

CONTAINER FOR PACKAGING PAPER SHEETS, AND PAPER SHEET PACKAGE BODY

Technical Field

[0001]

5 The present invention relates to a container for packaging paper sheets, and particularly relates to a container for housing a plurality of stacked paper sheets and a paper sheet package body.

Background Art

[0002]

10 A container for packaging a plurality of stacked paper sheets may have an outlet through which paper sheets therein are taken out. According to Patent Literature 1, in addition to an outlet made through an upper surface, an outlet through which paper sheets (tissue paper) are taken out is formed across a side of the box to allow the housed paper sheets to be taken out through different outlets.

Citation List

Patent Literature

[0003]

Patent Literature 1: Japanese Unexamined Patent Publication No. 2009-220859

Summary of Invention

Technical Problem

[0004]

20 When taking out a paper sheet from a container such as the container recited in Patent Literature 1, the easiness of taking out varies in accordance with the state of the paper sheet. For example, the paper sheet is easily taken out when a part thereof juts out
25 from the outlet. On the other hand, when the paper sheet is entirely housed inside the box and no part thereof juts out, it is difficult to take out the paper sheet because it is

necessary to pick out the paper sheet through the outlet .

[0005]

An object of the present invention is to provide a container for packaging paper sheets and a paper sheet package body, each of which has an outlet making it possible to easily take out paper sheets stored in the container.

Solution to Problem

[0006]

A container for packaging a plurality of stacked paper sheets of the present invention includes: a substantially rectangular parallelepiped box; and one of an outlet of the paper sheets, which is formed across two neighboring surfaces of the box and slits intermittently formed along the outline of the outlet to form the outlet, the outlet including: ends in border directions, which are in parallel to the border between the two surfaces; first and second narrowed parts which are formed between the ends and are narrowed in a direction orthogonal to the border directions; and a protruding part which is formed between the first and second narrowed parts and protrudes, as compared to the ends, toward an edge of at least one of the two surfaces, the edge being opposite to the border.

[0007]

In addition to the above, the paper sheet package body of the present invention includes: the container above; and a plurality of paper sheets which are stacked in the container in an alternately folded manner, in the border directions, the outlet being on the inside of the paper sheets in the container.

Advantageous Effects of Invention

[0008]

The container of the present invention is arranged such that an outlet (or slits) has a protruding part which protrudes away from the border as compared to the ends. In

other words, the outlet (or the slits) greatly cuts into the surfaces along the surfaces. For this reason, even if the paper sheets remain deep inside the box, the paper sheets are easily taken off because the paper sheets remaining deep inside are reachable through the greatly-cutting protruding part.

5 [0009]

The paper sheet package body of the present invention stores the paper sheets in a stacked manner with the sheets being folded with one another. Therefore, when one paper sheet is taken off, the next paper sheet is likely to jut out from the outlet together with the one paper sheet. As such, when a paper sheet is taken out from the outlet, the
10 next paper sheet is ready to be taken out. Furthermore, the outlet is formed to be on the inside of the paper sheets which are provided on the inner side. Because of this arrangement, when a paper sheet is taken out through the outlet, the paper sheet passes through the outlet while being narrowed in width. This facilitates the folding of the first paper sheet with the next paper sheet, and hence these sheets are likely to be taken
15 out together.

Brief Description of Drawings

[0010]

[FIG. 1] FIG. 1 is an oblique perspective view of a box paper of an embodiment of the present invention.

20 [FIG. 2] FIG. 2 is an oblique perspective view showing how a layered body is formed by folding and stacking paper sheets.

[FIG. 3] FIG. 3 shows a box blank of a box-shaped container constituting the box paper, which has not been folded yet.

[FIG. 4] FIG. 4 is a variation of the outlet of the box paper.

Description of Embodiments

25 [0011]

The following will describe a box paper 1 (paper sheet package body) of an embodiment of the present invention with reference to FIG. 1 to FIG. 3. The box paper 1 includes a box-shaped container 2 (box) and a plurality of paper sheets 3 housed in the container 2. The paper sheets 3 are each rectangular in plan view, and are each folded in two and stacked in an alternate manner as shown in FIG. 2. As such, the layered body 3g of the paper sheets 3 is formed. The box-shaped container 2 is roughly rectangular parallelepiped and has a hollow internal space therein. The outer walls of the box-shaped container 2 are constituted by thin plates made of cardboard, synthetic resin, or the like. As shown in FIG. 1, the layered body 3g of the paper sheets 3 is housed to be substantially as wide as the internal space in border directions. In the layered body 3g, the direction in which the paper sheets 3 are stacked is in parallel to the vertical direction.

[0012]

Through the box-shaped container 2 is formed an outlet 4 for taking out the paper sheets 3. The outlet 4 penetrates the outer walls of the box-shaped container 2 to connect the internal space with the outside. The outlet 4 is formed across an upper surface 2a of the box-shaped container 2 and a side surface 2b that neighbors the upper surface 2a. The outline of the outlet 4 intersects at two parts with the side 2c which is the border between the upper surface 2a and the side surface 2b. The two parts are points 4a and 4b that are at the respective ends in directions along the side 2c (hereinafter, the directions will be referred to as border directions). The outlet 4 is formed to be narrowed outward in the border directions, i.e., is tapered off toward the ends 4a and 4b. On the outline of the outlet 4, parts of the outline other than the points 4a and 4b are separated from the side 2c in the directions orthogonal to the border directions. Furthermore, no part of the outline of the outlet 4 sharply points at the outlet 4, and the parts of the outline other than the points 4a and 4b are smoothly

and continuously connected with one another. The outlet 4 is shorter than the length of the side 2c in the border directions. Furthermore, the outlet 4 is formed to be on the inside of the layered body 3g of the paper sheets 3 which is housed inside, in the border directions. In other words, in the border directions the outlet 4 is narrower in width
5 than the layered body 3g.

[0013]

Between the ends 41 and 42 that are the respective ends of the outlet 4 in the border directions, narrowed parts 43 and 44 (first and second narrowed parts) are formed. Each of the narrowed parts 43 and 44 is a part where the outlet 4 is narrowed in the
10 directions orthogonal to the border directions. Only at the narrowed parts 43 and 44, the outlet 4 protrudes toward the side 2c. In each of the narrowed parts 43 and 44, the leading end where each part is closest to the side 2c is separated from the side 2c.

[0014]

Between the narrowed parts 43 and 44 in the border directions, protruding parts 45 and
15 46 are formed. The protruding part 45 is formed on the upper surface 2a to horizontally protrude from the side 2c toward the opposite side 2d. In other words, the protruding part 45 protrudes along the surface of the topmost paper sheet 3 in the layered body 3g. The leading end of the protruding part 45 is closer to the side 2d than the ends 41 and 42. Through the protruding part 45, the topmost paper sheet 3 in
20 the layered body 3g is exposed upward.

[0015]

The protruding part 46 is formed on the side surface 2b to protrude vertically downward from the side 2c toward the opposite side 2e. In other words, the protruding part 46 protrudes in the direction in which the paper sheets 3 are stacked in
25 the layered body 3g. The lower end (leading end) of the protruding part 46 is closer to the side 2e than the ends 41 and 42, and is positioned to almost reach the lower surface

of the box-shaped container 2. Through the protruding part 46, the side edges of the paper sheets 3 in the layered body 3g are exposed. Furthermore, because the lower end of the protruding part 46 almost reaches the lower surface of the box-shaped container 2, the paper sheets 3 are exposed to the outside through the lower end part of the protruding part 46, even if the remaining number of the paper sheets 3 in the layered body 3g becomes small.

[0016]

The box blank 102 shown in FIG. 3 illustrates the box-shaped container 2 which is not folded yet. The box blank 102 is a single thin plate made of cardboard, synthetic resin, or the like. The box blank 102 includes rectangular parts 111 to 118 and pasting margins 121 to 125. The rectangular parts 111 to 114 serve as, in the box-shaped container 2, a side surface opposing the side surface 2b, the upper surface 2a, the side surface 2b, and a lower surface, respectively. The rectangular parts 115 to 118 serve as, in the box-shaped container 2, side surfaces on the respective sides in the border directions. The pasting margins 121 to 125 are provided inside the box-shaped container 2 to be pasted onto the rectangular part 115 and the like. Across the rectangular parts 112 and 113, a cutting-off line 104 is formed along the outline of the region which forms the outlet 4. The cutting-off line 104 is intermittent slits penetrating the box blank 102, in which a line of holes is formed along the curved outline of the outlet 4.

[0017]

In the box blank 102, the rectangular parts 111 to 118 and the margins 121 to 125 are folded 90 degrees with respect to one another at folding lines indicated by two-dot chain lines. The folding lines 131 to 133 serve as the sides 2c to 2e in the box-shaped container 2. The rectangular parts 116 and 118 are folded to be inside the rectangular parts 115 and 117, respectively, and are pasted onto the corresponding parts by means

of an adhesive. The pasting margins 121 to 125 are folded to be inside the rectangular parts 111 to 118, respectively, and are pasted onto the rectangular parts 111 and 115 to 118 by means of an adhesive. The box paper 1 is constructed in such a way that the parts above are pasted onto one another while the layered body 3g of the paper sheets 3 is housed inside. As a part of the box-shaped container 2 is cut off along the cutting-off line 104, the outlet 4 is formed in the box paper 1 as shown in FIG. 1.

[0018]

According to the embodiment described above, the outlet 4 is formed across the upper surface 2a and the side surface 2b. This allows the paper sheets 3 to be taken out through the outlet 4 not only vertically upward but also horizontally. P1 in FIG. 1 indicates, by a dotted line, an example of the paper sheet 3 having been taken out vertically upward, whereas P2 in FIG. 1 indicates, by a dotted line, an example of the paper sheet 3 having been horizontally taken out. Therefore, even if, for example, an article is placed on the upper surface 2a of the box-shaped container 2 and the part of the outlet 4 formed on the upper surface 2a is blocked, it is possible to take out the paper sheet 3 from the side surface 2b side. Furthermore, through the outlet 4, the topmost paper sheet 3 in the layered body 3g is taken out. In this regard, the paper sheets 3 provided inside are stacked in an alternately folded manner as shown in FIG. 2. For this reason, when the topmost paper sheet 3 is being taken out, this paper sheet 3 being taken out rolls up the upper part of the next paper sheet 3. Therefore, after the paper sheet 3 is taken out, the upper part of the next paper sheet 3 juts out from the outlet 4. This makes it possible to easily take out the paper sheet 3 next time.

[0019]

In addition to the above, according to the present embodiment, the protruding parts 45 and 46 are formed at the outlet 4. In the layered body 3g provided in the box-shaped container 2, the topmost paper sheet 3 is exposed upward through the protruding part

45. On the other hand, the side edges of the paper sheets 3 in the layered body 3g are exposed to the outside through the protruding part 46. There is a case where, when the paper sheet 3 is taken out, the next paper sheet 3 is not rolled up and remains inside the box-shaped container 2. In this regard, even if the paper sheet 3 remains in the box-shaped container 2, this paper sheet 3 is successfully taken out in such a way that, a part of the paper sheet 3 is exposed through the protruding parts 45 and 46, and this part is picked. In particular, because the lower end part of the protruding part 46 is formed to almost reach the lower surface of the box-shaped container 2, the paper sheets 3 are exposed to the outside through the lower end part of the protruding part 46, even if the number of the remaining paper sheets 3 in the layered body 3g becomes small. When the number of the remaining paper sheets 3 in the layered body 3g becomes small, the paper sheets 3 tend to remain at the bottom part of the box-shaped container 2. Even in such a case, each paper sheet 3 is successfully taken out through the lower end part of the protruding part 46.

[0020]

In addition to the above, in the present embodiment, the outlet 4 is formed to be on the inside of the layered body 3g, in the border directions. Therefore, when the paper sheet 3 is being taken out from the outlet 4, the width of this paper sheet 3 is narrowed in the border directions when passing through the outlet 4. The paper sheet 3 is folded with the upper part of the next paper sheet 3. For this reason, as the topmost paper sheet 3 is being taken out while being narrowed in width, the upper part of the paper sheet 3 folded with the topmost paper sheet 3 is also taken out while being narrowed in width, together with the topmost paper sheet 3. In this regard, in Patent Literature 1 one of the outlets is formed to be as wide as the container. In this arrangement, because the paper sheet is not narrowed in width at all, the paper sheet tends to be smoothly taken out without being folded with the next paper sheet. If the paper sheet

being taken out is not folded with the next paper sheet, the next paper sheet is not easily taken out from the outlet. On the other hand, because in the present embodiment the topmost paper sheet 3 and the next paper sheet 3 are taken out while being narrowed in width, the folding of the paper sheets 3 with each other is ensured and hence these sheets are likely to be taken out together. Therefore, after the paper sheet 3 is taken out, the next paper sheet 3 is unlikely to remain in the box-shaped container 2, and the upper part thereof is likely to jut out.

[0021]

In addition to the above, according to the present embodiment, the narrowed parts 43 and 44 are formed at the outlet 4. Therefore, when the paper sheet 3 is taken out from the outlet 4, this paper sheet 3 being taken out is vertically sandwiched between the narrowed parts 43 and 44, together with the next paper sheet 3. Because this facilitates these paper sheets 3 to be folded with each other, the sheets are likely to be taken out together. For this reason, after the paper sheet 3 is taken out, the next paper sheet 3 is unlikely to remain in the box-shaped container 2, and the upper part thereof is likely to jut out.

[0022]

In addition to the above, according to the present embodiment, in the outlet 4 only the narrowed parts 43 and 44 protrude toward the side 2c, and the leading ends protruding toward the side 2c are separated from the side 2c. Therefore, when the paper sheet 3 is taken out, the next paper sheet 3 is unlikely to be caught at the narrowed parts 43 and 44 and jammed, no matter whether the paper sheet is taken out vertically upward as indicated by P1 in FIG. 1 or the paper sheet is horizontally taken out as indicated by P2.

[0023]

Box papers are typically arranged such that a film or the like is pasted at an outlet to facilitate, when a paper sheet is taken out, the next paper sheet to be taken out together

with the paper sheet. On the other hand, the present embodiment is arranged so that, even if a film of the like is not pasted at the outlet 4, the next paper sheet 3 is taken out together with the paper sheet 3 being taken out, on account of the functions of the narrowed parts 43 and 44 and also of the formation of the outlet 4 to be on the inside of the paper sheet 3. Because a film or the like is unnecessary in the present embodiment, the environment protection and the resource conservation are ensured.

[0024]

In addition to the above, in Patent Literature 1 two outlets are formed; one being formed on the upper surface whereas the other being formed to be as wide as the container. In this structure, the overall strength of the container may be low. On the other hand, according to the present embodiment, only one outlet 4 is formed and the outlet 4 is not as wide as the box-shaped container 2. The container of the present embodiment therefore has improved strength as compared to the container of Patent Literature 1.

[0025]

In addition to the above, in the present embodiment the ends 41 and 42 of the outlet 4 are tapered off toward the points 4a and 4b, respectively. The outlet 4 is arranged in this way for the reason below. When the paper sheet 3 is taken out from the outlet 4, the ends of the paper sheet 3 in the border directions contact with the ends 41 and 42, respectively. When the paper sheet 3 is made of relatively hard paper, the resistance applied to the parts contacting with the ends 41 and 42 is high. For example, when the tapered parts are not formed as in an outlet 204 (described later) shown in FIG. 4, the resistance applied to the parts contacting with the ends 41 and 42 may be excessively high, and the paper sheet 3 may not be easily taken out. In this regard, in the present embodiment, the ends 41 and 42 of the outlet 4 are tapered off. As the ends of the paper sheet 3 pass through these tapered parts, the paper sheet 3 passes through the area

which is wider than the area in case where the tapered parts are not formed, with the result that the resistance applied to the parts of the paper sheet 3 contacting with the ends 41 and 42 is restrained. On the other hand, when the paper sheet 3 is made of relatively soft paper, the width of the paper sheet 3 may not be sufficiently narrowed at the time of passing through the tapered parts, because the paper sheet 3 passes through the area which is wider than the area in case where the tapered parts are not formed. In this regard, when the paper sheet 3 is made of relatively soft paper, the width of the paper sheet 3 is sufficiently narrowed if the ends of the paper sheet 3 pass through regions slightly deviated from the tapered parts. As such, because of the formation of the tapered parts in the present embodiment, the paper sheet 3 is easily taken out no matter whether the paper sheet 3 is relatively hard or relatively soft.

[0026]

(Variations)

While in the embodiment above both of the protruding parts 45 and 46 are formed at the outlet 4, only one of these protruding parts may be formed. Furthermore, FIG. 1 shows the box paper 1 with the outlet 4 being open. In this regard, the state in which the cutting-off line 104 has been formed but the outlet has not been opened yet is also encompassed within the scope of the present invention. Furthermore, the ends 41 and 42 of the outlet 4 are formed to be tapered off toward the points 4a and 4b. Alternatively, as in an outlet 204 shown in FIG. 4, the ends in the border directions may not be tapered off but smoothly curved.

Industrial Applicability

[0027]

A possible use is to store a plurality of stacked sheet members.

Reference Signs List

[0028]

1 BOX PAPER

2 BOX-SHAPED CONTAINER

2a UPPER SURFACE

2b SIDE SURFACE

5 3 PAPER SHEET

4 OUTLET

41, 42 END

43, 44 NARROWED PART

45, 46 PROTRUDING PART

10

Claims

[Claim1]

A container for packaging a plurality of stacked paper sheets, comprising:

a substantially rectangular parallelepiped box; and

5 one of an outlet of the paper sheets, which is formed across two neighboring surfaces of the box and slits intermittently formed along the outline of the outlet to form the outlet, the outlet including:

ends in border directions, which are in parallel to the border between the two surfaces;

first and second narrowed parts which are formed between the ends and are narrowed

10 in a direction orthogonal to the border directions; and a protruding part which is formed between the first and second narrowed parts and protrudes, as compared to the ends, toward an edge of at least one of the two surfaces, the edge being opposite to the border.

[Claim 2]

15 The container according to claim 1, wherein,

parts where the ends intersect the border are sharply formed outward in the border directions.

[Claim 3]

20 A paper sheet package body comprising:

the container according to claim 1; and

a plurality of paper sheets which are stacked in the container in an alternately folded manner,

in the border directions, the outlet being on the inside of the paper sheets in the

25 container.