

Bag for carrying beverage cup

BACKGROUND OF THE INVENTION

5 The present invention relates to a bag for carrying beverage cups, especially to a bag for carrying beverage cups formed by a ring part and an inclined handle so that a tapered beverage cup is inserted into the ring part for easy carrying.

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Drinks such as black tea, or jelly pearl milk tea are quite popular now. Generally, drinks are filled in a plastic beverage cup shaped like a tapered cylinder in which the circular cross section at the top is smaller
15 in diameter than that at the bottom. Then a plastic sheet is covered on an opening of the beverage cup by a sealing machine. Thus people can insert the straw to drink.

20 For easy carrying of users, generally a narrow plastic

bag with a handle is used to load a beverage cup. If there is more than one cup, a bag with enough depth is used to load the cups. However, cups inside such kind bag are easy to incline due to large margin. And
5 the longer than bag is, the more material it uses. Thus the cost is increased. The Taiwanese patent publication No. 577436 and No. M248749 have revealed solutions. However, the effect is not so perfect and the cost is increased due to difficulties in
10 mass production.

SUMMARY OF THE INVENTION

It is therefore a primary object of the present
15 invention to provide a bag for carrying beverage cups composed of a ring part and an inclined handle that are integrated with each other. When a tapered beverage cup is put into an opening on top of the ring part, the ring part automatically strings and locks on
20 upper part of the beverage cup with larger diameter.

The inclined handle extends from top of the ring part.
When the ring part is extended, the inclined handle is
also extended to form an arch part for being held over
the ring part. Thus the manufacturing process is
5 simplified, the device is easy to be mass produced,
and the cost is down.

BRIEF DESCRIPTION OF THE DRAWINGS

10 Fig. 1 is a schematic drawing showing front view of
an embodiment before use according to the present
invention;

Fig. 2 is a schematic drawing showing how the
embodiment in Fig. 1 is formed by cutting;

15 Fig. 3 is a schematic drawing showing the
embodiment in Fig. 1 being extended;

Fig. 3A is a schematic drawing showing the
embodiment in Fig. 3 being used;

Fig. 4 is a schematic drawing showing front view of
20 another embodiment before use according to the

present invention;

Fig. 5 is a schematic drawing showing how the embodiment in Fig. 4 is formed by cutting;

Fig. 6 is a schematic drawing showing front view of a
5 further embodiment before use according to the present invention;

Fig. 7 is a schematic drawing showing how the embodiment in Fig. 6 is formed by cutting;

Fig. 8 is a schematic drawing showing the
10 embodiment in Fig. 6 being extended;

Fig.8A is a schematic drawing showing the embodiment in Fig. 8 being used;

Fig. 9 is another schematic drawing showing how the embodiment in Fig. 1 is formed by cutting;

15 Fig. 10 is a schematic drawing showing front view of the embodiment in Fig. 9 after being cut;

Fig. 11 is a schematic drawing showing front view of a two-cup style bag of an embodiment according to the present invention;

20 Fig. 12 is a schematic drawing showing how the

embodiment in Fig. 1 is formed by cutting;

Fig. 13 is a schematic drawing showing the embodiment in Fig. 11 being used;

Fig. 14 is a schematic drawing showing front view of
5 a two-cup style bag of another embodiment according to the present invention;

Fig. 15 is a schematic drawing showing how the embodiment in Fig. 14 is formed by cutting;

Fig. 16 is a schematic drawing showing the
10 embodiment in Fig. 14 being used.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

15 Refer from Fig. 1 to Fig. 3A, a bag for carrying beverage cups 1 according to the present invention includes a ring part 10 and an inclined handle 11. The bag for carrying beverage cups 1 can be formed by cutting and processing of a cylindrical intermediate
20 product 1a made of paper or plastic, as shown in Fig.

2. The cylindrical intermediate product 1a is formed by a cylinder compressed into a flat double-layer sheet with a fold line respectively on left and right sides. Then by cutting knives or dies, the cylindrical intermediate product 1a is cut into a bag 1. As shown in Fig. 1, the bag 1 is a flat sheet having an upper layer and a lower layer. And at the edges of the bag 1, only line segments 12, 13, 14 are fold lines. That's fold lines on left and right sides of the cylindrical intermediate product 1a not being cut yet. The rest line segments 15, 16, 17, 18 are cut by cutting knives or dies so that the upper layer doesn't connect with the lower layer. Therefore, the ring part 10 becomes a ring with certain diameter by extension of the line segments 12, 13, 14, as shown in Fig. 3. The inclined handle 11 ranges from top of the ring part 10 to the line segment 14. The line segments 12, 14 are located on the fold line of the cylindrical intermediate product 1a. When the ring part 10 is extended from a flat status in Fig. 1 to an extended status in Fig. 3,

the inclined handle 11 is also extended to form an arch over the ring part 10.

Refer to Fig. 3 & Fig. 3A, a tapered beverage cup 5 with corresponding size is set from opening over the ring part 10 so that the ring part 10 locks and strings upper part 51 of the beverage cup 5 with larger diameter. That means horizontal lines 16a, 17a of the line segments 16, 17 lock and tie up a projecting rim 52 of the beverage cup 5. Because the handle 11 is inclined, it's easy and convenient to put the beverage cup 5 into the ring part 10. Moreover, during manufacturing processes, a connecting line 14a of the line segment 14 on edge of the cylindrical intermediate product 1a saves one more step-no need to go through hot sealing one more time. The arched handle 11 is connected by the connecting line 14a. Thus the manufacturing process is simplified, convenient for mass production with lower cost.

Refer to Fig. 4 & Fig. 5, a bag 2 for carrying beverage cups of another embodiment has the same structure with the bag 1. The width of the handle 11 and the connecting locations of the ring part 10 are not restricted and are able to be adjusted according to requirements of style.

Refer from Fig. 6 to Fig. 8A, a bag 3 for carrying beverage cups includes a ring part 10 and an inclined handle 11, the same with the bags 1, 2. A cut 19 is arranged on the inclined handle 11 for insertion of fingers so as to carry easily. The cut-off line segment 17 and a horizontal line 17a thereof are replaced by at least one horizontal slot 20 so that the horizontal slot 20 locks the projecting rim 52 of the beverage cup 5.

Refer to Fig. 9 & Fig. 10, while cutting the cylindrical intermediate product 1a by cutting knives or dies, the inclined handles 11 of two bags 1 are

arranged continuously and in parallel, located between the two ring parts 10. Thus the two parallel inclined handles 11 share the same cutting line of the cutting die 21. Two bags 1 are formed at the same
5 time. Thus the cutting process is simplified and material loss is reduced.

Refer from Fig. 11 to Fig. 13, a two-cup style bag 4 is formed by connection of two bags 1 in Fig. 1. The
10 cylindrical intermediate product 1a is cut by cutting knives or dies while tops of the inclined handle 11 of the two bags 1 are connected with each other to form a fold line 22 to replace the original line segment 18 and the two bags are arranged symmetrical to each
15 other, as shown in Fig. 11 & Fig. 12. In usage, as shown in Fig. 13, reverse and fold the two bags 1 along the fold line 22 so that the two ring parts 10 are reversed with the back side in parallel. Therefore, two beverage cups are set at the same time and users
20 can bring them through the cut 19 or the fold line 22.

Refer from Fig. 14 to Fig. 16, another two-cup style bag 6 are formed by two bags 3 in Fig. 6 with the same function of the two-cup style bag 4.

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Additional advantages and modifications will readily occur to those skilled in the art. Therefore, the invention in its broader aspects is not limited to the specific details, and representative devices shown
10 and described herein. Accordingly, various modifications may be made without departing from the spirit or scope of the general inventive concept as defined by the appended claims and their equivalents.

CLAIM

What is claimed is:

1. A bag for carrying beverage cups made from
5 plastic or paper cylindrical intermediate product
being cut by cutting knives or dies comprising a
ring part and an inclined handle;
the ring part is for loading a tapered beverage cup
in which the circular cross section at the top is
10 smaller in diameter than that at the bottom and
binding an upper part of the beverage cup with
larger diameter after being extended;
the inclined handle is extended from top of the ring
part to a line segment of a fold line; when the ring
15 part is extended, the inclined handle is also
extended to form an arch over the ring part.
2. The device as claimed in claim 1, wherein width,
an inclined angle and connecting locations to the
ring part of the inclined handle are not restricted.
- 20 3. The device as claimed in claim 1, wherein a cut is

disposed on the inclined handle.

4. The device as claimed in claim 1, wherein while
the cylindrical intermediate product being cut by
cutting knives or dies, the inclined handles of two
5 bags are arranged continuously and in parallel,
located between the two ring parts so that the two
parallel inclined handles share the same cutting
line of the cutting die.

5. The device as claimed in claim 1, wherein while
10 being cut by cutting knives or dies, tops of the
inclined handle of the two bags are connected with
each other to form a fold line; thereby reverse and
fold the two bags along the fold line so that the two
ring parts are reversed with the back side in
15 parallel for loading two beverage cups at the same
time.