BOTTLE CONNECTING APPARATUS AND METHOD

Inventor: Vincent V. Ihli, Pahrump, NV (US)

Correspondence Address:
WEISS & MOY PC
4204 NORTH BROWN AVENUE
SCOTTSDALE, AZ 85251 (US)

Abstract

A bottle connecting apparatus and method. A bottle connector has a first threaded end and a second threaded end, and may be used to connect spouts of two bottles. In one embodiment, the connector has a passage therethrough, to permit the passage of the contents of one bottle through the connector and into the second bottle. In another embodiment, the connector has a barrier therein, so that fluid may not pass through.
BOTTLE CONNECTING APPARATUS AND METHOD

FIELD OF THE INVENTION

[0001] The present invention relates to fluid-containing bottles (or the like) and, more particularly, to an apparatus and method for coupling two fluid-containing bottles together at the spouts thereof.

BACKGROUND OF THE INVENTION

[0002] Fluid-containing bottles, typically plastic-bottles used for holding sodas or other liquids, are well-known. At present, the two-liter size of plastic bottle is particularly popular.

[0003] When a plurality of such bottles are used for an event such as a party, it is often the case that more than one bottle of a particular beverage type becomes opened, yet is not completely emptied of its contents. Because two-liter bottles occupy a significant amount of space within a typical refrigerator, it can be inconvenient to be required to store a plurality of partially-filled bottles.

[0004] One solution is to pour the remnants of one bottle into another bottle containing the same liquid. However, this can be a messy process. Using a funnel can reduce the mess, but a funnel will not always be available, and use of the funnel would generally require two hands—one to steady the funnel and the other to hold the bottle that is being emptied. If the operation is not performed in a sufficiently steady way, there may still be spillage.

[0005] In addition, in this recycling-conscious period, there are potential uses for emptied plastic bottles. If two emptied bottles could be reliably coupled together about the spouts of each, it would be possible to create a variety of useful and enjoyable apparatuses therewith.

[0006] The present invention satisfies these needs and provides other, related, advantages.

SUMMARY OF THE INVENTION

[0007] In accordance with an embodiment of the present invention, a bottle connecting apparatus is disclosed. The apparatus comprises, in combination: a first threaded end; wherein the first threaded end is configured to be removably coupled to a spout of a first bottle in a relatively fluid-tight manner; a second threaded end opposite the first threaded end; wherein the second threaded end is configured to be removably coupled to a spout of a second bottle in a relatively fluid-tight manner; and a barrier between the first threaded end and the second threaded end preventing passage of fluid from the first threaded end to the second threaded end; wherein the first threaded end, second threaded end, and the barrier comprise a one-piece, molded assembly.

[0009] In accordance with a further embodiment of the present invention, a method for transferring the contents of a first bottle to a second bottle is disclosed. The method comprises: affixing a first threaded end of a bottle connecting apparatus to a spout of a first bottle in a relatively fluid-tight manner; affixing a second threaded end of the bottle connecting apparatus to a spout of a second bottle in a relatively fluid-tight manner; and raising the first bottle so that contents thereof exit the spout, pass through the first threaded end, pass through a passage between the first threaded end and the second threaded end, pass through the second threaded end, and enter the second bottle.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] FIG. 1 is a perspective view of two equal-sized bottles connected together utilizing a bottle connecting apparatus consistent with an embodiment of the present invention.

[0011] FIG. 2 is side view of two different-sized bottles connected together utilizing a bottle connecting apparatus consistent with an embodiment of the present invention.

[0012] FIG. 3 is a side view illustrating grasping of a bottle connecting apparatus consistent with an embodiment of the present invention.

[0013] FIG. 4 is a side, cross-sectional view of a bottle connecting apparatus consistent with an embodiment of the present invention, having a barrier therein to prevent the passage of fluid from a first end thereof to a second end thereof.

[0014] FIG. 5 is a side, cross-sectional view of a bottle connecting apparatus consistent with an embodiment of the present invention, having a passage therein to permit the passage of fluid from a first end thereof to a second end thereof.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0015] Referring first to FIG. 5, an embodiment of a bottle connector apparatus 10 ("apparatus 10") consistent with an embodiment of the present invention is shown. In this embodiment, the apparatus 10 has a first threaded end 12 and a second threaded end 14. As seen in this figure, the threading is located on the interior of the apparatus 10, so that apparatus 10 may be fitted over and threadably coupled to the spout of a bottle of the type shown, by way of example, in FIG. 1 or 2. Preferably, the threading in the first threaded end 12 is in the opposite direction of the threading in the second threaded area 14, so that one end may conveniently be tightened without thereby loosening the opposite end.

[0016] The apparatus 10 has a passage 16 between the first threaded end 12 and second threaded end 14. In this fashion, fluid entering first threaded end 12 may pass through passage 16, and then pass through second threaded end 14.
It is preferred that the apparatus 10 be formed into a one-piece assembly, preferably through a molding type of process. It is preferred that the apparatus 10 be formed from plastic.

As shown by way of example in FIGS. 1 and 3, the apparatus 10 may be used to connect, in a relatively fluid-tight manner, a first bottle 18 and a second bottle 20. After connection has occurred, fluid may pass from the first bottle 18 to the second bottle 20. This would be regarded as particularly desirable where it was desired to empty the contents of the first bottle 18 into the second bottle 20. A user may wish to do so where both first bottle 18 and second bottle 20 contain the same type of soft-drink or other liquid, and second bottle 20 is more full than first bottle 18.

The transfer may be accomplished by raising the first bottle 18 until its contents begin to pour through the apparatus 10. It would be considered particularly convenient to raise first bottle 18 until it was directly above second bottle 20, with second bottle 20 resting on a surface. In this manner, the contents of first bottle 18 could be transferred without the need for a user to be holding either bottle in position during the transfer.

As shown in FIGS. 1 and 3, the apparatus 10 may be used with a first bottle 18 and second bottle 20 that are the same size. Alternatively, as shown in FIG. 2, the apparatus 10 may be utilized with a first bottle 22 and a second bottle 24, wherein the two bottles are differently sized. This may be particularly desired where, for example, the contents of a plurality of bottles are to be poured into a relatively large, second bottle 24, which will serve as a storage container.

Referring now to FIG. 4, an embodiment of a bottle connector apparatus 30 ("apparatus 30") consistent with an embodiment of the present invention is shown. In this embodiment, the apparatus 30 has a first threaded end 32 and a second threaded end 34. As with the apparatus 10, the threading is located on the interior of the apparatus 30, so that apparatus 10 may be fitted over and threadably coupled to the spout of a bottle of the type shown, by way of example, in FIG. 1 or 3. Preferably, and again as discussed above, the threading in the first threaded end 32 is in the opposite direction of the threading in the second threaded area 34, so that one end may conveniently be tightened without thereby loosening the opposite end.

The apparatus 30 has a barrier 36 between the first threaded end 32 and second threaded end 34. In this fashion, fluid entering first threaded end 32 is prevented by barrier 36 from passing through the apparatus 30, and thereafter through the second threaded end 34.

It is preferred that the apparatus 30, like the apparatus 10, be formed into a one-piece assembly, preferably through a molding type of process. It is preferred that the apparatus 30 be formed from plastic.

Apparatus 30 may be particularly useful in creating new uses for bottles such as bottles 18 and 20. For example, a form of dumbbell may be created by placing equal amounts of fluid in first bottle 18 and second bottle 20, connecting apparatus 30 therebetween, and thereafter grasping apparatus 30 (see FIG. 3) and raising the entire assembly.

This type of assembly may also be used as a water weight, a cheerleaders baton, to form part of a raft, and so on.

I claim:

1. A bottle connecting apparatus comprising, in combination:

   a first threaded end;

   wherein the first threaded end is configured to be removably coupled to a spout of a first bottle in a relatively fluid-tight manner;

   a second threaded end opposite the first threaded end;

   wherein the second threaded end is configured to be removably coupled to a spout of a second bottle in a relatively fluid-tight manner;

   a passage between the first threaded end and the second threaded end permitting passage of fluid from the first threaded end to the second threaded end;

   wherein the first threaded end, second threaded end, and the passage comprise a one-piece, molded assembly.

2. The apparatus of claim 1 wherein threads on said first threaded end run in a first direction, and threaded on said second threaded end run in a second, opposite direction.

3. A bottle connecting apparatus comprising, in combination:

   a first threaded end;

   wherein the first threaded end is configured to be removably coupled to a spout of a first bottle in a relatively fluid-tight manner;

   a second threaded end opposite the first threaded end;

   wherein the second threaded end is configured to be removably coupled to a spout of a second bottle in a relatively fluid-tight manner;

   a barrier between the first threaded end and the second threaded end preventing passage of fluid from the first threaded end to the second threaded end;

   wherein the first threaded end, second threaded end, and the barrier comprise a one-piece, molded assembly.

4. The apparatus of claim 3 wherein threads on said first threaded end run in a first direction, and threaded on said second threaded end run in a second, opposite direction.

5. A method for transferring the contents of a first bottle to a second bottle comprising:

   affixing a first threaded end of a bottle connecting apparatus to a spout of a first bottle in a relatively fluid-tight manner;

   affixing a second threaded end of the bottle connecting apparatus to a spout of a second bottle in a relatively fluid-tight manner; and

   raising the first bottle so that contents thereof exit the spout, pass through the first threaded end, pass through a passage between the first threaded end and the second threaded end, pass through the second threaded end, and enter the second bottle.