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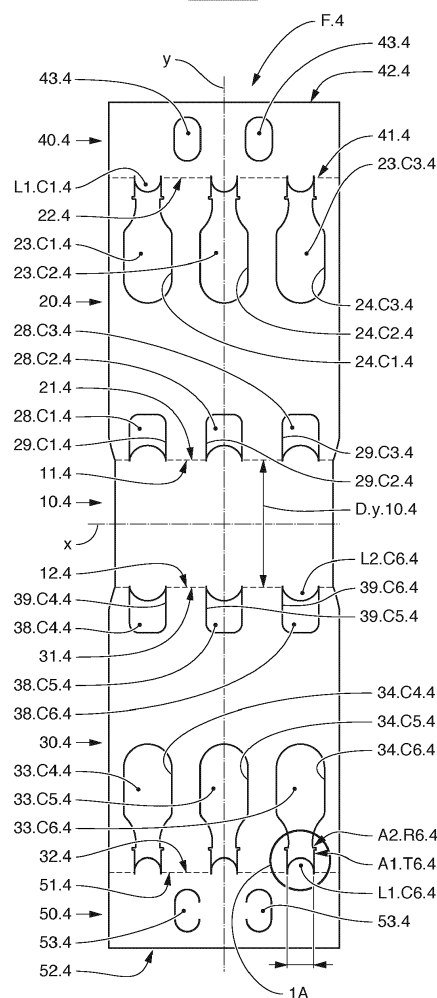
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(54) **BASKET TO COLLECT CONTAINERS AND BLANK TO OBTAIN THE SAME**

(57) A basket (CS.4 / CS.5) for the collection of a plurality of containers such as bottles (C1.4, C2.4, etc. / C1.5, C2.5, etc.) or similar objects comprising a bottom panel (10.4 / 10.5), a first side panel (20.4 / 20.5), a second side panel (30.4 / 30.5), a first top panel (40.4 / 40.5), and a second top panel (50.4 / 50.5). The first side panel (20.4 / 20.5) comprises one or more first openings (23.C1.4, 23.C2.4, 23.C3.4 / 23.C1.5, 23.C2.5, 23.C3.5) and the second side panel (30.4 / 30.5) comprises one or more second openings (33.C4.4, 33.C5.4, 33.C6.4 / 33.C4.5, 33.C5.5, 33.C6.5). A blank (F.4 / F.5) to make the aforementioned basket (CS.4 / CS.5).

Fig. 1



Description

Field of Invention

[0001] The present invention concerns a basket to collect containers such as bottles and similar objects, as well as a relative blank to obtain the same.

Background of the Invention

[0002] Currently are known baskets for collecting of containers such as bottles and similar objects, as well as are known blanks for obtaining said baskets.

[0003] Said known baskets and said known blanks have a series of drawbacks.

[0004] A first drawback is due to the fact that the case of the baskets and/or the blanks that forms said baskets comprise bonding points and/or fastening couplings positioned in the underlying area of the basket, i.e. in the area that forms the bottom of the same basket, therefore in an area in which the weight of the lot of the batch contained into the basket is applied, with consequent possible detachment of said bonding points and/or of said fastening couplings when the basket is raised with relative possible fall of the containers.

[0005] A second drawback is due to the fact that said baskets are difficult to make manually and/or that they are difficult to make by automatic machines, since their manufacture requires the execution of gluing and fixing operations in the underlying area of the basket, therefore in the area affected by the presence of the objects and in the area in which the weight of the batch of objects is applied.

[0006] Other drawbacks, about the known baskets, reside in the fact that they do not allow to be held the containers in the correct position during transport, in the fact that they are unable to obviate the collision (clashing) of the containers between them, as for example during transport, in the fact that they are unable to compact (press) the containers between them, in the fact that they cannot be stacked in a stable manner, in the fact that they do not allow to keep the top of the relative containers clean, in the fact that they do not allow to show the container (and/or the label of the container, bottle) to the public, and in the fact that they do not allow to guarantee to hide in a way at least not legible of the barcode applied on the respective containers (bottles) contained in the basket, and in the fact that when lifted, for example by gripping of the top, all the weight of the containers is applied on the bottom panel.

[0007] Some drawbacks concerning known blanks for obtaining said baskets reside in the fact that they require the use of two or more blanks which must be joined together, in the fact that must be used a type of cardboard having a high thickness, with consequent high consumption as a weight of cardboard with relative costs, in the fact that they have a very large flat development, with consequent high consumption of surface of material for

the die-cutting of the same, and in the fact that they have jagged profiles, with consequent formation of high quantities of scraps during punching, and in the fact that they are unable to form the basket object of the present invention.

Exposure of the Invention

[0008] The purpose of the present invention is therefore to solve the aforementioned drawbacks.

[0009] The invention solves the problem of creating a basket to collect containers, such as bottles and similar objects, comprising the characteristics specified in claim 1, in the related claims, in the description and in the illustrations.

[0010] The invention solves the problem of creating a blank to obtain a basket to collect containers, such as bottles and similar objects, comprising the characteristics specified in claims 14 and 15, in the related claims, in the description and in the illustrations.

Brief description of the Drawings

[0011] Further characteristics and advantages of the present invention will be more evident from the following description of some preferred practical embodiments, given here by way of non-limiting example, made with reference to the figures of the attached drawings in which:

Figure 1 illustrates a blank relative to the manufacture of a basket according to a first embodiment of the present invention;

Figures 2 and 2A, respectively, are a three-dimensional view of the basket according to said first embodiment and an enlarged view of the portion 2A of Fig. 2;

Figures 3, 4, 5, 6, 7 and 8, respectively, are a view from the left, from the right, from the front, from the rear, from the top and from the bottom, of the basket of fig. 2, relating to said first embodiment;

Figure 5A is an enlargement of the portion 5A of Figure 5;

Figure 9 illustrates a blank relative to the manufacture of a basket according to a second embodiment of the present invention;

Figures 10 and 10A, respectively, are a three-dimensional view of the basket according to said second embodiment and an enlargement of a portion of Fig. 10;

Figures 11 and 12, respectively, are a view from the left and from the right of the basket of fig. 10, relating to said second embodiment.

Figure 1A is an enlarged illustration of the detail indicated as 1A in Figure 1;

Figure 13 is an enlarged illustration of the top of one of the bottles illustrated in the previous figures.

Preferred Exemplary Forms of Practical Implementation

[0012] With reference to the following description, concerning a first and a second embodiment of the invention which is the subject of the present patent application, the references of the first and of the second embodiment are reported separated by a "/" and, preferably, the suffix xxx.4 is used to identify a detail of the first embodiment, while the suffix xxx.5 is used to identify a detail of the second embodiment.

[0013] With reference to the figures of the attached drawings, **a basket**, CS.4 / CS.5, for the collection of a plurality of containers such as bottles, C1.4, C2.4, etc. / C1.5, C2.5, etc., or similar objects, comprises: a bottom panel, 10.4 / 10.5, which extends along a transverse axis X and along a longitudinal axis Y; a first side panel, 20.4 / 20.5, which extends along a transverse axis X and along a longitudinal axis Y; a second side panel, 30.4 / 30.5, which extends along a transverse axis X and along a longitudinal axis Y; a first top panel, 40.4 / 40.5, which extends along a transverse axis X and along a longitudinal axis Y; a second top panel, 50.4 / 50.5, which extends along a transverse axis X and along a longitudinal axis Y; in which said panels are preferably obtained by means of a single blank, F.4 / F.5, wrapped as a sleeve around a batch of containers, in which said basket, in the forms illustrated in the attached drawings, comprises, as for example, six containers, C1.4, C2.4, etc. / C1.5, C2.5, etc., and in which the top panels, 40.4_50.4 / 40.5_50.5, are bound together, in order to obtain a specific distance, D3.4 / D3.5, between the two side panels, 20.4_30.4 / 20.5_30.5, arranged opposite to each other and spaced apart, for the reasons that will be better understood below.

[0014] With reference to the bottom panel, 10.4 / 10.5, it defines a first longitudinal end edge, 11.4 / 11.5, and a second longitudinal end edge, 12.4 / 12.5, in which said edges preferably define creasing lines.

[0015] With reference to the first side panel, 20.4 / 20.5, with respect to the bottom panel, 10.4 / 10.5, it defines a proximal longitudinal end edge, 21.4 / 21.5, and a distal longitudinal end edge, 22.4 / 22.5, in which the proximal longitudinal end edge, 21.4 / 20.5, is connected with the first longitudinal end edge, 11.4 / 11.5, of the bottom panel, 10.4 / 10.5, in order to preferably define a creasing line.

[0016] Said first side panel, 20.4 / 20.5, comprises one or more first openings, 23.C1.4, 23.C2.4, 23.C3.4 / 23.C1.5, 23.C2.5, 23.C3.5, in which each of said first openings, 23.C1.4 / 23.C1.5, has a shape and/or a position suitable for allowing a top portion, C1.4.a / C1.5.a, of a respective container, C1.4 / C1.5, to mate, with interference, inside a respective first opening, 23.C1.4 / 23.C1.5, when the respective container, C1.4 / C1.5, is located on the bottom panel, 10.4 / 10.5.

[0017] More particularly, see fig. 3 and 11, said mating with interference between first openings and containers takes place when a first part, C1.4.a.1 / C1.5.a.1, of the

top portion, C1.4.a / C1.5.a, of a respective container, C1.4 / C1.5, is freely passed through the respective opening 23.C1.4 / 23.C1.5 and it is positioned outside with respect to said first side panel, 20.4 / 20.5, while a second part, C1.4.a.2 / C1.5.a.2, of the top portion, C1.4.a / C1.5.a, of the respective container, C1.4 / C1.5, is positioned and held inside with respect to said first side panel, 20.4 / 20.5.

[0018] With reference to said mating with interference between first openings and containers, it takes place between the external profile of the top portion, C1.4.a / C1.5.a, of the respective container, C1.4 / C1.5, and the internal profile, 24.C1.4 / 24.C1.5, of the respective first opening, 23.C1.4 / 23.C1.5, in which said interference testrains to the second part, C1.4.a.2 / C1.5.a.2, of the top portion, C1.4.a / C1.5.a, of the respective container, C1.4 / C1.5, to pass from the inside towards the outside with respect to said first side panel, 20.4 / 20.5.

[0019] Preferably, said mating with interference between one or more first openings and one or more respective containers, for example between the first opening 23.C1.4 with the container C1.4 or between the second opening 23.C1.5 with the container C1.5, is preferable a mating with progressive interference, or free with subsequent interference, or with selective "go"_"not go" interference, as better understood later, which allows to a first part, C1.4.a.1 / C1.5.a.1, of the container, C1.4 / C1.5, to pass through the respective first opening, 23.C1.4 / 23.C1.5, with slight or no interference, and, therefore, to position said first part, C1.4.a.1 / C1.5.a.1, outside with respect to said first side panel, 20.4 / 20.5, while, always said mating with interference, does not allow to a second part, C1.4.a.2 / C1.5.a.2, of the same container, C1.4 / C1.5, to pass through the same first opening, 23.C1.4 / 23.C1.5, and, therefore, hold and position said second part, C1.4.a.2 / C1.5.a.2, inside with respect to said first side panel, 20.4 / 20.5, in which said stop takes place due to a "not go" interference between the internal profile of the first opening, 23.C1.4 / 23.C1.5, with the external profile defined by the top of the container C1.4 / C1.5.

[0020] Optionally, if desired, the degree of interference can progressively increase when a first part, C1.4.a.1 / C1.5.a.1, of the container, C1.4 / C1.5, enters and moves from the inside outwards with respect to the first side panel, 20.4 / 20.5, in order to obtain, during said relative movement, also a particular "gripping" and/or "constraining" action between the first side panel, 20.4 / 20.5, and the container C1.4 / C1.5, in such a way as to obtain a union between them.

[0021] With reference to said second side panel, 30.4 / 30.5, with respect to the bottom panel, 10.4 / 10.5, it defines a proximal longitudinal end edge, 31.4 / 31.5, and a distal longitudinal end edge, 32.4 / 32.5, in which said proximal longitudinal end edge, 31.4 / 31.5, is connected with the second longitudinal end edge, 12.4 / 12.5, of the bottom panel, 10.4 / 10.5, in order to preferably define a creasing line.

[0022] Said second side panel, 30.4 / 30.5, comprises one or more second openings, 33.C4.4, 33.C5.4, 33.C6.4 / 33.C4.5, 33.C5.5, 33.C6. 5, in which each of said one or more second openings, 33.C4.4 / 33.C4.5, has a shape and/or a position suitable for allowing a top portion, C4.4.a / C4. 5.a, of a respective container, C4.4 / C4.5, to mate, with interference, inside a respective second opening, 33.C4.4 / 33.C4.5, when the respective container, C4.4 / C4.5, is located on the bottom panel, 10.4 / 10.5.

[0023] With reference to said mating with interference between second openings and containers, it takes place when a first part, C4.4.a.1 / C4.5.a.1, of the top portion, C4.4.a / C4.5, of the respective container, C4.4 / C4.5, is freely passed through the respective second opening, 33.C4.4 / 33.C4.5, and it is positioned outside with respect to said second side panel, 30.4 / 30.5, while a second part, C4.4.a.2 / C4.5.a.2, of the top portion, C4.4.a / C4.5.a, of the respective container, C4.4 / C4. 5, is positioned and restrained inside with respect to said second side panel, 30.4 / 30.5, in which said mating with interference takes place between the outer profile of the top portion, C4.4.a / C4.5.a, of the respective container, C4.4 / C4.5, and internal profile, 34.C4.4 / 34.C4.5, of the respective second opening, 33.C4.4 / 33.C4.5, in which said mating with interference between second openings and containers, restrains the second part, C4.4.a.2 / C4.5.a.2, of the top portion, C4.4.a / C4.5.a, of the respective container, C4.4 / C4.5, to pass from internal outwards with respect to said second side panel, 30.4 / 30.5.

[0024] More particularly, preferably, see fig. 3 and 11, said mating with interference between one or more second openings and one or more respective containers, for example between the second opening 33.C4.4 with the container C4.4 or between the second opening 33.C4.5 with the container C4.5, is preferably a mating with progressive interference, or free with subsequent interference, or with selective interference "go" / "non go", as better understood later, which allows to a first part, C4.4.a.1 / C4.5.a.1, of the container, C4.4 / C4.5, to pass through the respective second opening, 33.C4.4 / 33.C4.5, with slight interference or without interference, and, therefore, to position said first part, C4.4.a.1 / C4.5.a.1, on the outside with respect to said second side panel, 30.4 / 30.5, while, always said mating with interference, does not allow to a second part, C4.4.a.2 / C4.5.a.2, of the same container, C4.4 / C4.5, to pass through the same second opening, 33.C4.4 / 33.C4.5, and, therefore, hold and position said second part, C4.4.a.2 / C4.5.a.2, inside with respect to said second side panel, 30.4 / 30.5, in which said restrain takes place due to a "not go" interference between the internal profile of the second opening, 33.C4.4 / 33.C4.5, with the external profile defined by the top of the container C4.4 / C4.5.

[0025] Optionally, if desired, the degree of interference can progressively increase when a first part, C4.4.a.1 / C4.5.a.1, of the container, C4.4 / C4.5, enters and moves from the inside outwards with respect to the second side

panel, 30.4 / 30.5, in order to obtain, during said relative movement, also a "gripping" and/or "constraining" action between the second side panel, 30.4 / 30.5, and the container C4.4 / C4.5, in such a way as to obtain a union between them.

[0026] With particular reference to Figures 3 and 11, preferably, without limiting intentions, said mating with interference, between the first and/or second openings and the containers, takes place in a particular geometric configuration, in which one or more containers, for example the containers, C1.4 / C1.5, have their respective longitudinal axis, C1.4.y / C1.5.y, lying in a first plane "a", and their respective first openings, 23.C1.4 / 33. C4.4, which are in the upper portion of the side panel, 20.4 / 20.5, lying in a respective second plane "b", in which said second plane "b" is inclined with respect to said first plane "a", and in which, always preferably, said two planes "a" and "b" intersect each other in an area positioned near the top of the containers, for example, see fig. 3 or 11, just above the top of the container C1.4 and in correspondence of the vertical median axis C1.4.Y of the same container C1.4.

[0027] With particular but not exclusive reference to figures 1, 2A and 5, and also to figures 1A and 13, specifying that similar characteristics may also be present in the second embodiment illustrated in figures from 9 to 12, the containers, C6.4 / C6.5, may comprise a respective cap, T6.4 / T6.5, applied to the top of a respective container, C6.4 / C6.5, in which said cap T6.4 has a certain diameter, D.T6. 4, and a certain height, H.T6.4.

[0028] In this case, preferably, the first and/or second openings, 33.C6.4 / 33.C6.5, can each comprise a respective first housing, A1.T6.4 / A1.T6.5, having a shape and/or a position suitable to allow to a respective cap, T6.4 / T6.5, to mate and position itself, with interference, within the respective first housing, A1.T6.4 / A1.T6.5, when the respective container, C6.4 / C6.5, is located on the bottom panel, 10.4 / 10.5.

[0029] More particularly, see also fig. 4 and 12, said interference between the first housing and the cap takes place when a first part, T6.4.1 / T6.5.1, of the cap, T6.4 / T6.5, is passed freely (or with slight interference that allows the relative movement) through said first housing, A1.T6.4 / A1.T6.5, and it is positioned outside with respect to said second and/or third side panel, 20.4, 30.4 / 20.4, 30.5, while, a second part, T6.4.2 / T6.5.2, of a portion of the cap, is still positioned inside with respect to said second and/or third side panel, 20.4, 30.4 / 20.4, 20.5, in which said interference takes place between the external profile of the cap, T6.4 / T6.5, and the internal profile that defines the respective first housing, A1.T6.4 / A1.T6.5, and in which, said interference, restrains the second part, T6.4.2 / T6. 5.2, of the portion of the cap, T6.4 / T6.5, to pass from the inside to the outside, with respect to said second and/or third side panel, 20.4, 30.4 / 20.5, 30.5.

[0030] In this context, see in particular fig. 5A, and also fig. 1A and 13, reaffirming that what was written above

and what follows also apply to the second embodiment, said first housing, A1.T6.4 / A1.T6.5, preferably has a width, D.A1.T6.4, defined horizontal (transverse X compared to the blank F.4 or F.5), which is smaller, preferably slightly smaller, than the external diameter, D.T6.4, of the relative cap, T6.4, of the relative container, C6.4, and, always preferably, said first housing, A1.T6.4 / A1.T6.5, has a height, H.A1.T6, defined vertical (longitudinal Y with respect to the blank), which is lower, preferably slightly lower, with respect to the height H.T6.4 of the cap T6.4, defined between the top of the cap T6.4 and the upper line of the ring collar R6.4, in order to allow, always preferably, an insertion and a sliding of the first portion of cap, T6.4.1, within said first housing, A1.T6.4, and in order to obtain a limit stop of insertion of the cap, T6.4, into said first housing, A1.T6.4, with consequent "grip" of the cap into said first housing.

[0031] Preferably, said mating between a first housing, A1.T6.4 / A1.T6.5, and a respective cap, T6.4 / T6.5, is a mating with progressive interference, or free with subsequent interference, or with interference "go"_"not go" selective, as will be better understood later, which allows to a first part, T6.4.1 / T6.5.1, of the cap, T6.4 / T6.5, to pass through the respective first housing, A1.T6.4 / A1.T6.5, with slight interference or without interference, and, therefore, position said first part, T6.4.1 / T6.5.1, outside with respect to said second side panel, 30.4 / 30.5, while, again said mating, does not allow to a second part, T6.4.2 / T6.5.2, of the same cap, T6.4 / T6.5, to pass through the same first housing, A1.T6.4 / A1.T6.5, and, therefore, hold and position said second part, T6.4.2 / T6.5.2, inside with respect to said second side panel, 30.4 / 30.5, in which said restrain takes place due to a "no_go" interference between the internal profile of the first housing, A1.T6.4 / A1.T6.5, with the external profile defined by the cap T6.4 / T6.5.

[0032] Optionally, if desired, the degree of interference can progressively increase when a first part of the cap, T6.4 / T6.5, is inserted and moves from the inside outwards with respect to the first housing, A1.T6.4 / A1.T6.5, in order to obtain, during said relative movement, also a "gripping" and/or "constraining" action between the side panel, 30.4 / 30.5, and the cap, T6.4 / T6.5, in such a way as to obtain a union between them, preferably when said relative movement, in correlation with the intensity of the applied forces, reaches an limit stop of movement determined by the interference.

[0033] With reference to the above specification and to the drawings, said first housings, for example the housings, A1.T6.4 / A1.T6.5, can assume different dimensions and different shapes with respect to those described and illustrated, that can be selected and/or conformed in relation to the shape and/or size of the cap, T6.4 / T6.5, with which they must be matched, in order to substantially obtain results and technical effects similar or equivalent to those indicated above, without departing from the inventive concepts described and protected by the present invention.

[0034] With particular but not exclusive reference to figures 1, 2A and 5, and also to figures 1A and 13, specifying that similar characteristics may also be present in the second embodiment illustrated in figures from 9 to 12, the containers, C6.4 / C6.5, can comprise a respective ring collar, R6.4 / R6.5, positioned in proximity of the upper portion of a respective container, C6.4 / C6.5, in which said ring collar R6.4 has a determined diameter, D.R6.4, and a determined height or thickness, H.R6.4.

[0035] In this case, preferably, the first and/or second openings, 33.C6.4 / 33.C6.5, can each comprise a respective second housing, A2.R6.4 / A2.R6.5, in which said second housing, A2.R6.4 / A2.R6.5, preferably has a shape and/or a position suitable to allow to a portion of the respective ring collar, R6.4 / R6.5, to mate and position itself, with interference, inside the respective second housing, A2.R6.4 / A2.R6.5, when the respective container, C6.4 / C6.5, is positioned on the bottom panel, 10.4 / 10.5.

[0036] More particularly, see fig. 4 and 12, said interference takes place when a first part, R6.4.1 / R6.5.1, of the ring collar, R6.4 / R6.5, is passed freely (or with slight interference that allows relative movement) through said second housing, A2.R6.4 / A2.R6.5, and it is positioned outside with respect to said second and/or third side panel, 20.4, 30.4 / 20.5, 30.5, while, a second part, R6.4.2 / R6.5.2, of a portion of the ring collar, R6.4 / R6.5, is positioned inside with respect to said second and/or third side panel, 20.4, 30.4 / 20.5, 30.5, and in which said interference takes place between the external profile of the collar, R6.4 / R6.5, and the internal profile of the respective second housing, A2.R6.4 / A2.R6.5, and in which, preferably, said interference restrains the second part, R6.4.2 / R6.5.2, of portion of ring collar, R6.4 / R6.5, to pass from the inside to the outside with respect to said second and/or third side panel, 20.4, 30.4 / 20.5, 30.5.

[0037] In this context, see in particular fig. 5A, and also fig. 1A and 13, reaffirming that what aforescribed and what follows also applies to the second embodiment, again preferably, said second housing, A2.R6.4 / A2.R6.5, has a width, D.A2.R6.4, defined horizontal, i.e. having a transverse orientation X with respect to the blank F.4 or F.5, slightly smaller than the external diameter, D.R6.4, of the relative ring collar, R6.4, of the respective container, C6.4, and, again preferably, said second housing, A2.R6.4 / A2.R6.5, has a height, H.A2.R6.4, defined as vertical, i.e. having a longitudinal orientation Y with respect to the blank F.4 or F.5, slightly smaller than the height or thickness H.R6.4 of the respective ring collar R6.4, in order to allow, always preferably, an insertion and a limit stop of insertion of the ring collar, R6.4 / R6.5, within said second housing, A2.R6.4 / A2.R6.5, with consequent grip of the ring collar within said housing.

[0038] Preferably, said mating between a second housing, A2.R6.4 / A2.R6.5, and a respective ring collar, R6.4 / R6.5, is a mating with progressive interference, or free with subsequent interference, or with selective "go"_"not go" interference, as will be better understood

later, which allows to a first part, R6.4.1 / R6.5.1, of the ring collar, R6.4 / R6.5, to pass through the respective second housing, A2.R6.4 / A2.R6.5, with slight interference or without interference, and, therefore, position said first part, R6.4.1 / R6.5.1, of the ring collar, outside with respect to said second side panel, 30.4 / 30.5, while, always said mating, does not allow to a second part, R6.4.2 / R6.5.2, of the same ring collar, R6.4 / R6.5, to pass through the same second housing, A2.R6.4 / A2.R6.5, and, therefore, hold and position said second part, R6.4.2 / R6.5.2, inside with respect to said second side panel, 30.4 / 30.5, in which said restrain takes place due to a "not go" interference between the internal profile of the second housing, A2.R6.4 / A2.R6.5, with the external profile defined by the ring collar R6.4 / R6.5.

[0039] Optionally, if desirable, the degree of interference can progressively increase when a first part of the ring collar, R6.4 / R6.5, is inserted and moves from the inside to the outside with respect to the second housing, A1.R6.4 / A1.R6.5, in order to obtain, in the course of said relative movement, also a "gripping" and/or "constraining" action between the side panel, 30.4 / 30.5, and the ring collar, R6.4 / R6.5, in such a way as to obtain a union between them, preferably when said relative movement, in correlation with the intensity of the applied forces, reaches a limit stop of movement determined by the interference.

[0040] More particularly and preferably, see in particular fig. 1A, said second housing, A2.R6.4 / A2.R6.5, comprises two inlets (recesses), A2.R6.4.sx and A2.R6.4.dx, each preferably having the shape of a "U", arranged opposite each other with respect to their open side, in which each inlet includes two horizontally oriented segments, A2.R6.4.sx.1, A2.R6.4.sx.2, A2.R6.4.dx.1, A2.R6.4.dx.2, i.e. having an orientation substantially transversely X with respect to the blank F.4 or F.5, and a vertical segment, A2.R6.4.sx.3 and A2.R6.4.dx.3, i.e. having a longitudinal orientation Y with respect to the blank F.4 or F.5.

[0041] In this context, the two horizontal segments, A2.R6.4.sx.1_A2.R6.4.sx.2, A2.R6.4.dx.1_A2.R6.4.dx.2, of each inlet, A2.R6.4.sx and A2.R6.4.dx, can be parallel to each other, or, optionally, if desired, at least one of said two horizontal segment, see in fig. 1A the sections A2.R6.4.sx.2 and A2.R6.4.dx.1, can assume a profile slightly inclined with respect to an axis lying perpendicular to the vertical axis Y of the blank F.4 or F.5, in order to form at least one inlet, A2.R6.4.sx and/or A2.R6.4.dx, having a tapered shape, which narrows from the open side towards the closed bottom side, A2.R6.S.sx.3 and/or A2.R6.4.dx.3, in order to improve the insertion of the ring collar R6.4 into the respective inlet, A2.R6.sx and/or A2.R6.4.dx, as well as in order to improve the interference (clamping and/or gripping) between the ring collar R6.4 and the respective inlet A2.R6.4.sx and/or A2.R6.4.dx.

[0042] With reference to the above specification and to the drawings, said second housings, for example, see

the housings A2.R6.4 / A2.R6.5, and the respective inlets, see for example the inlets A2.R6.4.sx and/or A2.R6.4.dx, can assume different sizes and shapes than those described and illustrated, selected and/or shaped in relation to the shape and/or size of the ring collar with which they must be matched, in order to substantially obtain results and technical effects similar or equivalent to those indicated above, without departing from the inventive concepts described and protected by the present invention.

[0043] With reference to the particular matings above described among the first openings, 23.C1.4, 23.C2.4, 23.C3.4/23.C1.5, 23.C1.5, 23.C3.5, with respective containers, C1.4, C2.4, C3.4/C1.5, C2.5, C3.5, and between the second openings, 33.C4.4, 33.C5.4, 33.C6.4 / 33.C4.5, 33.C5.5, 33.C6.6, with their respective containers, C4.4, C5.4, C6.4 / C4.5, C5.5, C6.5, setting a determined distance, D3.4 / D3.5, between the two side panels, 20.4_30.4 / 20.5_30.5, which press against the containers of the batch, it is possible to fit the containers in the relative first and second openings, as well as generate and applying on the relative containers of one or more forces having a direction from the outside towards the inside, in which said forces are particularly useful to compact and/or grasp and/or constrain and/or stabilize the batch of containers contained in the basket, C.4 / C.5, when the basket is single, or when the basket is stacked, or when the basket is transported, or when the the basket is gripped and lifted by a human user or by an operating machine by means of any grip.

[0044] In fact, with particular but not exclusive reference to figures 3 and 11, the basket, CS.4 / CS.5, can comprise at least two containers, C1.4_C4.4 / C1.5_C4.5, arranged side-by-side with contact between them, in which the first side panel, 20.4 / 20.5, and the second side panel, 30.4 / 30.5, are positioned opposite and stably spaced, with a distance, D3.4 / D3.5, constrained, not expandable, by means of the constraints (tie) comprising the bottom panel, 10.4 / 10.5, and the top panels, 40.4_50.4 / 40.5_50.5, in which the latter are overlapped and constrained together, preferably by glue, in which the distance between said two side panels, 20.4_30.4 / 20.5_30.5, has a predetermined width and/or measure, D3.4 / D3.5, in which said measure is predetermined and/or stated in order to configure a package in which a container, C1.4 / C1.5, of said pair of containers, C1.4_C4.4 / C1.5_C5.5, has its first part, C1.4.a.1 / C1.5.a.1, of the top portion, C1.4.a / C1.5.a, positioned outside with respect to said first side panel, 20.4 / 20.5, and in which the other container, C4.4 / C4.5, of said pair of containers, C1.4_C4.4 / C1.5_C4.5, has its first part, C4.4.a.1 / C4.5.a.1, of the top portion, C4.4.a / C5.4.a, positioned on the outside with respect to said second side panel, 30.4 / 30.5.

[0045] Preferably, but not necessarily, said predetermined distance, D3.4 / D3.5, has a measure such as to obtain contact and compression between the two containers, C1.4_C4.4 / C1.5_C4.5, in order to tighten (com-

part) the container each other and avoid the clash between them during the transport of the package and/or such as to maintain the joint between the containers and the two opposing side panels, 20.4_30.4 / 20.5_30.5.

[0046] With reference to the basket, CS.4 / CS.5, described above, when an user raises the basket, by gripping the top, for example by inserting his fingers into the holes 43.4_53.4 / 43.5_53.5 and pulling up the basket, by means of the architecture described above, there is a consolidation of the aforementioned matings, a compaction for the containers of the batch, and a distribution of the gravity load of the containers among the various components (panels) which form the same basket.

[0047] With reference to the above specification, the basket, CS.4 / CS.5, can comprise first and/or second openings, 33.C6.4 / 33.C6.5, in which each opening can comprise: the first housing described above only; or the second housing described above only; or a combination comprising the first and second housing described above, in which, in said combination, said first and said second housing can be positioned in a longitudinal succession, Y axis, as shown in the figures, or positioned in another way, without depart from the inventive concepts protected by the present invention.

[0048] With particular reference to Figures 1 to 8, if desired, said first side panel, 20.4, can further comprise one or more third openings, 28.C1.4, 28.C2.4, 28.C3.4, each having a shape and/or a position suitable to allow to a lower portion, C1.4.b, of a respective container, C1.4, to be positioned, with interference, inside a respective third opening, 28.C1.4, when the respective container, C1.4, is positioned on the bottom panel, 10.4, with the basket CS.4 formed around the batch in a closed configuration.

[0049] Preferably, see fig. 3, said interference takes place when a first part, C1.4.b.1, of the lower portion, C1.4.b, of the respective container, C1.4, is positioned outside with respect to said first side panel, 20.4, and a second part, C1.4.b.2, of lower portion, C1.4.b, of the respective container, C1.4, is positioned inside with respect to said first side panel, 20.4.

[0050] More particularly, said interference takes place between the external profile of the lower portion, C1.4.b, of the respective container, C1.4, and the internal profile, 29.C1.4, of the respective third opening, 28.C1.4, in which said interference restrains the second part, C1.4.b.2, of the lower portion, C1.4.b, of the respective container, C1.4, from passing from the inside towards the outside with respect to said first side panel 20.4.

[0051] Similarly, the second side panel, 30.4, can also comprise one or more fourth openings, 38.C4.4, 38.C5.4, 38.C6.4, in which each of said one or more fourth openings, 38.C4.4, has a shape and/or a position suitable to allow a to lower portion, C4.4.b, of a respective container, C4.4, to mate with interference inside a respective fourth opening, 38.C4.4, when the respective container, C4.4, is positioned on the bottom panel, 10.4.

[0052] Preferably, said interference takes place when

a first part, C4.4.b.1, of the lower portion, C4.4.b, of the respective container, C4.4, is positioned outside with respect to said second side panel, 30.4, while a second part, C4.4.b.2, of a lower portion, C4.4.b, of the respective container, C4.4, is positioned inside with respect to said second side panel 30.4.

[0053] More particularly, said interference takes place between the external profile of the lower portion, C4.4.b, of the respective container, C4.4, and the internal profile, 34.C4.4, of a respective fourth opening, 38.C4.4, in which said interference restrains the second part, C4.4.b.2, of the lower portion, C4.4.b, of the respective container, C4.4, from passing from the inside towards the outside with respect to said second side panel, 30.4.

[0054] With reference to the figures, the basket CS.4 / CS.5 can optionally also include one or more first tabs, L1.C1.4, L1.C2.4, etc. / L1.C1.5, L1.C2.5, etc., preferably supported in a cantilever manner, which are suitable for covering the upper face of the containers, C1.4, C2.4, etc. / C1.5, C2.5, etc., more particularly the tops of the caps, T1.4, T2.4, etc. / T1.5, T2.5, etc., as well as suitable for forming a thickness with the aim of improving the stability of a possible stack of baskets, CS.4 / CS.5, superimposed on each other.

[0055] Preferably, said first tabs, L1.C1.4, L1.C2.4, etc. / L1.C1.5, L1.C2.5, are obtained by means of projections, L1.C6.4, etc. / L1.C6.5, etc., positioned along the proximal longitudinal end edge, 41.4/41.5, of the first top panel, 40.4 / 40.5, or similar projections, L1.C1.4, etc. / L1.C1.5, etc., positioned along the proximal longitudinal end edge, 51.4 / 51.5, of the second top panel, 50.4 / 50.5, as projections of the same top panel, in which said tabs, again preferably, are coplanar with respect to relative top panels.

[0056] With reference to Figures 1 to 8, the basket CS.4 can optionally comprise one or more second tabs, L2.C6.4, etc., preferably supported in a cantilevered manner, which are suitable to cover and/or support the lower face of containers C6.4, etc.

[0057] Preferably, said second tabs, L2.C6.4, etc., are obtained by means of projections, L2.C6.4, etc., and are positioned along the first and/or the second longitudinal end edge, 11.4, 12.4, of the bottom panel 11.4, as protuberances of the same bottom panel, in which said tabs, again preferably, are coplanar with respect to said bottom panel.

[0058] With reference to the figures, see in particular figs. 1_4 / 9_12, the measurement, D.Y.10.4 / D.Y.10.5, of the longitudinal distance provided between the first longitudinal end edge, 11.4 / 11.5, and a second longitudinal end edge, 12.4 / 12.5, of the bottom panel, 10.4 / 10.5, is preferably smaller than the measurement, D1.4 / D1.5, of overall dimensions defined by the lower portion of two containers, C6.4_C3.4 / C6.5_C3.5, positioned close side by side.

[0059] With reference to the matings with interference above described, relating to the fourth openings, 38.C4.4, 38.C5.4, 38.C6.4, by setting a certain distance,

D.Y.10.4, between the two side panels, 20.4_30.4, smaller than the measure, D1.4, of overall dimensions defined by the lower portion of two containers, C6.4_C3.4, it is possible to fit the containers in the relative fourth openings, as well as generate and apply on the relative containers one or more forces with a direction from the outside towards the inside, in which said forces are particularly useful for compacting and/or grasping and/or binding and/or stabilizing the batch of containers contained in the basket C.4.

[0060] With reference to the basket CS.5, by setting a certain distance, D.Y.10.5, between the two side panels, 20.5_30.5, which press against the containers of the batch, lower than the size, D1.5, of overall dimensions defined by the lower portion of two containers, C6.5_C3.5, it is possible to tighten and/or clamp the lower portion of the containers between said side panels, as well as to generate and apply on the relative containers one or more forces having a direction from the outside towards the inside, in which said forces are particularly useful to compact and/or grasp and/or constrain and/or stabilize the batch of containers contained in the basket C.5.

[0061] With reference to figures 9 to 12, the basket, CS.5, can comprise one or more third tabs, L3.C1.5, L3.C2.5, L3.C3.5 L3.C4.5, L3.C5 .5, L3.C6.5, preferably supported in a cantilever manner, positioned within said first and/or second openings, 23.C1.5, 23.C2.5, 23.C3.5, 33.C4.5, 33. C5.5, 22.C6.5.

[0062] _The third tabs, L3.C1.5, L3.C2.5, L3.C3.5 L3.C4.5, L3.C5.5, L3.C6.5, preferably, they extend in the basket from bottom to top, they are supported in a cantilever manner, they are arranged lying within said first or second openings, 23.C1.5, 23.C2.5, 23.C3.5, 33.C4.5, 33.C5.5, 33.C6.5, they have their free end positioned upwards in said basket CS.5, and they have the lower end or foot connected to the respective side panel, 20.5 and/or 30.5.

BLANK

[0063] The above description and the attached drawings regarding the baskets CS.4 and CS.5 are to be considered as supplementary and descriptive in relation to the following description regarding the blanks of F.4 and F.5, but not in a limiting manner.

[0064] With reference to figure 1 / 9, they illustrate a blank, F.4 / F.5, which, preferably, but not exclusively, and not in a limiting manner, can be used to form a basket, CS.4 / CS.5, for the collection of a plurality of containers, such as bottles, C1.4, C2.4, etc. / C1.5, C2.5, etc., or similar objects.

[0065] With reference to the blank, F.4 / F.5, it preferably comprises: a bottom panel, 10.4 / 10.5, which extends along an axis X defined as transverse and along an axis Y defined as longitudinal; a first side panel, 20.4 / 20.5, which extends along an axis X defined as transverse and along an axis Y defined as longitudinal; a sec-

ond side panel, 30.4 / 30.5, which extends along an axis X defined as transverse and along an axis Y defined as longitudinal; a first top panel, 40.4 / 40.5, which extends along an axis X defined as transverse and along an axis Y defined as longitudinal; a second top panel, 50.4 / 50.5, which extends along an axis X defined as transverse and along an axis Y defined as longitudinal.

[0066] The bottom panel, 10.4 / 10.5, defines a first longitudinal end edge, 11.4 / 11.5, and a second longitudinal end edge, 12.4 / 12.5.

[0067] The first side panel, 20.4 / 20.5, with respect to the bottom panel, 10.4 / 10.5, defines a proximal longitudinal end edge, 21.4 / 21.5, and a distal longitudinal end edge, 22.4 / 22.5, in which the longitudinal proximal end edge, 21.4 / 20.5, is connected with the first longitudinal end edge, 11.4 / 11.5, of the bottom panel, 10.4 / 10.5, thus forming a creasing line.

[0068] Said first side panel, 20.4 / 20.5, comprises one or more first openings, 23.C1.4, 23.C2.4, 23.C3.4 / 23.C1.5, 23.C2.5, 23.C3.5, wherein, each of said one or more first openings, for example 23.C1.4 / 23.C1.5, has a shape and/or a position suitable to allow to a top portion, C1.4. a / C1.5.a, of a respective container, C1.4 / C1.5, to mate, with interference, inside a respective first opening, 23.C1.4 / 23.C1.5, when the respective container, C1.4 / C1.5, is positioned on the bottom panel, 10.4 / 10.5, and the basket, CS.4 / CS.5, is formed and/or closed as illustrated in fig. 2/10.

[0069] _With reference to said one or more first openings, 23.C1.4, 23.C2.4, 23.C3.4 /23.C1.5, 23.C2.5, 23.C3.5, in correlation with the blank F.4 or F.5, the characteristics relating to the same first openings previously described in the specification relating to the basket CS.4 or CS.5 are referred as a specific supplementary description for said blank F.4, 23.C1.4, 23.C2.4, 23.C3.4 / 23.C1.5, 23.C2.5, 23.C3.5.

[0070] The second side panel, 30.4 / 30.5, with respect to the bottom panel, 10.4 / 10.5, defines a proximal longitudinal end edge, 31.4 / 31.5, and a distal longitudinal end edge, 32.4 / 32.5, in which the longitudinal proximal end edge, 31.4 / 31.5, is connected with the second longitudinal end edge, 12.4 / 12.5, of the bottom panel, 10.4 / 10.5, thus forming a creasing line.

[0071] Said second side panel, 30.4 / 30.5, comprises one or more second openings, 33.C4.4, 33.C5.4, 33.C6.4 / 33.C4.5, 33.C5.5, 33.C6.5, in which each of said one or more second openings, see for example 33.C4.4 / 33.C4.5, has a shape and/or a position suitable to allow to a top portion, C4.4. a / C4.5.a, of a respective container, C4.4 / C4.5, to mate with interference inside a respective second opening, 33.C4.4 / 33.C4.5, when the respective container, C4.4 / C4.5, is positioned on the bottom panel, 10.4 / 10.5, and the basket, CS.4 / CS.5, is formed as illustrated in fig. 2/10.

[0072] In relation to one or more second openings, 33.C4.4, 33.C5.4, 33.C6.4 / 33.C4.5, 33.C5.5, 33.C6.5, the characteristics relating to the same second openings, 33.C4.4, 33.C5.4, 33.C6.4 / 33.C4 .5, 33.C5.5, 33.C6.5,

previously described in the specification with reference to the basket CS.4 or CS.5, are here referred as supplementary description in correlation with said blank F.4 or F.5,

[0073] With reference to the first and/or second openings, see for example 33.C6.4 / 33.C6.5, they can comprise a respective first housing, A1.T6.4 / A1.T6.5, having a shape and/or a position suitable to allow to a respective cap, T6.4 / T6.5, to match and position itself, with interference, within the respective first housing, A1.T6.4 / A1.T6.5, when the respective container, C6.4 / C6.5, is located on the bottom panel, 10.4 / 10.5.

[0074] With reference to said first housing, A1.T6.4 / A1.T6.5, the characteristics relating to the same first housing, A1.T6.4 / A1.T6.5, previously described in the description relating to the basket CS.4 or CS.5, are here referred as a specific supplementary description for said blank F.4 or F.5.

[0075] With reference to the blank, F.4 / F.5, the first and/or second openings, 33.C6.4 / 33.C6.5, can each comprise a respective second housing, A2.R6.4 / A2.R6.5, wherein, said second housing, A2.R6.4 / A2.R6.5, preferably has a shape and/or a position suitable to allow to a portion of the respective ring collar, R6.4 / R6.5, to match and position, with interference, inside the respective second housing, A2.R6.4 / A2.R6.5, when the respective container, C6.4 / C6.5, is positioned on the bottom panel, 10.4 / 10.5.

[0076] With reference to said second housing, A2.R6.4 / A2.R6.5, the characteristics relating to the same second housing, A2.R6.4 / A2.R6.5, previously described in the specification relating to the basket CS.4 or CS.5 are here referred as specific supplementary description for the blank F.4 or F.5.

[0077] More particularly and preferably, see in particular fig. 1A, said second housing, A2.R6.4 / A2.R6.5, comprises two inlets (recesses), A2.R6.4.sx and A2.R6.4.dx, each preferably having the shape of a "U", arranged opposite each other with respect to their open side, in which each inlet includes two horizontally oriented segments, A2.R6.4.sx.1, A2.R6.4.sx.2, A2.R6.4.dx.1, A2.R6.4.dx.2, i.e. having orientation substantially transversely X with respect to the blank F.4 or F.5, and a vertical segment, A2.R6.4.sx.3 and A2.R6.4.dx.3, i.e. having a longitudinal orientation Y with respect to the blank F.4 or F.5.

[0078] In this context, the two horizontal segments, A2.R6.4.sx.1_A2.R6.4.sx.2, A2.R6.4.dx.1_A2.R6.4.dx.2, of each inlet, A2.R6.4.sx and A2.R6.4.dx, can be parallel to each other, or, optionally, if desired, at least one of said two horizontal segments, see in fig. 1A the segments A2.R6.4.sx.2 and A2.R6.4.dx.1, can assume a profile slightly inclined with respect to an axis lying perpendicular to the vertical axis Y of the blank F.4 or F.5, in order to form at least one inlet, A2.R6.4.sx and/or A2.R6.4.dx, having a tapered shape, which narrows from the open side towards the closed bottom side, A2.R6.S.sx.3 and/or A2.R6.4.dx.3,

in order to improve the insertion of the ring collar R6.4 into the respective inlet, A2.R6.sx and/or A2.R6.4.dx, as well as in order to improve the interference (tightening and/or grip) between the ring collar R6.4 and the respective inlet A2.R6.4.sx and/or A2.R6.4.dx.

[0079] With reference to the above specification, each of said first and/or second openings, 33.C6.4 / 33.C6.5, can assume various configurations and, for example, each opening can comprise: the first housing A1.T6.4 / A1.T65 only; or the second housing A2.R6.4 / A2.R6.5 only; or a combination comprising said first housing, A1.T6.4 / A1.T6.5, and said second housing, A2.R6.4 / A2.R6.5, wherein, in said combination, said first and second housing can be positioned in a longitudinal succession, Y axis, as illustrated in Figures 1 and 9, or can be positioned in another way, without departing from the inventive concepts protected by the present invention.

[0080] With reference to the blank F.4, the first side panel 20.4 can optionally further comprise one or more third openings, 28.C1.4, 28.C2.4, 28.C3.4, in which, see also Fig. 3, each of said one or more third openings, 28.C1.4, 28.C2.4, 28.C3.4, has a shape and/or a position suitable to allow to a lower portion, C1.4.b, of a respective container, C1.4, to fit together with interference inside a respective third opening, 23.C1.4, when the respective container, C1.4, is positioned on the bottom panel, 10.4, and the basket, CS.4, is formed as illustrated in fig. 2.

[0081] In relation to said one or more third openings, 28.C1.4, 28.C2.4, 28.C3.4, and in correlation with the blank F.4, the characteristics previously described in the specification relating to the basket CS.4 are here referred as a specific supplementary description for said blank F.4.

[0082] Again with reference to the blank F.4, the second side panel, 30.4, can further comprise one or more fourth openings, 38.C4.4, 38.C5.4, 38.C6.4, in which each of said one or more fourth openings, for example the fourth opening 38.C4.4, has a shape and/or a position suitable to allow to a lower portion, C4.4.b, of a respective container, C4.4, to match, with interference, inside said fourth opening, 38.C4, when the respective container, C4.4, is positioned on the bottom panel, 10.4, and the basket C.4 is formed as illustrated in fig. 2.

[0083] In relation to said one or more fourth openings, 38.C4.4, 38.C5.4, 38.C6.4, in correlation with the blank F.4, the characteristics previously expressed in the description relating to the basket CS.4 are here referred as a specific supplementary description for said blank F.4

[0084] With reference to the blank, F.4 / F.5, it can also comprise one or more first tabs, L1.C1.4, L1.C2.4, L1.C3.4, L1.C4.4, L1.C5.4, L1.C6.4 / L1.C1.5, L1.C2.5, L1.C3.5, L1.C4.5, L1.C5.5, L1.C6.5, preferably having a shape of a semicircle or circular segment with a free dome, which extend axially along the longitudinal axis Y, which are supported in a cantilever manner by the first and/or the second top panel, 40.4, 50.4 / 40.5, 50.5, in which, with reference to fig. 2/10, they are suitable for covering the upper face of the containers, C1.4, C2.4,

C3.4, C5.4, C6.4 / C1.5, C2.5, C3.5, C5.5, C6.5, more particularly the top of the relative caps, as well as suitable for forming a thickness aimed at improving the stability of any stack of baskets, CS.4 / CS.5, superimposed on each other.

[0085] With reference to the blank, F.4 / F.5, it can also include one or more second tabs, L2.C1.4, L2.C2.4, L2.C2.4, L2.C4.4, L2.C5.4, L2.C6.4 / L2.C1.5, L2.C2.5, L2.C2.5, L2.C4.5, L2.C5.5, L2.C6.5, preferably having a form of a semicircle or circular segments with free dome, which extend along the longitudinal axis Y, in which they are supported in a cantilever manner by the bottom panel, 10.4 / 10.5, in which they are designed to cover and/or to support the lower face of the containers, C1.4, C2.4, C3.4, C5.4, C6.4.

[0086] With reference to the blank F.5, it can also comprise one or more third tabs, L3.C1.5, L3.C2.5, L3.C3.5, L3.C4.5, L3.C5.5, L3.C6.5, positioned within said first and/or second openings, 23.C1.5, 23.C2.5, 23.C3.5, 33.C4.5, 33.C5.5, 22.C6.5, which extend along the longitudinal axis Y, which are supported in a cantilever manner by the first and/or second side panel 20.5 and/or 30.5.

[0087] _With reference to the above description, please note the following.

[0088] The basket object of the present invention does not comprise gluing or fixing couplings positioned in the underlying area of the same basket, thus solving the above mentioned problems.

[0089] The basket object of the present invention is not laborious to make and it can be easily made by automatic machines, since it does not require the execution of gluing and fixing operations to be carried out in the underlying area of the basket, thus solving the above problems.

[0090] Still the basket object of the present invention is able to hold the containers in the correct position within the package, is able to obviate the banging (collision) of the containers lying within the package, is able to obviate the relative movements (horizontal and vertical movements) of the containers each other, is able to obviate the relative movements (horizontal and vertical movement) between the containers and the envelope (blank) that forms the package, is able to compact (tighten, press) the containers together, is able to stack the basket in a stable manner, is able to keep clean the top of the relative containers, is able to cushion the impacts of the container during stacking, is able to show the container (and/or the label of the container, bottle) to the public, is able to guarantee a concealment at least in a not legible manner of the bar code applied on the respective containers (bottles) contained in the basket, is able to execute a ripartition of the gravitational load generated by containers between the components of the basket when the package is lifted.

[0091] The same characteristics also apply in relation to the blank object of the present invention.

[0092] _The above description of the baskets and/or blanks is given purely by way of non-limiting example and, therefore, it is therefore clear that these baskets

and/or blanks may be subject to any modifications or variants suggested by the practice and/or its use and, in any case, within the scope of the following claims. In this context, the following claims also form an supplementary part for the above description.

Claims

1. Basket for the collection of a plurality of containers such as bottles (C 1.4, C2.4, etc. / C1.5, C2.5, etc.) or similar objects, **characterized by the fact that** it comprises: a bottom panel (10.4 / 10.5) which extends along an axis (X) defined as transverse and along an axis (Y) defined as longitudinal; a first side panel (20.4 / 20.5) which extends along an axis (X) defined as transverse and along an axis (Y) defined as longitudinal; a second side panel (30.4 / 30.5) which extends along an axis (X) defined as transverse and along an axis (Y) defined as longitudinal; a first top panel (40.4 / 40.5) which extends along an axis (X) defined as transverse and along an axis (Y) defined as longitudinal; a second top panel (50.4 / 50.5) which extends along an axis (X) defined as transverse and along an axis (Y) defined as longitudinal; **by the fact that** said bottom panel (10.4 / 10.5) defines a first longitudinal end edge (11.4 / 11.5) and a second longitudinal end edge (12.4 / 12.5); **by the fact that** said first side panel (20.4 / 20.5), with respect to the bottom panel (10.4 / 10.5) defines a proximal longitudinal end edge (21.4 / 21.5) and a distal longitudinal end edge (22.4 / 22.5); **by the fact that** said first side panel (20.4 / 20.5) has its proximal longitudinal end edge (21.4 / 20.5) connected with the first longitudinal end edge (11.4 / 11.5) of the bottom panel (10.4 / 10.5); **by the fact that** said first side panel (20.4 / 20.5) comprises one or more first openings (23.C1.4, 23.C2.4, 23.C3.4 / 23.C1.5, 23.C2.5, 23.C3.5); **by the fact that** each of said one or more first openings (23.C1.4, 23.C2.4, 23.C3.4 / 23.C1.5, 23.C2.5, 23.C3.5) has a shape and/or a position suitable to allow to a top portion (C1.4.a / C1.5.a) of a respective container (C1.4 / C1.5) to mate with interference within a respective first opening (23.C1.4 / 23.C1.5) when the respective container (C1.4 / C1.5) is positioned on the bottom panel (10.4 / 10.5); **by the fact that** said mating with interference between first openings and containers takes place when a first part (C1.4.a.1 / C1.5.a.1) of top portion (C1.4.a / C1.5.a) of the respective container (C1.4 / C1.5) is positioned outside with respect to said first side panel (20.4 / 20.5) and a second part (C1.4.a.2 / C1.5.a.2) of the top portion (C1.4.a / C1.5.a) of the respective container (C1.4 / C1.5) is positioned inside with respect to said first side panel (20.4 / 20.5); **by the fact that** said mating with interference between first openings and containers takes place between the external profile of the top portion

(C1.4.a / C1.5.a) of the respective container (C1.4 / C1.5) and the internal profile of the respective first opening (23.C1.4 / 23.C1.5); **by the fact that** said mating with interference between first openings and containers restrains the second part (C1.4.a.2 / C1.5.a.2) of the top portion (C1.4a / C1.5.a) of the respective container (C1.4 / C1.5) to pass from the inside to the outside with respect to said first side panel (20.4 / 20.5); **by the fact that** said second side panel (30.4 / 30.5), with respect to the bottom panel (10.4 / 10.5) defines a proximal longitudinal end edge (31.4 / 31.5) and a distal longitudinal end edge (32.4 / 32.5); **by the fact that** said second side panel (30.4 / 30.5) has its proximal longitudinal end edge (31.4 / 31.5) connected with the second longitudinal end edge (12.4 / 12.5) of the bottom panel (10.4 / 10.5); **by the fact that** said second side panel (30.4 / 30.5) comprises one or more second openings (33.C4.4, 33.C5.4, 33.C6.4 / 33.C4.5, 33.C5.5, 33.C6.5); **by the fact that** each of said one or more second openings (33.C4.4 / 33.C4.5) has a shape and/or a position suitable for allowing to a portion of the top (C4.4.a / C4.5.a) of a respective container (C4.4 / C4.5) to mate with interference inside a respective second opening (33.C4.4 / 33.C4.5) when the respective container (C4.4 / C4.5) is positioned on the bottom panel (10.4 / 10.5); **by the fact that** said mating with interference between the second openings and containers takes place when a first part (C4.4.a.1 / C4.5.a.1) of top portion (C4.4.a / C4.5.a) of the respective container (C4.4 / C4.5) is positioned outside with respect to the second side panel (30.4 / 30.5) and a second part (C4.4.a.2 / C4.5.a.2) of the top portion (C4.4.a / C4.5.a) of the respective container (C4.4 / C4.5) is positioned inside with respect to said second side panel (30.4 / 30.5); **by the fact that** said mating with interference between second openings and containers takes place between the external profile of the top portion (C4.4.a / C4.5.a) of the respective container (C4.4 / C4.5) and the internal profile of the respective second opening (33.C4.4 / 33.C4.5); **by the fact that** said mating with interference between second openings and containers restrains the second part (C4.4.a.2 / C4.5.a.2) of the top portion (C4.4.a / C4.5.a) of the respective container (C4.4 / C4.5) to pass from the inside to the outside with respect to said second side panel (30.4 / 30.5).

2. Basket according to claim 1, **characterized by the fact that** the containers (C6.4 / C6.5) include a respective cap (T6.4 / T6.5) applied to the top of the same container (C6.4 / C6.5); **by the fact that** said first and/or second openings (33.C6.4 / 33.C6.5) each comprise a respective first housing (A1.T6.4 / A1.T6.5) having a shape and/or a position suitable to allow to a respective cap (T6.4 / T6.5) to mate with interference within the respective first housing

(A1.T6.4 / A1.T6.5) when the respective container (C6.4 / C6.5) is positioned on the bottom panel (10.4 / 10.5); **by the fact that** said mating with interference between the first openings and the cap takes place when a first part (T6.1.4 / T6.1.5) of the cap (T6.4 / T6.5) is positioned outside with respect to said second and/or third side panel (20.4, 30.4 / 20.4, 30.5) and a second part (T6.2.4 / T6.2.5) of the cap is positioned inside with respect to said second and/or third side panel (20.4, 30.4 / 20.4, 20.5); **by the fact that** said mating with interference between the first housing and the cap takes place between the external profile of the cap (T6.4 / T6.5) and the internal profile of the the respective first housing (A1.T6.4 / A1.T6.5); and **by the fact that** said mating with interference between the first housing and the cap restrains the second part (T6.2.4 / T6.2.5) of the cap (T6.4 / T6.5) to pass from the inside towards the outside with respect to said second and/or third side panel (20.4, 30.4 / 20.5 30.5).

3. Basket according to claim 2, **characterized by the fact that** said first housing (A1.T6.4 / A1.T6.5) has a horizontal width (D.A1.T6.4) which is smaller than the external diameter (D.T6.4) of the relative cap (T6.4) of the container (C6.4).
4. Basket according to claim 2 or 3, **characterized by the fact that** said first housing (A1.T6.4) has a vertical height (H.A1.T6.4) which is lower than the height (H.T6.4) of the cap (T6.4).
5. Basket according to one of claims 1 to 4, **characterized by the fact that** the containers (C6.4 / C6.5) comprise a respective ring collar (R6.4 / R6.5); **by the fact that** said first and/or second openings (33.C6.4 / 33.C6.5) each comprise a respective second housing (A2.R6.4 / A2.R6.5); **by the fact that** said second housing (A2.R6.4 / A2.R6.5) has a shape and/or a position suitable to allow to a portion of the respective ring collar (R6.4 / R6.5) to mate with interference inside the respective second housing (A2.R6.4 / A2.R6.5) when the respective container (C6.4 / C6.5) is positioned on the bottom panel (10.4 / 10.5); **by the fact that** said mating with interference between the second housing and the ring collar takes place when a first part (R6.4.1 / R6.5.1) of the ring collar (R6.4 / R6.5) is positioned outside with respect to said second and/or third side panel (20.4, 30.4 / 20.5, 30.5) and with a second part (R6.2.4 / R6.2.5) of ring collar (R6.4 / R6.5) positioned inside with respect to said second and/or third side panel (20.4, 30.4 / 20.5, 30.5); **by the fact that** the said mating with interference between the second housing and the ring collar takes place between the external profile of the ring collar (R6.4 / R6.5) and the internal profile of the respective second housing (A2.R6.4 / A2.R6.5); **by the fact that** said

mating with interference between the second housing and the ring collar restrains the second part (R6.2.4 / R6.2.5) of the ring collar (R6.4 / R6.5) to pass from the inside towards the external with respect to said second and/or third side panel (20.4, 30.4 / 20.5, 30.5).

6. Basket according to claim 5, **characterized by the fact that** said second housing (A2.R6.4) has a horizontal width (D.A2.R6.4) which is smaller than the external diameter (D.R6.4) of the relative ring collar (R6.4) of the container (C6.4). 5
7. Basket according to claim 5 or 6, **characterized by the fact that** said second housing (A2.R6.4) has a height (H.A2.R6.4) defined vertical which is lower than the height (H.R6.4) of the respective ring collar (R6.4). 10
8. Basket according to one of claims 5 to 7, **characterized by the fact that** said second housing (A2.R6.4) comprises two inlets (A2.R6.4.sx and A2.R6.4.dx) each having a shape in the form of a "U"; **by the fact that** each inlet (A2.R6.4.sx / A2.R6.4.dx) comprises two segment (A2.R6.4.sx.1, A2.R6.4.sx.2 / A2.R6.4.dx.1, A2.R6.4.dx.2) defined as horizontal segment and a segment (A2.R6.4.sx.3 / A2.R6.4.dx.3) defined as vertical segment. 15
9. Basket according to claim 8, **characterized by the fact that** at least one segment (A2.R6.4.sx.2) of said two segments (A2.R6.4.sx.1_A2.R6.4.sx.2 / A2.R6.4.dx.1_A2.R6.4.dx.2) defined as horizontal (A2.R6.4.sx.1_A2.R6.4.sx.2 / A2.R6.4.dx.1_A2.R6.4.dx.2) of each inlet (A2.R6.4.sx / A2.R6.4.dx) has an inclined profile in order to form at least one inlet (A2.R6.4.sx / A2.R6.4.dx) with a tapered shape that narrows from the open side towards the closed bottom side (A2.R6.4.sx.3 / A2.R6.4 .dx.3). 20
10. Basket according to one of claims 5 to 9, **characterized by the fact that** said second housings (A2.R6.4 / A2.R6.5) comprise inlets (A2.R6.4.sx and/or A2.R6.4.dx) having dimensions and/or shapes selected and/or shaped in relation with the shape and/or size of the ring collar (R6.4) with which they are to be matched. 25
11. Basket according to one of claims 5 to 10, **characterized by the fact that** to further comprising third and/or fourth openings (28.C1.4, 28.C2.4, 28.C3.4 and / or 38.C4.4, 38.C5.4, 38.C6.4); and **by the fact that** each of said third and/or fourth openings (28.C1.4 / 38.C4.4) has a shape and/or a position suitable for allowing to a lower portion (C1.4.b and/or C4.4.b) of a respective container (C1.4 and/or C4.4) to mate with interference inside said third and/or 30

fourth opening (28.C1.4 and/or 38.C4.4).

12. Basket according to one of claims 1 to 10, **characterized by the fact that** it comprises at least two containers (C1.4_C4.4 / C1.5_C4.5) arranged in side by side contact with each other; **by the fact that** said first panel (20.4 / 20.5) and said second panel (30.4 / 30.5) are positioned opposite and spaced from each other; **by the fact that** the distance between said two panels (20.4_30.4 / 20.5_30.5) has a predetermined measure (D3.4 / D3.5) such as to configure a package in which a container (C1.4 / C1.5) of said pair of containers (C1.4_C4.4 / C1.5_C5.5) has its first part (C1.4.a.1 / C1.5.a.1) of the top portion (C1.4 .a / C1.5.a.1) positioned outside with respect to said first side panel (20.4 / 20.5) and in which the other container (C4.4 / C4.5) of said pair of containers (C1.4_C4.4 / C1.5_C4.5) has its first part (C4.4.a.1 / C4.5.a.1) of the top portion (C4.4.a / C5.4.a) positioned outside with respect to said second side panel (30.4 / 30.5). 35
13. Blank to form a basket for the collection of a plurality of containers such as bottles (C1.4, C2.4, etc. / C1.5, C2.5, etc.) or similar objects, **characterized by the fact** to comprise: a bottom panel (10.4 / 10.5) which extends along an axis (X) defined as transverse and along an axis (Y) defined as longitudinal; a first side panel (20.4 / 20.5) which extends along an axis (X) defined as transverse axis and along an axis (Y) defined as longitudinal; a second side panel (30.4 / 30.5) which extends along an axis (X) defined as transverse axis and along an axis (Y) defined as longitudinal; a first top panel (40.4 / 40.5) which extend along an axis (X) defined as transverse and along an axis (Y) defined as longitudinal; a second top panel (50.4 / 50.5) which extends along an axis (X) defined as transverse axis and along an axis (Y) defined as longitudinal; **by the fact that** said bottom panel (10.4 / 10.5) defines a first longitudinal end edge (11.4 / 11.5) and a second longitudinal end edge (12.4 / 12.5); **by the fact that** said first side panel (20.4 / 20.5), with respect to the bottom panel (10.4 / 10.5) defines a proximal longitudinal end edge (21.4 / 21.5) and a distal longitudinal end edge (22.4 / 22.5); **by the fact that** said first side panel (20.4 / 20.5) has its proximal longitudinal end edge (21.4 / 20.5) connected with the first longitudinal end edge (11.4 / 11.5) of the bottom panel (10.4 / 10.5); **by the fact that** said first side panel (20.4 / 20.5) comprises one or more first openings (23.C1.4, 23.C2.4, 23.C3.4 / 23.C1.5, 23.C2.5, 23.C3.5); **by the fact that** said second side panel (30.4 / 30.5), with respect to the bottom panel (10.4 / 10.5) defines a proximal longitudinal end edge (31.4 / 31.5) and a distal longitudinal end edge (32.4 / 32.5); **by the fact that** said second side panel (30.4 / 30.5) has its proximal longitudinal end edge (31.4 / 31.5) connected with 40

the second longitudinal end edge (12.4 / 12.5) of the bottom panel (10.4 / 10.5); **by the fact that** said second side panel (30.4 / 30.5) comprises one or more second openings (33.C4.4, 33.C5.4, 33.C6.4 / 33.C4.5, 33.C5.5, 33.C6.5); **by the fact that** said first and/or second openings (33.C6.4 / 33.C6.5) each comprise a respective first housing (A1.T6.4 / A1.T6.5); **by the fact that** said first housing (A1.T6.4 / A1.T6.5) has a shape and/or a position suitable for allowing to a portion of a cap (T6.4 / T6.5) of a container (C6.4 / C6.5) to mate with interference inside said first housing (A1.T6.4 / A1.T6.5).

14. Blank to form a basket for the collection of a plurality of containers such as bottles (C1.4, C2.4, etc. / C1.5, C2.5, etc.) or similar objects, **characterized by the fact** to comprise: a bottom panel (10.4 / 10.5) which extends along an axis (X) defined as transverse axis and along an axis (Y) defined as longitudinal; a first side panel (20.4 / 20.5) which extends along an axis (X) defined as transverse axis and along an axis (Y) defined as longitudinal; a second side panel (30.4 / 30.5) which extends along an axis (X) defined as transverse and along an axis (Y) defined as longitudinal; a first top panel (40.4 / 40.5) which extends along an axis (X) defined as transverse and along an axis (Y) defined as longitudinal; a second top panel (50.4 / 50.5) which extends along an axis (X) defined as transverse and along an axis (Y) defined as longitudinal; **by the fact that** said bottom panel (10.4 / 10.5) defines a first longitudinal end edge (11.4 / 11.5) and a second longitudinal end edge (12.4 / 12.5); **by the fact that** said first side panel (20.4 / 20.5) with respect to the bottom panel (10.4 / 10.5) defines a proximal longitudinal end edge (21.4 / 21.5) and a distal longitudinal end edge (22.4 / 22.5); **by the fact that** said first side panel (20.4 / 20.5) has its proximal longitudinal end edge (21.4 / 20.5) connected with the first longitudinal end edge (11.4 / 11.5) of the bottom panel (10.4 / 10.5); **by the fact that** said first side panel (20.4 / 20.5) comprises one or more first openings (23.C1.4, 23.C2.4, 23.C3.4 / 23.C1.5, 23.C2.5, 23.C3.5); **by the fact that** said second side panel (30.4 / 30.5) with respect to the bottom panel (10.4 / 10.5) defines a proximal longitudinal end edge (31.4 / 31.5) and a distal longitudinal end edge (32.4 / 32.5); **by the fact that** said second side panel (30.4 / 30.5) has its proximal longitudinal end edge (31.4 / 31.5) connected with the second longitudinal end edge (12.4 / 12.5) of the bottom panel (10.4 / 10.5); **by the fact that** said second side panel (30.4 / 30.5) comprises one or more second openings (33.C4.4, 33.C5.4, 33.C6.4 / 33.C4.5, 33.C5.5, 33.C6.5); **by the fact that** said first and/or second openings (33.C6.4 / 33.C6.5) each comprise a respective second housing (A2.T6.4 / A2.T6.5); **by the fact that** said second housing (A2.T6.4 / A2.T6.5) has a shape and/or a position suitable for

allowing to a portion of a ring collar (R6.4 / R6.5) of the container (C6.4 / C6.5) to mate with interference inside said second housing (A2.T6.4 / A2.T6.5).

15. A blank according to claim 14, **characterized by the fact that** said second housing (A2.R6.4) comprises two inlets (A2.R6.4.sx and A2.R6.4.dx) each having a shape in the form of a "U"; and **by the fact that** each inlet (A2.R6.4.sx / A2.R6.4.dx) includes two horizontal segments (A2.R6.4.sx.1, A2.R6.4.sx.2 / A2.R6.4.dx.1, A2.R6.4.dx.2) and a vertical segment (A2.R6.4.sx.3 / A2.R6.4.dx.3).

Fig. 1

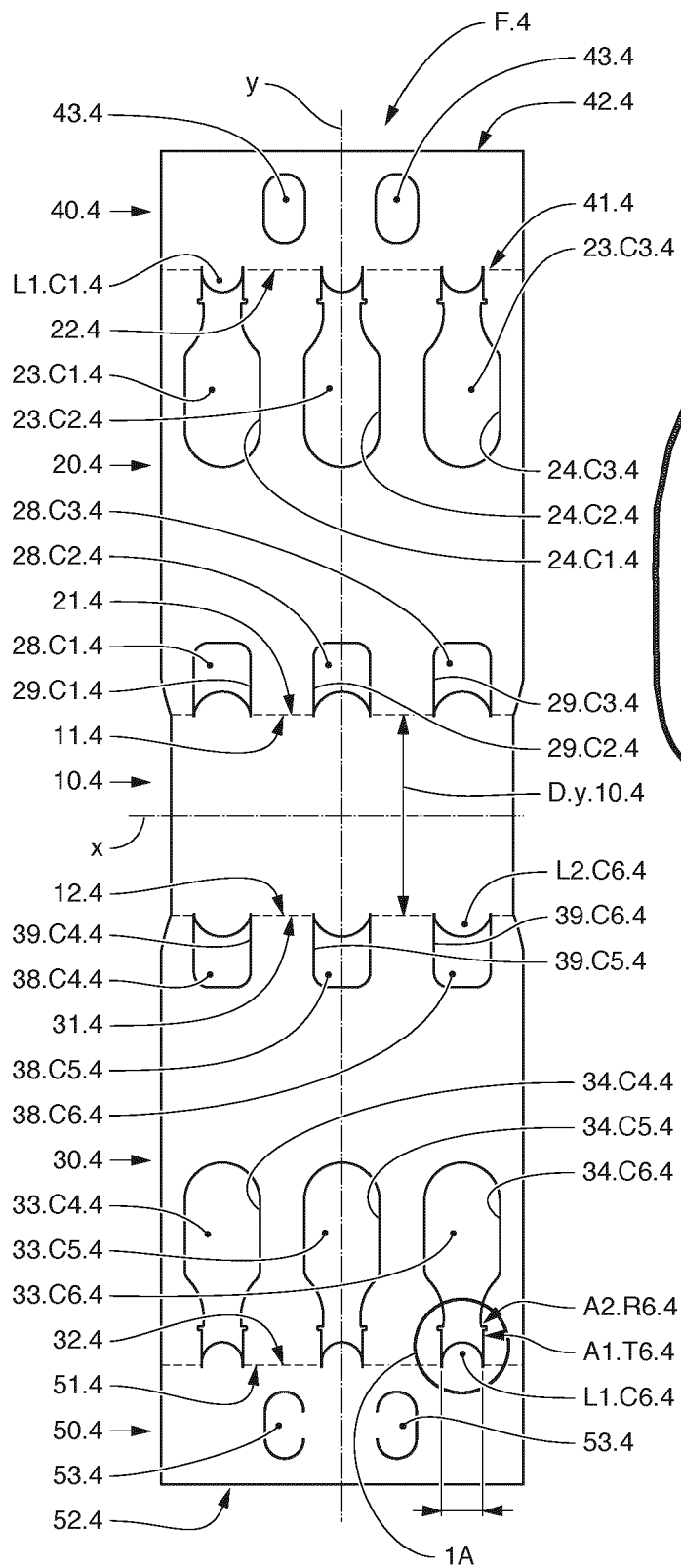


Fig. 2

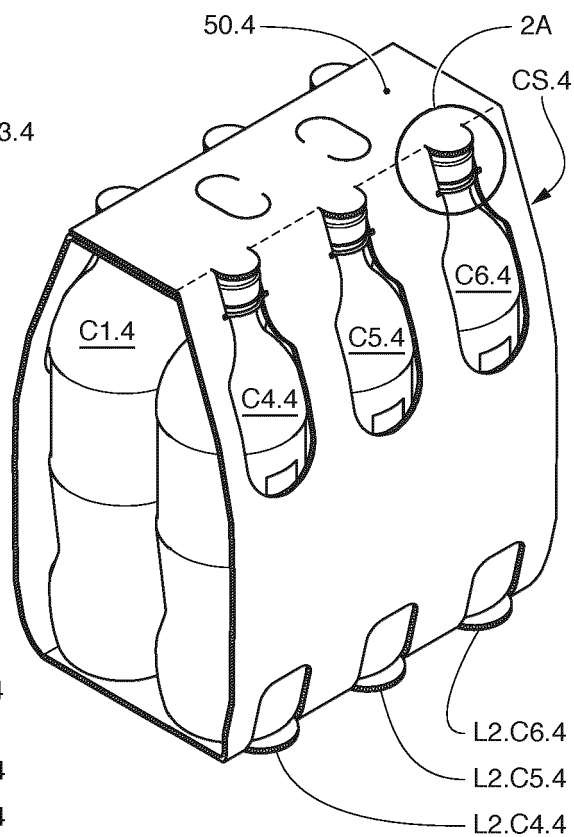
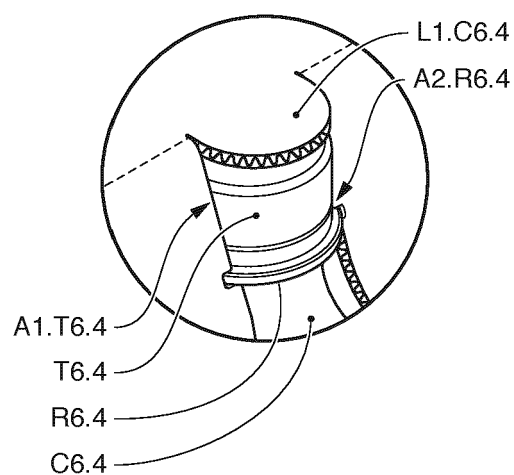


Fig. 2A



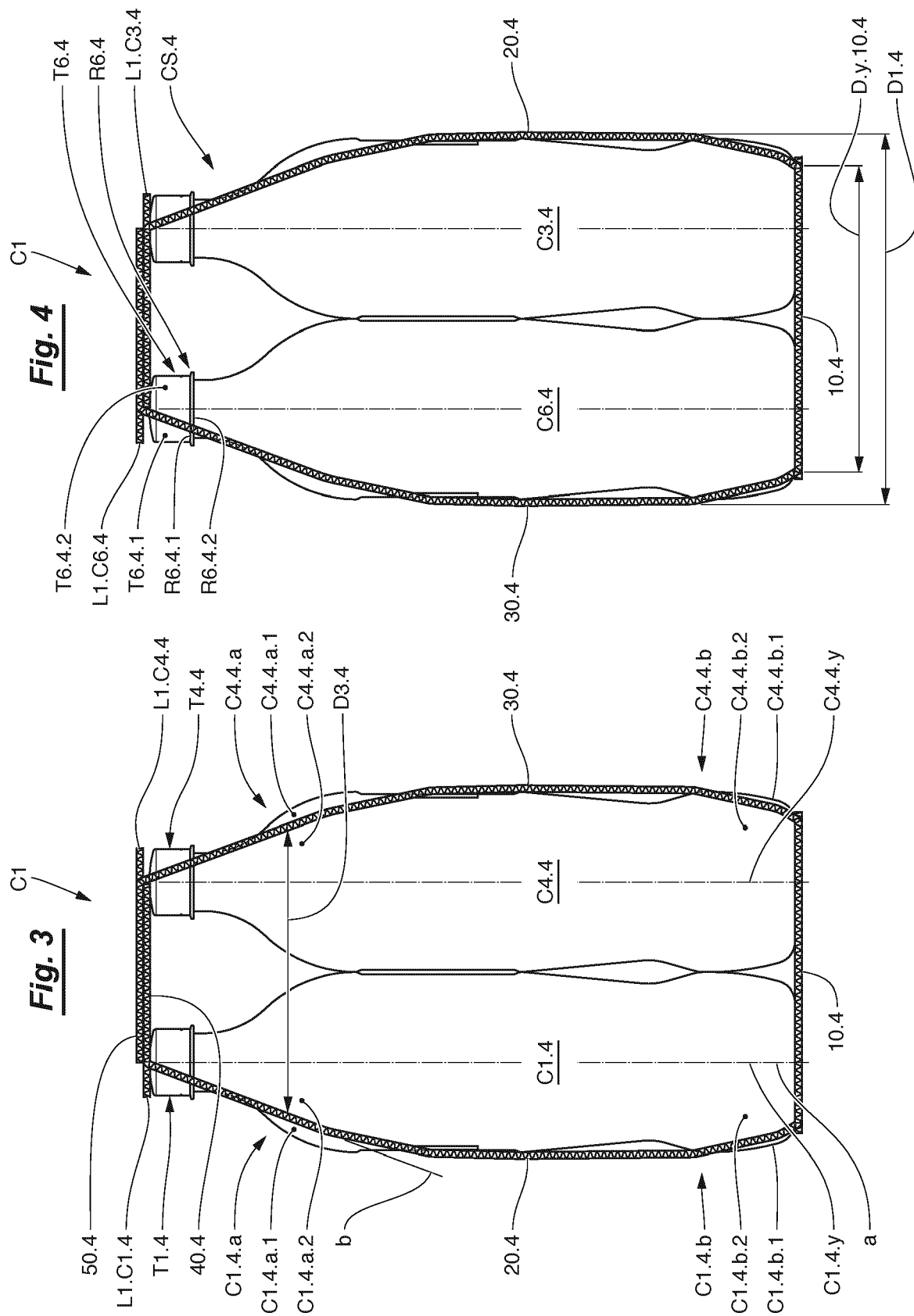


Fig. 5A

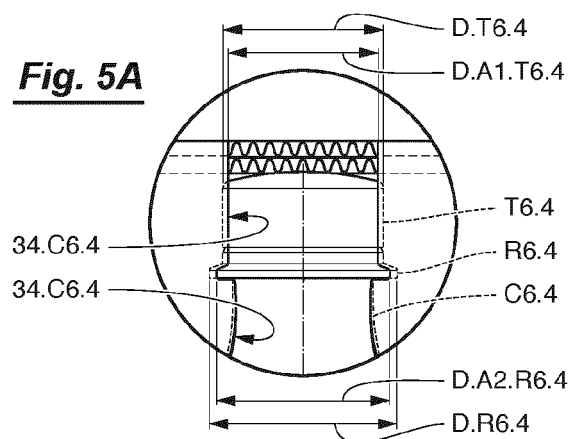


Fig. 5

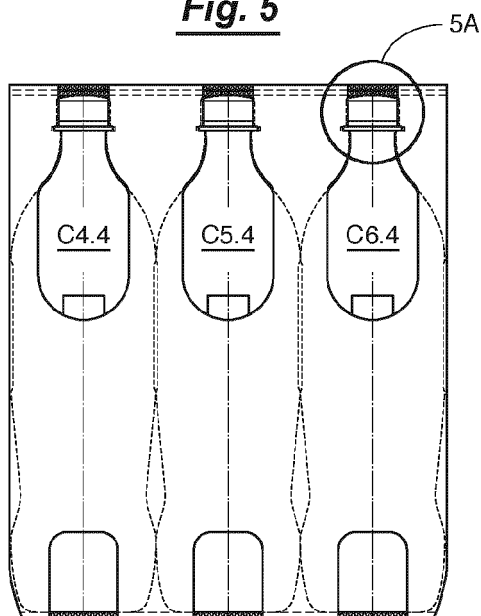


Fig. 6

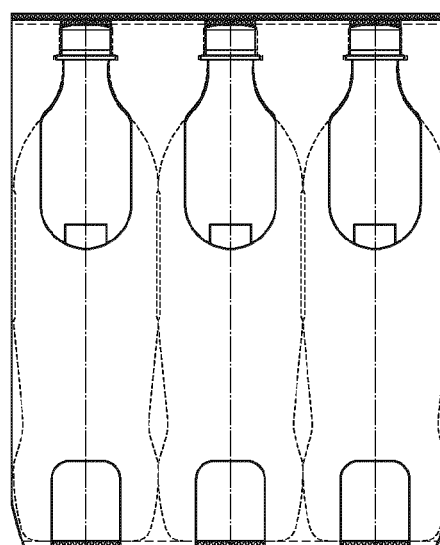


Fig. 7

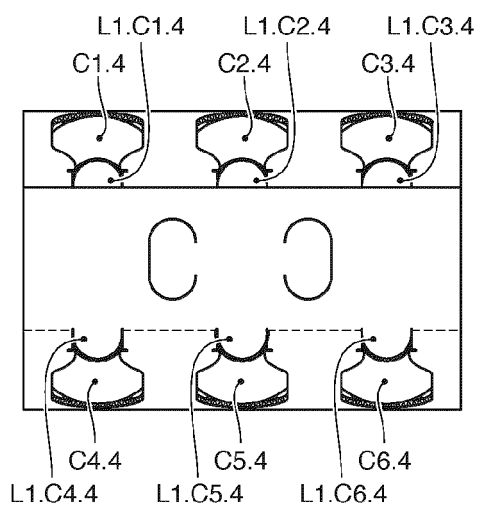


Fig. 8

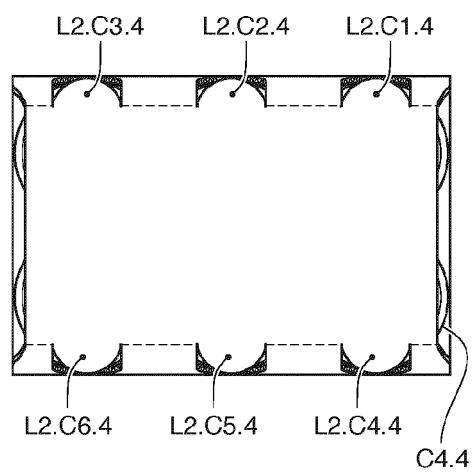


Fig. 9

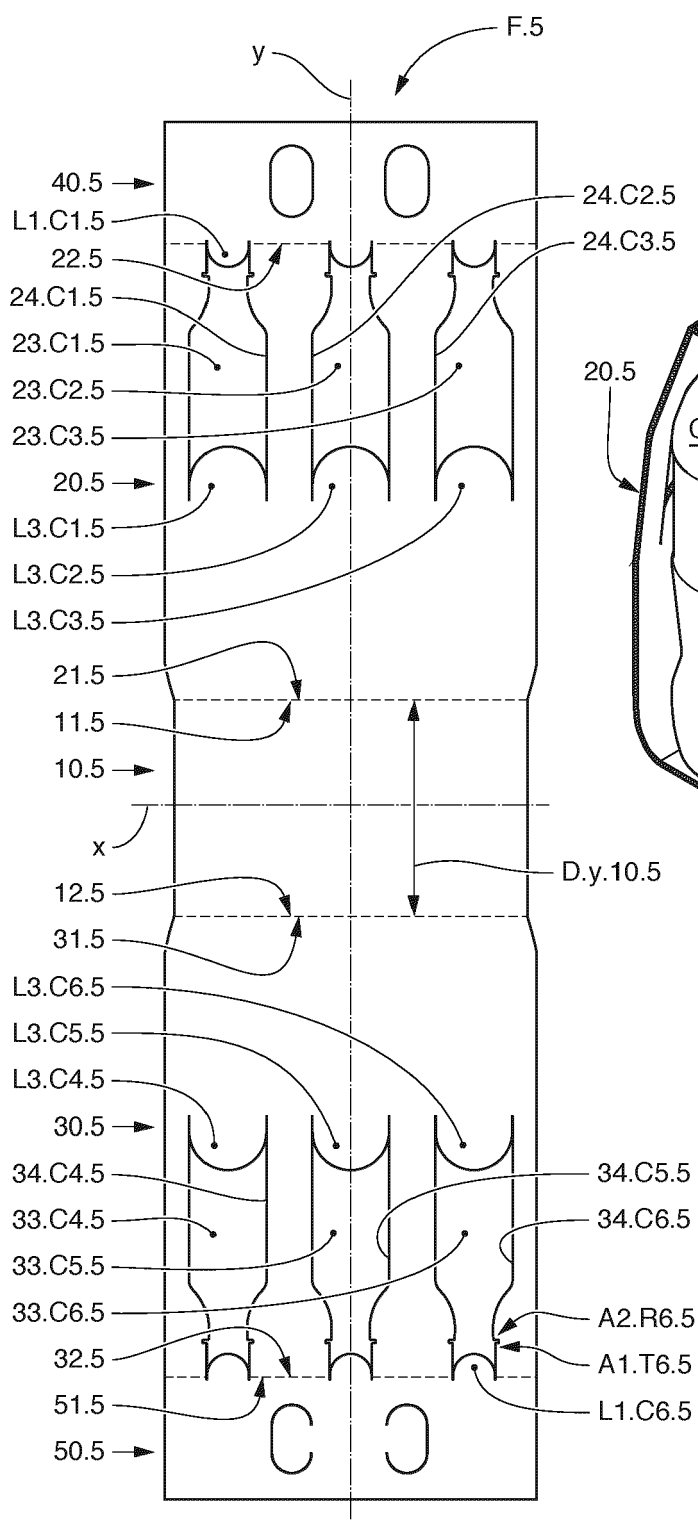


Fig. 10

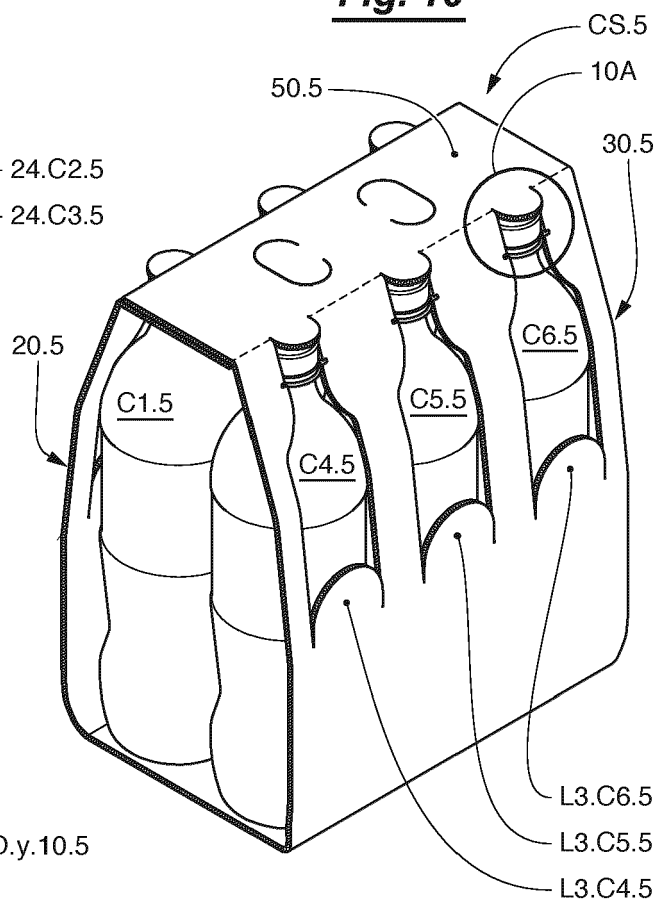
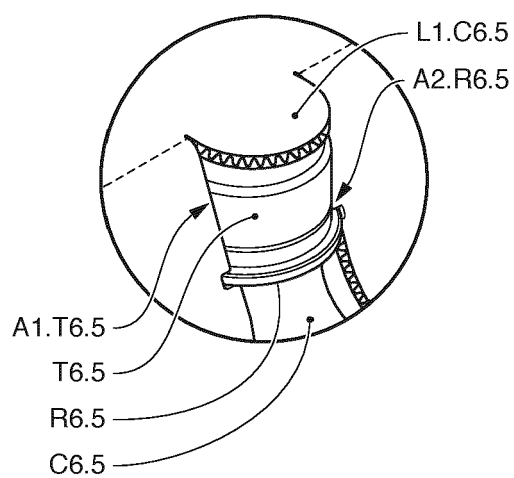


Fig. 10A



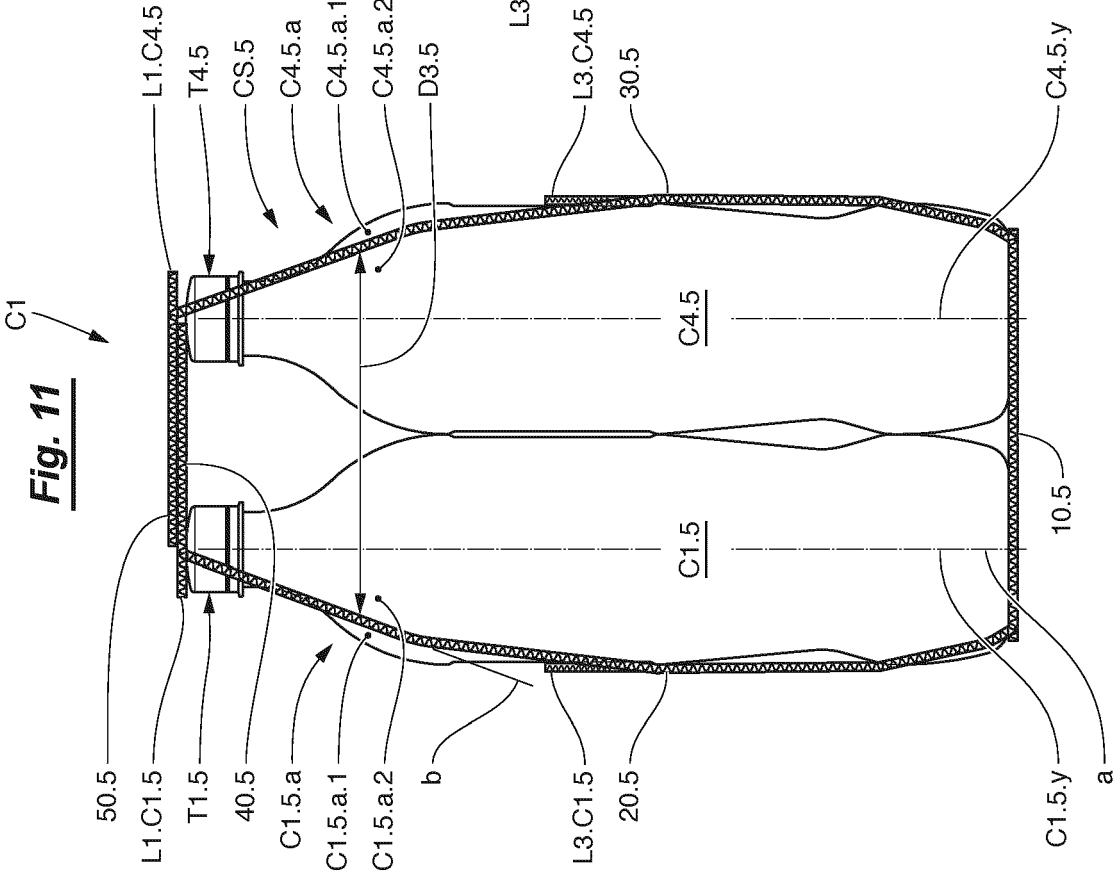
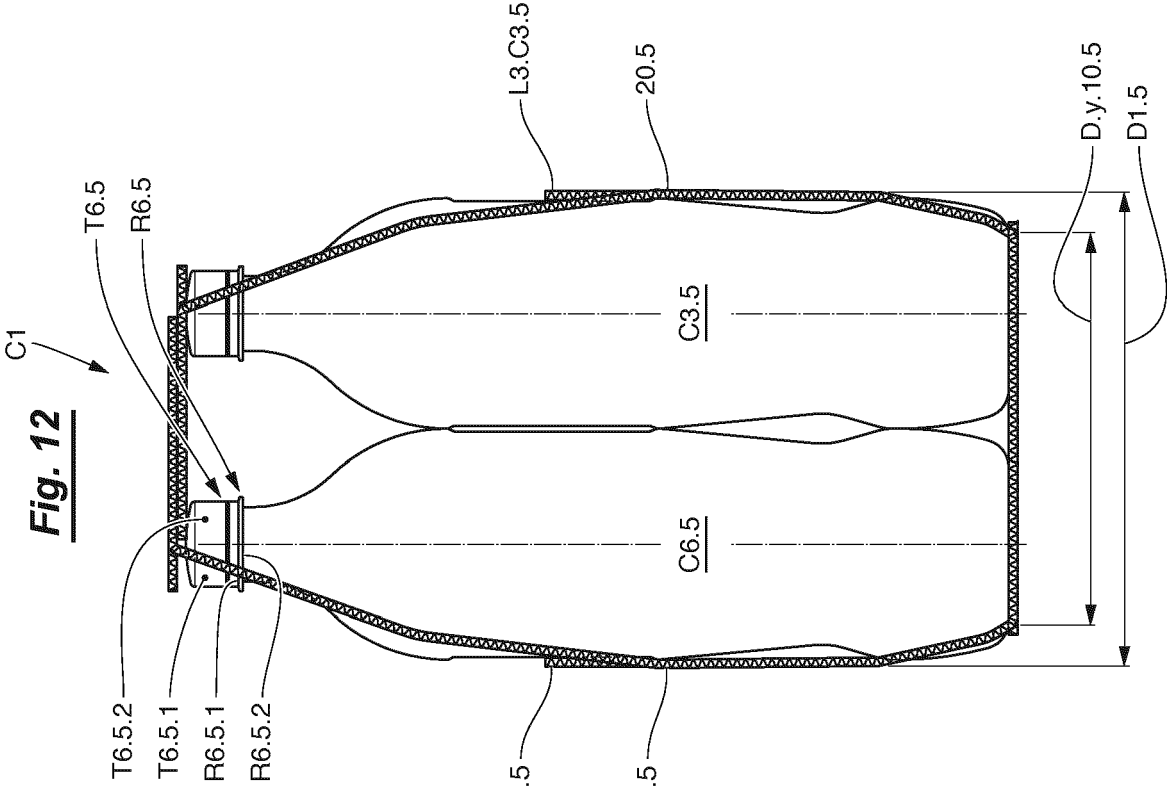


Fig. 1A

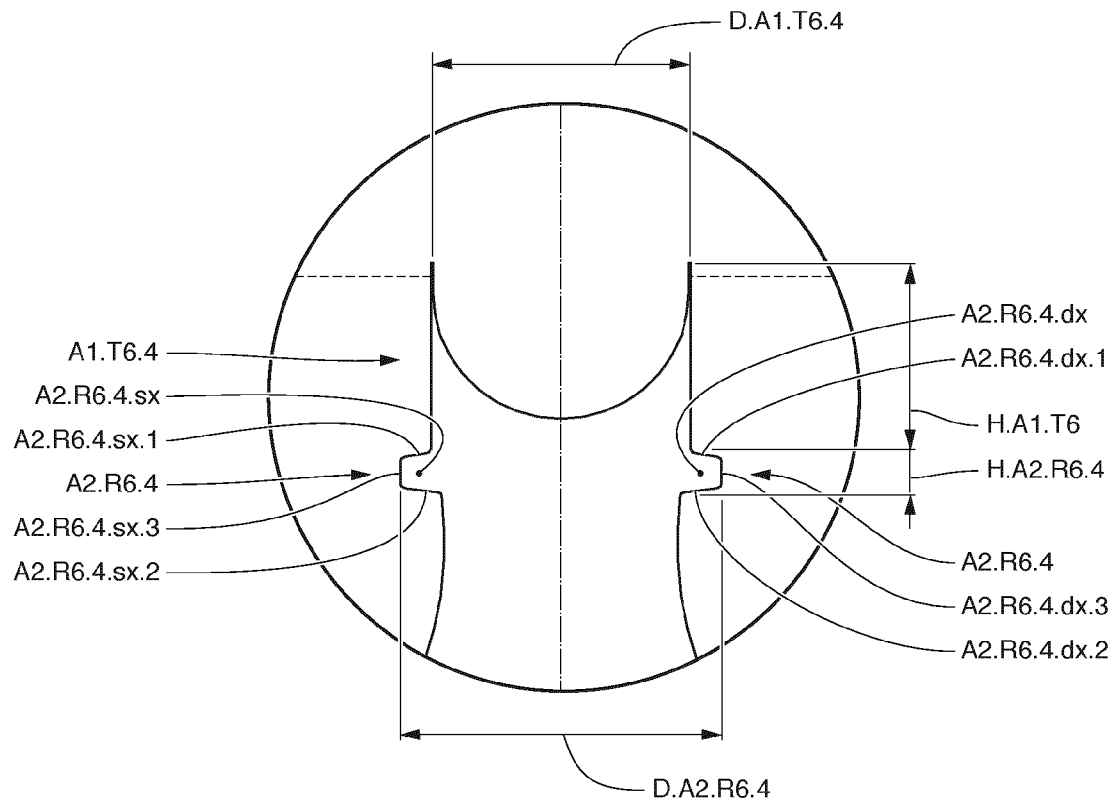
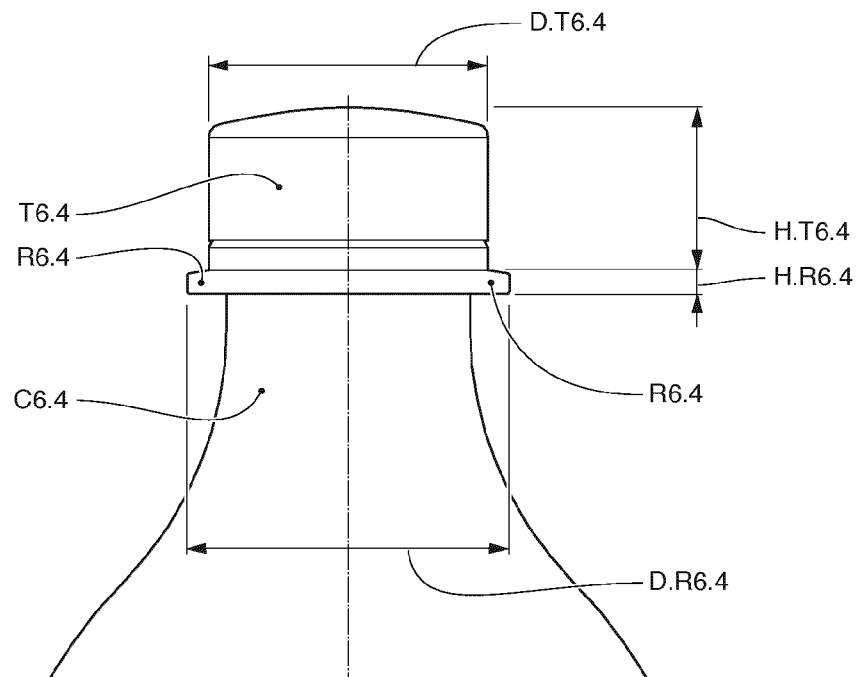


Fig. 13





EUROPEAN SEARCH REPORT

 Application Number
 EP 20 21 4929

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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 23 February 2021	Examiner Tempels, Marco
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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**ANNEX TO THE EUROPEAN SEARCH REPORT
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