

BEVERAGE CONTAINER CARRIER

Field of the Invention

The present invention relates to a beverage container carrier having a carrying handle and a plurality of
5 compartments, each adapted to contain a beverage container, in particular a bottle. The invention has been developed especially, but not exclusively, for use in sporting events to carry team's sports bottles and is herein described in that context. However, it is to be
10 appreciated that it is not limited to that use.

Background to the Invention

It is common at indoor and outdoor sporting events to see a person such as a team coach or trainer running onto
15 the playing area with a carrier adapted to hold a plurality of bottles of water or other sports beverage. Such carriers typically have a handle and an even number of compartments arranged in pairs with one compartment of each pair on either side of the central plane in which the
20 handle is mounted. Typical carrying devices include 4, 6 or 8 compartments, each containing a single bottle.

Most available bottle carriers are manufactured using steel wire. Once fully manufactured, the wire skeleton of
25 the bottle carrier is coated using plastic resin. The coating of the wire offers a degree of rust prevention and some protection to the user. Such bottle carriers, especially when used outdoors, are subject to attack from UV light and other damaging conditions. The products are
30 periodically made wet and then dried out, and suffer considerable physical damage during use and transportation. The polymer coating, which naturally has a low mechanical strength, is further weakened by such tough conditions and begins to crack and peel, leaving the wire
35 partially exposed. This renders the bottle carrier difficult to clean and the exposed wire begins to rust, particularly at corners, creating a risk of injury to the

person carrying the bottle carrier and to the athletes collecting bottles from the bottle carrier.

Existing bottle carriers typically can only take one
5 size of bottle and when fully loaded can deform under a relatively low load making it difficult for the user to carry it comfortably.

Bottle carriers are often carried at speed, as it is
10 desirable for coaches and trainers to run onto and off the sports field with minimal disruption to the game. It is therefore desirable for bottle carriers to be ergonomically designed to be easily carried at speed.

15 Summary of the Invention

The present invention provides a beverage container carrier having a central plane which, when carried, is orientated substantially vertically, the container comprising: a handle arranged along a longitudinal axis
20 extending in the central plane; a plurality of compartments, each including a base, an opening opposite the base and a compartment wall extending between the base and the opening, each compartment being adapted to support at least a lower portion of at least one beverage
25 container; at least one compartment disposed on each side of the handle, wherein the openings are disposed above their respective bases and are disposed outwardly from the bases relative to the central plane so that the opening of the at least one compartment on one side of the handle is
30 spaced from the opening of the at least one compartment on other side of the handle, and, in use, beverage containers disposed in the compartments have longitudinal axes disposed at an angle to the central plane; wherein the handle is located proximate the compartments and remains
35 accessible when the carrier is supporting beverage containers that have upper portions that project from the compartments as a result of the orientation of the

compartments and the spacing between the compartment openings.

Because, when carried, the beverage containers are
5 inclined to the central vertical plane, and the handles
are located proximate the compartments, the carrier has a
lower profile than one in which the bottles are supported
vertically. This means that, when full, the carrier is
more easily carried, particularly at speed.

10

In a particular embodiment, the compartments are
arranged such that, when carried, each beverage container
is disposed such that a top end of the beverage container,
where the opening is located, is disposed upwards and
15 angled away from the central plane. It is generally
preferable for the top end of the beverage containers to
face upwards and outwards for ease of access and
prevention of leakage. However, there are possible
advantageous arrangements wherein the containers face
20 downwards. For instance, if the bottles have a tapered
shape at their top ends, then a row of bottles on either
side of the handle may be staggered and arranged such that
the top ends of the bottles cross over to provide a
compact packing arrangement.

25

In a particular embodiment, each compartment is
constructed to entirely surround the sides of a beverage
container. This minimises movement of the beverage
containers during carrying of the carrier.

30

In one form, the compartments are arranged in two
rows, one disposed on each side of the central plane.

The two rows may be staggered with respect to each
35 other, but preferably the compartments are arranged
symmetrically on either side of the central plane, with
the compartments in each row aligned.

In one form, the carrier comprises two sections, each comprising one row of compartments. Preferably, the two sections are identical. The handle could be formed as a separate part, but preferably each section comprises a part of the handle.

In a preferred embodiment, the carrier is constructed entirely of two identical halves which can be joined by snap-fit connectors.

In a preferred embodiment, the sections are, when separate, stackable. Therefore, when disassembled, the sections of the carriers are easy to store and transport.

In one form, each compartment is dimensioned to hold a beverage container of a first size, and comprises a support portion proximate a base of the compartment. In one form the support portion is in the form of a collar which is dimensioned to surround a beverage container of a second, smaller, size. Thereby, the beverage container carrier is adapted to carry beverage containers of two different sizes, the support portion providing a support base for the first beverage container and a surrounding support for the smaller sized containers to minimise its movement during transport.

In one form, the carrier is formed from injection moulded plastics. In one particular form, the plastics contains a UV resistant additive. In one particular form, the plastics also contains an anti-static additive. In a particular form, each compartment is formed as an open webbed structure. This means that the outside of each beverage container is easily visible when the beverage containers are in the carrier, so that particular beverage containers, for example those intended for particular athletes, can easily be identified.

Brief Description of the Drawings

It is convenient to herein describe embodiments of the present invention with reference to the accompanying drawings. The particularity of the drawings and the
5 related description is to be understood as not superseding the preceding broad description of the invention:

In the drawings:

10 Fig. 1 is a plan view of a preferred embodiment of a beverage container carrier;

Fig. 2 is a side view of the beverage container carrier of Fig. 1; and

15

Fig. 3 is a partial end view of the beverage container carrier of Fig. 1.

Detailed Description

20

A beverage container carrier in the form of a bottle carrier 1 comprises a handle 2 and a plurality of compartments 3, each compartment 3 adapted to contain and support a single bottle. The handle 2 is positioned in
25 central plane A-A', which is orientated substantially vertically when the bottle carrier 1 is carried.

The compartments 3 are arranged symmetrically in two rows, one on either side of the central plane A-A', such
30 that the compartments 3 in each row are aligned. In the illustrated embodiment, there are two rows of four compartments, but the bottle carrier could include four or six compartments arranged in two rows of two or three compartments, respectively. More than eight compartments
35 could be used, but this could make the carrier heavier and more unwieldy to carry.

As illustrated in Figure 3, the compartments 3 are angled such that a longitudinal axis B of a bottle 4 placed in the compartment 3 is inclined at an angle β to the vertical central plane A-A'. A preferred range for the
5 angle β is 15° to 45°, more preferably 20° to 40° and optimally substantially 30°. Because the compartments 3 are tilted away from the handle 2, the handle 2 can be positioned at a lower height without the tops of the bottles 4 obstructing use of the handle 2. The handle 2 is
10 therefore positioned closer to the centre of gravity of the carrier 1.

Each compartment 3 includes a base portion 5 for supporting a bottle 4 positioned in the compartment 3, and
15 base portion 5 includes a collar 6 dimensioned to fit a smaller size of bottle. Support portions 7 are located below the collar 6 to support the base of the smaller sized bottle. The perimeter of the collar 6 provides surrounding support for the smaller sized bottle, reducing
20 movement of the smaller sized bottle in the compartment 3 during carrying of the carrier 1.

The outer portions of the compartments 3 have an open webbed structure including openings 8, which enable labels
25 on the bottles to be visible when they are positioned in the compartments 3.

The bottle carrier 1 is injection moulded from polypropylene, preferably including UV and anti-static
30 additives to protect it from attack from sunlight and to prevent it attracting dust, making it easier to clean. The injection moulding process also means that the carrier 1 can be formed in a variety of colours, such as corporate or team colours. A name plate with the name of the team
35 or sponsor can also be clipped to the outside of the carrier 1.

The carrier 1 is formed in two identical, symmetrical, halves which have been designed in such a way to allow the assembly of reversed identical parts. Each half includes four compartments 3 and half of the handle 2 and the two halves are joined along the central plane A-A'. When separate, the two halves are stackable for easy storage and transportation and to reduce the size of packaging required.

10 A series of aligning details and snap-in fittings using prongs ensure that when the two halves of the bottle carrier 1 are pressed together via through holes on the mating part, the carrier will stay assembled under normal use. The snap-in fittings are designed for once only
15 assembly and have no non-destructive means for disassembly.

It is to be understood that a reference herein to a prior art publication does not constitute an admission
20 that the publication forms a part of the common general knowledge in the art in Australia, or any other country.

In the claims which follow and in the preceding description of the invention, except where the context
25 requires otherwise due to express language or necessary implication, the word "comprise" or variations such as "comprises" or "comprising" is used in an inclusive sense, i.e. to specify the presence of the stated features but not to preclude the presence or addition of further
30 features in various embodiments of the invention.

Variations and modifications may be made to the parts previously described without departing from the spirit or ambit of the invention.

CLAIMS:

1. A beverage container carrier having a central plane which, when carried, is orientated substantially
5 vertically, the container comprising:

a handle arranged along a longitudinal axis extending in the central plane;

10 a plurality of compartments, each including a base, an opening opposite said base and a compartment wall extending between said base and said opening, each compartment being adapted to support at least a lower
15 portion of at least one beverage container;

at least one said compartment disposed on each side of the handle, wherein the openings are disposed above their respective bases and are disposed outwardly from said bases relative to said central plane so that the
20 opening of the at least one compartment on one side of the handle is spaced from the opening of the at least one compartment on other side of the handle, and, in use, beverage containers disposed in the compartments have longitudinal axes disposed at an angle to the central
25 plane;

wherein the handle is located proximate the compartments and remains accessible when the carrier is supporting beverage containers that have upper portions
30 that project from the compartments as a result of the orientation of the compartments and the spacing between the compartment openings.

2. A beverage container carrier according to claim 1,
35 wherein the compartments are orientated so that beverage containers when disposed in the compartments are at an angle from 15°-45° from the central plane.

3. A beverage container carrier according to claim 1 or 2, wherein the compartments are orientated so that beverage containers when disposed in the compartments are at an angle from 20°-40° from the central plane.

5

4. A beverage container carrier according to any preceding claim, wherein each compartment is constructed to entirely surround the sides of a beverage container.

10 5. A beverage container carrier according to any one of the preceding claims, wherein the compartments are arranged symmetrically with respect to the central plane.

15 6. A beverage container carrier according to any one of the preceding claims, wherein the compartments are arranged in two rows, one disposed on each side of the central plane.

20 7. A beverage container carrier claim 6, wherein the compartments in each row are aligned.

8. A beverage container carrier according to any one of the preceding claims, comprising two sections, each comprising one row of compartments.

25

9. A beverage container carrier according to claim 8, wherein the two sections are identical.

30 10. A beverage container carrier according to claim 8 or 9, wherein each section comprises a part of the handle.

11. A beverage container carrier according to any one of claims 8 to 10, wherein the sections are, when separate, stackable.

35

12. A beverage container carrier according to any preceding claim, wherein each compartment is dimensioned to hold a beverage container of a first size, and

comprises a support portion proximate a base of the compartment, the support portion being in the form of a collar dimensioned to extend about a beverage container of a second, smaller, size.

5

13. A beverage container carrier according to any preceding claim, wherein the carrier is formed from injection moulded plastics.

10 14. A beverage container carrier according to claim 13, wherein the plastics contains a UV resistant additive.

15. A beverage container carrier according to claim 13 or 14, wherein the plastics contains an anti-static additive.

15

16. A beverage container carrier according to any preceding claim, wherein at least a portion of each compartment is formed as an open webbed structure.