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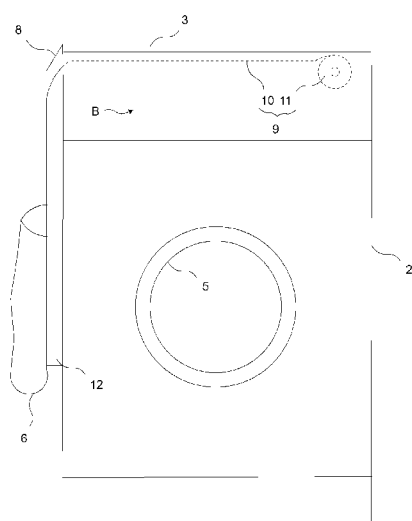
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- (54) **Title:** A WASHING MACHINE COMPRISING A WASHING BAG

Figure 2



- (57) **Abstract:** The present invention relates to a washing machine (1) comprising a body (2); a top plate (3) that covers the upper surface of the body (2); a tub (4) that is disposed in the body (2) and wherein the washing process is realized; a door (5) that is disposed at the front surface of the body (2) and that provides access into the tub (4); a gap (B) that is arranged between the top plate (3) and the tub (4), and a washing bag (6) that is used for storing the dirty laundry collected to be washed.

Description**A WASHING MACHINE COMPRISING A WASHING BAG**

- [0001] The present invention relates to a front-loading washing machine comprising a washing bag wherein the laundry to be washed is placed.
- [0002] The laundry to be washed in the washing machine is collected in containers generally known as dirty laundry baskets. In particular, in houses with a small area, positioning the said baskets poses a problem for the user. The user has to bend over to transfer the laundry in the said dirty laundry basket into a front-loading washing machine and it becomes more difficult for users, that have a difficulty to bend over, to load the laundry into the washing machine. Moreover, while loading the laundry from the dirty laundry basket into the washing machine, the laundry may fall onto the floor and may be subjected to the water and/or the dirt on the floor. A dirty laundry basket that enables the user to easily load the laundry into the washing machine is a desired feature.
- [0003] In the state of the art International Patent Application No. WO2009153641, a washing is disclosed, wherein the dirty laundry is collected in a separate container that is positioned under the drum wherein the laundry is washed.
- [0004] In the state of the art European Patent Application No. EP1911871, a washing machine is disclosed, wherein the dirty laundry is collected in a separate foldable container that is positioned under the drum wherein the laundry is washed.
- [0005] The aim of the present invention is the realization of a washing machine wherein the dirty laundry is collected and easily loaded into the washing machine.
- [0006] The washing machine realized in order to attain the aim of the present invention, explicated in the claims, comprises a washing bag that is disposed into the gap under the top plate covering the upper surface of the body above the tub wherein the laundry is washed and wherein the user loads the dirty laundry, and an opening that is arranged on the top plate, that provides access into the gap and that enables the washing bag to be placed into the gap. In the washing machine of the present invention, the need for the dirty laundry basket generally positioned by the washing

machine is eliminated. By means of the washing bag placed into the space between the top plate and the tub, the user is enabled to collect the dirty laundry. The user takes the washing bag out, loads the dirty laundry therein and replaces the washing bag, thus collecting the dirty laundry in the body of the washing machine.

[0007] In an embodiment of the present invention, the washing machine has a lid that provides access into the region wherein the washing bag is placed and that enables the washing bag to be hidden inside the body when in the closed position. The user access the washing bag by opening the lid and enables the washing bag to be concealed in the body by closing the lid.

[0008] In a version of this embodiment, the opening and the lid are positioned on the front surface of the body so as to be above the door providing access into the tub. By means of this embodiment, the user uses only the front surface of the body and can place the washing machine in a closed volume in the house. By opening the lid disposed at the upper half of the body, the washing bag can be accessed. As per the user preference, the lid can be opened from the lower edge thereof downwards or from the upper edge thereof upwards. In another version of this embodiment, the opening and the lid are positioned so as to be at the right or left of the body. The washing bag can be used by being hung down over the side surface of the body and does not block the door that provides access into the tub.

[0009] In another embodiment of the present invention, the washing machine comprises a rolling mechanism that enables the washing bag to be stowed in the body. The washing bag is taken out of the body as connected to the rolling mechanism and the rolling mechanism continuously tends to pull/stow the washing bag into the body by means of the spool of the rolling mechanism. With the washing bag being automatically stowed into the body, the user is not required to place the washing bag into the body. In different versions of the embodiment, the rolling mechanism can be in such a structure to remain in a plurality of positions so as to enable the washing bag to be taken out of the body in the desired amount. The

washing bag can remain fixed at certain positions when taken out of the body and can be stowed back into the body as the user pulls the washing bag outwards for a small amount.

[0010] In another embodiment of the present invention, the washing bag is fastened onto the body by means of magnets. When taken out of the body, the washing bag is fastened onto the front surface of the body by means of the magnets disposed at the rear surface of the washing bag and the user is enabled to easily load the dirty laundry into the washing bag without requiring to hold the washing bag. Moreover, by means of the magnets, the rolling mechanism is prevented from pulling the washing bag into the body.

[0011] In another embodiment of the present invention, the washing bag comprises a fastener that enables the dirty laundry therein to be easily loaded in the tub when the washing bag is when taken out of the body and fastened onto the front surface of the body by means of the magnets. In this embodiment, the washing bag is pulled forwards and angularly positioned so as to allow the door providing access to the front surface of the body and the tub to be opened and the washing bag is unloaded from the rear surface thereof by means of the fasteners such as zippers, etc. disposed on the rear surface thereof. In this embodiment, the washing bag serves as a basket fixed in front of the door and the dirty laundry therein can be easily loaded into the tub. In this embodiment, the user can load the washing bag from the front surface thereof and enables the rear surface thereof to be opened by means of the fastener disposed on the said rear surface when the user desires to load the laundry in the washing bag into the tub.

[0012] In another embodiment of the present invention, the washing bag comprises a plurality of partitions that enable different types of laundry to be separately stored. The user can load a different type of laundry into each partition, thus storing the dirty laundry in the body by means of the categorized washing bag.

[0013] In the washing machine of the present invention, the gap between the top plate and the tub is utilized and the washing bag wherein the user stores

the dirty laundry can be placed into the said gap. Moreover, by means of the rolling mechanism, the user is not required to place the washing bag into the said gap and the rolling mechanism automatically collects the washing bag into the body.

[0014] The washing machine realized in order to attain the aim of the present invention is illustrated in the attached figures, where:

[0015] Figure 1 – is the perspective view of a washing machine.

[0016] Figure 2 – is the front schematic view of the washing bag and the rolling mechanism related to an embodiment of the present invention.

[0017] Figure 3 – is the front schematic view of the washing bag related to another embodiment of the present invention.

[0018] Figure 4 – is the sideways schematic view of the washing bag and the rolling mechanism related to an embodiment of the present invention.

[0019] Figure 5 – is the sideways schematic view of the washing bag and the rolling mechanism related to another embodiment of the present invention.

[0020] Figure 6 – is the top perspective view of the washing bag related to another embodiment of the present invention.

[0021] The elements and steps in the figures are numbered as follows:

1. Washing machine
2. Body
3. Top plate
4. Tub
5. Door
6. Washing bag
7. Opening
8. Lid
9. Rolling mechanism
10. Rope
11. Spool
12. Magnet
13. Fastener
14. Partition

[0022] B. Gap

[0023] The washing machine (1) comprises a body (2); a top plate (3) that covers the upper surface of the body (2); a tub (4) that is disposed in the body (2) and wherein the washing process is realized; a door (5) that is disposed at the front surface of the body (2) and that provides access into the tub (4); a gap (B) that is arranged between the top plate (3) and the tub (4), and a washing bag (6) that is used for storing the dirty laundry collected to be washed. In the washing machine (1), the laundry to be washed is loaded in the tub (4) by opening the door (4), and the washing process is realized in the tub (4) when the door (5) is closed. The dirty laundry is placed into the washing bag (6) to be collected.

[0024] The washing machine (1) of the present invention comprises an opening (7) that is arranged at the top plate (3) and that enables the washing bag (6) to be placed into the gap (B) when not in use and to be taken out of the gap (B) and hung down when the laundry is desired to be loaded therein. In other words, the washing bag (6) is placed into the gap (B) inside the body (2) between the tub (4) and the top plate (3). By means of the washing bag (6) placed into the gap (B) in the body (2) between the tub (4) and the top plate (3), the user can store the dirty laundry inside the body (2) without the need for an external dirty laundry basket. When empty and not in use, the washing bag (6) is placed inside the body (2) between the tub (4) and the top plate (3). When needed, the user can take the washing bag (6) out of the gap (B) through the opening (7) and loads the laundry, then replace the washing bag (6) between the top plate (3) and the tub (4).

[0025] In an embodiment of the present invention, the washing machine (1) comprises a lid (8) that is disposed on the top plate (3), that provides access into the gap (B) between the tub (4) and the top plate (3) and that provides the concealment of the washing bag (6). The user has access to the washing bag (6) by opening lid (8). By means of the lid (8), the washing bag (6) wherein the dirty laundry is collected is kept hidden.

[0026] In another embodiment of the present invention, the opening (7) and the lid (8) are disposed at the front surface of the top plate (3) in the direction of the door (5), in other words at the front surface of the body (2) where the laundry is loaded. In this embodiment, the washing bag (6) is accessed

from the front surface of the body (2) where the door (5) is also disposed and the dirty laundry in the washing bag (6) is enabled to be more conveniently loaded into the tub (4).

[0027] In another embodiment of the present invention, the opening (7) and the lid (8) are disposed at a side surface of the top plate (3) seated onto the body (2), in other words at the right or the left side thereof. In other words, the washing bag (6) is accessed from the lateral surface of the body (2), that is the right or left surface of the body (2). In this embodiment, the washing bag (6) is fastened to the lateral surface of the body (2) and the laundry is loaded into the tub (4) from the front surface of the body (2).

[0028] In another embodiment of the present invention, the washing machine (1) comprises a rolling mechanism (9) that is disposed in the body (2), that enables the washing bag (6) to be stowed in the body (2) and that has a rope (10) connected to the upper edge of the washing bag (6) and a spool (11) whereon the rope (10) is wrapped. By means of the rolling mechanism (9), the washing bag (6) is used as connected to the body (2) and when the user desires to use the washing bag (6), he/she pulls the washing bag (6) and takes the same out of the body (2). When the washing bag (6) is desired to be placed back into the body (2), the ropes (10) of the rolling mechanism (9) connected to the washing bag (6) are wound around the spool (11) and pull the washing bag (6) into the body (2). By means of the rolling mechanism (9), the user is not required to place the washing bag (6) into the body (2) and the washing bag (6) is pulled into the body (2) between the tub (4) and the top plate (3) by means of the rolling mechanism (9).

[0029] In another embodiment of the present invention, the washing bag (6) comprises at least one magnet (12) that is disposed at the rear surface thereof and that enables the washing bag (6) to be fastened to the lateral surface of the body (2). When taken out of the body (2), the washing bag (6) is fastened to the body (2) by means of the magnet (12) disposed at the rear surface of the washing bag (6), thus providing ease of utilization for the user. By means of the magnet (12), the rolling mechanism (9) is instantaneously prevented from pulling the washing bag (6) into the body

(2) and when the user separates the magnet (12) from the lateral surface of the body (2), the rolling mechanism (9) pulls the washing bag (6) into the body (2).

[0030] In another embodiment of the present invention, the washing bag (6) comprises a fastener (13) that is disposed at the rear surface thereof and that enables the same rear surface to be almost completely opened. The washing bag (6) is taken out of the body (2) preferably by being held from the lower edge thereof and is fastened to the front surface of the body (2) from the same lower edge by means of the magnet (12). When the washing bag (6), being connected to the rolling mechanism (9), is tilted forwards as much as needed to enable the door (5) to be opened through which the laundry is loaded into the tub (4), the fastener (13) disposed at the rear surface of the washing bag (6) is opened and the laundry in the washing bag (6) is enabled to be transferred into the tub (4) directly from the said rear surface. The fastener (13) can be state of the art fastening means such as zipper, Velcro or like.

[0031] In another embodiment of the present invention, the washing bag (6) comprises a plurality of partitions (14) wherein the laundry is placed. In this embodiment, the washing bag (6) has the partitions that enable different types of laundry to be separately stored. The user takes the washing bag (6) out of the body (2) and places different types of laundry into separate partitions (14). Thus, for example, when colored laundry is to be washed, the laundry in the relevant partition can be washed by being transferred into the tub (4), and the user is not required to separate the colored laundry from the other laundry. The partitions (14) can be accessed from the front surface of the washing bag (6) or in the above-described embodiment, by means of the fasteners (13) at the rear surface of the washing bag (6) different partitions (14) can be accessed.

[0032] In the washing machine (1) of the present invention, the volume occupied by the washing machine (1) can be efficiently used by placing the washing bag (6), that enables the dirty laundry to be collected/stored inside the body (2), between the top plate (3) and the tub (4). Moreover, as the washing bag (6) is disposed at the upper part of the body (2), the user is

not required to bend over while using the washing bag (6).

Claims

1. A washing machine (1) **comprising** a body (2); a top plate (3) that covers the upper surface of the body (2); a tub (4) that is disposed in the body (2) and wherein the washing process is realized; a door (5) that is disposed at the front surface of the body (2) and that provides access into the tub (4); a gap (B) that is arranged between the top plate (3) and the tub (4), and a washing bag (6) that is used for storing the dirty laundry collected to be washed, **characterized by** an opening (7) that is arranged at the top plate (3) and that enables the washing bag (6) to be placed into the gap (B) when not in use and to be taken out of the gap (B) and hung down when the laundry is desired to be loaded therein.
2. A washing machine (1) as in Claim 1, **characterized by** a lid (8) that is disposed on the top plate (3) and that provides access into the opening (7).
3. A washing machine (1) as in Claim 2, **characterized by** the opening (7) and the lid (8) that are disposed at the front surface of the top plate (3) in the direction of the door (5).
4. A washing machine (1) as in Claim 2, **characterized by** the opening (7) and the lid (8) that are disposed at a lateral surface the top plate (3) seated onto the body (2).
5. A washing machine (1) as in any one of the above claims, **characterized by** a rolling mechanism (9) that is disposed in the body (2), that enables the washing bag (6) to be stowed in the body (2) and that has a rope (10) connected to the upper edge of the washing bag (6) and a spool (11) whereon the rope (10) is wrapped.
6. A washing machine (1) as in any one of the above claims, **characterized by** the washing bag (6) having at least one magnet (12) that is disposed at the rear surface of the latter and that enables the washing bag (6) to be fastened to the lateral surface of the body (2).
7. A washing machine (1) as in any one of the above claims, **characterized by** the washing bag (6) having a fastener (13) that is disposed at the rear surface of the latter and that enables the said rear surface to be almost completely opened.
8. A washing machine (1) as in any one of the above claims, **characterized by** the

washing bag (6) having a plurality of partitions (14) wherein the laundry is placed.

Figure 1

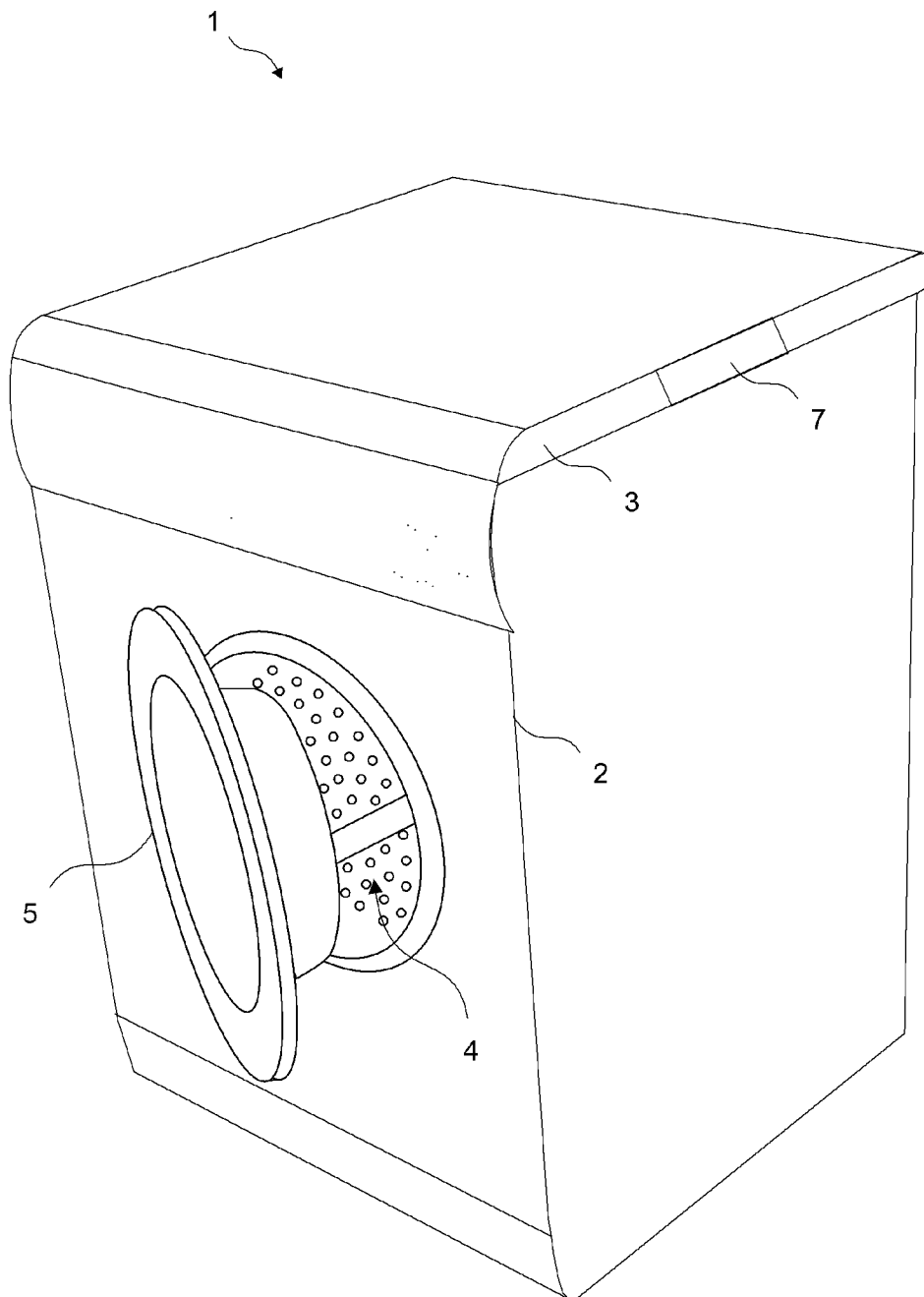


Figure 2

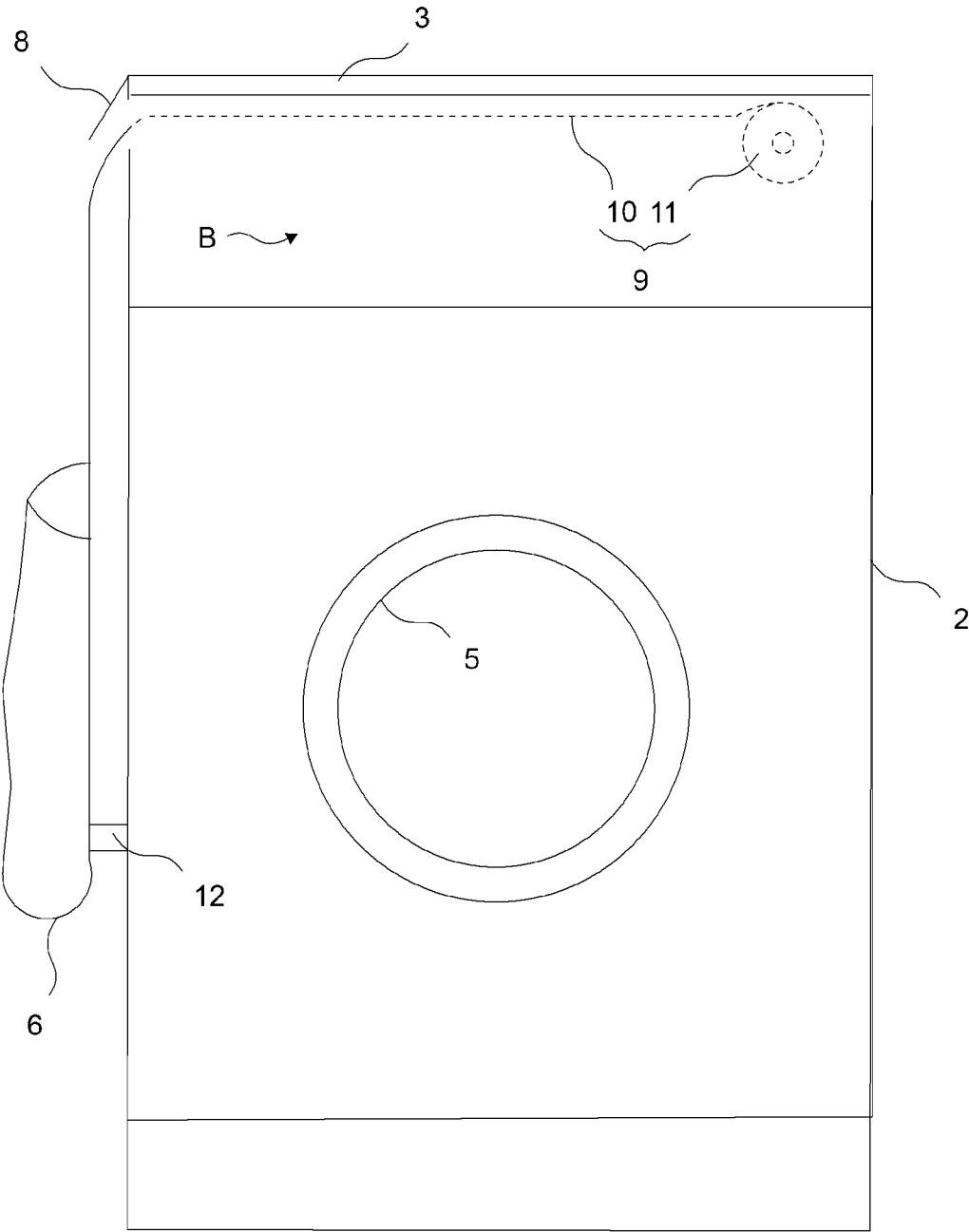


Figure 3

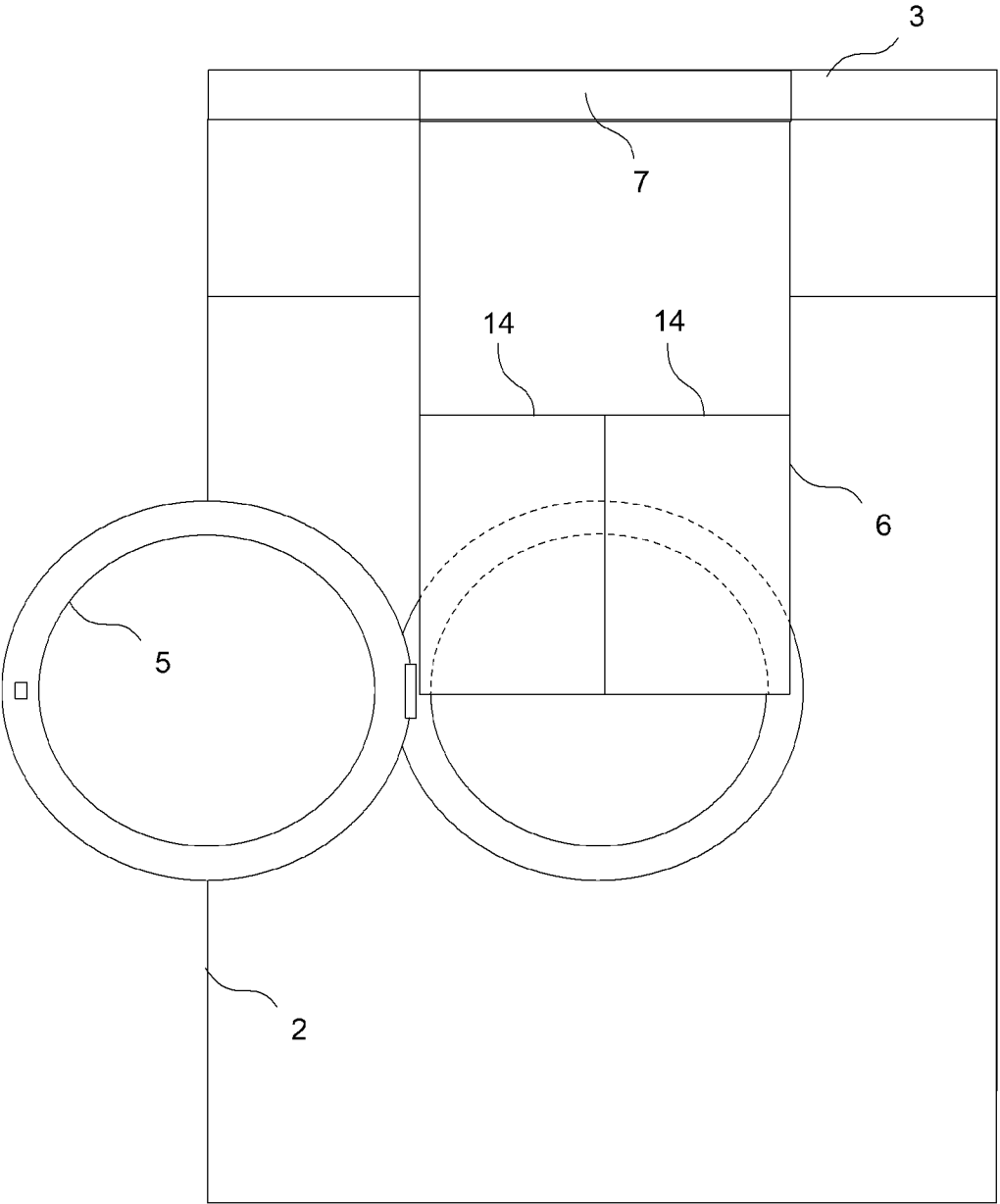


Figure 4

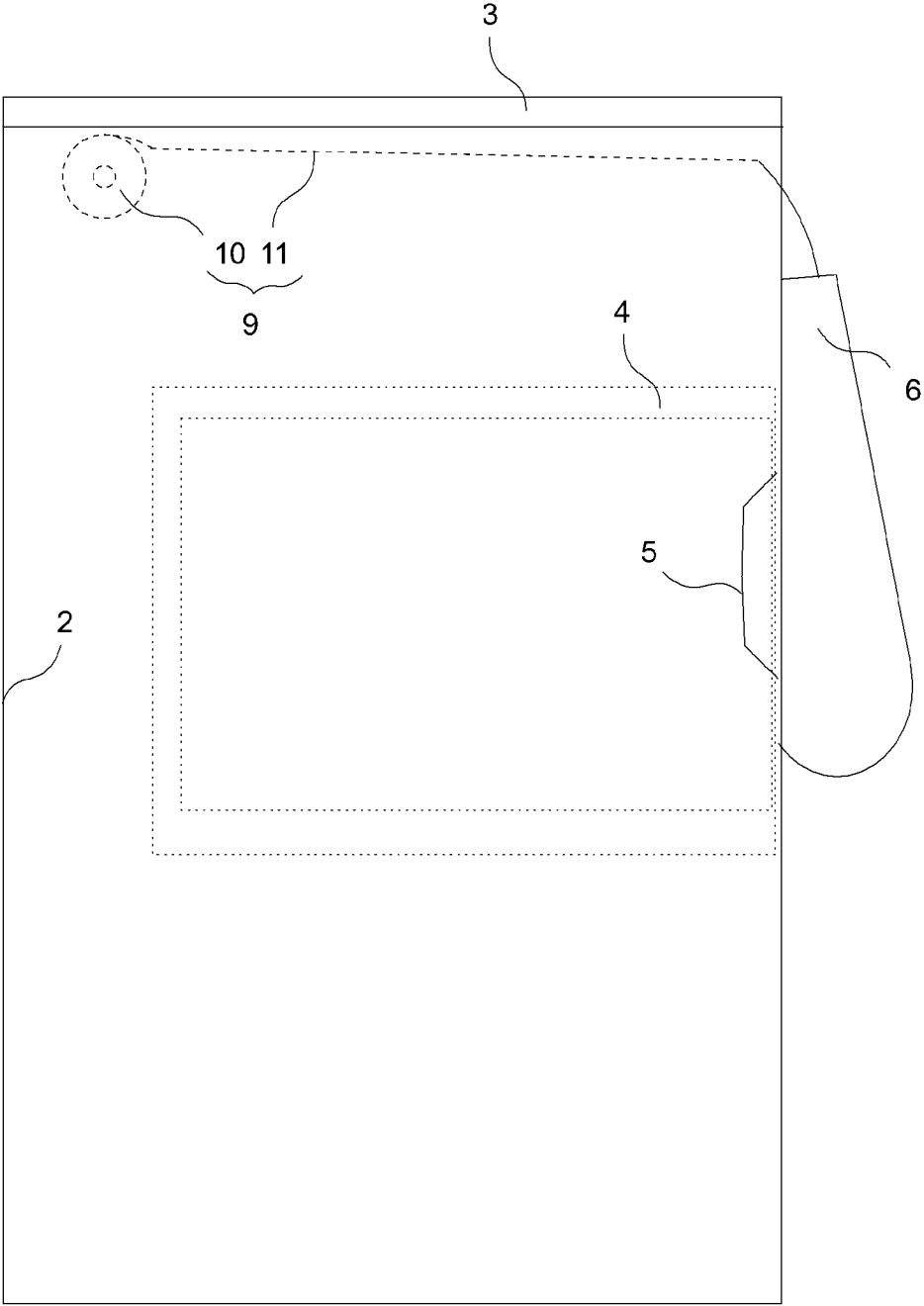


Figure 5

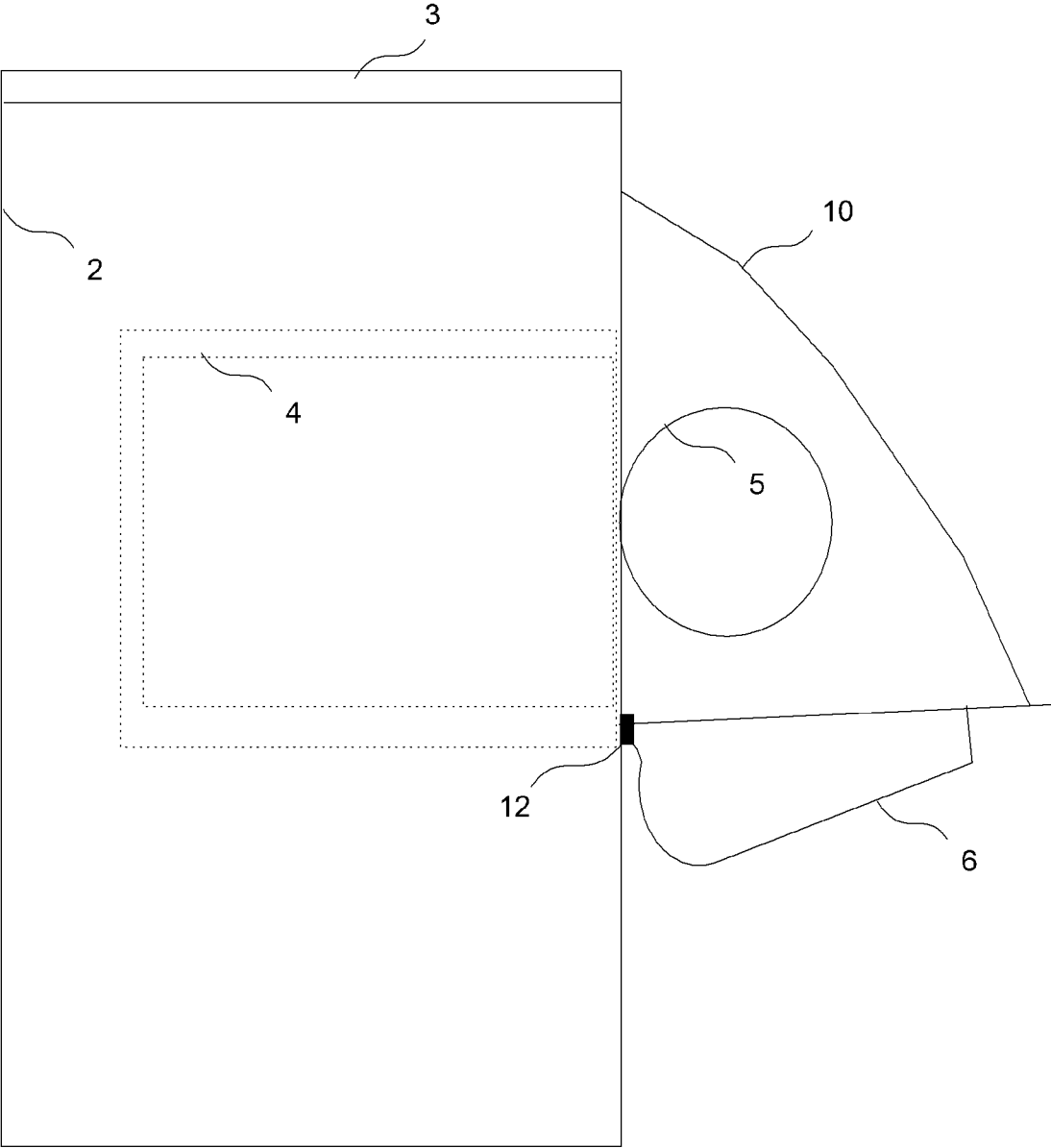
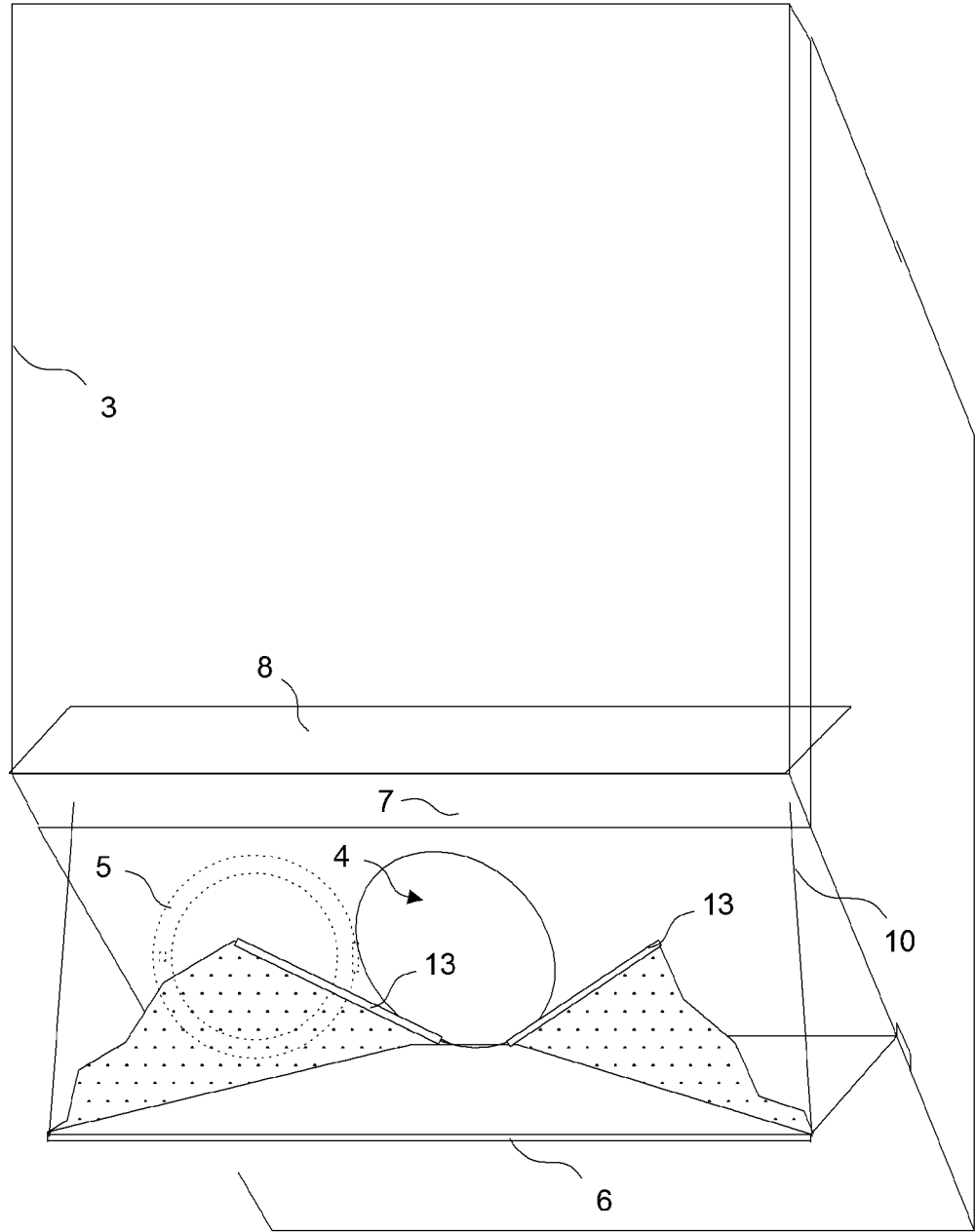


Figure 6



INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
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)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X,P	WO 2016/155801 A1 (ARCELIK AS [TR]) 6 October 2016 (2016-10-06)	1-3
A,P	pages 7-8; figure 3	4-8
A	----- US 2 685 441 A (BAADE ALMA R) 3 August 1954 (1954-08-03) column 2, line 50 - column 3, line 30; figures 1-2	1-8
A	----- EP 1 911 871 A2 (LANZA DAVIDE [IT]) 16 April 2008 (2008-04-16) cited in the application figures	1-8



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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2016155801	A1	06-10-2016	NONE
US 2685441	A	03-08-1954	NONE
EP 1911871	A2	16-04-2008	NONE