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(54) A LAUNDRY WASHER AND/OR DRYER COMPRISING A LOCKING MEMBER

WASCHMASCHINE UND/ODER TROCKNER MIT EINEM VERRIEGELUNGSELEMENT

LAVE-LINGE ET/OU SÈCHE-LINGE COMPRENANT UN ÉLÉMENT DE VERROUILLAGE

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(73) Proprietor: **Arçelik Anonim Sirketi**
34445 Istanbul (TR)

(72) Inventors:
- **SAHIN, Furkan**
  34445 Istanbul (TR)
- **SEVEN, Faruk**
  34445 Istanbul (TR)
- **SENGUN, Ismail**
  34445 Istanbul (TR)
- **YONAR, Cem**
  34445 Istanbul (TR)

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EP 4 332 294 B1

Description

[0001] The present invention relates to a laundry washer and/or dryer comprising a locking member which enables the door to be kept closed.

[0002] In laundry washer and/or dryers, the laundry to be washed or dried is loaded into the drum through a loading opening and the loading opening is closed by the door. Keeping the door in the closed position is ensured by a locking member. Generally, locking is realized by the placement of a lock latch disposed on the door into the lock body of the locking member provided on the front wall. The lock body is mounted on the front wall by being aligned with the opening on the front wall. The locking member is usually grouped to the front wall with connection members such as screws. Afterwards, usually a connection member is inserted into the front wall by means of screws or nails from the front of the front wall. The purpose of the connection member is to provide an aesthetic appearance for the user by preventing the user from seeing the locking member through the opening on the front wall. However, the screws which enable the lock and the connection member to be grouped on the front wall are visible to the user and an aesthetic appearance cannot be obtained. Moreover, mounting the connection member and the locking member to the front wall separately with screw or nail structures causes an additional assembly process in production, thus causing serious time losses and cost increase in production. As a solution to this technical problem, in one of the state of the art embodiments, the rails which are provided on the connection member and which extend in the vertical axis are attached to the slides on the lock by being slid in the vertical axis such that the connection member and the lock are grouped to the front wall at the same time. There is a limited space on the front wall for the fastening movement of the connection member in the vertical axis. Therefore, the size of the connection member must be small. This increases the possibility of encountering various safety problems.

[0003] In the state of the art European Patent Application No. EP2655724, a washer/dryer is disclosed, wherein the connection member is attached by being slid on the lock in a single axis. However, this embodiment is disadvantageous in that sufficient mounting safety cannot be provided since the connection member is connected in a single axis, the size of the connection member is small and the locking is performed in a single axis.

[0004] In the state of the art European Patent Application No. EP1681386, a washer/dryer is disclosed, comprising a lock group wherein the lock group is snap-fittingly mounted by being rotated and slid after being inserted through the front wall from a single side.

[0005] WO2014/161784 A1 discloses a laundry treating apparatus comprising a door lock having an extension protruding on the front panel of the apparatus, wherein the door lock is fixed to the panel by a connecting member that is slidably engaged with the panel via a form fit of a protrusion on the connecting member and a hole in the front panel.

[0006] The aim of the present invention is the realization of a laundry washer and/or dryer comprising a cost-efficient locking member with increased safety which provides ease of assembly.

[0007] The laundry washer and/or dryer 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 drum which is provided in the body and wherein the laundry to be washed and/or dried is placed; a front wall which is provided on the body and which has a loading opening allowing the laundry to be placed in the drum; a door which covers the loading opening; a lock latch which is provided on the door; an opening which is provided on the front wall so as to be adjacent to the loading opening; a locking member which is inserted into the opening from the rear side of the front wall facing the drum, which enables the door to remain closed throughout the washing/drying process and which has a lock body remaining behind the front wall and an extension extending to the front of the front wall; a rail on each side of the extension; a connection member which has two slides entering the rails when slid in a vertical engagement direction and which is attached to the locking member so as to move together with the locking member as the slides are fitted into the rails; at least one connection foot which is provided on the connection member; at least one vertical guiding opening which extends on the front wall in the engagement direction, which guides the movement of the connection member in the engagement direction and wherein the connection foot moves during the movement of the connection member in the engagement direction; and at least one horizontal guiding opening which is provided on the front wall, which extends in the horizontal axis, which joins with the vertical guiding opening, which guides the movement of the locking member and the connection member in the fixing direction and wherein the connection foot slidably moves as moved in a fixing direction perpendicular to the engagement direction together with the locking member whereon the connection member is attached. Thus, the locking member is mounted in a quick and easy manner, and mounting safety is increased by mounting the connection member onto the front wall by being slid in the engagement direction and in the fixing direction perpendicular to the engagement direction together with the locking member. This aspect of the invention is also advantageous in that mounting tolerances are increased and thus faulty operation is prevented by means of ensuring the centering in two axes.

[0008] In an embodiment of the present invention, on the connection foot, at least one protrusion is provided, which extends from the horizontal and vertical guiding openings towards the rear of the front wall. The protrusions abut against the rear of the front wall when the connection foot is in the horizontal guiding opening. Thus, the connection member and the locking member

which are connected to each other are attached to the front wall so as not to be pulled out from the front wall.

[0009] In another embodiment of the present invention, the horizontal guiding opening narrows in the fixing direction. Thus, the connection member which slidably moves in the horizontal guiding opening is pressed into the horizontal guiding opening.

[0010] In another embodiment of the present invention, on the connection member, at least one claw is provided, which enables the connection member to be fixed to the front wall in the horizontal axis by passing through the opening to the rear side of the front wall during the movement of the connection member in the fixing direction. Thus, the connection member and the locking member are attached to the front wall so as not to move in the horizontal axis and the mounting safety is increased.

[0011] In another embodiment of the present invention, on the vertical guiding opening, at least one stopper edge is provided, which limits the movement of the connection foot in the vertical guiding opening by bearing against the connection foot. Thus, after the slides on the connection member are inserted into the rails on the locking member in the vertical axis, the connection member is prevented from moving more in the vertical axis and the slide is prevented from leaving the rail.

[0012] In another embodiment of the present invention, on the horizontal guiding opening, at least one limiting member is provided, which limits the movement of the connection foot in the horizontal guiding opening by bearing against the same. Thus, the connection foot is prevented from moving in the horizontal fixing direction while bearing against the limiting member, and the locking member is easily centered in the opening. Moreover, when the connection foot contacts the limiting member, the claws on the connection member flex and pass through the opening on the front wall so as to be locked onto the front wall.

[0013] In another embodiment of the present invention, the connection member covers the vertical guiding opening and the horizontal guiding opening on the front wall in a fixing position where the connection member is brought at the end of the movement in the fixing direction. Thus, by means of the connection member, the user is prevented from seeing the openings on the front wall and a more aesthetic appearance is provided for the user.

[0014] By means of the present invention, the connection of the connection member and the locking member to the front wall is achieved without the need for any additional assembly processes while increasing assembly safety in a cost-effective manner.

[0015] The laundry washer and/or dryer realized in order to attain the aim of the present invention is illustrated in the attached figures, where:

Figure 1 - is the perspective view of the laundry washer and/or dryer related to an embodiment of the present invention.

Figure 2 - is the perspective view of the body of the laundry washer and/or dryer related to another embodiment of the present invention.

Figure 3 - is the front partial view of the front wall of the laundry washer and/or dryer related to another embodiment of the present invention.

Figure 4 - is the front view of the connection member before the slides are inserted into the rails related to another embodiment of the present invention.

Figure 5 - is the rear view of the connection member and the locking member before the slides are inserted into the rails related to another embodiment of the present invention.

Figure 6 - is the view of the connection member and the locking member when the slides are inserted into the rails by sliding the connection member in the engagement direction related to another embodiment of the present invention.

Figure 7 - is the view showing the connection member and the locking member being pushed in the fixing direction related to another embodiment of the present invention.

Figure 8 - is the cross-sectional view where the connection member and the locking member are connected to the front wall related to another embodiment of the present invention.

Figure 9 - is the front view where the connection member and the locking member are connected to the front wall related to another embodiment of the present invention.

[0016] The elements illustrated in the figures are numbered as follows:

1- Laundry washer and/or dryer

2- Body

3- Drum

4- Loading opening

5- Front wall

6- Door

7- Lock latch

8- Opening

9- Extension

10- Lock body

11- Locking member

12- Rail

13- Claw

14- Slide

15- Connection member

16- Connection foot

17- Vertical guiding opening

18- Horizontal guiding opening

19- Protrusion

20- Stopper edge

21- Limiting member

X: Fixing direction

Y: Engagement direction

[0017] The laundry washer and/or dryer (1) comprises a body (2); a drum (3) which is provided in the body (2) and wherein the laundry to be washed and/or dried is placed; a front wall (5) which is provided on the body (2) and which has a loading opening (4) allowing the laundry to be placed in the drum (3); a door (6) which covers the loading opening (4); a lock latch (7) which is provided on the door (6); an opening (8) which is provided on the front wall (5); a locking member (11) which is inserted into the opening and which has an extension (9) passing through the opening (8) and remaining in front of the front wall (5) and a lock body (10) remaining at the rear side of the opening (8); a rail (12) which is provided on each side of the extension (9); and a connection member (15) having at least two slides (14) entering the rails when slid in a vertical engagement direction (Y) and enabling the connection member (15) to be attached onto the locking member (11). The laundry washer and/or dryer (1) is a washing machine, a laundry dryer or a laundry washing/-drying machine. When the locking member (11) is placed in the opening (8) from the side of the opening (8) facing the inside of the drum (3), the extension (9) provided on the locking member (11) passes through the opening (8) and reaches to the front side of the front wall (5). First, the slides (14) provided on the connection member (15) are inserted into the rails (12) located on both sides of the extension (9). Then, when the connection member (15) is moved in the engagement direction (Y), the slides (14) are slidably moved in the rails (12). Thus, the connection member (15) and the locking member (11) engage with each other.

[0018] The laundry washer and/or dryer (1) of the present invention comprises at least one connection foot (16) which is provided on the connection member (15); at least one vertical guiding opening (17) which extends on the front wall (5) in the vertical axis and wherein the connection foot (16) slidably moves during the movement of the connection member (15) in the engagement direction (Y); and at least one horizontal guiding opening (18) which extends on the front wall (5) in the horizontal axis, which joins with the vertical guiding opening (17) and wherein the connection foot (16) slidably moves as the connection member (15) and the locking member (11) attached thereon are pushed in a fixing direction (X) perpendicular to the engagement direction (Y). The connection member (15) has at least one connection foot (16). The vertical guiding openings (17) are provided on the front wall (5) such that the connection feet (16) provided on the connection member (15) can move in the vertical direction with the movement of the connection member (15) in the engagement direction (Y). By moving the connecting member (15) in the engagement direction (Y), the connection feet (16) slidably move in the vertical guiding opening (17). Thus, the movement of the connection member (15) in the engagement direction (Y) is guided. In order to move the connection member (15) together with the locking member (11) in the horizontal direction, the horizontal guiding openings (18) are provided, which join with the vertical guiding openings (17) on the front wall (5) and which guide the movement of the connection member (15) in a fixing direction (X) almost perpendicular to the movement thereof in the vertical direction in the engagement direction (Y). The horizontal guiding opening (18) join with the vertical guiding opening (17) and the horizontal guiding opening (18) and the vertical guiding opening (17) together form an almost L-shaped opening on the front wall (5). Thus, the connection feet (16) slide in the vertical and horizontal guiding openings (17, 18) so as to guide the movement of the connection member (15) in both vertical and horizontal axes. Consequently, together with the connection member (15), the locking member (11) is placed in the opening (8) by being moved in the fixing direction (X) perpendicular to the engagement direction (Y), and fast and safe assembly of the connection member (15) and the locking member (11) group is ensured. Thus, the technical problem of the small size of the connection member (15) due to the limited space on the front wall (5) for the movement of the connection member (15) in the vertical axis in the engagement direction (Y), and thus the failure to provide sufficient strength, is eliminated.

[0019] In an embodiment of the present invention, on the connection foot (16), at least one protrusion (19) is provided, which bears against the front wall (5) when the connection foot (16) is in the horizontal guiding opening (18). As the connection member (15) is moved in the engagement direction (Y) to be connected to the locking member (11), the connection foot (16) is fitted into the

horizontal guiding opening (18). When the connection foot (16) is in the horizontal guiding opening (18), the protrusion (19) provided on the connection foot (16) and extending to the rear of the front wall (5) acts as a hook. Thus, the connection member (15) and the locking member (11) which are connected to each other at the end of the movement of the connection member (15) in the engagement direction (Y) are connected to the front wall (5) so as not to be pulled out through the opening (8).

[0020] In another embodiment of the present invention, a horizontal guiding opening (18) has a form which narrows down in the fixing direction (X). When the connection member (15) is pushed in the fixing direction (X), the connection foot (16) close-fits into the horizontal guiding opening (18) and limits the movement of the connection member (15) in the horizontal axis. Thus, the connection member (15) and the locking member (11) are enabled to be mounted on the front wall (5) more securely.

[0021] In another embodiment of the present invention, on the connection member (15), at least one claw (13) is provided, which passes through the opening (8) with the movement of the connection member (15) in the fixing direction (X) and extends behind the front wall (5). The claws (13) which can be locked by flexing engage with the front wall (5) at the end of the movement of the connection member (15) in the fixing direction (X), and enable the connection member (15) to be fixed on the front wall (5) in the horizontal axis. The width of the opening (8) in the fixing direction (X) is slightly larger than the width of the extension (9) in the fixing direction (X). Thus, the connection member (15) and the locking member (11) are enabled to be connected to the front wall (5) in a secure manner.

[0022] In another embodiment of the present invention, on the vertical guiding opening (17), at least one stopper edge (20) is provided, which limits the movement of the connection foot (16) in the vertical guiding opening (17) by bearing against the connection foot (16). Thus, when the slides (14) provided on the connection member (15) are inserted into the rails (12) provided on the locking member (11) in the engagement direction (Y), the connection foot (16) provided on the connection member (15) contacts the stopper edge (20) provided on the vertical guiding opening (17), and the movement of the connection member (15) in the vertical axis is terminated.

[0023] In another embodiment of the present invention, on the horizontal guiding opening (18), at least one limiting member (21) is provided, which limits the movement of the connection foot (16) in the horizontal guiding opening (18) by bearing against the connection foot (16). At the end of the movement of the connection member (15) together with the locking member (11) in the fixing direction (X), the connection foot (16) bears against the limiting member (21). When the connection foot (16) bears against the limiting member (21), the claws (13) provided on the connection member (15) pass through the opening (8) and are locked onto the front wall (5). Thus, the movement of the connection member (15) both in the fixing direction (X) and in the direction opposite to the fixing direction (X) is prevented.

[0024] In another embodiment of the present invention, the connection member (15) at least partially covers the horizontal guiding opening (17) and/or the vertical guiding opening (18). The connection member (15) is moved in the fixing direction (X) until the connection feet (16) provided on the connection member (15) bear against the limiting member (21) and the claws (13) provided on the connection member (15) pass through the opening (8) and engage with the front wall (5). At the end of this movement, the connection member (15) partially covers the front wall (5) so as to cover the vertical guiding opening (17) and the horizontal guiding opening (18) on the front wall (5). Thus, an aesthetic appearance is provided for the user.

[0025] By means of the present invention, a laundry washer and/or dryer (1) is realized, with improved aesthetic appearance and safety in a cost-effective manner, comprising a locking member (11) which is easily mounted onto the front wall (5).

Claims

1. A laundry washer and/or dryer (1) **comprising** a body (2); a drum (3) which is provided in the body (2) and wherein the laundry to be washed and/or dried is placed; a front wall (5) which is provided on the body (2) and which has a loading opening (4) allowing the laundry to be placed in the drum (3); a door (6) which covers the loading opening (4); a lock latch (7) which is provided on the door (6); an opening (8) which is provided on the front wall (5); a locking member (11) which is inserted into the opening (8) and which has an extension (9) passing through the opening (8) and remaining in front of the front wall (5) and a lock body (10) remaining at the rear side of the opening (8); a rail (12) which is provided on each side of the extension (9); and a connection member (15) having at least two slides (14) entering the rails (12) when slid in a vertical engagement direction (Y) and enabling the connection member (15) to be attached onto the locking member (11),

   - at least one connection foot (16) which is provided on the connection member (15);
   - at least one vertical guiding opening (17) which extends on the front wall (5) in the vertical axis and wherein the connection foot (16) slidably moves during the movement of the connection member (15) in the engagement direction (Y),

   characterized by

   - at least one horizontal guiding opening (18) which extends on the front wall (5) in the horizontal axis, which joins with the vertical guiding opening (17) and wherein the connection foot

(16) slidably moves as the connection member (15) and the locking member (11) attached thereon are pushed in a fixing direction (X) perpendicular to the engagement direction (Y).

2. A laundry washer and/or dryer (1) as in Claim 1, **characterized by** at least one protrusion (19) which is provided on the connection foot (16) and which bears against the front wall (5) when the connection foot (16) is in the horizontal guiding opening (18).

3. A laundry washer and/or dryer (1) as in Claim 1 or 2, **characterized by** the horizontal guiding opening (18) which has a form which narrows down in the fixing direction (X).

4. A laundry washer and/or dryer (1) as in any one of the above claims, **characterized by** at least one claw (13) which is provided on the connection member (15), which passes through the opening (8) with the movement of the connection member (15) in the fixing direction (X) and extends behind the front wall (5).

5. A laundry washer and/or dryer (1) as in any one of the above claims, **characterized by** at least one stopper edge (20) which is provided on the vertical guiding opening (17) and which limits the movement of the connection foot (16) in the vertical guiding opening (17) by bearing against the connection foot (16).

6. A laundry washer and/or dryer (1) as in any one of the above claims, **characterized by** at least one limiting member (21) which is provided on the horizontal guiding opening (18) and which limits the movement of the connection foot (16) in the horizontal guiding opening (18) by bearing against the connection foot (16).

7. A laundry washer and/or dryer (1) as in any one of the above claims, **characterized by** the connection member (15) which at least partially covers the horizontal guiding opening (17) and/or the vertical guiding opening (18).

Patentansprüche

1. Eine Waschmaschine und/oder ein Trockner (1) umfasst einen Körper (2); eine Trommel (3), die in dem Körper (2) vorgesehen ist und in der die zu waschende und/oder trocknende Wäsche platziert wird; eine Vorderwand (5), die an dem Körper (2) vorgesehen ist und die eine Ladeöffnung (4) aufweist, die es ermöglicht, die Wäsche in die Trommel (3) zu platzieren; eine Tür (6), die die Ladeöffnung (4) abdeckt; einen Schlossriegel (7), der an der Tür (6) vorgesehen ist; eine Öffnung (8), die an der Vorderwand (5) vorgesehen ist; ein Verriegelungselement (11), das in die Öffnung (8) eingesetzt ist und das eine Verlängerung (9) aufweist, die durch die Öffnung (8) hindurchgeht und vor der Vorderwand (5) verbleibt, und einen Schlosskörper (10), der an der Rückseite der Öffnung (8) verbleibt; eine Schiene (12), die auf jeder Seite der Verlängerung (9) vorgesehen ist; und ein Verbindungselement (15) mit mindestens zwei Gleitschienen (14), die in die Schienen (12) eintreten, wenn sie in einer vertikalen Eingriffsrichtung (Y) gleiten, und die es ermöglichen, das Verbindungselement (15) an dem Verriegelungselement (11) zu befestigen,

- mindestens einen Verbindungsfuß (16), der an dem Verbindungselement (15) vorgesehen ist;
- mindestens eine vertikale Führungsöffnung (17), die sich an der Vorderwand (5) in der vertikalen Achse erstreckt und wobei sich der Verbindungsfuß (16) bei der Bewegung des Verbindungselements (15) in der Eingriffsrichtung (Y) verschiebbar bewegt,

gekennzeichnet ist es dadurch, dass

- mindestens eine horizontale Führungsöffnung (18), die sich an der Vorderwand (5) in der horizontalen Achse erstreckt, die mit der vertikalen Führungsöffnung (17) zusammenläuft und bei der sich der Verbindungsfuß (16) gleitend bewegt, wenn das Verbindungselement (15) und das daran befestigte Verriegelungselement (11) in einer Befestigungsrichtung (X) senkrecht zur Eingriffsrichtung (Y) geschoben werden.

2. Eine Waschmaschine und/oder ein Trockner (1) wie in Anspruch 1 aufgeführt, **ist dadurch gekennzeichnet, dass** mindestens einen Vorsprung (19), der an dem Verbindungsfuß (16) vorgesehen ist und der an der Vorderwand (5) anliegt, wenn sich der Verbindungsfuß (16) in der horizontalen Führungsöffnung (18) befindet.

3. Eine Waschmaschine und/oder ein Trockner (1) wie in Anspruch 1 oder 2 aufgeführt, **ist dadurch gekennzeichnet, dass** die horizontale Führungsöffnung (18) eine Form aufweist, die sich in der Befestigungsrichtung (X) verengt.

4. Eine Waschmaschine und/oder Trockner (1) nach einem der obigen Ansprüche, **ist dadurch gekennzeichnet, dass** mindestens eine Klaue (13), die an dem Verbindungselement (15) vorgesehen ist, die bei der Bewegung des Verbindungselements (15) in der Befestigungsrichtung (X) durch die Öffnung (8) hindurchgeht und sich hinter die Vorderwand (5) erstreckt.

5. Eine Waschmaschine und/oder Tockner (1) nach

einem der vorstehenden Ansprüche, **ist dadurch gekennzeichnet, dass** mindestens eine Anschlagkante (20), die an der vertikalen Führungsöffnung (17) vorgesehen ist und die die Bewegung des Verbindungsfußes (16) in der vertikalen Führungsöffnung (17) begrenzt, indem sie an dem Verbindungsfuß (16) anliegt.

6. Eine Waschmaschine und/oder Trockner (1) nach einem der obigen Ansprüche, ist **dadurch gekennzeichnet, dass** mindestens ein Begrenzungselement (21), das an der horizontalen Führungsöffnung (18) vorgesehen ist und das die Bewegung des Verbindungsfußes (16) in der horizontalen Führungsöffnung (18) begrenzt, indem es an dem Verbindungsfuß (16) anliegt.

7. Eine Waschmaschine und/oder ein Trockner (1) nach einem der obigen Ansprüche, **ist dadurch gekennzeichnet, dass** das Verbindungselement (15), das die horizontale Führungsöffnung (17) und/oder die vertikale Führungsöffnung (18) zumindest teilweise abdeckt.

Revendications

1. Un lave-linge et/ou sèche-linge (1) **comprenant** un corps (2) ; un tambour (3) qui est prévu dans le corps (2) et dans lequel le linge à laver et/ou à sécher est placé ; une paroi frontale (5) qui est prévue sur le corps (2) et qui comporte une ouverture de chargement (4) permettant d'introduire le linge dans le tambour (3) ; une porte (6) qui couvre l'ouverture de chargement (4) ; un loquet de verrouillage (7) qui est prévu sur la porte (6); une ouverture (8) qui est prévue sur la paroi frontale (5) ; un élément de verrouillage (11) qui est inséré dans l'ouverture (8) et qui possède une extension (9) traversant l'ouverture (8) et restant devant la paroi frontale (5), et un corps de verrouillage (10) restant à l'arrière de l'ouverture (8) ; un rail (12) qui est prévu de chaque côté de l'extension (9) et un élément de connexion (15) ayant au moins deux glissières (14) s'insérant dans les rails (12) lorsqu'elles sont glissées dans une direction d'engagement verticale (Y) et permettant de fixer l'élément de connexion (15) à l'élément de verrouillage (11) ;

- au moins un pied de connexion (16) qui est prévu sur l'élément de connexion (15) ;
- au moins une ouverture de guidage verticale (17) qui s'étend sur la paroi frontale (5) dans un axe vertical et dans laquelle le pied de connexion (16) se déplace de manière coulissante lors du mouvement de l'élément de connexion (15) dans la direction d'engagement (Y), **caractérisée par**
- au moins une ouverture de guidage horizontale (18) qui s'étend sur la paroi frontale (5) dans un axe horizontal, qui rejoint l'ouverture de guidage verticale (17) et dans laquelle le pied de connexion (16) se déplace de manière coulissante lorsque l'élément de connexion (15) et l'élément de verrouillage (11) qui y est fixé sont poussés dans une direction de fixation (X) perpendiculaire à la direction d'engagement (Y).

2. Un lave-linge et/ou sèche-linge (1) selon la Revendication 1, **caractérisé par** au moins une saillie (19) qui est prévue sur le pied de connexion (16) et qui vient en appui contre la paroi frontale (5) lorsque le pied de connexion (16) se trouve dans l'ouverture de guidage horizontale (18).

3. Un lave-linge et/ou sèche-linge (1) selon la Revendication 1 ou 2, **caractérisé par** l'ouverture de guidage horizontale (18) qui a une forme qui se rétrécit dans la direction de fixation (X).

4. Un lave-linge et/ou sèche-linge (1) selon l'une quelconque des revendications précédentes, **caractérisé par** au moins une griffe (13) qui est prévue sur l'élément de connexion (15), qui passe par l'ouverture (8) avec le mouvement de l'élément de connexion (15) dans la direction de fixation (X) et s'étend derrière la paroi frontale (5).

5. Un lave-linge et/ou sèche-linge (1) selon l'une quelconque des revendications précédentes, **caractérisé par** au moins un bord d'arrêt (20) qui est prévu sur l'ouverture de guidage verticale (17) et qui limite le mouvement du pied de connexion (16) dans l'ouverture de guidage verticale (17) en venant en appui contre le pied de connexion (16).

6. Un lave-linge et/ou sèche-linge (1) selon l'une quelconque des revendications précédentes, **caractérisé par** au moins un élément de limitation (21) qui est prévu sur l'ouverture de guidage horizontale (18) et qui limite le mouvement du pied de connexion (16) dans l'ouverture de guidage horizontale (18) en venant en appui contre le pied de connexion (16).

7. Un lave-linge et/ou sèche-linge (1) selon l'une quelconque des revendications précédentes, **caractérisé par** l'élément de connexion (15) qui recouvre au moins partiellement l'ouverture de guidage horizontale (17) et/ou l'ouverture de guidage verticale (18).

Figure 1

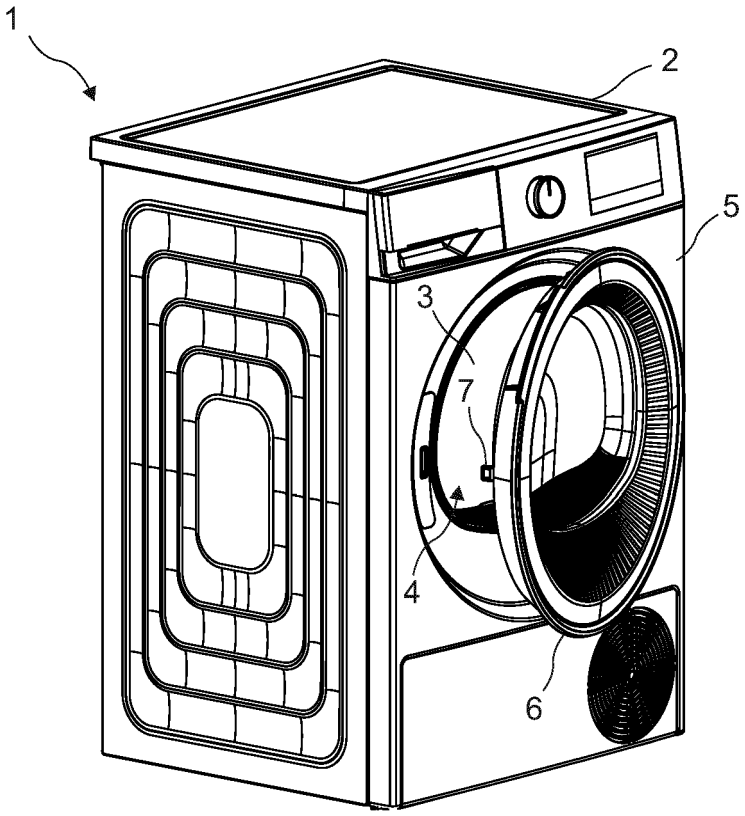


Figure 2

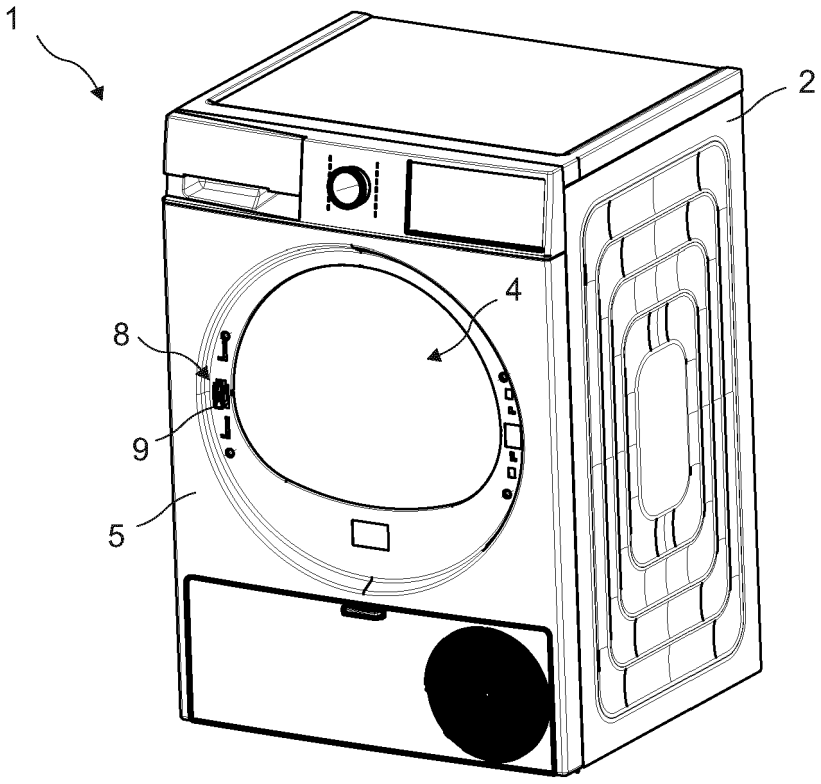


Figure 3

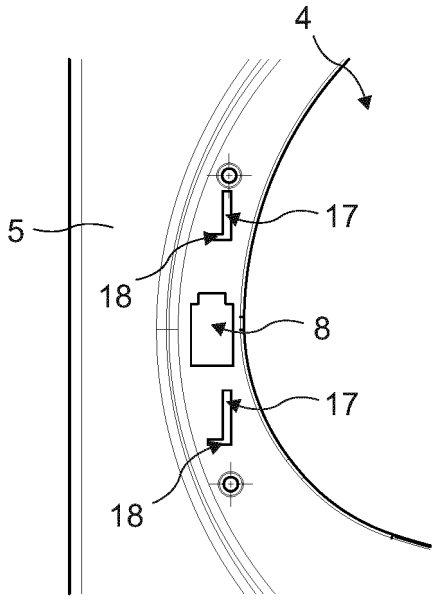


Figure 4

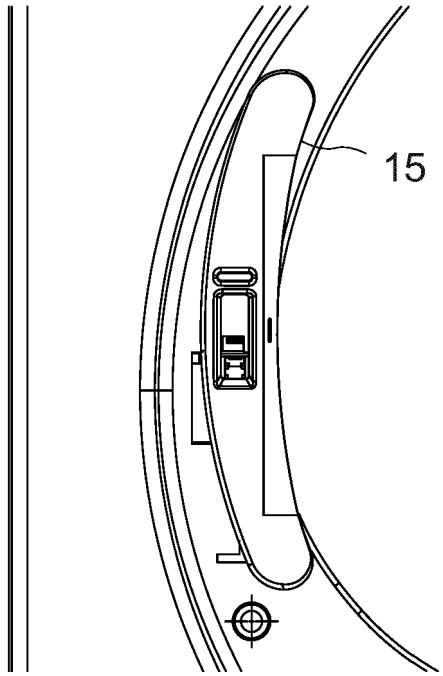


Figure 5

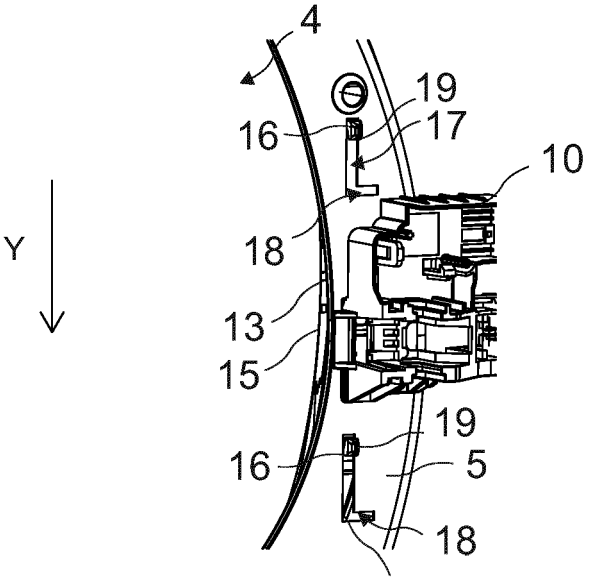


Figure 6

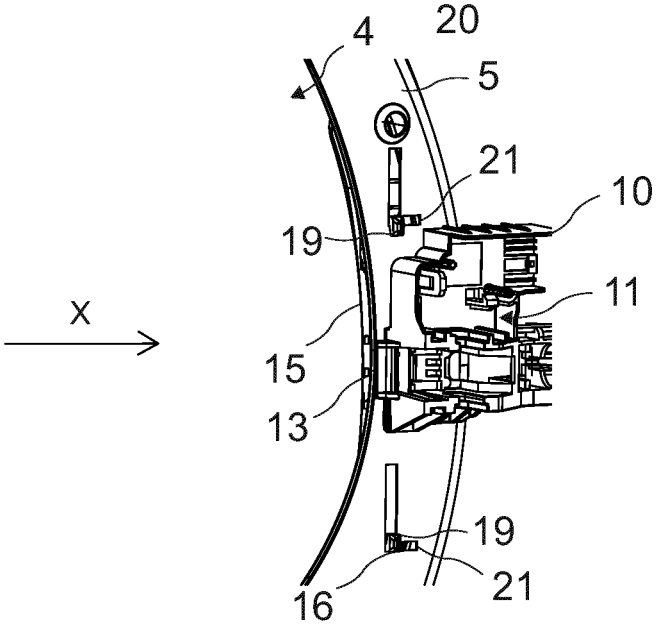


Figure 7

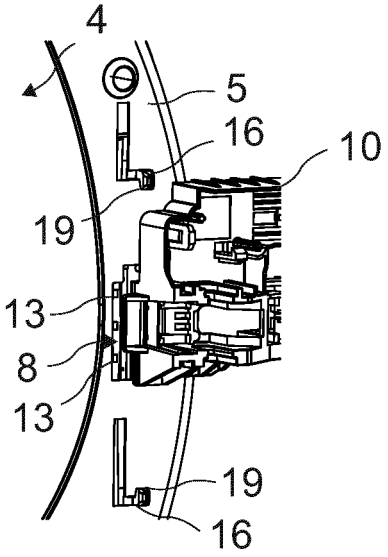


Figure 8

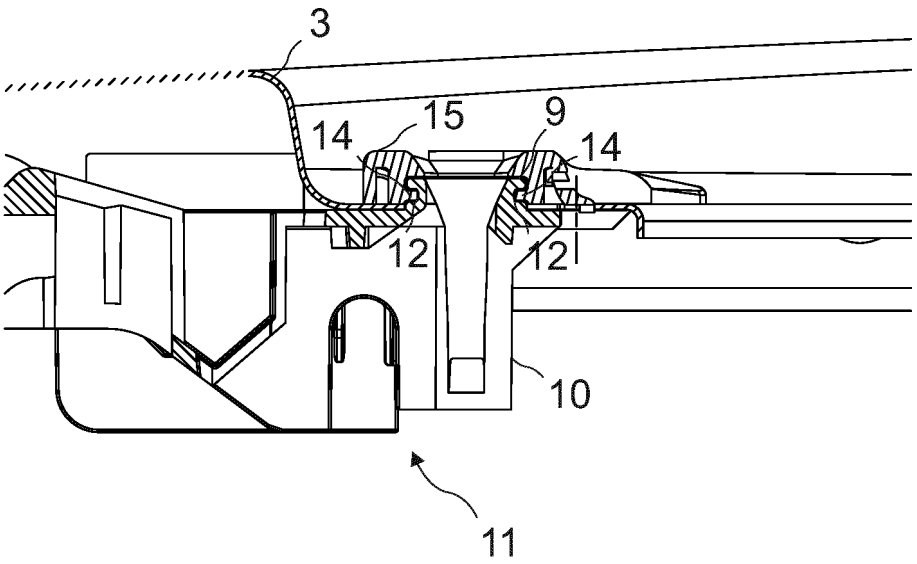
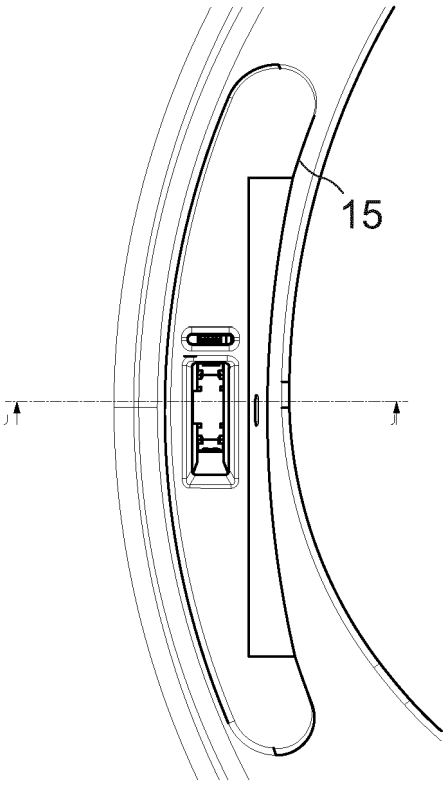


Figure 9



REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

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- EP 1681386 A **[0004]**
- WO 2014161784 A1 **[0005]**