



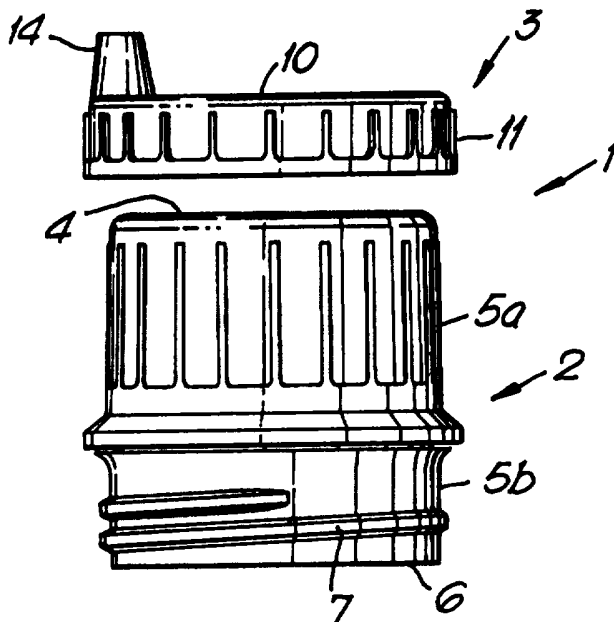
## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification <sup>6</sup> :</b> <b>B65D 41/26, D06F 39/02</b>	<b>A1</b>	<b>(11) International Publication Number:</b> <b>WO 96/11855</b> <b>(43) International Publication Date:</b> 25 April 1996 (25.04.96)
<b>(21) International Application Number:</b> PCT/GB94/02257 <b>(22) International Filing Date:</b> 14 October 1994 (14.10.94)  <b>(71) Applicant (for AU BB CA GB IE KE LK MN MW NZ SD TT only):</b> UNILEVER PLC [GB/GB]; Unilever House, Blackfriars, London EC4P 4BQ (GB).  <b>(71) Applicant (for all designated States except AU BB CA GB IE KE LK MN MW NZ SD TT):</b> UNILEVER N.V. [NL/NL]; Weena 455, NL-3013 AL Rotterdam (NL).  <b>(72) Inventor:</b> STOCKWELL, Colin; 5 Rob Close, Shanbril Lodge, North Villa, Benoni 1501 (ZA).  <b>(74) Agent:</b> MOLE, Peter, Geoffrey; Unilever plc, Patent Division, Colworth House, Sharnbrook, Bedford MK44 1LQ (GB).		<b>(81) Designated States:</b> AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG), ARIPO patent (KE, MW, SD, SZ).  <b>Published</b> <i>With international search report.</i>

(54) Title: DETERGENT DISPENSER

## (57) Abstract

A detergent dispenser comprising a first part (2) in the form of a closure which normally serves to seal a detergent container, the closure having a closed top (4), a dependent skirt (5a, 5b) and an open mouth (6), and a second part (3) which is releasably engageable with the closure over its open mouth, the second part having an aperture (15) for dispensing detergent.



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DETERGENT DISPENSER

This invention relates to a detergent dispenser and more particularly to a dispenser for liquid washing detergent.

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When doing household washing in an automatic washing machine, it is often useful to dab washing detergent on to soiled parts of clothing such as cuffs and collars before the clothing is placed in the washing machine.

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It is an object of the invention to provide a novel dispenser of the above kind.

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A detergent dispenser according to the invention comprises a first part in the form of a closure which normally serves to seal a detergent container, the closure having a closed top, a dependent skirt and an open mouth, and a second part which is releasably engageable with the closure over its open mouth, the second part having an aperture for dispensing detergent.

20

In a preferred form the closure has an external thread for screwing the closure into the detergent container.

25

The second part is preferably in the form of a shallow cap with an internal thread engageable with the external thread of the closure.

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The closure and the cap preferably have complementary formations to enable the cap releasably to be joined to the closed top of the closure.

The aperture in the cap is preferably formed in a raised funnel formed in the top of the cap.

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An embodiment of the invention will now be described by way of example with reference to the accompanying drawings in which:-

5        Figure 1            is an elevation of two parts of a detergent dispenser made in accordance with the invention;

10       Figure 2            is a similar view of the parts of the dispenser joined in an inoperative condition;

       Figure 3            is a similar view of the parts of the dispenser joined in an operative condition;

15       Figures 4            is a plan view from above of the cap of the dispenser;

       Figure 5            is a plan view from below of the cap of the dispenser, and

20       Figure 6            is a cross-section of the parts of the dispenser shown in Figure 1.

25       As shown in the drawings a dispenser 1 comprises a first part in the form of a closure 2 and a second part in the form of a cap 3.

30       The closure 2 comprises a top 4 having a dependent skirt made up of upper and lower sections 5a, 5b. The lower section 5b defines an open mouth 6 of the closure and has an external thread 7 which enables the closure to be screwed into and to seal a suitable container such as a liquid detergent bottle (not shown). The closure 2 therefore normally serves the purpose of sealing a detergent bottle.

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- 3 -

The top of the closure has a sunken peripheral channel 8 surrounding a centrally located pedestal 9 (see Figure 6).

5 The cap 3 has a top 10 and a narrow dependant skirt 11. The skirt 11 has an internal thread 12 (Figure 6) which is adapted to engage the external thread 7 on the closure 2. In its top 10 the cap 3 has a raised arcuate funnel 14 with an aperture 15 therein.

10 On the underside of the top of the cap 3 dependent arcuate flanges 16 are provided which are formed in the shape of a circle and which correspond with the pedestal 9 on the top of the closure 2.

15 The flanges 16 are provided to snap over the peripheral edge of the pedestal 9 when the cap is located over the top of the closure 2. The cap can thus releasably and inoperatively be joined to the closure 2 (see Figure 2).

20 In use, the closure 2 may be removed from its bottle, inverted and filled with detergent from the bottle. The cap 3 may then be operatively joined to the closure by screwing the cap over mouth 7 of the closure (Figure 3). Detergent may thereupon be dispensed through the aperture 15 in the cap  
25 3 to soiled parts of clothing such as cuffs and collars.

Thus the invention provides a useful dispenser for use in clothes washing.

30 Many other embodiments of the invention may be made without departing from the scope of the invention described in the appended claims.

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CLAIMS

1. A detergent dispenser comprising a first part in the form of a closure which normally serves to seal a detergent container, the closure having a closed top, a dependent skirt and an open mouth, and a second part which is releasably engageable with the closure over its open mouth, the second part having an aperture for dispensing detergent.
2. A detergent dispenser as claimed in claim 1 in which the closure has an external thread for screwing the closure into the detergent container.
3. A detergent dispenser as claimed in claim 2 in which the second part is in the form of a shallow cap with an internal thread engageable with the external thread of the closure.
4. A detergent dispenser as claimed in claim 3 in which the closure and the cap have complementary formations to enable the cap releasably to be joined to the closed top of the closure.
5. A detergent dispenser as claimed in claim 3 or 4 in which the aperture in the cap is formed in a raised funnel formed in the top of the cap.

$\frac{1}{2}$   
Fig.1.

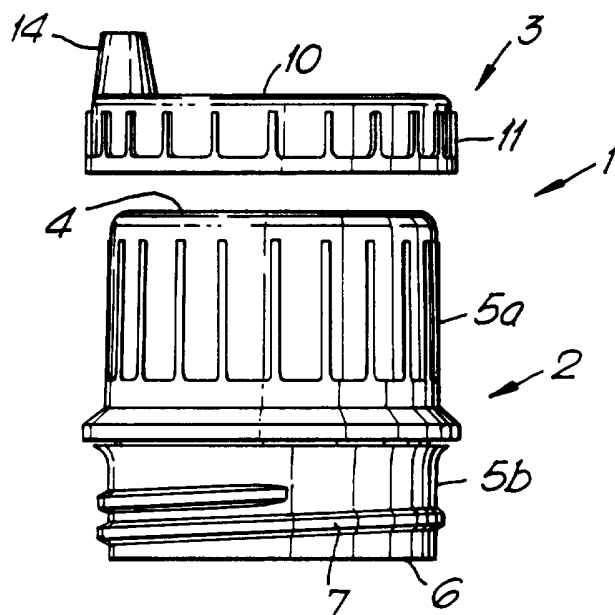


Fig.2.

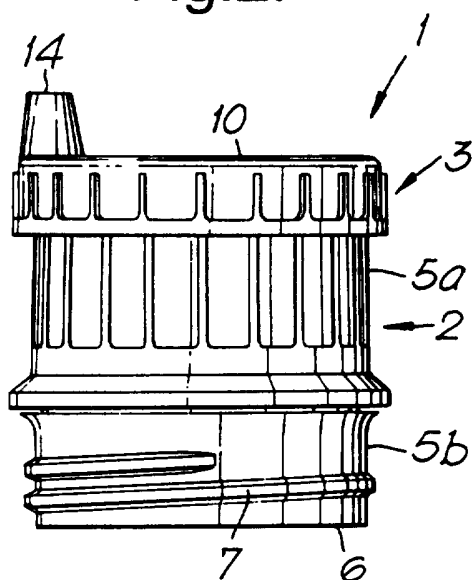
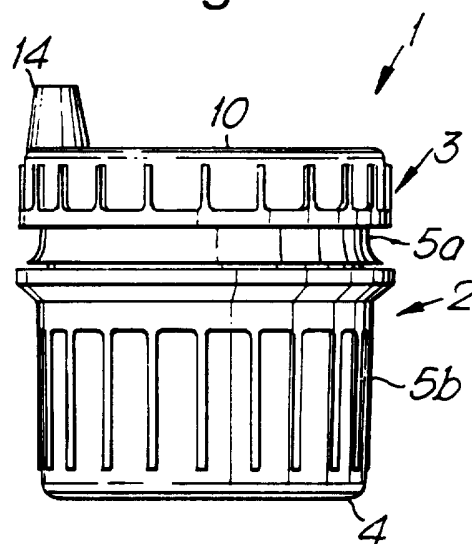


Fig.3.



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Fig.4.

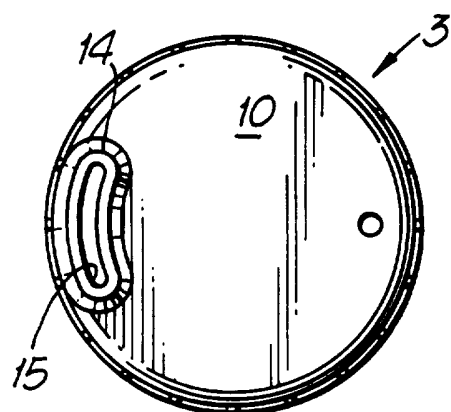


Fig.5.

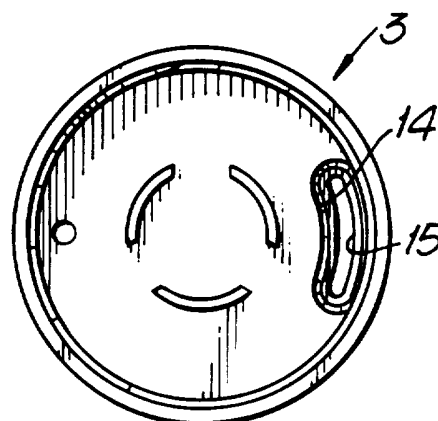
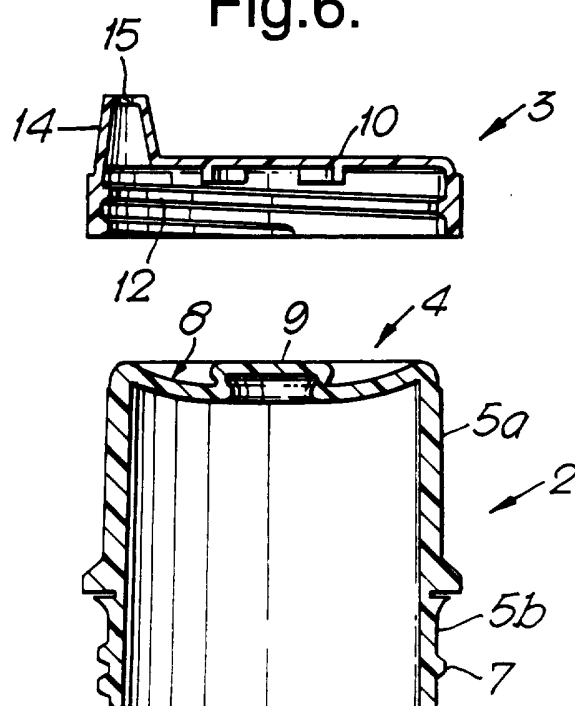


Fig.6.





## INTERNATIONAL SEARCH REPORT

Internal Application No

PCT/GB 94/02257

#### A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 B65D41/26 D06F39/02

According to International Patent Classification (IPC) or to both national classification and IPC

### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 B65D D06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

### C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FR,A,2 637 298 (PROCTER AND GAMBLE) 6 April 1990	1-4
Y	see page 10, line 2 - line 20 see page 11, line 16 - line 26; figures 5,7	5
Y	EP,A,0 305 067 (HAYES) 1 March 1989 see figures 3,4	5
X	EP,A,0 328 865 (HENKEL) 23 August 1989 see column 4, line 37 - column 6, line 31; figures 1-4	1-4
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Date of the actual completion of the international search

27 June 1995

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A	EP,A,0 459 498 (PALL CORP.) 4 December 1991 -----	

# INTERNATIONAL SEARCH REPORT

Information on patent family members

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