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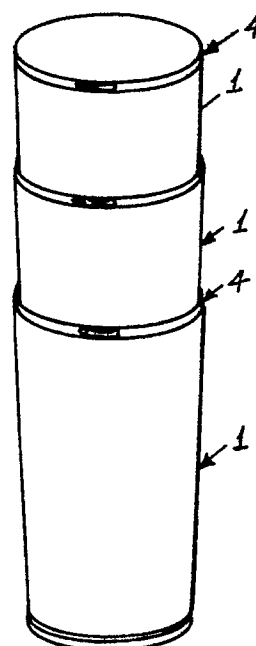
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AT BE CH DE ES FR GB GR LI NL SE(71) Applicant: **IMBALLAGGI INVERNIZZI S.R.L.**
Via Pontano, 35
I-20127 Milano(IT)(72) Inventor: **Invernizzi, Francesco, IMBALLAGGI**
INVERNIZZI Srl
Via G. Pontano, 35
I-20127 Milano(IT)(74) Representative: **Cicogna, Franco**
Ufficio Internazionale Brevetti Dott.Prof.
Franco Cicogna Via Visconti di Modrone,
14/A
I-20122 Milano(IT)(54) **Kraft paper or metal container including means for preventing the container from embedding in a like container stacked thereon.**

(57) The present invention related to a kraft paper or metal container including means for prevent ing the container from embedding in a like container stacked thereon, characterized in that said container comprises a frustum of cone shaped body with the inlet mouth arranged at the larger base thereof, a closing cover being provided for coupling to the mouth through a clamping collar.

The main feature of the invention is that the clamping collar is provided with a leg which can be superimposed peripherally on the mouth and which at least in part inward projects in order to be removably engaged with the outer surface of a stacked container body so as to prevent the top container from embedding in the underlaying container body.

Fig.1**EP 0 409 799 A2**

BACKGROUND OF THE INVENTION

The present invention relates to a kraft paper or metal container including means for preventing the container from embedding in a like container stacked thereon.

As is known, in several industrial applications there are used at present, for packaging chemical substances and loose products in general, suitable containers which can be stacked onto one another.

These containers are provided with a substantially frustum of cone container body which is provided, at the top inlet mouth formed through the larger base of the container body, with a sheet metal edge which is clamped so as to operate as an engaging element for the clamping collar of a conventional disc-shaped closure cover.

These containers, as they are in an empty condition, are mutually stacked for storing and shipment purposes.

As the containers are stacked, a container of the stack may be embedded in an underlying container which will involve great difficulties in removing the stacked containers.

In order to solve the above mentioned problems several solutions have been already proposed such as the provision on the container wall of projecting ages arranged at an intermediate portion of the side wall of the container and adapted to prevent stacked containers from embedding into one another.

These solutions, however, require to greatly modify the container making process and the thus equipped containers are very expensive.

SUMMARY OF INVENTION

Accordingly, the aim of the present invention is to overcome the above mentioned drawbacks, by providing a kraft paper or metal container including means from preventing stacked containers from embedding into one another, which container can be easily and quickly made by a conventional container making process.

Within the scope of the above mentioned aim, a main object of the present invention is to provide such a container which comprises anti-stacking means which can be easily disengaged as a container is to be removed from a container stack.

Another object of the present invention is to provide such a container which is very reliable in operation and, moreover, can be easily made starting from easily available materials and elements

and which, furthermore, is very competitive from a mere economic standpoint.

According to one aspect of the present invention, the above mentioned aim and objects, as well as yet other objects, which will become more apparent hereinafter are achieved by a kraft paper or metal container including means for preventing the container from embedding in a like container stacked thereon, said container comprising a frustum of cone shaped body with the inlet mouth thereof arranged at the larger base of said body, a cover being provided for association with said inlet mouth through a clamping collar, characterized in that said clamping collar is provided with a leg which can be peripherally superimposed on said mouth and which at least in part inward projects so as to removably engage with the outer surface of the body of a stacked container to prevent the stacked container from embedding in the underlying container body.

BRIEF DESCRIPTION OF THE DRAWINGS

Further characteristics and advantages of the present invention will become more apparent from the following disclosure of a preferred, though not exclusive, embodiment thereof, which is illustrated, by way of an indicative but not limitative example, in the figures of the accompanying drawing, where:

Figure 1 shows a plurality of stacked containers; Figure 2 is a cross-sectional view illustrating a detail of the coupling region between two stacked containers;

Figure 3 is a cross-sectional view illustrating the clamping collar associated with the container; and

Figure 4 is a perspective view of the clamping collar.

DESCRIPTION OF THE PREFERRED EMBODIMENT

With reference to figures of the accompanying drawing, the kraft paper or metal container with means for preventing the container from embedding in a like container stacked thereon comprises a container frustum of cone shaped body, overall indicated at the reference number 1 which, in a known way, is made of a plurality of kraft paper

layers which are superimposed onto one another and glued to one another.

At the contained top inlet mouth there is applied, by any suitable clamping means, an edge member 2 which defines a top loop member 3 which slightly outward projects.

To this loop 3 there is applied a clamping collar, indicated overallly at the reference number 4, which operates so as to connect the closing cover of the container which is conventionally formed by a disc like element.

A main feature of the present invention is that the clamping collar 4 has a substantially C-shaped cross-section including a top leg 10 of greater extension than a bottom leg 11 so as to be peripherally superimposed on the edge 3 and including a portion inward projecting with respect to the container mouth so that it contact engages with the outer side surface of the body 1 of a stacked container.

The clamping collar 4 is provided, as is known, with means for opening and closing the collar, indicated at the reference number 10, and comprising a lever 21 one end of which is articulated to a corresponding end of the collar defining open loop and being moreover articulated, at an intermediate portion thereof, to a rod 22 which is in turn articulated to the other end of the clamping collar defining loop.

Thus, the clamping collar can be opened and closed so as to allow the cover to be applied and removed and to apply the collar to container bodies 1 to be stacked, by tightening the collar so as to cause the inner periphery of the top leg 10 to inward project and engage with the outer side surface of the stacked container.

For removing the container, it will be sufficient to open the clamping collar of the underlaying container.

From the above disclosure it should be apparent that the invention fully achieves the intended aim and objects.

In particular, the fact is to be pointed out that a kraft paper or other material container has been provided which solves the problem of preventing stacked containers from embedding into one another and this without constructionally modifying the container body but simply changing, in a very limited way, the shape of an auxiliary element which is used, in these containers, for holding the container cover.

Thus, a simple increase of the length of a leg of the clamping collar permits to solve, at a very reduced cost, the above mentioned problem.

While the invention has been disclosed and illustrated with reference to a preferred embodiment thereof, it should be apparent that the disclosed embodiment is susceptible to several modi-

fications and variations all of which will become within the scope and spirit of the appended claims.

5 Claims

1. A kraft paper or metal container including means for preventing the container from embedding in a like container stacked thereon, said container comprising a frustum of cone shape body with the inlet mouth thereof arranged at the larger base of said body, a cover being provided for association with said inlet mouth through a clamping collar, characterized in that said clamping collar is provided with a leg which can be peripherally superimposed on said mouth and which at least in part inward projects so as to removably engage with the outer surface of the body of a stacked container to prevent the stacked container from embedding in the underlaying container body.
2. A container, according to claim 1, characterized in that said clamping collar has a substantially C-shaped cross section with a top leg having a larger size than a bottom leg.
3. A container, according to claims 1 and 2, characterized in that said clamps bar comprises an open loop member having a lever arm articulated at one end of the open loop and articulated, at an intermediate position thereof, to a rod in turn articulated to the other end of the open loop.
4. A container, according to one or more of the preceding claims, characterized in that said clamping collar can be engaged with an edge affixed to the container body at the mouth thereof.

Fig.1

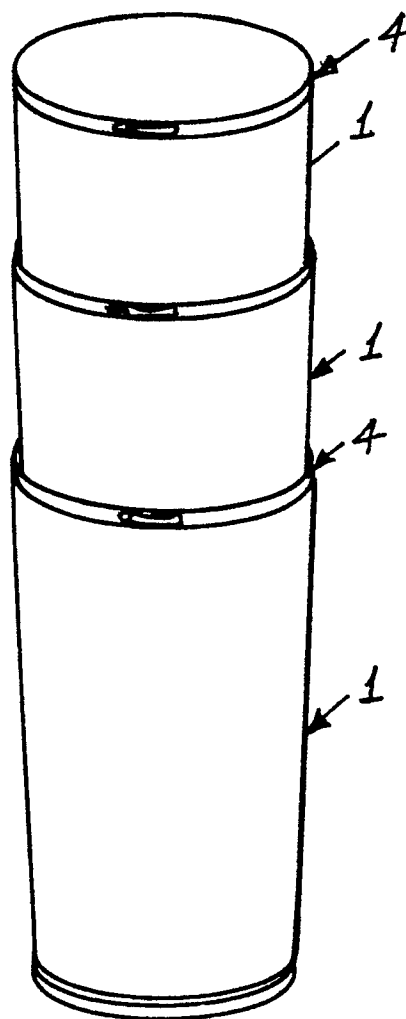


Fig.2

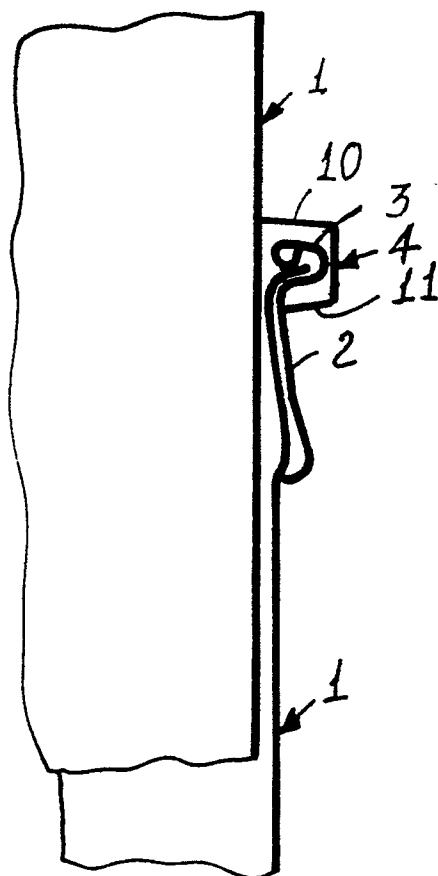


Fig.3

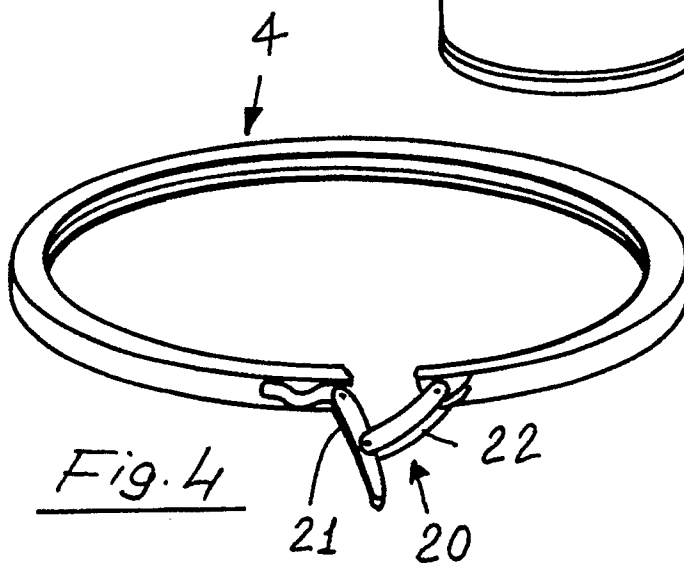
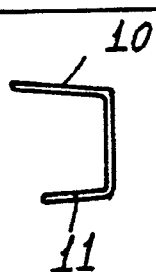


Fig.4