$ or US-2664902-$ or US-2407533-$ or US-2320133-$).did. or (EP-2454983-$ or EP-3222191-$ or EP-1277430-$ or GB-2322067-$ or KR-20050122359-$ or KR-101248098-$ or EP-3222192-$ or WO-2015000512-$ or EP-1632166-$ or EP-1632166-$ or DE-10039880-$ or EP-1183983-$).did. or (GB-2322067-$).did. or (JP-11253381-$).did. or (EP-2454983-$ or GB-2322067-$ or JP-11253381-$ or DE-202004013786-$ or CN-204467992-$).did.				
S81	247	(US-20160058264-$ or US-20080163904-$ or US-20140150831-$ or US-20120138106-$ or US-20120097200-$ or US-20120138092-$ or US-20120138096-$ or US-20120138110-$ or US-20120138111-$ or US-20120249467-$ or US-20140251378-	US-PGPUB; USPAT	OR	OFF	2018/06/11 07:53

		$ or US-20150245762-$ or US-20150257623-$ or US-20170055799-$ or US-20170135547-$ or US-20170156563-$ or US-20170172370-$ or US-20170273535-$ or US-20100154846-$ or US-20110197937-$ or US-20110197938-$ or US-20120125381-$ or US-20120125382-$ or US-20030183255-$ or US-20030192578-$ or US-20040069332-$).did. or (US-20050133070-$ or US-20050241680-$ or US-20050241686-$ or US-20070006903-$ or US-20070158472-$ or US-20070235063-$ or US-20070246078-$ or US-20070251553-$ or US-20070289615-$ or US-20080142056-$ or US-20080156358-$ or US-20080169009-$ or US-20080173730-$ or US-20080271765-$ or US-20090159101-$ or US-20090159103-$ or US-20100051071-$ or US-20100101611-$ or US-20100139719-$ or US-20100194254-$ or US-20110030742-$ or US-20110155190-$ or US-20120279530-$ or US-20120285490-$ or US-20120285491-$ or US-20120291827-$ or US-20120325277-$).did. or (US-20130068265-$ or US-20140070025-$ or US-20140137909-$ or US-20140196756-$ or US-20140261584-$ or US-20140345654-$ or US-20150007861-$ or US-20150122298-$ or US-20150136189-$ or US-20150182103-$ or US-20150201823-$ or US-20150230687-$ or US-20150250374-$ or US-20150272421-$ or US-20150366430-$ or US-20160000295-$ or US-20160066765-$ or US-20160106295-$ or US-20160106297-$ or US-20040255992-$ or US-20170135548-$ or US-20040194810-$ or US-20080110480-$ or US-20080110481-$ or US-20030226580-$ or US-20050109378-$ or US-20130098406-$).did. or (US-20030089672-$ or US-20040079713-$ or US-20060219271-$ or US-20100314977-$ or US-20120139399-$ or US-20130104944-$ or US-20140076363-$ or US-20040250837-$ or US-20110203619-$ or US-20120031432-$ or US-20120175431-$ or US-20140373883-$ or US-20150208897-$ or US-20160198927-$ or US-20160316992-$ or US-20170007094-$ or US-20170181600-$ or US-20170188790-$ or US-20170245727-$ or US-20170258290-$ or US-20170265707-$ or US-20170265713-$ or US-20170273534-$ or US-20140332042-$ or US-20090255560-$ or US-20080276975-$).did. or (US-9010345-$ or US-6969029-$ or US-3146953-$ or US-3213866-$ or US-3051183-$ or US-2980120-$ or US-2973907-$ or US-2734520-$ or US-2031816-$ or US-7594513-$ or US-9532699-$ or US-8454762-$ or US-9119517-$ or US-9259138-$ or US-7947132-$ or US-8137479-$ or US-8187390-$ or US-				

		5944037-$ or US-9375128-$ or US-9414736-$ or US-9492055-$ or US-9532701-$ or US-9693672-$ or US-9706896-$ or US-9839340-$).did. or (US-D741556-$ or US-D750854-$ or US-D750855-$ or US-8881748-$ or US-9133574-$ or US-9480389-$ or US-3064664-$ or US-3064665-$ or US-3348775-$ or US-3841342-$ or US-4046261-$ or US-4064887-$ or US-4145002-$ or US-4257559-$ or US-4735222-$ or US-4884585-$ or US-4993444-$ or US-5211190-$ or US-5267582-$ or US-5415350-$ or US-5507877-$ or US-5546968-$ or US-5577665-$ or US-5730370-$ or US-5823211-$ or US-5904166-$ or US-5927616-$).did. or (US-5983908-$ or US-6053185-$ or US-6325220-$ or US-6955179-$ or US-8287660-$ or US-8696827-$ or US-4038103-$ or US-4611759-$ or US-4836230-$ or US-5582742-$ or US-3960328-$ or US-5964232-$ or US-7032604-$ or US-6431188-$ or US-7055537-$ or US-7225818-$ or US-8166983-$ or US-8191560-$ or US-9138126-$ or US-9167953-$ or US-1562614-$ or US-2646809-$ or US-2739025-$ or US-2907470-$ or US-2910207-$ or US-3126098-$ or US-3288302-$).did. or (US-3752322-$ or US-8347898-$ or US-2016880-$ or US-2956572-$ or US-3006557-$ or US-3884263-$ or US-3934822-$ or US-4135532-$ or US-4175575-$ or US-4807654-$ or US-5842492-$ or US-6112754-$ or US-6869029-$ or US-7509963-$ or US-7673639-$ or US-7754024-$ or US-7896977-$ or US-8333207-$ or US-8778094-$ or US-8801863-$ or US-9668635-$ or US-8905053-$ or US-9034114-$ or US-9375127-$ or US-9420938-$ or US-9474430-$ or US-9480386-$).did. or (US-9675232-$ or US-9736123-$ or US-9801523-$ or US-4582259-$ or US-1701066-$ or US-3342421-$ or US-5488965-$ or US-6390106-$ or US-3210010-$ or US-5609174-$ or US-4798017-$ or US-3691577-$ or US-9486819-$ or US-5787910-$ or US-3176697-$ or US-4405087-$ or US-D778667-$ or US-6766864-$ or US-4420005-$ or US-4298015-$ or US-3719323-$ or US-9827600-$ or US-7331356-$ or US-9480385-$ or US-9301670-$ or US-7695571-$ or US-2904265-$).did. or (US-2407533-$).did. or (US-3460548-$ or US-3210010-$ or US-0321025-$ or US-3446219-$ or US-2904265-$ or US-2808842-$ or US-2664902-$ or US-2407533-$ or US-2320133-$).did. or (EP-2454983-$ or EP-3222191-$ or EP-					

		1277430-$ or GB-2322067-$ or KR-20050122359-$ or KR-101248098-$ or EP-3222192-$ or WO-2015000512-$ or EP-1632166-$ or EP-1632166-$ or DE-10039880-$ or EP-1183983-$).did. or (GB-2322067-$).did. or (JP-11253381-$).did. or (EP-2454983-$ or GB-2322067-$ or JP-11253381-$ or DE-202004013786-$ or CN-204467992-$).did.				
S82	14	("3126098").URPN.	USPAT	OR	OFF	2018/06/11 08:16
S83	2	"20130098406"	US-PGPUB; USPAT	OR	OFF	2018/06/11 08:30
S84	2	"20120292270"	US-PGPUB; USPAT	OR	OFF	2018/06/11 08:32
S85	2	"20050109378"	US-PGPUB; USPAT	OR	OFF	2018/06/11 08:32
S86	8	"4134414"	US-PGPUB; USPAT	OR	OFF	2018/06/11 08:49
S87	20	"3126098"	US-PGPUB; USPAT	OR	OFF	2018/06/11 09:56
S88	217	"7594513"	US-PGPUB; USPAT	OR	OFF	2018/06/11 12:08
S89	106	"7594513"	USPAT	OR	OFF	2018/06/11 12:09
S90	264	(US-20150245762-$ or US-20130002107-$ or US-20120138106-$ or US-20100051069-$ or US-20030226580-$ or US-20070246090-$ or US-20120097199-$ or US-20120125383-$ or US-20120138111-$ or US-20130000673-$ or US-20140137909-$ or US-20140137911-$ or US-20150359412-$ or US-20120138100-$ or US-20130087173-$ or US-20130098406-$ or US-20140076363-$ or US-20060144424-$ or US-20120138107-$ or US-20050109378-$ or US-20060108298-$ or US-20060219271-$ or US-20060289038-$ or US-20090065455-$ or US-20110030742-$ or US-20120291827-$).did. or (US-20120292269-$ or US-20120292270-$ or US-20120298155-$ or US-20130104944-$ or US-20130299438-$ or US-20160095497-$ or US-20160007824-$ or US-20140021149-$ or US-20120293054-$ or US-20120139399-$ or US-20100314977-$ or US-20090090680-$ or US-20080169009-$ or US-20050241686-$ or US-20040108283-$ or US-20040079713-$ or US-20030089672-$ or US-20170135547-$ or US-20080156358-$ or US-20150201823-$ or US-20160058264-$ or US-20030192578-$ or US-20140196756-$ or US-20120249467-$ or US-20100194254-$ or US-20140373883-$ or US-20150208897-$).did. or (US-20050241680-$ or US-20160316992-$ or US-20150272421-$ or US-20160106295-$ or US-20100139719-$ or US-20100101611-$ or US-20070235063-$ or US-20050133070-$ or US-20150257623-$ or US-20170172370-$ or	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	OFF	2018/06/11 12:15

Petitioner Samsung Ex-1004, 0286

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		3210010-$ or US-3146953-$ or US-4735222-$ or US-5546968-$ or US-2734520-$ or US-2980120-$ or US-5944037-$ or US-D383880-$ or US-5462348-$ or US-8191560-$).did. or (US-9480389-$ or US-6755490-$ or US-9138126-$ or US-9962063-$).did. or (DE-10332149-$ or JP-5006715-$ or JP-5006715-$ or JP-5006715-$ or JP-5006716-$ or JP-5006716-$ or JP-5006716-$ or EP-2594186-$ or EP-2754377-$ or DE-19960496-$ or EP-2912983-$ or CA-2071423-$ or CA-2094466-$ or CA-2094466-$ or CA-2353655-$ or CA-2431612-$ or CA-2432235-$ or CA-2444311-$ or CA-2445170-$ or CA-2473527-$ or DE-102010061215-$ or DE-102011054149-$ or DE-102012102184-$ or DE-102013111240-$ or DE-102013111241-$ or EP-2896343-$).did. or (EP-2912983-$ or GB-2321590-$ or WO-2009083576-$ or JP-2594186-$ or JP-2594186-$).did. or (DE-10332149-$ or DE-19960496-$ or GB-2321590-$ or EP-372342-$).did. or (JP-2002065562-$).did. or (JP-2002065562-$ or DE-10332149-$ or JP-2009005925-$ or JP-2009005930-$ or EP-2594186-$ or DE-19960496-$ or DE-29800479-$ or US-8567882-$ or DE-102012102189-$ or US-20120139399-$ or DE-102010043272-$ or DE-102008015713-$ or DE-102004057018-$ or US-20060108298-$ or WO-2006015932-$ or WO-2005107570-$ or WO-03055375-$ or US-4606464-$ or US-4064887-$).did.				
S91	264	(US-20150245762-$ or US-20130002107-$ or US-20120138106-$ or US-20100051069-$ or US-20030226580-$ or US-20070246090-$ or US-20120097199-$ or US-20120125383-$ or US-20120138111-$ or US-20130000673-$ or US-20140137909-$ or US-20140137911-$ or US-20150359412-$ or US-20120138100-$ or US-20130087173-$ or US-20130098406-$ or US-20140076363-$ or US-20060144424-$ or US-20120138107-$ or US-20050109378-$ or US-20060108298-$ or US-20060219271-$ or US-20060289038-$ or US-20090065455-$ or US-20110030742-$ or US-20120291827-$).did. or (US-20120292269-$ or US-20120292270-$ or US-20120298155-$ or US-20130104944-$ or US-20130299438-$ or US-20160095497-$ or US-20160007824-$ or US-20140021149-$ or US-20120293054-$ or US-20120139399-$ or US-20100314977-$ or US-20090090680-$ or US-20080169009-$ or US-20050241686-$ or US-20040108283-$ or US-20040079713-$ or US-20030089672-$ or US-20170135547-$ or US-20080156358-$ or US-20150201823-$ or US-20160058264-$ or US-20030192578-$ or US-20140196756-$ or US-20120249467-$ or US-20100194254-$	US-PGPUB; USPAT; FPRS; EPO; JPO; DERWENT	OR	OFF	2018/06/12 12:22

Petitioner Samsung Ex-1004, 0288

		or US-20140373883-$ or US-20150208897-$).did. or (US-20050241680-$ or US-20160316992-$ or US-20150272421-$ or US-20160106295-$ or US-20100139719-$ or US-20100101611-$ or US-20070235063-$ or US-20050133070-$ or US-20150257623-$ or US-20170172370-$ or US-20120138110-$ or US-20120138092-$ or US-20170181600-$ or US-20120285490-$ or US-20170245727-$ or US-20120285491-$ or US-20140251378-$ or US-20090159103-$ or US-20170273535-$ or US-20150182103-$ or US-20090159101-$ or US-20110155190-$ or US-20120031432-$ or US-20170055799-$ or US-20150122298-$ or US-20140345654-$ or US-20150136189-$).did. or (US-20160198927-$ or US-20150230687-$ or US-20150007861-$ or US-20120175431-$ or US-20160000295-$ or US-20130068265-$ or US-20120279530-$ or US-20070289615-$ or US-20080271765-$ or US-20030183255-$).did. or (US-7594513-$ or US-6907998-$ or US-3464566-$ or US-3258127-$ or US-2910207-$ or US-2907470-$ or US-2646809-$ or US-8753454-$ or US-9119517-$ or US-9259138-$ or US-5662744-$ or US-6460555-$ or US-D481179-$ or US-D488594-$ or US-8347898-$ or US-4653520-$ or US-4134414-$ or US-3951684-$ or US-3951683-$ or US-3444870-$ or US-8192557-$ or US-7455066-$ or US-7410228-$ or US-8701898-$ or US-8567882-$ or US-8534471-$).did. or (US-7445128-$ or US-7418967-$ or US-7032604-$ or US-5918749-$ or US-5657878-$ or US-5205419-$ or US-4064887-$ or US-3752322-$ or US-3303934-$ or US-3288302-$ or US-3269548-$ or US-3126098-$ or US-2739025-$ or US-1562614-$ or US-0372123-$ or US-D506855-$ or US-6666220-$ or US-9345382-$ or US-8353412-$ or US-5567029-$ or US-4238035-$ or US-7644826-$ or US-5601195-$ or US-8807352-$ or US-8356719-$ or US-8651287-$ or US-8196593-$).did. or (US-6786339-$ or US-7228975-$ or US-7231929-$ or US-8714371-$ or US-7931155-$ or US-D398092-$ or US-D796750-$ or US-5351837-$ or US-8104628-$ or US-5480035-$ or US-4917248-$ or US-6571965-$ or US-4606464-$ or US-9949613-$ or US-5158185-$ or US-8960452-$ or US-5497890-$ or US-6325220-$ or US-6848585-$ or US-7766175-$ or US-7682465-$ or US-9877632-$ or US-9615722-$ or US-8287660-$ or US-9801523-$ or US-3051183-$ or US-7055537-$).did. or (US-3006557-$ or US-9480385-$ or US-5823211-$ or US-				

		8881748-$ or US-6431188-$ or US-9167953-$ or US-2407533-$ or US-2031816-$ or US-2904265-$ or US-9827600-$ or US-5927616-$ or US-3348775-$ or US-4257559-$ or US-5582742-$ or US-2956572-$ or US-5904166-$ or US-2973907-$ or US-3210010-$ or US-3146953-$ or US-4735222-$ or US-5546968-$ or US-2734520-$ or US-2980120-$ or US-5944037-$ or US-D383880-$ or US-5462348-$ or US-8191560-$).did. or (US-9480389-$ or US-6755490-$ or US-9138126-$ or US-9962063-$).did. or (DE-10332149-$ or JP-5006715-$ or JP-5006715-$ or JP-5006715-$ or JP-5006716-$ or JP-5006716-$ or JP-5006716-$ or EP-2594186-$ or EP-2754377-$ or DE-19960496-$ or EP-2912983-$ or CA-2071423-$ or CA-2094466-$ or CA-2094466-$ or CA-2353655-$ or CA-2431612-$ or CA-2432235-$ or CA-2444311-$ or CA-2445170-$ or CA-2473527-$ or DE-102010061215-$ or DE-102011054149-$ or DE-102012102184-$ or DE-102013111240-$ or DE-102013111241-$ or EP-2896343-$).did. or (EP-2912983-$ or GB-2321590-$ or WO-2009083576-$ or JP-2594186-$ or JP-2594186-$).did. or (DE-10332149-$ or DE-19960496-$ or GB-2321590-$ or EP-372342-$).did. or (JP-2002065562-$).did. or (JP-2002065562-$ or DE-10332149-$ or JP-2009005925-$ or JP-2009005930-$ or EP-2594186-$ or DE-19960496-$ or DE-29800479-$ or US-8567882-$ or DE-102012102189-$ or US-20120139399-$ or DE-102010043272-$ or DE-102008015713-$ or DE-102004057018-$ or US-20060108298-$ or WO-2006015932-$ or WO-2005107570-$ or WO-03055375-$ or US-4606464-$ or US-4064887-$).did.				
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		20120292269-$ or US-20120292270-$ or US-20120298155-$ or US-20130104944-$ or US-20130299438-$ or US-20160095497-$ or US-20160007824-$ or US-20140021149-$ or US-20120293054-$ or US-20120139399-$ or US-20100314977-$ or US-20090090680-$ or US-20080169009-$ or US-20050241686-$ or US-20040108283-$ or US-20040079713-$ or US-20030089672-$ or US-20170135547-$ or US-20080156358-$ or US-20150201823-$ or US-20160058264-$ or US-20030192578-$ or US-20140196756-$ or US-20120249467-$ or US-20100194254-$ or US-20140373883-$ or US-20150208897-$).did. or (US-20050241680-$ or US-20160316992-$ or US-20150272421-$ or US-20160106295-$ or US-20100139719-$ or US-20100101611-$ or US-20070235063-$ or US-20050133070-$ or US-20150257623-$ or US-20170172370-$ or US-20120138110-$ or US-20120138092-$ or US-20170181600-$ or US-20120285490-$ or US-20170245727-$ or US-20120285491-$ or US-20140251378-$ or US-20090159103-$ or US-20170273535-$ or US-20150182103-$ or US-20090159101-$ or US-20110155190-$ or US-20120031432-$ or US-20170055799-$ or US-20150122298-$ or US-20140345654-$ or US-20150136189-$).did. or (US-20160198927-$ or US-20150230687-$ or US-20150007861-$ or US-20120175431-$ or US-20160000295-$ or US-20130068265-$ or US-20120279530-$ or US-20070289615-$ or US-20080271765-$ or US-20030183255-$).did. or (US-7594513-$ or US-6907998-$ or US-3464566-$ or US-3258127-$ or US-2910207-$ or US-2907470-$ or US-2646809-$ or US-8753454-$ or US-9119517-$ or US-9259138-$ or US-5662744-$ or US-6460555-$ or US-D481179-$ or US-D488594-$ or US-8347898-$ or US-4653520-$ or US-4134414-$ or US-3951684-$ or US-3951683-$ or US-3444870-$ or US-8192557-$ or US-7455066-$ or US-7410228-$ or US-8701898-$ or US-8567882-$ or US-8534471-$).did. or (US-7445128-$ or US-7418967-$ or US-7032604-$ or US-5918749-$ or US-5657878-$ or US-5205419-$ or US-4064887-$ or US-3752322-$ or US-3303934-$ or US-3288302-$ or US-3269548-$ or US-3126098-$ or US-2739025-$ or US-1562614-$ or US-0372123-$ or US-D506855-$ or US-6666220-$ or US-9345382-$ or US-8353412-$ or US-5567029-$ or US-4238035-$ or US-7644826-$ or US-5601195-$ or US-8807352-$ or US-8356719-$ or US-8651287-$ or US-8196593-$).did. or (US-6786339-$ or US-7228975-$ or US-				

		7231929-$ or US-8714371-$ or US-7931155-$ or US-D398092-$ or US-D796750-$ or US-5351837-$ or US-8104628-$ or US-5480035-$ or US-4917248-$ or US-6571965-$ or US-4606464-$ or US-9949613-$ or US-5158185-$ or US-8960452-$ or US-5497890-$ or US-6325220-$ or US-6848585-$ or US-7766175-$ or US-7682465-$ or US-9877632-$ or US-9615722-$ or US-8287660-$ or US-9801523-$ or US-3051183-$ or US-7055537-$).did. or (US-3006557-$ or US-9480385-$ or US-5823211-$ or US-8881748-$ or US-6431188-$ or US-9167953-$ or US-2407533-$ or US-2031816-$ or US-2904265-$ or US-9827600-$ or US-5927616-$ or US-3348775-$ or US-4257559-$ or US-5582742-$ or US-2956572-$ or US-5904166-$ or US-2973907-$ or US-3210010-$ or US-3146953-$ or US-4735222-$ or US-5546968-$ or US-2734520-$ or US-2980120-$ or US-5944037-$ or US-D383880-$ or US-5462348-$ or US-8191560-$).did. or (US-9480389-$ or US-6755490-$ or US-9138126-$ or US-9962063-$).did. or (DE-10332149-$ or JP-5006715-$ or JP-5006715-$ or JP-5006715-$ or JP-5006716-$ or JP-5006716-$ or JP-5006716-$ or EP-2594186-$ or EP-2754377-$ or DE-19960496-$ or EP-2912983-$ or CA-2071423-$ or CA-2094466-$ or CA-2094466-$ or CA-2353655-$ or CA-2431612-$ or CA-2432235-$ or CA-2444311-$ or CA-2445170-$ or CA-2473527-$ or DE-102010061215-$ or DE-102011054149-$ or DE-102012102184-$ or DE-102013111240-$ or DE-102013111241-$ or EP-2896343-$).did. or (EP-2912983-$ or GB-2321590-$ or WO-2009083576-$ or JP-2594186-$ or JP-2594186-$).did. or (DE-10332149-$ or DE-19960496-$ or GB-2321590-$ or EP-372342-$).did. or (JP-2002065562-$).did. or (JP-2002065562-$ or DE-10332149-$ or JP-2009005925-$ or JP-2009005930-$ or EP-2594186-$ or DE-19960496-$ or DE-29800479-$ or US-8567882-$ or DE-102012102189-$ or US-20120139399-$ or DE-102010043272-$ or DE-102008015713-$ or DE-102004057018-$ or US-20060108298-$ or WO-2006015932-$ or WO-2005107570-$ or WO-03055375-$ or US-4606464-$ or US-4064887-$).did.				
S96	7	"2910207"	USPAT	OR	OFF	2019/05/03 11:01

8/ 23/ 2019 9:47:29 AM
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Petitioner Samsung Ex-1004, 0292

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	WHIRLPOOL CORPORATION		
For:	GLASSES RACK FOR DISHWASHER		
Application No.:	15/941,761	Examiner:	Thomas Bucci
Filed:	March 30, 2018	Group Art Unit:	1711
Atty. Docket:	SUB-05031-US-CNT2	Confirmation No.:	4804

CERTIFICATE OF MAILING/TRANSMISSION (37 CFR 1.8(a))

I hereby certify that this correspondence is, on the date shown below, being:

☐ deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to the Commissioner for Patents, Alexandria, VA, 22313-1450.

☒ transmitted via the EFS Web filing system.

/Johanne Hrycuna/
Signature

Date: September 30, 2019

Johanne Hrycuna
(type or print name of person certifying)

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

AMENDMENT UNDER 37 C.F.R. §1.312

This paper is responsive to the Notice of Allowance mailed September 5, 2019. Under the provisions of 37 C.F.R. § 1.312, kindly amend the above-identified U.S. Patent Application as follows:

Amendments to the Specification begin on page 2 of this paper.

Remarks begin on page 3 of this paper.

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph following Cross-Reference to Related Applications of the Application as filed with the following paragraph:

[0001] This application is a continuation of U.S. Application No. 14/620,688, filed February 12, 2015, entitled "Glasses Rack for Dishwasher," now U.S. Patent No. 10,349,804, issued July 16, 2019, which claims the benefit of U.S. Provisional Patent Application No. 61/946,101, filed February 28, 2014, which is incorporated herein by reference in its entirety.

REMARKS

By this amendment, the specification has been amended to update the reference application with its patent number. No new matter has been added by this amendment. Entry of the amendment is respectfully requested.

If there are any questions regarding this matter, the Examiner is respectfully invited to contact the undersigned.

Respectfully submitted,
WHIRLPOOL CORPORATION

Date: September 30, 2019

By: /Sara L. Haas/

Sara L. Haas, Reg. No. 64,796
McGARRY BAIR PC
45 Ottawa Ave. SW, Suite 700
Grand Rapids, Michigan 49503
(616) 742-3500
slh@mcgarrybair.com

Electronic Acknowledgement Receipt

EFS ID:	37313742
Application Number:	15941761
International Application Number:	
Confirmation Number:	4804
Title of Invention:	GLASSES RACK FOR DISHWASHER
First Named Inventor/Applicant Name:	Barry E. Tuller
Customer Number:	130348
Filer:	Sara Lynn Haas/Johanne Hrycuna
Filer Authorized By:	Sara Lynn Haas
Attorney Docket Number:	SUB-05031-US-CNT2
Receipt Date:	30-SEP-2019
Filing Date:	30-MAR-2018
Time Stamp:	12:01:06
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		G1369400.PDF	178958 c64a0a586417676c1f99c5419cd671529c6(c33d	yes	3

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment after Notice of Allowance (Rule 312)	1	1
	Specification	2	2
	Applicant Arguments/Remarks Made in an Amendment	3	3
Warnings:			
Information:			
	Total Files Size (in bytes):	178958	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/941,761	03/30/2018	Barry E. Tuller	SUB-05031-US-CNT2	4804

130348 7590 10/22/2019

Whirlpool Corporation / McGarry Bair PC
2000 North M63
Benton Harbor, MI 49022

EXAMINER
BUCCI, THOMAS

ART UNIT	PAPER NUMBER
1711	

NOTIFICATION DATE	DELIVERY MODE
10/22/2019	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PatentDocketing@whirlpool.com
deborah_tomaszewski@whirlpool.com
patents@mcgarrybair.com

Petitioner Samsung Ex-1004, 0299

Response to Rule 312 Communication	Application No.	Applicant(s)	
	15/941,761	Tuller et al.	
	Examiner	Art Unit	AIA (FITF) Status
	THOMAS BUCCI	1711	Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

1. ☑ The amendment filed on 30 September 2019 under 37 CFR 1.312 has been considered, and has been:
   a) ☑ entered.
   b) ☐ entered as directed to matters of form not affecting the scope of the invention.
   c) ☐ disapproved because the amendment was filed after the payment of the issue fee.
      Any amendment filed after the date the issue fee is paid must be accompanied by a petition under 37 CFR 1.313(c)(1) and the required fee to withdraw the application from issue.
   d) ☐ disapproved. See explanation below.
   e) ☐ entered in part. See explanation below.

/THOMAS BUCCI/ Examiner, Art Unit 1711	/DAVID G CORMIER/ Primary Examiner, Art Unit 1711

Petitioner Samsung Ex-1004, 0300

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	WHIRLPOOL CORPORATION		
For:	GLASSES RACK FOR DISHWASHER		
Application No.:	15/941,761	Examiner:	Thomas Bucci
Filed:	March 30, 2018	Group Art Unit:	1711
Atty. Docket:	SUB-05031-US-CNT2	Confirmation No.:	4804

CERTIFICATE OF MAILING/TRANSMISSION (37 CFR 1.8(a))

I hereby certify that this correspondence is, on the date shown below, being:

☐ deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to the Commissioner for Patents, Alexandria, VA, 22313-1450.

☒ transmitted via the EFS Web filing system.

/Johanne Hrycuna/
Signature

Date: September 30, 2019

Johanne Hrycuna
(type or print name of person certifying)

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

AMENDMENT UNDER 37 C.F.R. §1.312

This paper is responsive to the Notice of Allowance mailed September 5, 2019. Under the provisions of 37 C.F.R. § 1.312, kindly amend the above-identified U.S. Patent Application as follows:

Amendments to the Specification begin on page 2 of this paper.

Remarks begin on page 3 of this paper.

OK TO ENTER: /T.B/

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), by mail or fax, or via EFS-Web.

By mail, send to: Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

By fax, send to: (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

130348 7590 09/05/2019
Whirlpool Corporation / McGarry Bair PC
2000 North M63
Benton Harbor, MI 49022

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being transmitted to the USPTO via EFS-Web or by facsimile to (571) 273-2885, on the date below.

Johanne Hrycuna (Typed or printed name)
/Johanne Hrycuna/ (Signature)
November 18, 2019 (Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/941,761	03/30/2018	Barry E. Tuller	SUB-05031-US-CNT2	4804

TITLE OF INVENTION: GLASSES RACK FOR DISHWASHER

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$1000	$0.00	$0.00	$1000	12/05/2019

EXAMINER	ART UNIT	CLASS-SUBCLASS
BUCCI, THOMAS	1711	134-170000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-09 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 McGarry Bair PC
2
3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE: Whirlpool Corporation

(B) RESIDENCE: (CITY and STATE OR COUNTRY): Benton Harbor, Michigan

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. Fees submitted: ☒ Issue Fee ☐ Publication Fee (if required) ☐ Advance Order - # of Copies _____

4b. Method of Payment: *(Please first reapply any previously paid fee shown above)*

☒ Electronic Payment via EFS-Web ☐ Enclosed check ☐ Non-electronic payment by credit card (Attach form PTO-2038)

☒ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. 502003

5. **Change in Entity Status** (from status indicated above)

☐ Applicant certifying micro entity status. See 37 CFR 1.29

☐ Applicant asserting small entity status. See 37 CFR 1.27

☐ Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature /Sara L. Haas/ Date November 18, 2019

Typed or printed name /Sara L. Haas/ Registration No. 64,796

Petitioner Samsung Ex-1004, 0302

Electronic Patent Application Fee Transmittal

Application Number:	15941761
Filing Date:	30-Mar-2018
Title of Invention:	GLASSES RACK FOR DISHWASHER
First Named Inventor/Applicant Name:	Barry E. Tuller
Filer:	Sara Lynn Haas/Johanne Hrycuna
Attorney Docket Number:	SUB-05031-US-CNT2

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
UTILITY APPL ISSUE FEE	1501	1	1000	1000

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
			Total in USD ($)	**1000**

Electronic Acknowledgement Receipt

EFS ID:	37777516
Application Number:	15941761
International Application Number:	
Confirmation Number:	4804
Title of Invention:	GLASSES RACK FOR DISHWASHER
First Named Inventor/Applicant Name:	Barry E. Tuller
Customer Number:	130348
Filer:	Sara Lynn Haas
Filer Authorized By:	
Attorney Docket Number:	SUB-05031-US-CNT2
Receipt Date:	18-NOV-2019
Filing Date:	30-MAR-2018
Time Stamp:	14:28:10
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	$1000
RAM confirmation Number	E2019AHE28270444
Deposit Account	
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Issue Fee Payment (PTO-85B)	G1384625.PDF	200336 c3a725c457920fff26adbeb50d6509db015197c7	no	1
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30475 ef2dea39dd29ee08e41101f80ff4dd5baee7c63f	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	230811		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/941,761	12/24/2019	10512385	SUB-05031-US-CNT2	4804

130348 7590 12/04/2019

Whirlpool Corporation / McGarry Bair PC
2000 North M63
Benton Harbor, MI 49022

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment is 0 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site http://pair.uspto.gov for additional applicants):

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