Airtight container cover that is made by double injection molding method

Inventors: Jaegu Moon, Seoul (KR); Junggeum Park, Seoul (KR)

Correspondence Address:
SHERIDAN ROSS PC
1560 BROADWAY
SUITE 1200
DENVER, CO 80202

Appl. No.: 10/240,469

PCT Filed: Mar. 30, 2001

PCT No.: PCT/KR01/00539

Foreign Application Priority Data
Apr. 1, 2000 (KR) 2000/17182

Publication Classification
Int. Cl. B65D 43/08
U.S. Cl. 220/796; 220/806

ABSTRACT
A thin packing cover needs some pressing and bending process to stick the packing material into the main cover. This invention is the packing cover which can be manufactured without bending or pressing the main cover by the processing of double injection moulding method that can inject the packing plastic material from upper and under packing place of the main cover.
Fig. 3

Fig. 4
AIR-TIGHT CONTAINER COVER THAT IS MADE BY DOUBLE INJECTION MOLDING METHOD

BACKGROUND OF THE INVENTION

[0001] 1. Field of the Invention

[0002] The present invention relates to a cover of container made of plastic, more particularly to a cover of container, which its airtight power is increased and a soil molding material and a rigid molding material can be stuck to each other, so that after molding, the cover is to be made smooth and flat.

[0003] At the recent years, the prior art is represented as a container cover made by double injection molding method as shown in FIG. 6, which is that after the body (11) of the cap (10) is made at first, the part (10a) that is combined with the container (20) is made of a soft material on the outer border of the cap (10) by double injection molding method, which is formed the body (11), so that the combining part (10a) has a better airtight power by means of the soft viscosity.

[0004] However, this kind of prior art has some problems such as the covered pat is scaling off and when cooled, the torture is produced, which is not made the cover smooth and flat, because of the differences in the molding condition with the body (11) of the cap in regard that the body (11) of the cap is usually injection-molded in the thickness of 1 mm and that thickness of the cover, which is molded in the method covering over, is 0.1 mm.

[0005] Therefore, in order to prevent this torture, as shown in FIG. 7, when the body (11) is formed as one with the combining part (10a) by double injection molding method, the inside part of the combining part (10a) is coating-treated with a soft material, so that the coating-treated part (13) has a great airtight power due to the viscosity.

[0006] Nevertheless, it is difficult to coat only the inside part and because there is no way to connect the coating-treated part with the body (11), the coated-treated part is scaling after all.

[0007] 2. Discussion or Related Art

[0008] Thus, in order to solve the above-mentioned problem, as the coating layer is formed inside part of the combining part (10a) by double injection molding method, the said coating layer is protruded toward the top through the hole or the opening part on the cover, so the airtight power is improved and the appearance is excellent as well as the coating layer that is formed inside of the combining part (10a) may not be separated.

[0009] Brief Description of the Attached Drawings

[0010] FIG. 1 is a perspective view according to the embodiment of the present invention

[0011] FIG. 2 is a perspective view showing the hole of the cover

[0012] FIG. 3 is a perspective view showing the opening part instead of the said hole

[0013] FIG. 4 is a sectional view showing the formation of the outer wall.

[0014] FIG. 4A is a sectional view showing the formation of the inner wall

[0015] FIG. 5 is a perspective view showing the hole perforated on the cover of the container.

[0016] FIG. 6 is a sectional view of the embodiment of the prior art made by double injection molding method

[0017] FIG. 7 is a sectional view showing the coating layer of the prior art

DETAILED DESCRIPTION OF PREFERRED EMBODIMENT

[0018] The following is the detailed description of the most desirable embodiment of the present invention. The most desirable embodiment of this invention will be to described in detail according to the annexed drawings on the following and the same referenced number will be used to mean the same drawing elements regardless of different drawings.

[0019] As shown in FIGS. 1 and 4, while the combining part (10a) wherein the cap (10) and the container (20) is combined, is formed on with the body (11) of the cap, the coating layer (1) is formed inside the combining part (10a) and the coating layer is protruded toward the surface of the cap (10) through the hole (3), forming the protrusion. This is designed to protect the coating layer (1) from being scaling off.

[0020] The size and location of the hole (3) depends on the shape of the surface of the body, and the opening part (4) can be used as an alternative to the hole (3).

[0021] Also, the trademark of the product is printed on the surface of the protrusion (2) that is protruded toward the top of the cap (10). The trademark is printed on the mold which is used only for double injection molding method. Therefore, it can lead to various kinds of low-cost products' production.

[0022] And producing various kinds of products would be possible when the protrusion (2) is formed in one along the outline of the cap or is formed at an interval of a fixed space.

[0023] When the protrusion (2) is formed in one through the hole (3) made in the top of the cap by making a hole in the inner wall of the combining part wherein tile cap (10) and the container (20) is combined, the air tight power is improved and the cap can be prevented from being bent.

[0024] Also, the inner wall is formed by double injection molding method and the protrusion (2) is formed through the hole (3) of the cap after the outer wall is formed to the combining part (10a) wherein the cap and the container is formed.

[0025] Accordingly, the combining part (10a) is formed in one by double injection molding method with a soft molding material, resulting ill preventing the container cover from being bent. Because the coating layer is formed in one with the cap through the hole made in the cap, the coating layer can be firmly coated. And the protrusion is formed when the coating layer is exposed on the cap through the hole of the cap, so the trademark can be printed on the protrusion, making the design of the container better.
What is claimed is:

1. An airtight container cover that is made by double injection molding method wherein its improvement comprising,

   a body is formed as one with the combining part, which is combined with the container by double injection molding method,

   a coating layer is protruded toward the top through the hole or the opening part on the cover, so the airtight power is improved and the appearance is excellent as well as the coating layer that is formed inside of the combining part may not be separated.

2. An airtight container cover that is made by double injection molding method as claimed in claim 1 wherein, the opening part is formed instead of the said hole.

3. An airtight container cover that is made by double injection molding method as claimed in claim 1 wherein, the trademark of the product is printed on the surface of the protrusion that is protruded toward the top of the cover.

4. An airtight container cover that is made by double injection molding method as claimed in claim 1 wherein, the protrusion is made by double injection molding method with the hole in the inner wall of the combining part through the hole on the top of the cover.

5. An airtight container cover that is made by double injection molding method as claimed in claim 1 wherein, the protrusion is formed on the inner wall or outer wall of the combining part by double injection molding method and protruded through the hole on the top of the cover.