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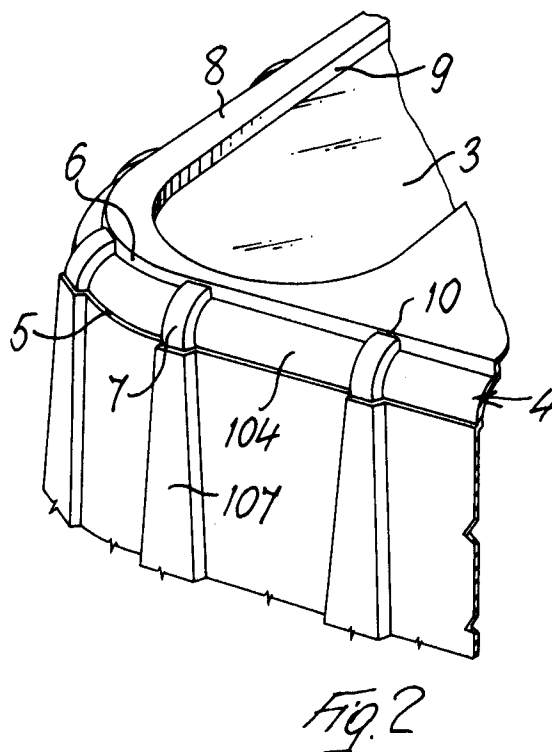
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I-16124 Genova (IT)**(54) **Punnet.**

(57) The present invention relates to a punnet, characterized in that it comprises a plurality of side-by-side stiffening ribs (7), each extending crosswise around the corner (4) connecting the sidewalls (2) to the bottom (3) of the punnet (1), between two steps, one (5) of which is at the peripheral edge of the bottom (3) and the other (6) at the lower edge of the sidewalls (2), so as to divide the connection corner (4) into a plurality of successive segments (104) which are defined by two stiffening ribs at the ends thereof and by two steps (5,6) at the top and bottom sides, respectively.

*Fig. 2***EP 0 557 575 A2**

The invention relates to a punnet, for example, for packaging fruit and vegetable articles or other types of articles, which is specifically made of plastics material.

The object of the invention is to provide a punnet of plastics material, having greater stiffness and strength against any punnet-deforming pressure on its bottom area, by using very simple and low-cost manufacturing means and material.

The invention attains this object by providing a plastics material punnet formed with a plurality of side-by-side stiffening ribs, each extending transversely around the connection corner between the sidewalls and the bottom of the punnet, between two steps, one of which is at the peripheral edge of the bottom wall and the other at the lower edge of the sidewalls.

The assembly of ribs and steps entails the division of the corner area into a plurality of successive segments, each of which is defined by two adjacent ribs at the ends and by the two steps at the edges of the bottom and the sidewalls.

Preferably, the connection corner is rounded and said steps extend continuously along the peripheral edge of the bottom and along the sidewalls, respectively, of the punnet.

Said ribs and steps are integral with the punnet, and particularly in case of punnets made by molding a foil of plastics material such as, for example, the so-called PVC, they are formed directly during the punnet molding operation, thus avoiding any further expenditure on the used material.

The corner connecting the bottom and sidewalls of the punnet is thus stiffened considerably, imparting the punnet a remarkable strength against deformation pressures. This, advantageously, avoids any possibility of damage to the products arranged in the punnets, for example, when they are either handled or transported.

Further features of the invention are the subject of the dependent claims.

The features of the invention and the advantages resulting therefrom will become more apparent from the following description of an exemplary embodiment as shown in the accompanying drawings, wherein:

Figure 1 is a perspective view of the punnet according to the invention, in an upturned position;

Figure 2 is an enlarged view of a detail of the punnet of Figure 1, showing an area of the connection corner;

Figure 3 is an enlarged cross sectional view through the area of the connection corner of the punnet of Figures 1 and 2.

Illustrated in the figures is a punnet indicated generally at 1 and made, specifically, by molding a

foil of plastics material such as the so-called PVC.

The sidewalls 2 merge into the bottom 3 of the punnet 1 through a rounded connection corner 4. The connection corner 4 is united to both the sidewalls 2 and bottom 3 and forms therewith outwardly-protruding steps 5,6. The steps 5,6 extend continuously along the entire peripheral edge of the bottom 3 and sidewalls 2 in endless configuration.

A plurality of side-by-side stiffening ribs 7 extend from the step 5 at the lower edge of the sidewalls 2 to the other step 6 at the bottom 3 round across the connection corner 4. Preferably, said stiffening ribs 7 are equally spaced apart and divide the area of the connection corner 4 into a plurality of successive segments 104 which are defined by two successive stiffening ribs 7 at the ends thereof and by the steps 5 and 6 at the top and bottom sides, respectively.

When, as in the illustrated example, the punnet is made by molding a foil of plastics material, the steps 5,6 and stiffening ribs 7 may be made during the same molding operation as the punnet 1 by deforming accordingly the sidewalls 2, bottom 3 and connection corner 4, so that no additional material is required to form them.

According to a further characteristic of the invention, each stiffening rib may comprise an extension 107 over the sidewalls 2. The extensions 107 may become progressively larger upwards to assume an upturned triangular configuration.

In this instance, the endless step 5 at the lower edge of the sidewalls may also concern the extensions 107 of the stiffening ribs 7, thus contributing to increase the stiffening action.

The stiffening ribs 7 are of a certain width and of any cross section, such as either a constant, rectangular, trapezoidal or rounded cross section. Their outer sides may extend to a slightly lower level than that of the outer sides of the steps 5,6 so that they join said steps 5,6 (specifically the step 6 at the bottom 3) to form a small step 10.

Specifically, the step 6 at the sides of the bottom may be formed by the peripheral outer sides of a peripheral rim 8 protruding downwards from the bottom 3, thus forming an additional step 9 opposing the deformation of the punnet at the inner sides of the peripheral rim.

Advantageously, the longitudinal portions of the peripheral rim may be connected to each other by transverse ribs 108 which further improve the stiffening action on the bottom of the punnet.

As an alternative to the illustrated embodiment, the stiffening ribs 7 at the corner 4 may comprise extensions on the punnet bottom 3 which connect opposed ribs 7 two by two either of only two sides, thus forming, for example, the stiffening ribs 108, or of all the sides, thus forming a stiffening grating

for the bottom 3.

Claims

1. A punnet, characterized in that it comprises a plurality of side-by-side stiffening ribs (7), each extending crosswise around the corner (4) connecting the sidewalls (2) to the bottom (3) of the punnet (1), between two steps, one (5) of which is at the peripheral edge of the bottom (3) and the other (6) at the lower edge of the sidewalls (2), so as to divide the connection corner (4) into a plurality of successive segments (104) which are defined by two stiffening ribs at the ends thereof and by two steps (5,6) at the top and bottom sides, respectively. 5 10 15
2. A punnet according to claim 1, characterized in that the connection corner (4) is rounded. 20
3. A punnet according to claims 1 or 2, characterized in that the stiffening ribs (7) are spaced apart from each other and are of a certain width. 25
4. A punnet according to one or more of the preceding claims, characterized in that the stiffening ribs (7) may protrude to a lower extent than the steps (5,6) and join the latter with a small step (10). 30
5. A punnet according to one or more of the preceding claims, characterized in that the steps (5,6) extend continuously along the peripheral edge of the bottom (3) and on the sidewalls (2). 35
6. A punnet according to one or more of the preceding claims, characterized in that the stiffening ribs (7) are extended (107) upwards beyond the step (5) over the sidewalls (2) and become progressively larger upwards to assume an upturned triangular configuration. 40
7. A punnet according to claim 6, characterized in that the step (5) at the sidewalls (2) is extended as well along the extensions of the stiffening ribs (7). 45
8. A punnet according to claims 6 or 7, characterized in that the stiffening ribs (7) may extend as well or as an alternative over the bottom (3), thus forming cross members (108) connecting the corresponding stiffening ribs (7) on the opposite side of the punnet. 50 55
9. A punnet according to one or more of the preceding claims, characterized in that the

stiffening ribs (7) may have a constant cross section, for example, of rectangular, trapezoidal or rounded shape.

10. A punnet according to one or more of the preceding claims, characterized in that the step (6) at the bottom (3) is formed by a peripheral rim protruding downwards from the bottom (3) and forming on the inner side thereof a further concentric step (9), and the opposite sides of the peripheral rim (8) may be connected by transverse stiffening ribs (108) which may be formed or not by extensions of the stiffening ribs (7).
11. A punnet according to one or more of the preceding claims, characterized in that it is made from a foil of any material, more particularly of plastics material, for example of the so-called PVC, said stiffening ribs (7) and steps (5,6) of the sidewalls (2) and bottom (3) being formed integral with the punnet upon molding the foil.

