(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 1 176 100 A1

(12) EUROPEAN PATENT APPLICATION

(43) Date of publication:
30.01.2002 Bulletin 2002/05

(51) Int Cl.[7]: **B65D 23/08**, B65D 23/10

(21) Application number: **01203386.6**

(22) Date of filing: **10.09.1999**

(84) Designated Contracting States:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
Designated Extension States:
AL LT LV MK RO SI

(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC:
99870181.7 / 1 083 129

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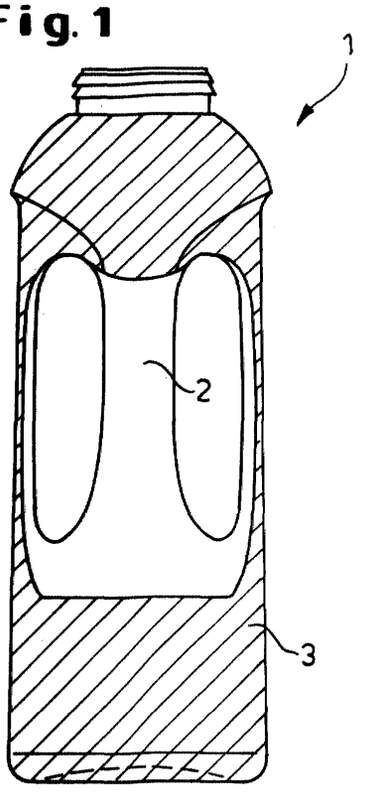
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Remarks:
This application was filed on 07 - 09 - 2001 as a divisional application to the application mentioned under INID code 62.

(54) Shrink sleeved bottle

(57) The invention relates to a bottle having a base, a top part and sides, the bottle comprising a handle (2) located on a side of the bottle, the bottle being shrink-sleeved, whereby the sleeve (3) does not cover the handle (2).

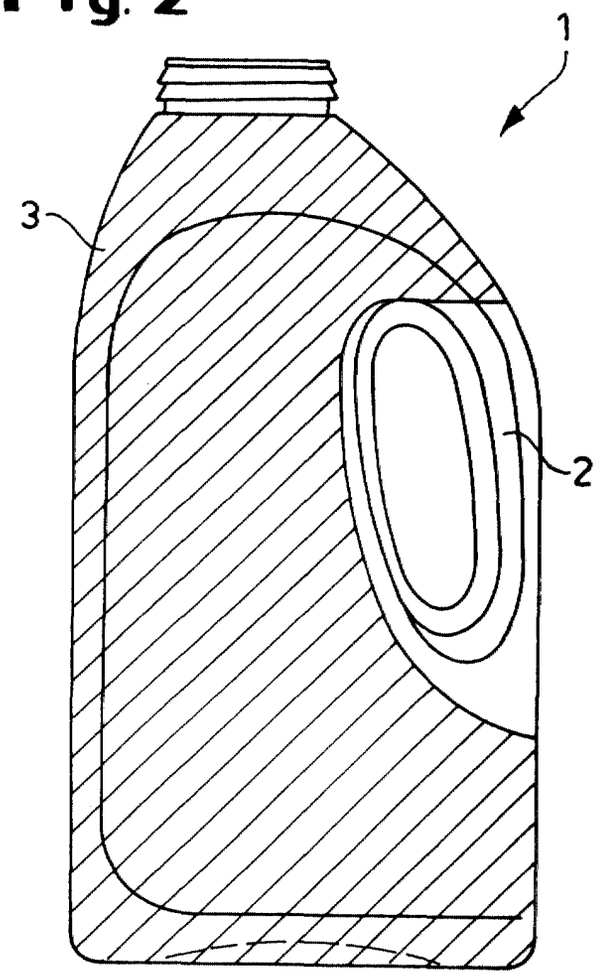
Fig. 1



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Fig. 2



Description

Technical Field

[0001] The invention relates to packages such as bottles used for containing fluids.

Background of the Invention

[0002] Bottles are widely used in consumer goods industry for packaging various type of fluid products. Such bottles are normally decorated, often using labels which are stuck onto the bottle. Such labels are typically used not only for decoration but also to display usage instructions or information on the composition of the content for example. However, conventional labelling technology such as wet glue labels, self-adhesive labels, or in mold labels do not allow to decorate the full bottle surface area. The accumulation of such visual signals led the industry to develop new approaches allowing higher decoration coverage of the container's surface, one of them being the shrink-sleeving of packages.

[0003] Shrink-sleeving is mostly used in the drinking industry, whereby a sleeve of thermo-plastic material may be shrunk all around a beverage bottle, thus offering an extended area which may be used for any type of graphics. Typical thermoplastic materials used for shrink sleeving include polyvinylchloride (PVC), polyestertetraphtalate (PET), oriented polypropylene (OPP) and oriented polystyrene (OPS).

[0004] However, use of shrink-sleeving did not extend to relatively larger containers, particularly because of the need of a side handle when such containers are used. Indeed, the sleeving of a bottle consists in inserting the bottle into a straight sleeve of thermo-plastic material, the thermo-plastic being then heated up to shrink and fit tightly around the container. Clearly, in case of a container or bottle having a side handle, such a process would lead to preventing access to the handle as the sleeve would cover the recess produced by the handle, so that the handle cannot be gripped.

[0005] The present invention seeks to provide a bottle with a side handle, whereby the surface available for displaying graphics onto the bottle is maximised,

Summary of the Invention

[0006] In accordance with the invention, this object is accomplished by a bottle having a base, a top part and sides, the bottle comprising a handle located on a side of the bottle, the bottle being shrink-sleeved, whereby the handle merges with the side of the bottle in one region only, whereby the sleeve does not cover the handle.

Detailed Description of the Invention

[0007] The invention relates to a decorated bottle where the means of decoration is a shrink sleeve. The term bottle hereby should be understood generally as a container for fluid products, fluid products including liquids as well as flowing materials such as powders or granule.

[0008] The bottle has a base. By a base it should be understood a part of the bottle on which the bottle is left to stand up-right. This part my be flat, on may for example be formed from a moulded tripod, or from a flat ring. Many types of "base" are know in the art, the main feature of such a base being to hold the bottle in a stable position on a flat supporting surface.

[0009] The bottle further comprises a top part. The top part is typically the part of the bottle opposed to the base. The top is commonly the part of the bottle which provides an exit for the content of the bottle.

[0010] The bottle also comprises sides. The sides are the surfaces which generally speaking are joining the top and the base of the bottle. Typically, when the bottle is upright, the sides are substantially vertical and perpendicular to the base. The sides may also have a curved or relatively complex shape depending on the bottle considered.

[0011] The bottle comprises a handle located on a side of the bottle. This makes the bottle different from bottles without handles (such as for example bottles for soda or beer portions), and also from bottle with a handle on the top part (such as "heavy" bottles of the type used for containing more than 5 liters of petrol for example). The handle according to the invention is normally forming a recess in the vertical direction when the bottle is upright, the recess being such that a user may slide the hand in the recess to hold the bottle by the handle.

[0012] Further, the bottle is shrink-sleeved. Shrink sleeving consists in enveloping a part of the bottle in a thermoplastic tube like sleeve, the sleeve being heated to shrink and fit onto the bottle.

[0013] According to the invention, the sleeve does not cover the handle. This conveniently reduces the likelihood of contact between a consumer hand and the sleeve cut-out fringe when gripping the handle. As a matter of fact, the sleeve fringe can exhibit sharp edges which can result in paper cut to consumer hands or simply unpleasant contact. In this manner, access to the handle is easy and direct, the user gripping directly the handle itself, without being in contact with the sleeve.

[0014] Such a result may be obtained in various ways.

[0015] In a first embodiment, the handle may simply be assembled to the bottle. This may be obtained for example with a clip on handle, or with a handle integrated to a transition piece such as a non-dripping neck for example. Indeed, if this is achieved, the bottle may be sleeved prior to assembling or placing the handle onto the bottle.

[0016] In another embodiment, the handle is an integral part of the bottle, the handle merging with the side of the bottle in two regions, whereby the sleeve is cut

out between the two merging regions. In this manner, the sleeve does not cover the handle. In this particular case, the recess formed by the handle has a closed perimeter. In such an embodiment, it might be preferable to cut out the sleeve onto the bottle after the heat shrink operation has been performed. The cutting of the sleeve can be achieved by various means such as mechanical die cutting, laser cutting or water jet cutting. This allows to remove that portion of the sleeve which covers the handle hence exposing the handle area for convenient gripping by sliding the hand through the handle.

[0017] In the preferred embodiments, the sleeve covers at least 30% of the outer surface of the bottle, in order to provide for a sufficient surface to application of graphics. More preferably, the sleeve covers at least 50% of the outer surface of the bottle, even more preferably 65%, and most preferably at least 80% of the outer surface of the bottle. It should be understood the "outer surface of the bottle" hereby comprises the whole outer surface, including the outer surface of the base, or of the handle for example.

[0018] In the preferred embodiments, the bottle has an internal volume of at least 1 litre and of less than 5 litres. Even more preferred is a bottle with an internal volume of less than 3 litres. Indeed, a handle would not be particularly needed for smaller bottles, and a side handle would be preferably replaced by a top handle for larger bottles.

[0019] The invention will now be described by way of example and with reference to the accompanying drawing in which:

Figure 1 is a side view illustrating a sleeved bottle (1) according to the invention, the handle (2) merging with the side of the bottle in two regions, whereby the sleeve (3) (which is hatched on the Figures) is cut-out between the two merging regions.

Figure 2 is a front view of the bottle of Figure 1.

Figure 3 is a side view illustrating a sleeved bottle (1) according to the invention, the handle (2) merging with the side of the bottle (1) in top region only and the sleeve (3) covering the sides of the bottle from the base up to the merging region.

Figure 4 is a front view of the bottle of Figure 3.

Claims

1. A bottle having a base, a top part and sides, the bottle comprising a handle (2) located on a side of the bottle, the bottle being shrink-sleeved, whereby the sleeve (3) does not cover the handle (2).

2. The bottle according to claim 1, whereby the handle (2) is assembled to the bottle.

3. The bottle according to claim 1, whereby the handle (2) is an integral part of the bottle.

4. The bottle according to claim 3, whereby the handle (2) merges with the side of the bottle in two regions, and whereby the sleeve (3) is cut out between the two merging regions.

5. The bottle according to any of the above claims, whereby the sleeve (3) covers at least 30% of the outer surface of the bottle.

6. The bottle according to any of the above claims, whereby the bottle has an internal volume of at least 1 litre and of less than 5 litres.

Fig. 1

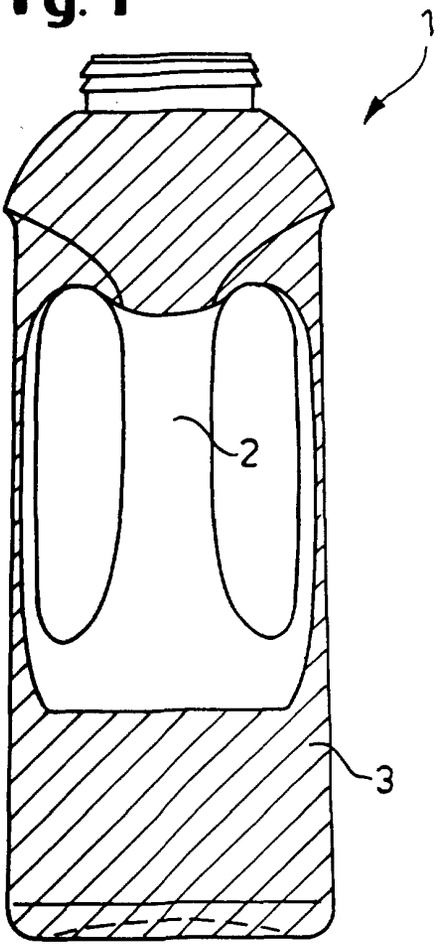


Fig. 2

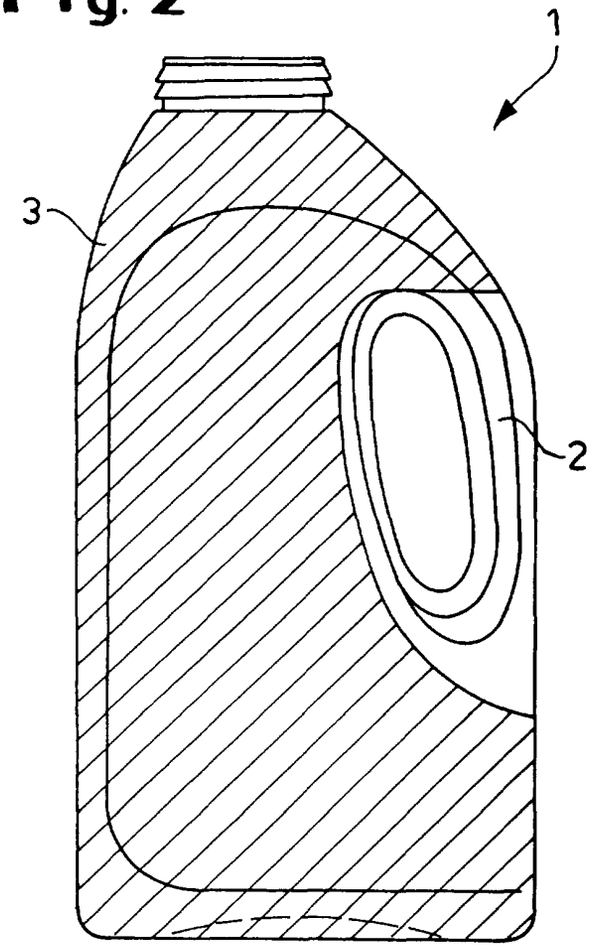


Fig. 3

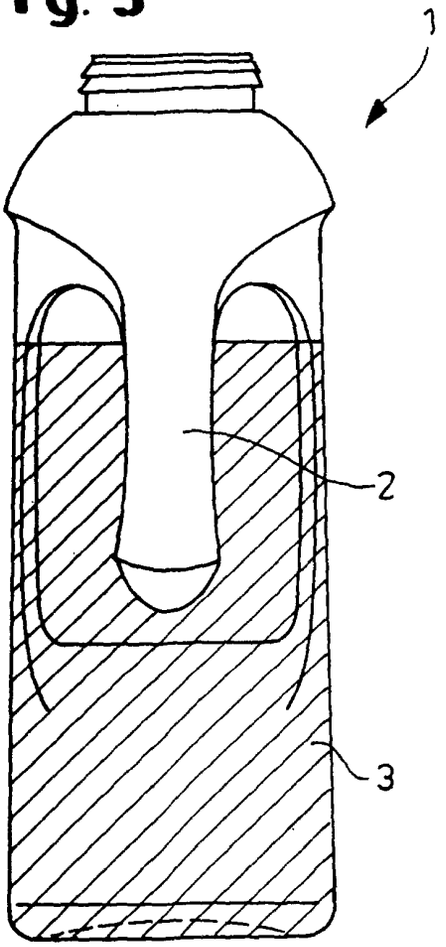
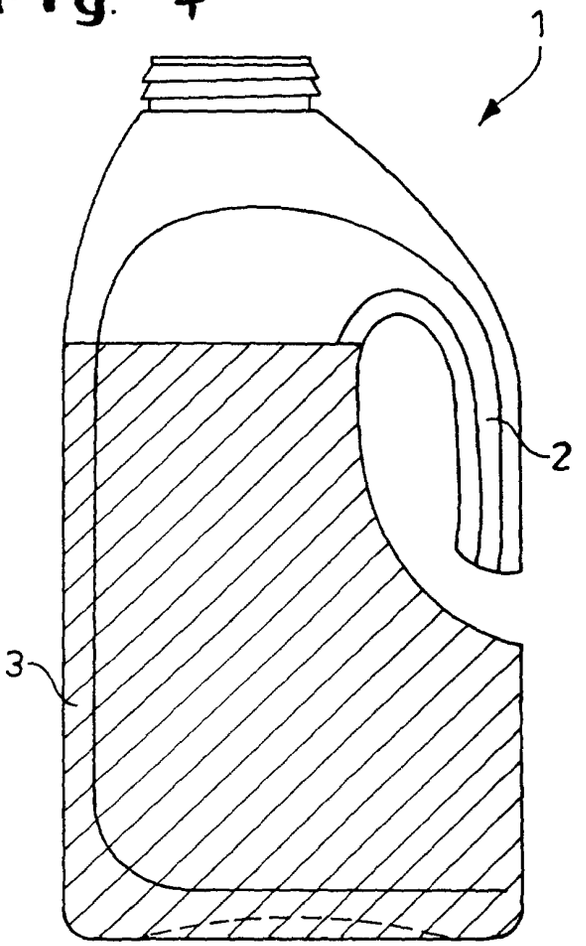


Fig. 4



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EUROPEAN SEARCH REPORT

Application Number
EP 01 20 3386

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Y	* column 5, line 56 - column 6, line 3; figure 2 *	2	
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A	US 4 629 598 A (THOMPSON MORTIMER S) 16 December 1986 (1986-12-16) * the whole document *	1-6	
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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	21 November 2001	Pernice, C

CATEGORY OF CITED DOCUMENTS

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