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(71) Applicant: **THE PROCTER & GAMBLE COMPANY**
One Procter & Gamble Plaza
Cincinnati Ohio 45202(US)

(72) Inventor: **Khan, Adil Mehboob**
Via S. Erasmo 5
I-00184 Roma(IT)
Inventor: **Gabbarini, Mario**
Via L. Belardi 9
I-00045 Genzano Di Roma(IT)

(74) Representative: **Suslic, Lydia et al**
Procter & Gamble European Technical Center N.V. Temselaan 100
B-1820 Strombeek-Bever(BE)

(54) In-pack all-purpose container for vacuum packed pouches.

(57) In-pack all purpose container to be packed inside a pouch containing primarily vacuum packed coffee. The all-purpose container is more particularly meant to contain small premium items.

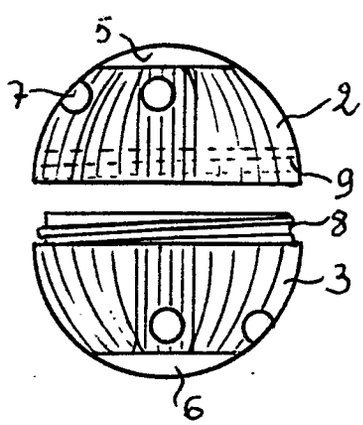

fig. 2

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IN-PACK ALL-PURPOSE CONTAINER FOR VACUUM PACKED POUCHES

Technical Field

This invention relates to an in-pack all purpose container to be packed inside a pouch containing primarily vacuum packed coffee. The all-purpose container is more particularly meant to contain small premium items.

Background art

Vacuum packing of certain products, like coffee, is a common practice and has been described in many manuals and patent literature. The importance of vacuum packing e.g. coffee resides in the fact that such products, when exposed to air, lose very rapidly their flavor and aroma and get stale. Products like ground coffee deteriorate even faster. For this reason it is important that no oxygen is left or can enter into a pouch which contains a product that has to be kept under vacuum until its contents is to be used.

In many countries, it is a consumer habit to include premiums in the packages of widespread consumer products. Such premiums can be attached to the package, with the risk of losing or pilfering, or can be introduced in the package before it is finally closed. Detergent cartons containing small plastic toys wrapped in a transparent bag are an example of such premium distribution with consumer goods.

However, the above mentioned examples of premium distribution are unsuitable for using with e.g. a vacuum packed coffee pouch. Indeed, attaching a premium on the package pouch is an expensive operation in that it does require not only additional equipment or manpower to attach the premium, but also additional shipping and shelving space, since the outer volume becomes larger, this in addition to the already above-mentioned disadvantages of losing or pilfering. Inserting a premium in a plastic bag in the bulk of the container, as is done with detergent containing cartons, is also an unsuitable solution. Indeed, due to their reduced seize, vacuum packed coffee pouches can receive very small premiums only. If a very small premium is packed in a plastic pouch before being introduced in the coffee pouch, chances that it is hard to find in the package, once it is opened, are high, and it could become a messy operation to try to find the premium among the coffee upon opening of the package. Not finding the premium might lead to the risk of, e.g. pooring the premium together with the coffee when brewing coffee. Furthermore, automatic adding on a packing line, into e.g. a coffee pouch being filled with coffee, of a small premium packed in a plastic pouch, can slow down the packing process if the premium assemblies are not of a constant shape, easy to drop or shoot into the coffee pouch.

Summary of the Invention

The present invention relates to an in-pack all-purpose container which can be used for enclosing a small item, like a premium in, e.g., a vacuum packed coffee pouch, without risking that any air is left in the all-purpose container and can consequently seep into the contents of the vacuum packed pouch, thereby deteriorating the quality of the packed product.

In a preferred embodiment, a spherical container, consisting of two halves which can be easily separated and reclosed, is provided. In order to make sure that no air is left in said container after the individual complete package undergoes the vacuum operation, holes are provided in the walls of the container. The premium to be packed, e.g. a small necklace pendant, is wrapped in a micro-perforated film before being inserted in the container, which is subsequently closed. An automatic dispensing device is installed on a coffee packing line before the pouch enters the vacuum chamber. When the vacuum is drawn in the vacuum chamber, air is extracted both from the coffee pouch and from the container before the package is sealed.

When the package is opened for consumption, the quality of its contents is unharmed and the premium container can be easily retrieved. The container can be easily opened to get access to the premium and subsequently reclosed to serve as a small toy.

The container of the preferred embodiment is made of polypropylene. It can however be made of any food-compatible material which resists vacuum drawing and is shape-retaining. It can also be made from a food-compatible shape-retaining material with micro perforation.

Although the container described in the preferred embodiment is spherical, the shape can vary according to taste or need. The size can be adapted to the size of the premium to be packed and the volume of the outer package of product in which it has to be added.

Although the preferred embodiment describes the all-purpose container for use with vacuum-

packed coffee pouches, it can also be used with any other vacuum-packed product.

Brief Description of the Drawings

While the specification concludes with the claims particularly pointing out and distinctly claiming the subject matter which is regarded as forming the present invention, it is believed that the invention will be better understood from the following descriptions which are taken in conjunction with the accompanying drawings in which like designations are used to designate substantially identical elements and in which :

Fig. 1 is a side view of a preferred embodiment of the all-purpose container according to the invention, in closed condition.

Fig. 2 is a side view of the all-purpose container of Fig. 1, showing the two parts of the container in detached position.

Fig. 3 is a top view of one half of the all-purpose container of Fig. 1.

Fig. 4 is a top view of the other half of the all-purpose container of Fig. 1.

Fig. 5 shows a premium to be inserted in the all-purpose container of Fig. 1, and which is already wrapped in a food-compatible micro perforated film.

Fig. 6 is a top view of the open side of one half of the multi-purpose container of Fig. 1, in which the wrapped premium has been inserted.

Detailed Description of the Drawings of the preferred embodiment

The all-purpose container (shown in Fig. 1), consists of two halves (2 and 3). The major part of its walls is ribbed (4) in order to give greater resistance to the container and so allow the minimum use of plastic material, and to enchance gripping when the container is to be opened or closed. Extremities (5 and 6) show a smooth surface which can receive any inscriptions or indications for use of the container. Holes (7) are provided in the ribbed walls of the container.

In Fig. 2 it can be seen how container half (3) is provided with external screw-thread (8) which coincides with internal screw-thread (9) of container half (2).

Fig. 3, which is a top view of container half (2), shows how the smooth area (5) is used to indicate to the consumer that the material of which the container is made is food compatible (10).

Fig. 4, which is a top view of container half 3, shows how smooth area (6) is used to instruct the consumer how to open the container (11).

Fig. 5 shows how premium (12), here a necklace pendant, is wrapped in a micro-perforated plastic film (13) to form the premium assembly (14).

Fig. 6 shows how premium assembly (14) is located in container half (3), ready to be covered by container half (2).

The dimension of the holes (7) or of the microperforations if the container is made of microperforated material, will be a function of the volume of air to be drawn and of the duration of the vacuum drawing operation, as will be evident to any man skilled in the art.

In the preferred embodiment, the all-purpose container is made of polypropylene and, as can be seen from the drawings, it has a spherical shape. Its diameter is 3,5 cm. Four holes, of a diameter of 4 mm each, are provided in each half.

After being filled and closed, the all-purpose container is dropped in a pouch containing 250 g of ground coffee. The filled pouches are subsequently subjected to vacuum drawing for 10′ and sealed. Coffee pouches which had undergone the above operation were opened after three months and it was found that the flavor and aroma of the coffee had not deteriorated.

It will be obvious to the man skilled in the art, that the above preferred embodiment is not limiting to the concept of the invention. The container can be of any shape which can be fitted into a vacuum packed container. It can also be made of several parts, as long as the assembly is such that vacuum can be drawn and that it can resist the vacuum operation without being damaged. The way in which the container is opened or held closed can be of any suitable type, like screwthread, bayonet, snap-fit, friction, etc.

Claims

1. In-pack all-purpose container (1) for small items (12), characterized in that its walls are permeable to vacuum drawing jointly with the product package which holds it.

2. In-pack all-purpose container according to claim 1, characterized in that said walls are shape-retaining and show openings (7).

3. In-pack all-purpose container according to claim 1, characterized in that said walls are made of a shape-retaining microperforated material.

4. In-pack all-purpose container according to any of the preceeding claims, characterized in that part of the container walls are ribbed (4).

5. In-pack all-purpose container according to any of the preceeding claims, characterized in that

part of the container walls are provided with markings (6) or inscriptions (5).

6. In-pack all-purpose container according to any of the preceeding claims, characterized in that the product package with which it is vacuum packed contains coffee.

fig.1

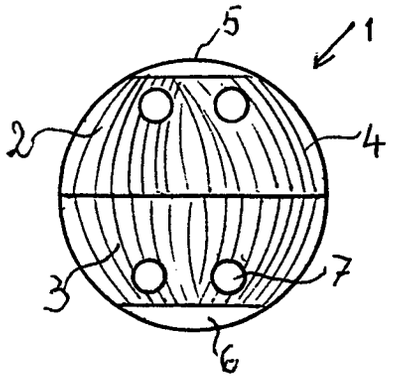


fig.2

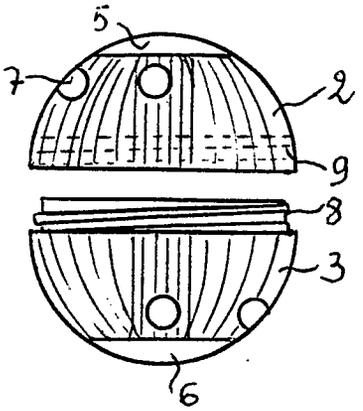


fig.3

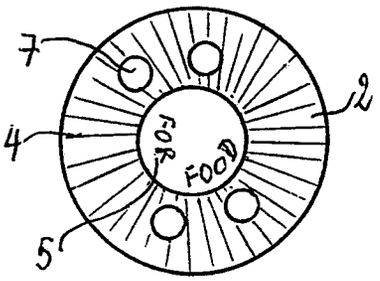


fig.4

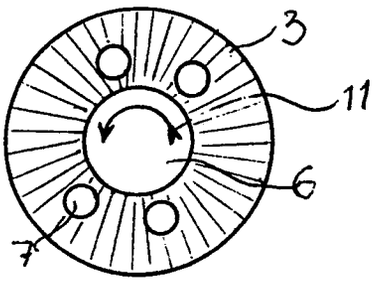


fig.5

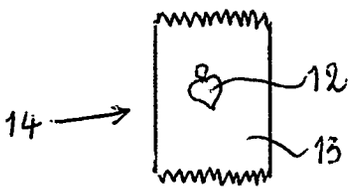
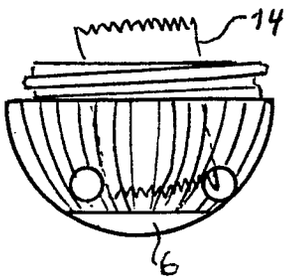


fig.6



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EUROPEAN SEARCH REPORT

Application Number

EP 90 20 0027

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)
A	US-A-4 583 643 (SANDERSON) * Column 3, line 37 - column 4, line 14; figs. 1,2,3 * ---	1,2	B 65 D 77/24
A	CH-A- 405 153 (HESSER MASCHINENFABRIK AG) * Page 2, line 78 - page 3, line 2; fig. * ---	1,6	
A	FR-A-2 302 935 (SMITH & NEPHEW PHARMACEUTICALS LTD) -----		

TECHNICAL FIELDS SEARCHED (Int. Cl.5)

B 65 D
B 65 B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	10-04-1990	MARTENS L.G.R.

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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