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(54) **CONTAINER FOR LIQUIDS**

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(57) **ABSTRACT**

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A container for liquids comprises a hollow body (1) having an opening (2). The hollow body has a triangular cross-section formed by an isosceles triangle, the two identical sides of the triangle forming a right angle.

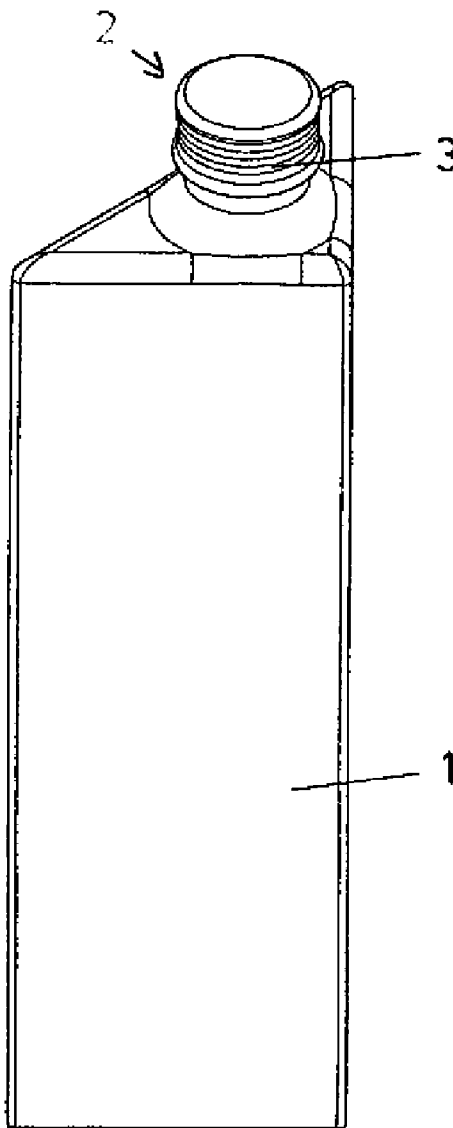


Fig. 2 a

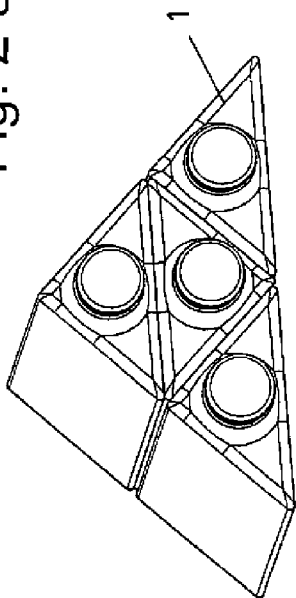


Fig. 2 b

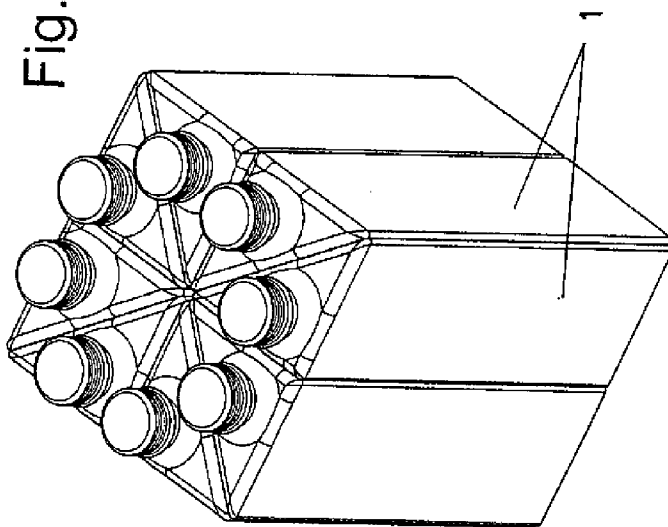


Fig. 1 b

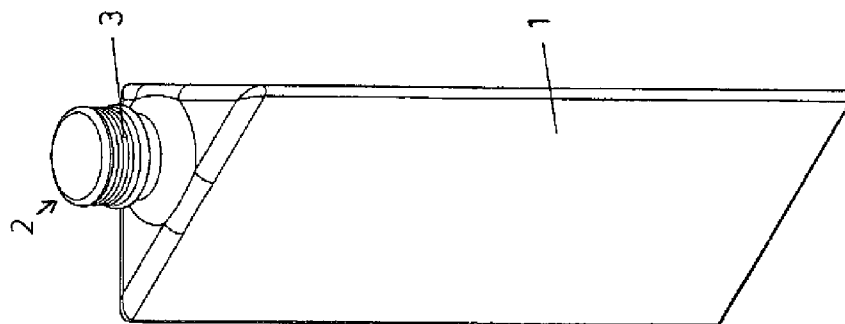


Fig. 1 a

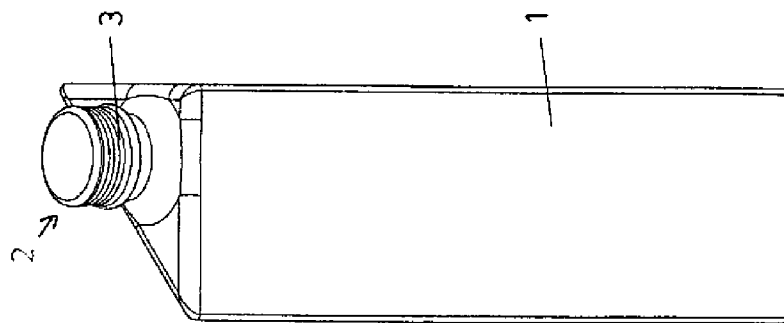


Fig. 4 a

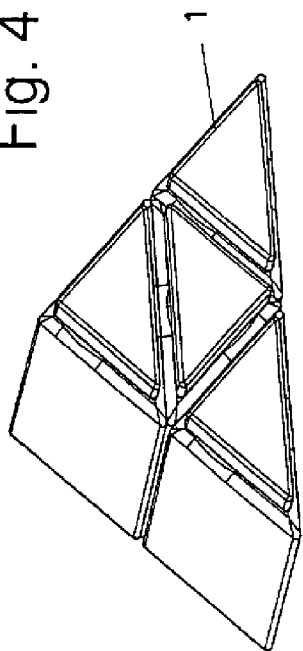


Fig. 4 b

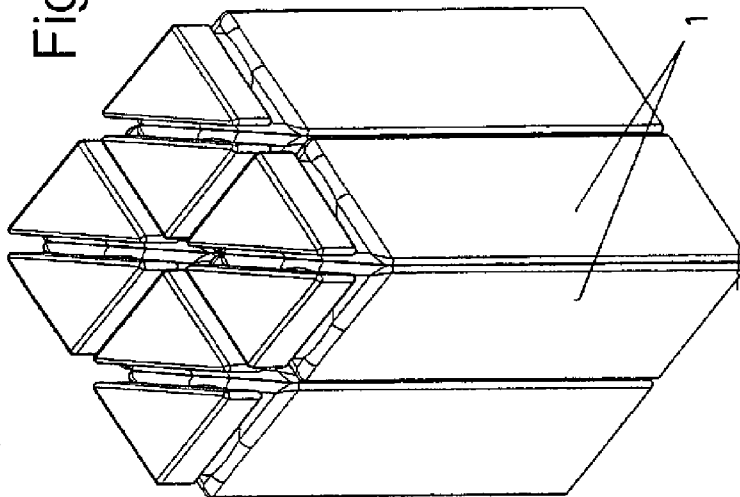


Fig. 3 b

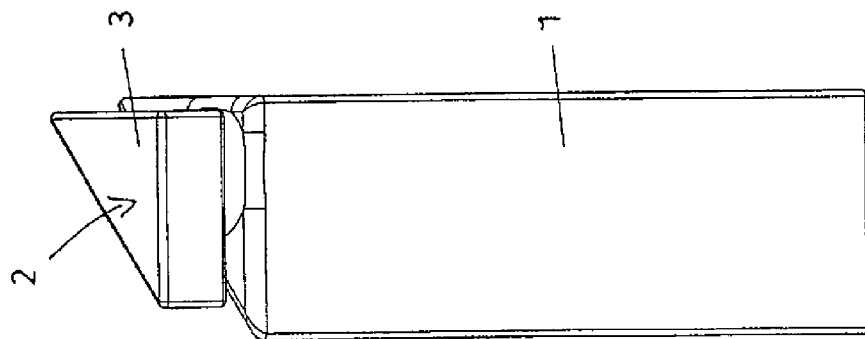
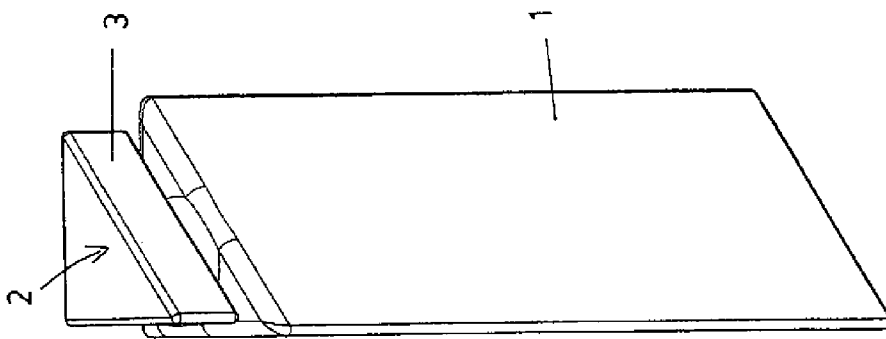


Fig. 3 a



CONTAINER FOR LIQUIDS

[0001] The invention concerns a container for liquids according to the preamble of claim 1.

[0002] Containers for liquids are known in multiple embodiments. For example, it is known to store liquids in bottles. Oil, on the other hand, can be stored in large oil barrels.

[0003] The present invention concerns containers in the most general sense with respect to the type of liquids as well as the quantity of liquid.

[0004] A known special shape of containers for liquids provides that they have a triangular cross-section. These triangular cross-sections are always isosceles triangles, i.e., the sides of the triangle are of the same length. This means that the sides of the triangle define between them an angle of 60 degrees, respectively.

[0005] The problem in connection with these equilateral triangles resides in that they can be stored relatively compact in particular in their upright position that, however, in the edge area there is always a non-uniform, i.e., zigzag-shaped, peripheral contour. This is not optimal for storing these triangular containers.

[0006] Based on this, it is the object of the invention to provide a container for liquids of the aforementioned kind which can be assembled in an even more compact form.

[0007] The technical solution is characterized by the features in the characterizing portion of claim 1.

[0008] The basic idea of the triangular container according to the invention for liquids resides in that the cross-section is an isosceles triangle wherein specifically the two legs of identical length of this triangle define a right angle between them. This has the very great advantage that a plurality of containers can be positioned in a very compact configuration because the peripheral contour of the package of containers forms a square or a rectangle. This means that absolutely no space is lost due to air interstices. In case that the containers are stacked horizontally, very clear and compact structures result likewise that within themselves are very stable so that basically stacks of any desired height can be reached. In this context, the containers can be provided with one or two openings. In particular larger containers also have two openings, in general, a large opening for emptying and a smaller opening for venting, as is conventional in case of barrels.

[0009] A preferred embodiment according to claim 2 proposes that the cross-section is the same across the entire height of the hollow body.

[0010] The embodiment according to claim 3 proposes that the closure of the opening can be plugged in or screwed on. Basically, conventional closures can be employed, in particular screw closures. Likewise, also closures can be employed which are plugged in, in particular also clipped on.

[0011] The embodiment according to claim 4 proposes that the closures are round or, in accordance with the shape of the container, are also triangular. Likewise, any other shape or form of the closure can be employed. In particular, these closures are designed such that they do not project past the peripheral contour of the hollow body.

[0012] Moreover, the embodiment according to claim 5 proposes that the hollow body is made of glass, sheet metal, steel or plastic material. This means that the container according to the invention can be produced from any conventional material.

[0013] Finally, the claims 6 and 7 propose possibilities in order to assemble several of these containers to larger units. Claim 6 concerns in this context the horizontal variant and claim 7 the upright variant.

[0014] Two embodiments of a container for liquids in accordance with the invention will be explained in the following with the aid of the drawing. It is shown therein in:

[0015] FIG. 1a a first embodiment of the container with a round closure;

[0016] FIG. 1b a somewhat different view of the container of FIG. 1a;

[0017] FIG. 2a the containers of FIGS. 1a and 1b in the stacked state;

[0018] FIG. 2b the containers of FIGS. 1a and 1b in the upright assembled state;

[0019] FIG. 3a a second embodiment of the container with a round closure;

[0020] FIG. 3b a somewhat different view of the container of FIG. 3a;

[0021] FIG. 4a the containers of FIGS. 3a and 3b in the stacked state;

[0022] FIGS. 1a and 1b show a first embodiment of a container for liquids. The container has in this context a hollow body 1 with a topside opening 2. This opening 2 can be closed by a round closure 3 in the form of a screw closure.

[0023] The special feature of this container resides in the cross-sectional shape of the hollow body 1. The cross-sectional shape is triangular. More specific, the shape is an isosceles triangle whose two identical legs define an angle of 90 degrees between them.

[0024] The special feature of this container with the special cross-sectional shape is apparent when several such containers are assembled.

[0025] FIG. 2a thus shows a total of four such containers as they are stacked in horizontal position. The basic principle resides in this context in that first two containers are placed with their long legs onto the support surface. Into the formed V-shaped area between them, a third container is inserted, namely with the 90 degree angle pointing downwardly. Onto this third container, a fourth container can be placed, here with the 90 degree angle at the top. This system can be continued endlessly in that next to the lowermost containers further containers are placed laterally and further containers are stacked thereon.

[0026] The illustration of FIG. 2b shows the containers when positioned in upright form. The basic idea resides in that always two containers are assembled in pairs contacting each other wherein the triangles are contacting each other with their long sides.

[0027] This means that these two container pairs in cross-section define a square. Such container pairs can then be assembled to larger units as can be seen in FIG. 2b.

[0028] The embodiment variant of FIGS. 3a and 3b differs from the first embodiment variant only in that the closure 3 is not round but has a triangular shape. The cross-sectional contour of this triangular closure 3 is embodied likewise as an isosceles triangle.

[0029] FIGS. 4a and 4b show then the situation in accordance with FIGS. 2a and 2b when the containers are stacked or, in upright position, are assembled while standing.

List of Reference Numerals

[0030] 1 hollow body

[0031] 2 opening

[0032] 3 closure

What is claimed is:

1.-7. (canceled)

8. A container for liquids, comprising:

a hollow body having an opening and a first triangular cross-section;

a closure closing off the opening;

wherein the first triangular cross-section has the shape of an isosceles triangle with two identical legs and the two identical legs define a right angle between them.

9. The container according to claim 8, wherein the cross-section is identical across an entire height of the hollow body.

10. The container according to claim 8, wherein the closure is adapted to be plugged into the opening or screwed on.

11. The container according to claim 8, wherein the closure is round.

12. The container according to claim 8, wherein the closure has a second triangular cross-section in the shape of an isosceles triangle with two identical legs, wherein the two identical legs of the second triangular cross section define a right angle between them.

13. The container according claim 8, wherein the hollow body is comprised of glass, sheet metal, steel, or plastic material.

14. A container assembly comprising:

containers, each container comprising a hollow body having an opening and a triangular cross-section, a closure

closing off the opening, and wherein the triangular cross-section has the shape of an isosceles triangle with two identical legs and a long leg, wherein the two identical legs define a right angle between them and wherein the long leg connects the two identical legs;

wherein the containers are assembled such that two of the containers are placed with the long legs onto a support surface so that a V-shaped area is formed between the two containers, wherein a third one of the containers is inserted with the right angle facing downwardly into the V-shaped area, wherein onto the third container, as needed, a fourth container is placed with the right angle facing upwardly, and wherein, as needed, containers are added by laterally positioning next to the containers positioned on the support surface further containers and stacking further containers thereon.

15. A container assembly comprising:

containers, each container comprising a hollow body having an opening and a triangular cross-section, a closure closing off the opening, and wherein the triangular cross-section has the shape of an isosceles triangle with two identical legs and a long leg, wherein the two identical legs define a right angle between them and wherein the long leg connects the two identical legs;

wherein the containers are assembled such that two of the containers in upright position are assembled, respectively, in pairs so that the long sides of the triangular cross-section are contacting each other, and wherein the container pairs are assembled to a larger unit.

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