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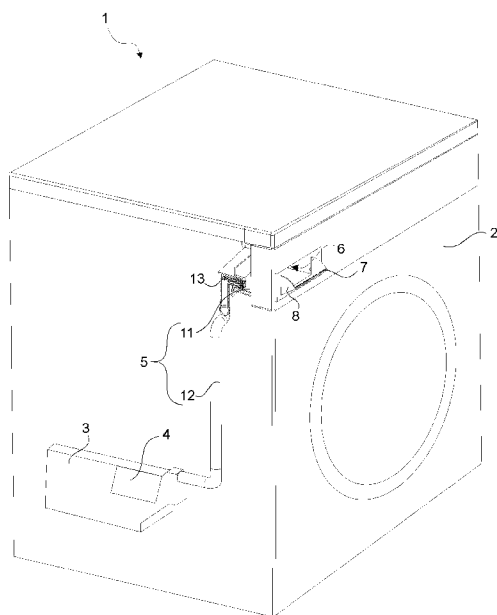
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(54) Title: A LAUNDRY WASHING AND/OR DRYING MACHINE

Figure 3



(57) Abstract: The present invention relates to a laundry washing
and/or drying machine (1) comprising a body (2), a steam generator
(3) situated in the body (2) and generating steam to be delivered into
the washing tub, a receptacle (4) situated inside or in vicinity of the
steam generator (3) and wherein liquid is accumulated to be used in
the steam generator (3),



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- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

Description**A LAUNDRY WASHING AND/OR DRYING MACHINE**

- [0001] The present invention relates to a laundry washing and/or drying machine that comprises a steam generator.
- [0002] In laundry washing and/or drying machines, steam generators that generate steam to send onto the laundry are used. Liquid such as water, etc. required by the steam generator is filled into a funnel situated inside the machine by the user. The liquid filled in by the user is transferred from the funnel to a receptacle by means of a hose. The liquid accumulated in the receptacle is transferred to the steam generator to be vaporized.
- [0003] In the state of the art, embodiments are known related to the path to be followed by the liquid that is being transferred to the steam generator. However, the user cannot easily deliver liquid into the funnel situated inside the machine.
- [0004] In the state of the art International Patent Application No. WO2011144453, it is disclosed that the liquid delivered to the steam generator is transferred to the funnel from the condensation tank.
- [0005] The aim of the present invention is the realization of a laundry washing and/or drying machine comprising a liquid delivery line and a cover that enables the user to easily deliver liquid into the steam generator.
- [0006] The laundry washing and/or drying machine realized in order to attain the aim of the present invention, explicated in the first claim and the respective claims thereof, comprises a body, a steam generator situated in the body and generating steam to be delivered into the washing tub, and a receptacle situated inside or in vicinity of the steam generator and wherein liquid is accumulated to be used in the steam generator. The laundry washing and/or drying machine of the present invention furthermore comprises a liquid delivery line extending from the receptacle to the surface of the body, an opening arranged on the body and allowing the user to deliver liquid into the liquid delivery line, and a cover that has a closed position (C) where the opening is covered and an open position (O) to which the cover is brought from the closed position by being rotated and that allows the liquid poured therein by the user to reach the liquid delivery

line. Thus, the user can deliver from outside the body the liquid required by the steam generator to the steam generator situated inside the body.

[0007] In an embodiment of the present invention, the cover extends outside the body in the open position (O) it is brought by being rotated. When the cover is in the open position (O), a gap forms partially between the cover and the body. The user can pour the liquid onto the cover through this gap. The cover is brought from the open position (O) to the closed position (C) by being rotated. The cover completely covers the opening when in the closed position (C). Thus, foreign materials such as dust, etc. are prevented from entering the liquid delivery line.

[0008] In an embodiment of the present invention, the laundry washing and/or drying machine comprises two parallel, quadrant-shaped side walls that are situated on the cover and that face each other. The cover is mounted to the body by means of a hinge. The cover moves by rotating around the hinge. The hinge is located below the cover. The liquid poured onto the cover does not leak outside from the sides of the cover by means of the side walls of the cover.

[0009] In an embodiment of the present invention, the liquid delivery line comprises a drawer extending from the body surface towards the inside of the body and in front of which the cover is situated, and a hose mounted to the drawer, providing the liquid in the drawer to be delivered to the receptacle. The drawer can be pulled forwards and taken outside from the opening. When placed into the opening, the drawer connects to the hose. Thus, the liquid in the drawer is delivered to the receptacle by means of the hose.

[0010] In an embodiment of the present invention, the laundry washing and/or drying machine comprises a sealing element that extends from over the cover towards over the drawer and that prevents the liquid flowing over the cover to leave the drawer. The sealing element which is a gasket, bitumen, etc. enables the liquid flowing thereover to be transferred to the liquid delivery line without leaking outside the body.

[0011] In an embodiment of the present invention, the laundry washing and/or drying machine comprises a valve that is mounted between the hose and

the drawer. When the drawer is placed into the opening, the valve enables the liquid in the drawer to be transferred to the hose. When the drawer is pulled forwards from the opening, the valve prevents the liquid in the drawer from leaking outside. The valve has two parts, and the movable part is situated on the drawer and the other part comes across the movable part when the drawer is placed into the opening. An orifice providing the liquid in the drawer to be transferred to the hose is arranged on the drawer. The movable part is situated in the said orifice. Between the orifice and the movable part, there is a spring that surrounds the movable part and that enables the movable part to move forwards/backwards in the orifice. The spring which stretches when the drawer is pulled from the opening pushes the movable part and enables the movable part to close the orifice in the drawer. Thus, when the drawer is pulled out from the opening, the liquid in the drawer is prevented from leaking outside the drawer. When the drawer is pushed into the body, with the movable part contacting the stationary part, the spring is compressed and provides the movable part to open the orifice of the drawer. Thus, the liquid in the drawer can be transferred to the hose through the orifice of the drawer.

- [0012] In an embodiment of the present invention, the opening is arranged on the body so as to be in front of the body and at the top side of the body.
- [0013] By means of the present invention, a laundry washing and/or drying washing is realized wherein liquid is easily delivered to the steam generator situated in the body by means of a cover and a liquid delivery line.
- [0014] The laundry washing and/or drying machine realized in order to attain the aim of the present invention is illustrated in the attached figures, where:
- [0015] Figure 1 – is the schematic view of a laundry washing and/or drying machine.
- [0016] Figure 2 – is the schematic view of a laundry washing and/or drying machine comprising a steam generator, a receptacle, a liquid delivery line and a drawer related to an embodiment of the present invention.
- [0017] Figure 3 – is the schematic view of the laundry washing and/or drying

machine comprising the drawer and the hose related to an embodiment of the present invention.

[0018] Figure 4 – is the partial perspective, cross-sectional view of a drawer related to an embodiment of the present invention.

[0019] The elements illustrated in the figures are numbered as follows:

1. Laundry washing and/or drying machine
2. Body
3. Steam generator
4. Receptacle
5. Liquid delivery line
6. Opening
7. Cover
8. Side wall
9. Hinge
10. Sealing element
11. Drawer
12. Hose
13. Valve

[0020] The laundry washing and/or drying machine (1) comprises a body (2), a steam generator (3) situated in the body (2) and generating steam to be delivered into the washing tub, and a receptacle (4) situated inside or in vicinity of the steam generator (3) and wherein liquid is accumulated to be used in the steam generator (3) (Figure 1, Figure 2, Figure 3).

[0021] The laundry washing and/or drying machine (1) of the present invention furthermore comprises

- a liquid delivery line (5) that extends from the body (2) surface to the receptacle (4) and that delivers the liquid passing therethrough to the receptacle (4),
- an opening (6) that is arranged on the body (2) and that allows access into the liquid delivery line (5),
- a cover (7) that has a closed position (C) where the opening (6) is covered and an open position (O) to which the cover (7) is brought from the closed position (C) by being rotated and that allows the liquid

transferred therein to be guided towards the liquid delivery line (5).

[0022] Liquid such as water, liquid perfume, etc. is sent onto the laundry in the washing tub by being vaporized by means of the steam generator (3).

Thus, the laundry that is being washed and/or dried is humidified. The user rotates the cover (7) on the body (2) to bring to the open position (O) and pours the liquid in a recipient such as glass, pitcher, etc. into the liquid delivery line (5) that extends to the receptacle (4) which is situated in the laundry washing and/or drying machine (1) and wherein the liquid is accumulated to be used in the steam generator (3). Thus, the liquid can be easily delivered to the receptacle (4) situated in the body (2) from outside the body (2). In the closed position (C) to which the cover (7) is brought from the open position (O), the cover (7) closes the opening (6). Thus, foreign materials such as dust, etc. are prevented from entering the liquid delivery line (5) from outside (Figure 2, Figure 3).

[0023] The cover (7) has the open position (O) where the cover (7) extends outside the body (2) and the liquid poured thereon is enabled to be transferred to the liquid delivery line (5). The user rotates and brings the cover (7) to the open position (O) wherein the liquid can be transferred to the liquid delivery line (5) from over the cover (7). When the cover (7) is in the open position (O), a gap forms partially between the cover (7) and the body (2). The user pours the liquid in the recipient into this gap. The liquid poured into the gap can be easily transferred to the liquid delivery line (5) from the surface of the cover (7). The user rotates the cover (7) to bring to the closed position (C) and closes the opening (6).

[0024] In an embodiment of the present invention, the laundry washing and/or drying machine (1) comprises two quadrant-shaped side walls (8) that are situated on the cover (7), that remain in the opening (6) when the cover (7) is in the closed position (C) and that allow the liquid to pass therebetween when the cover (7) is in the open position (O), and furthermore comprises a hinge (9) that enables the cover (7) to be mounted to the body (2) so as to rotate around the horizontal axis. Thus, the user can easily open the cover (7) by rotating. The side walls (8) prevent the liquid poured onto the cover (7) from leaking outside from the sides of the cover (7).

- [0025] In an embodiment of the present invention, the liquid delivery line (5) comprises a drawer (11) extending from the opening (6) towards the inside of the body (2) and in front of which the cover (7) is situated, and a hose (12) mounted to the drawer (11), providing the liquid in the drawer (11) to be delivered to the receptacle (4). The drawer (11) can be pulled forwards and taken outside through the opening (6). When placed into the opening (6), the drawer (11) connects to the hose (12). Thus, the liquid in the drawer (11) is delivered to the receptacle (4) by means of the hose (12).
- [0026] In an embodiment of the present invention, the laundry washing and/or drying machine (1) comprises a sealing element (10) that is situated between the bottom side of the cover (7) and the drawer (11) base and that prevents the liquid accumulated in the drawer (11) from leaking outside from the bottom side of the cover (7). The sealing element (10) which covers the hinge (9) and which is a gasket, bitumen, etc. enables the liquid flowing thereover to be transferred to the liquid delivery line (5) without leaking outside the body (2) (Figure 4).
- [0027] In an embodiment of the present invention, the laundry washing and/or drying machine (1) comprises a valve (13) that is mounted between the hose (12) and the drawer (11). When the drawer (11) is placed into the opening (6), the valve (13) enables the liquid in the drawer (11) to be transferred to the hose (12). When the drawer (11) is pulled forwards from the opening (6), the valve (13) prevents the liquid in the drawer (11) from leaking outside. The valve (13) has two parts, and the movable part is situated on the drawer (11) and the other part comes across the movable part when the drawer (11) is placed into the opening (6). An orifice providing the liquid in the drawer (11) to be transferred to the hose (12) is arranged on the drawer (11). The movable part is situated in the said orifice. Between the orifice and the movable part, there is a spring that surrounds the movable part and that enables the movable part to move forwards/backwards in the orifice. The spring, which stretches when the drawer (11) is pulled out from the opening (6), pushes the movable part and enables the movable part to close the orifice in the drawer (11). Thus, when the drawer (11) is pulled out of the opening (6), the liquid in the

drawer (11) is prevented from leaking outside the drawer (11). When the drawer (11) is pushed into the body (2), with the movable part contacting the stationary part, the spring is compressed and provides the movable part to open the orifice of the drawer (11). Thus, the liquid in the drawer (11) can be transferred to the hose (12) through the orifice of the drawer (11) (Figure 4).

- [0028] In an embodiment of the present invention, the opening (6) is arranged in front of the body (2) and at the top side of the body (2). Thus, the user can transfer liquid to the liquid delivery line (5) more easily.
- [0029] By means of the present invention, a laundry washing and/or drying machine (1) is realized, comprising the liquid delivery line (5) that enables the user to easily transfer liquid to the steam generator (3) and the cover (7) that provides access to the liquid delivery line (5).
- [0030] It is to be understood that the present invention is not limited to the embodiments disclosed above and a person skilled in the art can easily introduce different embodiments. These should be considered within the scope of the protection postulated by the claims of the present invention.

Claims

1. A laundry washing and/or drying machine (1) **comprising** a body (2), a steam generator (3) situated in the body (2) and generating steam to be delivered into the washing tub, a receptacle (4) situated inside or in vicinity of the steam generator (3) and wherein liquid is accumulated to be used in the steam generator (3),
characterized by
 - a liquid delivery line (5) that extends from the body (2) surface to the receptacle (4) and that delivers the liquid passing therethrough to the receptacle (4),
 - an opening (6) that is arranged on the body (2) and that allows access into the liquid delivery line (5),
 - a cover (7) that has a closed position (C) where the opening (6) is covered and an open position (O) to which the cover (7) is brought from the closed position (C) by being rotated and that allows the liquid transferred therein to be guided towards the liquid delivery line (5).
2. A laundry washing and/or drying machine (1) as in Claim 1, **characterized by** two quadrant-shaped side walls (8) that are situated on the cover (7), that remain in the opening (6) when the cover (7) is in the closed position (C) and that allow the liquid to pass therebetween when the cover (7) is in the open position (O), and **by** a hinge (9) that enables the cover (7) to be rotatably mounted to the body (2).
3. A laundry washing and/or drying machine (1) as in Claim 1 or 2, **characterized by** the liquid delivery line (5) that comprises a drawer (11) extending from the opening (6) towards the inside of the body (2) and in front of which the cover (7) is situated, and a hose (12) mounted to the drawer (11), providing the liquid in the drawer (11) to be delivered to the receptacle (4).
4. A laundry washing and/or drying machine (1) as in Claim 3, **characterized by** a sealing element (10) that is situated between the bottom side of the cover (7) and the drawer (11) base and that prevents the liquid accumulated in the drawer (11) from leaking outside from the bottom side of the cover (7).
5. A laundry washing and/or drying machine (1) as in any one of the above claims, **characterized by** a valve (13) mounted between the hose (12) and the

drawer (11).

6. A laundry washing and drying machine (1) as in any one of the above claims, **characterized by** the opening (6) that is arranged on the body (2) so as to be in front of the body (2) and at the top side of the body (2).

Figure 1

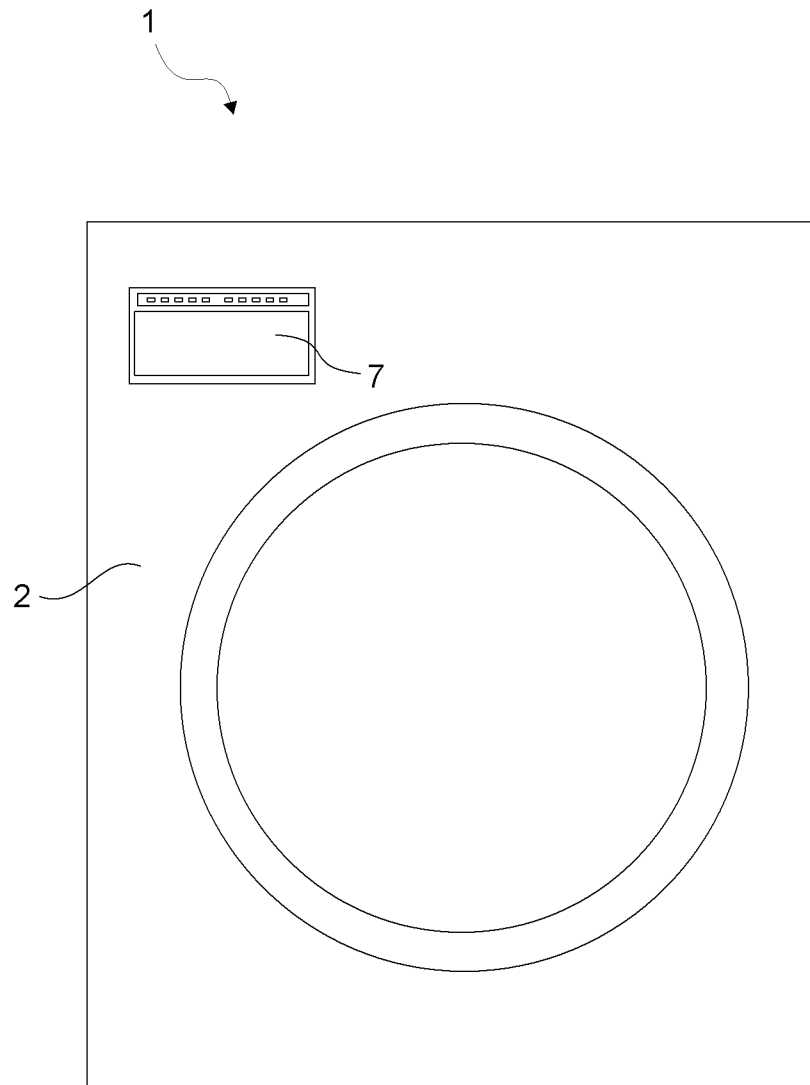


Figure 2

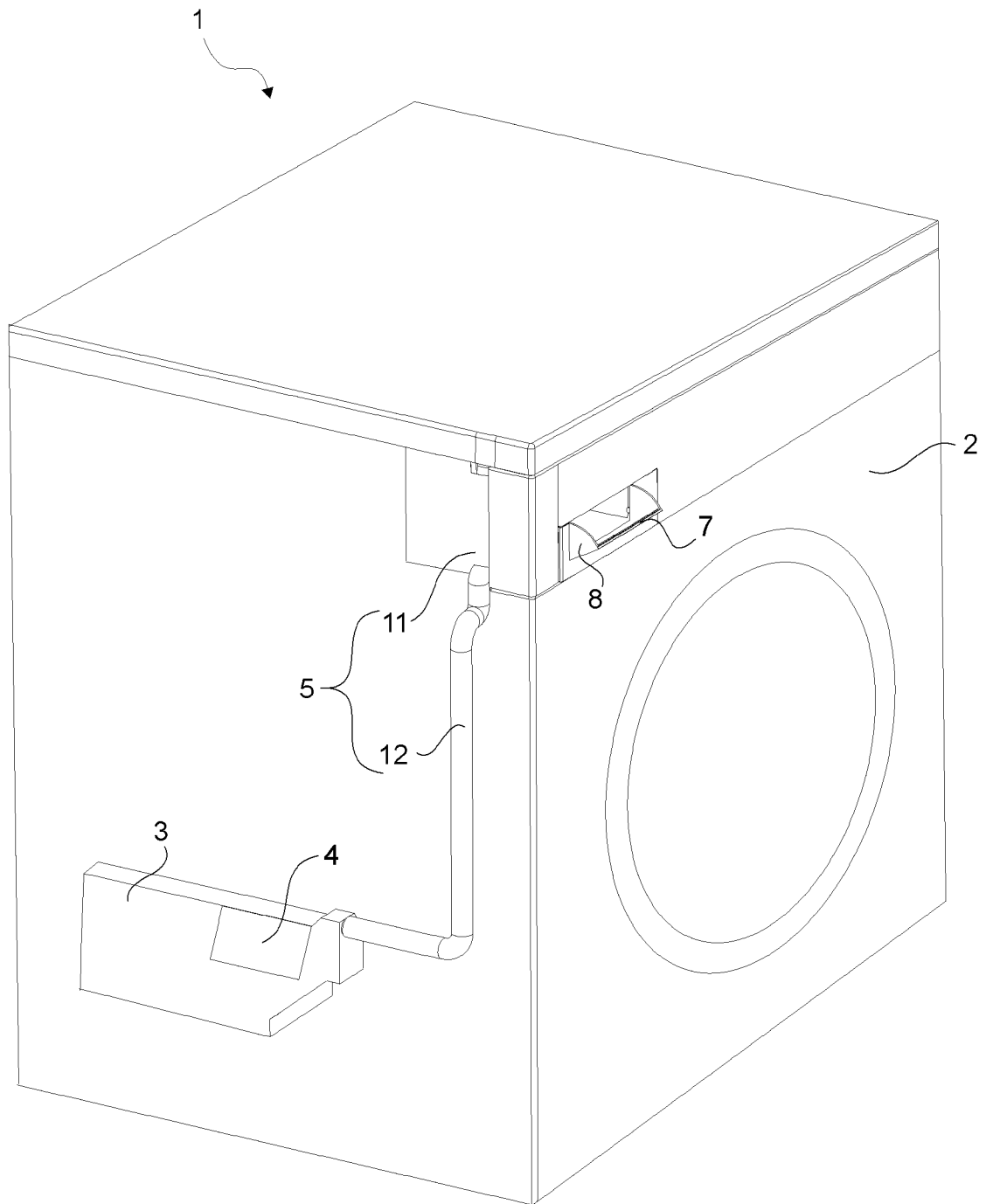


Figure 3

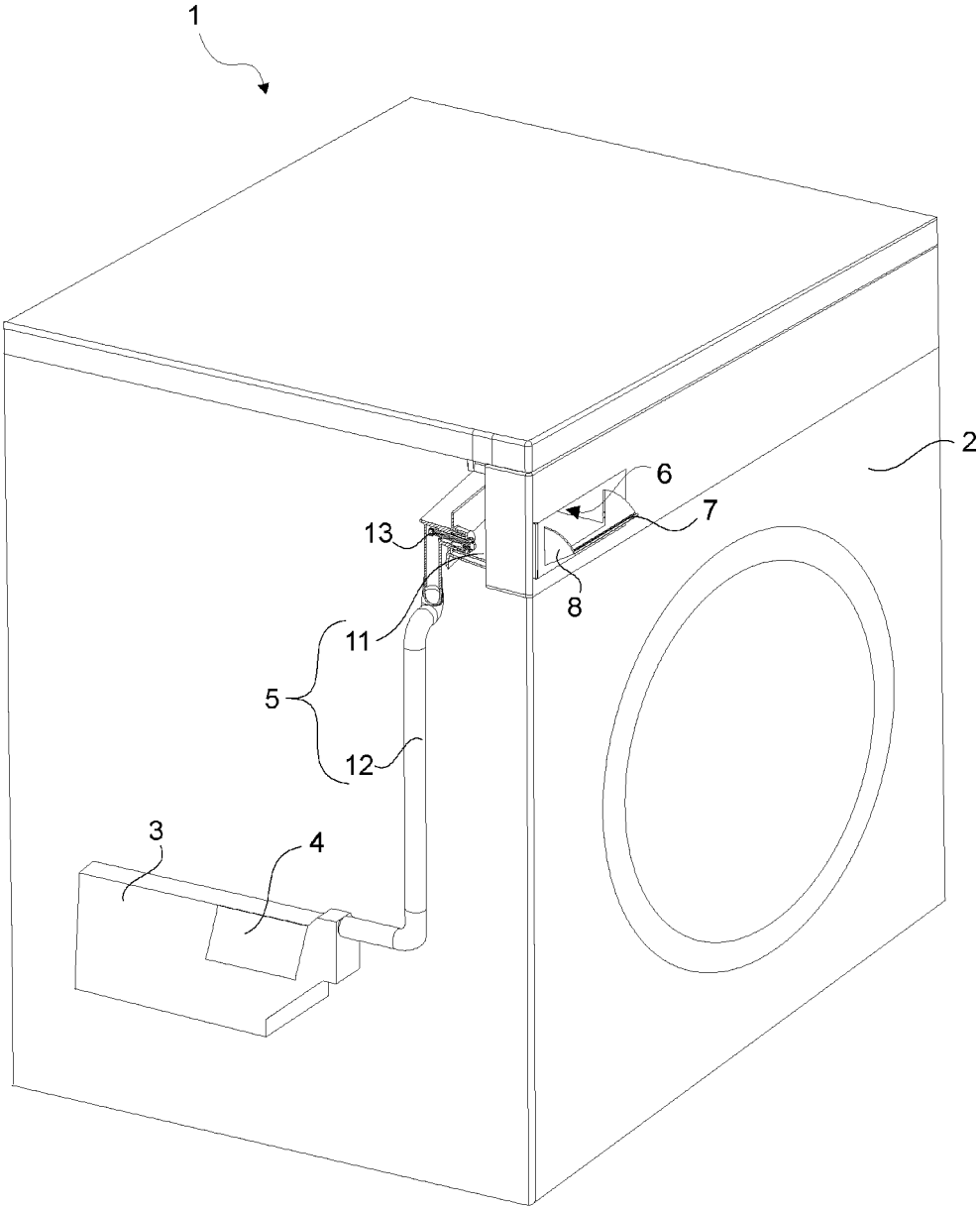
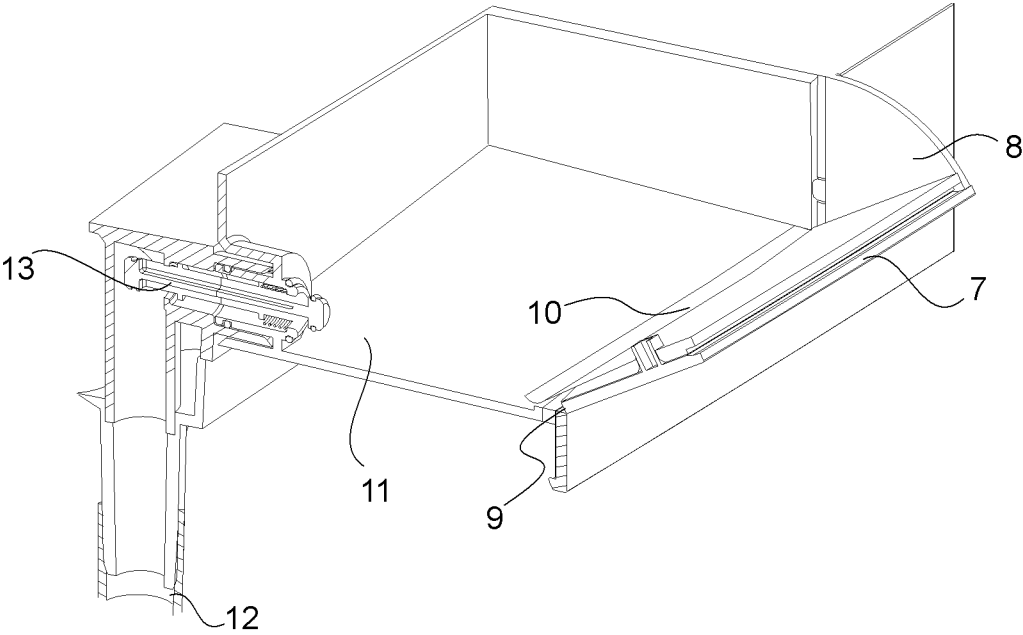


Figure 4



INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2013/072396

A. CLASSIFICATION OF SUBJECT MATTER
INV. D06F39/00 D06F39/12 D06F58/20
ADD.

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B. FIELDS SEARCHED

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D06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2010/077628 A1 (BAE SANG HUN [KR] ET AL) 1 April 2010 (2010-04-01)	1,6
A	paragraph [0011] - paragraph [0054]; figures 1-4,6	2-5
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	paragraph [0014] - paragraph [0154]; figures 1-12	
A	US 2010/077630 A1 (BAE SANG-HUN [KR] ET AL) 1 April 2010 (2010-04-01)	1-6
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A	US 2010/077629 A1 (BAE SANG-HUN [KR] ET AL) 1 April 2010 (2010-04-01)	1,2,6
	paragraph [0012] - paragraph [0054]; figures 1-5	



Further documents are listed in the continuation of Box C.



See patent family annex.

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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