BOX FOR DISPENSING PRE-CUT WIPING MATERIALS

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ABSTRACT

A packaging box for pre-cut wipe material comprises a base, side and end walls, an upper flap with attachment tabs, the upper flap having a directly formed cutting member to cut the material stored in the packaging box, and an intermediate articulated flap comprising, on its upper visible face, at least one curved protruding shape with, at its end, a longitudinal bulge which ensures guidance of the material as it emerges from inside the box. The width of the intermediate flap is less than the width of the box in order to allow the strip of material to emerge, and the upper flap has an inner face with at least one curved shape which matches at least the shape on the intermediate flap, said shapes allowing the strip of material to emerge so that it can be cut along the perforation line on the strip.
Fig. 4
BOX FOR DISPENSING PRE-CUT WIPE MATERIALS

[0011] The invention relates to the technical field of machines and equipment for dispensing wipe, hand-wipe, general-purpose wipe, handkerchief and paper-towel materials.

[0012] The packaging of wipe materials in paperboard boxes is widely known. Such boxes (1) shown in FIG. 1, by way of example, have a parallelepiped shape and, on their upper face (1a), have a closed oval or similar shaped perforation line (1b) which makes provision for defining an opening after removing seal (2). These boxes make it possible to grasp pieces of cut interleaved folded strips (B) of material (FIG. 1a). This technique is widespread for handkerchiefs and hand wipes. The essential problem with this technique is the cost of manufacturing and formatting the finished products which are handkerchiefs, tissues and similar items and of interleaving them. These products are manufactured in strips or trimmed sizes, cut to the desired size, folded and interleaved so that they can be grasped one by one, thereby obtaining partial exposure of the new piece so that it too can be grasped. Because these packaged products are very competitively priced, low-margin products, the quality of interleaving must be impeccable.

[0013] Packaging boxes for rolls of aluminium foil, for example, which have, on their upper flap, a serrated part which enables the user to tear off a strip of material of the required size which is appropriate to needs are known. In this case, the packaging box is directly produced in a single operation with the serrated area and the box is then folded.

[0014] The Applicant’s approach was therefore to come up with a new concept for packaging boxes which are suitable for pre-cut, folded and interleaved wipe materials or wipe materials on a reel.

[0015] The devised solution is simple and enables the packaging box to be manufactured in a single operation using classic carton-industry cutting and formatting tools. The packaging box according to the invention can be made of paperboard carton material or, alternatively, of plastic.

[0016] According to a first aspect, the packaging box for pre-cut wipe material is of the type comprising a base, end and side walls, an upper flap designed with attachment tabs, the upper flap having a directly formed means making it possible to cut the material stored in the packaging characterised in that it comprises an intermediate articulated flap comprising, on its upper visible face, at least one curved protruding shape with, at its end, a longitudinal bulge which ensures guidance of the material so that it emerges from inside the box and in that the width of the intermediate flap is less than the width of the box in order to allow the strip of material to emerge and in that the upper flap has an inner face with at least one curved shape which matches at least the shape on the intermediate flap, said shapes allowing the strip of material to emerge so that it can be cut along the perforation line on the strip.

[0017] These aspects and others will become apparent from the following description.

[0018] The invention is explained below in greater detail, reference being made to the accompanying drawings in which:

[0019] FIG. 1 is a view of a packaging box according to the prior art.

[0020] FIG. 1a shows the positioning of the pieces of strips of material arranged and stored in the box in FIG. 1.

[0021] FIG. 2 is a perspective view of the packaging box according to the invention.

[0022] FIG. 2a is a view showing the pre-cut strip of material and stored in the box in FIG. 1.

[0023] FIG. 3 is a perspective view showing the packaging box according to the invention.

[0024] FIG. 4 is a plan view of the inside of the packaging box according to the invention.

[0025] FIG. 5 is a plan view of the outside of the packaging box according to the invention.

[0026] FIG. 6a is a view of an alternative embodiment of the means which make it possible to form the strip of material.

[0027] FIG. 6b is a schematic view showing how the strip of material passes through the shapes shown in FIG. 6.

[0028] In order that the present invention may more readily be understood, the following description is given, merely by way of example, reference being made to the accompanying drawings.

[0029] The packaging box according to the invention is referred to in its entirety by 10. It has a parallelepiped shape and can be made of any material, paperboard, plastic or similar materials. In a known manner, it comprises a base (10a), side walls (10b), end walls (10c) with one or two flaps as well as a lid (10d) which is articulated relative to one of the above-mentioned side walls (10b). The latter also comprise folding tabs (10c) and the base (10a) may comprise slits (10f) in order to fit the positioning tabs (10g) formed as an extension of end walls (10c). This description of a packaging box is merely by way of an example of the invention.

[0030] According to the invention, the packaging box comprises an articulated intermediate flap (10h) comprising, on its visible upper face, at least one protruding curved shape (10m) and, at its end, a longitudinal bulge (10n) which ensures guidance of the material (P) as it emerges from inside the box. The width of intermediate flap (10h) is less than the width of the box in order to allow the strip of material to emerge, the latter being folded and interleaved or wound on a reel. The upper flap (10d) is designed, according to the invention, with, on its inner face, at least one curved shape (10p) which matches the shape (10m) formed on the intermediate flap.

[0031] Shapes (10g) and (10m) are concentric and there is a space between them in order to guide the strip of material and remove it.

[0032] In the version shown in FIGS. 6a and 6b, intermediate flap (10h) and upper flap (10d) forming a lid are each arranged with several curved shapes (10m) and (10p) respectively which nest in each other alternately in order to leave room for the strip of material to pass through if the latter is thick and in order to improve the tensioning of the strip. These protruding shapes (10n) (10p) with matching outlines are preferably produced at the time the box is actually manufactured. The reader is also reminded that the upper flap which forms a lid has, at each of its ends, two opposite-facing tabs (10s) which define, between them, a space through which the strip of material can pass and emerge. These tabs have a slanting profile in order to make it easier to load the material and separate the pieces. Quick-attachment means (11) are thus established on these tabs (10s) and also on the front side-wall (10p) of the packaging box.

[0033] Without extending beyond the scope of the invention, support stops which are not shown can be provided internally, for instance on the inner walls of tabs (10c) by deformation, stamping or other methods in order to limit the
travel of intermediate flap (10h) so as to preserve a perfect combination and match between shapes (10m-10p) in order to move and guide the material.

[0024] The packaging box according to the invention is very inexpensive to manufacture. Manufacturing the pre-cut strip is less expensive than the cost incurred in the case of the product shown in FIG. 1. The packaging box can be disposable if necessary.

1. Packaging box for pre-cut wipe material, comprising a base, side walls, end walls, an upper flap with attachment tabs, the upper flap having a directly formed cutting member to cut the material stored in the packaging box, an intermediate articulated flap comprising, on an upper visible face, at least one curved protruding shape with, at an end, a longitudinal bulge which ensures guidance of the material as it emerges from inside the box, wherein width of the intermediate flap is less than width of the box in order to allow the strip of material to emerge and the upper flap has an inner face with at least one curved shape which matches at least the shape on the intermediate flap, said shapes allowing the strip of material to emerge so that the material can be cut along a perforation line on the strip.

2. Packaging box as claimed in claim 1, wherein the intermediate flap and upper flap are each arranged with several curved shapes, respectively, which nest in each other alternately.

3. Packaging box as claimed in claim 2, wherein the protruding shape and the curved shape with matching outlines are produced at the time the box is actually manufactured.

4. Packaging box as claimed in claim 1, wherein the upper flap forms a lid and has, at each of its ends, two opposite-facing tabs which define, between them, a space through which the strip of material can pass and emerge, and the tabs have a slanting inner profile in order to make it easier to load the material and separate pieces and quick-attachment means established on the tabs (10c) and on a front end-wall of the packaging box.

5. Packaging box as claimed in claim 1, further comprising internally provided support stops on walls of the tabs to limit travel of the intermediate flap so as to preserve a match between the protruding shapes and the curved shape in order to move and guide the material.

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