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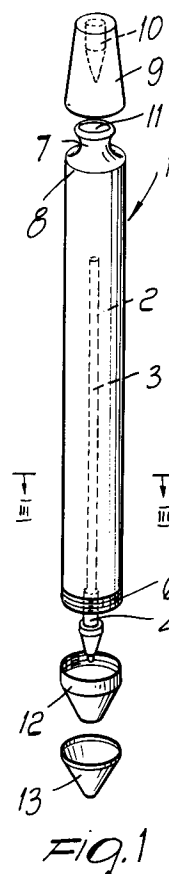
(11) Publication number:

0 465 872 A1

(12)

EUROPEAN PATENT APPLICATION(21) Application number: **91109906.7**(51) Int. Cl.⁵: **B43K 29/20**(22) Date of filing: **17.06.91**(30) Priority: **21.06.90 IT 2138990 U**(43) Date of publication of application:
15.01.92 Bulletin 92/03(84) Designated Contracting States:
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I-20123 Milan(IT)(54) **Multiple-function pen.**

(57) A multiple-function pen which comprises a substantially elongated capsule (1) which defines a blind cavity (2). The blind cavity has an accommodation seat (3) for a refill (4) and is connected to the outside through means (7) for taking liquids contained in the blind cavity.

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The present invention relates to a multiple-function pen.

Consumers usually take confectionery products or medicines from adapted containers which are normally not easily carried, i.e. their size is excessive for easy and economical carrying.

Both sweets and medicines are in fact usually packaged in containers which have a size that discourages their carrying for personal use, such as for example bottles for syrups or for solutions to be taken by mouth and the like.

These problems usually discourage users from carrying such bottles with them even in the case of medicines which are important for the treatment of particular conditions. Taking the liquids contained in said bottles furthermore entails the use of measuring devices or of other implements to take the liquid contained in the bottle, causing further problems to the user.

The aim of the present invention is to eliminate or substantially reduce the disadvantages described above in known types of bottles for medicines or confectionery products by providing a multiple-function pen which has small dimensions and can be easily carried.

Within the scope of the described aim, an object of the present invention is to provide a multiple-function pen which does not require the use of further containers for taking the liquids contained therein.

Not least object of the present invention is to provide a multiple-function pen which is relatively easy to manufacture at competitive costs.

This aim, the objects mentioned and others which will become apparent hereinafter are achieved by a multiple-function pen according to the invention, characterized in that it comprises a substantially elongated capsule which defines a blind cavity, said blind cavity having a seat for the accommodation of a refill and means for taking liquids contained in said cavity, said means being connected to the outside.

Further characteristics and advantages of the invention will become apparent from the description of a multiple-function pen, illustrated only by way of non-limitative example in the accompanying drawings, wherein:

figure 1 is an exploded perspective view of a multiple-function pen according to the invention;
figure 2 is a partial sectional view of the pen according to the invention; and
figure 3 is a sectional view taken along the line III-III of figure 1.

With reference to the above figures, the multiple-function pen comprises a substantially elongated capsule 1 which defines a blind cavity 2. The blind cavity 2 has a seat 3 for accommodating a refill 4 and means for taking liquids contained in

the cavity 2, said means being connected to the outside.

The means for accommodating a refill 4 comprise a blind tube 5 which is contained in the blind cavity 2 and is open at an end 6 of the capsule 1; said end 6 is at least partially threaded on its outer surface.

The means for taking liquids comprises an open and closeable mouthpiece 7 which protrudes from the capsule 1 from the other end 8.

The invention furthermore comprises an end-piece 9 which can be removably associated with the mouthpiece 7 and has, inside itself, a point 10 for perforating a film 11 which closes the capsule 1, since the film 11 can be inserted in the mouthpiece 7.

The invention furthermore comprises a collar 12 for locking the refill 4 within the accommodation seat or tube 5; said collar is at least partially threaded on an internal surface so as to removably engage on the end 6 of the capsule.

A cap 13 can be removably fixed to the collar 12 and removably engages on the end-piece 9. The invention thus described achieves the intended aim and objects and constitutes a valid replacement for containers for medicines or other liquids.

In practice, the materials employed, as well as the dimensions, may be any according to the requirements.

Where technical features mentioned in any claim are followed by reference signs, those reference signs have been included for the sole purpose of increasing the intelligibility of the claims and accordingly such reference signs do not have any limiting effect on the scope of each element identified by way of example by such reference signs.

Claims

1. A multiple-function pen, characterized in that it comprises a substantially elongated capsule (1) which defines a blind cavity (2), said blind cavity having an accommodation seat (3) for a refill (4) and means (7) for taking liquids contained within said cavity, said means being connected to the outside.
2. Pen according to claim 1, characterized in that said refill accommodation means comprise a blind tube (5) which can be contained within said cavity, said tube opening at an end of said capsule.
3. Pen according to claim 1, characterized in that said liquid taking means comprises an open and closeable mouthpiece (7) which protrudes from said capsule.

4. Pen according to one or more of the preceding claims, characterized in that it comprises an endpiece (9) which can be removably fixed on said mouthpiece, said endpiece having, inside itself, a point (10) for perforating a closure film (11) of said capsule, said film being insertable in said mouthpiece. 5
5. Pen according to one or more of the preceding claims, characterized in that it comprises a collar (12) for locking said refill within said accommodation seat, said collar being at least partially threaded on an inner surface so as to removably engage on said second end of said capsule. 10 15
6. Pen according to one or more of the preceding claims, characterized in that it comprises a cap (13) which can be removably fixed to said collar, said cap being suitable for removably engaging on said endpiece. 20

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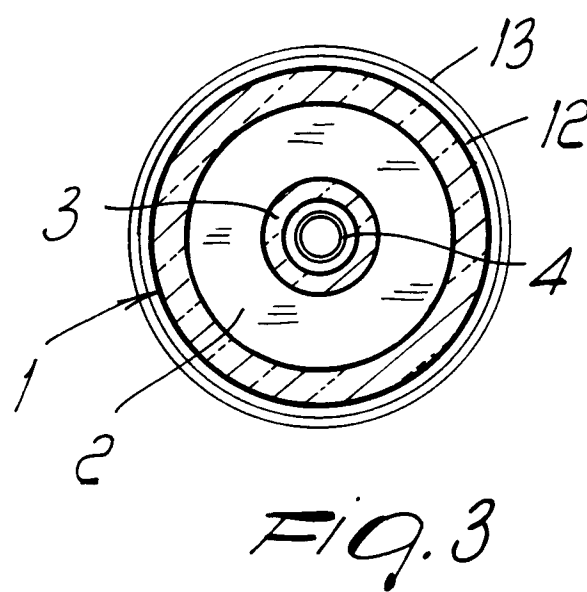
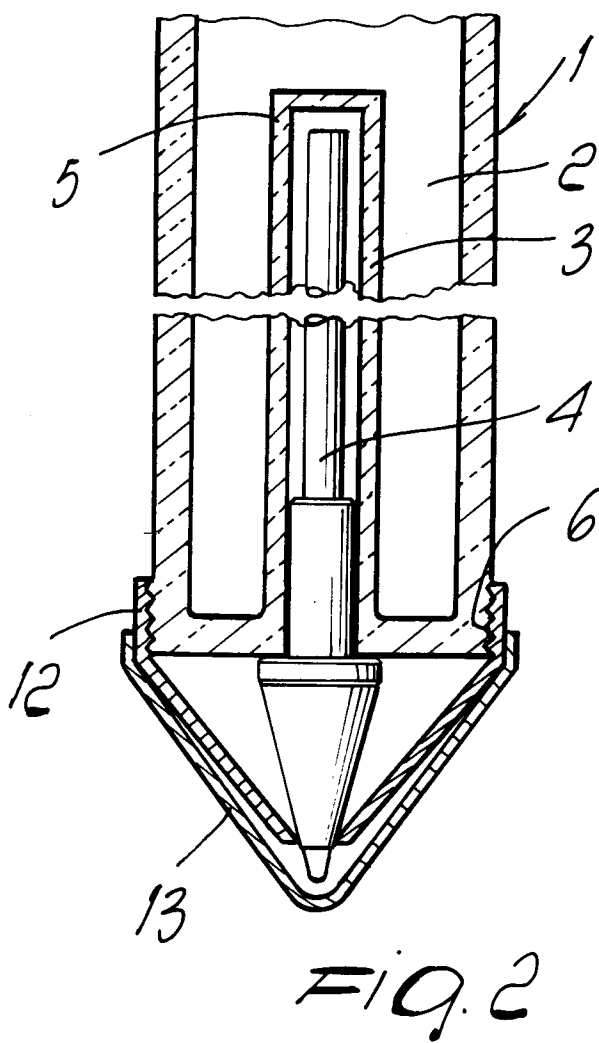
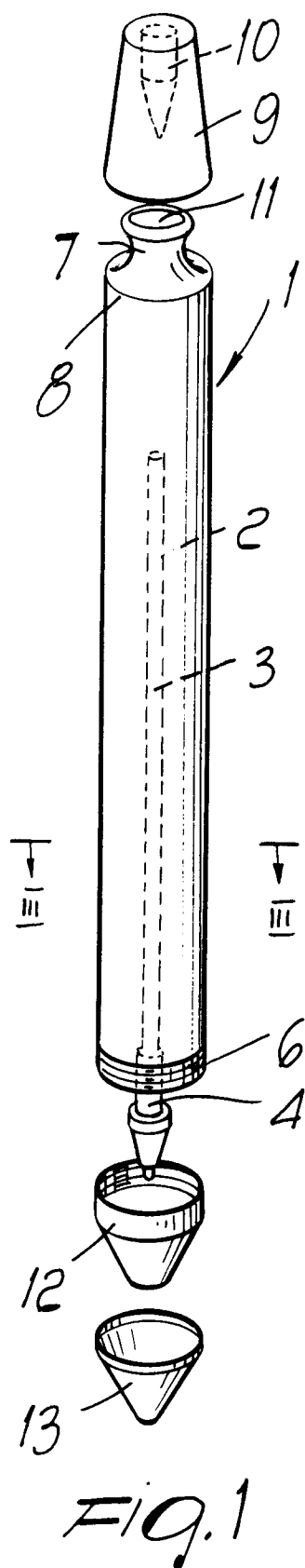
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EUROPEAN SEARCH REPORT

EP 91 10 9906

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
X,Y	US-A-2 269 591 (LOCKER) * page 1, right column, line 1 - line 43; figure 1 * - - -	1-3,4-6	B 43 K 29/20
Y,P	WO-A-9 108 116 (UNI-CONTINENTAL HOLDING) * page 7, paragraph 3; figures 6,13 * - - -	4	
Y	EP-A-0 296 607 (BEIJING MING-QIANG FACTORY) * column 2, line 30 - line 38; figure 3 * - - -	5	
Y	CH-A-518 186 (LÄUFER GUMMIWARENFABRIK SCHWERDT & RENNER) * claim 7; figure 3 * - - -	6	
A	FR-A-2 568 190 (EUROWAY S.N.C.) * page 1, line 29 - page 2, line 26; figures * - - -	1-3,5,6	
A	CH-A-460 576 (HERMANN REIST,MURGENTHAL) * column 1, line 29 - column 2, line 26; figure 2 * - - - - -	1	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			B 43 K B 43 M
The present search report has been drawn up for all claims			
Place of search		Date of completion of search	Examiner
The Hague		08 October 91	PERNEY Y.J.
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone		E : earlier patent document, but published on, or after the filing date	
Y : particularly relevant if combined with another document of the same category		D : document cited in the application	
A : technological background		L : document cited for other reasons	
O : non-written disclosure		& : member of the same patent family, corresponding document	
P : intermediate document			
T : theory or principle underlying the invention			