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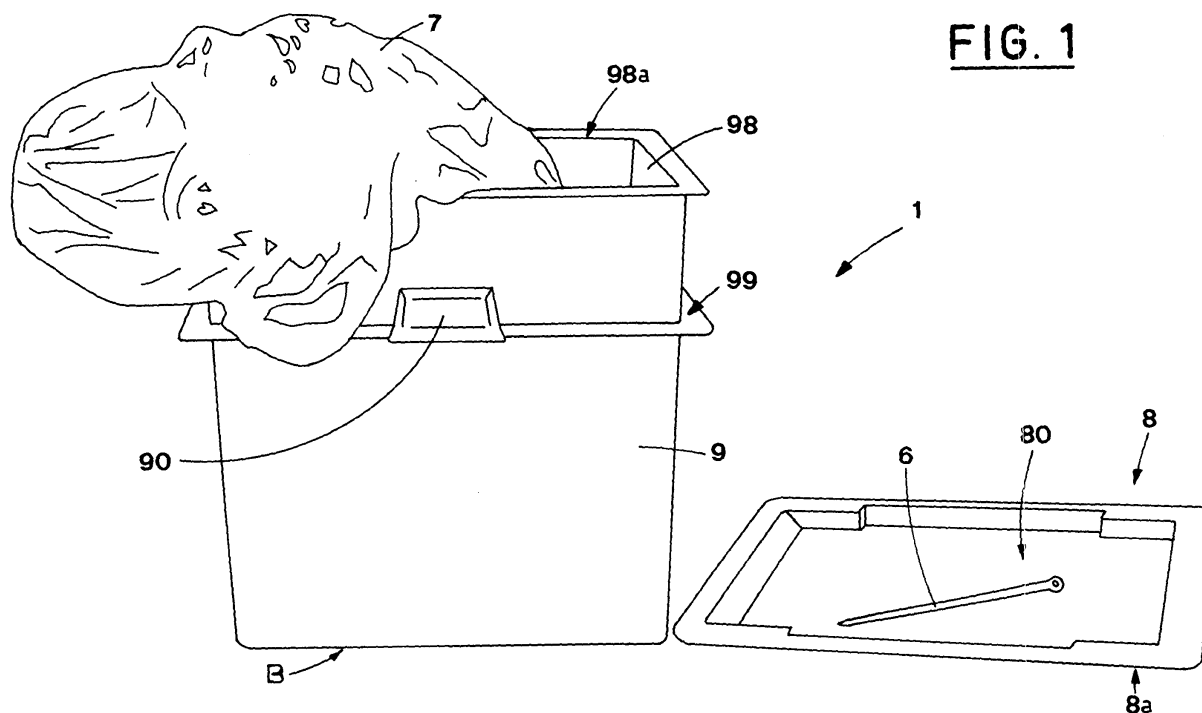
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(54) **Container for foodstuffs**

(57) A container, in particular a container for foodstuffs, includes a vessel (9), whose section increases in upward direction; a bag (7), situated inside the vessel (9) for containing a mixture; closing elements (6) for

closing the bag (7), in a way such that it can be re-opened, after the mixture has been put therein; a cover (8), which is applied to the vessel (9) with slight interference.



EP 1 481 917 A1

Description

[0001] The present invention relates to the technical field concerning containers, for example for foodstuffs.

[0002] Barrels with a constant cross-section, in particular with circular cross-section, having covers are aimed at containing mixtures formed, for example, by a liquid solution and olives.

[0003] The above mentioned barrels have some drawbacks.

[0004] The inner surface of the barrels must be suitably treated, to avoid bacterial contamination of the mixture contained therein.

[0005] During transportation, the mixture waves inside the barrel and, in extreme situations, this movement can open the cover and/or damage the foodstuff.

[0006] If the barrels are to be re-used, it is necessary to sterilize and/or clean the inner surface thereof.

[0007] Traditional barrels usually are disposable, because their re-use is not profitable.

[0008] Actually, the room occupied by empty barrels is the same as the one occupied by full barrels, and consequently, the transport of the empty barrels is practically as expensive as the transport of the same number of full barrels.

[0009] Another drawback of the non re-used barrels is connected to their disposal, because they are made of plastic materials.

[0010] The object of the present invention is to propose a container for foodstuff, which can avoid the above drawbacks, and in particular, a container made in such a way, that its inner surface does not touch the product to be transported.

[0011] Another object of the present invention is to propose a container, which is made in such a way that it can be used more times.

[0012] A further object of the present invention is to propose a container, whose shape allows to optimize the occupied space during the transport and storing.

[0013] A still further object of the present invention is to propose a container, whose shape facilitates its handling, either manually or by using machines.

[0014] Yet a further object of the present invention is to propose a container for foodstuff, whose cost is low in relation to its utility.

[0015] The above mentioned objects are obtained in accordance with the contents of the claims.

[0016] The characteristic features of the invention will be pointed out in the following, with particular reference to the enclosed drawings, in which:

- Figure 1 is a lateral view of the proposed container for foodstuff, with the elements forming the barrel pointed out;
- Figure 2 is a lateral view of more containers in in-use conditions.

[0017] With reference to the enclosed figures, the reference numeral 1 indicates a container for foodstuff, formed by a vessel 9, made for example of polyolefin resin, whose cross-section, for example rectangular, increases in the upward direction, and whose upper end forms an outer edge 98.

[0018] At its sides, the vessel 9 has handles 90, as well as flanges 99, for example extending all around, for the manual or mechanical (e.g. by forks of a fork lift) handling of the vessel 9.

[0019] A bag 7 is situated inside the vessel 9, and is closed in its upper part, in a way such that it can be re-opened, by a closing element 6, for example an adhesive strip, so as to define a package C, whose volume is substantially equal to the capacity of the container 1.

[0020] The container 1 includes also a cover 8, which can be coupled with a slight interference with the outer edge 98 of the vessel 9.

[0021] When coupled, the edge 8a of the cover 8 matches with the upper portion 98a of the edge 98 of the vessel 9, square folded outwards.

[0022] The upper surface of the cover 8 forms a seat 80, whose cross-section increases in its upper part, and whose dimensions are not smaller than the dimensions of the base B of the vessel 9.

[0023] The container 1 can be used mainly for transport of foodstuffs, but its use for transport of other types of products is not excluded.

[0024] Mainly, the container 1 is used for transportation of foodstuff; the bag 7, contained in the vessel 9, receives a mixture, for example a liquid solution and olives.

[0025] After filling, the bag 7 is tightened by the closing element 6, so as to be sealed, and the vessel 9 is closed with the cover 8.

[0026] The container 1 defined by the combination vessel 9, bag 7 (with its contents), bag closing elements 6, cover 8, is moved by the forks of a fork lift.

[0027] The container 1 is hooked by the forks of the lift, so that the latter go in abutment against the lower surface of the flange 99; then, the container is raised and moved to a pallet P, as seen in Figure 2.

[0028] The above described container 1 has particularly advantageous technical-functional features.

[0029] The bag 7 of the vessel 9, made of e.g. transparent polypropylene, allows, after the opening of the container 1, to check the contents of the mixture in the bag 7 without opening or removing the closing element 6.

[0030] In this way, the mixture is not exposed to the air and to possible bacterial contamination.

[0031] The closure of the bag 7 with the closing element 6 to define the package C, whose volume is substantially equal to the capacity of the container 1, is advantageous, because during the transport, the mixture contained in the bag 7, does not wave.

[0032] In this way, possible opening of the cover 8 is avoided and the foodstuff contained in the mixture is not

damaged.

[0033] The closing element 6 closes the bag 7, but it acts also as a "guarantee seal" for the mixture contained in the bag 7.

[0034] In order to use the mixture contained in the bag 7, it is enough to take the latter from the vessel 9 and send it to the apparatuses for opening the bag and handling the mixture.

[0035] The removal of the bag 7 from the vessel 9 avoids the necessity of sterilization and/or cleaning of the vessel 9 and the cover 8, because they are not in touch with the transported mixture; therefore, the container 1 can be re-used immediately, it is enough to put a new bag 7 into the vessel 9.

[0036] The inner surface of the vessel 9 does not touch the product to be transported, so the container 1 can be made of any kind of material.

[0037] The outer shape of the vessel 9, and of its cover 8, is such as to optimize the occupied space during the transport and storage.

[0038] During transport and storage, the full containers are placed one over another; the seat 80 made in the upper surface of each cover 8 defines a base for receiving the bottom of the container situated above.

[0039] The empty containers occupy less space than the full containers, since the vessels 9 can be piled up due to their section, which increases upwards, and their covers can be placed one over another.

[0040] Therefore, the transport and re-use of the containers is economically advantageous.

edge (98), whose upper portion (98a) matches with the edge (8a) of said cover (8), after said cover (8) has been applied to said vessel (9).

- 5 5. Container as claimed in claim 1, **characterized in that** said vessel (9) has handles (90), situated at the sides thereof for manual handling of the container.
- 10 6. Container as claimed in claim 1, **characterized in that** said vessel (9) has flanges (99), situated at the sides thereof and aimed at handling the container by means of handling machines.
- 15 7. Container as claimed in claim 1, **characterized in that** said vessel (9) has a rectangular cross-section.
- 20 8. Container as claimed in claim 1 or 3, **characterized in that** said closing means (6) include an adhesive strip.

Claims

1. Container, in particular for foodstuffs, **characterized in that** it includes: a vessel (9), whose section increases in the upward direction; a bag (7), situated inside the vessel (9) for containing a mixture; closing elements (6) for closing said bag (7), in a way such that it can be re-opened, after said mixture has been put therein; a cover (8), which is applied to said vessel (9) with slight interference.
2. Container as claimed in claim 1, **characterized in that** the upper surface of said cover (8) forms a seat (80), whose section increases in the upward direction, and whose dimensions are not smaller than the dimensions of the base (B) of said vessel (9), with said seat (80) being provided for receiving the bottom of a container (1) situated above.
3. Container as claimed in claim 1, **characterized in that** said closing means (6) close said bag (7), so as to define a package (C), whose volume is substantially equal to the capacity of the container (1).
4. Container, as claimed in claim 1, **characterized in that** the upper end of said vessel (9) has an outer

FIG. 1

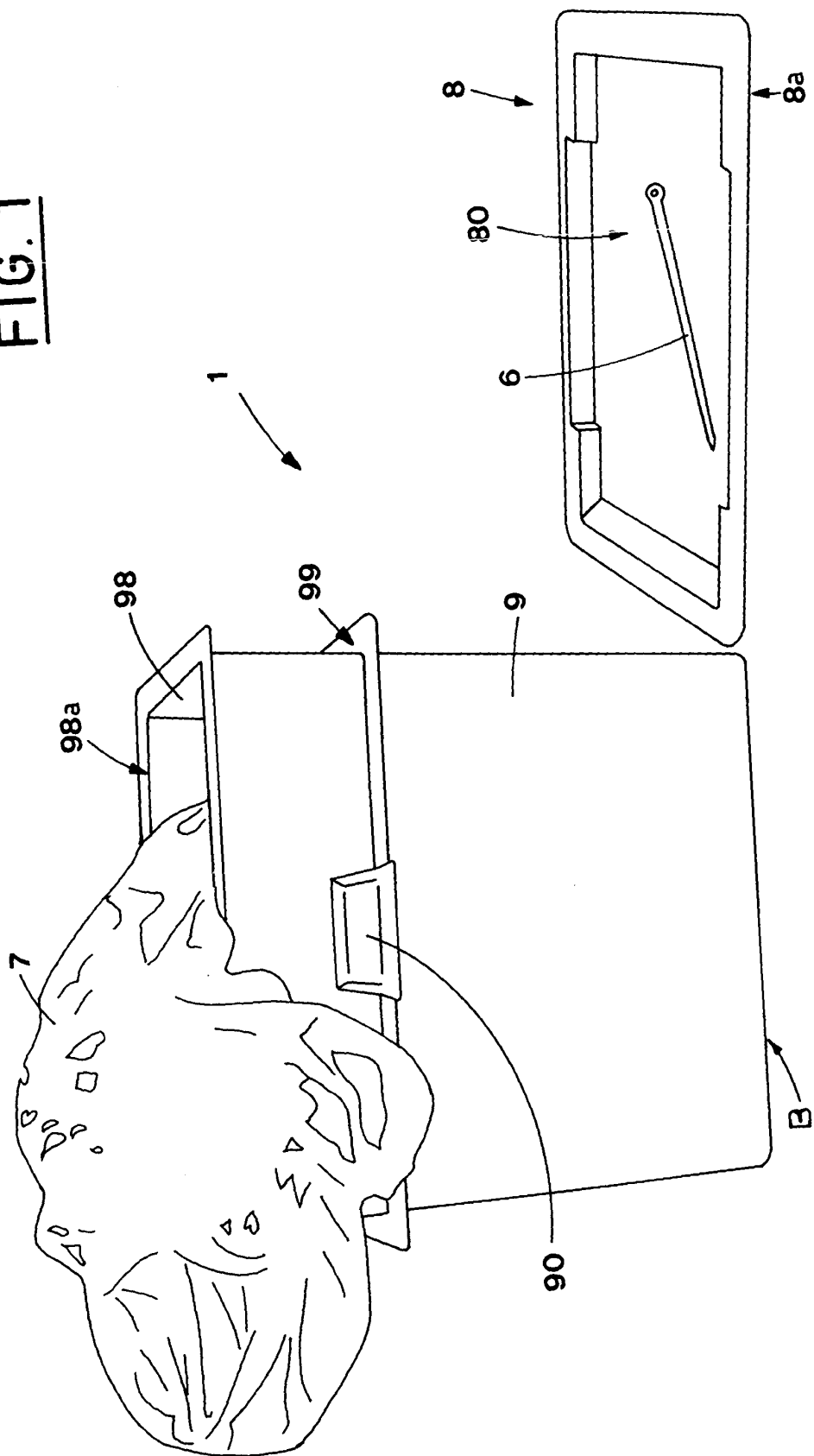
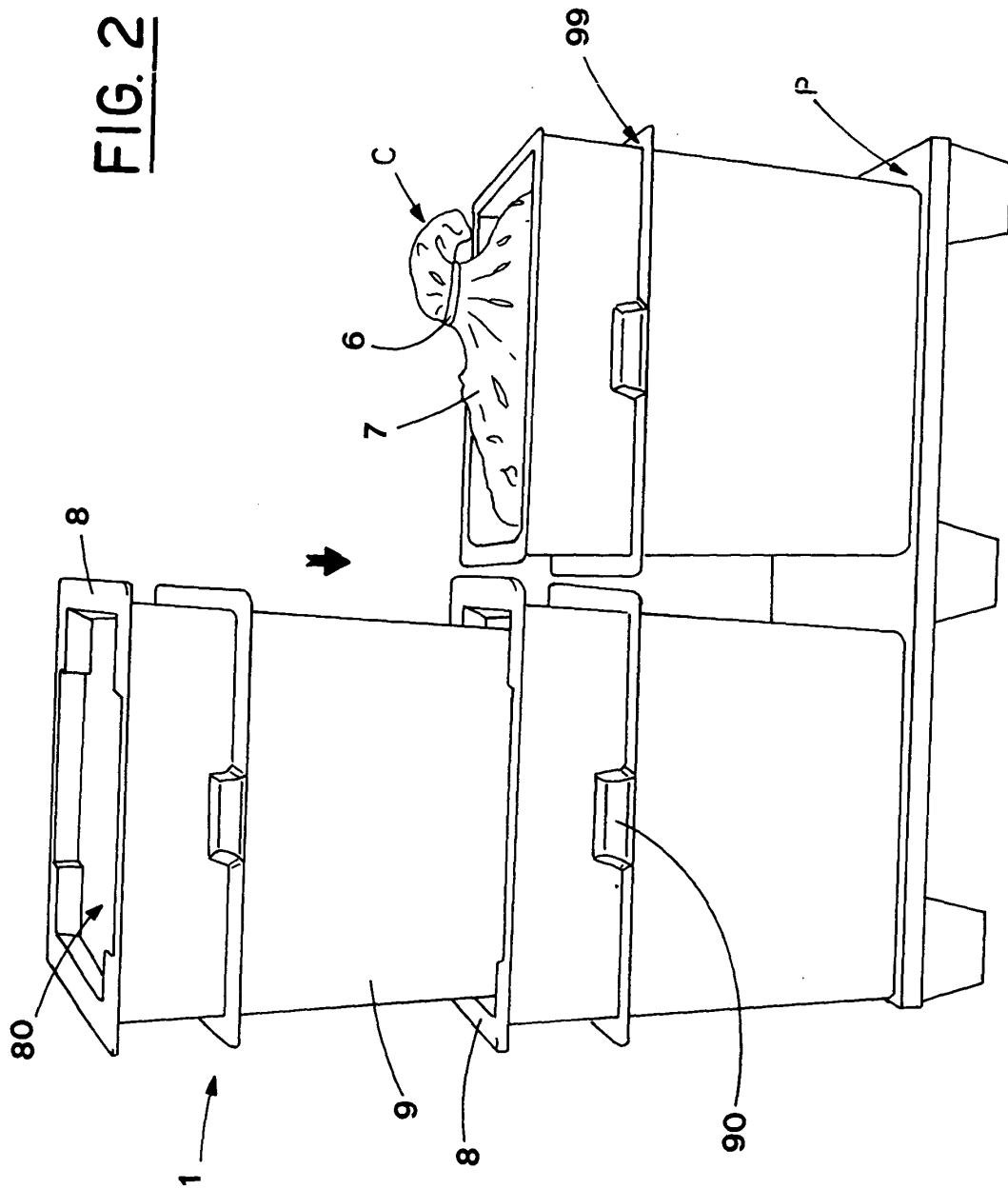


FIG. 2





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EUROPEAN SEARCH REPORT

Application Number
EP 04 01 2433

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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 5 August 2004	Examiner Segerer, H
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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