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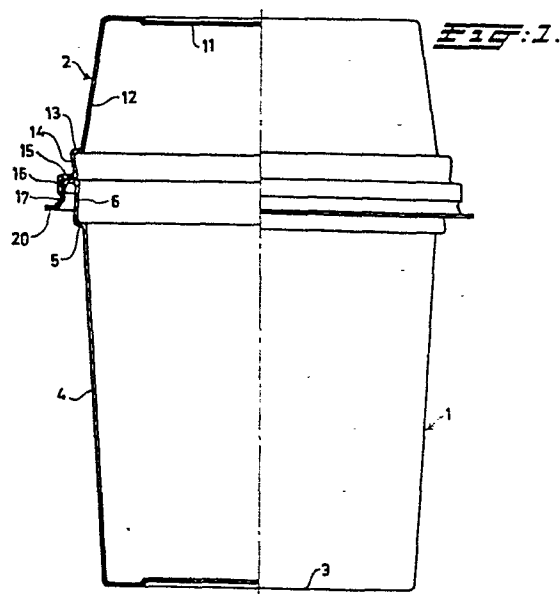
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54 **Package.**

57 Package comprising a first (1) and a second (2) container which snappingly engage each other. The first container (1) is provided with a circumferential ledge (8) and the second container (2) with a part 16 having an inwardly directed lip 17 snappingly engaging the lower edge (19) of ledge 8.



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Package.

The invention relates to a package, comprising a lower or first container and an upper or second container, which interact with one another.

- 5 Packages of this type, consisting of a lower and an upper container, the upper edges of which are superimposed and interconnected, are known.

A problem with these known packages is that special measures have to be taken so as to unite the upper and the lower container with each another, while furthermore, after the respective closure has been broken, the package can no longer be closed off in a moisture-proof manner, thus enabling moisture to penetrate into the container and the remaining contents.

This is very disadvantageous, especially when crisp foodstuffs like for instance biscuits, have to be packed. The same applies to packages filled with moist products, like for instance rye, as the impossibility to tightly close a lower and an upper container after said closure has been broken, may involve an escape of moisture from the latter foodstuffs.

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The present invention aims to provide a package of the
aforementioned type, not presenting said disadvantages.

This object is attained according to the invention in
5 that in a package, comprising a lower and an upper con-
tainer, an edge part of the upper container snappingly
interacts with an edge part of the lower container.

As soon as part of the contents of a package according to
10 the invention, for example biscuits, has been removed after
having opened the respective package, the upper container
may be sealingly re-united with the lower container, by
a snapping interaction of the respective edge parts of the
two containers, so that the remaining contents of the
15 said package is protected against any outside hampering
influence.

The upper and lower container may be nested into one
another in a very favourable manner, for which aim the
20 upper edge parts of the lower and of the upper container
snappingly engage one another, so producing a very
appropriate package. Both the lower containers and the
upper containers may advantageously be mutually nested.
This favourable effect enables a considerable economy of
25 space, which is especially important when nested lower and
upper containers have to be transported to a factory, in
order to have them filled.

Another important factor of nested upper and lower containers

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is that the lower container may be filled up to a certain level, with one component, preferably a dry product, whereafter the upper container is nested into the lower container, said upper container then being filled with another additional
5 product. The assembly so obtained may then be closed off by means of a covering foil, such as e.g. an aluminium foil.

Actually the desired packages may also be obtained by superimposing the lower and upper container upon one another, in
10 a reverse manner. The upper edge of the lower container is then provided with a covering layer, in the form of, for example, an aluminium foil or a plastics foil, whilst the second or upper container is likewise provided with a covering layer which is provided upon the upper edge of the latter
15 container.

A package of the latter type, so consisting of a reverse upper and lower container, is very appropriate, when for instance soup products have to be delivered with matching
20 meat substances. The meat substances may then for instance be packaged in the lower container, and the soup in the upper container, thus causing a final product to be delivered to the consumer, offering an optimum flavour.

25 Another possibility for the latter package is for example the packaging of dyes in the lower container and of blending or diluting agents in the upper container. The respective package may also contain adhesive products, one component

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of which in the form of a resin is received in the lower container, while the catalyst is for instance stored in the upper container.

- 5 The lower or first container tapers upwards in a widening manner from the bottom of said container, an upper part of said first container subsequently tapering inwards. At the location of the transition between the lowermost part of the lower container and the uppermost part of said lower
10 container, an inner circumferential rim is expediently provided. The upper or second container also tapers from the bottom onwards in a widening manner and subsequently merges into an uppermost part of the upper container or second container; the tapering of the second part narrows
15 towards the upper side.

The inner diameter of the upper edge of the lower container is efficiently smaller than the outer diameter of the upper container at the location of the transition between the
20 lowermost and uppermost portion of the upper container, so that a snap connection is produced when said lower and upper container are nested into one another, in which case the uppermost edges of the two containers rest against each other.

- 25 The circumference of the uppermost edge of at least one of the containers is extended with an inwardly curved part or lip, enabling a snapping interaction with a projecting part provided upon the peripheral edge of the other container.

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The invention will be illustrated with respect to an embodiment in the drawing, wherein:

Figure 1 shows a package in accordance with the invention;

5 Figure 2 shows a partial cross-section of a package according to the invention;

Figure 3 shows a package wherein the containers have been nested into one another and

10 Figure 4 shows a lateral view of a package as shown in figure 3.

Figure 1 shows a package, comprising a lower or first container 1 and an upper or second container 2. A first portion 4 of the lower container 1 widens from the bottom 3 upwards in a tapering manner and merges into a flat circumferential edge 5, provided inside the lower or first container 1. Subsequently a second portion 6 of the first container 1 continues its upwards tapering. Said second portion 6 is bent outwardly while forming a flat peripheral edge 7, which in turn supports a ledge 8 being curved towards the bottom.

The flat peripheral edge 7 may be provided with a foil 10 consisting for example of plastics or of aluminium in order to seal off the materials or foodstuffs within the lower container.

The upper container 2 comprises a wall part 12, which extends upwardly from the bottom 11 of the upper container 2, in a

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tapering widening manner, while forming a flat transition edge 13 of said second container, a wall part 14 following said flat transition edge 13, and extending inwardly in a widening tapering manner towards the free end of the upper
5 or second container 2. Said wall part 14 comprises an outwardly directed flat peripheral edge 15, which merges into a cylindric wall part 16 being provided with an inwardly curved part or lip 17 being able to snappingly interact with the lowermost edge 19 of the ledge 8.

10

The inwardly curved portion or lip 17 is preferably provided with an outwardly directed peripheral edge 20, so as to protect the relatively thin-walled package against damages. Said peripheral edge 20 simultaneously offers the additional
15 possibility to easily remove the inwardly directed lip 17 of the ledge 8, so as to open the package.

Although the drawing shows that the wall portion 17 is cylindric, said wall portion need not necessarily have
20 said shape, as, instead of the latter, ledge 8 may also be cylindric, whilst in that case wall portion 16 tapers inwardly.

The flat edge 15 may be provided with a covering foil, which for example consists of aluminium or plastics and which
25 serves for sealing off the materials or foodstuffs in the second container 2.

When transporting the lower and upper containers to the factory which uses the respective packages for filling them,
30 space between the second or upper containers 2 and lower

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or first containers 1 can be saved, by mutually nesting them into one another.

It is observed that the wall portion 4 of the lower or first container 1 e.g. encloses an angle of 3° with the perpendicular which explains the tapering extension of said portion 4.

The wall portion 12 of the upper or second container encloses an angle of, for example, 8° with the perpendicular.

10

Obviously the abovedescribed values only represent an example of many possibilities, so that the scope of the present invention is not limited to them.

15 It should be noted that a good snapping interaction between the first and the second container is improved in consequence of the manner in which the edge 7 with the ledge 8 and the lowermost edge 19 have been thickened with respect to other parts of the respective containers.

20

The outer diameter of the upper or second container 2 is at the location of the transmission edge 13, greater than the inner diameter of the lower or first container, at the location of the edge 9, thus causing a snapping connection between the two containers, when nesting the second container 2 into the first container 1.

25

The containers 1 and 2 consist of a thermosetting material, such as polyvinylchloride, polystyrene, polyester or polyolefin, and in particular of polyethylene or polypropylene.

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C L A I M S

1. Package, comprising a lower or first container and an upper or second container, which interact with one another, characterized in that
an edge part of the upper container snappingly interacts with
5 an edge part of the lower container.
2. Package according to claim 1, in which the lower and the upper container may be nested into one another while the upper edge parts of the lower and the upper container snappingly
10 interact with one another on nesting the upper and lower container.
3. Package according to claim 1, in which the upper and lower container cooperate snappingly with one another in a reverse superimposed position, by means of an upper edge part.
- 15 4. Package according to any or more of the preceding claims, in which at least one of the containers is closed off by means of a covering layer, preferably consisting of a metal or a plastics foil.
5. Package according to any or more of the preceding claims,
20 in which a first or lower container is provided with an upper portion (6, 9), which tapers inwardly.
6. Package according to any or more of the preceding claims, in which an inner circumferential edge (5) is provided at the location of the transition of the lowermost portion of the lower
25 or first container and the uppermost portion of the lower or first container.

7. Package according to any or more of the preceding claims,
in which the second or upper container is provided with an
uppermost portion which tapers in a narrowing manner towards
the free upper side, and preferably adjoins a flat transition
5 edge (13).
8. Package according to any or more of the preceding claims,
in which the inner diameter of the uppermost side (9a) of the
first or lower container is smaller than the outer diameter of
the second or upper container at the location of the outside of
10 the transition edge (13), thus causing a snap connection when
nesting the first or lower and the second or upper container
into one another, in such a manner that the upper edges of said
containers then rest against each other.
9. Package according to any or more of the preceding claims,
15 in which the upper edge of at least one of the containers is
extended at the location of the circumference with an inwardly
curved part or lip (17) which can snappingly interact with a
projecting part or ledge (8) provided at the circumference of
the edge (7) of the other container.
- 20 10. Package according to any or more of the preceding claims,
in which the two containers are nested into one another, while
the upper side of the package is sealed off by a covering layer,
whereas the first and the second container are preferably each
provided with a separate covering layer (10, 21), the covering
25 layer (10) of the first container being supported by the support
edge (7) of the first or lower container, and the covering layer
(21) of the second container being supported by the supporting
edge (15) of the second or upper container.

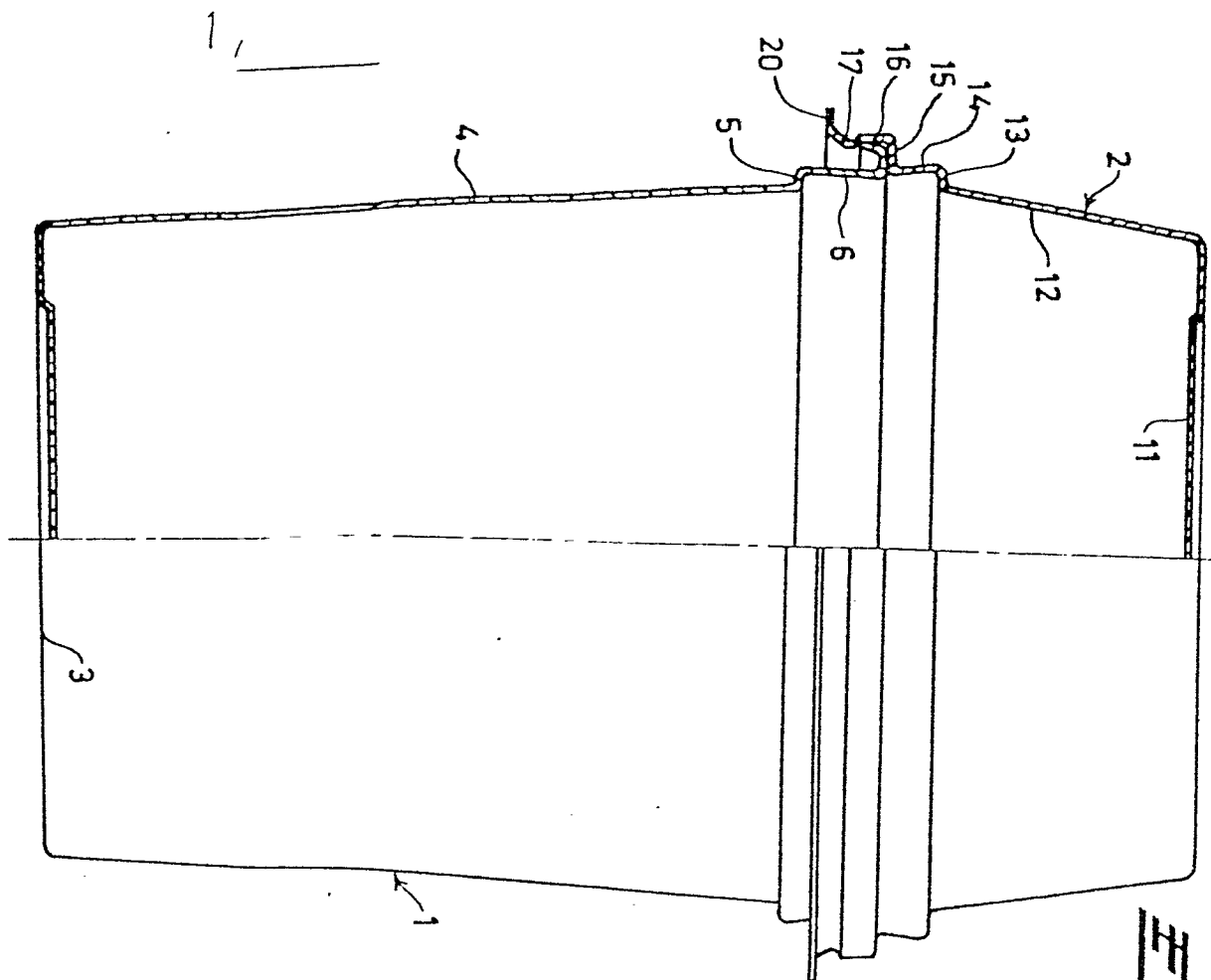


Fig. 2.

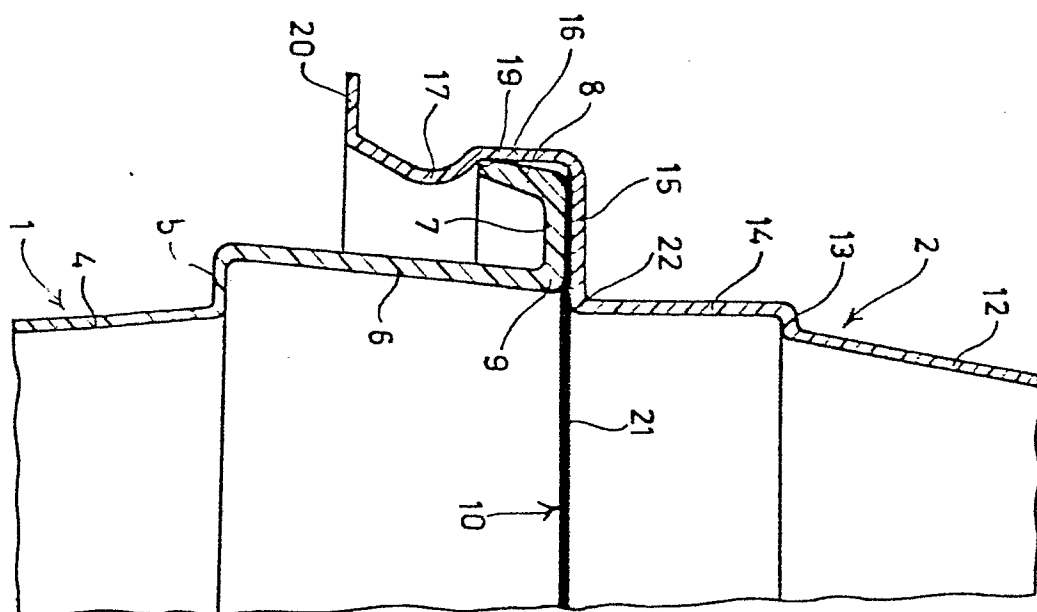


Fig. 2.

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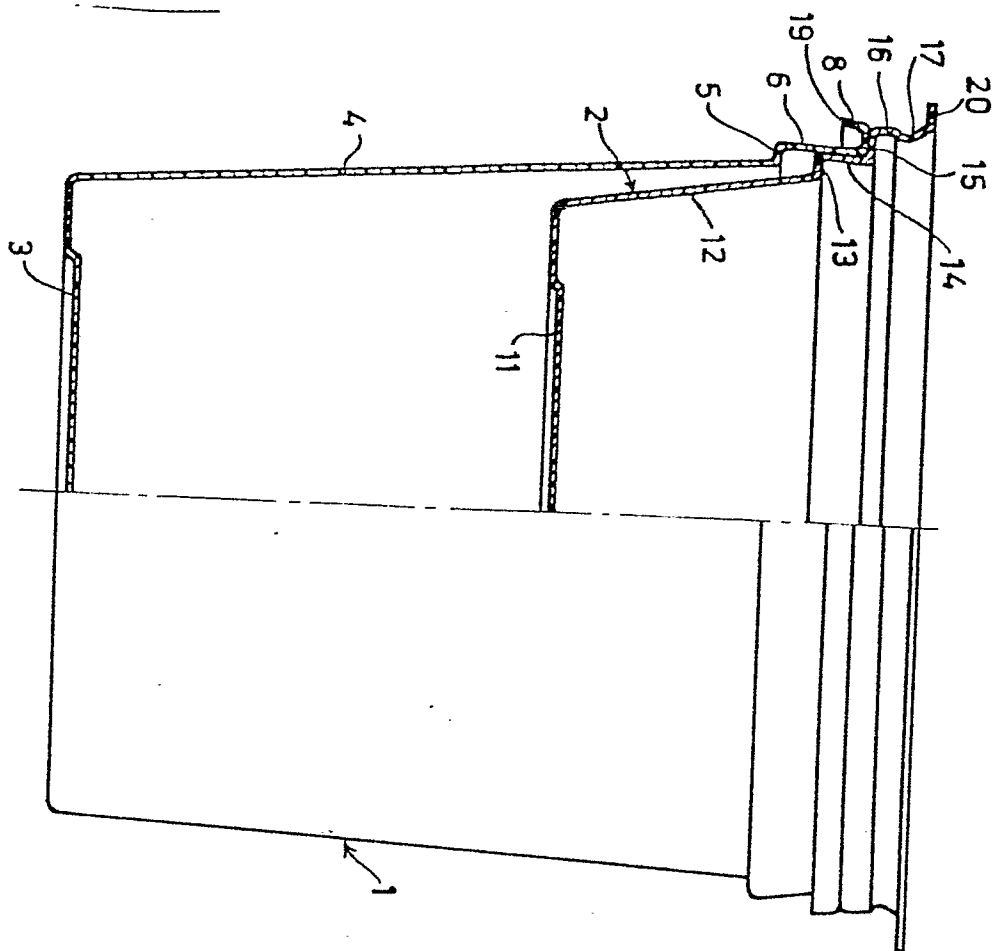


Fig. 5.

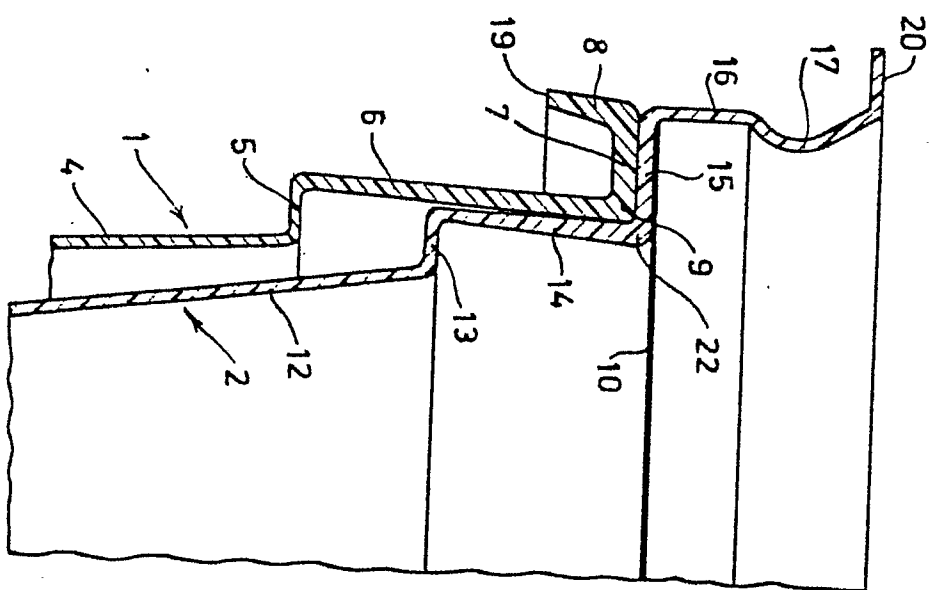


Fig. 4.



European Patent
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EUROPEAN SEARCH REPORT

0017276
Application number
EP 80 20 0237

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int. Cl. ³)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
	<u>CA - A - 952 449</u> (WONG) * Patent specification *	1-3	B 65 D 8/00 81/32
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	<u>US - A - 2 739 751</u> (BAILEY) * Patent specification *	1,3,4, 7,8	
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	<u>US - A - 3 215 300</u> (LYNCH) * Patent specification *	1,3,5, 7	
	--		TECHNICAL FIELDS SEARCHED (Int.Cl. ³)
	<u>FR - A - 1 558 624</u> (PENTON) * Patent specification *	1,3,4, 8-10	B 65 D

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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	19-06-1980	VANTOMME	