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(54) Shaped container carrier

(57) The invention concerns a shaped container carrier, comprising one or more shaped housings (3, 3') for containers and a substantially plane support (5), characterised in that the support (5) and said one or more housings (3, 3') are capable to be coupled in an at least partially removable manner through mechanical means so that the container carrier is apt to assume at least one first loading configuration, wherein the inside of at least one housing of said one or more housings (3, 3') is accessible, and at least one second use configuration, wherein the inside of said one or more housings (3, 3') is closed and not accessible from the outside.

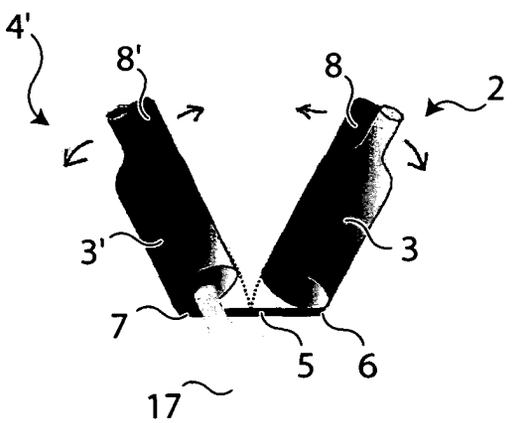

Fig. 3

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Description

[0001] The present invention refers to a shaped container carrier, preferably in paper and/or cardboard and/or plastic, apt to assume at least one loading configuration and at least one configuration of use, meaning storage and/or carriage, for safe housing containers, preferably bottles, which is simply and quickly usable, easy to be produced and unexpensive.

[0002] Presently, a certain number of bottle carriers in several materials and shapes are available on the market, which are provided with a plurality of housings for bottles, apt to hold bottles for storage and/or carriage purposes.

[0003] Usually, such bottle carriers have a fixed shape, which is not easily usable during operations both of bottles loading and of carrying.

[0004] Alternatively, the known bottle carriers may be arrangeable by the user, so as to transform the shape from a first loading configuration into a second carriage configuration. However, such arrangeable bottle carriers present the inconvenience of being no more modifiable, once they have assumed the carriage configuration, and/or their transformation from one configuration into the other is not easy nor quick, and/or the carriage configuration is not safe, since the bottles may fall from the bottle carriers.

[0005] It is therefore an object of the present invention to provide a container carrier apt to assume at least one loading configuration and at least one use configuration for safe housing containers, preferably bottles, the transformation of which from the rest configuration into the use configuration and vice versa is simply and quickly.

[0006] It is a further object of the present invention to provide such a container carrier the carriage configuration of which is safe.

[0007] It is a another object of the present invention to provide such a container carrier which is easy to be produced and unexpensive

[0008] It is specific subject matter of this invention a shaped container carrier, comprising one or more shaped housings for containers and a substantially plane support, characterised in that the support and said one or more housings are capable to be coupled in an at least partially removable manner through mechanical means so that the container carrier is apt to assume at least one first loading configuration, wherein the inside of at least one housing of said one or more housings is accessible, and at least one second use configuration, wherein the inside of said one or more housings is closed and not accessible from the outside.

[0009] Always according to the invention, at least one of said one or more housings may comprise a base and a top, the inside of said at least one housing being accessible in correspondence with said base when the container carrier assumes said at least one first loading configuration.

[0010] Still according to the invention, said housings may be at least two, and they may form a first group of housings and a second group of housings.

[0011] Preferably according to the invention, the first group of housings and the second group of housings comprise the same number of housings.

[0012] Always preferably according to the invention, the housings of the first group and the housings of the second group are arranged, respectively, along a first row and along a second row.

[0013] Furthermore according to the invention, the first group of housings and the second group of housings may be integrally coupled one to the other.

[0014] Always according to the invention, the first group of housings and the second group of housings may be capable to be removably coupled one to the other.

[0015] Still according to the invention, the first group of housings and the second group of housings may be capable to be removably coupled one to the other through tonguing elastic means.

[0016] Furthermore according to the invention, the first row and the second row may be separated by a plate when the container carrier assumes at least said at least one second use configuration.

[0017] Preferably according to the invention, the number of housings of the first group and of the second group is equal to three.

[0018] Still according to the invention, the support may comprise, for each one of said one or more housings, a seat comprising a shaped projection.

[0019] Always according to the invention, the mechanical means of coupling between the support and said one or more housings may comprise at least one coupling hinge.

[0020] Still according to the invention, the first row of housings and the second row of housings are hinged on the support along, respectively, a first perimeter side and a second perimeter side of the same support.

[0021] Furthermore according to the invention, the support (5) may comprise a first portion and a second portion hinged one on the other along an axis, and the mechanical means of coupling between the support and said one or more housings may comprise a coupling hinge along said hinge axis between the first portion and the second portion.

[0022] Always according to the invention, the mechanical means of coupling between the support and said one or more housings may comprise mechanical means of removable coupling.

[0023] Still according to the invention, said mechanical means of removable coupling may comprise tonguing elastic means.

[0024] Always according to the invention, the support may comprise, for each one of said one or more housings, a seat and said mechanical means of removable coupling may comprise, for each seat, a side rim apt to interact with the corresponding housing.

[0025] Furthermore according to the invention, the housings of the first row may be laterally provided with at least one first tongue, and the housings of the second row may be laterally provided with at least one second tongue corresponding to said at least one first tongue.

[0026] Always according to the invention, said at least one first tongue and said at least one corresponding second tongue may be integrally coupled.

[0027] Still according to the invention, said at least one first tongue and said at least one corresponding second tongue may be reciprocally integrated.

[0028] Furthermore according to the invention, said at least one first tongue and said at least one corresponding second tongue may be capable to be removably coupled.

[0029] Always according to the invention, said at least one first tongue and said at least one corresponding second tongue may be elastic.

[0030] Still according to the invention, said at least one first tongue and said at least one corresponding second tongue may be capable to be coupled through removable tonguing means.

[0031] Furthermore according to the invention, said at least one first tongue and said at least one corresponding second tongue may be shaped so as to form at least one handle when the container carrier assumes at least said at least one second use configuration.

[0032] Always according to the invention, the container carrier may further comprise at least one side plane hinged on the support, said at least one hinged plane being apt to removably couple to at least one housing.

[0033] Still according to the invention, said at least one hinged plane may be apt to removably couple to said at least one housing through tonguing means.

[0034] Furthermore according to the invention, the number of hinged planes may be equal to two.

[0035] Always according to the invention, the container carrier may further comprise at least one handle coupled to at least one housing.

[0036] Furthermore according to the invention, said at least one handle may be coupled to said at least one housing by means of said at least one first tongue and/or said at least one second tongue.

[0037] Still according to the invention, the container carrier may also comprise at least one frame coupled to the support.

[0038] Furthermore according to the invention, said at least one frame may be integrally coupled to the support.

[0039] Always according to the invention, said at least one frame may be hinged on the support.

[0040] Still according to the invention, said at least one frame may be provided with at least one portion of at least one corresponding handle.

[0041] Furthermore according to the invention, the number of hinged frames may be equal to two and in that the hinged frames may be capable to be reciprocally removably coupled when the container carrier assumes said at least one second use configuration.

[0042] Always according to the invention, each one of the two hinged frames may be provided with a corresponding semi-handle which, when the container carrier assumes at least said at least one second use configuration, mechanically couple one to the other forming a handle.

[0043] Still according to the invention, a semi-handle may be provided with at least one tooth apt to insert in at least one corresponding opening of the other semi-handle carrying out a tonguing.

[0044] Furthermore according to the invention, each one of the two hinged frames may be provided with at least one projection apt to removably couple to at least one notch of at least one corresponding small column of the support.

[0045] Always according to the invention, each one of the two hinged frames may be provided with at least one opening in which at least one external side rib of at least one housing is apt to removably insert.

[0046] Still according to the invention, the container carrier may further comprise means of sealing of the container carrier, apt to seal the container carrier when this assumes at least said at least one second use configuration.

[0047] Always according to the invention, the container carrier may further comprise removable coupling means apt to allow a plurality of container carriers to be stacked.

[0048] Still according to the invention, said stacking removable coupling means may comprise a central projecting element of the support, apt to insert into at least one central projecting element of another support, and apt to receive at least one handle of another support.

[0049] Still according to the invention, said stacking removable coupling means may comprise tonguing means, preferably rib and/or projection means.

[0050] Furthermore according to the invention, said stacking removable coupling means may be located at least in correspondence with said at least one housing.

[0051] Always according to the invention, said stacking removable coupling means may be located at least in correspondence with said at least one frame.

[0052] Still according to the invention, the container carrier may further comprise a closing cap apt to removably couple to at least one of said one or more housings.

[0053] Furthermore according to the invention, at least one housing may comprise thermal insulating means.

[0054] The present invention will be now described, by way of illustration and not by way of limitation, according to its preferred embodiments, by particularly referring to the Figuress of the enclosed drawings, in which:

Figure 1 shows a perpective view of a first first embodiment of the container carrier according to the invention in a first loading configuration;

Figure 2 shows a perpective view of the container carrier of Figure 1 in a second loading configuration;
Figure 3 shows a perpective view of the container carrier of Figure 1 in a third configuration;
Figure 3B shows a perpective view of a second embodiment of the container carrier according to the invention;
Figure 4 shows a perpective view of a third embodiment of the container carrier according to the invention in a first configuration;
Figure 5 shows a perpective view of the container carrier of Figure 4 in a second configuration;
Figure 6 shows a perpective view of the container carrier of Figure 4 in a third configuration;
Figure 7 shows a perpective view of the container carrier of Figure 4 in a fourth configuration;
Figure 8 shows a perpective view of the container carrier of Figure 4 in a fifth configuration;
Figure 8B shows a perpective view of a fourth embodiment of the container carrier according to the invention in a first configuration;
Figure 9 shows a perpective view of a fifth embodiment of the container carrier according to the invention in a first configuration;
Figure 10 shows a perpective view of the container carrier of Figure 9 in a second configuration;
Figure 11 shows a perpective view of the container carrier of Figure 9 in a third configuration;
Figure 12 shows a perpective view of the container carrier of Figure 9 in a fourth configuration;
Figure 13 shows a perpective view of the container carrier of Figure 9 in a fifth configuration;
Figure 14 shows a perpective view of a sixth embodiment of the container carrier according to the invention;
Figure 15 shows a perpective view of a seventh embodiment of the container carrier according to the invention;
Figure 16 shows a perpective view of a eighth embodiment of the container carrier according to the invention in a first configuration;
Figure 17 shows a perpective view of the container carrier of Figure 16 in a second configuration;
Figures 18a-d show a ninth embodiment of the container carrier according to the invention in a first configuration;
Figure 19 shows a perpective view of the support of the container carrier of Figure 18 in a second configuration;
Figure 20 shows a particular of the support of Figure 19;
Figure 21 shows a perpective view of a plurality of stacked supports stacked of the type of Figure 19;
Figure 22 shows a perpective view in part section of the shaped housings of the container carrier of Figure 18;
Figures 23a-f show several configurations of the container carrier of Figure 18;
Figures 24a-d show some particulars of the container carrier of Figure 18;
Figures 25a-b show a plurality of container carriers of the type of Figure 18 stacked according to a first stacking mode; and
Figure 26 shows a plurality di container carriers of the type of Figure 18 stacked according to a second stacking mode.

[0055] In the following description, same references will be used for indicating alike elements in the Figures.

[0056] Figures 1-3 show a first embodiment of the container carrier according to the invention.

[0057] With reference to Figure 1, the container carrier 1 in a first loading configuration may be observed. The container carrier comprises a right element 2, provided with three shaped housings 3 for containers, preferably bottles 17, and a similar left element 4, provided with three shaped housings 3' for containers as well. Each shaped housing 3 and 3' is open in correspondence with the base of a container from which it takes the shape, and it is preferably (but not necessarily) close in correspondence with the top of the container from which it takes the shape.

[0058] The right element 2 and the left element 4 are hinged on a corresponding side, respectively 6 and 7, of a plane support 5, so as to be capable to rotate each round a corresponding side, as shown in Figures 2 and 3, between a first position of loading of containers and a second position of carriage. In the first loading position the base opening of each housing 3 and 3' is accessible, consequently allowing a container, for instance a bottle 17, to be inserted into the housing 3 and 3'.

[0059] In particular: in Figure 1, both sides 2 and 3 are shown in the first loading position; in Figure 2, the right side 2 is shown in the second carriage position while the left side 3 is shown in the first loading position; in Figure 3, both sides 2 and 3 are shown in a position intermediate between the first loading position and the second carriage position.

[0060] In correspondence with the top of the container shape, the housings 3 and 3' are provided with a fastening tongue, respectively 8 and 8'. When both the right side 2 and the left side 3 are in the second carriage position, the respective housings 3 and 3' are symmetrical ones with respect to the others, and the tongues 8 of the housings 3 of the right side 2 face the tongues 8' of the corresponding housings 3' of the left side 4. In particular, the tongues 8 are apt to removably couple to the corresponding faced tongues 8' when both the right and left sides 2 and 3 are in the second carriage position. By way of illustration and not by way of limitation, the tongues 8 and the tongues 8' may be elastic and shaped so as to reciprocally interact (as for instance a male-female rib coupling), or they may be shaped so as to carry out a removable groove-and-tongue joint between a beading of the tongue 8 and a notch of the tongue 8' (or vice versa). Other embodiments may provide that the

tongues 8 and 8' are located along at least a side portion of the container profile of the housings 3 and 3', so as to reciprocally interact for a longer length.

[0061] When both the right and left sides 2 and 3 are coupled one to the other by means of the tongues 8 and 8', the container carrier may be carried through at least one upper handle coupled to at least one tongue 8 or 8' and/or to the top of at least one housing 3 or 3', such for example shown in Figure 3B with the handle 20 integrally coupled to the three tongues 8 of the right side 2. An alternative upper handle (not shown in the Figures) may comprise two corresponding arc elements coupled to the right side 2 and the left side 4, respectively.

[0062] Also, the container carrier may be provided with at least one carriage handle carried out by at least two holes (also not shown in the Figures) with which at least due tongues 8 and 8' interacting one with the other are provided, preferably the central tongues 8 and 8' of Figures 1-3.

[0063] Furthermore, the container carrier may be provided with at least one carriage handle coupled to the side of at least one housing 3 or 3', in order to allow the container carrier 1 to be carried with the housings 3 and 3' arranged in horizontal.

[0064] When the right and left sides 2 and 3 are coupled one to the other by means of the tongues 8 and 8', the container carrier 1 may be reopen by pulling the two sides 2 and 3 so as to unlock the coupling of the tongues 8 and 8'.

[0065] Figures 4-8 show a third embodiment of the container carrier according to the invention, wherein the plane support 5 is provided along the short side with two side hinged planes 9, each having two slots 10, apt to interact in a tonguing with two pairs of flaps 11 with which the four corner housings 3" of the container carrier 1 are provided.

[0066] In order to laterally close the container carrier 1, starting from the configuration of Figure 4, with the right and left sides 2 and 4 coupled by means of the tongues 8 and 8', the side hinged planes 9 are raised up till the flaps 11 are inserted into the corresponding slots 10, as shown in Figure 5. Afterwards, as shown in Figure 6, one of the two flaps 11 of each pair, emerging from the corresponding slots 10, is bent, preferably towards the other flap 11 of the pair, which is in turn bent on the previously bent flap 11, as shown in Figure 7. Finally, the so closed container carrier 1 may be carried by means of two handles 12 laterally coupled to two faced corner housings 3 and 3', the carriage occurring with the housings 3 and 3' arranged in horizontal as shown in Figure 8. Alternatively or additionally, the handles may be carried out as described above for the embodiment of Figures 1-3, as for example shown in Figure 8B.

[0067] Figures 9-13 show a fifth embodiment of the container carrier according to the invention.

[0068] With reference to Figure 9, showing the container carrier 1 overturned, it may be observed that the plane support is shaped so as to have a curvilinear perimeter according to the geometric envelope of the base circumferences of the housings 3 and 3'. In particular, the plane support is divided in two right and left portions 5' and 5", corresponding to the bases, respectively, of the housings 3 of the right side 2 and of the housings 3' of the left side 4, wich are hinged one on the other in correspondence with a central axis of symmetry of the plane support. A couple of frames 13 and 13', provided with corresponding handles 14 and 14' integral to them, are hinged on the support 5 laterally with respect to the housings 3 and 3'.

[0069] With reference to Figure 10, it is possible to observe the left side 4 in the second carriage position and the right side 2 in a position intermediate between the first loading position and the second carriage position, wherein the base opening of each housing 3 is accessible.

[0070] Once the housings 3 and 3' are filled with containers, preferably bottles, the container carrier 1 may be arranged in standing position, as shown in Figure 11 where the right frame 13 is not yet closed while the frame 13' is closed on the housings 3'. In particular, the frames 13 and 13' are apt to be removably coupled to the corresponding housings 3 and 3', for example through tonguing coupling, not shown.

[0071] In order to arrange the container carrier 1 in the carriage configuration, it is sufficient to close both the frames 13 and 13' on the housings 3 and 3', respectively, as shown in Figure 12.

[0072] In Figure 13, it is shown the container carrier 1 in horizontal position laterally laying on two housings 3 and 3'. This position may be used for the storage of a plurality of container carrier 1 which may be stacked one upon the other. In such case, ribs and/or projections may be present on the housings 3 and/or 3' and/or no the frames 13 and 13', which, by fixing to the ones of the adjacent container carriers of a storage stack, prevent the stacked container carrier from slipping. It is evident that, alternatively to the horizontal position of Figure 13, the container carrier 1 may be also stacked by laterally laying them down on the housings 3 of the right side 2 or on the housings 3' of the left side 4. It is further evident that the housings 3 and 3' may be filled with the containers or the bottles not only in the overturned position of Figure 9, but also in the horizontal position of Figure 13.

[0073] Figure 14 shows a sixth embodiment of the container carrier according to the invention wherein the shaped plane support, provided with the couple of frames 13 and 13' having corresponding handles 14 and 14', is apt to be removably coupled to the bases of the housings 3 and 3', preferably through tonguing elastic means, not shown.

[0074] Figure 15 shows a seventh embodiment of the container carrier according to the invention, similar to the fifth embodiment of Figures 9-13, wherein the handles 14 and 14' are shaped so that, in the carriage configuration, they face one towards the other and prefera-

bly removably coupled, for example through tonguing means, not shown.

[0075] Figures 16 and 17 show an eighth embodiment of the container carrier according to the invention respectively in a first loading configuration and in a second carriage configuration. It may be observed that this embodiment differs from the one shown in Figures 1-3 in the following features:

the plane support 5 comprises beadings apt to make the support 5 removably couple to the housings 3 and 3';
the plane support 5 is provided with a plate 15 separating the right side 2 and the left side 4, the plate 15 being capable to be both integrally and removably coupled to the support 5; and
the container carrier 1 is further provided with a closing cap 16 apt to couple to the top of the housings 3 and 3' and/or to the plate 15 so as to grant a safer lockup of the container carrier 1 in the carriage configuration.

[0076] Advantageously, the container carrier 1 of Figures 16 and 17 may be provided with handles (not shown) laterally coupled to the housings 3 and/or 3'. The closing cap 16 may be further provided with at least one handle for allowing the container carrier 1 to be carried in vertical position.

[0077] With reference to Figure 18, it may be observed a ninth embodiment of the container carrier according to the invention, of which Figure 18a shows a perpective view, Figure 18b shows a right side view, Figure 18c shows a front view, and Figure 18d shows a top view. In the container carrier of Figure 18, the substantially plane support 5 is provided with two laterally hinged side frames 13 and 13', each one of which is provided with a corresponding integral semi-handle, respectively 14 and 14', which mechanically coupled one to the other forming a handle in the use configuration shown in Figure 18. In particular, as more clearly shown in Figure 19, each frame comprises a lower hole, 30 and 30', and an upper hole, 31 and 31'. The container carrier of Figure 18 further comprises six shaped housings, preferably according to the shape of a bottle, and located along two facing rows of three housings 3 and 3', respectively. The six housings 3 and 3' are integral one to the other so as to form a sole bottle cover shell. In particular, the neck of the central housings 3Z and 3Z' of each row projects from the upper hole 31 and 31' of the respective frame 13 and 13'.

[0078] With reference to Figures 19 and 20, it may be observed the base support 5 of the container carrier of Figure 18 in an open configuration, i.e. in a configuration wherein the frames 13 and 13' are arranged on the same plane as the supporting plane of the support 5. The support 5 comprises six seats for the bases of the containers (preferably bottles) which will be housed within the housings 3 and 3'. As shown in greater detail in Figure 20, each one of the six seats comprises a projection 32, shaped according to the base shape of the containers which will be housed and, preferably, provided with ribs in order to better interact with the base of the containers, and a side rim 33 apt to interact with the corresponding housing, 3 or 3', for allowing the bottle cover shell to be coupled, as it will be better described below. In particular, the side rim 33 is further useful for correctly positioning the containers, for example bottles, on the support 5. The support 5 also comprises some stiffening structural elements, among which a central projecting element 34 enables stacking of both a plurality of supports 5 in open configuration, as shown in Figure 21, and a plurality of container carriers in use configuration (which always means storage and/or carriage), as it will be shown in Figure 25. In Figure 20, side hinges 6 and 7 are also shown in greater detail for coupling the side frames 13 and 13', respectively, which allows the same frames to rotate from the horizontal position of Figure 19 to the vertical position of Figure 18 in which they reciprocally couple, as it will be better shown below.

[0079] Figure 22 shows a perpective view in part section of the bottle cover shell comprising the six housings 3 and 3' integrally coupled one to the other. Inside, each housing comprises internal ribs 40 apt to interact with the container that will be housed therein for eliminating, or at least reducing, its movements during carriage of the container carrier. At the base of the bottle cover shell comprising the six housings, two hooks or pins 41 are present, preferably a front one and a rear one, which are apt to insert into corresponding openings 35 of the support 5 (shown in Figure 20) which, along with the interaction of the base profile of the housings 3 and 3' with the side rims 33, carries out a removable coupling between the bottle cover shell and the support 5. The housings 3 and 3' also comprise respective external side ribs 42, which distribute the load among several container carriers, when they are stacked in horizontal position as shown in Figure 26, and transmit accidental overloads from a container carrier to another, when they are stacked in vertical position as shown in Figure 25. Moreover, the external side ribs 42 of the central housings 3Z and 3Z' contribute to the removable coupling between the bottle cover shell and the respective frame 13 and 13', as it will be described with reference to Figure 24.

[0080] In Figure 23 it is possible to observe the operations necessary for packing the containers 17, preferably bottles, within the container carrier of Figure 18: in Figure 23a è mostrato il posizionamento di six bottles 17 sulle six sedi del support 5, in correspondence with the relativo aggetto 32; in Figure 23b it is shown the positioning of the bottle cover shell, comprising the six integral housings 3 and 3', over the six bottles 17; in Figure 23c it is shown the closing of the frames 13 and 13' up to coupling the two semi-handles 14 and 14', forming the handle of the container carrier, where it may be observed an element 36 (shown in greater detail in Figure 23d) of sealing of the container carrier, coupled to the

right semi-handle 14; finally, in Figure 23e it is shown the container carrier at the end of packing, wherein a free end of the element 36 (shown in greater detail in Figure 23f) is inserted in a corresponding opening 37 of the left semi-handle 14' for completing the sealing.

[0081] The various elements contributing to the removable coupling of the housings 3 and 3' of the bottle cover shell to the side frames 13 and 13', of the side frames 13 and 13' to the substantially plane support 5, and of between the two semi-handles 14 and 14' are better shown in Figure 24.

[0082] In particular, Figure 24b shows in greater detail a section of Figure 24a wherein it may be observed the removable coupling of two projections 38' of the left frame 13' to the notches of two corresponding small columns 39' of the support 5 (also shown in Figures 19 and 20). Similar projections 38 of the right frame 13 removably couple to two corresponding small columns 39 of the support 5. Such coupling of the projections 38 and 38' to the small columns 39 and 39' allows the load acting on the support 5 to be transmitted to the side frames 13 and 13' without overloading the hinges 6 and 7, which are consequently partially discharged during carriage of the container carrier.

[0083] Figure 24c shows in greater detail a section of Figure 24a wherein it may be observed the removable coupling between the upper end of the external side rib 42 of the left central housing 3Z' and a corresponding opening 43' of the left frame 13', holding in position the central part of the left frame 13'. A similar removable coupling may be established between the upper end of the external side rib 42 of the right central housing 3Z and a corresponding opening 43 (also shown in Figure 19) of the right frame 13. In particular, the upper ends of the external side ribs 42 of the central housings 3Z and 3Z' are preferably sharply shaped, in order to better interact with the corresponding openings 43 and 43'.

[0084] Figure 24d shows in greater detail, in part section, the removable coupling between the two semi-handles 14 and 14', also shown in Figure 24a. Such removable coupling is carried out through the insertion of three teeth 44 of the right semi-handle 14 in three corresponding openings 45 of the left semi-handle 14' (the teeth 44 and the openings 45 are also shown in Figure 19).

[0085] Figures 25a and 25b show a side view and a front view of a plurality of container carriers of the type of Figure 18, according to the use configuration (i.e. wherein the side frames 13 and 13' are closed and the semi-handles 14 and 14' are coupled), vertically stacked one upon the other. In particular, it may be observed that the handle of each container carrier (formed by the two coupled semi-handles 14 and 14') inserts into the stiffening central projecting element 34 of the support 5 of the immediately upper container carrier.

[0086] Figure 26 shows a front view of a plurality of container carriers of the type of Figure 18, according to the use configuration (i.e. wherein the side frames 13 and 13' are closed and the semi-handles 14 and 14' are coupled), laterally stacked one upon the other.

[0087] Advantageously, the components of the various embodiments of the container carrier according to the invention may be made in one piece (for example, in the case of the container carrier of Figures 18-26, in two pieces related to the support 5 and to the bottle cover shell, comprising the six housings, respectively) of, preferably molded, plastic material, the material having such a thickness that it gives a sufficient stiffness to the container carrier 1.

[0088] Preferably, the material of the container carrier may be transparent and/or semitransparent and/or coloured.

[0089] THe housings 3 and 3' for the containers may be carried out so as to enable a thermal insulation, for instance by carrying out an external space filled with air or a suitable insulating material. In such a way, the housings may keep liquids contained within the housed containers, for example bottles, warm or cool.

[0090] The preferred embodiments have been above described and some modifications of this invention have been suggested, but it should be understood that variations and/or changes can be made by those skilled in the art, without so departing from the related scope of protection, as defined by the following claims.

Claims

1. Shaped container carrier, comprising one or more shaped housings (3, 3') for containers and a substantially plane support (5), **characterised in that** the support (5) and said one or more housings (3, 3') are capable to be coupled in an at least partially removable manner through mechanical means so that the container carrier is apt to assume at least one first loading configuration, wherein the inside of at least one housing of said one or more housings (3, 3') is accessible, and at least one second use configuration, wherein the inside of said one or more housings (3, 3') is closed and not accessible from the outside.

2. Container carrier according to claim 1, **characterised in that** at least one of said one or more housings (3, 3') comprises a base and a top, the inside of said at least one housing (3, 3') being accessible in correspondence with said base when the container carrier assumes said at least one first loading configuration.

3. Container carrier according to claim 1 or 2, **characterised in that** said housings (3, 3') are at least two, and they form a first group (2) of housings (3) and a second group (4) of housings (3').

4. Container carrier according to claim 3, **characterised in that** the first group (2) of housings (3) and

the second group (4) of housings (3') comprise the same number of housings.

5. Container carrier according to claim 3 or 4, **characterised in that** the housings (3) of the first group (2) and the housings (3') of the second group (4) are arranged, respectively, along a first row (2) and along a second row (4).

6. Container carrier according to any one of claims 3 to 5, **characterised in that** the first group (2) of housings (3) and the second group (4) of housings (3') are integrally coupled one to the other.

7. Container carrier according to any one of claims 3 to 5, **characterised in that** the first group (2) of housings (3) and the second group (4) of housings (3') are capable to be removably coupled one to the other.

8. Container carrier according to claim 7, **characterised in that** the first group (2) of housings (3) and the second group (4) of housings (3') are capable to be removably coupled one to the other through tonguing elastic means (8, 8').

9. Container carrier according to claim 5 or any one of claims 6 to 8, when dependent on claim 5, **characterised in that** the first row (2) and the second row (4) are separated by a plate (15) when the container carrier assumes at least said at least one second use configuration.

10. Container carrier according to claim 4 or any one of claims 5 to 9, when dependent on claim 4, **characterised in that** the number of housings (3, 3') of the first group (2) and of the second group (4) is equal to three.

11. Container carrier according to any one of the preceding claims, **characterised in that** the support (5) comprises, for each one of said one or more housings (3, 3'), a seat comprising a shaped projection (32).

12. Container carrier according to any one of the preceding claims, **characterised in that** the mechanical means of coupling between the support (5) and said one or more housings (3, 3') comprises at least one coupling hinge.

13. Container carrier according to claim 12, when dependent on claim 5, **characterised in that** the first row (2) of housings (3) and the second row (4) of housings (3') are hinged on the support (5) along, respectively, a first perimeter side (6) and a second perimeter side (7) of the same support (5).

14. Container carrier according to claim 12, when dependent on claim 5, **characterised in that** the support (5) comprises a first portion (5') and a second portion (5") hinged one on the other along an axis, and **in that** the mechanical means of coupling between the support (5) and said one or more housings (3, 3') comprises a coupling hinge along said hinge axis between the first portion (5') and the second portion (5").

15. Container carrier according to any one of claims 1 to 11, **characterised in that** the mechanical means of coupling between the support (5) and said one or more housings (3, 3') comprises mechanical means of removable coupling.

16. Container carrier according to claim 15, **characterised in that** said mechanical means of removable coupling comprises tonguing elastic means.

17. Container carrier according to claim 15 or 16, **characterised in that** the support (5) comprises, for each one of said one or more housings (3, 3'), a seat and **in that** said mechanical means of removable coupling comprises, for each seat, a side rim (33) apt to interact with the corresponding housing (3, 3').

18. Container carrier according to any one of the preceding claims, when dependent on each one of claims 4 and 5, **characterised in that** the housings (3) of the first row (2) are laterally provided with at least one first tongue (8), and **in that** the housings (3') of the second row (4) are laterally provided with at least one second tongue (8') corresponding to said at least one first tongue (8).

19. Container carrier according to claim 18, when dependent on claim 6, **characterised in that** said at least one first tongue (8) and said at least one corresponding second tongue (8') are integrally coupled.

20. Container carrier according to claim 19, **characterised in that** said at least one first tongue (8) and said at least one corresponding second tongue (8') are reciprocally integrated.

21. Container carrier according to claim 18, when dependent on claim 7, **characterised in that** said at least one first tongue (8) and said at least one corresponding second tongue (8') are capable to be removably coupled.

22. Container carrier according to claim 21, **characterised in that** said at least one first tongue (8) and said at least one corresponding second tongue (8') are elastic.

23. Container carrier according to claim 21 or 22, **characterised in that** said at least one first tongue (8) and said at least one corresponding second tongue (8') are capable to be coupled through removable tonguing means.

24. Container carrier according to any one of claims 18 to 23, **characterised in that** said at least one first tongue (8) and said at least one corresponding second tongue (8') are shaped so as to form at least one handle (20) when the container carrier assumes at least said at least one second use configuration.

25. Container carrier according to any one of the preceding claims, **characterised in that** it further comprises at least one side plane (9) hinged on the support (5), said at least one hinged plane (9) being apt to removably couple to at least one housing (3, 3').

26. Container carrier according to claim 25, **characterised in that** said at least one hinged plane (9) is apt to removably couple to said at least one housing (3, 3') through tonguing means (10, 11).

27. Container carrier according to claim 25 or 26, **characterised in that** the number of hinged planes (9) is equal to two.

28. Container carrier according to any one of the preceding claims, **characterised in that** it further comprises at least one handle (12, 20) coupled to at least one housing (3, 3').

29. Container carrier according to claim 28, when dependent on claim 18, **characterised in that** said at least one handle (12, 20) is coupled to said at least one housing (3, 3') by means of said at least one first tongue (8) and/or said at least one second tongue (8').

30. Container carrier according to any one of the preceding claims, **characterised in that** it also comprises at least one frame (13, 13') coupled to the support (5).

31. Container carrier according to claim 30, **characterised in that** said at least one frame (13, 13') is integrally coupled to the support (5).

32. Container carrier according to claim 30, **characterised in that** said at least one frame (13, 13') is hinged on the support (5).

33. Container carrier according to any one of claims 30 to 32, **characterised in that** said at least one frame (13, 13') is provided with at least one portion of at least one corresponding handle (14, 14').

34. Container carrier according to claim 32 or according to claim 33, when dependent on claim 32, **characterised in that** the number of hinged frames (13, 13') is equal to two and **in that** the hinged frames (13, 13') are capable to be reciprocally removably coupled when the container carrier assumes said at least one second use configuration.

35. Container carrier according to claim 34, **characterised in that** each one of the two hinged frames (13, 13') is provided with a corresponding semi-handle (14, 14') which, when the container carrier assumes at least said at least one second use configuration, mechanically couple one to the other forming a handle.

36. Container carrier according to claim 35, **characterised in that** a semi-handle (14) is provided with at least one tooth (44) apt to insert in at least one corresponding opening (45) of the other semi-handle (14') carrying out a tonguing.

37. Container carrier according to any one of claims 34 to 36, **characterised in that** each one of the two hinged frames (13, 13') is provided with at least one projection (38, 38') apt to removably couple to at least one notch of at least one corresponding small column (39, 39') of the support (5).

38. Container carrier according to any one of claims 34 to 37, **characterised in that** each one of the two hinged frames (13, 13') is provided with at least one opening (43, 43') in which at least one external side rib (42) of at least one housing (3, 3') is apt to removably insert.

39. Container carrier according to any one of the preceding claims, **characterised in that** it further comprises means (36, 37) of sealing of the container carrier, apt to seal the container carrier when this assumes at least said at least one second use configuration.

40. Container carrier according to any one of the preceding claims, **characterised in that** it further comprises removable coupling means apt to allow a plurality of container carriers to be stacked.

41. Container carrier according to claim 40, **characterised in that** said stacking removable coupling means comprises a central projecting element (34) of the support (5), apt to insert into at least one central projecting element (34) of another support (5), and apt to receive at least one handle (14, 14') of another support (5).

42. Container carrier according to claim 40 or 41, **characterised in that** said stacking removable coupling

means comprises tonguing means, preferably rib and/or projection means.

43. Container carrier according to any one of claims 40 to 42, **characterised in that** said stacking removable coupling means are located at least in correspondence with said at least one housing (3, 3').

44. Container carrier according to any one of claims 40 to 43, when dependent on claim 30, **characterised in that** said stacking removable coupling means are located at least in correspondence with said at least one frame (13, 13').

45. Container carrier according to any one of the preceding claims, **characterised in that** it further comprises a closing cap (16) apt to removably couple to at least one of said one or more housings (3, 3').

46. Container carrier according to any one of the preceding claims, **characterised in that** at least one housing (3, 3') comprises thermal insulating means.

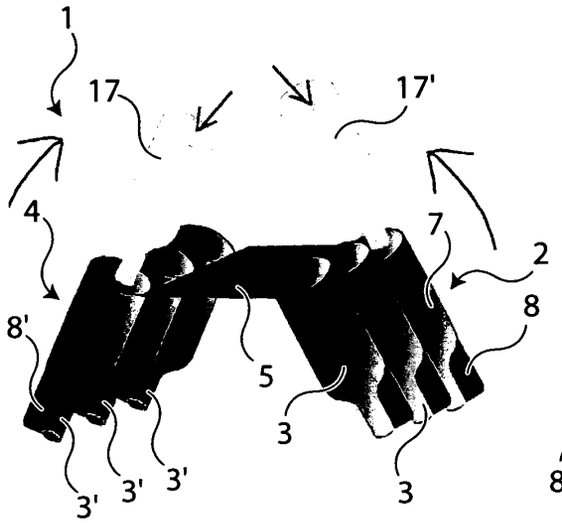

Fig. 1

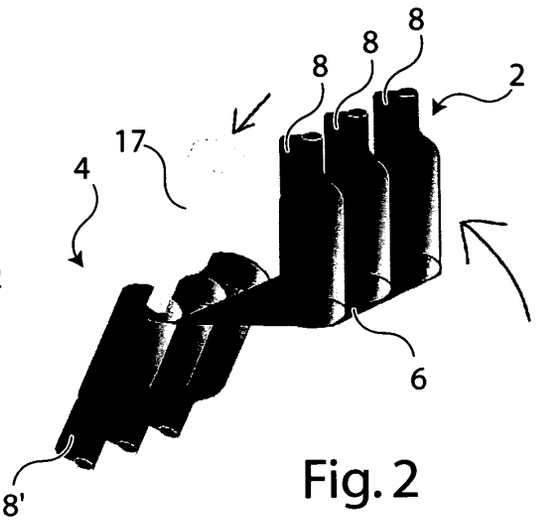

Fig. 2

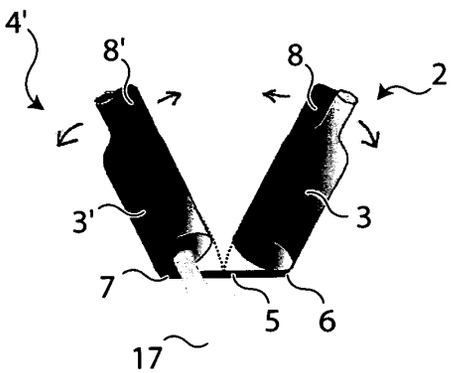

Fig. 3

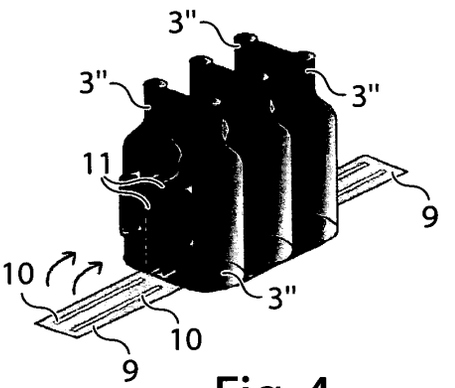

Fig. 4

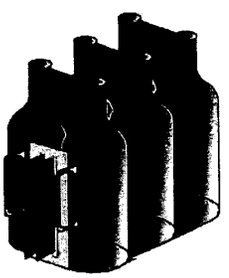

Fig. 5

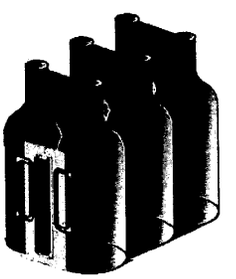

Fig. 6

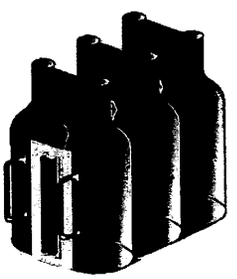

Fig. 7

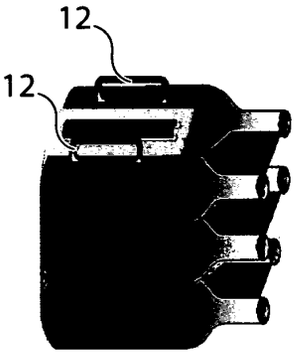

Fig. 8

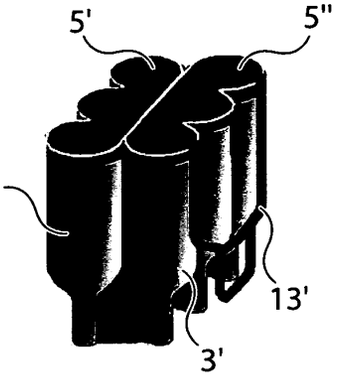

Fig. 9

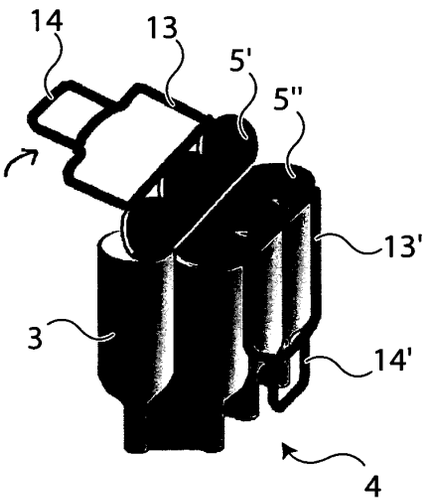

Fig. 10

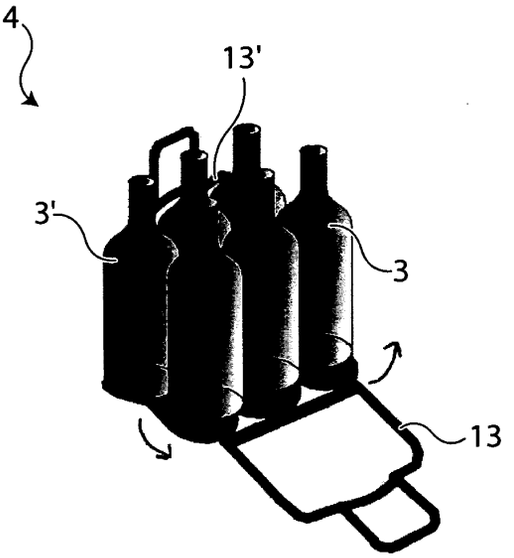

Fig. 11

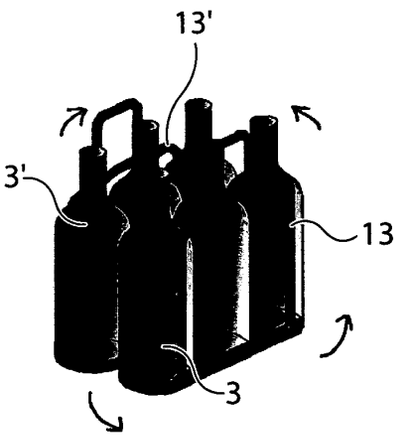

Fig. 12

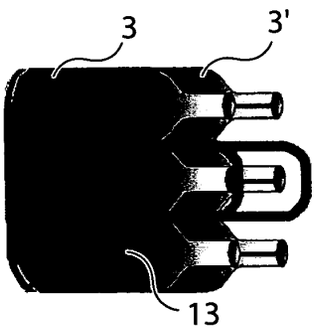

Fig. 13

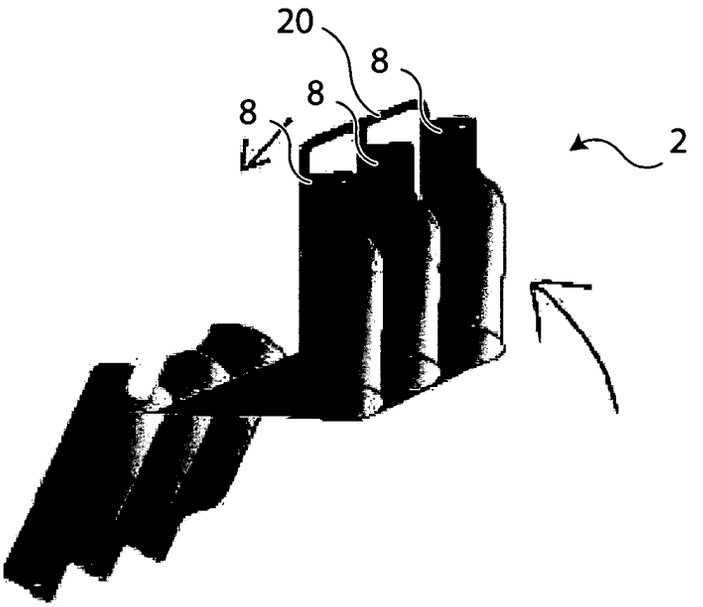

Fig. 3b

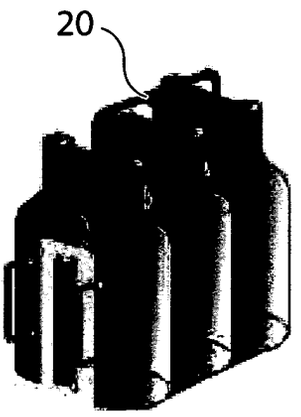

Fig. 8b

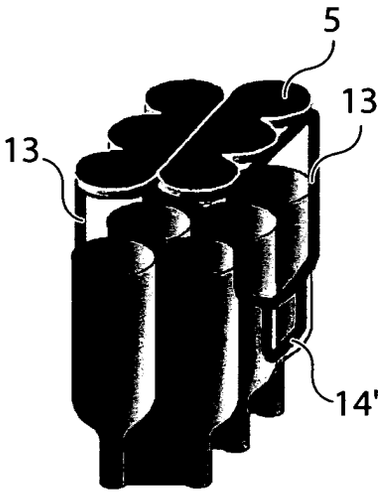

Fig. 14

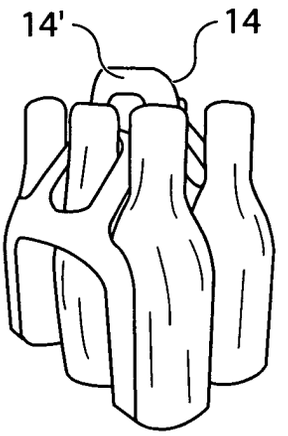

Fig. 15

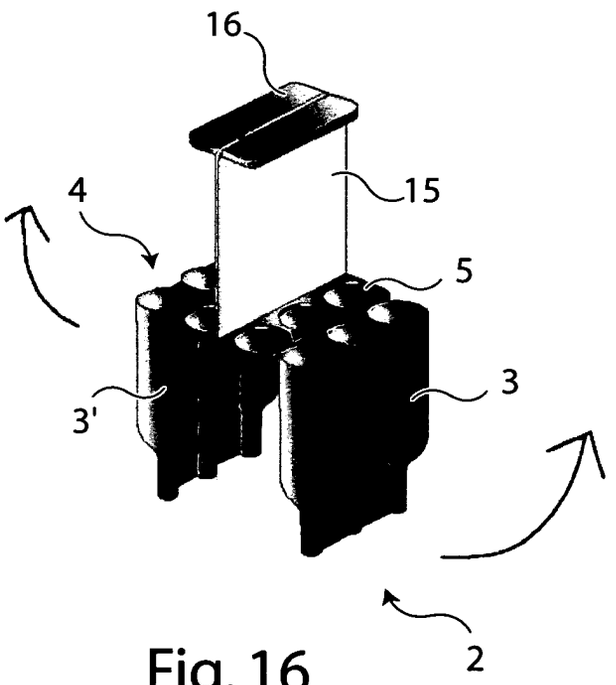

Fig. 16

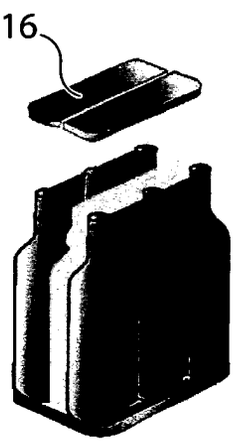

Fig. 17

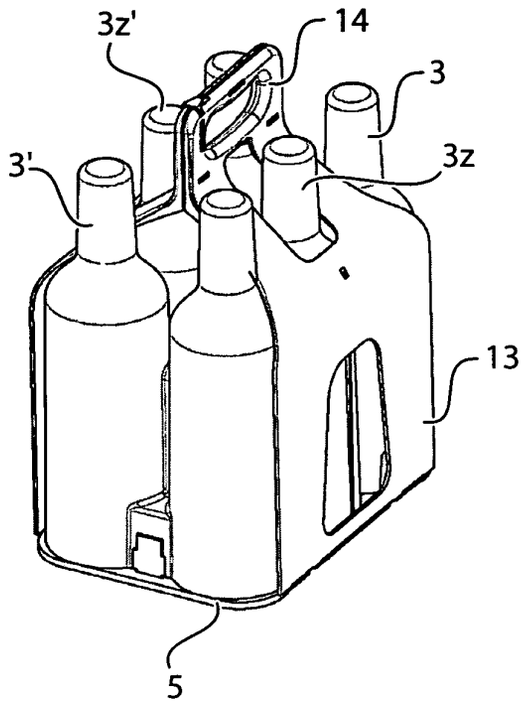

Fig. 18a

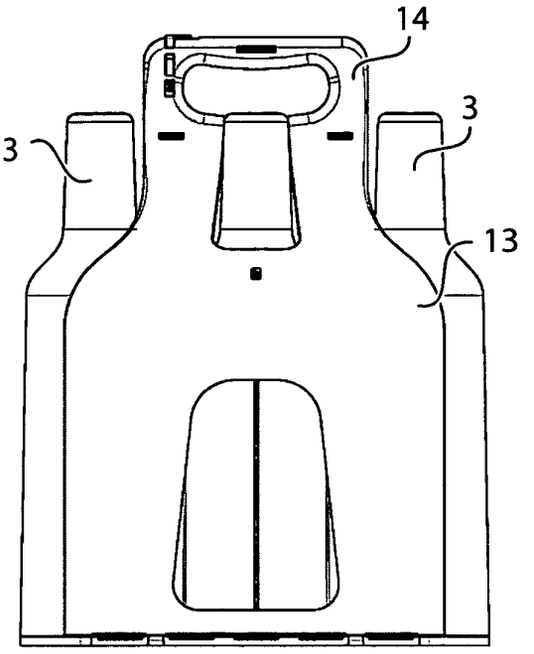

Fig. 18b

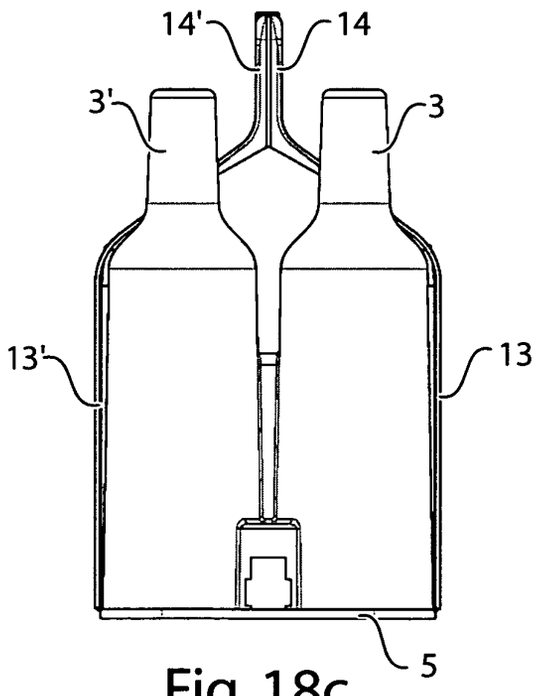

Fig. 18c

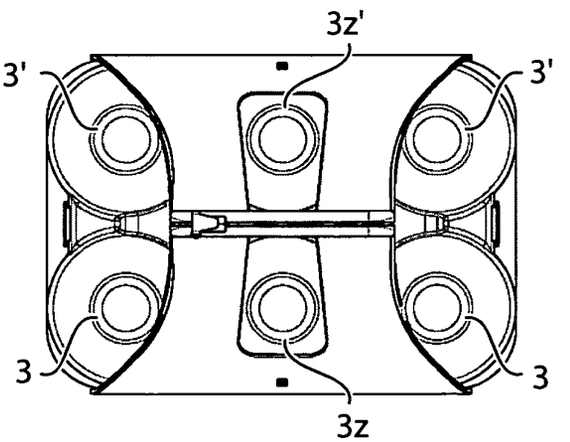

Fig. 18d

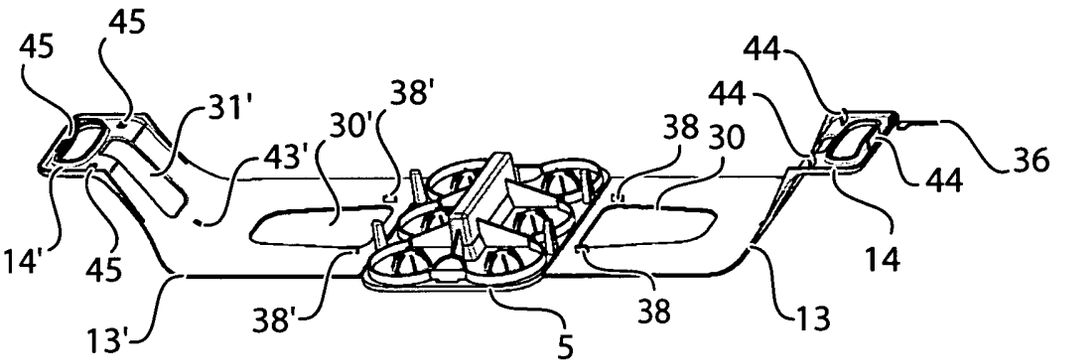
45
45
31'
38'
30'
43'
38
30
44
44
36
44
14'
45
14
13'
38'
38
13
5

Fig. 19

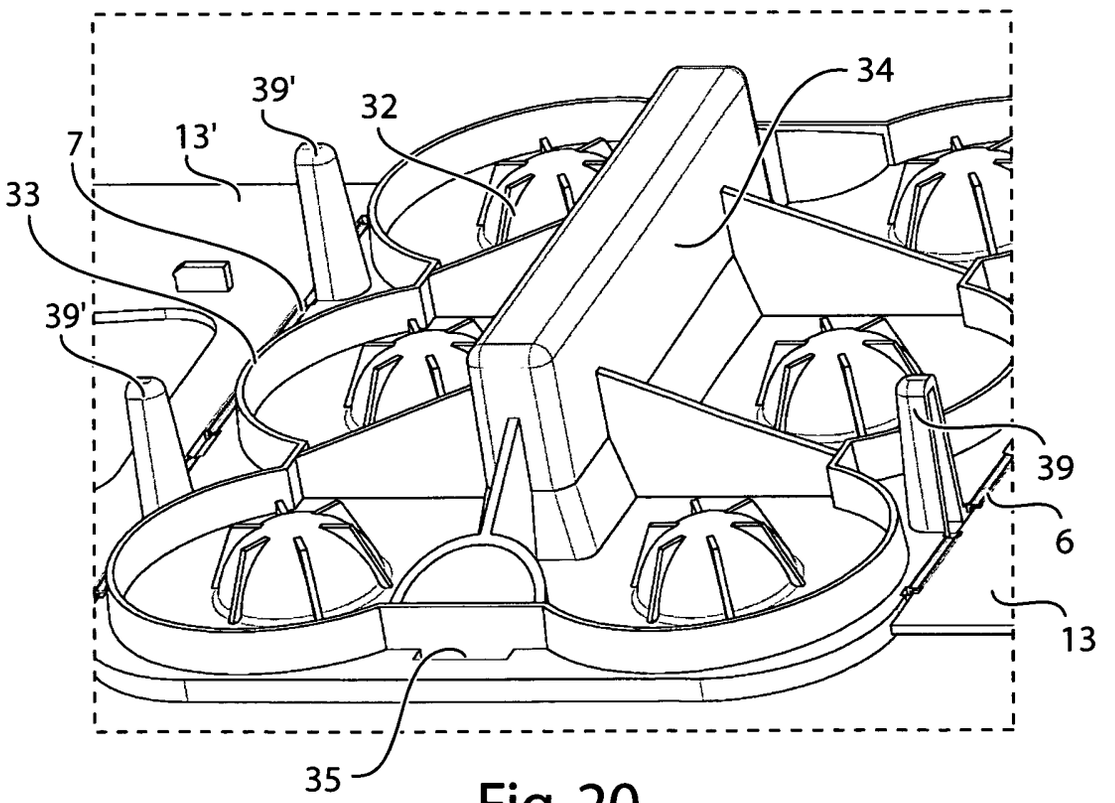
39'
32
34
13'
7
33
39'
39
6
13
35

Fig. 20

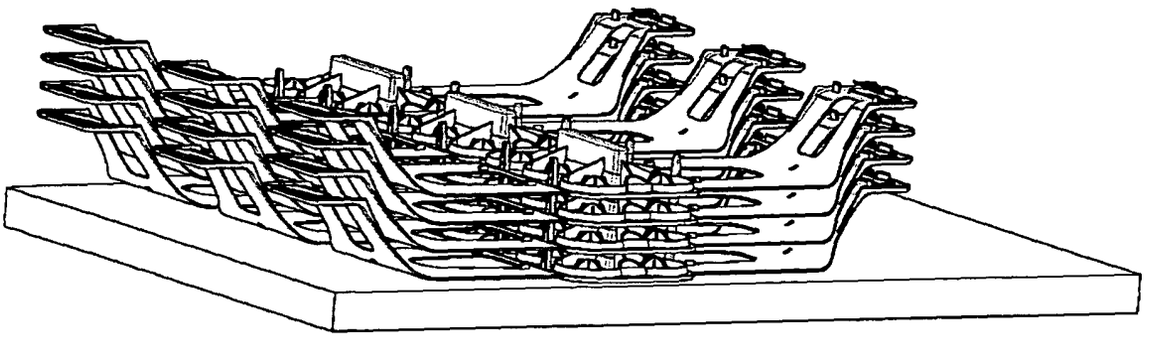

Fig. 21

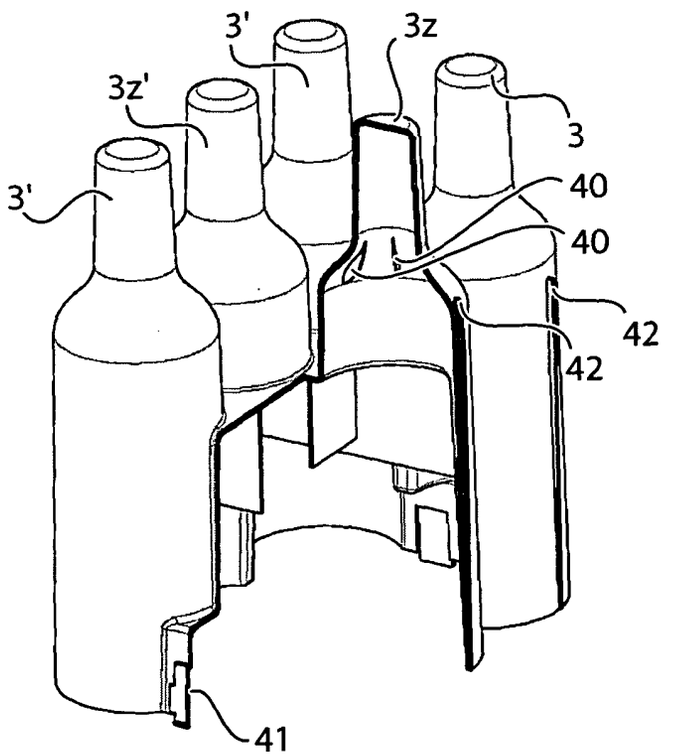

Fig. 22

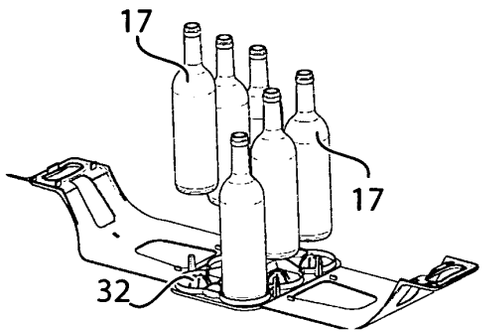

Fig. 23a

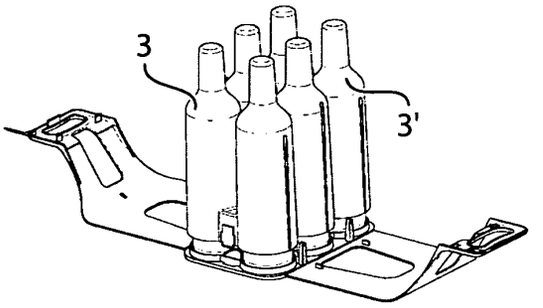

Fig. 23b

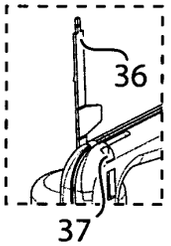

Fig. 23d

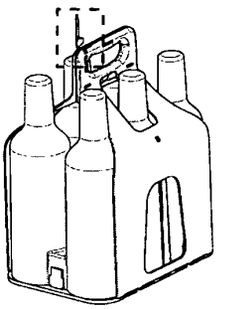

Fig. 23c

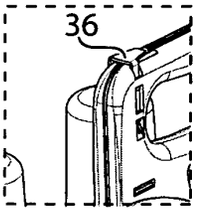

Fig. 23f

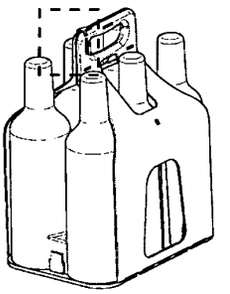

Fig. 23e

Fig. 24d

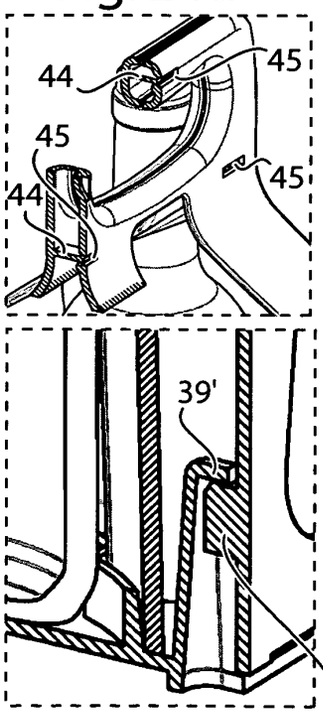

Fig. 24b

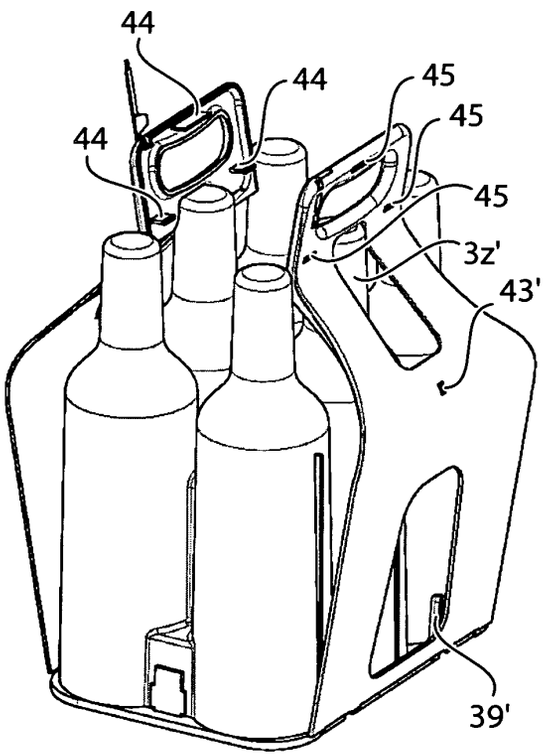

Fig. 24a

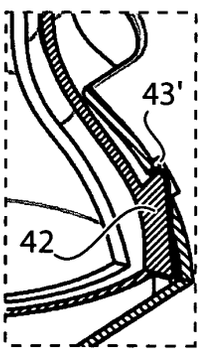

Fig. 24c

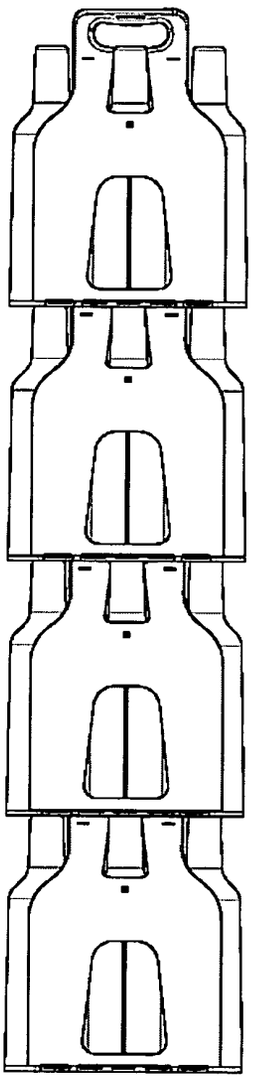

Fig. 25a

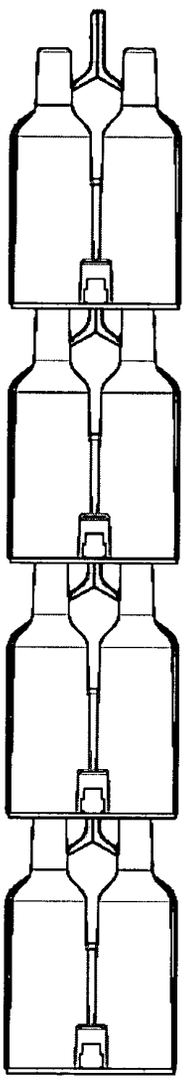

Fig. 25b

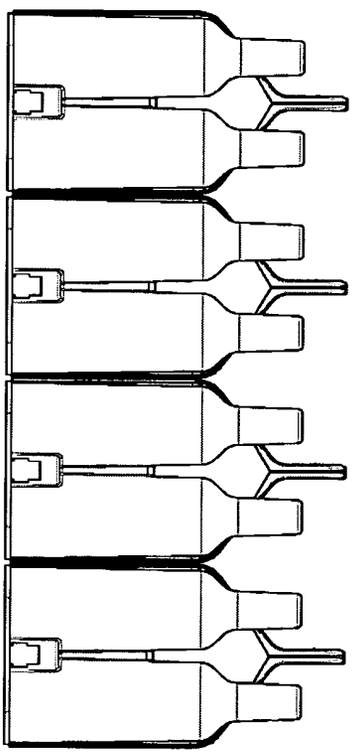

Fig. 26