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(54) METHOD FOR ASSEMBLING AN ELECTRICAL HOUSEHOLD APPLIANCE

VERFAHREN ZUR MONTAGE EINES ELEKTROHAUSHALTSGERÄTS

PROCÉDÉ POUR ASSEMBLER UN APPAREIL DOMESTIQUE ÉLECTRIQUE

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Description

Technical Field

[0001] This invention relates to a method for assembling an electrical household appliance.

Prior Art

[0002] Normally, electrical household appliances are fully assembled at a production plant and from there despatched to warehouses at various locations in a certain geographical area which in turn distribute them to different points of sale.

[0003] Each warehouse keeps a stock of each model of the electrical household appliance. For example, in the case of washing machines, there may be a large number of different machine models, many of which differ only in certain minor features such as the number and range of washing programs.

[0004] Further, a production plant that sends its products to different countries might produce electrical household appliances that differ in certain details such as, for example, the language of the labels indicating the function of the switches forming part of the user interface. US 2779463, for example, discloses method for assembling a television set comprising a body and a functional component connectable to the machine body after the body has been packed in a packaging without the functional component.

Disclosure of the Invention

[0005] In this context, this invention has for an aim to provide a method for assembling an electrical household appliance which makes it possible to simplify the distribution logistics of electrical household appliances.

[0006] The technical purpose and aim specified are substantially achieved by a method for assembling an electrical household appliance comprising the technical features described in one or more of the appended claims.

Brief Description of the Drawings

[0007] Further features and advantages of the invention are more apparent in the non-limiting description which follows of a preferred non-limiting embodiment of a method for assembling an electrical household appliance as illustrated in the accompanying drawings, in which:

- Figure 1 is a perspective view of a machine body;
- Figure 2 is a perspective view of an empty packaging;
- Figure 3 shows the machine body of Figure 1 inside the packaging of Figure 2;
- Figures 4 and 5 show further steps of the method according to the invention;

- Figure 6 is a perspective view of an electrical household appliance.

Detailed Description of the Preferred Embodiments of the Invention

[0008] The subject-matter of this invention is a method for assembling an electrical household appliance 1 comprising a machine body 2 and a first functional component 3 connectable to the machine body 2:

[0009] Conveniently, the electrical household appliance 1 is designed to perform a treatment on external products. Advantageously, the electrical household appliance 1 may be one of several different kinds of machine, as for example: a washing appliance (laundry washer, dishwasher), an appliance for drying textiles and garments, a cooking appliance, etc.

[0010] Conveniently, the machine body 2 comprises at least the set of parts that physically perform the treatment (which may be washing, drying, cooking, and so on) on an external product (for example dishes, garments, food) which is made to interact with the electrical household appliance 1.

[0011] The method comprises the step of placing the machine body 2, at least without the first functional component 3, in a packaging 4 for transportation (Figure 1 shows an example of a machine body 2, Figure 2 shows an example of a packaging 4 and Figure 3 shows an example of the machine body 2 inside the packaging 4).

[0012] The method also comprises connecting the first functional component 3 to the machine body 2 after the machine body 2 has been packed (see Figures 4 and 5 by way of a non-limiting example).

[0013] The step of connecting the first functional component 3 to the machine body 2 entails connecting the first functional component 3 to the machine body 2 electrically and/or mechanically.

[0014] In a first embodiment of it, the method might comprise applying the first functional component 3 to the machine body 2 after the machine body 2 has been taken out of the packaging 4 (this embodiment not being illustrated).

[0015] Preferably, the step of connecting the first functional component 3 occurs when the machine body 2 is still packed. This makes it possible to further handle the electrical household appliance 1 in conditions of maximum safety. It also allows the electrical household appliance 1 to be delivered to the end customer in the assembled condition (see Figure 6). In that case, the end customer does not perceive any difference from an electrical household appliance 1 assembled and distributed by a traditional system.

[0016] The step of connecting the first functional component 3 to the machine body 2 conveniently comprises applying the first functional component 3 through a window 40 in the packaging 4.

[0017] In effect, the packaging 4 comprises an outer enclosure 41 which surrounds the machine body 2. The

enclosure 41 may thus be a box large enough to contain the machine body 2. The window 40 may simply be an opening (for example, rectangular) in the enclosure 41. In an alternative embodiment (not illustrated) the window 40 comprises a movable element which, in a first configuration obstructs an opening 42 in the enclosure 4 and, in a second configuration, places the machine body 2 in communication with the outside of the packaging 4 through the opening 42. The movable element might have at least one flap connected to the rest of the enclosure 41 to allow opening by turning the movable element about the flap. Alternatively, the movable element might be removed completely from the rest of the enclosure 41 so as to uncover the opening 42. Advantageously, the movable element is associated with a swelling which, before the first functional component 3 is connected to the machine body 2, occupies the space that will later be occupied by the first functional component 3. This prevents unwanted movements of the machine body 2 inside the packaging 4.

[0018] The packaging 4 conveniently encircles the window 40 completely.

[0019] Conveniently, the first functional component 3 is an essential component for the operation of the electrical household appliance 1. The step of placing the machine body 2 in the packaging 4 comprises placing the machine body 2 in such a way that the window 40 in the packaging 4 faces a first seat for applying the first functional component 3.

[0020] The first functional component 3 is at least a first portion 50 of a user interface 5. In that case, some of the switches of the user interface 5 might be made on the machine body 2 and not on the first portion 50. Conveniently, the switches made on the machine body 2 might be linked to standard functions of the electrical household appliance 1 (for example power on/off for the electrical household appliance 1).

[0021] In an alternative embodiment, the first functional component 3 comprises the entire user interface 5. In that case, the first portion 50 coincides with the entire interface 5.

[0022] The machine body 2 comprises a housing in the user interface 5. Preferably, the machine body 2 comprises a first connector designed to interact with a corresponding second connector made on the first portion 50 of the user interface 5. By fitting the user interface 5 in the housing in the machine body 2 the first and second connectors are conveniently connected to each other.

[0023] Alternatively, the electrical household appliance 1 might be a washing appliance 6, in which case the first functional component 3 (instead of being the first portion of the user interface 5) is a panel 80 giving access to a drawer for adding chemical detergents to aid washing. Advantageously, the panel 80 might have a visible decoration on the surface of it and which can be customized according to personal taste. Based on the customer's requests, the machine body 2 might thus be fitted with a panel 80 with a preferred decoration without in any

way interfering with the production or distribution of the machine body 2. Alternatively, the panel 80 might contain information for the user (for example, the information might be a key explaining the symbols used in the user interface 5). Depending on the final destination of the electrical household appliance 1, this information may be written in different languages. It is therefore possible to apply the panel 80 bearing the information in the language of the country where the electrical household appliance 1 will be sold.

[0024] The step of placing the machine body 2 in the packaging 4 for transportation comprises placing the machine body 2 in the packaging 4 without a second functional component 8.

[0025] The step of placing the machine body 2 in the packaging 4 comprises placing the machine body 2 in such a way that the window in the packaging faces a second seat for applying the second functional component 8.

[0026] The method also comprises connecting the second functional component 8 to the machine body 2 after the machine body 2 has been packed.

[0027] The step of connecting the second functional component 8 to the machine body 2 comprises applying the second functional component 8 through the same window 40 in the packaging 4 as that used for applying the first functional component 3.

[0028] Advantageously, the second functional component 8 might be a panel 80 giving access to a drawer for adding chemical detergents to aid washing (the panel 80 having one or more of the features described above). Obviously, in the latter solution, the panel 80 does not coincide with the first functional component 3. For example, in a preferred embodiment, the first functional component 3 might be the at least one first portion 50 of the user interface 5, while the second functional component 8 might be the panel 80. In that case, advantageously, the method comprises applying the at least one first portion 50 of the user interface 5 and the panel 80 side by side on the machine body 2.

[0029] Conveniently, the method comprises connecting the at least one first portion 50 of the user interface 5 and the panel 80 side by side on the machine body 2 in such a way as to form in combination a control board extending mainly horizontally (the first portion 50 of the user interface 5 being applied on a first zone of the control board and the panel 80 being applied on a second zone of the control board). Advantageously, the first functional component 3, when it is applied to the machine body 2, extends between a first end 421 of the opening 42 and a central portion 423 of the opening 42. Advantageously, the step of applying the first functional component 3 comprises connecting first a part of the first functional component 3 to the first end 421 and then a part of the first functional component 3 to the central portion 423.

[0030] Advantageously, the second functional component 8, when it is applied to the machine body 2, extends between a second end 423 of the opening 42 and a cen-

tral portion 423 of the opening 42. Advantageously, the step of applying the second functional component 8 comprises connecting first a part of the second functional component 8 to the second end 422 and then a part of the second functional component 8 to the central portion 423.

[0031] Advantageously, the step of applying the first and/or the second functional component 3, 8 comprises fitting the first and/or the second functional component 3, 8 in the respective housing. Advantageously, the step of applying the first and/or the second functional component 3, 8 makes it possible to apply the first and/or the second functional component 3, 8 extremely easily, (for example by a snap connection to the machine body 2 or any other form of connection that does not require the use of external tools).

[0032] Preferably, the method comprises a step of testing the electrical household appliance 1 before packing the machine body 2, said testing step using, instead of the first functional component 3, a temporary device that is disconnected from the machine body 2 after the test. The testing step thus entails connecting the temporary device to the machine body 2. The temporary device can perform all or part of the functions of the first functional component 3 (so as to allow the test to be carried out). In one particular embodiment, the temporary device is identical to a specific version of the first functional component 3 which might be connected to the machine body 2 in a subsequent step of the method. Alternatively, the temporary device might be a portion of a testing system, as for example an electronic control device operatively connectable to the machine body 2 in order to perform the functions of the first functional component 3. For example, the control device might be electrically connectable to the machine body 2 using a robotized arm.

[0033] This solution is particularly important when the first functional component 3 is at least a first portion 50 of the user interface 5.

[0034] Conveniently, between the step of placing the machine body 2 in the packaging 4 and the step of connecting the first functional component 3 there is a step of transporting the machine body 2 inside the packaging 4 from the place of production to a place of storage (or, in a non-preferred embodiment, directly to the home of the end customer). Advantageously, therefore, identical machine bodies 2 may be made at the place of production. Differentiation may be carried out at the place of storage where the appropriate first functional component 3 is applied to the machine body 2 according to requirements. The first functional component 3 might be made at a different place of production from that where the machine body 2 is made.

[0035] The first functional component 3 is interchangeable with other components of the same type and compatible with the machine body 2. Similarly, the second functional component 8 is also interchangeable with other components of the same type and compatible with the machine body 2. The expression "compatible with the

machine body 2" is used to mean that they can be physically and operatively connected to the machine body 2. The expression "of the same type" is used to mean that they can perform the same function as the functional component they are used instead of.

[0036] In the method according to the invention, the first and/or the second functional component 3, 8 can be removed. The step of removing the first and/or the second functional component 3, 8 may require the use of a tool (for example, a screwdriver). The reason for that is to avoid accidental removal, which may be dangerous, especially if the first and/or the second functional component 3, 8 are electrically powered through the machine body 2 and their removal provides access to electrical contact points in the machine body 2 subject to dangerous voltages the end user may not be aware of.

[0037] Advantageously, at least in the preferred embodiment of the method according to the invention, after the first functional component 3 has been applied, the machine body 2 and the first functional component 3 associated with it can be transported to a new location (for example a point of sale, a new place of storage or the place of use).

[0038] This invention has important advantages.

[0039] The advantages are linked mainly to distribution logistics; in effect, the machine body 2 is of the same type for a multiplicity of electrical household appliance which differ only in certain additional features.

[0040] These additional features (which allow one machine to be distinguished from another) can be applied quickly and easily according to customers' specific requirements.

[0041] Furthermore, the cost of the additional features is much lower than the cost of the electrical household appliance in its entirety. Consequently, less capital is locked up in inventory.

[0042] Another advantage is that the machine body and the additional features may come from different productions sites.

Claims

1. A method for assembling an electrical household appliance (1) comprising a machine body (2) and a first functional component (3) connectable to the machine body (2), the method comprising the steps of:

- placing the machine body (2), at least without the first functional component (3), in a packaging (4) for transportation;
- connecting the first functional component (3) to the machine body (2) after the machine body (2) has been packed;

characterized in that the electrical household appliance (1) is a washing appliance (6) and the first functional component (3) is a panel (80) giving ac-

cess to a drawer for adding chemical detergents to aid washing.

2. The method according to claim 1, **characterized in that** the step of connecting the first functional component (3) occurs when the machine body (2) is still packed. 5
3. The method according to claim 1 or 2, **characterized in that** the step of connecting the first functional component (3) to the machine body (2) comprises applying the first functional component (3) through a window (40) in the packaging (4). 10
4. The method according to any of the foregoing claims, **characterized in that** the step of placing the machine body (2) in the packaging (4) for transportation comprises placing the machine body (2) in the packaging (4) without a second functional component (8), the method comprising connecting the second functional component (8) to the machine body (2) after the machine body (2) has been packed. 15
5. The method according to claims 3 and 4, **characterized in that** the step of connecting the second functional component (8) to the machine body (2) comprises applying the second functional component (8) through the same window (40) in the packaging (4) as that used for applying the first functional component (3). 20
6. The method according to any of the foregoing claims, **characterized in that** it comprises a step of testing the electrical household appliance (1) before packing the machine body (2) in the packaging (4), said testing step using, instead of the first functional component (3), a temporary device that is disconnected from the machine body (2) after the test. 25
7. The method according to any of the foregoing claims, **characterized in that** between the step of placing the machine body (2) in the packaging (4) and the step of connecting the first functional component (3) there is a step of transporting the machine body (2) inside the packaging (4) from the place of production to a place of storage. 30
8. The method according to any of the foregoing claims, **characterized in that** the first functional component (3) is interchangeable with other components of the same type and compatible with the machine body (2). 35
9. A method for assembling an electrical household appliance (1) comprising a machine body (2) and a first functional component (3) connectable to the machine body (2), the method comprising the steps of: 40

- placing the machine body (2), at least without the first functional component (3), in a packaging (4) for transportation;
- connecting the first functional component (3) to the machine body (2) after the machine body (2) has been packed, **characterized by** further comprising a step of:
 - testing the electrical household appliance (1) before packing the machine body (2) in the packaging (4), said testing step using, instead of the first functional component (3), a temporary device that is disconnected from the machine body (2) after the test.

10. The method according to claim 9, **characterized in that** the step of connecting the first functional component (3) occurs when the machine body (2) is still packed. 45
11. The method according to claim 9 or 10, **characterized in that** the step of connecting the first functional component (3) to the machine body (2) comprises applying the first functional component (3) through a window (40) in the packaging (4). 50
12. The method according to claim 9 or 10 or 11, **characterized in that** the first functional component (3) is at least a first portion (50) of a user interface (5). 55
13. The method according to claim 9 or 10 or 11 or 12, **characterized in that** between the step of placing the machine body (2) in the packaging (4) and the step of connecting the first functional component (3) there is a step of transporting the machine body (2) inside the packaging (4) from the place of production to a place of storage.
14. The method according to claim 9 or 10 or 11 or 12 or 13, **characterized in that** the first functional component (3) is interchangeable with other components of the same type and compatible with the machine body (2).

45 Patentansprüche

1. Verfahren für den Zusammenbau eines elektrischen Haushaltsgeräts (1), das einen Maschinenkörper (2) und eine mit dem Maschinenkörper (2) verbindbare erste Funktionskomponente (3) aufweist, wobei das Verfahren die Schritte aufweist:
 - Anordnen des Maschinenkörpers (2), zumindest ohne die erste Funktionskomponente (3), in einer Verpackung (4) für den Transport;
 - Verbinden der ersten Funktionskomponente (3) mit dem Maschinenkörper (2), nachdem der Maschinenkörper (2) verpackt worden ist;

- dadurch gekennzeichnet, dass** das elektrische Haushaltsgerät (1) eine Waschmaschine (6) ist, und die erste Funktionskomponente (3) eine Platte (80) ist, die einer Schublade zum Hinzufügen von chemischen Detergenzien zur Waschunterstützung Zugang gibt. 5
2. Das Verfahren nach Anspruch 1, **dadurch gekennzeichnet, dass** der Schritt des Verbindens der ersten Funktionskomponente (3) stattfindet, wenn der Maschinenkörper (2) noch verpackt ist. 10
3. Das Verfahren nach Anspruch 1 oder 2, **dadurch gekennzeichnet, dass** der Schritt des Verbindens der ersten Funktionskomponente (3) mit dem Maschinenkörper (2) aufweist, die erste Funktionskomponente (3) durch ein Fenster (40) in der Verpackung (4) anzubringen. 15
4. Das Verfahren nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** der Schritt des Anordnens des Maschinenkörpers (2) in der Verpackung (4) für den Transport aufweist, den Maschinenkörper (2) in der Verpackung (4) ohne eine zweite Funktionskomponente (8) anzuordnen, wobei das Verfahren aufweist, die zweite Funktionskomponente (8) mit dem Maschinenkörper (2) zu verbinden, nachdem der Maschinenkörper (2) verpackt worden ist. 20 25
5. Das Verfahren nach den Ansprüchen 3 und 4, **dadurch gekennzeichnet, dass** der Schritt des Verbindens der zweiten Funktionskomponente (8) mit dem Maschinenkörper (2) aufweist, die zweite Funktionskomponente (8) durch das gleiche Fenster (40) in der Verpackung (4) anzubringen wie jenem, das zum Anbringen der ersten Funktionskomponente (3) verwendet wird. 30 35
6. Das Verfahren nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** es einen Schritt aufweist, das elektrische Haushaltsgerät (1) zu testen, bevor der Maschinenkörper (2) in der Verpackung (4) verpackt wird, wobei der Testschritt, anstelle der ersten Funktionskomponente (3), eine temporäre Vorrichtung verwendet, die nach dem Test von dem Maschinenkörper (2) getrennt wird. 40 45
7. Das Verfahren nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** sich zwischen dem Schritt des Anordnens des Maschinenkörpers (2) in der Verpackung (4) und dem Schritt des Verbindens der ersten Funktionskomponente (3), ein Schritt befindet, den Maschinenkörper (2) innerhalb der Verpackung (4) vom Produktionsort zum Aufbewahrungsort zu transportieren. 50 55
8. Das Verfahren nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** die erste Funktionskomponente (3) gegen andere Komponenten des gleichen Typs, und die mit dem Maschinenkörper (2) kompatibel sind, austauschbar ist.
9. Verfahren für den Zusammenbau eines elektrischen Haushaltsgeräts (1), das einen Maschinenkörper (2) und eine mit dem Maschinenkörper (2) verbindbare erste Funktionskomponente (3) aufweist, wobei das Verfahren die Schritte aufweist:
- Anordnen des Maschinenkörpers (2), zumindest ohne die erste Funktionskomponente (3), in einer Verpackung (4) für den Transport;
 - Verbinden der ersten Funktionskomponente (3) mit dem Maschinenkörper (2), nachdem der Maschinenkörper (2) verpackt worden ist, **dadurch gekennzeichnet, dass** es ferner einen Schritt aufweist:
- Testen des elektrischen Haushaltsgeräts (1), bevor der Maschinenkörper (2) in der Verpackung (4) verpackt wird, wobei der Testschritt anstelle der ersten Funktionskomponente (3), eine temporäre Vorrichtung verwendet, die nach dem Test von dem Maschinenkörper (2) getrennt wird.
10. Das Verfahren nach Anspruch 9, **dadurch gekennzeichnet, dass** der Schritt des Verbindens der ersten Funktionskomponente (3) stattfindet, wenn der Maschinenkörper (2) noch verpackt ist.
11. Das Verfahren nach Anspruch 9 oder 10, **dadurch gekennzeichnet, dass** der Schritt des Verbindens der ersten Funktionskomponente (3) mit dem Maschinenkörper (2) aufweist, die erste Funktionskomponente (3) durch ein Fenster (40) in der Verpackung (4) anzubringen.
12. Das Verfahren nach Anspruch 9 oder 10 oder 11, **dadurch gekennzeichnet, dass** die erste Funktionskomponente (3) zumindest ein erster Abschnitt (50) einer Benutzerschnittstelle (5) ist.
13. Das Verfahren nach Anspruch 9 oder 10 oder 11 oder 12, **dadurch gekennzeichnet, dass** sich zwischen dem Schritt des Anordnens des Maschinenkörpers (2) in der Verpackung (4) und dem Schritt des Verbindens der ersten Funktionskomponente (3), ein Schritt befindet, den Maschinenkörper (2) innerhalb der Verpackung (4) vom Produktionsort zum Aufbewahrungsort zu transportieren.
14. Das Verfahren nach Anspruch 9 oder 10 oder 11 oder 12 oder 13, **dadurch gekennzeichnet, dass** die erste Funktionskomponente (3) gegen andere Komponenten des gleichen Typs, und die mit dem

Maschinenkörper (2) kompatibel sind, austauschbar ist.

Revendications

1. Procédé pour assembler un appareil électrique domestique (1) comportant un corps de machine (2) et un premier composant fonctionnel (3) pouvant être connecté au corps de machine (2), le procédé comportant les étapes comprenant le fait de :

- placer le corps de machine (2), au moins sans le premier composant fonctionnel (3), dans un emballage (4) destiné au transport ;
- connecter le premier composant fonctionnel (3) au corps de machine (2) après que le corps de machine (2) a été emballé ;

caractérisé en ce que l'appareil électrique ménager (1) est un appareil de lavage (6) et **en ce que** le premier composant fonctionnel (3) est un panneau (80) donnant accès à un tiroir permettant d'ajouter des détergents chimiques pour aider au lavage.

2. Procédé selon la revendication 1, **caractérisé en ce que** l'étape de connexion du premier composant fonctionnel (3) se produit lorsque le corps de machine (2) est encore emballé.

3. Procédé selon la revendication 1 ou 2, **caractérisé en ce que** l'étape consistant à connecter le premier composant fonctionnel (3) au corps de machine (2) comporte le fait d'appliquer le premier composant fonctionnel (3) à travers une fenêtre (40) dans l'emballage (4).

4. Procédé selon l'une quelconque des revendications précédentes, **caractérisé en ce que** l'étape consistant à placer le corps de machine (2) dans l'emballage (4) en vue d'un transport comporte de placer le corps de machine (2) dans l'emballage (4) sans un second composant fonctionnel (8), le procédé comprenant de connecter le second composant fonctionnel (8) au corps de machine (2) après que le corps de machine (2) a été emballé.

5. Procédé selon les revendications 3 et 4, **caractérisé en ce que** l'étape consistant à connecter le second composant fonctionnel (8) au corps de machine (2) comporte d'appliquer le second composant fonctionnel (8) à travers la même fenêtre (40) dans l'emballage (4) que celle qui est utilisée pour appliquer le premier composant fonctionnel (3).

6. Procédé selon l'une quelconque des revendications précédentes, **caractérisé en ce qu'il** comprend une étape consistant à tester l'appareil électrique ména-

ger (1) avant d'emballer le corps de machine (2) dans l'emballage (4), ladite étape de test utilisant, au lieu du premier composant fonctionnel (3), un dispositif temporaire qui est déconnecté du corps de la machine (2) après le test.

7. Procédé selon l'une quelconque des revendications précédentes **caractérisé en ce que**, entre l'étape consistant à placer le corps de machine (2) dans l'emballage (4) et l'étape consistant à connecter le premier composant fonctionnel (3), il existe une étape consistant à transporter le corps de machine (2) contenu dans l'emballage (4), de l'endroit où il est produit vers l'endroit où il est stocké.

8. Procédé selon l'une quelconque des revendications précédentes **caractérisé en ce que** le premier composant fonctionnel (3) est interchangeable avec d'autres composants du même type et compatibles avec le corps de machine (2).

9. Procédé pour assembler un appareil électrique ménager (1) comportant un corps de machine (2) et un premier composant fonctionnel (3) pouvant être connecté au corps de machine (2), le procédé comportant les étapes comprenant le fait de :

- placer le corps de machine (2), au moins sans le premier composant fonctionnel (3), dans un emballage (4) pour le transport ;
- connecter le premier composant fonctionnel (3) au corps de machine (2) après que le corps de machine (2) a été emballé, **caractérisé en ce qu'il** comprend, de plus, une étape consistant à :
- tester l'appareil électrique ménager (1) avant d'emballer le corps de machine (2) dans l'emballage (4), ladite étape de test utilisant, à la place du premier composant fonctionnel (3), un dispositif temporaire qui est déconnecté du corps de machine (2) après le test.

10. Procédé selon la revendication 9, **caractérisé en ce que** l'étape de connexion du premier composant fonctionnel (3) se produit lorsque le corps de machine (2) est encore emballé.

11. Procédé selon la revendication 9 ou 10, **caractérisé en ce que** l'étape de connexion du premier composant fonctionnel (3) au corps de machine (2) comprend d'appliquer le premier composant fonctionnel (3) à travers une fenêtre (40) formée dans l'emballage (4).

12. Procédé selon la revendication 9 ou 10 ou 11, **caractérisé en ce que** le premier composant fonctionnel (3) est au moins une première partie (50) d'une interface avec l'utilisateur (5).

13. Procédé selon la revendication 9 ou 10 ou 11 ou 12, **caractérisé en ce que**, entre l'étape consistant à placer le corps de machine (2) dans l'emballage (4) et l'étape consistant à connecter le premier composant fonctionnel (3), il y a une étape consistant à transporter le corps de machine (2) contenu dans l'emballage (4) de l'endroit où il est produit à l'endroit où il est stocké. 5
14. Procédé selon la revendication 9 ou 10 ou 11 ou 12 ou 13, **caractérisé en ce que** le premier composant fonctionnel (3) est interchangeable avec d'autres composants du même type et compatible avec le corps de machine (2). 10

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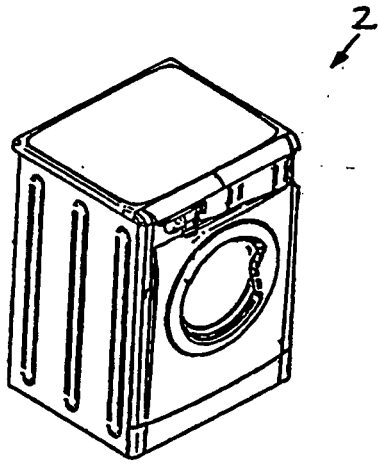


Fig. 1

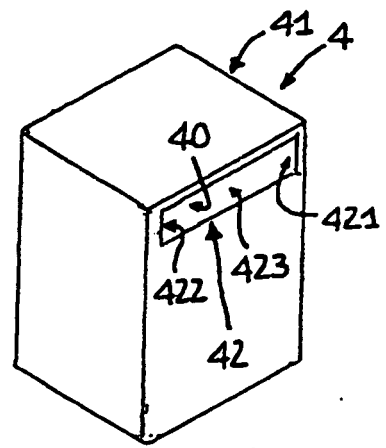


Fig. 2

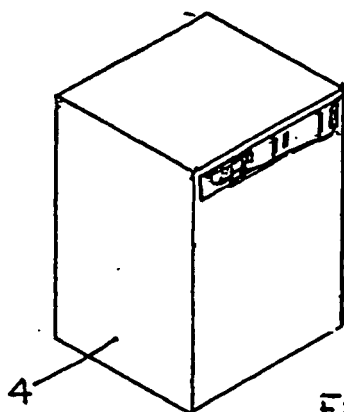
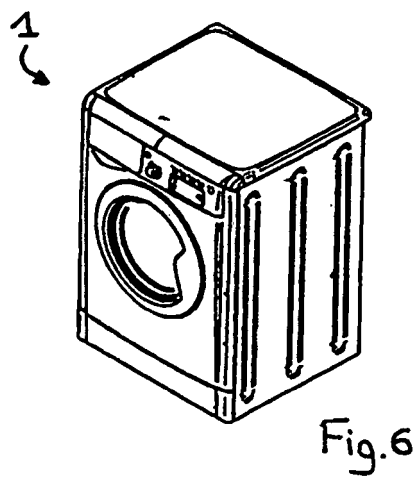
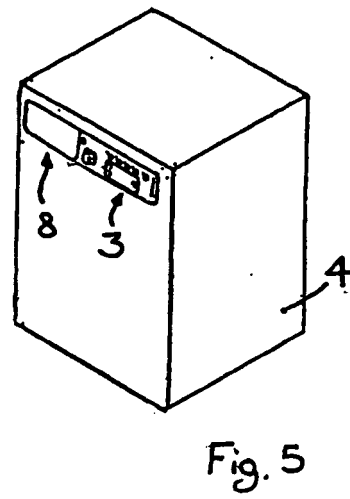
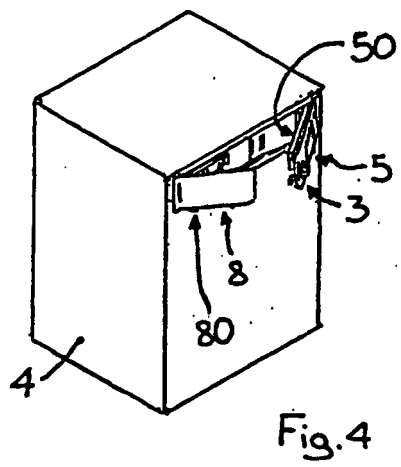


Fig. 3



REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

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