A container body (1) having an upper part defining a container opening (4) and a carrier member (2), which is formed integrally with the upper part of the container body (1) at its outer surface. The carrier member (2) can be stretched from a starting position into a position of use, and the carrier member (2) is defined by the circumference of a flange and by weakening or cut lines defining two radially spaced concentric arcs of circles (6). In the position of use, the carrier member (2) allows the container to be carried e.g. in a belt.
A CONTAINER BODY WITH AN INTEGRATED HANDLE

Field of the Invention

The present invention relates to a container body, such as a can or a bottle, which is provided with a carrier member or handle to facilitate carrying of the container, which may, for example, contain food or drinks.

Description of Prior Art

Various types of carrier members for carrying bottles and other containers are known. As an example WO 2004/035413 discloses a separate carrier member adapted to releasably engage with the cap or crown cork of one or more bottles. Thus, the bottles have to be connected to the carrier member by the manufacturer or the consumer in a separate operation.

Summary of the Invention

The object of the present invention is to provide a container having a carrier integrally formed therewith. Thus, the present invention provides a container body having an upper part defining a container opening and a carrier member, which is formed integrally with the upper part of the container body at its outer surface, the carrier member being at least partly defined by a weakening line or cut line such that the carrier member may be stretched from a starting position into a position of use.

This means that the container body may be manufactured with the integral carrier member arranged in a compact or retracted starting position, in which it does not take up much space, and when the carrier member is to be used it may be stretched from the compact starting position into an extended position of use. The stretched carrier member may, for example, be used by the consumer as a handgrip or for attaching the container body to the clothing, such as a belt, of the consumer.

The carrier member may, for example, be in the form of a string, which in the starting position of the carrier member is attached around the upper part of the container body or to an edge of the upper part, such as the neck of a bottle or edge of a can, and which may have a loop or handle at its free end. Along its length the string may be connected to the container body via a weakening line or score line so as to form a kind of flange, and/or be separated there from by a cut. When the consumer wants to carry the container body filled
with for example a drink or food and closed by a suitable closure he/she may grip the loop or handle, break the weakening line and stretch the string.

In a preferred embodiment the carrier member may in its starting position form a flange or flap extending outwardly from the outer surface of the container body, and this flange or flap may then be provided with such weakening lines and/or cut lines that a useful carrier member is formed when it is extended or stretched so that the flange or flap breaks along the weakening lines or score lines.

In principle, the container body may be made from any suitable material, such as metal. In one embodiment, the container body is made from plastic material, for example by injection moulding or blow moulding. As an example, the container may be of the disposable type to be used only once for food or drinks. Thus, the container body may be a bottle, which is closed by a closure, such as a cap or screw cap. In another embodiment, the container body is made of metal and comprises a can having an upper part with a traditional opening arrangement with a pulling string.

The carrier member preferably has a gripping member or fastening member at its free end. As an example, the carrier member may comprise a loop-shaped part. Thus, the carrier member may be defined by a single loop. More preferred, however, the carrier member is a chain-like member comprising two or more interconnected loop-shaped links, so that the carrier member is more elongated in its position of use. When in its starting position the carrier member forms an annular flange the loop-shaped part may be defined by the circumference of the flange and by a weakening line or a cut line defining an arc of a circle substantially concentric with said circumference.

In a preferred embodiment the carrier member is defined by the circumference of the annular flange and by weakening lines or cut lines defining two or more radially spaced, substantially mutually concentric arcs of circles. When the carrier member is stretched into its position of use by breaking the flange along the weakening lines or score lines, an elongated chain-like member is formed.

Alternatively, the carrier member may form a flap or an ear, and also in this case the weakening lines or cuts may be such that a chain-like carrier member is formed when stretched into its position of use. As an example, by means of weakening lines or cut lines the flap or ear may be divided into a U-shaped loop part comprising a pair of branches and a transverse bottom part, and a connecting part, which is located between the branches of the U-shaped loop part so as to connect the transverse bottom part with the container body.
As mentioned above, the container body according to the invention may by any conventional method, such as deep drawing, injection moulding or blow moulding. In case of moulding, the weakening or score lines or the cut lines are advantageously formed by the moulding process, for example by complementary shaped ridges on the inner mould surface. Alternatively, the weakening lines or cut lines may be formed by a separate operation, such as a cutting or stamping operation.

Instead of moulding the carrier member with the container body, the carrier member may be formed integrally with the container body by fixedly attaching it to the body after the body has been provided. The carrier member may be fixed attached to the body by means of adhesive and/or by means of threads. The carrier member may be made of plastic, metal, cardboard or a composite material.

The various shapes of the carrier member shown and described could of course also be attached to the container body in a way such that they can be demounted from the container body again.

According to a second aspect, the present invention relates to a container body having an upper part defining a container opening and a carrier member, which is formed integrally with the upper part of the container body at its outer surface and can be stretched from a starting position into a position of use.

The carrier member is preferably at least partly defined by a weakening line or cut line such that it can be stretched from the starting position into the position of use.

The carrier member according to the second aspect may comprise any of the elements of the carrier member according to any of claims 2-17.

According to a third aspect, the present invention relates to a carrier member to be integrally formed with an upper part of a container body, the carrier member comprising any of the elements of the carrier member according to any of claims 1-17.

Brief Description of the Drawings

The invention will now be further described with reference to the drawings, wherein

Fig. 1 shows a basic form for a container according to the invention having a carrier member in its starting position,
Fig. 2 shows a basic form for a container according to the invention having a carrier member in its position of use,

Fig. 3 shows the container of fig. 1 from above,

Fig. 4 shows an embodiment of the carrier member according to the invention,

Figs. 5-6 show a bottle according to the invention wherein the carrier member is in its position of use and starting position, respectively,

Figs. 7-8 show a bottle according to the invention with the carrier member in its starting position and position of use, respectively, and

Figs. 9-10 show a can according to the invention with the carrier member in its starting position and position of use, respectively, and

Referring to figs. 1-3, a basic form 1 of the container is shown having a carrier member 2 integrally formed in its upper part 3 defining a container opening 4. The basic form 1 is to be blow moulded e.g. into a container as shown in figs. 7-8.

In the starting position, the carrier member 2 is defined by the circumference of a flange and by weakening or cut lines 5 defining two radially spaced concentric arcs of circles 6. The lines 5 are to be broken when the carrier member is going from its starting position in fig. 1 to the position of use in fig. 2. In the position of use, the carrier member 2 allows the container to be carried in a belt.

Fig. 4 shows a carrier member 2 formed with a flap or an ear, the weakening lines or cuts 5 are such that a chain-like carrier member is formed when stretched into its position of use. The flap or ear is, by means of the lines 5, divided into a U-shaped loop part 6 comprising a pair of branches 7 and a transverse bottom part 8, and a connecting part 9, which is located between the branches of the U-shaped loop part so as to connect the transverse bottom part 8 with the container body 1.

Figs. 5-6 shows the container according to the invention from above, wherein the basic form 1 shown figs. 1-2 now has been blow-moulded into a container/bottle 1. The carrier member 2 is integrally formed with the upper part 3 of the bottle defining the opening 4. Fig. 5 shows the carrier member 2 in its position of use and fig. 6 shows the carrier member 2 in its starting position where the weakening lines 5 are not broken.
Figs. 7-8 shows the bottle of figs. 5-6 from the side, where the carrier member 2 is in its starting position and position of use, respectively.

Figs. 9-10 show a can 1 having a carrier member 2 mounted thereto according to the invention, and wherein the carrier member 2 is shown in a starting position and a position of use. The carrier member 2 is mounted to the upper edge of the upper part of the can defining an opening (not shown), preferably a traditional opening arrangement for a can. The carrier member 2 may be mounted to the can by moulding or it may be attached to the upper edge by means of an adhesive or clicked on thereto. As shown, the carrier member 2 is positioned in the upper part and encircled by the upper edge.

In the starting position, the carrier member 2 is defined by the circumference of a flange and by weakening or cut lines 5 defining two radially spaced concentric arcs of circles 6. The lines 5 are to be broken when the carrier member is going from its starting position in fig. 9 to the position of use in fig. 10. In the position of use, the carrier member 2 allows the can to be carried in e.g. a belt.
CLAIMS

1. A container body having:

5  • an upper part defining a container opening and
• a carrier member, which is formed integrally with the upper part of the container body at its outer surface, the carrier member being at least partly defined by a weakening line or cut line such that the carrier member may be stretched from a starting position into a position of use.

10 2. A container body according to claim 1, wherein in its starting position the carrier member forms a flange or flap extending outwardly from the outer surface of the container body.

15 3. A container body according to claim 1 or 2, which is made from plastic material.

4. A container body according to any of the claims 1-3, wherein the carrier member comprises a loop-shaped part.

20 5. A container body according to any of the claims 1-4, wherein the carrier member is a chain-like member comprising two or more interconnected loop-shaped links.

6. A container body according to claim 4, wherein in its starting position the carrier member forms an annular flange, the loop-shaped part being defined by the circumference of the flange and a weakening line or a cut line defining an arc of a circle substantially concentric with said circumference.

7. A container body according to any of the claims 4-6, wherein the carrier member is defined by the circumference of the flange and by weakening lines or cut lines defining two or more radially spaced, substantially mutually concentric arcs of circles.

8. A container body according to any of the claims 1-5, wherein the carrier member forms a flap, which by means of weakening lines or cut lines is divided into a U-shaped loop part comprising a pair of branches and a transverse bottom part, and a connecting part, which is located between the branches of the U-shaped loop part so as to connect the transverse bottom part with the container body.

9. A container according to any of claims 1-8, wherein the container body is a bottle or a can for containing e.g. beer or soda.
10. A container according to claim 9, wherein the carrier member is attached to at least a part of a circumferentially extending edge of the upper part of the can and being positioned internally in the upper part in relation to said edge.

11. A container according to any of claims 1-10, wherein the carrier member is formed integrally with the upper part by means of a fixed attachment thereto.

12. A container according to any of claims 1-10, wherein the carrier member is formed integrally with the upper part by means of moulding.

13. A method of moulding a container according to any of claims 1-10 and 12, wherein the weakening lines or cut lines are formed by the moulding process.

14. A method of moulding a container according to any of claims 1-12, wherein the weakening lines or cut lines are formed by a separate operation.

15. A method of providing a container according to any of claims 1-11, wherein the carrier member is fixed attached to the container body after moulding the container body.

16. A method according to claim 15, wherein the carrier member is fixed attached to the body by means of adhesive.

17. A method according to claim 15 or 16, wherein the carrier member is fixed attached to the body by means of threads.
**INTERNATIONAL SEARCH REPORT**

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC 7 B65D23/00 B65D23/10 B65D25/22 B65D25/28

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B65D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

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Date of the actual completion of the international search

15 September 2005

Date of mailing of the international search report

28/09/2005

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