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(54) **A WASHING MACHINE COMPRISING A DETERGENT DRAWER**

WACHMASCHINE MIT WASCHMITTELDOSIERFACH

MACHINE À LAVER COMPORTANT UN TIROIR À DÉTERGENTS

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Description

[0001] The present invention relates to a washing machine comprising a detergent drawer wherein the washing agents are put.

[0002] Washing machines comprise a detergent drawer wherein the washing agents are put. The washing agent placed in the detergent drawer is delivered into the washing tub after being mixed with the wash water. The detergent drawers should be completely taken out from the detergent box chamber contained therein at certain time intervals in order to clean the washing agent residues, dirt deposits, mold, microorganisms etc. formed by the residues which are left in the detergent drawers at the end of the washing process. On the other hand, the detergent drawer is not desired to be easily separated from the detergent box chamber when opened for loading in the washing agents.

[0003] In the state of the art German patent document no DE19505292, a drawer is explained having a bypass mechanism composed of protrusions and opposite protrusions which prevent the drawer from being dislodged unintentionally.

[0004] A further example of a drawer is to be found in US2007/0056328A1.

[0005] The aim of the present invention is the realization of a washing machine comprising a detergent drawer which can be easily separated from the detergent box chamber when desired.

[0006] The washing machine realized in order to attain the aim of the present invention, described in the first claim and the respective claims thereof, comprises one or more arms extending from the upper surface of the detergent drawer towards the lower surface of the flushing device, moving vertically or transversely in the horizontal, with respect to the movement direction of the detergent drawer and one or more pins whereto the arm bears against during the motion of the detergent drawer, extending from over the lower surface of the flushing device towards the upper surface of the detergent drawer and a trigger mechanism on the upper surface of the detergent drawer, in the vicinity of the arm moving in the horizontal, which limits the motion of the arm in the horizontal direction.

[0007] The trigger mechanism is disposed on the movement direction of the arm and limits the movement of the arm unless actuated by the user.

[0008] While the detergent drawer is closed, if the detergent drawer is moved toward the direction of opening by the user, the detergent drawer moves in the opening direction without encountering any obstruction until the arms movable in the horizontal contact the pin. The arm bears against the pin while the detergent drawer is mounted, dismounted from the detergent box chamber. The pin cannot move the arm in the horizontal and the movement of the detergent drawer remains limited unless the user brings the trigger mechanism to the free position wherein the movement of the arm is not prevented.

ed.

[0009] When the user wants to dislodge the detergent drawer for cleaning, the trigger mechanism is brought to the free position by the user wherein the movement of the arm is not prevented. When we continue pulling the detergent drawer, the pin separates from the arm by moving it in the horizontal since the trigger mechanism withdraws from the horizontal movement direction of the arm. The arm resumes its initial position after passing the pin.

[0010] When the detergent drawer is desired to be mounted into the detergent box chamber again, it is inserted into the detergent box chamber and pushed. The detergent drawer moves comfortably inside the chamber until the arm coincides with the pin. When the arm coincides with the pin, it stops and continues moving inside the detergent box chamber when the trigger mechanism is changed from the lock position to the free position by the user. In this case, when we continue pushing the detergent drawer, the pin moves the arm in the horizontal and is freed from the arm.

[0011] In an embodiment of the present invention, the washing machine comprises two arms, parallel to each other oppositely, extending along the movement direction of the detergent drawer and two pins disposed oppositely on the lower surface of the flushing device. The arms bear against the pins and jump thereover, moving towards each other in the horizontal as the detergent drawer is moved and simultaneously the trigger mechanism is changed to the free position by the user. The arms pass in between the pins.

[0012] The washing machine furthermore comprises a stopper each disposed oppositely on both of the two arms, limiting the movement of the detergent drawer by forming a barrier in front of the pin.

[0013] The washing machine comprises a protuberance each arranged oppositely on the arms, disposed at the front side of the stoppers with respect to the pulling direction of the detergent drawer, which contact the pins before the stoppers when the detergent drawer is desired to be dislodged from the detergent box chamber.

[0014] When the detergent drawer is desired to be dismounted by the user for cleaning, first the protuberances contact the pins. The protuberances make the motion of the detergent drawer difficult in the exit direction thereby the user understands that the detergent drawer has come to the loading position. The protuberances give the user a stopping feeling when the stoppers contact the pins, with the aim of forewarning before the detergent drawer stops. When the user continues to pull the detergent drawer, the pins jump over the protuberances and stop the detergent drawer by contacting the stoppers. The pins are prevented from moving relatively both forward and backward while in the region between the protuberances and the stoppers, thereby the detergent drawer is enabled to remain stationary in the loading position.

[0015] Furthermore, the trigger mechanism comprises a bridge, extending between the arms that move in the vertical axis with the force exerted by the user and a

barrier extending from the upper surface of the bridge towards the lower surface of the flushing device, which prevents the motion of the arms in the horizontal axis.

[0016] The bridge bends in the vertical axis when a force is exerted thereon due to its resiliency and the barrier thereon is drawn back from between the arms.

[0017] In this embodiment, when the user wants to dislodge the detergent drawer for cleaning, the pins contact the stopper. The pins cannot jump from the stoppers since the trigger mechanism is in the lock position (L) and the movement of the detergent drawer is prevented. The user presses on the bridge that moves vertically in order to entirely dislodge the detergent drawer from the detergent box chamber. The bridge is bent in the vertical axis by the force exerted thereon and separates the barrier from between the arms. Accordingly, the trigger mechanism changes to the free position (S). When the detergent drawer is pulled outside from the detergent box chamber while pressure is being applied on the bridge, the pins push and move the arms in the horizontal and freed from the arms. When the pressure applied on the bridge is released, the bridge resumes its initial position and the trigger mechanism changes to the lock position (L).

[0018] In another embodiment of the present invention, the trigger mechanism is at a position reachable by the finger of the user when the detergent drawer is partially taken out of the detergent box chamber. Thus, the user can easily move the trigger mechanism.

[0019] In another embodiment of the present invention, the arms and the trigger mechanism are situated on the siphon lid.

[0020] A washing machine realized in order to attain the aim of the present invention is illustrated in the attached figures, where:

Figure 1 - is the schematic view of a washing machine.

Figure 2 - is the detailed perspective view of a flushing device and the pins.

Figure 3 - is the perspective view of a detergent drawer and a detergent box chamber.

Figure 4 - is the detailed perspective view of a siphon lid.

Figure 5 - is the top view of a siphon lid.

Figure 6 - is the schematic view of the trigger mechanism in the free position (S) and in the lock position (L).

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

1. Washing machine
2. Tub
3. Detergent drawer
4. Detergent box chamber
5. Flushing device
6. Arm

7. Pin
8. Trigger mechanism
9. Bridge
10. Barrier
11. Stopper
12. Protuberance
13. Siphon Lid

[0022] The washing machine (1) comprises a tub (2) wherein the washing process is performed by placing the items to be washed, a detergent drawer (3) whereinto the washing agents such as detergent, softener etc. are placed and wherein the washing agents are mixed with water, a detergent box chamber (4) whereinto the detergent drawer (3) is mounted, and a flushing device (5) disposed above the detergent box chamber (4) for directing the water received from the main supply into the detergent drawer (3) (Figure 1 and Figure 2).

[0023] The washing machine (1) comprises one or more pins (7) that extend from the lower surface of the flushing device (5) towards the upper surface of the detergent drawer (3) and one or more arms (6) that extend from the upper surface of the detergent drawer (3) towards the lower surface of the flushing device (5), that move vertically or transversely in the horizontal with respect to the movement direction of the detergent drawer (3) as the pin (7) bears against thereto during the motion of the detergent drawer (3) (Figure 2, Figure 3 and Figure 4).

[0024] Moreover, the washing machine (1) comprises a trigger mechanism (8) on the upper surface of the detergent drawer (3), in the vicinity of the arm (6) moving in the horizontal, actuated by the user by being pressed thereon which limits the movement of the arm (6) in the horizontal direction (Figure 4 and Figure 5).

[0025] There are two different positions of the trigger mechanism (8). The first of these is the lock position (L) wherein the trigger mechanism (8) limits the horizontal movement of the arm (6), preventing the motion of the detergent drawer (3) and the other is the free position (S) wherein the movement of the arm (6) is not limited. When the detergent drawer (3) is moved by the user while the trigger mechanism (8) is in the lock position (L), the arm (6) bears against the pin (7). While in this position, the user cannot completely dismount the detergent drawer (3) from the detergent box chamber (4) or mount into the detergent box chamber (4) without bringing the trigger mechanism (8) to the free position (S) by pressing thereon.

[0026] The pin (7) has a rigid configuration. The arm (6) bears against the pin (7) during the opening-closing motion of the detergent drawer (3). The movement of the detergent drawer (3) remains limited as long as the arm (6) does not get out of the way of the pin (7) by moving in the horizontal since the pin (7) has a rigid configuration.

[0027] The detergent drawer (3) has two different positions, a loading position (Y) while in the detergent box chamber (4), being partially out of the detergent box

chamber (4) so that the user can easily load the washing agents without entirely separating from the detergent box chamber (4), and a closed position (K) being entirely inserted into the detergent box chamber (4), for delivering the washing agents therein into the tub (2) together with the wash water. The detergent drawer (3) can move comfortably until it changes from the closed position (K) to the loading position (Y). When the detergent drawer (3) comes to the loading position (Y), the arm (6) situated on the detergent drawer (3) bears against the pin (7). If the trigger mechanism (8) is in the lock position (L), it is situated on the horizontal movement direction of the arm (6) thereby preventing the motion of the arm (6) and hence the detergent drawer (3). If the trigger mechanism (8) is in the free position (S), the detergent drawer (3) can be pulled outwards since the motion of the arm (6) in the horizontal is not prevented by the trigger mechanism (8) (Figure 6).

[0028] The user brings the trigger mechanism (8) to the free position (S) when the detergent drawer (3) is desired to be dismounted for cleaning. In this position, the trigger mechanism (8) retreats from the horizontal movement direction of the arm (6) and allows the movement of the arm (6) in the horizontal. When the user continues to pull the detergent drawer (3), the pin (7) moves the arm (6) in the horizontal and is freed from the arm (6) since the trigger mechanism (8) retreats from the horizontal movement direction of the arm (6). The arm (6) resumes its initial position after passing the pin (7). Consequently, the detergent drawer (3) is enabled to proceed inside the detergent box chamber (4) toward the exit direction of the detergent drawer (3).

[0029] When the detergent drawer (3) is wanted to be mounted into the detergent box chamber (4) again, it is inserted into the detergent box chamber (4) and pushed therein. The detergent drawer (3) moves comfortably inside the detergent box chamber (4) until the arm (6) coincides with the pin (7). When the arm (6) coincides with the pin (7), the motion of the arm (6) in the horizontal is limited if the trigger mechanism (8) is in the lock position (L) and the detergent drawer (3) cannot be inserted into the detergent box chamber (4) further more. When the trigger mechanism (8) is brought to the free position (S) by the user, the arm (6) becomes free and can move in the horizontal. In this position, when the user continues to push the detergent drawer (3), the pin (7) moves the arm (6) in the horizontal direction and is freed from the arm (6).

[0030] In an embodiment of the present invention, the washing machine (1) comprises two arms (6) that extend oppositely and parallel to each other in the movement direction of the detergent drawer (3), with the trigger mechanism (8) disposed therebetween and two pins (7) arranged oppositely on the lower surface of the flushing device (5). While the detergent drawer (3) is moved, and simultaneously the trigger mechanism (8) is brought to the free position (S) by the user, the arms (6) move toward each other in the horizontal. The arms (6) pass through

in between the pins (7).

[0031] The washing machine (1) furthermore comprises a stopper (11) situated on the arm (6) that limits the movement of the detergent drawer (3) by forming an obstruction in front of the pin (7) and a protuberance (12) disposed in front of the stopper (11) with respect to the pulling direction of the detergent drawer (3), which contacts the pin (7) before the stopper (11) when the detergent drawer (3) is desired to be dislodged from the detergent box chamber (4).

[0032] The protuberances (12) contact the pins (7) before the stoppers (11) while the detergent drawer (3) is pulled. The protuberances (12) do not prevent the movement of the detergent drawer (3) while the detergent drawer (3) is pulled by the user and jump over the pin (7) by stretching when they contact the pin (7) but give the user a stopping sensation since a counterforce is created against pulling. When the detergent drawer (3) is continued to be pulled in the direction of pulling by the user, the pins (7) jump over the protuberances (12). The pins (7) contact the stoppers (11) after passing the protuberances (12) and stop between the protuberances (12) and the stoppers (11).

[0033] While the pins (7) are in the region between the protuberances (12) and the stoppers (11), its unwanted forward and backward movement is prevented and hence the detergent drawer (3) is enabled to remain stationary in the loading position.

[0034] In this embodiment of the present invention, the trigger mechanism (8) is disposed between the arms (6) such that the movement of the arms (6) towards each other is prevented. The trigger mechanism (8) comprises a bridge (9) that extends between the arms (6) and moves in the vertical axis and a barrier (10) which extends from the upper surface of the bridge (9) towards the lower surface of the flushing device (5), entering between the arms (6) thereby preventing their motion in the horizontal axis.

[0035] The bridge (9) is of a resilient configuration. The bridge (9) bends in the vertical axis due to this resiliency when force is exerted thereon by the user and after bending the barrier (10) situated thereon is withdrawn from between the arms (6). When the barrier (10) is withdrawn therebetween, the arms (6) can move comfortably in the horizontal axis.

[0036] When the detergent drawer (3) is desired to be dismounted by the user for cleaning, the arms (6) first contact the protuberances (12) since the trigger mechanism (8) is in the lock position (L) and during this contact, the user feels that the movement of the detergent drawer (3) is constrained. However, the movement of the detergent drawer (3) is not prevented, the pins (7) jump over the protuberances (12) and contact the stopper (11) when the detergent drawer (3) is continued to be pulled. When the pins (7) contact the stoppers (11), they try to move the arms (6) in the horizontal direction and to jump over the stoppers (11). Since the trigger mechanism (8) is in the lock position (L), the pins (7) cannot jump over

the stoppers (11) and the movement of the detergent drawer (3) is prevented.

[0037] When the user wants to entirely dislodge the detergent drawer (3) from the detergent box chamber (4), s/he brings the trigger mechanism (8) to the free position (S). The user presses on the bridge (9) moving in the vertical in order to bring the trigger mechanism (8) to the free position (S). The bridge (9) bends in the vertical axis by the force exerted thereon and the barrier (10) is withdrawn from between the arms (6). When the detergent drawer (3) is pulled outwards from the detergent box chamber (4) by pressing on the bridge (9), the arms (6) in contact with the pins (7) move towards each other by moving in the horizontal and the pins (7) are freed from the arms (6). Thus, the arms (6), being behind the pins (7) with respect to the exit direction, jump over the stoppers (11) on the pins (7) and come in front of the pins (7) with respect to the exit direction. Consequently, the detergent drawer (3) can be dislodged from the detergent box chamber (4).

[0038] The pins (7) exert pressure towards the arms (6) while the detergent drawer (3) is continued to be pulled while the trigger mechanism (8) is in the lock position (L). The pins (7) try to push the arms (6) towards each other in the horizontal direction by the pressure. The barrier (10), situated in between the arms (6), is compressed by the arms (6) from both sides in the horizontal. The trigger mechanism (8) cannot change to the free position (S) by forcing the detergent drawer (3) to move in the horizontal direction since the bridge (9) has to move in the vertical so that the barrier (10) can be withdrawn from therebetween. Consequently, the detergent drawer (3) is prevented to be dislodged from the detergent box chamber (4) unintentionally when excessive force is exerted during pulling.

[0039] In an embodiment of the present invention, the washing machine (1) comprises a siphon lid (13) situated on a siphon by which the liquid washing agents are discharged from the detergent drawer (3) with the received water. The arms (6) and the trigger mechanism (8) are disposed on the siphon lid (13).

[0040] In the washing machine (1) of the present invention, the motion of the detergent drawer (3) is limited while mounting into the detergent box chamber (4) or while dismounting, by means of the arm (6) situated on the detergent drawer (3) and movable in the horizontal, bearing against the pin (7) on the flushing device (5). The trigger mechanism (8) limiting the movement of the arm (6) in the horizontal should be brought to the free position (S) by the user in order to mount the detergent drawer (3) into the detergent box chamber (4) or dismount from the detergent box chamber (4). Accordingly, the detergent drawer (3) is prevented from being easily dislodged from the detergent box chamber (4) unintentionally.

[0041] It is to be understood that the present invention is not limited by the embodiments disclosed above and an expert in the technique can easily introduce different embodiments. These should be considered within the

scope of the protection of the claims of the present invention.

5 Claims

1. A washing machine (1) that comprises a tub (2) wherein the washing process is performed by placing the items to be washed, a detergent drawer (3) whereinto the washing agents such as detergent, softener etc. are placed and wherein the washing agents are mixed with water, a detergent box chamber (4) whereinto the detergent drawer (3) is mounted, a flushing device (5) disposed above the detergent box chamber (4) for directing the water received from a main supply into the detergent drawer (3), one or more pins (7) that extend from the lower surface of the flushing device (5) towards the upper surface of the detergent drawer (3), and **characterized by** one or more arms (6) that extend from the upper surface of the detergent drawer (3) towards the lower surface of the flushing device (5), movable transversely in the horizontal with respect to the pulling direction of the detergent drawer (3) as the at least one pin (7) bears against the at least one arm during the movement of the detergent drawer (3) and a trigger mechanism (8) on the upper surface of the detergent drawer (3), in the vicinity of the arm (6), which limits the movement of the arm (6) in the horizontal direction, a stopper (11) situated on the arm (6) that limits the movement of the detergent drawer (3) by forming an obstruction for the pin (7), and a protuberance (12) disposed in front of the stopper (11) with respect to the pulling direction of the detergent drawer (3), which contacts the pin (7) before the stopper (11) when the detergent drawer (3) is desired to be dislodged from the detergent box chamber (4).
2. A washing machine (1) as in Claim 1, **characterized by** the trigger mechanism (8) having two positions, the lock position (L) wherein the horizontal movement of the arm (6) is limited and the movement of the detergent drawer (3) is prevented and the free position (S) wherein the movement of the arm (6) is not prevented and the detergent drawer (3) is allowed to move.
3. A washing machine (1) as in any one of the above Claims, **characterized by** two arms (6) that extend oppositely and parallel to each other in the movement direction of the detergent drawer (3), with the trigger mechanism (8) disposed therebetween and two pins (7) arranged oppositely on the lower surface of the flushing device (5).
4. A washing machine (1) as in any one of the above Claims, **characterized by** the trigger mechanism (8) comprising a bridge (9) that extends between the

arms (6) and moves in the vertical axis and a barrier (10) which extends from the upper surface of the bridge (9) towards the lower surface of the flushing device (5), entering between the arms (6) thereby preventing their movement in the horizontal axis.

5. A washing machine (1) as in any one of the above Claims, **characterized by** the trigger mechanism (8) reachable by the finger of the user while the detergent drawer (3) is in the loading position.
6. A washing machine (1) as in any one of the above Claims, **characterized by** a siphon lid (13) whereon the trigger mechanism (8) and the arms (6) are disposed.

Patentansprüche

1. Waschmaschine (1), umfassend einen Waschbehälter (2), in dem der Waschvorgang durchgeführt wird, indem zu waschende Artikel hineingegeben werden, ein Waschmittelfach (3), in das Waschmittel wie Reinigungsmittel, Weichspüler usw. gegeben werden und in dem die Waschmittel mit Wasser gemischt werden, eine Reinigungsmittelkasten-kammer (4), in der das Waschmittelfach (3) angebracht ist, eine Spülvorrichtung (5), die über der Reinigungsmittelkasten-kammer (4) angeordnet sind, um das Wasser von einer Hauptversorgung in das Waschmittelfach (3) zuleiten, einen oder mehrere Stifte (7), die sich von der Unterseite der Spülvorrichtung (5) zur Oberseite des Waschmittelfachs (3) erstrecken, und **gekennzeichnet durch** einen oder mehrere Arme (6), die sich von der Oberseite des Waschmittelfachs (3) zur Unterseite der Spülvorrichtung (5) erstrecken und in der Horizontalen quer zur Zugrichtung des Waschmittelfachs (3) beweglich sind, wenn der wenigstens eine Stift (7) während der Bewegung des Waschmittelfachs (3) an dem wenigstens einen Arm anliegt, und einen Auslösemechanismus (8) an der Oberseite des Waschmittelfachs (3) in der Nähe des Arms (6), der die Bewegung des Arms (6) in der horizontalen Richtung einschränkt, einen Anschlag (11), der am Arm (6) angeordnet ist und der die Bewegung des Waschmittelfachs (3) einschränkt, indem er ein Hindernis für den Stift (7) bildet, und eine Wölbung (12), die in Bezug auf die Zugrichtung des Waschmittelfachs (3) vor dem Anschlag (11) angeordnet ist und vor dem Anschlag (11) in Kontakt mit dem Stift (7) gelangt, wenn das Waschmittelfach (3) aus der Reinigungsmittelkasten-kammer (4) entnommen werden soll.
2. Waschmaschine (1) nach Anspruch 1, **dadurch gekennzeichnet, dass** der Auslösemechanismus (8) zwei Stellungen aufweist, die Verriegelungsstellung (L), in der die horizontale Bewegung des Arms (6)

eingeschränkt wird und die Bewegung des Waschmittelfachs (3) verhindert wird, und die freie Stellung (S), in der die Bewegung des Arms (6) nicht verhindert wird und sich das Waschmittelfach (3) bewegen kann.

3. Waschmaschine (1) nach einem der vorangehenden Ansprüche, **gekennzeichnet durch** zwei Arme (6), die sich entgegengesetzt und parallel zueinander in der Bewegungsrichtung des Waschmittelfachs (3) erstrecken, wobei der Auslösemechanismus (8) dazwischen angeordnet ist, und zwei Stifte (7), die gegenüber an der Unterseite der Spülvorrichtung (5) angeordnet sind.
4. Waschmaschine (1) nach einem der vorangehenden Ansprüche, **dadurch gekennzeichnet, dass** der Auslösemechanismus (8) eine Brücke (9), die sich zwischen den Armen (6) erstreckt und sich an der vertikalen Achse bewegt, und eine Barriere (10) umfasst, die sich von der Oberseite der Brücke (9) zur Unterseite der Spülvorrichtung (5) erstreckt und zwischen die Arme (6) tritt und dadurch die Bewegung an der horizontalen Achse verhindert.
5. Waschmaschine (1) nach einem der vorangehenden Ansprüche, **dadurch gekennzeichnet, dass** der Auslösemechanismus (8) vom Finger des Benutzers erreichbar ist, solange das Waschmittelfach (3) in der Ladestellung ist.
6. Waschmaschine (1) nach einem der vorangehenden Ansprüche, **gekennzeichnet durch** einen Siphondeckel (13), an dem der Auslösemechanismus (8) und die Arme (6) angeordnet sind.

Revendications

1. Un lave-linge (1) qui comprend une cuve (2) où le processus de lavage est réalisé en plaçant les objets à laver dedans, un bac à produits (3) où les produits de lavage comme le détergent, l'assouplissant, etc. sont placés et où les produits de lavage sont mélangés avec l'eau, une chambre de bac à produits (4) dans laquelle le bac à produits (3) est placé, un distributeur (5) disposé au-dessus de la chambre de bac à produits (4) pour diriger l'eau reçue de l'alimentation principale dans le bac à produits (3), une ou plusieurs goupilles (7) qui s'étendent à partir de la surface inférieure du distributeur (5) vers la surface supérieure du bac à produits (3), et **caractérisé par** un ou plusieurs bras (6) qui s'étendent à partir de la surface supérieure du bac à produits (3) vers la surface inférieure du distributeur (5) et qui se déplacent transversalement au plan horizontal par rapport à la direction de tirage du bac à produits (3) comme l'au moins une goupille (7) s'appuie sur l'au

moins un bras pendant le mouvement du bac à produits (3) et un mécanisme de déclenchement (8) sur la surface supérieure du bac à produits (3) au voisinage du bras (6), qui limite le mouvement du bras (6) dans la direction horizontale, une butée (11) qui est disposée sur le bras (6) et qui limite le mouvement du bac à produits (3) en formant une barrière contre la goupille (7), et une protubérance (12) qui est disposée à l'avant de la butée (11) par rapport à la direction de tirage du bac à produits (3) et qui touche la goupille (7) avant la butée (11) lorsque l'on souhaite détacher le bac à produits (3) de la chambre de bac à produits (4).

2. Un lave-linge (1) selon la Revendication 1, **caracté-** 15
risé par le mécanisme de déclenchement (8) pré-
 sentant deux positions, c'est-à-dire la position de
 verrouillage (L) où le mouvement horizontal du bras
 (6) est limité et le mouvement du bac à produits (3)
 est empêché et la position libre (S) où le mouvement 20
 du bras (6) n'est pas empêché et le bac à produits
 (3) est permis de se déplacer.

3. Un lave-linge (1) selon l'une quelconque des reven- 25
 dications précédentes, **caractérisé par** deux bras
 (6) qui s'étendent de manière opposée et parallèle-
 ment l'un à l'autre dans la direction de mouvement
 du bac à produits (3) avec le mécanisme de déclen-
 chement (8) disposé entre eux et deux goupilles (7)
 qui sont arrangées de manière opposée sur la sur- 30
 face inférieure du distributeur (5).

4. Un lave-linge (1) selon l'une quelconque des reven- 35
 dications précédentes, **caractérisé par** le mécanis-
 me de déclenchement (8) comprenant un pont (9)
 qui s'étend entre les bras (6) et se déplace dans l'axe
 vertical et une barrière (10) qui s'étend à partir de la
 surface supérieure du pont (9) vers la surface infé-
 rieure du distributeur (5) et qui s'intercale entre les 40
 bras (6), donc empêchant leurs mouvements dans
 l'axe horizontal.

5. Un lave-linge (1) selon l'une quelconque des reven- 45
 dications précédentes, **caractérisé par** le mécanis-
 me de déclenchement (8) accessible par le doigt de
 l'utilisateur lorsque le bac à produits (3) est dans la
 position de chargement.

6. Un lave-linge (1) selon l'une quelconque des reven- 50
 dications précédentes, **caractérisée par** un couver-
 cle de siphon (13) sur lequel le mécanisme de dé-
 clenchement (8) et les bras (6) sont disposés.

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Figure 1

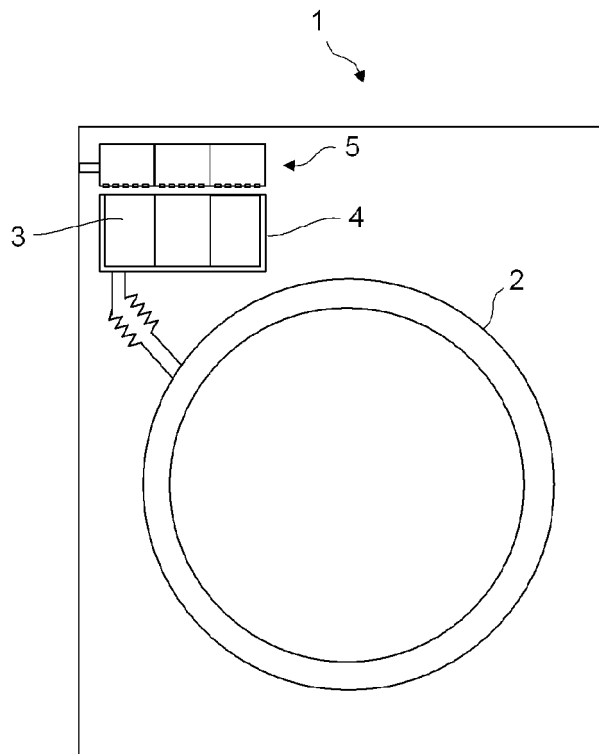


Figure 2

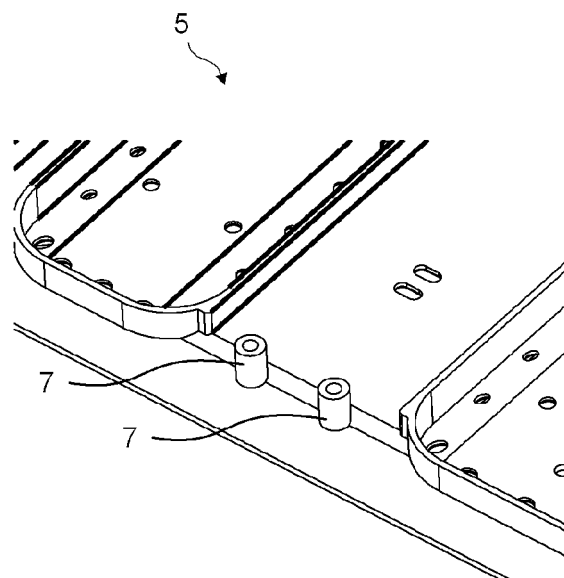


Figure 3

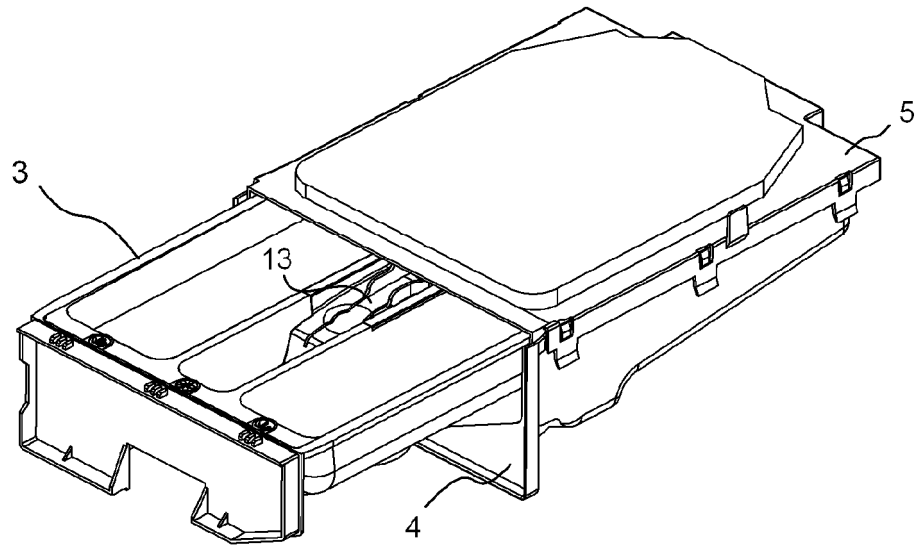


Figure 4

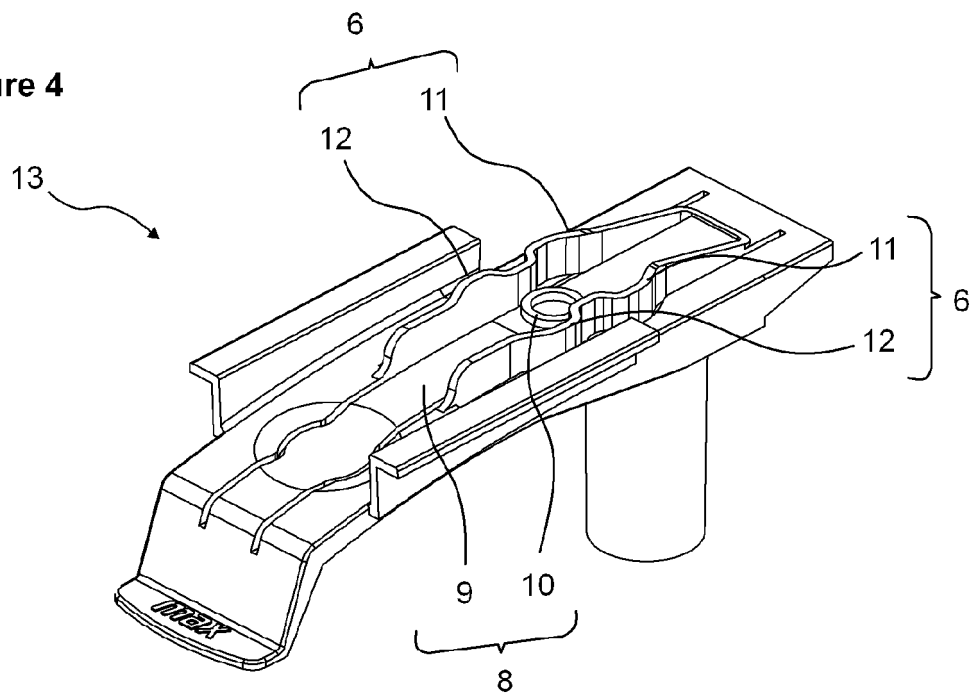


Figure 5

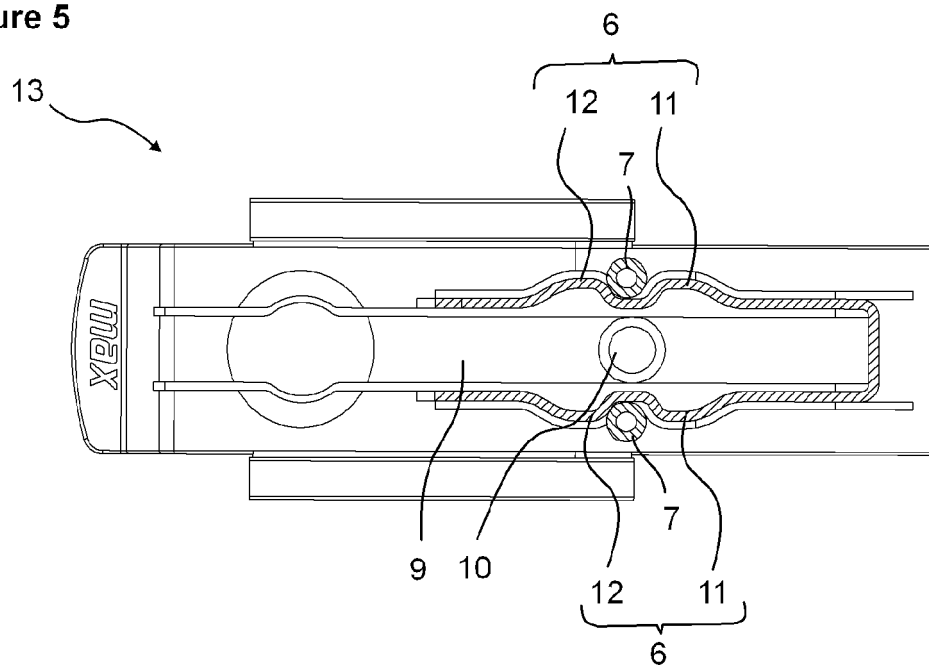
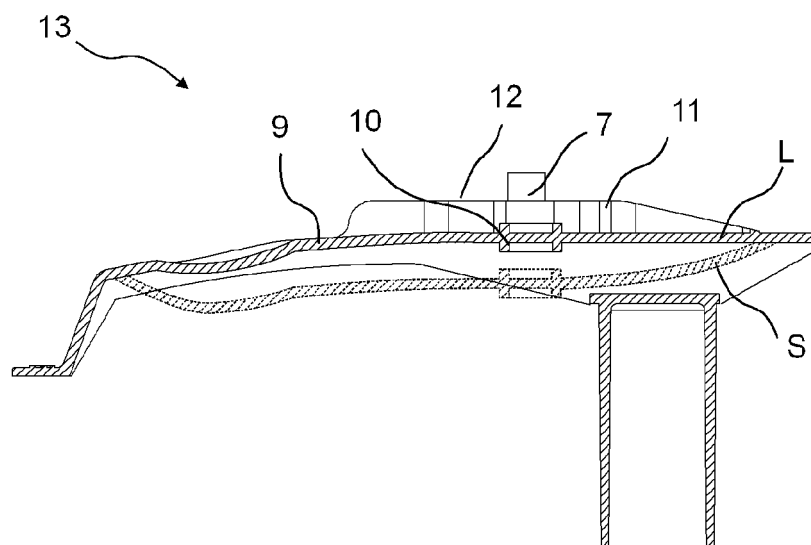


Figure 6



REFERENCES CITED IN THE DESCRIPTION

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