

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

WENZHOU XIN XIN SANITARY WARE CO., LTD.,

Petitioner,

v.

DELTA FAUCET COMPANY,

Patent Owner.

U.S. Patent No. 11,473,277

PETITION

For *Inter Partes* Review

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	BACKGROUND	1
A.	The ‘277 Patent.....	1
B.	Prosecution History of the ‘277 Patent.....	4
C.	Prosecution History of the ‘056 Patent	4
III.	SUMMARY OF CHALLENGES AND RELIEF REQUESTED	5
IV.	PERSON OF ORDINARY SKILL IN THE ART.....	6
V.	CLAIM CONSTRUCTION.....	6
VI.	SPECIFIC GROUNDS FOR PETITION	7
A.	Ground 1: Van Der Linden in View of Shen Wei.....	7
1.	Claim 1	7
2.	Claim 2	17
3.	Claim 3	19
4.	Claim 4	20
5.	Claim 5	21
6.	Claim 10	22
7.	Claim 11	23
8.	Claim 12	26
9.	Claim 13	27
10.	Claim 15	28
B.	Ground 2: Thomas in View of Van Der Linden	28
1.	Claim 1	28
2.	Claim 2	34
3.	Claim 3	35
4.	Claim 4	36

5.	Claim 5.....	36
6.	Claim 6.....	37
7.	Claim 7.....	38
8.	Claim 10.....	39
9.	Claim 11.....	41
10.	Claim 12.....	44
11.	Claim 13.....	44
12.	Claim 14.....	45
13.	Claim 15.....	46
14.	Claim 16.....	46
15.	Claim 17.....	46
16.	Claim 20.....	47
17.	Claim 21.....	52
18.	Claim 23.....	52
19.	Claim 24.....	53
C.	Ground 3: Thomas in View of Boursier and Hotaling.....	53
1.	Claim 1.....	54
2.	Claim 2.....	58
3.	Claim 5.....	58
4.	Claim 6.....	59
5.	Claim 7.....	60
6.	Claim 10.....	60
7.	Claim 11.....	62
8.	Claim 12.....	65
9.	Claim 13.....	66
10.	Claim 14.....	66
11.	Claim 16.....	66

12.	Claim 17	67
13.	Claim 20	67
14.	Claim 21	71
15.	Claim 23	71
16.	Claim 24	72
VII.	CONCLUSION.....	72
VIII.	CERTIFICATION OF GROUND FOR STANDING	72
IX.	MANDATORY NOTICES	73
A.	Real Party in Interest.....	73
B.	Related Matters.....	73
C.	Lead and Back-up Counsel	73
D.	Service Information.....	73
E.	Fee for <i>Inter Parties</i> Review (37 C.F.R. § 42.103)	74

TABLE OF AUTHORITIES

Cases

<i>In re Translogic Tech., Inc.</i> , 504 F.3d 1249, 1257 (Fed. Cir. 2007).....	6
<i>Wenzhou Xin Xin Sanitary Ware Co., Ltd. v. Delta Faucet Company</i> , No. 2:23-cv-2038 (D.N.J. filed April 11, 2023)	73

Statutes

35 U.S.C. § 102.....	<i>passim</i>
35 U.S.C. § 103	<i>passim</i>
37 C.F.R. § 42.100(b)	6
37 C.F.C. § 42.104(a).....	72

PETITIONER'S EXHIBIT LIST

Exhibit No.	Description
1001	U.S. Patent No. 11,473,277 (“the ‘277 Patent”)
1002	U.S. Patent No. 10,914,056 (“the ‘056 Patent” or “Parent”)
1003	Prosecution History of Application No. 17/167,647 (“the ‘647 Application”), now the ‘277 Patent
1004	Prosecution History of Application No. 16/131,035 (“the ‘035 Application”), now the ‘056 Patent
1005	Expert Report of J. Chris Cook
1006	U.S. Patent Application Publication No. 2008/0142095 (“Van Der Linden”)
1007	Chinese Patent No. 203281567 (“Shen Wei”)
1008	U.S. Patent Application Publication No. 2011/0061754 (“Thomas”)
1009	French Patent No. 2606622 (“Boursier”)
1010	U.S. Patent Application Publication No. 2012/0204242 (“Hotaling”)

I. INTRODUCTION

Petitioner Wenzhou Xin Xin Sanitary Ware Co., Ltd. (“Petitioner” or “Sanitary Ware”) petitions for *inter partes* review (“IPR”) of claims 1-7, 10-17, 20-21, and 23-24 (“Challenged Claims”) of U.S. Patent No. 11,473,277 (“the ‘277 Patent”) (Ex. 1001) assigned to Delta Faucet Company (“Patent Owner”). This petition demonstrates that there is a reasonable likelihood that the Petitioner will prevail with respect to at least one of the Challenged Claims on the grounds set forth herein.

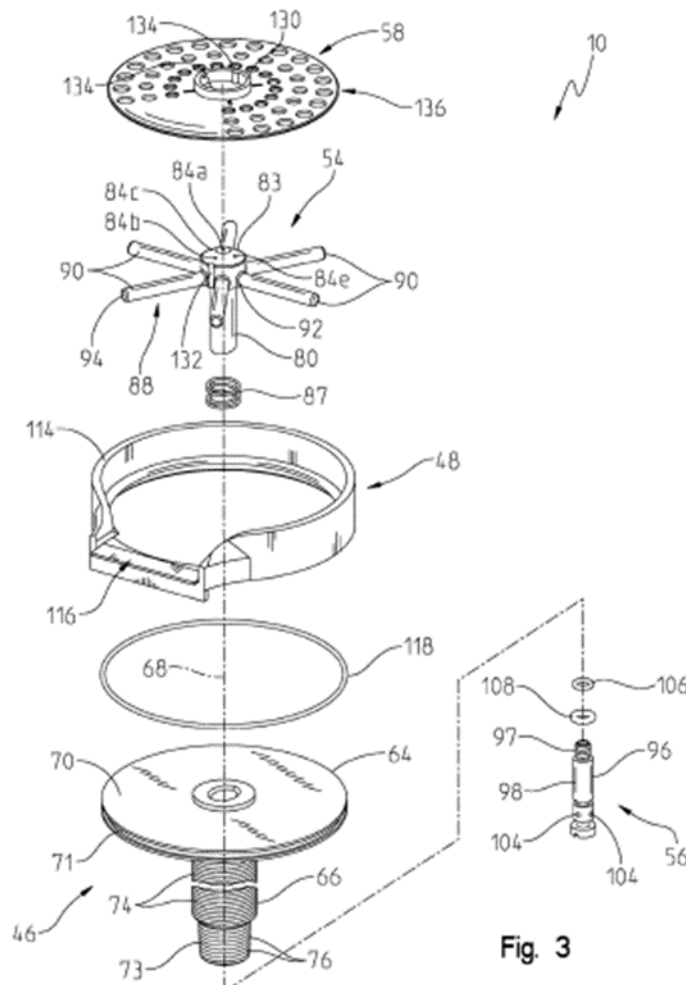
II. BACKGROUND

A. The ‘277 Patent

The ‘277 Patent discloses a vessel rinsing apparatus. Many such apparatuses were known in the relevant field prior to the ‘277 Patent’s earliest effective priority date of September 14, 2018. The ‘277 Patent is a continuation of application No. 16/131,035 (“the ‘035 Application”), now U.S. Patent No. 10,914,056 (“the ‘056 Patent” or “Parent”).

The ‘277 Patent broadly claims conventional elements of a vessel rinsing apparatus (10), such as a mounting member (46), a fluid discharge member (54) including a plurality of nozzles (84) and a trigger (88), a valve member (56) operably coupled to the fluid discharge member and configured to control water flow through the nozzles in response to movement of the trigger, and a drain bowl (52) operably

coupled to the mounting member, including a lower wall (64), an upwardly extending wall (114), and a drain channel (116) configured to receive water from the drain bowl and discharge water above into a sink basin. *See* Ex. 1001 at claims 1, 11, 20; *see* Fig. 3 below:



The purported point of novelty of the '277 Patent, as argued by the Patent Owner in their Amendment and Response to a Non-Final Office Action dated September 24, 2020, is a drain bowl including a lower wall coupled with an upwardly extending wall and a drain channel configured to receive water from the

drain bowl and discharge water above and into a sink basin.¹ As discussed below, this purported point of novelty was disclosed in the prior art, rendering them obvious with a reason to combine.

The dependent claims of the ‘277 Patent also cover elements that were known in the prior art before the ‘277 Patent priority date. These elements include a mounting shank (claims 2, 13, & 24), a lower wall including an opening (claim 3), a drain bowl defined by an escutcheon (claims 4 & 15), a sloped away drain channel (claims 5 & 11), selective fluid communication with a mixing valve (claims 6 & 16), a diverter valve (claims 7, 17, & 21), a trigger with plurality of arms (claim 10), a longitudinal mounting member (claims 12 & 23), and a valve shaft (claim 14). As shown herein, all of these features were known in the prior art before the priority date of the ‘277 Patent by Van Der Linden, Thomas, Shen Wei, Boursier, and Hotaling (in various combinations).

¹ The cited Amendment and Response was to an Office Action in the prosecution of the Parent, wherein the Examiner rejected analogous claims under § 103. Ex. 1004, Non-Final Rejection dated July 31, 2020, at 63-69; Applicant-Initiated Interview Summary dated September 10, 2020, at 56; Amendment and Response to Non-Final Office Action dated September 24, 2020, at 50-53. Moreover, claims 1, 11, & 20 of the ‘277 Patent were issued a nonstatutory double patenting rejection as being unpatentable over these same analogous claims of the Parent. Ex. 1003, Non-Final Rejection dated March 3, 2022, at 247-252; Terminal Disclaimer dated March 28, 2022, at 154. In this regard, the novelty arguments and amendments made in the Parent are applicable to the ‘277 Patent.

B. Prosecution History of the ‘277 Patent

The ‘277 Patent issued from the ‘647 Application, filed on February 4, 2021, as a continuation of the ‘035 Application, filed on September 14, 2018, now the ‘056 Patent. Ex. 1001 at 1. A Non-Final Office Action was issued on March 3, 2022, thereby rejection claims 1-24 on the grounds of nonstatutory double patenting as being unpatentable over the ‘056 Patent. Ex. 1003, Non-Final Office Action dated March 3, 2022, at 247-252. The Applicant responded by filing a Terminal Disclaimer over the ‘056 Patent. Ex. 1003, Terminal Disclaimer dated March 28, 2022, at 154. No further office actions were issued. The ‘277 Patent issued on October 18, 2022. Ex. 1001 at 1. The ‘277 Patent contains three independent claims (claims 1, 11, & 20) and 21 dependent claims. Ex. 1001 at 6:64-9:16.

C. Prosecution History of the ‘056 Patent

The ‘056 Patent is the parent of the ‘277 Patent. The ‘056 Patent issued from the ‘035 Application, filed on September 14, 2018. Ex. 1002 at 1. A Non-Final Office Action was issued on July 31, 2020, thereby rejection claims 1-30 under 35 U.S.C. § 103. Claim 1 was rejected as unpatentable over Thomas (US 2011/0061754) in view of FR2543426A3. Ex. 1004, Non-Final Rejection dated July 31, 2020, at 63-69. To overcome the rejection, Claim 1 was amended to recite that the drain channel is “configured to receive water from the drain bowl and discharge water above and into a sink basin supported by the mounting deck.” Ex. 1004,

Amendment and Response to Non-Final Office Action dated September 24, 2020, at 50-53. Analogous language is recited in Claims 1, 11, and 20 of the ‘277 Patent. To further overcome the rejection, new claim 31 which depends on claim 1 was added which recites “wherein the escutcheon further includes a lower wall coupled to the upwardly extending wall.” Ex. 1004, Amendment and Response to Non-Final Office Action dated September 24, 2020, at 52. This lower wall element is recited in Claims 1, 11, and 20 of the ‘277 Patent. No further office actions were issued. The ‘277 Patent issued on October 18, 2022. Ex. 1001 at 1.

III. SUMMARY OF CHALLENGES AND RELIEF REQUESTED

Petitioner asserts the following challenges supported by expert testimony of J. Chris Cook (Ex. 1005):

<i>Ground</i>	<i>Reference(s)</i>	<i>Basis</i>	<i>Claim(s) Challenged</i>
1	Van Der Linden in view of Shen Wei	§ 103	1-5, 10-13, 15
2	Thomas in view of Van Der Linden	§ 103	1-7, 10-17, 20-21, 23-24
3	Thomas in view of Boursier & Hotaling	§ 103	1-2, 5-7, 10-14, 16-17, 20-21, 23-24

Petitioner requests that the Board institute an *inter partes* review based on the

reasonable likelihood that Petitioner would prevail with respect to at least one claim challenged herein. Specifically, at least claims 1-7, 10-17, 20-21, and 23-24 of the '277 Patent are unpatentable under 35 U.S.C. § 103 over the cited prior art herein.

IV. PERSON OF ORDINARY SKILL IN THE ART

A person of ordinary skill in the art ("POSITA") at the time of filing would have had a minimum of a bachelor's degree in mechanical engineering or its equivalent and two years of experience in mechanical engineering with some experience in mechanical design. In lieu of a degree, a POSITA could be one whose equivalent accumulated knowledge and experience in the field of mechanical engineering and specifically mechanical design makes him or her a POSITA. Additional graduate-level education could substitute for professional experience, or significant experience in the field could substitute for formal education.

V. CLAIM CONSTRUCTION

In an IPR, claim terms are given their "broadest reasonable construction in light of the specification of the patent in which it appears." *See* 37 C.F.R. § 42.100(b). Under this broadest reasonable construction standard, claim terms generally are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *See In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). Here, Petitioner proposes that all claim terms be given their plain and ordinary meaning.

VI. SPECIFIC GROUNDS FOR PETITION

A. Ground 1: Van Der Linden in View of Shen Wei

Under 35 U.S.C. § 103, Claims 1-5, 10-13, and 15 are unpatentable over Van Der Linden in view of Shen Wei. Van Der Linden is prior art under 35 U.S.C. § 102(a) based on its earliest effective filing date of December 6, 2006 and/or publication date of June 19, 2008. Van Der Linden was disclosed by the Applicant in an IDS during prosecution of the ‘647 Application, but importantly was not the basis of any claim rejection. Shen Wei is prior art under 35 U.S.C. §102(a) based on its publication/issue date of November 13, 2013. Shen Wei was not cited during prosecution of the ‘647 Application.

1. Claim 1

i. “A vessel rinsing apparatus” (preamble)

To the extent the preamble is limiting, Van Der Linden discloses a vessel rinsing apparatus (**washing device 21**). Van Der Linden “relates to a faucet having **washing means for washing the insides of glasses** and the like...” Ex. 1006 at Abstract. Van Der Linden discloses a “draft tower 1... with a **washing device 21**.” *Id.* at [0031].

ii. “a mounting member extending along a longitudinal axis, the mounting member configured to extend through a mounting aperture formed within a mounting deck”

Van Der Linden discloses a mounting member (**base 28**) configured to extend through a mounting aperture (**recess 29**) formed within a mounting deck (**worktop**

4, column 2). In Van Der Linden, “[t]he **supply line 28** also forms a **base** for the washing device 21, whose lower end is accommodated in a **recess 29** in the wall of the **column 2**.” Ex. 1006 at [0032]. See Fig. 2 below:

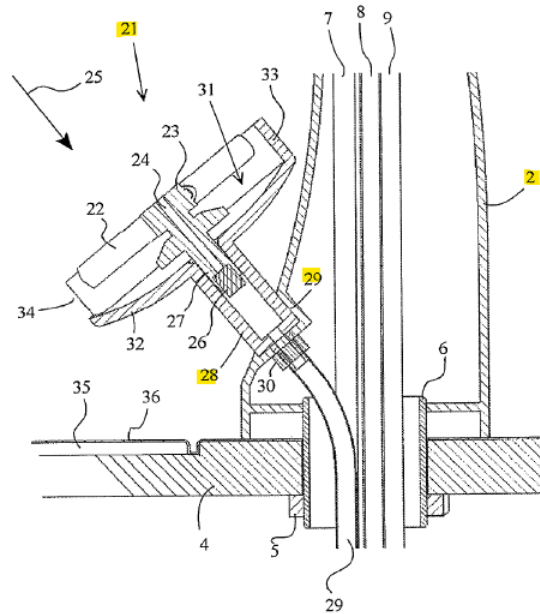


Fig. 2

To the extent that the mounting member (**base 28**) of Van Der Linden is not longitudinal, this element is clearly disclosed by Shen Wei. Shen Wei discloses a mounting member (**body 3**) extending along a longitudinal axis and explains that the “cup-washing machine can be installed on the sink/tank” via the **fastening nut 8**. Ex. 1007 at [0009]. As shown in Figure 1 below, the **body 3** extends along a longitudinal axis and is secured to a sink by the **fastening nut 8**:

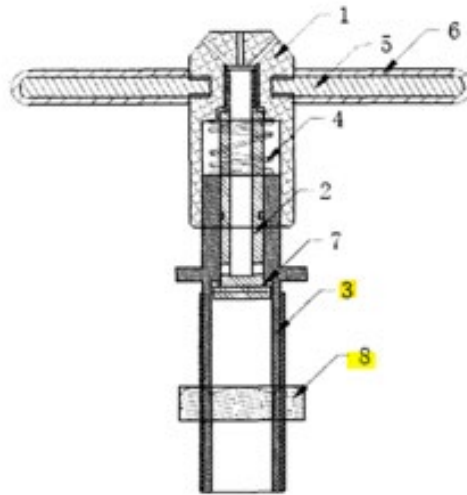


Figure 1

In the expert opinion of Mr. Cook, it would have been obvious to one having ordinary skill in the art, having the teachings of Van Der Linden and Shen Wei before him before the effective filing date of the claimed invention, to modify the vessel rinsing apparatus of Van Der Linden to incorporate the longitudinal mounting member (body 3) and mounting method of Shen Wei so as to minimize the number of components for cost and reliability. Ex. 1005 at 59. In fact, the aperture mounting method and longitudinal mounting body is the same configuration that deck mounts in residential and commercial faucets and plumbing fixtures have used for hot and cold water valves for many years. *Id.* Given the known advantages and predictable result of having a longitudinal mounting member that mounts through apertures like other commonly available fixtures for increased standalone stability, one having ordinary skill in the art would have been motivated to make this obvious

modification. *Id.*

- iii. *“a fluid discharge member including a central body supporting a plurality of nozzles and a trigger, the central body being movable relative to the mounting member”*

Van Der Linden discloses a fluid discharge member (**spray nozzle body 23**) with a central body (**cylindrical end 27**) supporting a nozzle (**spray channel/nozzle 24**) and a trigger (**abutment member 22**). In Van Der Liden “[t]he washing device 21 comprises a **cross-shaped abutment member 22**... [and] a **spray nozzle body 23**... provided with an internal **spray channel 24** that opens into a **spray nozzle**... [and] comprises a **cylindrical end 27**...” Ex. 1006 at [0031].

In the expert opinion of Mr. Cook, a POSITA would understand the central body (**cylindrical end 27**) to be at least implicitly movable relative to the mounting member (**base 28**) under the action of the **pressure direction 25**. Ex. 1005 at 61. For example, when the abutment member 22 is pressed in the pressure direction 25, the cylindrical end 27 so too moves downward relative to the base 28, opening a valve 26. *Id.* Van Der Linden explains that “when a pressure is exerted on the abutment member 22 in the **pressure direction 25** by pressing the open end of a glass against said abutment member, the valve 26 will open, so that washing liquid will be sprayed into the glass in question from the spray channel 24.” Ex. 1006 at [0031]. Said another way, in the opinion of Mr. Cook, the only way for the valve 26 to open is for the pressure direction 25 to move the entire spray nozzle body 23 (including the

relative to the base 28. Ex. 1005 at 61; *see* Fig. 2 below:

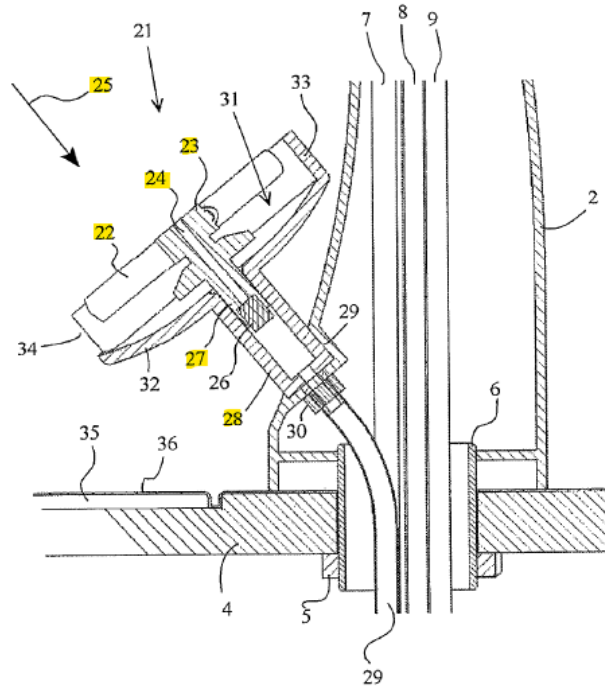


Fig. 2

To the extent that Van Der Linden does not disclose a *plurality* of nozzles, this element is clearly disclosed by Shen Wei (**orifices 9**). In Shen Wei “said nozzle has **orifices [9]**, and water flows through these small **orifices [9]** to form high speed and high pressure to effectively pre-cool/pre-heat/flush various containers...” Ex. 1007 at [0008]. As shown in Figures 3 & 4, Shen Wei discloses a plurality of spray nozzles (**orifices 9**):

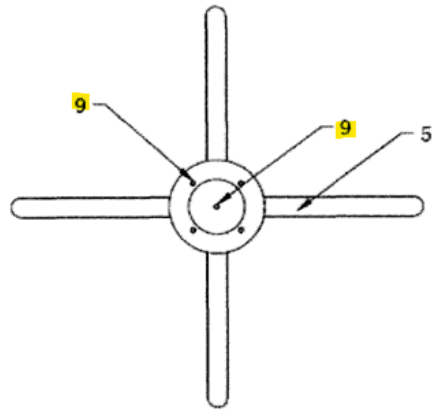


Figure 3

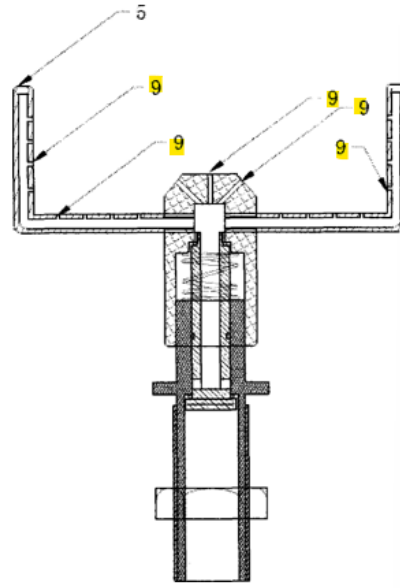


Figure 4

In the expert opinion of Mr. Cook, it would have been obvious to one having ordinary skill in the art, having the teachings of Van Der Linden and Shen Wei before him before the effective filing date of the claimed invention, to modify the vessel rinsing apparatus of Van Der Linden to incorporate the plurality of spray nozzles (orifices 9) of Shen Wei. Ex. 1005 at 63. In Mr. Cook's opinion, only having a single nozzle would be ineffective and require users to move the glassware around excessively, making it highly likely that the glassware would not be cleaned effectively. *Id.* Given the known and predictable rinsing advantages of having a plurality of nozzles for more effective and efficient cleaning, one having ordinary skill in the art would have been motivated to make this obvious modification. *Id.*

- iv. *“a valve member operably coupled to the fluid discharge member and configured to control water flow through the central body to the plurality of nozzles in response to movement of the trigger”*

Van Der Linden discloses a valve member (**valve 26**) operably coupled to the fluid discharge member (**spray nozzle body 23**) via the cylindrical end 27. In Van Der Linden “**spray nozzle body 23** comprises a cylindrical end 27 provided with a **valve 26**...” Ex. 1006 at [0031].

Van Der Linden further discloses a valve member (**valve 26**) configured to control water flow through the central body (**cylindrical end 27**) to the plurality of nozzles (**spray channel/nozzle 24**) in response to movement (**pressure direction 25**) of the trigger (**abutment member 22**). Van Der Linden explains this water flow mechanism as follows: “The pressure in the supply line 29 will keep the valve 26 in the closed position as long as no pressure is exerted on the abutment member 22, so that the supply of washing liquid from the supply line 29 to the spray channel 24 is blocked. However, when a pressure is exerted on the abutment member 22 in the pressure direction 25 by pressing the open end of a glass against said abutment member, the valve 26 will open, so that washing liquid will be sprayed into the glass in question from the spray channel 24.” Ex. 1006 at [0031]; *see also* [0035]. Further, Van Der Linden states that this water flow mechanism is not novel: “The above principle is already known per se to those skilled in the art and need not be explained

in more detail herein, therefore.” *Id.* at [0031]; *see* Fig. 2 below:

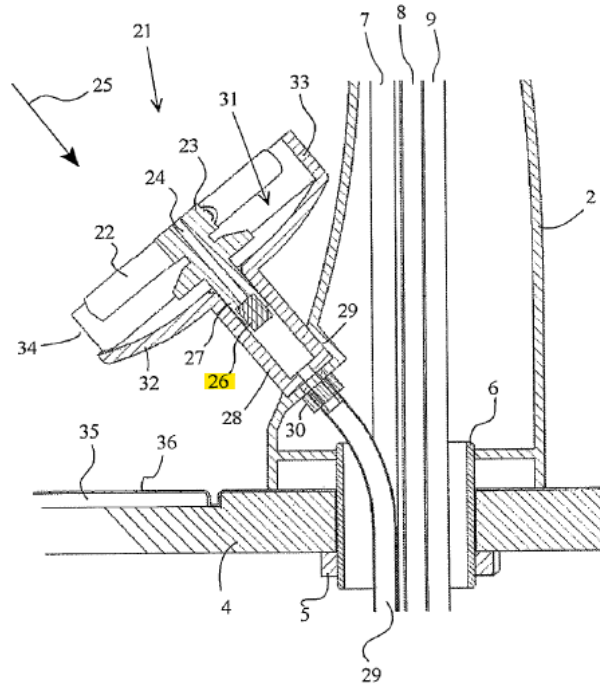


Fig. 2

- v. *“a drain bowl operably coupled to the mounting member, the drain bowl including a lower wall, an upwardly extending wall operably coupled to the lower wall, and a drain channel extending through the upwardly extending wall, the drain channel configured to receive water from the drain bowl and discharge water above and into a sink basin supported by the mounting deck”*

Van Der Linden discloses a drain bowl (**cup shaped container 31**) operably coupled to the mounting member (**base 28**). In Van Der Linden “[t]he washing device 21 further comprises an at least substantially **cup-shaped container 31** which joins the upper end of the **base 28**...” Ex. 1006 at [0033].

Van Der Linden further discloses a drain bowl (**cup shaped container 31**) including a lower wall (**slightly concave bottom 32**), an upwardly extending wall

(**upright wall 33**) operably coupled to the lower wall, and a drain channel (**outflow opening 34**) extending through the upwardly extending wall. In Van Der Linden the “**container [31]** comprises a **slightly concave bottom 32** and an **upright wall 33** which joins the circumference of the bottom 32... At the lowermost point, the circular wall 33 is interrupted, thereby creating an **outflow opening 34** at that location.” Ex. 1006 at [0033]; *see* Fig. 2 below:

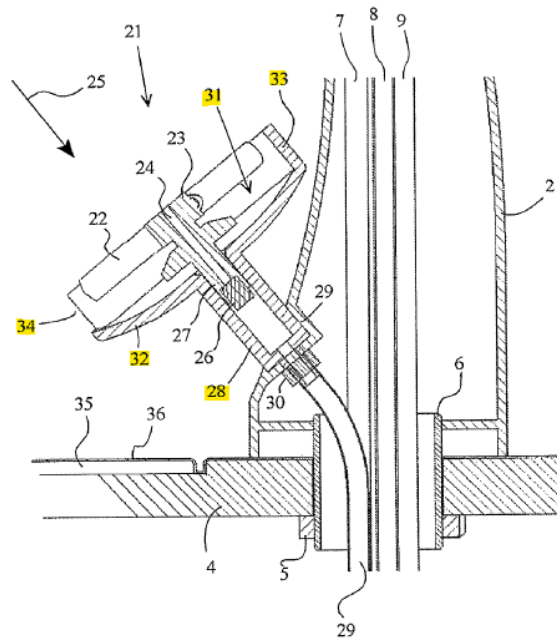


Fig. 2

Van Der Linden further discloses a drain channel (**outflow opening 34, 79**) configured to receive water from the drain bowl (**cup shaped container 31**) and discharge water above and into a sink basin (**drip tray 36, sink 77**) supported by a mounting deck (**worktop 4, column 2**). Van Der Linden explains that “[s]aid **outflow opening 34** is located above a recessed part 35 in the **worktop 4**, where a

drip tray 36 is provided.” Ex. 1006 at [0033]. Van Der Linden explains the discharge feature: “said washing liquid will flow out of the **container 31** via the **outlet opening 34** and into the recessed part 35 via holes in the **drip tray 36**...” *Id.* at [0035]. A second embodiment of Van Der Linden explicitly discloses discharging water into a sink basin: “As is apparent from FIG. 5, the **outflow opening 79** of the washing device 78 opens above the **sink 77**.” *Id.* at [0039]; *see* Fig. 5 below:

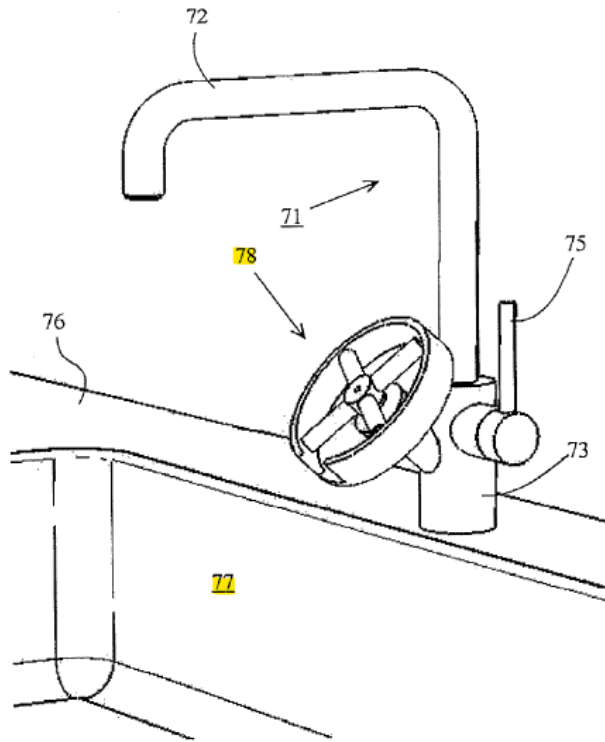


Fig. 5

2. Claim 2

- i. *“The vessel rinsing apparatus of claim 1, wherein the mounting member comprises a mounting shank defining an opening extending along the longitudinal axis, and the central body of the fluid discharge member is received within the opening of the mounting shank and movable along the longitudinal axis.”*

Van Der Linden discloses a mounting member with a central body comprising a mounting shank (generally, **base 28**) defining an opening (**shown in red below**) extending along an axis and the central body (**cylindrical end 27**) of the fluid discharge member (**spray nozzle body 23**) is received within the opening of the mounting shank (**shown in red below**) and movable along an axis. As seen in Figure 2, the **base 28** defines an opening extending along an axis and the **cylindrical end 27** of the **spray nozzle body 23** is received therein and moveable along that axis upon movement of the abutment member 22 in the pressure direction 25. *See Ex. 1006 at [0031] & [0035]; see also Fig. 2 (annotated) below:*

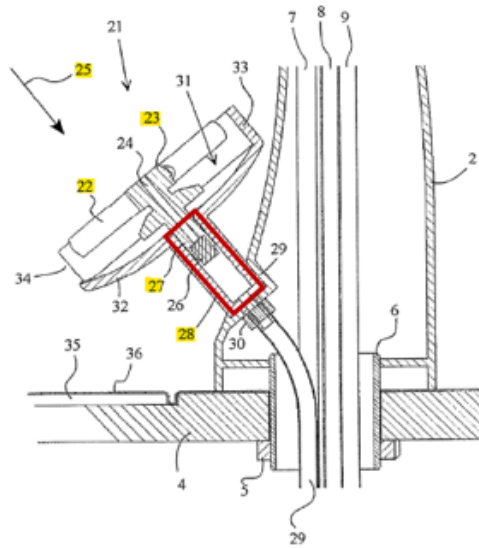


Fig. 2

Again, to the extent that the opening of the mounting member (**base 28**) of Van Der Linden does not extend along the longitudinal axis, this element is clearly disclosed by Shen Wei. Shen Wei discloses an opening of a mounting member (**body 3**) extending along the longitudinal axis. As shown in Figure 1 below, the opening of **body 3** extends along a longitudinal axis:

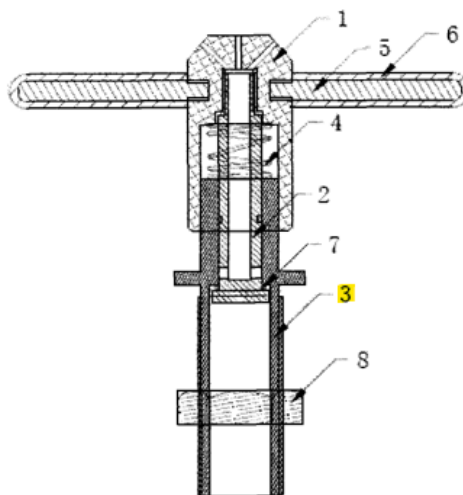


Figure 1

In the expert opinion of Mr. Cook, it would have been obvious to one having ordinary skill in the art, having the teachings of Van Der Linden and Shen Wei before him before the effective filing date of the claimed invention, to modify the vessel rinsing apparatus of Van Der Linden to incorporate the longitudinal mounting member (body 3) of Shen Wei. *See* Ex. 1005 at 71.

3. Claim 3

- i. *“The vessel rinsing apparatus of claim 2, wherein the lower wall includes an opening through which the mounting shank extends.”*

Van Der Linden discloses a lower wall (**slightly concave bottom 32**) including an opening (**shown in red**) through which the mounting shank (generally, **base 28**) extends. As seen in Figure 2, the **concave bottom 32** includes an opening (**shown in red**) through which the **base 28** extends. This opening allows for the flow of water from the supply hose to the nozzle in response to pressure at the trigger. *See* Fig. 2 (annotated) below:

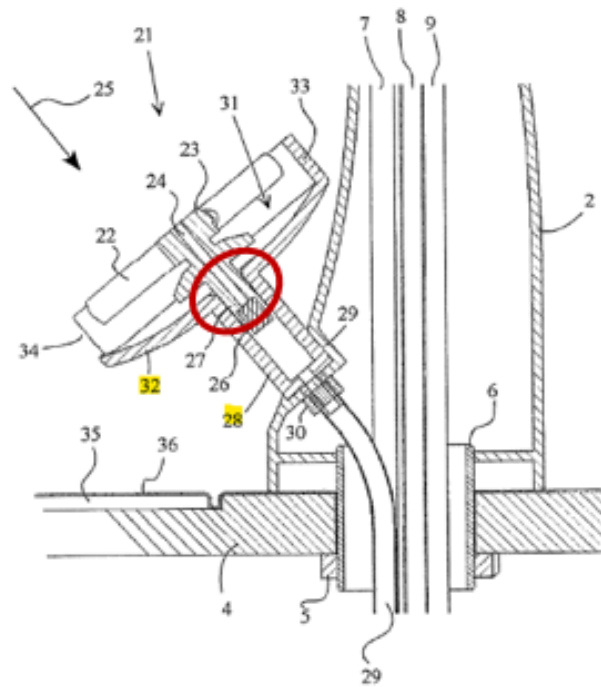


Fig. 2

4. Claim 4

- i. *“The vessel rinsing apparatus of claim 1, wherein the drain bowl is defined by an escutcheon.”*

Van Der Linden discloses a drain bowl (**cup shaped container 31**) defined by an escutcheon. The ‘277 Patent defines an escutcheon as including an upwardly extending wall, a lower wall, and a drain channel. *See* Ex. 1001 at 5:40-53. The **cup shaped container 31**, including **slightly concave bottom 32**, **upright wall 33**, and **outlet opening 34**, of Van Der Linden define as escutcheon. *See* Ex. 1006 at [0033].

5. Claim 5

- i. “The vessel rinsing apparatus of claim 1, wherein the drain channel slopes away from the fluid discharge member and the drain bowl.”

Van Der Linden discloses a drain channel (**outflow opening 34, 79**) sloped away from a fluid discharge member (**spray nozzle body 23**) and a drain bowl (**cup shaped container 31**). Van Der Linden explains that “[m]ost of the washing **water will flow** from the glass into the container 31 **under the influence of the force of gravity...** From the container 31, said washing liquid will flow out of the container 31 via the outlet opening 34 and into the recessed part 35...” Ex. 1006 at [0035]. In this regard, the outflow opening 34 is sloped away from the spray nozzle body 23 and container 31 to facilitate the outflow of water under the force of gravity into the recessed part 35, *i.e.*, the sink (*see* Fig. 5), as best shown in Figure 2 below:

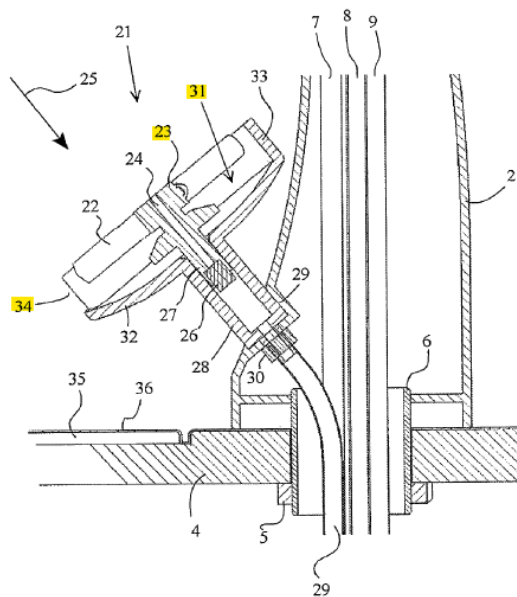


Fig. 2

6. Claim 10

- i. *“The vessel rinsing apparatus of claim 1, wherein the trigger of the fluid discharge member includes a plurality of arms extending radially outwardly from the central body of the fluid discharge member.”*

Van Der Linden discloses a trigger (**abutment member 22**) of a fluid discharge member (**spray nozzle body 23**) including a plurality of arms extending radially outwardly (**cross shaped**) from the central body of the fluid discharge member. In Van Der Linden the “washing device 21 comprises a **cross-shaped abutment member 22**... In the centre of the cross shape of the abutment member, the washing device 21 comprises a **spray nozzle body 23** connected to the abutment member...” Ex. 1006 at [0031]; see Figure 1 below:

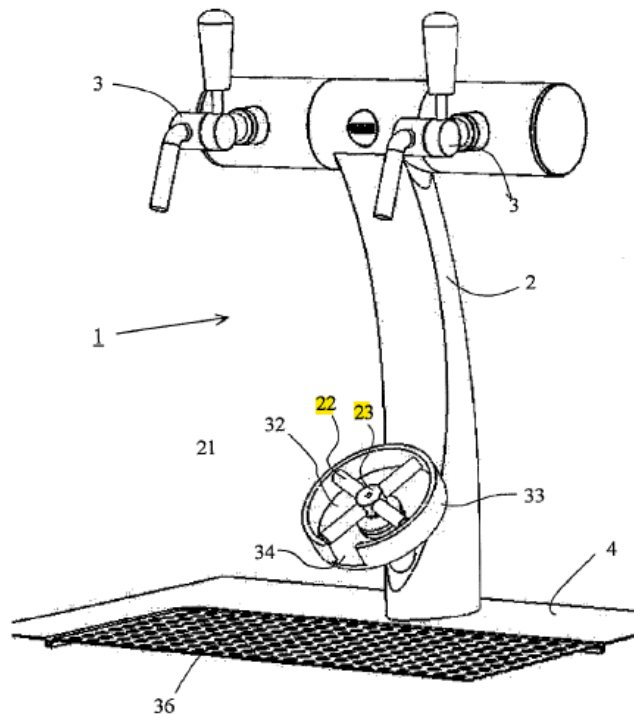


Fig. 1

7. Claim 11

i. “A vessel rinsing apparatus” (preamble)

To the extent the preamble is limiting, Van Der Linden discloses a vessel rinsing apparatus (**washing device 21**). See Ex. 1006 at Abstract & [0031].

ii. “a drain bowl including a lower wall, an upwardly extending wall operably coupled to the lower wall, and a drain channel extending through the upwardly extending wall, the drain channel configured to receive water from the drain bowl and discharge water above and into a sink basin supported by a mounting deck”

Van Der Linden discloses a drain bowl (**cup shaped container 31**) including a lower wall (**slightly concave bottom 32**), an upwardly extending wall (**upright wall 33**) operably coupled to the lower wall, and a drain channel (**outflow opening 34**) extending through the upwardly extending wall. See Ex. 1006 at [0031] & Fig. 2.

Van Der Linden further discloses a drain channel (**outflow opening 34, 79**) configured to receive water from the drain bowl (**cup shaped container 31**) and discharge water above and into a sink basin (**drip tray 36, sink 77**) supported by a mounting deck (**worktop 4, column 2**). See Ex. 1006 at [0031], [0035], [0039] & Fig. 5.

- iii. *“a mounting member operably coupled to the drain bowl, the mounting member configured to couple the drain bowl to the mounting deck”*

Van Der Linden discloses a mounting member (**base 28**) operably coupled to a drain bowl (**cup shaped container 31**) and configured to couple the drain bowl (**cup shaped container 31**) to the mounting deck (**worktop 4, column 2**). *See* Ex. 1006 at [0033], [0032] & Fig. 2.

- iv. *“a fluid discharge member including a central body supporting a plurality of nozzles and a trigger, the central body being movable relative to the mounting member”*

Van Der Linden discloses a fluid discharge member (**spray nozzle body 23**) with a central body (**cylindrical end 27**) supporting a nozzle (**spray channel/nozzle 24**) and a trigger (**abutment member 22**). *See* Ex. 1006 at [0031]. Van Der Linden further discloses the central body (**cylindrical end 27**) moveable (**pressure direction 25**) relative to the mounting member (**base 28**). *See* Ex. 1006 at [0031], [0035] & Fig. 2.

To the extent that Van Der Linden does not disclose a *plurality* of nozzles, this element is clearly disclosed by Shen Wei. Shen Wei discloses a plurality of nozzles (**orifices 9**). *See* Ex. 1007 at [0008] & Figs. 3 & 4. In the expert opinion of Mr. Cook, it would have been obvious to one having ordinary skill in the art, having the teachings of Van Der Linden and Shen Wei before him before the effective filing date of the claimed invention, to modify the vessel rinsing apparatus of Van

Der Linden to incorporate the plurality of nozzles (orifices 9) of Shen Wei. *See* Ex. 1005 at 81.

- v. *“a valve member operably coupled to the fluid discharge member and configured to control water flow through the central body to the plurality of nozzles”*

Van Der Linden further discloses a valve member (**valve 26**) operably coupled to the fluid discharge member (**spray nozzle body 23**). In Van Der Linden the **valve 26** is coupled to the spray **nozzle body 23** via the cylindrical end 27. *See* Ex. 1006 at [0031]. Van Der Linden further discloses a valve member (**valve 26**) configured to control water flow through the central body (**cylindrical end 27**) to the plurality of nozzles (**spray channel/nozzle 24**). *See* Ex. 1006 at [0031], [0035] & Fig. 2.

- vi. *“wherein the drain channel slopes away from the fluid discharge member and the drain bowl to facilitate water drainage into the sink basin.”*

Van Der Linden further discloses wherein a drain channel (**outflow opening 34**) is sloped away from a fluid discharge member (**spray nozzle body 23**) and a drain bowl (**cup shaped container 31**) to facilitate water drainage into the sink basin (**drip tray 36, sink 77**). *See* Ex. 1006 at [0035]. In this regard, the outflow opening 34 is sloped away from the spray nozzle body 23 and container 31 to facilitate the outflow of water under the force of gravity into the recessed part 35 via holes in the drip tray 36, from where it will be further discharged through the worktop 4., *i.e.*, the sink. *See id.* at [0039], Fig. 2 & Fig. 5.

8. Claim 12

- i. *“The vessel rinsing apparatus of claim 11, wherein the mounting member extends along a longitudinal axis, the mounting member configured to extend through a mounting aperture formed within the mounting deck.”*

Van Der Linden discloses a mounting member (**base 28**) configured to extend through a mounting aperture (**recess 29**) formed within a mounting deck (**worktop 4, column 2**). *See* Ex. 1006 at [0032] & Fig. 2.

To the extent that the mounting member (**base 28**) of Van Der Linden is not longitudinal, this element is clearly disclosed by Shen Wei. Shen Wei discloses a mounting member (**body 3**) extending along a longitudinal axis. *See* Ex. 1007 at Fig. 1. In the expert opinion of Mr. Cook, it would have been obvious to one having ordinary skill in the art, having the teachings of Van Der Linden and Shen Wei before him before the effective filing date of the claimed invention, to modify the vessel rinsing apparatus of Van Der Linden to incorporate the longitudinal mounting member (body 3) and mounting method of Shen Wei to minimize the number of components for cost and reliability. *See* Ex. 1005 at 85.

9. Claim 13

- i. *“The vessel rinsing apparatus of claim 12, wherein the mounting member comprises a mounting shank defining an opening extending along the longitudinal axis, and the central body of the fluid discharge member is received within the opening of the mounting shank and movable along the longitudinal axis.”*

Van Der Linden discloses a mounting member with a central body comprising a mounting shank (generally, **base 28**) defining an opening extending along an axis and the central body (**cylindrical end 27**) of the fluid discharge member (**spray nozzle body 23**) is received within the opening of the mounting shank and movable along an axis. *See* Ex. 1006 at [0031], [0035] & Fig. 2.

Again, to the extent that the opening of the mounting member (base 28) of Van Der Linden does not extend along the longitudinal axis, this element is clearly disclosed by Shen Wei. Shen Wei discloses an opening of a mounting member (body 3) extending along the longitudinal axis. *See* Ex. 1007 at Fig. 1. In the expert opinion of Mr. Cook, it would have been obvious to one having ordinary skill in the art, having the teachings of Van Der Linden and Shen Wei before him before the effective filing date of the claimed invention, to modify the vessel rinsing apparatus of Van Der Linden to incorporate the longitudinal mounting member (body 3) of Shen Wei. *See* Ex. 1005 at 87.

10. Claim 15

- i. *“The vessel rinsing apparatus of claim 11, wherein the drain bowl is defined by an escutcheon.”*

Van Der Linden discloses a drain bowl (**cup shaped container 31**) defined by an escutcheon. The ‘277 Patent defines an escutcheon as including an upwardly extending wall, a lower wall, and a drain channel. *See* Ex. 1001 at 5:40-53. The **cup shaped container 31**, including **slightly concave bottom 32**, **upright wall 33**, and **outlet opening 34**, defines as escutcheon. *See* Ex. 1006 at [0033].

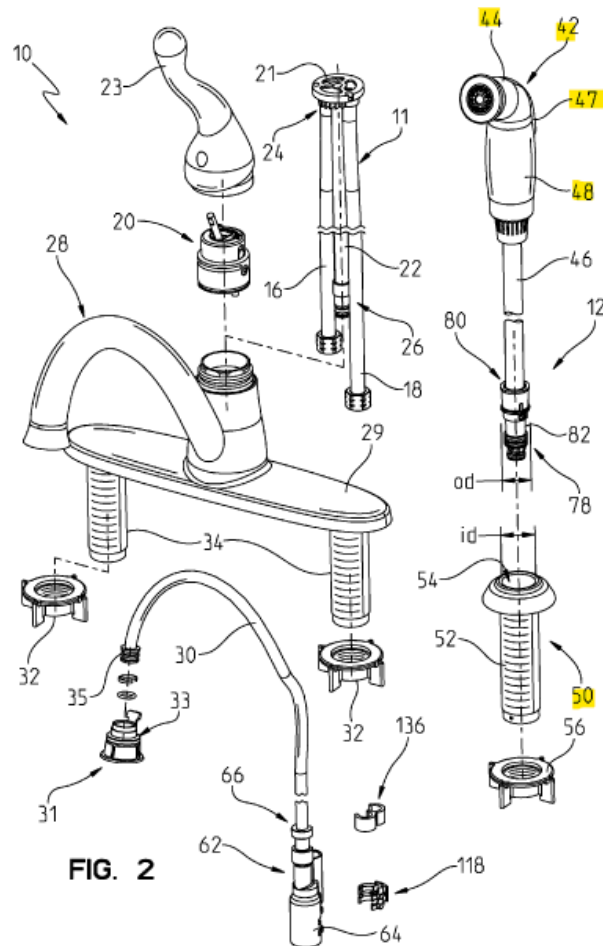
B. Ground 2: Thomas in View of Van Der Linden

Under 35 U.S.C. § 103, Claims 1-7, 10-17, 20-21, and 23-24 are unpatentable over Thomas in view of Van Der Linden. Thomas is prior art under 35 U.S.C. § 102(a) based on its earliest effective filing date of May 21, 2008 and/or publication date of March 17, 2011. Thomas was disclosed by the Applicant in an IDS during prosecution of the ‘035 Application, and was the primary basis of several claim rejections under 35 U.S.C. § 103. Of note, Thomas was assigned to the Patent Owner on February 24, 2015 from Masco Corporation of Indiana. *See* Reel/frame 035168/0845.

1. Claim 1

- i. *“A vessel rinsing apparatus” (preamble)*

To the extent the preamble is limiting, Thomas discloses a vessel rinsing apparatus (**a side sprayer assembly 42**, **auxiliary fluid dispenser**, **fluid delivery**

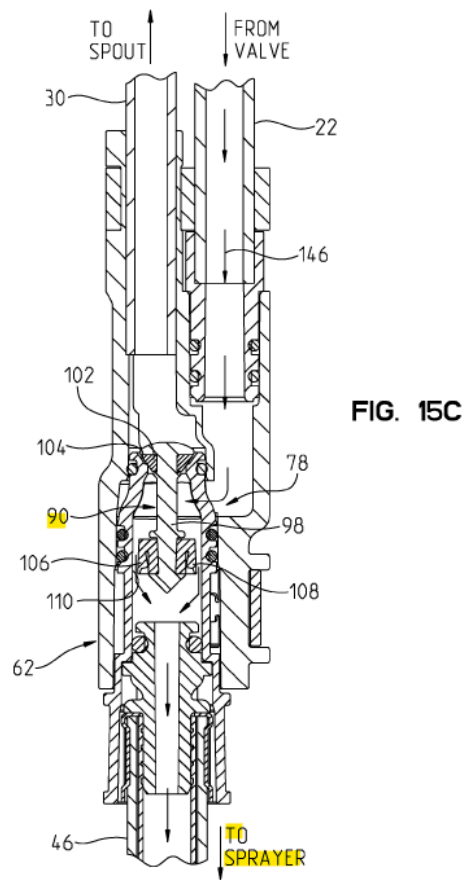


- iv. *“a valve member operably coupled to the fluid discharge member and configured to control water flow through the central body to the plurality of nozzles in response to movement of the trigger”*

Thomas discloses a valve member (**valve member 90**) operably coupled to the fluid discharge member (**sprayer assembly 42**) and configured to control water flow through the central body (**body 48 via sprayer tube 46**) to the plurality of nozzles (**handheld sprayer 44**) in response to movement of the trigger (**trigger 47**).

Thomas explains the water flow mechanism as follows: “A **valve member 90** is...

configured to move relative thereto to control the flow of water...” Ex. 1008 at [0040]. Further, the “**valve member 90** may operate in a known manner in response to differential water pressure changes... FIG. 8C shows the **valve member 90** in a **sprayer delivery position.**” *Id.* at [0041]. “The water 146 flows... out the **sprayer tube 46** (FIG. 15C)” if “the **sprayer trigger 47** has been actuated.” *Id.* at [0045]; see Fig. 15C below:



- v. *“a drain bowl operably coupled to the mounting member, the drain bowl including a lower wall, an upwardly extending wall operably coupled to the lower wall, and a drain channel extending through the upwardly extending wall, the drain channel configured to receive water from the drain bowl and discharge water above and into a sink basin supported by the mounting deck.”*

Van Der Linden discloses a drain bowl (**cup shaped container 31**) operably coupled to the mounting member (**base 28**). *See* Ex. 1006 at [0033]. Van Der Linden further discloses a drain bowl (**cup shaped container 31**) including a lower wall (**slightly concave bottom 32**), an upwardly extending wall (**upright wall 33**) operably coupled to the lower wall, and a drain channel (**outflow opening 34**) extending through the upwardly extending wall. *See id.* & Fig. 2.

Van Der Linden further discloses a drain channel (**outflow opening 34, 79**) configured to receive water from the drain bowl (**cup shaped container 31**) and discharge water above and into a sink basin (**drip tray 36, sink 77**) supported by a mounting deck (**worktop 4, column 2**). *See* Ex. 1006 at [0033], [0035], [0039] & Fig. 5. In the opinion of Mr. Cook, there are a very limited number of ways to remove water from a bowl shape: either via a hole in the bottom or a gap in the side. Ex. 1005 at 94. It is obvious to anyone with ordinary skill in the art that either solution is required to move water from the rinser to the sink basin or another drain area. *Id.*

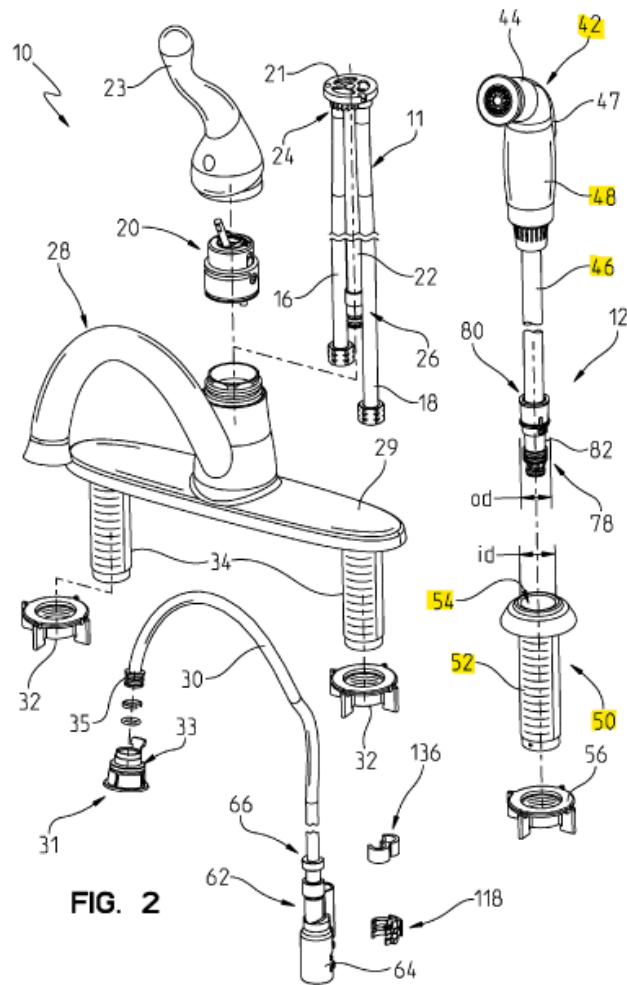
In the expert opinion of Mr. Cook, it would have been obvious to one having ordinary skill in the art, having the teachings of Thomas and Van Der Linden before

him before the effective filing date of the claimed invention, to modify the vessel rinsing apparatus of Thomas to incorporate the cup shaped container of Van Der Linden. Ex. 1005 at 97.

2. Claim 2

- i. *“The vessel rinsing apparatus of claim 1, wherein the mounting member comprises a mounting shank defining an opening extending along the longitudinal axis, and the central body of the fluid discharge member is received within the opening of the mounting shank and movable along the longitudinal axis.”*

Thomas discloses a mounting member (**mounting base 50**) comprising a mounting shank (**mounting shank or post 52**) defining an opening (**passageway 54**) extending along a longitudinal axis and the central body (**body 48 via sprayer outlet tube 46**) of the fluid discharge member (**sprayer assembly 42**) is received within the opening of the mounting shank and movable along the longitudinal axis. Thomas explains that the “**mounting base 50** includes a **mounting shank or post 52** defining a **passageway 54** to **slidably receive the sprayer outlet tube 46.**” Ex. 1008 at [0033]; *see* Fig. 2 below:



3. Claim 3

- i. “The vessel rinsing apparatus of claim 2, wherein the lower wall includes an opening through which the mounting shank extends.”

Van Der Linden discloses the lower wall (**slightly concave bottom 32**) including an opening (**shown in red**) through which the mounting shank (generally, **base 28**) extends. See Ex. 1006 at Fig. 2 (annotated) *supra*. In the opinion of Mr. Cook, it would have been obvious to one having ordinary skill in the art, having the teachings of Thomas and Van Der Linden before him before the effective filing date

of the claimed invention, to modify the vessel rinsing apparatus of Thomas to incorporate the claimed cup shaped container with a concave bottom including an opening through which the mounting shank extends of Van Der Linden. Ex. 1005 at 99.

4. Claim 4

- i. *“The vessel rinsing apparatus of claim 1, wherein the drain bowl is defined by an escutcheon.”*

Van Der Linden discloses a drain bowl (**cup shaped container 31**) defined by an escutcheon. The ‘277 Patent defines an escutcheon as including an upwardly extending wall, a lower wall, and a drain channel. *See* Ex. 1001 at 5:40-53. The **cup shaped container 31**, including **slightly concave bottom 32**, **upright wall 33**, and **outlet opening 34**, defines as escutcheon. *See* Ex. 1006 at [0033].

5. Claim 5

- i. *“The vessel rinsing apparatus of claim 1, wherein the drain channel slopes away from the fluid discharge member and the drain bowl.”*

Van Der Linden discloses a drain channel (**outflow opening 34**) sloped away from a fluid discharge member (**spray nozzle body 23**) and a drain bowl (**cup shaped container 31**). *See* Ex. 1006 at [0035] & Fig. 2. In the expert opinion of Mr. Cook, it would have been obvious to one having ordinary skill in the art, having the teachings of Thomas and Van Der Linden before him before the effective filing date of the claimed invention, to modify the vessel rinsing apparatus of Thomas to

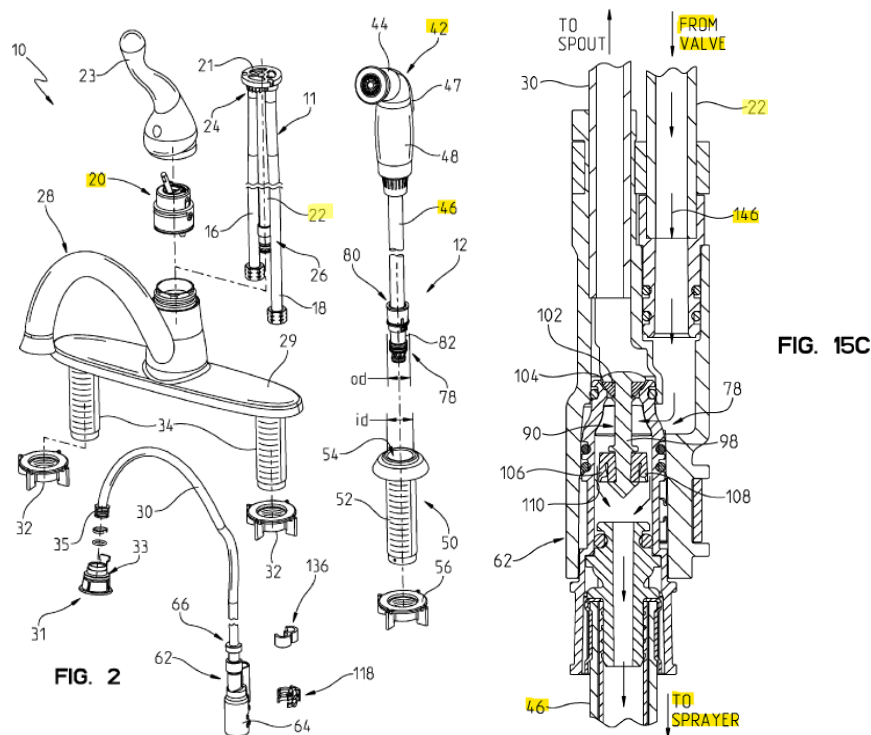
incorporate the sloped outflow opening of Van Der Linden. Ex. 1005 at 101. Thomas explicitly teaches substituting other known fluid delivery devices for the auxiliary fluid dispenser shown. *See* Ex. 1008 at [0033]. Water naturally flows from a high point to a low point due to gravity. Ex. 1005 at 101. Using gravity to assist that a sloped bowl provides for draining water is a trivial design feature. *Id.* In Mr. Cook’s opinion, it would have been obvious to combine the slopped outflow opening of Van Der Linden with Thomas to predictably facilitate drainage from the drain bowl into the sink. *Id.*

6. Claim 6

- i. *“The vessel rinsing apparatus of claim 1, wherein the fluid discharge member is in selective fluid communication with an outlet of a faucet mixing valve.”*

Thomas discloses a fluid discharge member (**sprayer assembly 42** via **sprayer outlet tube 46**) in selective fluid communication with an outlet of a faucet mixing valve (**inlet tube 22** of **mixing valve 20**). Thomas explains the selective fluid communication between the outlet of the mixing valve and the fluid discharge member as: “A user input, illustratively a handle 23, is operably coupled to the **mixing valve 20** to control the flow rate and the temperature of water delivered to the mixed water **inlet tube 22**.” Ex. 1008 at [0031]. Further, the “auxiliary fluid dispenser, illustratively a **sprayer assembly 42** includes a handheld sprayer 44 **fluidly coupled to... sprayer outlet tube 46**.” *Id.* at [0033]. Thomas explains the

connection: “The water 146 flows in from the **valve 20** into the center portion of the diverter stem 98 and either exits out... the **sprayer tube 46** (FIG. 15C)” if “the sprayer trigger 47 has been actuated.” *Id.* at [0045]; *see* Figs. 2 & 15C below:



7. Claim 7

- i. “The vessel rinsing apparatus of claim 6, further comprising a diverter valve fluidly coupled intermediate the outlet of the faucet mixing valve and the fluid discharge member.”

Thomas discloses a diverter valve (**diverter valve 78**) fluidly coupled intermediate the outlet of the faucet mixing valve (**inlet tube 22 of mixing valve 20**) and the fluid discharge member (**sprayer assembly 42 via sprayer outlet tube 46**). Thomas explains the positioning of the diverter valve: “With reference to FIGS. 3-

discharge member (**spray nozzle body 23**) including a plurality of arms extending radially outwardly from the central body of the fluid discharge member (**cross-shaped**). *See* Ex. 1006 at [0031] & Fig. 1.

In the expert opinion of Mr. Cook, it would have been obvious to one having ordinary skill in the art, having the teachings of Thomas and Van Der Linden before him before the effective filing date of the claimed invention, to modify the vessel rinsing apparatus of Thomas to incorporate the cross-shaped abutment member of Van Der Linden. Ex. 1005 at 105. In Mr. Cook's opinion, a single arm or point of contact on the trigger would provide an unstable method of activation by pressing with a round piece of glassware. *Id.* Such a design would require users to spend extra time to ensure no unwanted splashing or even damage to the glassware occurred. *Id.* Basic design principles state that to make stable contact with a plane, like that created by the rim of a glass or container, requires at least 3 points of contact, or arms in this case. *Id.* In my opinion, it would have been obvious to combine the cross-shaped abutment member of Van Der Linden with Thomas to predictably improve the trigger mechanism of the auxiliary fluid dispenser for specific use with glasses. *Id.* Moreover, this design feature is well known in the field and is disclosed in numerous prior art references, such as Shen Wei and Boursier. *Id.*

9. Claim 11

i. “A vessel rinsing apparatus” (preamble)

To the extent the preamble is limiting, Thomas discloses a vessel rinsing apparatus (**a side sprayer 42/auxiliary fluid dispenser/fluid delivery device**). See Ex. 1008 at [0002], [0033] & Fig. 2.

ii. “a drain bowl including a lower wall, an upwardly extending wall operably coupled to the lower wall, and a drain channel extending through the upwardly extending wall, the drain channel configured to receive water from the drain bowl and discharge water above and into a sink basin supported by a mounting deck”

Van Der Linden discloses a drain bowl (**cup shaped container 31**) including a lower wall (**slightly concave bottom 32**), an upwardly extending wall (**upright wall 33**) operably coupled to the lower wall, and a drain channel (**outflow opening 34**) extending through the upwardly extending wall. See Ex. 1006 at [0033] & Fig. 2.

Van Der Linden further discloses a drain channel (**outflow opening 34, 79**) configured to receive water from the drain bowl (**cup shaped container 31**) and discharge water above and into a sink basin (**drip tray 36, sink 77**) supported by a mounting deck (worktop 4, column 2). See Ex. 1006 at [0033], [0035], [0039], Fig. 2 & Fig. 5). In the opinion of Mr. Cook, there exists a very limited number of ways to remove water from a stationary bowl shape that are well-known: either a hole in

the bottom or a gap in the side. Ex. 1005 at 108. It is obvious to anyone with ordinary skill in the art that either solution is required to move water from the rinser to the sink basin or other drain area. *Id.*

In the opinion of Mr. Cook, it would have been obvious to one having ordinary skill in the art, having the teachings of Thomas and Van Der Linden before him before the effective filing date of the claimed invention, to modify the vessel rinsing apparatus of Thomas to incorporate the cup shaped container of Van Der Linden. *See* Ex. 1005 at 109.

- iii. *“a mounting member operably coupled to the drain bowl, the mounting member configured to couple the drain bowl to the mounting deck”*

Thomas discloses a mounting member (**mounting base 50**) operably coupled to an auxiliary fluid dispenser (**spray assembly 42**), *i.e.*, the drain bowl (**cup shaped container 31** of Van Der Linden), the mounting member configured to couple the drain bowl to the mounting deck (**mounting deck 4**). *See* Ex. 1008 at [0033] & Fig. 1.

- iv. *“a fluid discharge member including a central body supporting a plurality of nozzles and a trigger, the central body being movable relative to the mounting member”*

Thomas discloses a fluid discharge member (**sprayer assembly 42**) with a central body (**body 48**) supporting a plurality of nozzles (**handheld sprayer 44**) and a trigger (**trigger 47**), the central body (**body 48, sprayer outlet tube 46**) being

moveable relative to the mounting member (**mounting base 50**). *See* Ex. 1008 at [0033] & Fig. 2.

- v. *“a valve member operably coupled to the fluid discharge member and configured to control water flow through the central body to the plurality of nozzles”*

Thomas discloses a valve member (**valve member 90**) operably coupled to the fluid discharge member (**sprayer assembly 42**) and configured to control water flow through the central body (**body 48 via the sprayer tube 46**) to the plurality of nozzles (**handheld sprayer 44**). *See* Ex. 1008 at [0040], [0041], [0045] & Fig. 15C.

- vi. *“wherein the drain channel slopes away from the fluid discharge member and the drain bowl to facilitate water drainage into the sink basin”*

Van Der Linden further discloses wherein a drain channel (**outflow opening 34, 79**) slopes away from a fluid discharge member (**spray nozzle body 23**) and a drain bowl (**cup shaped container 31**) to facilitate water drainage into the sink basin (**recessed part 35/sink 77**). *See* Ex. 1006 at [0035]. In the opinion of Mr. Cook, the outflow opening 34,79 is sloped away from the spray nozzle body 23 and container 31 to facilitate the outflow of water under the force of gravity into the recessed part 35, *i.e.*, the sink 77, as best shown in Figs. 2 & 5.

In the opinion of Mr. Cook, it would have been obvious to one having ordinary skill in the art, having the teachings of Thomas and Van Der Linden before him before the effective filing date of the claimed invention, to modify the vessel rinsing

apparatus of Thomas to incorporate the sloped outflow opening of Van Der Linden.

See Ex. 1005 at 114.

10. Claim 12

- i. *“The vessel rinsing apparatus of claim 11, wherein the mounting member extends along a longitudinal axis, the mounting member configured to extend through a mounting aperture formed within the mounting deck.”*

Thomas discloses a mounting member (**mounting base 50**) extending along a longitudinal axis, the mounting member configured to extend through a mounting aperture (**nut 56**) within the mounting deck (**mounting deck 4**). See Ex. 1008 at [0033], Figs. 1 & 2.

11. Claim 13

- i. *“The vessel rinsing apparatus of claim 12, wherein the mounting member comprises a mounting shank defining an opening extending along the longitudinal axis, and the central body of the fluid discharge member is received within the opening of the mounting shank and movable along the longitudinal axis.”*

Thomas discloses a mounting member (**mounting base 50**) comprising a mounting shank (**mounting shank or post 52**) defining an opening (**passageway 54**) extending along a longitudinal axis, and the central body (**body 48 via sprayer outlet tube 46**) of the fluid discharge member (**sprayer assembly 42**) is received within the opening of the mounting shank and movable along the longitudinal axis. See Ex. 1008 at [0033] & Fig. 2.

12. Claim 14

- i. “The vessel rinsing apparatus of claim 11, wherein the valve member comprises a valve shaft configured to move with the trigger.”

Thomas discloses a valve member (**valve member 90**) comprising a valve shaft (**poppet or stem 98**) configured to move with the trigger (**sprayer trigger 47**). In Thomas, the “**valve member 90** of the diverter valve 78 includes a **poppet or stem 98 movably supported...**” Ex. 1008 at [0041]. Further, “water 146 flows in from the valve 20 into the center portion of the diverter **stem 98** and... out the sprayer tube 46 (FIG. 15C)” if “the **sprayer trigger 47** has been actuated.” *Id.* at [0045] and Fig. 15C.

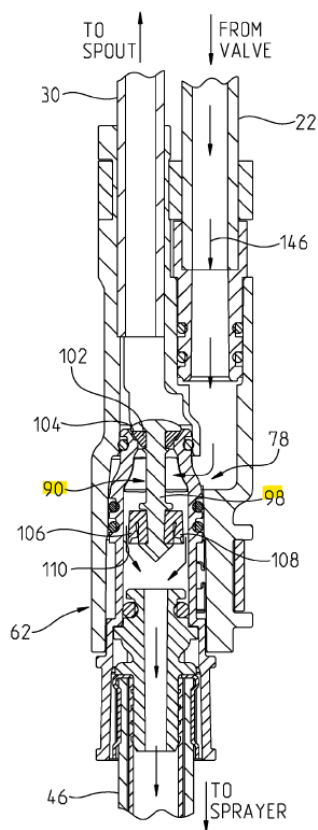


FIG. 15C

13. Claim 15

- i. *“The vessel rinsing apparatus of claim 11, wherein the drain bowl is defined by an escutcheon.”*

Van Der Linden discloses a drain bowl (**cup shaped container 31**) defined by an escutcheon. The ‘277 Patent defines an escutcheon as including an upwardly extending wall, a lower wall, and a drain channel. *See* Ex. 1001 at 5:40-53. The **cup shaped container 31**, including **slightly concave bottom 32**, **upright wall 33**, and **outlet opening 34**, define as escutcheon. *See* Ex. 1006 at [0033].

14. Claim 16

- i. *“The vessel rinsing apparatus of claim 11, wherein the fluid discharge member is in selective fluid communication with an outlet of a faucet mixing valve.”*

Thomas discloses a fluid discharge member (**sprayer assembly 42 via sprayer outlet tube 46**) in selective fluid communication with an outlet of a faucet mixing valve (**inlet tube 22 of mixing valve 20**). *See* Ex. 1008 at [0031], [0033], [0045], Figs. 2 & 15C.

15. Claim 17

- i. *“The vessel rinsing apparatus of claim 16, further comprising a diverter valve fluidly coupled intermediate the outlet of the faucet mixing valve and the fluid discharge member.”*

Thomas discloses a diverter valve (**diverter valve 78**) fluidly coupled intermediate the outlet of the faucet mixing valve (**inlet tube 22 of mixing valve 20**) and the fluid discharge member (**sprayer assembly 42 via sprayer outlet tube 46**).

See Ex. 1008 at [0040], [0045], Figs. 13 & 14.

16. Claim 20

i. “A fluid delivery device” (preamble)

To the extent that the preamble is limiting, Thomas discloses a fluid delivery device. “The present disclosure provides a diverter assembly configured to be connected to a faucet assembly that may be installed on a sink deck. The diverter assembly includes a diverter and an auxiliary fluid dispenser, such as a side sprayer or a filtered water dispenser. The diverter assembly is illustratively coupled to a tube which, in turn, is coupled to the delivery spout outlet of the faucet. The diverter assembly may redirect flow from the delivery spout outlet of the faucet to the auxiliary fluid dispenser upon activation of the auxiliary fluid dispenser.” Ex. 1008 at [0003].

ii. “a vessel rinsing apparatus”

Thomas discloses a vessel rinsing apparatus (**a side sprayer 42/auxiliary fluid dispenser/fluid delivery device**). See Ex. 1008 at [0002], [0033] & Fig. 2.

iii. “a drain bowl including a lower wall and an upwardly extending wall, and a drain channel extending through the upwardly extending wall, the drain channel configured to receive water from the drain bowl and discharge water above and into a sink basin supported by a mounting deck”

Van Der Linden discloses a drain bowl (**cup shaped container 31**) including a lower wall (**slightly concave bottom 32**), an upwardly extending wall (**upright**

wall 33), and a drain channel (**outflow opening 34**) extending through the upwardly extending wall. *See* Ex. 1006 at [0033] & Fig. 2.

Van Der Linden further discloses a drain channel (**outflow opening 34, 79**) configured to receive water from the drain bowl (**cup shaped container 31**) and discharge water above and into a sink basin (**drip tray 36, sink 77**) supported by a mounting deck (**worktop 4, column 2**). *See* Ex. 1006 at [0033], [0035], [0039], Fig. 2 & Fig. 5). In the opinion of Mr. Cook, there are a very limited number of ways to remove water from a bowl shape: a hole in the bottom or a gap in the side. Ex. 1005 at 124. It is obvious to anyone with ordinary skill in the art that either solution is required to move water from the rinser to the sink basin or another drain area. *Id.*

In the opinion of Mr. Cook, it would have been obvious to one having ordinary skill in the art, having the teachings of Thomas and Van Der Linden before him before the effective filing date of the claimed invention, to modify the vessel rinsing apparatus of Thomas to incorporate the cup shaped container of Van Der Linden. *See* Ex. 1005 at 125.

iv. *“a mounting member operably coupled to the drain bowl, the mounting member configured to couple the drain bowl to the mounting deck”*

Thomas discloses a mounting member (**mounting base 50**) operably coupled to an auxiliary fluid dispenser (**spray assembly 42**), *i.e.*, the drain bowl (**cup shaped container 31** of Van Der Linden), the mounting member configured to couple the

drain bowl to the mounting deck (**mounting deck 4**). See Ex. 1008 at [0033] & Fig.

1.

- v. *“a fluid discharge member including a central body supporting a plurality of nozzles and a trigger, the central body being movable relative to the mounting member”*

Thomas discloses a fluid discharge member (**sprayer assembly 42**) with a central body (**body 48**) supporting a plurality of nozzles (**handheld sprayer 44**) and a trigger (**trigger 47**), the central body (**body 48, sprayer outlet tube 46**) being moveable relative to the mounting member (**mounting base 50**). See Ex. 1008 at [0033] & Fig. 2.

- vi. *“a valve member operably coupled to the fluid discharge member and configured to control water flow through the central body to the plurality of nozzles”*

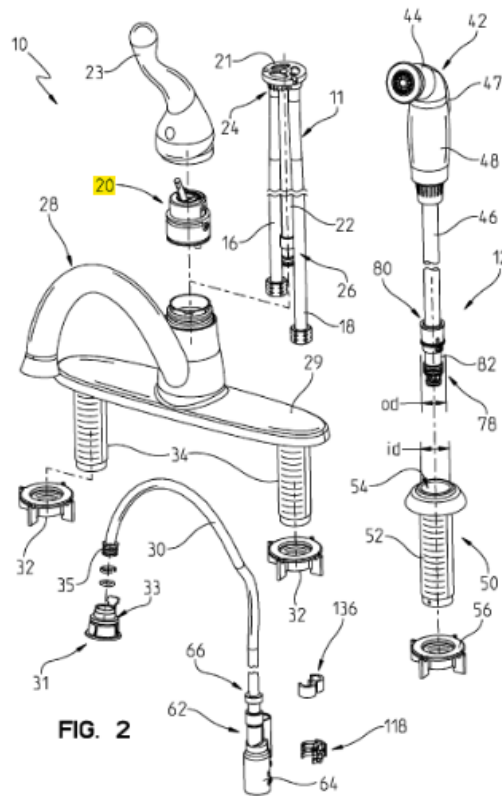
Thomas discloses a valve member (**valve member 90**) operably coupled to the fluid discharge member (**sprayer assembly 42**) and configured to control water flow through the central body (**body 48 via the sprayer tube 46**) to the plurality of nozzles (**handheld sprayer 44**). See Ex. 1008 at [0040], [0041], [0045] & Fig. 15C.

- vii. *“a faucet”*

Thomas discloses a faucet (**faucet assembly 10**). “[A] sink assembly 2 is shown as including a sink or mounting deck 4 supporting an illustrative **faucet assembly 10** above a sink basin 6.” Ex. 1008 at [0031]; see Fig. 1.

- iv. “a valve fluidly coupled to the delivery spout, the valve configured to control water flow to the water outlet”

Thomas discloses a valve (**mixing valve 20**) fluidly coupled to the delivery spout (**delivery spout 28**), the valve (**mixing valve 20**) configured to control water flow to the water outlet (**outlet 31**). “Operation of the **mixing valve 20** regulates the flow of water... A user input, illustratively a handle 23, is operably coupled to the **mixing valve 20** to control the flow rate and the temperature of water delivered to the mixed water inlet tube 22.” Ex. 1008 at [0031]; see Fig. 2 below.



- v. “wherein the fluid discharge member of the vessel rinsing apparatus is in selective fluid communication with the valve of the faucet”

Thomas discloses wherein a fluid discharge member (**sprayer assembly 42**)

of a vessel rinsing apparatus is in selective fluid communication with the valve of the faucet (**mixing valve 20**). In Thomas, the fluid discharge member is in selective fluid communication with the valve of the faucet via the diverter assembly 12 via the sprayer tube 46. Thomas explains that the “water 146 flows in from the **valve 20** into the center portion of the **diverter stem 98** and either exits out the spout outlet tube 30 (FIG. 15B) or out the **sprayer tube 46** (FIG. 15C), depending on whether the sprayer trigger 47 has been actuated.” Ex. 1008 at [0045]; see Fig. 15C.

17. Claim 21

- i. *“The fluid delivery device of claim 20, further comprising a diverter valve fluidly coupled intermediate the valve of the faucet and the fluid discharge member of the vessel rinsing apparatus.”*

Thomas discloses a diverter valve (**diverter valve 78**) fluidly coupled intermediate the outlet of the faucet mixing valve (**inlet tube 22 of mixing valve 20**) and the fluid discharge member (**sprayer assembly 42 via sprayer outlet tube 46**). See Ex. 1008 at [0040], [0045], Figs. 13 & 14.

18. Claim 23

- i. *“The vessel rinsing apparatus of claim 20, wherein the mounting member extends along a longitudinal axis, the mounting member configured to extend through a mounting aperture formed within the mounting deck.”*

Thomas discloses a mounting member (**mounting base 50**) extending along a longitudinal axis, the mounting member configured to extend through a mounting

aperture (**nut 56**) within the mounting deck (**mounting deck 4**). *See* Ex. 1008 at [0033], Figs. 1 & 2.

19. Claim 24

- i. *“The vessel rinsing apparatus of claim 23, wherein the mounting member comprises a mounting shank defining an opening extending along the longitudinal axis, and the central body of the fluid discharge member is received within the opening of the mounting shank and movable along the longitudinal axis.”*

Thomas discloses a mounting member (**mounting base 50**) comprising a mounting shank (**mounting shank or post 52**) defining an opening (**passageway 54**) extending along a longitudinal axis, and the central body (**body 48 via sprayer outlet tube 46**) of the fluid discharge member (**sprayer assembly 42**) is received within the opening of the mounting shank and movable along the longitudinal axis. *See* Ex. 1008 at [0033] & Fig. 2.

C. Ground 3: Thomas in View of Boursier and Hotaling

Under 35 U.S.C. § 103, Claims 1-2, 5-7, 10-14, 16-17, 20-21, and 23-24 are unpatentable over Thomas in view of Boursier and Hotaling. Boursier is prior art under 35 U.S.C. § 102(a) based on its publication date of May 20, 1988. Boursier was not previously cited by the Applicant in any IDS nor by the examiner during prosecution. Hotaling is prior art under 35 U.S.C. § 102(a) based on its publication date of August 16, 2012. Hotaling was not previously cited by the Applicant in any IDS nor by the examiner during prosecution.

1. Claim 1

i. “A vessel rinsing apparatus” (preamble)

To the extent the preamble is limiting, Thomas discloses a vessel rinsing apparatus (**a side sprayer 42/auxiliary fluid dispenser/fluid delivery device**). See Ex. 1008 at [0002], [0033] & Fig. 2.

ii. “a mounting member extending along a longitudinal axis, the mounting member configured to extend through a mounting aperture formed within a mounting deck”

Thomas discloses a mounting member (**mounting base 50**) extending along a longitudinal axis configured to extend through a mounting aperture (**nut 56**) formed within a mounting deck (**mounting deck 4**). See Ex. 1008 at [0033] & Figs. 1 & 2.

iii. “a fluid discharge member including a central body supporting a plurality of nozzles and a trigger, the central body being movable relative to the mounting member”

Thomas discloses a fluid discharge member (**sprayer assembly 42**) with a central body (**body 48**) supporting a plurality of nozzles (**handheld sprayer 44**) and a trigger (**trigger 47**), the central body (**body 48**) being moveable relative to the mounting member (**mounting base 50**). See Ex. 1008 at [0033] & Fig. 2.

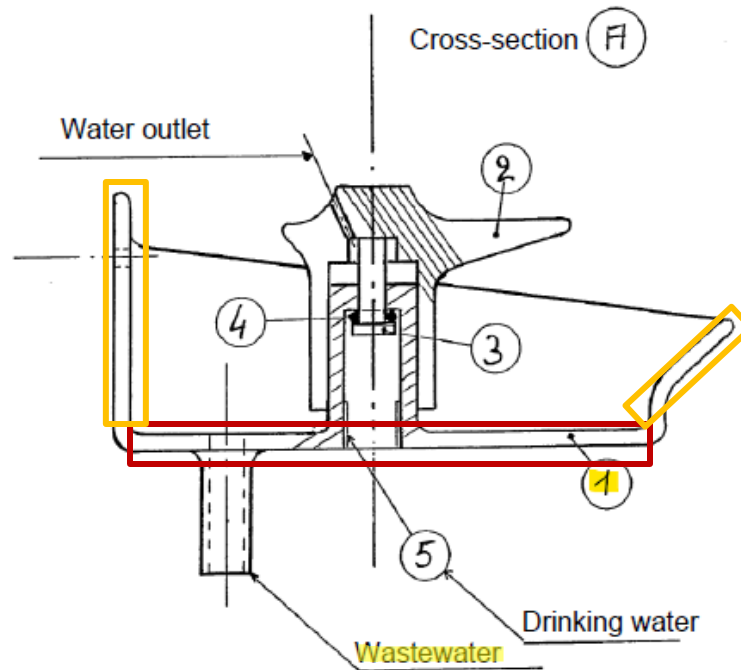
iv. “a valve member operably coupled to the fluid discharge member and configured to control water flow through the central body to the plurality of nozzles in response to movement of the trigger”

Thomas discloses a valve member (**valve member 90**) operably coupled to

the fluid discharge member (**sprayer assembly 42**) and configured to control water flow through the central body (**body 48 via sprayer tube 46**) to the plurality of nozzles (**handheld sprayer 44**) in response to movement of the trigger (**trigger 47**). See Ex. 1008 at [0040], [0041], [0045] & Fig. 15C.

- v. *“a drain bowl operably coupled to the mounting member, the drain bowl including a lower wall, an upwardly extending wall operably coupled to the lower wall, and a drain channel extending through the upwardly extending wall, the drain channel configured to receive water from the drain bowl and discharge water above and into a sink basin supported by the mounting deck.”*

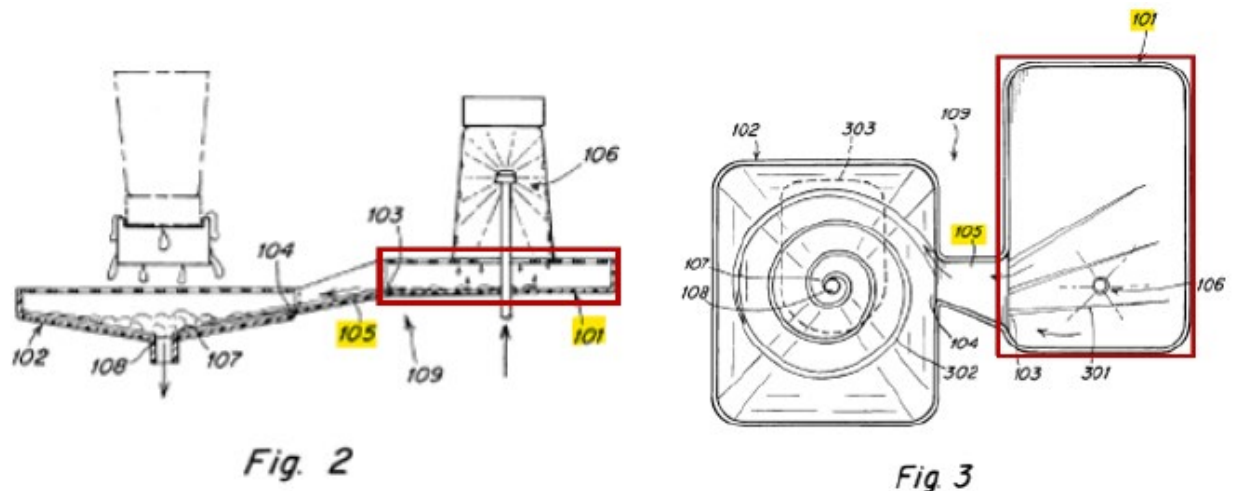
Boursier discloses a drain bowl (**tray or reservoir 1**) including a lower wall (**shown in red below**), an upwardly extending wall (**shown in orange below**) operably coupled to the lower wall, and a drain channel (**drain 7, wastewater outlet**) configured to receive water from the drain bowl and discharge water. Boursier explains that the “small **tray** contains the drinking water and **wastewater connections**.” Ex. 1009 at 1. The **tray/reservoir 1** of Boursier is best shown in Fig. A (annotated) below:



Boursier does not explicitly disclose mounting the tray/reservoir 1 to a mounting member. However, Boursier does teach that the tray 1 is “itself fastened to a wall or other partition by means of two screws.” *Id.* at 1. In the opinion of Mr. Cook, it would have been obvious to one having ordinary skill in the art to combine the mounting base 50 of Thomas with the tray/reservoir 1 of Boursier to provide a mounting method for deck installation with minimal and standard parts. Ex. 1005 at 142.

Boursier further does not explicitly disclose a drain channel extending through an upwardly extending wall. However, Boursier does disclose a drain 7 or wastewater: “The small tray contains the drinking water and wastewater connections.” Ex. 1009 at 1. Boursier also discloses an upwardly extending wall. *See*

Fig. A (annotated) *supra*. Hotaling discloses a drain channel (**trough 105, passage**) extending through an upwardly extending wall (**shown in red below**) of a drain bowl (**water collection tray 101**). Hotaling explains that “the rinse station **water collection tray, 101**, is connected to a high point, 104, in the drip tray, 102, by a **continuous trough, 105**, through which water is conducted from the rinse station, 106, to the drip tray, 102.” Ex. 1010 at [0018]. In Hotaling, the drip tray 102 is analogous to a sink basin. *See* Figs. 2 & 3 (annotated) below:



In the expert opinion of Mr. Cook, it would have been obvious to one having ordinary skill in the art to combine the drain channel and upwardly extending wall of Boursier with the drain channel extending through the upwardly extending wall of Hotaling to predictably improve water drainage into a sink basin. Ex. 1005 at 144. In Mr. Cook’s opinion, this is an obvious adaptation of the wall/partition mount of Boursier and the appliance mount of Hotaling to the deck mount feature of this

design. *Id.* The bowl is mounted above the sink basin and drains with the aid of gravity and the water is directed by the simplest and most obvious change in the geometry to direct the water properly. *Id.*

2. Claim 2

- i. *“The vessel rinsing apparatus of claim 1, wherein the mounting member comprises a mounting shank defining an opening extending along the longitudinal axis, and the central body of the fluid discharge member is received within the opening of the mounting shank and movable along the longitudinal axis.”*

Thomas discloses the mounting member (**mounting base 50**) comprising a mounting shank (**mounting shank or post 52**) defining an opening (**passageway 54**) extending along a longitudinal axis and the central body (**body 48 via sprayer outlet tube 46**) of the fluid discharge member (**sprayer assembly 42**) is received within the opening of the mounting shank and movable along the longitudinal axis. See Ex. 1008 at [0033] & Fig. 2.

3. Claim 5

- i. *The vessel rinsing apparatus of claim 1, wherein the drain channel slopes away from the fluid discharge member and the drain bowl.*

Hotaling discloses a drain channel (**trough 105, passage**) sloped away from a fluid discharge member (**rinse station 106**) and a drain bowl (**water collection tray 101**). Hotaling explains that the “lowest point, 103, in the rinse station **water collection tray, 101**, is connected to a high point, 104, in the drip tray, 102, by a

continuous **trough, 105**, through which water is conducted from the **rinse station, 106**, to the drip tray, 102.” Ex. 1010 at [0018]. In this regard, the trough 105 is sloped away from the rinse station 106 and tray 101 to facilitate the flow of water to the lower drip tray 102. *See* Figs. 2 & 3.

In the expert opinion of Mr. Cook, it is fundamental that water naturally flows from a high point to a low point due to gravity. Ex. 1005 at 147. Using gravity to assist draining water with a sloped surface is a trivial design feature. *Id.* In Mr. Cook’s opinion, it would have been obvious to one having ordinary skill in the art, having the teachings of Boursier and Hotaling before him before the effective filing date of the claimed invention, to modify the drain bowl of Boursier to incorporate the sloped trough of Hotaling to predictably facilitate drainage from the drain bowl into a sink basin. *Id.*

4. Claim 6

- i. *“The vessel rinsing apparatus of claim 1, wherein the fluid discharge member is in selective fluid communication with an outlet of a faucet mixing valve.”*

Thomas discloses a fluid discharge member (**sprayer assembly 42 via sprayer outlet tube 46**) in selective fluid communication with an outlet of a faucet mixing valve (**inlet tube 22 of mixing valve 20**). *See* Ex. 1008 at [0033], [0045], Figs. 2 & 15C.

5. Claim 7

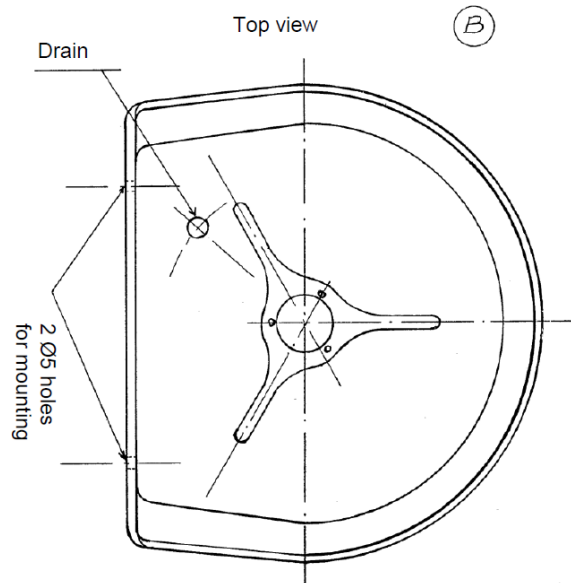
- i. *“The vessel rinsing apparatus of claim 6, further comprising a diverter valve fluidly coupled intermediate the outlet of the faucet mixing valve and the fluid discharge member.”*

Thomas discloses a diverter valve (**diverter valve 78**) fluidly coupled intermediate the outlet of the faucet mixing valve (**inlet tube 22 of mixing valve 20**) and the fluid discharge member (**sprayer assembly 42 via sprayer outlet tube 46**). See Ex. 1008 at [0040], [0045], Figa. 13 & 14.

6. Claim 10

- i. *“The vessel rinsing apparatus of claim 1, wherein the trigger of the fluid discharge member includes a plurality of arms extending radially outwardly from the central body of the fluid discharge member.”*

Boursier further discloses a trigger (**3-branch pusher 2**) of a fluid discharge member (**drinking water outlet 6**) including a plurality of arms extending radially outwardly from the central body of the fluid discharge member (**three 120° branches**). Boursier explains that “the molded **pusher [2]** comprises **three 120° branches** on which the edge of the glass rests.” Ex. 1009 at 2; see Fig. B below.



In the opinion of Mr. Cook, a single arm or point of contact would provide an unstable method of activating the trigger by pressing with a round piece of glassware. Ex. 1005 at 151. A single point of contact would require users to spend extra time to ensure no unwanted splashing or damage to the glassware occurred. *Id.* Basic design principles state that to make stable contact with a plane, like that created by the rim of a glass or container, requires at least 3 points of contact, or arms in this case. *Id.* In Mr. Cook's opinion, it would have been obvious to one having ordinary skill in the art to combine the vessel rinsing apparatus of Thomas with the trigger with a plurality of arms of Boursier to predictably improve the trigger response to circular glasses. *Id.*

7. Claim 11

i. “A vessel rinsing apparatus” (preamble)

To the extent the preamble is limiting, Thomas discloses a vessel rinsing apparatus (**a side sprayer/auxiliary fluid dispenser/fluid delivery device**). See Ex. 1008 at [0002], [0033] & Fig. 2.

ii. “a drain bowl including a lower wall, an upwardly extending wall operably coupled to the lower wall, and a drain channel extending through the upwardly extending wall, the drain channel configured to receive water from the drain bowl and discharge water above and into a sink basin supported by a mounting deck”

Boursier discloses a drain bowl (**tray or reservoir 1**) including a lower wall (**shown in red**), an upwardly extending wall (**shown in orange**) operably coupled to the lower wall, and a drain channel (**drain 7, wastewater outlet**) configured to receive water from the drain bowl and discharge water. See Ex. 1009 at 1 & Fig. A (annotated) *supra*.

Boursier further does not explicitly disclose a drain channel extending through an upwardly extending wall. However, Boursier does disclose a drain 7 or wastewater. Ex. 1009 at 1. Boursier also discloses an upwardly extending wall. See Fig. A (annotated). Hotaling discloses a drain channel (**trough 105, passage**) extending through an upwardly extending wall (**shown in red**) of a drain bowl (**water collection tray 101**). See Ex. 1010 at [0018]. In Hotaling, the drip tray 102

is analogous to a sink basin. *See* Figs. 2 & 3 (annotated) *supra*.

In the expert opinion of Mr. Cook, there are a limited number of ways to remove water from a bowl shape: either a hole in the bottom or a gap in the side wall. Ex. 1005 at 156. Any other solution would require costly and complex motors and pumps to remove water from the rinser. *Id.* In Mr. Cook's opinion, it would have been obvious to one having ordinary skill in the art to combine the drain channel and upwardly extending wall of Boursier with the drain channel extending through the upwardly extending wall of Hotaling to predictably improve water drainage into a sink basin. *Id.*

iii. *“a mounting member operably coupled to the drain bowl, the mounting member configured to couple the drain bowl to the mounting deck”*

Thomas discloses a mounting member (**mounting base 50**) operably coupled to an auxiliary fluid dispenser (**spray assembly 42**), *i.e.*, the tray of Boursier, the mounting member configured to couple the drain bowl to the mounting deck (**mounting deck 4**). *See* Ex. 1008 at [0033] & Fig. 1.

Boursier does not explicitly disclose mounting the tray/reservoir 1 to a mounting member. However, Boursier does teach that the tray 1 is “itself fastened to a wall or other partition by means of two screws.” Ex. 1009 at 1. In Mr. Cook's opinion, it would have been obvious to one having ordinary skill in the art to combine the mounting base 50 of Thomas with the tray/reservoir 1 of Boursier to

provide a mounting method adapted to a deck mount solution by combining the drain bowl mount with the deck mounting member. Ex. 1005 at 154. This has the predictable advantage of reducing part count, complexity, and cost. *Id.*

- iv. *“a fluid discharge member including a central body supporting a plurality of nozzles and a trigger, the central body being movable relative to the mounting member”*

Thomas discloses a fluid discharge member (**sprayer assembly 42**) with a central body (**body 48**) supporting a plurality of nozzles (**handheld sprayer 44**) and a trigger (**trigger 47**), the central body (**body 48**) being moveable relative to the mounting member (**mounting base 50**). *See* Ex. 1008 at [0033] & Fig. 2.

- v. *“a valve member operably coupled to the fluid discharge member and configured to control water flow through the central body to the plurality of nozzles”*

Thomas discloses a valve member (**valve member 90**) operably coupled to the fluid discharge member (**sprayer assembly 42**) and configured to control water flow through the central body (**body 48 via the sprayer tube 46**) to the plurality of nozzles (**handheld sprayer 44**). *See* Ex. 1008 at [0040], [0041], [0045] & Fig. 15C.

- vi. *“wherein the drain channel slopes away from the fluid discharge member and the drain bowl to facilitate water drainage into the sink basin”*

Hotaling discloses a drain channel (**trough 105, passage**) sloped away from a fluid discharge member (**rinse station 106**) and a drain bowl (**water collection tray 101**). Hotaling explains that the “lowest point, 103, in the rinse station **water**

collection tray, 101, is connected to a high point, 104, in the drip tray, 102, by a continuous **trough, 105**, through which water is conducted from the **rinse station, 106**, to the drip tray, 102.” Ex. 1010 at [0018]. In this regard, the trough 105 is sloped away from the rinse station 106 and tray 101 to facilitate the flow of water to the lower drip tray 102. *See* Figs. 2 & 3.

In Mr. Cook’s opinion, it is well known that water naturally flows from a high point to a low point due to gravity. Ex. 1005 at 161. Using gravity to assist draining water is a trivial design feature. *Id.* In Mr. Cook’s opinion, it would have been obvious to one having ordinary skill in the art and basic knowledge of water flow, having the teachings of Boursier and Hotaling before him before the effective filing date of the claimed invention, to modify the drain bowl of Boursier to incorporate the sloped trough of Hotaling to facilitate drainage from the drain bowl into a sink basin. *Id.*

8. Claim 12

- i. *“The vessel rinsing apparatus of claim 11, wherein the mounting member extends along a longitudinal axis, the mounting member configured to extend through a mounting aperture formed within the mounting deck.”*

Thomas discloses a mounting member (**mounting base 50**) extending along a longitudinal axis, the mounting member configured to extend through a mounting aperture (**nut 56**) within the mounting deck (**mounting deck 4**). *See* Ex. 1008 at [0033], Fig. 1 & Fig. 2.

9. Claim 13

- i. *“The vessel rinsing apparatus of claim 12, wherein the mounting member comprises a mounting shank defining an opening extending along the longitudinal axis, and the central body of the fluid discharge member is received within the opening of the mounting shank and movable along the longitudinal axis.”*

Thomas discloses the mounting member (**mounting base 50**) comprising a mounting shank (**mounting shank or post 52**) defining an opening (**passageway 54**) extending along a longitudinal axis, and the central body (**body 48 via sprayer outlet tube 46**) of the fluid discharge member (**sprayer assembly 42**) is received within the opening of the mounting shank and movable along the longitudinal axis. See Ex. 1008 at [0033] & Fig. 2.

10. Claim 14

- i. *“The vessel rinsing apparatus of claim 11, wherein the valve member comprises a valve shaft configured to move with the trigger.”*

Thomas discloses a valve member (**valve member 90**) comprising a valve shaft (**poppet or stem 98**) configured to move with the trigger (**sprayer trigger 47**). See Ex. 1008 at [0041], [0045] & Fig. 15C.

11. Claim 16

- i. *“The vessel rinsing apparatus of claim 11, wherein the fluid discharge member is in selective fluid communication with an outlet of a faucet mixing valve.”*

Thomas discloses a fluid discharge member (**sprayer assembly 42 via**

sprayer outlet tube 46) in selective fluid communication with an outlet of a faucet mixing valve (**inlet tube 22 of mixing valve 20**). *See* Ex. 1008 at [0031], [0033], [0045], Fig. 2 & Fig. 15C.

12. Claim 17

- i. *“The vessel rinsing apparatus of claim 16, further comprising a diverter valve fluidly coupled intermediate the outlet of the faucet mixing valve and the fluid discharge member.”*

Thomas discloses a diverter valve (**diverter valve 78**) fluidly coupled intermediate the outlet of the faucet mixing valve (**inlet tube 22 of mixing valve 20**) and the fluid discharge member (**sprayer assembly 42 via sprayer outlet tube 46**). *See* Ex. 1008 at [0040], [0045], Figs. 13 & 14.

13. Claim 20

- i. *“A fluid delivery device” (preamble)*

To the extent that the preamble is limiting, Thomas discloses a fluid delivery device. *See* Ex. 1008 at [0003].

- ii. *“a vessel rinsing apparatus”*

Thomas discloses a vessel rinsing apparatus (**a side sprayer 42/auxiliary fluid dispenser/fluid delivery device**). *See* Ex. 1008 at [0002], [0033] & Fig. 2.

- iii. *“a drain bowl including a lower wall and an upwardly extending wall, and a drain channel extending through the upwardly extending wall, the drain channel configured to receive water from the drain bowl and discharge water above and into a sink basin supported by a mounting deck”*

Boursier discloses a drain bowl (**tray or reservoir 1**) including a lower wall (**shown in red**), an upwardly extending wall (**shown in orange**) operably coupled to the lower wall, and a drain channel (**drain 7, wastewater outlet**) configured to receive water from the drain bowl and discharge water. *See* Ex. 1009 at 1 & Fig. A (annotated) *supra*.

Boursier does not explicitly disclose a drain channel extending through an upwardly extending wall. However, Boursier does disclose a drain 7 or wastewater. Ex. 1009 at 1. Boursier also discloses an upwardly extending wall. *See* Fig. A (annotated) *supra*. Hotaling discloses a drain channel (**trough 105, passage**) extending through an upwardly extending wall (**shown in red**) of a drain bowl (**water collection tray 101**). *See* Ex. 1010 at [0018]. In Hotaling, the drip tray 102 is analogous to a sink basin. *See* Figs. 2 & 3 (annotated) *supra*.

In the expert opinion of Mr. Cook, here are a limited number of ways to remove water from a bowl shape: either a hole in the bottom or a gap in the side wall. Ex. 1005 at 171. Any other solution would require costly and complex motors and pumps to remove water from the rinser. *Id.* In Mr. Cook's opinion, it would have been obvious to one having ordinary skill in the art to combine the drain channel and upwardly extending wall of Boursier with the drain channel extending through the upwardly extending wall of Hotaling to predictably improve water drainage into a sink basin. *Id.*

- iv. *“a mounting member operably coupled to the drain bowl, the mounting member configured to couple the drain bowl to the mounting deck”*

Thomas discloses a mounting member (**mounting base 50**) operably coupled to an auxiliary fluid dispenser (**spray assembly 42**), *i.e.*, the drain bowl (**tray or reservoir 1** of Boursier), the mounting member configured to couple the drain bowl to the mounting deck (**mounting deck 4**). *See* Ex. 1008 at [0033] & Fig. 1.

Boursier does not explicitly disclose mounting the tray/reservoir 1 to a mounting member. However, Boursier does teach that the tray 1 is “itself fastened to a wall or other partition by means of two screws.” *Id.* at 1. In Mr. Cook’s opinion, it would have been obvious to one having ordinary skill in the art to combine the mounting base 50 of Thomas with the tray/reservoir 1 of Boursier to provide a mounting method adapted to a deck mount solution by combining the drain bowl mount with the deck mounting member. Ex. 1005 at 173. This has the predictable advantage of reducing part count, complexity, and cost. *Id.*

- v. *“a fluid discharge member including a central body supporting a plurality of nozzles and a trigger, the central body being movable relative to the mounting member”*

Thomas discloses a fluid discharge member (**sprayer assembly 42**) with a central body (**body 48**) supporting a plurality of nozzles (**handheld sprayer 44**) and a trigger (**trigger 47**), the central body (**body 48, sprayer outlet tube 46**) being moveable relative to the mounting member (**mounting base 50**). *See* Ex. 1008 at

[0033] & Fig. 2.

- vi. *“a valve member operably coupled to the fluid discharge member and configured to control water flow through the central body to the plurality of nozzles”*

Thomas discloses a valve member (**valve member 90**) operably coupled to the fluid discharge member (**sprayer assembly 42**) and configured to control water flow through the central body (**body 48 via the sprayer tube 46**) to the plurality of nozzles (**handheld sprayer 44**). See Ex. 1008 at [0040], [0041], [0045] & Fig. 15C.

- vii. *“a faucet”*

Thomas discloses a faucet (**faucet assembly 10**). See Ex. 1008 at [0031] & Fig. 1.

- viii. *“a delivery spout having a water outlet”*

Thomas discloses a delivery spout (**delivery spout 28**) having a water outlet (**outlet 31**). See Ex. 1008 at [0032] & Fig. 1.

- iv. *“a valve fluidly coupled to the delivery spout, the valve configured to control water flow to the water outlet”*

Thomas discloses a valve (**mixing valve 20**) fluidly coupled to the delivery spout (**delivery spout 28**), the valve (**mixing valve 20**) configured to control water flow to the water outlet (**outlet 31**). See Ex. 1008 at [0031] & Fig. 2.

- v. *“wherein the fluid discharge member of the vessel rinsing apparatus is in selective fluid communication with the valve of the faucet”*

Thomas discloses wherein a fluid discharge member (**sprayer assembly 42**)

of a vessel rinsing apparatus is in selective fluid communication with the valve of the faucet (**mixing valve 20**). In Thomas, the fluid discharge member is in selective fluid communication with the valve of the faucet via the diverter assembly 12 via the sprayer tube 46. *See* Ex. 1008 at [0045] & Fig. 15C.

14. Claim 21

- i. *“The fluid delivery device of claim 20, further comprising a diverter valve fluidly coupled intermediate the valve of the faucet and the fluid discharge member of the vessel rinsing apparatus.”*

Thomas discloses a diverter valve (**diverter valve 78**) fluidly coupled intermediate the outlet of the faucet mixing valve (**inlet tube 22 of mixing valve 20**) and the fluid discharge member (**sprayer assembly 42 via sprayer outlet tube 46**). *See* Ex. 1008 at [0040], [0045], Figs. 13 & 14.

15. Claim 23

- i. *“The vessel rinsing apparatus of claim 20, wherein the mounting member extends along a longitudinal axis, the mounting member configured to extend through a mounting aperture formed within the mounting deck.”*

Thomas discloses a mounting member (**mounting base 50**) extending along a longitudinal axis, the mounting member configured to extend through a mounting aperture (**nut 56**) within the mounting deck (**mounting deck 4**). *See* Ex. 1008 at [0033], Figs. 1 & 2.

16. Claim 24

- i. *“The vessel rinsing apparatus of claim 23, wherein the mounting member comprises a mounting shank defining an opening extending along the longitudinal axis, and the central body of the fluid discharge member is received within the opening of the mounting shank and movable along the longitudinal axis.”*

Thomas discloses a mounting member (**mounting base 50**) comprising a mounting shank (**mounting shank or post 52**) defining an opening (**passageway 54**) extending along a longitudinal axis, and the central body (**body 48 via sprayer outlet tube 46**) of the fluid discharge member (**sprayer assembly 42**) is received within the opening of the mounting shank and movable along the longitudinal axis. See Ex. 1008 at [0033] & Fig. 2.

VII. CONCLUSION

The Challenged Claims of the ‘277 Patent are therefore unpatentable under § 103. Petitioner requests institution of an IPR to cancel the Challenged Claims.

VIII. CERTIFICATION OF GROUND FOR STANDING

Petitioner certifies pursuant to 37 C.F.R. § 42.104(a) that the ‘277 Patent for which review is sought is available for IPR and that Petitioner is not barred or estopped from requesting an IPR challenging the patent claims on the grounds identified in this Petition.

IX. MANDATORY NOTICES

A. Real Party in Interest

Petitioner Wenzhou Xin Xin Sanitary Ware Co., Ltd., a company based in China, is the real party-in-interest (“RPI”) and is the only party currently directing, controlling, and funding this IPR.

B. Related Matters

Petitioner filed a declaratory judgment of non-infringement of the ‘277 Patent in the United States District Court for the District of New Jersey. Therein, Patent Owner filed a counterclaim of infringement against Petitioner. *See Wenzhou Xin Xin Sanitary Ware Co., Ltd. v. Delta Faucet Company*, No. 2:23-cv-2038 (D.N.J. filed April 11, 2023).

C. Lead and Back-up Counsel

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E. Fee for *Inter Parties* Review (37 C.F.R. § 42.103)

The petition fee set in 37 C.F.R. § 42.15(a) is submitted with the petition.

Respectfully submitted,

Dated: August 16, 2023

/Timothy T. Wang/

Timothy T. Wang, Reg. No. 61,554

Attorney for Petitioner

CERTIFICATE OF COMPLIANCE

This Petition complies with the type-volume limitations of 37 C.F.R. § 42.24(a)(1)(i) because, according to the “word count” function of Microsoft Word, the Petition contains approximately 13,800 words, excluding the parts of the Petition exempted from the word count by 37 C.F.R. § 42.24(a)(1).

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. §§ 42.6(e)(4) and 42.105, the undersigned certifies that on August 16, 2023, a true and correct copy of this document (Petition for IPR), and every Exhibit filed with this document, were served on the following parties either electronically upon parties' agreement or by Express Mail.

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