

The invention relates to a hinge-lid pack for cigarettes or the like, with a pack part, a lid articulated on a pack rear wall and a collar arranged in the pack part with a collar front wall and collar side walls and of which the region projecting from the pack part, that is to say a collar top part, is surrounded by the lid in the closed position, and of which the collar front wall has webs for limiting a recess, a lid inner tab being attached to the inside of one lid front wall.

Hinge-lid packs of this type are known in various designs, recently also with vertical rounded or polygonally designed longitudinal edges. A particular problem in hinge-lid packs of this type is to ensure an exact closing position of the lid, especially after the hinge-lid pack has been used several times.

Hinge-lid packs, in which collar side walls cooperate with folding tabs arranged on the inside of lid side walls, are already known. In one instance (DE-B-1,161,513), the folding tabs on the inside of the collar side walls are provided with thickenings formed by folding. In the closed position of the hinge-lid pack, these bring about a higher friction on the collar side walls. These are specially shaped for receiving the thickenings on the inside of the lid, namely are provided with an embossing.

In another known hinge-lid pack (US-A-4,526,317), a front wall of the pack part is provided, at the front corners in the upper region, with upright webs extending diagonally. In the closed position, their legs extending in the plane of side walls assume a clamping position between a folding tab on the inside of the lid side wall and the latter.

These known hinge-lid packs do not conform in external appearance to the conventional form of construction of hinge-lid packs which is in widespread use throughout the world. In particular, the collar or the pack front wall and side wall are designed differently from conventional hinge-lid packs. Such a modified design is undesirable for practical purposes.

The object on which the invention is based is to propose a hinge-lid pack of the construction mentioned in the introduction, which, without any variation in the external appearance, has a reliable closing aid for the lid.

To achieve this object, the hinge-lid pack according to the invention is characterized in that the lid inner tab has on at least one side edge an incision or orifice, into which a web of the collar front wall can be pushed in such a way that a part surface of the web comes into the region between the lid inner tab and lid front wall.

In the hinge-lid pack according to the invention, the pack part, collar and lid are designed outwardly in the conventional way. Only an outwardly invisible lid inner tab is provided with punchings which automatically bring about a positive and non-positive engagement of parts of the collar front wall in the closed position. As a result of the design of the recesses in the lid inner tab, the reciprocal engagement with the webs of the collar front wall takes place automatically during the closing of the hinge-lid pack.

An exemplary embodiment of the invention is explained in more detail below by means of the drawings.

In these:

Fig. 1 shows a front view of a hinge-lid pack, particularly a "round-edge" pack, in the closed position,

Fig. 2 shows a horizontal section in the plane II - II in Figure 1,

Fig. 3 shows a corner cutout from the representation according to Figure 2 on an enlarged scale,

Fig. 4 shows a blank for a pack according to Figure 1 in spread-out form,

Fig. 5 shows a likewise spread-out blank for a collar on an enlarged scale,

Fig. 6 shows a detailed cutout of the blank according to Figure 4 in the region of a lid inner tab on a greatly enlarged scale,

Fig. 7 shows a representation of the hinge-lid pack similar to that of Figure 1 during the closing phase of the lid,

5 Fig. 8 shows a vertical section in the plane VIII - VIII of Figure 7 on an enlarged scale,

Fig. 9 shows a horizontal section approximately in the plane II - II of Figure 1, but with details of the lid omitted, on a greatly enlarged scale.

10 The exemplary embodiment illustrated in the drawings relates to a hinge-lid pack for receiving a cigarette group 50. This is conventionally wrapped in an inner blank of tinfoil or the like.

The hinge-lid pack consists of a pack part 10 and of a lid 11. The latter is connected pivotably to the
15 pack part 10. For this purpose, a lid rear wall 12 is connected to a pack rear wall 14 via a joint 13.

The pack part 10 consists, furthermore, of a bottom wall 15, pack side walls 16, 17 and a pack front wall 18.

20 Similarly to this, the lid 11 consists of an end wall 19, lid side walls 20, 21 and a lid front wall 22.

Inserted in the pack part 10 is a collar 23. This consists of a collar front wall 24 and transversely directed collar side walls 25, 26. The collar rests with
25 a collar bottom part 27 inside the pack part 10. The collar front wall 24 is connected to the pack front wall 18 on its inside, especially by adhesive bonding. In the present exemplary embodiment, two rectangular glue spots 51 are provided for this. The collar side walls 25, 26
30 bear against the insides of the pack side walls 16, 17.

A collar top part 28 of the collar 23 projects from the pack part 10. This collar top part 28 is surrounded by the lid 11 when the pack is in the closed position. At the same time, the respective part of the
35 collar front wall 24 bears against the lid front wall 22 on the inside. The collar side walls 25, 26 bear against the lid side walls 20, 21.

In the region of the collar front wall 24, the collar 23 is designed in a special way, namely with a

recess 29. This is limited laterally by obliquely directed side edges 30 diverging towards the upper edge. On the open side of the recess 29, these merge via an arc 31 into a transversely directed top edge of the collar.

5 In the present exemplary embodiment, the hinge-lid pack constructed in the way described is designed as a "round-edge" pack. Vertical longitudinal edges 33, 34 of the hinge-lid pack are made arcuate. This produces "rounded" edges, the radius of the roundings corresponding approximately to the radius of a cigarette.

10 The rounded longitudinal edges 33, 34 extend in the region of both the pack part 10 and the lid 11. Collar edges 35, 36 are also rounded accordingly.

When the pack is in the closed position, a
15 transversely directed closing edge 37 of the lid 11 bears against a counter edge 38 of the pack part 10. This closed position is to be secured, without the opening of the pack thereby being impeded. For this purpose, in the closed position, the collar 23 is anchored releasably
20 within the lid 11. To this end, when the pack is in the closed position, the collar 23 is hooked together with a tab inside the lid, in such a way as to generate an increased frictional resistance which prevents undesirable shifts of the lid 11 in the closed position.

25 In the present exemplary embodiment, a lid inner tab 39 is designed in a special way. Here, this is part of the blank for the pack (Fig. 4) and adjoins the lid front wall 22. In the finished pack, the lid inner tab 39 is folded against the inside of the lid front wall 22, and is connected to this by adhesive bonding. In the
30 exemplary embodiment illustrated, two rectangular glue zones 52 are provided for fastening the lid inner tab 39. These are so arranged that lateral regions of the lid inner tab 39 remain free of adhesive bonding.

35 In the present instance, in the longitudinal direction of the blank (Fig. 4) the lid inner tab 39 has a dimension corresponding virtually to the height of the lid front wall 22. Side edges 40 and 41 of the lid inner tab 39 are so designed that parts of the collar 23,

namely lateral vertical webs 42 as a limitation of the recess 29, are fixed here in the closed position.

For this purpose, the side edges 40, 41 of the lid inner tab 39 are equipped with recesses or slots. In the present exemplary embodiment, an orifice 43 free towards the edge is provided. This is limited by an arcuate guide edge 44 which merges into a slot-like acute-angled widening 45 of the orifice 43. The widening 45 is limited by a transverse edge 46.

During the closing movement of the lid 11, the web 42 of the collar front wall 24 enters the orifice 43 so formed. As a result of the dimensions of the lid 11 in relation to the collar 23, the latter slides along with the top edge 32 or the arc 31 of the webs 42 on the inside of the lid front wall 22. The upper rounded ends of the webs 42 bear with some pressure against the lid front wall 22 or against the lid inner tab 39. When the closing movement is continued, the webs 42 come with the arc 31 into the region of the orifice 43. Since the lid inner tab 39 is not connected to the lid front wall 22 in this region, the ends of the webs 42 pass under the transverse edge 46 and thereby under a holding tag 47 limited by this. When the closing movement is completed, the oblique side edge 30 of the webs 42 lies within the slot-shaped widening 45 of the orifice 43 (Fig. 1). A part region of the webs 42 now extends underneath the holding tag 47, that is to say between this and the lid front wall 22. The collar 23 or its webs 42 are therefore brought into a clamping position, namely between the holding tag 47 and the lid front wall 22. Outside the region of the holding tag 47, the collar front wall 24 bears against the inside of the lid inner tab 39.

In the closed position, the closed position of the lid 11 is fixed as a result of the clamping effect or of the increased friction exerted on the collar 23. During opening, the lid inner tab 39 is drawn out of the clamping position. The opening operation can take place as in conventional hinge-lid packs.

The above-described clamping or frictional

connections between the collar 23 and lid inner tab 39 are so arranged that cigarettes are not damaged thereby, specifically not even when the upper part of the cigarettes is exposed after a pack has been used. For
5 this purpose, a lateral limiting edge 48 of the holding tag 47 is set back relative to a limiting edge 49 in a region of the lid inner tab 39 facing the lid front wall 22. This is therefore designed with a smaller width in the region of the holding tag 47. Thus, the holding tag
10 47 is so arranged that it does not rest on a cigarette centrally, but offset relative to this. The web 42 likewise located in a position offset relative to a cigarette can thereby be pushed under the holding tag 47, without the outer surfaces of cigarettes being damaged.
15 This relative position is shown in Fig. 9. Here, the frictional or clamping connection between the collar 23 and lid inner tab 39 is between a corner cigarette 53 and an adjacent cigarette 54, and in this region there is, between the outer surface of the cigarettes 53, 54 and
20 the path of movement of the holding tags 47, a sufficient gap which allows the holding tags 47 to be pushed in into the clamping position without touching the cigarettes 53, 54.



Patent claims

1. Hinge-lid pack for cigarettes or the like, with a pack part (10), a lid (11) articulated on a pack rear wall (14) and a collar (23) arranged in the pack part
5 (10) with a collar front wall (24) and collar side walls (25, 26) and of which the region projecting from the pack part (10), that is to say a collar top part (28), is surrounded by the lid (11) in the closed position, and of which the collar front wall (24) has webs (42) for
10 limiting a recess (29), a lid inner tab (39) being attached to the inside of one lid front wall (22), characterized in that the lid inner tab (39) has on at least one side edge (40, 41) an incision or orifice (43), into which a web (42) of the collar front wall (24) can
15 be pushed in such a way that a part surface of the web (42) comes into the region between the lid inner tab (39) and lid front wall (22).
2. Hinge-lid pack according to Claim 1, characterized in that both webs (42) of the collar front
20 wall (24) can be pushed into associated orifices (43) on the side edges (40, 41) of the lid inner tab (39) in the closed position.
3. Hinge-lid pack according to Claim 1 or 2, characterized in that the webs (42) are designed with an
25 arc (31) at the upper free end and in that an obliquely extending side edge (30) of the web (42) adjoins the arc (31).
4. Hinge-lid pack according to Claim 1 or 2, characterized in that there adjoins the orifice (43) of
30 the lid inner tab (39) a holding tag (47) which, in the closed position, covers a part region of the web (42) of the collar front wall (24), the holding tag (47) being limited in the region of the orifice (43) by a transverse edge (46) bearing against the web (42).
- 35 5. Hinge-lid pack according to Claim 1 or 2, characterized in that the parts bringing about the mutual engagement of the collar (23) and lid inner tab (39) are arranged in a region between two adjacent cigarettes, the lid inner tab (39) having a smaller width in the region

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of the holding tags (47).

