A closing device (10) for a container (C) for "disposable products, comprising a stiff frame (12), fixable to the container (C) at an opening thereof and provided with at least a central hole (14), and at least one door (16) hinged to the frame (12). On the inner surface of the door (16) there is constrained at least a second container (20) shaped and sized for containing at least a second product. The second container (20) is provided with at least one valve (22) provided with an orifice (28) for selectively dispensing the second product.
CLOSING DEVICE FOR A CONTAINER FOR DISPOSABLE TISSUES

[0001] The present invention relates to a closing device for a container, intended in particular for the use on containers for “disposable” tissues.

[0002] “Disposable” tissues are generally soaked with disinfectant liquids, deodorants and/or detergents and, as is well known, thanks to the extreme convenience thereof, by now they have become of daily use.

[0003] In fact, they are widely used both for cleaning one’s hands, without water, and for providing for the cleansing of private parts, especially in babies.

[0004] Such tissues are generally used in combination with other detergent and/or moisturising products and/or talcum powders that are applied to the skin after the cleansing carried out by the above tissues.

[0005] Such products are sold in special packages or containers, either stiff or flexible, provided with an opening.

[0006] A considerable difficulty, especially in cleansing babies, is therefore represented by the fact of using together all these products and the “disposable” tissues while holding the baby still.

[0007] For such reason, even a simple operation like that of cleansing the baby requires the presence of at least two people.

[0008] Moreover, “disposable” tissues are often used outside the household, for example on a journey or during the travelling imposed by everyday life.

[0009] During this travelling, having to have available also the products to be used in combination, the occupied space and the weights of the bags to bring along is increased.

[0010] In the light of the above, the need of having a device like that according to the present invention which should allow solving the problems of the prior art is clear.

[0011] The object of the present invention therefore is that of providing a closing device for a container for disposable tissues, intended in particular for the use on containers for “disposable” tissues, which allows to facilitate the cleansing operations on babies.

[0012] Another object of the invention is to provide a closing device for disposable tissues which allows to reduce the space occupied by the products used for baby cleansing.

[0013] Yet another object of the invention is to provide a closing device for disposable tissues especially simple, handy and inexpensive to manufacture.

[0014] These and other objects according to the present invention are achieved by providing a closing device for a container for disposable tissues as described in claim 1.

[0015] Further features of the invention are described in the following claims.

[0016] The features and the advantages of a closing device for a container for disposable tissues according to the present invention will appear more clearly from the following description, made by way of an indicative non-limiting example with reference to the annexed schematic drawings, wherein:

[0017] FIG. 1A shows a perspective view of a first embodiment of the closing device for a container according to the present invention;

[0018] FIG. 1B shows a side elevation view of the device of FIG. 1A;

[0019] FIG. 1C shows a top plan view of the device of FIG. 1A;

[0020] FIG. 2A shows a perspective view of a second embodiment of the closing device for a container according to the present invention;

[0021] FIG. 2B shows a side elevation view of the device of FIG. 2A;

[0022] FIG. 2C shows a top plan view of the device of FIG. 2A;

[0023] FIG. 2D shows a perspective bottom view of the device of FIG. 2A shown in usage configuration;

[0024] FIG. 2E shows a top plan view of the device shown in the configuration of FIG. 2D;

[0025] FIG. 3A shows a perspective view of a third embodiment of the closing device for a container according to the present invention;

[0026] FIG. 3B shows an enlarged view of the detail indicated with letter B in FIG. 3A;

[0027] FIG. 3C shows a perspective view of the device of FIG. 3A shown in usage configuration;

[0028] FIG. 3D shows an enlarged view of the detail indicated with letter D in FIG. 3C;

[0029] FIG. 3E shows a side elevation view of the device shown in the configuration of FIG. 3C;

[0030] FIG. 3F shows an enlarged view of the detail indicated with letter F in FIG. 3E;

[0031] FIG. 4A shows a perspective view of a fourth embodiment of the closing device for a container according to the present invention;

[0032] FIG. 4B shows a top plan view of the device of FIG. 4A;

[0033] FIG. 4C is a sectional view obtained along line A-A in FIG. 4B;

[0034] FIG. 4D shows a perspective bottom view of the device of FIG. 4A shown in usage configuration;

[0035] FIG. 4E shows an enlarged view of the detail indicated with letter E in FIG. 4D;

[0036] FIG. 4F shows a plan view of the device shown in the configuration of FIG. 4D;

[0037] FIG. 5A shows a perspective view of a fifth embodiment of the closing device for a container according to the present invention;

[0038] FIG. 5B is a longitudinal sectional view of the device of FIG. 5A;

[0039] FIG. 5C shows an enlarged view of the detail indicated with letter C in FIG. 5B;

[0040] FIG. 5D is a cross sectional view of the device of FIG. 5A;

[0041] FIG. 5E shows an enlarged view of the detail indicated with letter E in FIG. 5D;

[0042] FIG. 6A shows a perspective view of a sixth embodiment of the closing device for a container according to the present invention;

[0043] FIG. 6B is a longitudinal sectional view of the device of FIG. 6A;

[0044] FIG. 6C shows an enlarged view of the detail indicated with letter C in FIG. 6B;

[0045] FIG. 6D is a cross sectional view of the device of FIG. 6A;

[0046] FIG. 6E shows an enlarged view of the detail indicated with letter E in FIG. 6D;

[0047] FIG. 7A shows a perspective view of a seventh embodiment of the closing device for a container according to the present invention;
FIG. 7B is a cross sectional view of the device of FIG. 7A;

FIG. 7C shows an enlarged view of the detail indicated with letter C in FIG. 7B;

FIG. 7D shows an enlarged view of the detail indicated with letter D in FIG. 7C;

FIG. 8A shows a perspective view of a different embodiment of the closing device for a container shown in FIG. 7A;

FIG. 8B is a cross sectional view of the device of FIG. 8A;

FIG. 8C shows an enlarged view of the detail indicated with letter C in FIG. 8B; and

FIG. 8D shows an enlarged view of the detail indicated with letter D in FIG. 8C.

With reference to the figures, there is shown a closing device 10 according to the present invention, applicable to a container C (FIG. 1A) intended in particular for containing “disposable” tissues.

The closing device 10, made of a plastic material, substantially comprises a stiff frame 12, fixable to the container C at the opening thereof and provided with a central hole 14 through which the products contained into container C itself can be picked up, and at least one door 16, suitably hinged to frame 12 and provided with a tab 18 for facilitating the opening thereof.

Advantageously, according to the present invention, on the inner surface of door 16, that is, the surface intended for covering hole 14 when device 10 is in closed configuration, there is constrained at least a second container 20 shaped and sized for containing at least a second product.

The second product is selected from a moisturising and/or detergent and/or nourishing product and/or a talcum powder and/or a mixture thereof and/or a derivative thereof.

Container 20 is made of a flexible plastic material and is provided with at least one valve 22 having an orifice 28 for selectively dispensing the product contained therein. Being on the inner surface of door 16, container 20 is only accessible after the first opening of door 16 itself, so as to keep the contents thereof intact until usage is required in combination with the tissues located in the outer container.

Container 20 is therefore constrained to door 16 through proper retainer means 24 represented, in the embodiments shown in FIGS. 1 to 4, by special projections obtained on the inner surface of door 16 itself and suitable to be fit-coupled with the outer edge of container 20.

In the embodiments shown in FIGS. 5 to 8, the retainer means are otherwise formed by a plurality of hooking pins 32, made integral with the door 16 and disposed underneath the door 16 itself. Each hooking pin 32 is provided with an enlarged portion 34 (FIGS. 5E and 6C) to retain in an immovable way the container 20 on the inner surface of door 16. The hooking pins 32 can be four in number and they can be disposed at the edges of door 16, as shown in FIGS. 5 to 8, or they can be in any number according to the need and they can be disposed in any portion of door 16 itself.

Such retainer means 24 and 32 may in any case be represented by equivalent means, and be obtained on container 20 rather than on door 16, without departing from the scope of protection of the present invention.

According to the embodiment shown in FIGS. 1 and 5 to 8, container 20 is configured to remain fixed relative to door 16. To this end, the entire outer edge 26 of the inner surface of door 16 is made in relief, so as to prevent container 20 from going beyond with respect to door 16 itself.

In these embodiments, the dispensing valve 22 is arranged at the opening tab 18 or at one edge of door 16, and the orifice 28 thereof faces the bottom surface of door 16 itself. However, the dispensing valve 22 and its orifice 28 for dispensing the product may be disposed in any portion of container 20, without departing from the scope of protection of the present invention. The dispensing of the product contained in container 20 is therefore obtained by exerting a specific pressure on the surface of container 20 itself.

FIGS. 2A-2E show a second embodiment of the closing device according to the present invention. According to this embodiment, container 20, always constrained to door 16 by the retainer means 24, is however capable of shifting relative to the bottom surface of door 16 itself.

More precisely, container 20 is movable between a first rest position, shown in FIGS. 2A and 2C, wherein it is fully underneath door 16, and a second operating position, shown in FIGS. 2D and 2E, wherein its dispensing valve 22 is capable of going beyond the outer edge 26 of door 16 for allowing the product exit.

In this case, orifice 28 of the dispensing valve 22 faces the top surface of door 16 (FIG. 2D) and a discontinuity is provided on the outer edge 26 in relief for allowing the dispensing valve 22 itself to go beyond it in order to dispense the product contained in container 20.

FIGS. 3A-3F show a third embodiment of the closing device according to the present invention. Container 20 is once again capable of shifting relative to door 16, so as to allow the dispensing valve 22 to go beyond the outer edge 26 of door 16 for the product exit.

Unlike the embodiment described hereinbefore, however, orifice 28 of the dispensing valve 22 is on a plane substantially perpendicular to the lying plane of door 16 and in this case it is provided with a cover 30, elastically connected to container 20 and capable of opening automatically when such container 20 is in the operating position.

FIGS. 4A-4F show a fourth embodiment of the closing device according to the present invention, fully similar to that shown in FIGS. 2A-2E except for the different shape of the dispensing valve 22 and of orifice 28 thereof.

FIGS. 5A-5E show a fifth embodiment of the closing device according to the present invention, wherein container 20, made integral with door 16 and thus not being capable to shift relative to door 16 itself, is provided with a spout-shaped orifice 28, made with a soft deformable plastic material and closable by means of a rigid plastic projection 36 obtained on the outer edge of frame 12 (FIG. 5C). In practice, when door 16 is in a closed position, the projection 36 presses against the spout 28 thus blocking the exit of the product from container 20.

FIGS. 6A-6E show a sixth embodiment of the closing device according to the present invention, which differs from the embodiment shown in FIGS. 1A-1C merely for the hooking system of container 20 below the door 16 and for the position of orifice 28.

FIGS. 7A-7D show a seventh embodiment of the closing device according to the present invention, fully similar to that shown in FIGS. 6A-6E except for the fact that the orifice 28 can be closed by means of a first contrast element 38, made integral with the outer edge of frame 12 (FIG. 7A), that engages with a second contrast element or wall 40 obtained on container 20 at the orifice 28 itself or on door 16.
In practice, after the closing of door 16 on, the central hole 14 the first contrast element 38 comes into contact with the second contrast element 40, forming a pressure coupling so as to obstruct the orifice 28 and to prevent the accidental exit of the product contained into container 20.

Finally, FIGS. 8A-8D show a different embodiment of the closing device shown in FIGS. 7A-7D, wherein contrast element 38 is shaped in a specific way so as to further improve the closure of container 20, as well as the dispensing of the product contained therein. More precisely, contrast element 38 is provided with a circular portion or edge 42, and the contact with the corresponding contrast element 40 provided on valve 22 can take place both superficially (contact with the circular edge 42 only) and with a partial conical insertion of lower contrast element 38 into the upper one 40. The upper contrast element 40 is manufactured with a rounded shape in order to improve the product exit from the container 20.

It is important to point out the fact that, preferably in all the above illustrated embodiments of the closing device, an adhesive removable film (not shown) acting as a quality seal for the product contained into container 20 should be applied on the orifice 28. The adhesive film should therefore be removed from the user when container 20 has to be used for the first time, so as to allow the dispensing of said product.

It has been seen that the closing device for a container for disposable tissues according to the present invention achieves the objects mentioned hereinbefore, allowing to have integrated in the cover of a container preferably intended for containing disposable tissues, a second container for other products to use in combination with such tissues, so as to make cleansing operations, especially of babies, easier and to minimise the space occupied.

In addition, the specific dispensing devices obtained on the second container, although in their different embodiments, always ensure the integrity of the content of the second container itself for all the dispensing operations following to the first opening of the tissue container.

The closing device for a container for disposable tissues of the present invention thus conceived can be subject to several changes and variations, all falling within the same inventive concept.

Moreover in the practice, the materials used as well as their sizes and components, can be whatever, according to the technical requirements.

1. A closing device (10) for a container (C) for "dispensable" products, comprising a stiff frame (12), fixable to said container (C) at an opening thereof and provided with at least a central hole (14), and at least one door (16) hinged to said frame (12), on the inner surface of said door (16) being constrained at least a second container (20) shaped and sized for containing at least a second product, characterised in that said second container (20) is provided with at least one valve (22) provided with an orifice (28) for selectively dispensing said second product.

2. The closing device (10) according to claim 1, characterised in that said second product is selected from a moisturising product and/or a detergent product and/or a talcum powder and/or a mixture thereof and/or a derivative thereof.

3. The closing device (10) according to claim 1, characterised in that said orifice (28) faces the bottom surface of said door (16).

4. The closing device (10) according to claim 3, characterised in that said orifice (28) can be closed by means of a first contrast element (38) that engages with a second contrast element (40) obtained on said door (16).

5. The closing device (10) according to claim 3, characterised in that said orifice (28) can be closed by means of a first contrast element (38) that engages with a second contrast element (40) obtained on said container (20) at said orifice (28).

6. The closing device (10) according to claim 5, characterised in that said first contrast element (38) is provided with a circular portion or edge (42) for the contact with said second contrast element (40).

7. The closing device (10) according to claim 1, characterised in that said orifice (28) faces the top surface of said door (16).

8. The closing device (10) according to claim 1, characterised in that said orifice (28) is on a plane substantially perpendicular relative to said door (16).

9. The closing device (10) according to claim 8, characterised in that said orifice (28) is provided with a cover (30) elastically connected to said container (20).

10. The closing device (10) according to claim 1, characterised in that said second container (20) is constrained to said door (16) through one or more retainer means (24, 32) suitable to be fit-coupled with the external edge of said container (20).

11. The closing device (10) according to claim 11, characterised in that said one or more retainer means consists of special projections (24) obtained on the inner surface of said door (16).

12. The closing device (10) according to claim 11, characterised in that said one or more retainer means consists of special projections (24) obtained on the inner surface of said door (16).

13. The closing device (10) according to claim 11, characterised in that said one or more retainer means consists of a plurality of hooking pins (32) made integral with said door (16) and disposed underneath said door (16).

14. The closing device (10) according to claim 13, characterised in that each of said hooking pins (32) is provided with an enlarged portion (34) to retain in an immovable way said container (20) on the inner surface of said door (16).

15. The closing device (10) according to claim 1, characterised in that the entire outer edge (26) of the inner surface of said door (16) is made in relief.

16. The closing device (10) according to claim 15, characterised in that said container (20) is configured to remain fixed relative to said door (16).

17. The closing device (10) according to claim 15, characterised in that said container (20) is capable of shifting, relative to the bottom surface of said door (16), between a first rest position, wherein said container (20) is fully underneath said door (16), and a second operating position, wherein said dispensing valve (22) is capable of going beyond said outer edge (26) of said door (16).

18. The closing device (10) according to claim 17, characterised in that said container (20) is capable of going beyond said outer edge (26) of said door (16).

19. The closing device according to 1, characterised in that an adhesive removable film, acting as a quality seal for said second product contained into said second container (20), is applied on said orifice (28).