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(54) A DISPENSER DEVICE FOR LIQUID SOAP OR THE LIKE AND RELATED CONTAINER

SPENDERVORRICHTUNG FÜR FLÜSSIGE SEIFE ODER DERGLEICHEN UND VERWANDTER
BEHÄLTER

DISPOSITIF DE DISTRIBUTION POUR SAVON LIQUIDE OU SIMILAIRE ET CONTENANT UTILISE
DANS CE DISPOSITIF

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Description

FIELD OF THE INVENTION

[0001] The present invention relates to a dispensing-dosing device for liquid soap, shampoo or similar fluids, of the type composed of a wall-mountable holder and of a squeezable bottle for the fluid to be dispensed, retained in a replaceable manner by the holder. The invention also relates to a bottle specially shaped to be mounted and held by the holder according to the objects of the present invention, but also adapted to be used separately from the holder.

BACKGROUND OF THE PRIOR ART

[0002] Dispensing devices of the aforesaid type are already known in the art and intended for use in communities, such as hotels, gymnasiums, common restrooms and other places in which the fluid must be dispensed to different users.

[0003] These devices are generally composed of a wall-mountable holder, which houses and holds a replaceable bottle, which can be provided with an automatic dispensing-and dosing valve. To prevent pilfering of the bottle, it is retained in the holder by means of a safety connection openable only with a special key.

[0004] In some applications, the bottle is pressed by means of a swinging cover on which the user can act with the same hand intended to collect the liquid soap or the like. In other cases, the bottle is held in a manner visible and accessible to users, who squeeze it with their fingers, generally collecting the fluid in the other hand.

[0005] An example of the latter type of dispensing device, more economical than the former one, is given in EP 530789, in which the bottle is retained in a C-shaped holder provided at the bottom with a removable sleeve that can be inserted to connect with an anti-pilfer system. Another example is given by EP842630, in which the bottle is supported again by a C-shaped holder having an upper arm that connects by snapping into a specific seat provided on the bottle.

[0006] US-A-4749108 relates to a flexible dispensing package for fluid material. When the package is unintentionally squeezed, no fluid material is dispensed, while in case of intentional external forces, the fluid material is dispensed. The flexible package has a substantially cylindrical resiliently deformable body and a self-sealing dispensing valve at the bottom of said body. A recessed notch is formed at the superior part of the cylindrical body. Said notch has a hook shape for allowing the insertion of a support member in order to hang the package from a support.

[0007] EP-A-1731440 discloses a viscous fluid dispenser, comprising a compressible body having a substantially tubular shape, a head comprising a cap structure connected to a dispensing end and a nozzle connected to said cap structure. The bottom of the dispenser

incorporates a holder provided with an aperture for hanging the dispenser from a support.

[0008] EP-A-0070641 discloses a medical liquid bottle having a tubular shape. The bottle is provided with a dispensing opening at the bottom, while a holder is formed at its top part. The bottle can be suspended by a hook inserted into the aperture formed in the holder.

[0009] WO 94/00363 relates to a fluid dispensing package comprising a tubular container with a closed top and an open bottom having a gusset panel attached thereto. An aperture is provided in the closed top part of the package for hanging the package from a support.

[0010] These prior art embodiments are still relatively costly and, moreover, in the case of EP 842630, requires the production of specific bottles, which in practice cannot be used without the holder. Moreover, the holder of prior art embodiments requires holes at a considerable mutual distance for mounting on the wall, of which it occupies a relatively large space. Finally, the holder being made of a plastic material, can be forced, exploiting its deformable nature, to fraudulently extract the bottle in spite of the anti-pilfer system. Other drawbacks of prior art devices are given by difficult access to the bottle, on the side facing the holder, for cleaning thereof, and by an available surface of the bottle limited to the side facing the user, to affix wording or the like relative to the content of the bottle, both of a promotional nature, and with information according to the law.

OBJECTS OF THE INVENTION

[0011] This being stated, it is now the object of the present invention to provide a dispensing-dosing device of the type indicated above, which overcomes the drawbacks of prior art and in particular which has a very economical holder with small dimensions, nonetheless capable of holding the bottle without allowing any possible undue removal when the anti-pilfer device is activated. Moreover, the holder must be capable of holding the bottle in position so that it has the maximum mobility to be used easily in any position desired or deemed convenient by the user.

[0012] Another object of the invention is to provide a device and a bottle for dosed dispensing of liquid soap or similar fluids, which allows the bottle to be used separately from the holder and which allows complete accessibility of all surfaces of the bottle mounted on the holder both for cleaning and to affix useful or necessary information.

SUBJECT OF THE INTENTION

[0013] The dispensing device and the bottle which, according to the invention, allow these and other objects to be achieved, are defined in the appended claims and more in general in claim 1 with regard to the bottle and in claim 11 with regard to the device.

BRIEF DESCRIPTION OF THE FIGURES

[0014] A particularly preferred embodiment of the invention will be now described purely by way of example, with reference to the accompanying drawings, in which:

- figure 1 is a perspective view of the dispensing-dosing device according to the preferred embodiment of the invention;
- figure 2 is a side view of the device of figure 1;
- figure 3 is a sectional side view of the device;
- figure 4 is a front view of the device;
- figure 5 shows a front view of a possible configuration of the key to release the anti-pilfer device.

DESCRIPTION OF THE PREFERRED EMBODIMENT

[0015] The principle of the present invention is based on the mutual constraining of two annular parts, one formed on the bottle and the other of the holder, at least one of the two parts being openable to allow mutual insertion and subsequently lockable preferably with an anti-pilfer device.

[0016] In the embodiment described here, the openable annular part has been provided in the holder, both to simplify production and for reasons of cost, given that the bottle is replaceable.

[0017] It must be noted that the term "annular" is intended here as any closed or closable configuration, with a central opening.

[0018] This being stated, the device shown is essentially composed of two components, i.e. a holder 10 and a bottle 11 intended to be mutually connected for use.

[0019] The holder 10 is of the wall-mountable type, for example using a wall plug or other known means through an opening 12 in the rear base 13 thereof. This holder 10 is formed of two parts, 14 and 15 respectively, both substantially U-shaped. More precisely, the fixed part 14 has the aforesaid rear base 13 and two arms 16 and 17 which extend from the base 13 in an essentially perpendicular direction to the fixing wall, preferably according to two planes vertically spaced apart. The moving part 15 is also U-shaped, with a base 18 and two arms 19 and 20 which can slide with respect to or inside the arms 16 and 17 of the fixed part, from a position in which the moving part 15 is detached from the fixed part, to fit or remove the bottle 11, to a position in which the moving part is connected to the fixed part to hold the bottle 11. Preferably, the connection is of the snap-in type, for example between the upper arms 16 and 19, which can only be removed with the use of a specific key, for example of the type indicated with 21 in figures 1 and 5.

[0020] The shown key 21 is, for example, bracket shaped with elastic arms 22, 23, each provided with a projection 24, 25 intended to be inserted in corresponding openings 26, 27 of the holder and to be pressed to perform disconnection, thereby releasing the two parts 14 and 15 of the holder.

[0021] The bottle 11, of the type with an end cover 28 at the dispensing end and with an automatic dispensing and dosing valve, known per se and therefore not illustrated, can have any general configuration, preferably with two opposed walls of greater extension and two walls of lesser extension, also opposed and connected to the first two, the bottle being of the type that can be squeezed directly by the user's fingers to dispense the fluid.

[0022] At the opposite end to the dispensing end, the bottle 11 has a closed ring configuration 29, with an opening that involves almost the whole of the end of the walls of greater extension to be fitted to the holder 10 as shown in the drawings.

[0023] Connection between the two rings, substantially at 90° from each other, is implemented so that there is clearance therebetween in a direction parallel to the fixing wall and moreover it is preferable to provide a mutual flat supporting section, as indicated by the arrow x for improved stability of the bottle during use.

[0024] Contrary to all prior art embodiments, with the aforesaid clearance, the bottle 11 is not held fixed, but can instead be made to swing in the two directions, as indicated by the double arrow y. This allows ideal positioning of the bottle for the user, easy access to all parts thereof for cleaning and, finally, makes all the surfaces thereof, including the rear, available to affix commercial information or information according to the law, which can thus always be read.

[0025] Finally, it should be noted that the bottle can also be used, if desired, detached for the holder described, in cases in which it is not necessary to secure it, for example in domestic uses, in which the ring thereof can be inserted over a simple wall hook.

Claims

1. A dispensing-dosing bottle (11), of the type that can be squeezed directly by the user's fingers and provided with an automatic dispensing valve, **characterized in that** the end opposite its dispensing end has an essentially closed ring configuration (29), especially for the use of a holder (10).
2. A bottle as claimed in claim 1, with an essentially flattened shape, **characterized in that** the annular configuration (29) of the end is coplanar with the surfaces of greater extension of the bottle.
3. A dispensing-dosing device for liquid soap, shampoo or similar fluids, of the type composed of a wall-mountable holder (10) and of a squeezable bottle (11) according to claim 1 for the fluid to be dispensed, retained in a replaceable manner by the holder (10), so that it can be squeezed directly by the user's fingers to dispense the fluid through the automatic dispensing valve, **characterized in that** also the holder (10) has a part with essentially annular configuration,

at least one of the aforesaid annular parts being openable to allow mutual insertion.

4. A dispensing-dosing device as claimed in claim 3, **characterized in that** the annular holder (10) is formed of two separable components (14, 15) connectable for closing thereof. 5
5. A dispensing-dosing device as claimed in claim 4, **characterized in that** the two components (14, 15) of the annular holder (10) are essentially U-shaped with mutually insertable arms (16, 17) for closing of the ring formed thereby. 10
6. A dispensing device as claimed in claim 5, **characterized in that** one of the components (14, 15) of the holder (10) has means for wall-mounting of its base (13) and **in that** the two components (14, 15) are insertable in a direction substantially perpendicular to the wall and mutually connectable. 15
7. A dispensing device as claimed in one of claims 3-6, **characterized in that** said openable annular part has anti-pilfer locking means (21) in the closed condition thereof, disconnectable with a key. 20
8. A dispensing device as claimed in one of claims 3-7, **characterized in that** the bottle (11) has an end in the shape of a closed ring (29), suitable to be inserted in the ring of the holder (10) in a plane essentially perpendicular to the plane of said holder (10). 25
9. A dispensing device as claimed in claim 8, **characterized in that** the ring shaped end (29) of the bottle (11) is the end opposite the one for dispensing the fluid. 30
10. A dispensing device as claimed in one of claims 3-9, **characterized in that** the width of the ring (29) of the bottle (11) is smaller than that of the ring of the holder (10) to allow the bottle to swing freely. 35
11. A dispensing device as claimed in claim 10, **characterized in that** the bottle (11) is provided with information on the content thereof on the front side exposed when the bottle (11) is mounted and not in use. 40
12. A dispensing device as claimed in claim 11, **characterized in that** bottle (11) is provided with information on the content thereof also on the rear side. 45
13. A dispensing device as claimed in one of claims 3-12, **characterized in that** the annular parts of the holder (10) and of the bottle (11) have mutual flat supporting areas. 50

Patentansprüche

1. Eine Ausgabe-Dosierflasche (11), welche unmittelbar mittels der Finger des Benutzers gequetscht werden kann und mit einem automatischen Ausgabeventil versehen ist, **dadurch gekennzeichnet, dass** das von dem Ausgabeende abliegende Ende eine im Wesentlichen geschlossene ringförmige Konfiguration (29) aufweist, die insbesondere für die Verwendung eines Halters (10) vorgesehen ist. 5
2. Flasche nach Anspruch 1 mit einer im Wesentlichen abgeflachten Form, **dadurch gekennzeichnet, dass** die ringförmige Konfiguration (29) des Endes koplanar mit Oberflächen größerer Ausdehnung der Flasche ist. 10
3. Eine Ausgabe-Dosiervorrichtung für flüssige Seife, Shampoo oder ähnliche Fluide derart, dass diese aus einem wandmontierbarem Halter (10) und einer quetschbaren Flasche (11) nach Anspruch 1 für das auszugebende Fluid zusammengesetzt ist, wobei die Flasche in austauschbarer Art und Weise von dem Halter (10) aufgenommen wird, sodass diese direkt durch die Finger des Benutzers gequetscht werden kann, um ein Fluid durch das automatische Ausgabeventil abgeben zu können, **dadurch gekennzeichnet, dass** auch der Halter (10) ein Teil mit einer im Wesentlichen ringförmigen Konfiguration aufweist, wobei zumindest eines der zuvor erwähnten ringförmigen Teile zum gegenseitigen Ineinanderfügen geöffnet werden kann. 20
4. Ausgabe-Dosiervorrichtung nach Anspruch 3, **dadurch gekennzeichnet, dass** der ringförmige Halter (10) aus zwei trennbaren Bauteilen (14, 15) gebildet wird, die zum Schließen des Halters miteinander verbindbar sind. 25
5. Ausgabe-Dosiervorrichtung nach Anspruch 4, **dadurch gekennzeichnet, dass** die beiden Bauteile (14, 15) des ringförmigen Halters (10) im Wesentlichen, U-förmig mit gegenseitig einsetzbaren Armen (16, 17) zum Schließen des dabei geformten Rings ausgebildet sind. 30
6. Ausgabevorrichtung nach Anspruch 5, **dadurch gekennzeichnet, dass** eines der Bauteile (14, 15) des Halters (10) Mittel zur Wandmontage seiner Basis (13) aufweist und dass die beiden Bauteile (14, 15) in einer im Wesentlichen senkrechten Richtung zu der Wand einsetzbar und miteinander verbindbar sind. 35
7. Ausgabevorrichtung nach einem der Ansprüche 3 bis 6, **dadurch gekennzeichnet, dass** das offene ringförmige Teil Verschlussmittel (21) zur Diebstahlsicherung in dessen geschlossenem Zustand 40

aufweist, die mit einem Schlüssel abnehmbar sind.

8. Ausgabevorrichtung nach einem der Ansprüche 3 bis 7, **dadurch gekennzeichnet, dass** die Flasche (11) ein Ende in der Form eines geschlossenen Rings (29) aufweist, der in den Ring des Halters (10) in einer Ebene, die sich im Wesentlichen senkrecht zur Ebene des Halters (10) erstreckt, einsetzbar ist.
9. Ausgabevorrichtung nach Anspruch 8, **dadurch gekennzeichnet, dass** das ringförmige Ende (29) der Flasche (11) dasjenige Ende ist, das der Fluidausgabe gegenüberliegend angeordnet ist.
10. Ausgabevorrichtung nach einem der Ansprüche 3 bis 9, **dadurch gekennzeichnet, dass** die Breite des Rings (29) der Flasche (11) geringer ist als diejenige des Rings des Halters (10), um eine freie Verschwenkung der Flasche zu ermöglichen.
11. Ausgabevorrichtung nach Anspruch 10, **dadurch gekennzeichnet, dass** die Flasche (11) mit Informationen über deren Inhalt auf deren exponierter Vorderseite versehen ist, wenn die Flasche (11) montiert ist und sich nicht im Gebrauch befindet.
12. Ausgabevorrichtung nach Anspruch 11, **dadurch gekennzeichnet, dass** die Flasche (11) mit Informationen über deren Inhalt auf deren Rückseite versehen ist.
13. Ausgabevorrichtung nach einem der Ansprüche 3 bis 12, **dadurch gekennzeichnet, dass** die ringförmigen Teile des Halters (10) und der Flasche (11) jeweils zueinander komplementäre flache Auflagebereiche aufweisen.

Revendications

1. Flacon distributeur-doseur (11) du type qui peut être comprimé directement par les doigts d'un utilisateur et pourvu d'une vanne de distribution automatique, **caractérisé en ce que** l'extrémité opposée à son extrémité distributrice a une configuration de bague essentiellement fermée (29) notamment pour l'utilisation d'un support (10).
2. Flacon selon la revendication 1, de forme essentiellement plate, **caractérisé en ce que** la configuration annulaire (29) de l'extrémité est coplanaire avec les surfaces de plus grande extension du flacon.
3. Dispositif distributeur-doseur pour savon liquide, shampoing ou fluides similaires, du type composé d'un support à monter au mur (10) et d'un flacon compressible (11) selon la revendication 1, pour le fluide à distribuer, retenu de manière remplaçable

par le support (10) de sorte qu'il peut être comprimé directement par les doigts d'un utilisateur pour distribuer le fluide par l'intermédiaire de la vanne de distribution automatique, **caractérisé en ce que** le support (10) comporte également une partie de configuration essentiellement annulaire, au moins une desdites parties annulaires précitées pouvant être ouvertes pour permettre une insertion mutuelle.

4. Dispositif distributeur-doseur selon la revendication 3, **caractérisé en ce que** le support annulaire (10) est formé de deux composants séparables (14, 15) pouvant être raccordés pour leur fermeture.
5. Dispositif distributeur-doseur selon la revendication 4, **caractérisé en ce que** les deux composants (14, 15) du support annulaire (10) sont essentiellement en forme de U avec des bras mutuellement insérables (16, 17) pour fermer la bague ainsi formée.
6. Dispositif distributeur selon la revendication 5, **caractérisé en ce que** l'un des composants (14, 15) du support (10) comporte un moyen pour le montage au mur de sa base (13) et **en ce que** les deux composants (14, 15) sont insérables dans une direction sensiblement perpendiculaire au mur et pouvant être mutuellement raccordés.
7. Dispositif distributeur selon l'une des revendications 3 à 6, **caractérisé en ce que** ladite partie annulaire pouvant être ouverte comporte un moyen de blocage inviolable (21) dans son état fermé, déblocable avec une clé.
8. Dispositif distributeur selon l'une des revendications 3 à 7, **caractérisé en ce que** le flacon (11) a une extrémité sous la forme d'une bague fermée (29), appropriée pour être insérée dans la bague du support (10) dans un plan essentiellement perpendiculaire au plan dudit support (10).
9. Dispositif distributeur selon la revendication 8, **caractérisé en ce que** l'extrémité en forme de bague (29) du flacon (11) est l'extrémité opposée à celle permettant de distribuer le fluide.
10. Dispositif distributeur selon l'une des revendications 3 à 9, **caractérisé en ce que** la largeur de la bague (29) du flacon (11) est plus petite que celle de la bague du support (10) pour permettre au flacon de basculer librement.
11. Dispositif distributeur selon la revendication 10, **caractérisé en ce que** le flacon (11) est pourvu d'informations sur son contenu sur le côté avant exposé lorsque le flacon (11) est monté et non utilisé.
12. Dispositif distributeur selon la revendication 11, **ca-**

ractérisé en ce que le flacon (11) est pourvu d'informations sur son contenu également sur le côté arrière.

13. Dispositif distributeur selon l'une des revendications 3 à 12, **caractérisé en ce que** les parties annulaires du support (10) et du flacon (11) comportent des zones de support plates mutuelles.

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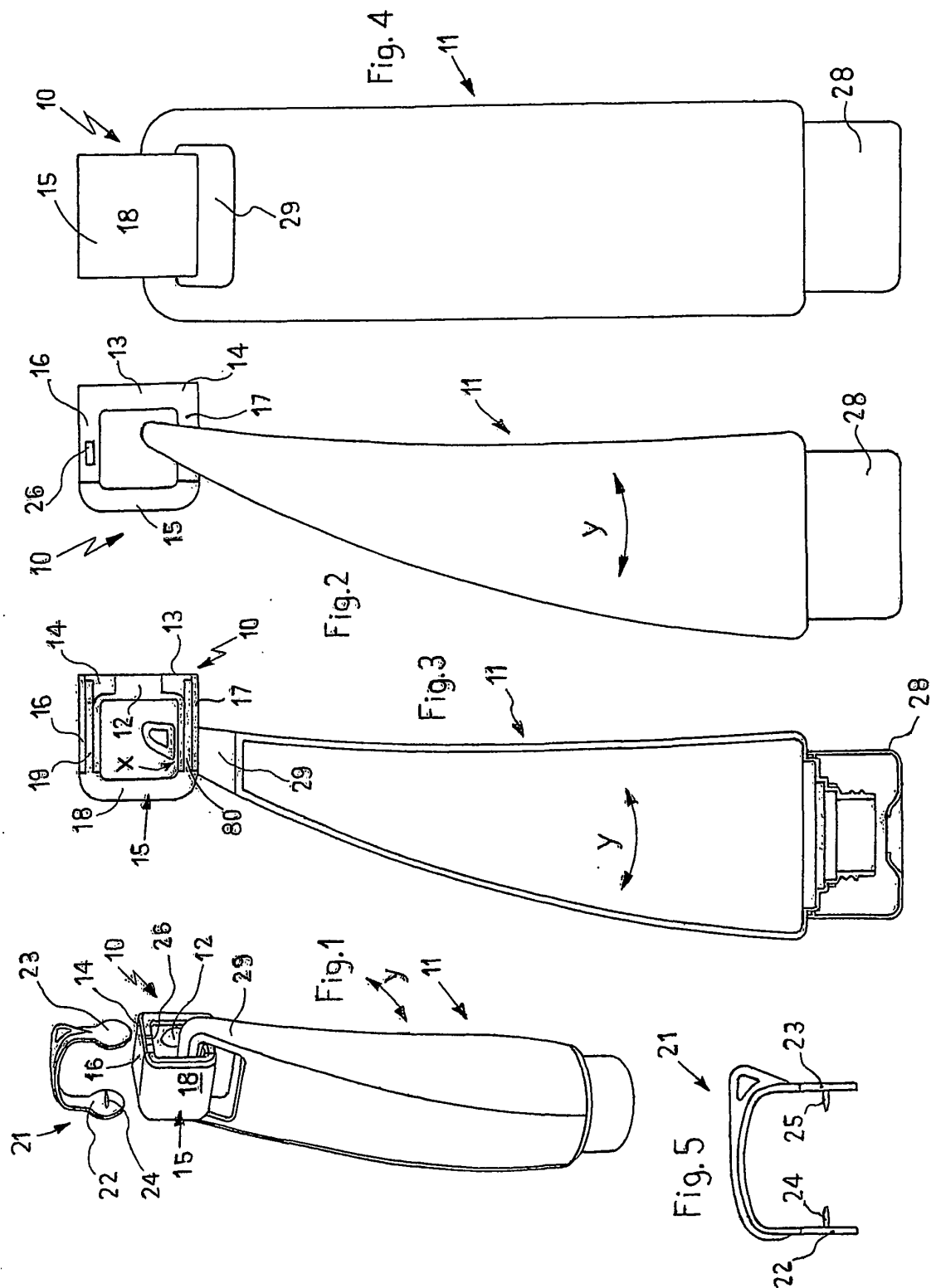
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REFERENCES CITED IN THE DESCRIPTION

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