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(71) Applicant: **Hisamitsu, Noriyuki**
Tokyo 141-0021 (JP)

(72) Inventor: **Hisamitsu, Noriyuki**
Tokyo 141-0021 (JP)

(74) Representative: **Carstens, Dirk Wilhelm**
Wagner & Geyer Partnerschaft mbB
Patent- und Rechtsanwälte
Gewürzmühlstraße 5
80538 München (DE)

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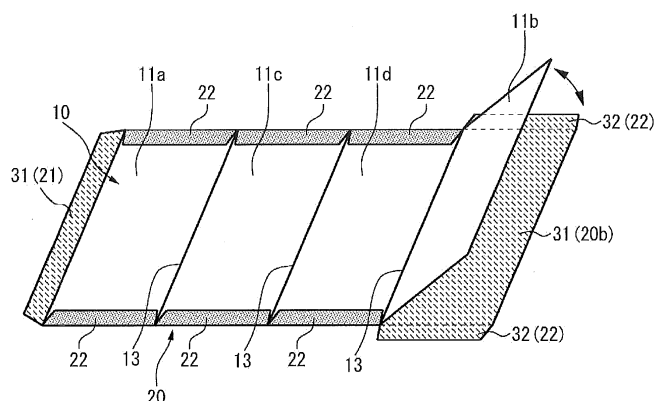
(54) **PACKAGING BOX SHEET**

(57) [Problem] To provide a packaging box sheet which can be transported and stored without taking up space and can easily be assembled during use to obtain a Hari-bako that has excellent appearance.

[Solution] A packaging box sheet assembled to obtain a Hari-bako includes a base paper and a decorative paper. The base paper includes a first bottom plate and a second lateral plate each of which has an outer edge each having a rectangular shape, etc. in a plan view, and at least a third lateral plate which has an outer edge having a rectangular shape in a plan view and which is disposed between the first lateral plate and the second lateral plate.

eral plate. The decorative paper includes: a first portion which is pre-bonded to the first lateral plate and the third lateral plate; a second portion which corresponds to the second lateral plate, is continuous with the first portion, and has at least a part that is separated from the second lateral plate without being bonded thereto; and a flap portion which is continuous with the first portion and which is provided so as to be projected from the first portion to a side opposite to the second portion. At least the part of the second portion and the flap portion each includes an adhesive layer and a release paper.

FIG. 1



Description

TECHNICAL FIELD

5 [0001] The present invention relates to a packaging box sheet that can be assembled into a Hari-bako.

BACKGROUND ART

10 [0002] For example, a Hari-bako is known as a packaging box suitable for storing items such as confectionery, tea, etc. and gift items. Conventionally, in the case of delivering such Hari-bakos, since these Hari-bakos are delivered to the delivery destination in an assembled state, there is a disadvantage that the delivery cost tends to be expensive because more space is required compared with its weight. Further, for the party receiving these Hari-bakos, there is a disadvantage that extensive space is required for storing the Hari-bakos.

15 [0003] With respect to the disadvantages described above, for example, Japanese Unexamined Patent Application Publication No. H07-061441 (Patent Document 1) discloses a technique where a Hari-bako is flattened by cutting the four corners of the lateral plates of the once assembled Hari-bako to reduce the volume of the Hari-bako at the time of transportation and storage, and then the four cut corners of the flattened Hari-bako are bonded with an adhesive to restore the original form at the time of use.

20 PRIOR ART DOCUMENT

PATENT DOCUMENT

25 [0004] Patent Document 1 :Japanese Unexamined Patent Application Publication No. H07-061441

SUMMARY OF THE INVENTION

PROBLEM TO BE SOLVED BY THE INVENTION

30 [0005] However, for the shop clerk in a store or the like who uses a Hari-bako to bond again the once cut Hari-bako with an adhesive during sales operation is a heavy burden. Further, the Hari-bako formed in this way is likely to result in a deteriorated aesthetic appearance compared to the Hari-bako which has not been cut, due to protrusion, etc. of the adhesive. Moreover, when food such as confectionery is boxed in the Hari-bako, there is a possibility that the adhesive is exposed on the inner side of the Hari-bako and contacts the confectionery, etc. Therefore, from these viewpoints, improvement is desired. Further, it is difficult for the technique described in the above-described Patent Document 1 to cope with a tubular Hari-bako.

35 [0006] In a specific aspect, it is an object of the present invention to provide a packaging box sheet which can be transported and stored without taking up space, and can easily be assembled during use to obtain a Hari-bako that is excellent in aesthetic appearance.

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MEANS FOR SOLVING THE PROBLEM

45 [0007] A packaging box sheet according to one aspect of the present invention is a packaging box sheet assembled to obtain a Hari-bako including: (a) a sheet-like base paper; and (b) a decorative paper disposed on an outer surface of the base paper; (c) where the base paper includes: (c1) a first bottom plate and a second lateral plate each of which has an outer edge each having a quadrangular shape in a plan view; and (c2) at least a third lateral plate which has an outer edge having a quadrangular shape in a plan view and which is disposed between the first lateral plate and the second lateral plate; (d) where the decorative paper includes: (d1) a first portion which is pre-bonded to the first lateral plate and the third lateral plate; (d2) a second portion which corresponds to the second lateral plate, is continuous with the first portion, and has at least a part that is separated from the second lateral plate without being bonded thereto; and (d3) a flap portion which is continuous with the first portion and which is provided so as to be projected from the first portion to a side opposite to the second portion; and where (e) at least the part of the second portion and the flap portion each includes: (e1) an adhesive layer; and (e2) a release paper covering the adhesive layer.

50 [0008] According to the above configuration, it is possible to provide a packaging box sheet which can be transported and stored without taking up space, and can easily be assembled during use to obtain a Hari-bako that is excellent in aesthetic appearance.

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BRIEF DESCRIPTION OF THE DRAWINGS

[0009]

[FIG. 1] FIG. 1 is a perspective view of a packaging box sheet.
 [FIG. 2] FIG. 2 is a perspective view of a Hari-bako after a packaging box sheet is being assembled.
 [FIG. 3] FIG. 3 is a cross-sectional view of the lateral plate portion of the packaging box sheet.
 [FIG. 4] FIG. 4 is a perspective view for explaining the method of assembling a packaging box sheet.
 [FIG. 5] FIG. 5 is a perspective view of the first modified example of a packaging box sheet.
 [FIG. 6] FIG. 6 is a perspective view of the second modified example of a packaging box sheet and a Hari-bako.
 [FIG. 7] FIG. 7 is a perspective view of the third modified example of a packaging box sheet and a Hari-bako.
 [FIG. 8] FIG. 8 is a perspective view of the fourth modified example of a packaging box sheet.
 [FIG. 9] FIG. 9 is a perspective view of the fourth modified example of a packaging box sheet.
 [FIG. 10] FIG. 10 is a perspective view for explaining the method of assembling the fourth modified example of a packaging box sheet.
 [FIG. 11] FIG. 11 is a perspective view of the fifth modified example of a packaging box sheet.
 [FIG. 12] FIG. 12 is a perspective view of the sixth modified example of a packaging box sheet.
 [FIG. 13] FIG. 13 is a perspective view of the seventh modified example of a packaging box sheet.
 [FIG. 14] FIG. 14 is a perspective view of the eighth modified example of a packaging box sheet.

MODE FOR CARRYING OUT THE INVENTION

[0010] FIG. 1 is a perspective view of a packaging box sheet 1 according to one embodiment, and the figure shows a perspective view of a packaging box sheet 1 when viewed from a base paper 10 side. The illustrated packaging box sheet 1 includes a base paper 10 which becomes a core material and a sheet-like decorative paper 20 disposed so as to overlap the entire outer surface of the base paper 10.

[0011] As shown in the perspective view in FIG. 2(A), the packaging box sheet 1 can be assembled into a tubular Hari-bako 100. This tubular Hari-bako 100, as shown in FIG. 2(B), for example, can be used by inserting a separate box 200 into the inside surrounded by the base paper 10. The illustrated separate box 200 has an opening at the top and a bottom plate at the bottom so that an arbitrary object can be placed inside.

[0012] The base paper 10 is made of, for example, a paperboard having a thickness of about 0.5 mm to several millimeters. The base paper 10 includes a lateral plate 11a (a first lateral plate), a lateral plate 11b (a second lateral plate), and lateral plates 11c, 11d (third lateral plates), each having a rectangular shaped outer edge in a plan view.

[0013] In the lateral plate 11a, one of the two long sides is connected to one long side of the adjacent lateral plate 11c, and nothing is connected to the other long side. In the lateral plate 11b, one of the two long sides is connected to one long side of the adjacent lateral plate 11d, and nothing is connected to the other long side.

[0014] In the lateral plate 11c, one of the two long sides is connected to one long side of the adjacent lateral plate 11a, and the other long side is connected to one long side of the adjacent lateral plate 11d. In the lateral plate 11d, one of the two long sides is connected to one long side of the adjacent lateral plate 11b, and the other long side is connected to one long side of the adjacent lateral plate 11c.

[0015] The four lateral plates 11a to 11d in the present embodiment are, when assembled, arranged so that the lateral plate 11a and the lateral plate 11d face each other and the lateral plate 11b and the lateral plate 11c face each other (refer to FIG. 2(A)). Further, each of the lateral plates 11a to 11d has one surface (front surface or back surface) having the same area and substantially the same shape.

[0016] Notch grooves 13 are portions where adjacent ones of the lateral plates 11a to 11d are connected to each other, and is provided linearly on the inner surface side after assembling the packaging box sheet 1. Each notch groove 13 is formed, for example, in a V-shaped cross section, to facilitate inward bending of each of the lateral plate 11a, etc. Here, each notch groove 13 may be provided on the outer surface of the lateral plate 11a, etc. when assembled. By providing notch groove 13 on the long side connecting each of the lateral plates 11a to 11d, bending of the adjacent lateral plates is facilitated.

[0017] The decorative paper 20 covers and decorates the entire outer surface of the base paper 10 and the edges of the opening after the packaging box sheet 1 is assembled into the Hari-bako (refer to FIG. 2(A)). Further, the decorative paper 20 has a portion for connecting the lateral plate 11a and the lateral plate 11b at their respective ends (one long side of each). This decorative paper 20 has arbitrary designs and patterns on the outer surface of the packaging box sheet 1 when assembled into the Hari-bako. The outer surface of the decorative paper 20 may be plain in any color.

[0018] In the present embodiment, the decorative paper 20 is preliminarily aligned and bonded to the first portion 20a facing the outer surface of each of the bottom plates 11a, 11c, and 11d. On the other hand, the decorative paper 20 is not preliminarily bonded to the second portion 20b corresponding to the lateral plate 11b, and the second portion 20b

is separated from the lateral plate 11b. Therefore, in the state prior to assembly, the lateral plate 11b can be freely bent around the notch groove 13 in a state of being separated and independent from the decorative paper 20 (refer to FIG. 1).

[0019] As shown in a partial cross-sectional view in FIG. 3, in the second portion 20b corresponding to the lateral plate 11b of the decorative paper 20, an adhesive layer 30 and a release paper 31 covering the adhesive layer 30 are provided.

When assembling the Hari-bako, the release paper 31 provided on the second portion 20b corresponding to the lateral plate 11b is peeled off, and the adhesive layer 30 of the second portion 20b is brought into contact with the outer surface of the lateral plate 11b. Thereby, the second portion 20b of the decorative paper 20 can be easily bonded to the lateral plate 11b. At this time, since the second portion 20b corresponding to the lateral plate 11b of the decorative paper 20 is connected in advance to the first portion 20a of the decorative paper 20 in the vicinity of the side where the notch groove 13 is provided and is in a state where its relative position is aligned with the side plate 11d, it is unlikely to cause misalignment when bonded to the lateral plate 11b.

[0020] The decorative paper 20 has a flap portion 21 which is provided extending outwardly from one long side of the lateral plate 11a, specifically the long side not connected to the other lateral plates. The flap portion 21 is a portion for connecting the lateral plate 11a and the lateral plate 11b when assembling the Hari-bako 100. As shown in FIG. 1, the flap portion 21 is connected to the first portion 20a corresponding to the lateral plate 11a of the decorative paper 20, and is provided extending away from one side (long side) of the lateral plate 11a in a direction away from this side (toward the opposite side of the second portion 20b).

[0021] The flap portion 21 has, for example, a trapezoidal outer edge as shown in the figure, the bottom of which is formed about the same length as the lateral edge of the lateral plate 11a, and is disposed in association with this lateral edge. Of the surface of the flap portion 21, on the same side as the side on which the adhesive layer 30 is provided on the decorative paper 20, as with the second portion 20b, the adhesive layer 30 and the release paper 31 covering it are provided (refer to FIG. 3). When assembling the Hari-bako 100, the release paper 31 of the flap portion 21 is peeled off, then while the edges of the long sides of the lateral plate 11a and the lateral plate 11b are brought in contact with each other, by bonding the flap portion 21 to the outer surface of the lateral plate 11b, the lateral plate 11a and the lateral plate 11b can be connected. Thereby, the packaging box sheet 1 can be easily assembled. Therefore, the flap portion 21 has a sufficient width (for example, about 1 cm) needed to connect the lateral plates to each other.

[0022] Further, the decorative paper 20 has two folding pieces 22 for folding inward and covering the inside of the lateral plate 11b. These folding pieces 22 have approximately the same length as the edge portion of the lateral plate 11b, and have a predetermined width (for example, about 1 cm) necessary and sufficient to fold inwardly, and as shown in FIG. 1, the folding pieces 22 are connected to the second portion 20b corresponding to the lateral plate 11b of the decorative paper 20, and is provided so as to project from each short side of the second portion 20b in a direction away from these short sides.

[0023] Of the surfaces of each folding piece 22, on the same side as the side on which the adhesive layer 30 is provided on the decorative paper 20, the adhesive layer 30 and the release paper 32 covering the adhesive layer 30 are provided. In the present embodiment, the release paper 32 provided on the folding piece 22 of the decorative paper 20 and the release paper 31 provided on the second portion 20b are integrally provided. When assembling the Hari-bako 100, by peeling off the release papers 31 and 32 provided integrally over each folding piece 22 and the second portion 20b, then bonding the second portion 20b to the lateral plate 11b and folding inwardly each folding piece 22 to the lateral plate 11b, the folding pieces 22 can be bonded to the inner side of the lateral plate 11b.

[0024] Here, as shown in FIG. 1, similar folding pieces 22 are provided for the other lateral plates 11a, 11c, and 11d, and these are preliminarily folded inwardly and bonded to the inner side of each of the lateral plates 11a, etc. Due to these folding pieces 22, since the portion from the edge to the part of inner surface of each of the lateral plates 11a to 11d of the base paper 10 can be decorated with the decorative paper 20, the aesthetic appearance of the edge portion of each lateral plate can be improved (refer to FIG. 2(A)).

[0025] The packaging box sheet 1 of the present embodiment has the above-described configuration, and the assembly procedure will now be described with reference to FIG. 4. The procedure shown below is one example, and each procedure can be interchanged as long as there is no contradiction in its assembly.

[0026] First, from a flat state of the packaging box sheet 1 as shown in FIG. 1, as shown in FIG. 4(A), each of the lateral plates 11a, 11b, 11c, and 11d is bent approximately 90 degrees along the notch groove 13 so that each of the lateral plates 11a to 11d are arranged to form a ring. In this state, the release paper 31 of the flap portion 21 is peeled off, then while the long sides of the lateral plate 11a and the lateral plate 11b are brought in contact with each other, the flap portion 21 is bonded to the outer surface of the lateral plate 11b. Thereby, the lateral plates 11a and 11b are connected to each other, and the lateral plates 11a to 11d become tubular as a whole.

[0027] Next, as shown in FIG. 4(B), the second portion 20b corresponding to the lateral plate 11b of the decorative paper 20 and the release papers 31 and 32 corresponding to the two folding pieces 22 are peeled off, and the second portion 20b of the decorative paper 20 is bonded to the outer surface of the lateral plate 11b. Thereby, the flap portion 21 is covered by the second portion 20b. Thereafter, as shown in FIG. 4(C), each folding piece 22 is folded inwardly inside the lateral plate 11b and bonded to the inner surface of the lateral plate 11b. From the above, the Hari-bako 100

as shown in FIG. 2(A) is completed.

[0028] According to the packaging box sheet 1 of the above embodiment, since the box sheet is in the form of a sheet prior to assembly, the packaging box sheet can be transported to the delivery destination in a space-saving manner and at low cost. In addition, less storage space is required at the delivery destination, and when the Hari-bako is needed, the Hari-bako (the packaging box) can be easily assembled into an aesthetically pleasing tubular shape without any special skills or dexterity on the part of the assembler.

[0029] In detail, since the bottom plates 11a, 11c, and 11d are pre-bonded to the decorative paper 20, the decorative paper 20 is less likely to be misaligned when assembled at a site such as a confectionery store. Further, since the lateral plate 11b and the decorative paper 20 are not pre-bonded, after connecting the lateral plate 11a and the lateral plate 11b with the flap portion 21, by bonding the second portion 20b of the decorative paper 20 to the lateral plate 11b so as to cover the flap portion 21, the flap portion 21 can be made invisible from the outside. As a result, the aesthetic appearance of the Hari-bako 100 is improved.

[0030] Here, the present invention is not limited to the content of the above-described embodiment, and can be variously modified and implemented within the scope of the subject matter of the present invention. For example, each folding piece 22 may be omitted from the packaging box sheet 1 of the above-described embodiment. Further, the plan view shape (the outer edge shape) of each of the lateral plates 11a to 11d is not limited to a rectangular shape, and may be a square shape. The plan view shape (the outer edge shape) of each of the lateral plates 11a to 11d may be a variety of quadrangles, each of which may have a different plan view shape.

[0031] Further, in the above-described embodiment, the decorative paper 20 is pre-bonded to the lateral plates 11a, 11c, 11d, but the present invention is not limited thereto, and it is sufficient that the decorative paper 20 is preliminarily aligned and bonded to at least one of the lateral plates 11c or 11d. In this case, with regard to the lateral plate that is not bonded to the decorative paper 20, it is preferable to provide the adhesive layer and the release paper as in the above-described embodiment.

[0032] One such modified example is shown in FIG. 5. In the packaging box sheet 1a of the modified example shown in FIG. 5(A), the lateral plates 11c and 11d and the decorative paper 20 are pre-bonded, but the lateral plate 11a is not pre-bonded. This point is different from the packaging box sheet 1 of the above-described embodiment. Specifically, the lateral plate 11a is connected to the lateral plate 11c, and is provided flexibly as with the lateral plate 11b. Further, the first portion 20a corresponding to the lateral plate 11a of the decorative paper 20 and each folding piece 22 are provided with an adhesive layer (not shown in the figure) and the release papers 32 and 33 covering the adhesive layer. In the illustrated example, the release paper 33 is provided integrally with the release paper 31 of the flap portion 21 and the release papers 32 of each folding piece 22, but these may be provided separately. Here, in this modified example, the portion of the decorative paper 20 that is pre-bonded to the lateral plates 11c and 11d corresponds to the third portion. This portion is connected to the first portion 20a and the second portion 20b of the decorative paper 20. Here, the configurations other than the above are the same as those in the above-described embodiment, and the same components are designated by the same reference numerals and detailed description thereof will be omitted (the same applies to other modified examples described below).

[0033] In the modified example of the packaging box sheet 1a shown in FIG. 5(A), at the time of assembly, firstly, the release papers 32 and 33 are peeled off, then the first portion 20a of the decorative paper 20 is bonded to the lateral plate 11a, and each folding piece 22 is also bonded to the lateral plate 11a. In the present example, the release paper 31 is also peeled off at the same time. Thereafter, the packaging box sheet can be assembled in the same manner as the above-described embodiment (refer to FIG. 4).

[0034] Further, as in the packaging box sheet 1a' of the modified example shown in FIG. 5(B), it is also possible to have only the lateral plate 11c pre-bonded to the decorative paper 20, and not have the lateral plate 11d pre-bonded thereto. In this case, the release papers 32 and 33 (and the adhesive layer not shown) are also provided onto the portion corresponding to the lateral plate 11d of the decorative paper 20. Instead, the lateral plate 11d may be pre-bonded to the decorative paper 20 and not have the lateral plate 11c pre-bonded thereto.

[0035] In the modified example of the packaging box sheet 1a' shown in FIG. 5(B), at the time of assembly, firstly, the release papers 32 and 33 are peeled off, then the first portion 20a of the decorative paper 20 is bonded to the lateral plate 11a, and each folding piece 22 is also bonded to the lateral plate 11a. In addition, with regard to the portion corresponding to the lateral plate 11d of the decorative paper 20, the release papers 32 and 33 are peeled off to be bonded to the lateral plate 11d. Thereafter, the packaging box sheet can be assembled in the same manner as the above-described embodiment (refer to FIG. 4).

[0036] Further, although the above-described embodiment illustrates the packaging box sheet to obtain the Hari-bako 100 in the form of a cylinder with a quadrangular cross section, the cross-sectional shape of the Hari-bako is not limited thereto, and by increasing or decreasing the number of lateral plates as necessary, the Hari-bako can be variously modified. One such modified example is shown in FIG. 6(A). The packaging box sheet 1b of the modified example shown in FIG. 6(A) is different in that the lateral plate 11d in the packaging box sheet 1 of the above-described embodiment is omitted, and the lateral plate 11b and the lateral plate 11c are connected at each long side. Here, as with the modified

example shown in FIG. 5(A), the lateral plate 11a may be configured not to be pre-bonded.

[0037] By assembling such packaging box sheet 1b in the same manner as described above, a tubular Hari-bako 100b having a triangular cross-sectional shape as shown in FIG. 6(B) can be obtained. Here, by increasing the number of the lateral plates arranged between the lateral plate 11a and the lateral plate 11b in the same manner, it is possible to realize a packaging box sheet capable of obtaining a tubular Hari-bako having various polygonal cross-sectional shapes.

[0038] Further, in the above-described embodiment, the size and shape of each of the lateral plates have been the same, but by making them different, it is possible to realize a packaging box sheet capable of obtaining a tubular Hari-bako having various polygonal cross-sectional shapes. One such modified example is shown in FIG. 7(A). The packaging box sheet 1c of the modified example shown in FIG. 7(A) includes eight lateral plates 111a, 111b, 111c, 111d, 111e, 111f, 111g, and 111h, provided in connection with each other. Of these, the lateral plate 111a corresponds to the lateral plate 11a in the above-described embodiment. And the flap portion 121 and the release paper 131 (and an adhesive layer not shown) covering the flap portion 121 are provided in association with the lateral plate 111a.

[0039] Further, the lateral plate 111b corresponds to the lateral plate 11b in the above-described embodiment. Then, in association with the lateral plate 111b, the second portion 120b, the release paper 131 (and the adhesive layer not shown) covering the second portion 120b, two folding pieces 122 and the release paper 132 (and the adhesive layer not shown) covering them are provided. The other lateral plates 111c, etc. correspond to the lateral plates 11c and 11d in the above-described embodiment. Of each lateral plate, the lateral plates 111a, 111d, 111f, 111h have relatively shorter short side lengths compared to the lateral plates 111b, 111c, 111e, and 111g.

[0040] By assembling the packaging box sheet 1c in the same manner as described above, a tubular Hari-bako 100c having an octagonal cross section as shown in FIG. 7(B) can be obtained. Here, in the same manner, by increasing or decreasing the number of lateral plates disposed between each of the lateral plates 111a and the lateral plate 111b, or by increasing or decreasing the length in the short side direction thereof, it is possible to realize a packaging box sheet capable of obtaining a tubular Hari-bako having various polygonal cross-sectional shapes.

[0041] Further, in the above-described embodiment, etc., various examples of packaging box sheets for obtaining tubular Hari-bakos that have no bottom plates and penetrates the inside have been illustrated, but a bottom plate may also be provided. One such modified example is shown in FIG. 8. The packaging box sheet 1d of the modified example shown in FIG. 8 is provided with the bottom plate 11e connected to one short side of the lateral plate 11c, and the decorative paper 20 is provided with a fourth portion 20e corresponding to the bottom plate 11e. Further, the lateral plates 11a and 11d are each provided with a flap portion 33 on the side where the bottom plate 11e is provided so as to project in the same direction as the bottom plate 11e from the short side where the bottom plate 11e is provided. An adhesive layer (not shown) is provided on the fourth portion 20e of the decorative paper 20 and each of the flap portions 33, and a release paper 31 is provided to cover the adhesive layer. Here, as illustrated in FIG. 9, the release paper 31 provided in the fourth part 20e and each flap portion 33 may be integrated.

[0042] The packaging box sheet 1d of the fourth modified example has the above-described configuration, and the assembly procedure will now be described with reference to FIG. 10. The procedure shown below is one example, and each procedure may be interchanged as long as there is no contradiction in its assembly.

[0043] First, from a flat state of the packaging box sheet 1d as shown in FIG. 8 or 9, each of the lateral plates 11a, 11b, 11c, and 11d is bent at approximately 90 degrees along the notch groove 13 as shown in FIG. 10(A), and they are arranged so that the lateral plates 11a to 11d form a ring. In this state, the release paper 31 of the flap portion 21 is peeled off, then while the long sides of the lateral plate 11a and the lateral plate 11b are brought in contact with each other, the flap portion 21 is bonded to the outer surface of the lateral plate 11b. Thereby, the lateral plates 11a and 11b are connected to each other, and the lateral plates 11a to 11d become tubular as a whole.

[0044] Next, as shown in FIG. 10(B), the bottom plate 11e is bent by approximately 90° and placed in contact with each end of each of the lateral plates 11a, 11b and 11d. In this state, the release paper 31 of each flap portion 33 is peeled off, and each flap portion 33 is bonded to the outer surface of the lateral plate 11e. Thereby, the lateral plate 11e is connected to one end side of each of the lateral plates 11a, 11c, and 11d.

[0045] Next, as shown in FIG. 10(B), the second portion 20b corresponding to the lateral plate 11b of the decorative paper 20 and the release papers 31 and 32 corresponding to the two folding pieces 22 are peeled off, and the second portion 20b of the decorative paper 20 is bonded to the outer surface of the lateral plate 11b. In addition, one folding piece 22 on the right side in the figure is bonded to the outer surface of the bottom plate 11e. Thereby, the lateral plate 11e is connected to one end side of the lateral plate 11b.

[0046] Then, as shown in FIG. 10(C), the other folding piece 22 is folded inwardly into the lateral plate 11b and bonded to the inner surface of the lateral plate 11b, and the fourth portion 20e of the decorative paper 20 is bonded to the outer surface of the bottom plate 11e so as to cover each of the flap portion 33, etc. From the above, the Hari-bako with the bottom plate is completed.

[0047] Further, in the packaging box sheet of the above-described embodiment, etc., the second portion of the decorative paper was separated from the entirety of the second lateral plate. However, one part of the second portion of

the decorative paper may be pre-bonded to the second lateral plate while the other part is kept separated therefrom. One such modified example is shown in FIG. 11. In the packaging box sheet 1e of the illustrated modified example, a part of the second portion 220b of the decorative paper 20 corresponding to the lateral plate 11b, specifically the part of about 2/3 from the long side where the lateral plate 11b and the lateral plate 11d contact each other toward the other long side of the lateral plate 11b, is pre-attached. Further, the folding sides 222a corresponding to this portion are pre-bonded to the inside of the lateral plate 11b, respectively. On the other hand, two folding sides 222b are connected to the portion of the second portion 220b which is separated from the lateral plate 11b, and these are covered by the release papers 231 and 232. In this modified example, the release paper 231 and the release paper 232 are integrally formed. Since the part of the second portion 220b which is separated from the lateral plate 11b needs to cover the flap portion 21 after the flap portion 21 is bonded to the lateral plate 11b at the time of assembly, the part is provided to have the length and width of at least roughly equal to or greater than the length and width of the flap portion 21. Since the method of assembling the modified example shown in FIG. 11 is basically the same as the method shown in FIG. 4, detailed description thereof will be omitted here. Since the packaging box sheet 1e of this modified example can have more pre-bonded portions, it is possible to further reduce the misalignment of the decorative paper during assembly.

[0048] Further, in the packaging box sheet of the above-described embodiment, etc., the shape of each lateral plate has been rectangular, but the shape of each lateral plate may be trapezoidal. One such modified example is shown in FIG. 12(A). In the packaging box sheet 1f of the modified example shown in the figure, each of the lateral plates 11a, 11b, 11c, and 11d is formed in a trapezoidal (isosceles trapezoid) shape having the same shape and size. In detail, in the illustrated example, the lateral plates 11a, 11b, 11c, and 11d are connected to each other by their upper sides and lower sides, respectively, and are connected to each other by the sides corresponding to their legs. Here, same reference numerals are given to all the configurations that share the same function as the packaging box sheet 1 shown in FIG. 1. Since the method of assembling the packaging box sheet 1f of this modified example is basically the same as the method shown in FIG. 4, detailed description thereof will be omitted here. By assembling the packaging box sheet 1f, as shown in FIG. 12(B), Hari-bako 100f having a shape in which one opening side is greater than the other opening side can be obtained. Such Hari-bako 100f can be provided with a lower lid or an upper lid by appropriately inserting a base paper from the greater opening side, for example.

[0049] Here, as with the modified example shown in the above-described FIG. 11, one part of the second portion of the decorative paper may be pre-bonded to the second lateral plate while the other part may be kept separated. As an example of such a case, a packaging box sheet 1f' is shown in FIG. 13. In FIG. 13, the same reference numerals are used for the configurations functionally common to those in FIG. 11, and the description thereof will be omitted. Further, also in the packaging box sheet 1f or 1f', the number of lateral plates separated from the decorative paper may be increased as in the modified example shown in FIG. 5 described above.

[0050] Further, in the packaging box sheet of the above-described embodiment, etc., basically, the shape and size of the release papers have been the same as each part of the decorative paper 20 to be covered by the release paper. However, there is no limitation on the shape etc. of the release papers as long as it is sufficient to cover the necessary portions. For example, as shown in FIG. 14(A), in the packaging box sheet 1, a rectangular shaped release paper 431a having a size sufficient to cover the second portion 20b corresponding to the lateral plate 11b and each folding piece 22 may be used. Similarly, as the release paper corresponding to the flap portion 21, a rectangular shaped release paper 431b having a size sufficient to cover the portion, or a release paper 431c having the length longer than the release paper 431b with its length extending beyond both sides in the depth direction in reference to the flap portion 21 in the figure, may be used.

[0051] Further, for example, as shown in FIG. 14(B), as the release paper to cover the second portion 20b corresponding to the lateral plate 11b in the packaging box sheet 1d, a rectangular shaped release paper 531a having a size sufficient to cover the portion, or a release paper 531b having the length longer than the release paper 531a and projecting toward at least one side (toward the front side in the illustrated example) in the depth direction in reference to the second portion 20b in the figure, may be used. Similarly, as the release paper for covering the fourth portion 20e etc. corresponding to the lateral plate 11e, a rectangular shaped release paper 531c having a size sufficient to cover the portion, or a release paper 531d having the length longer than the release paper 531c and projecting toward at least one side in the left-right direction (right side direction in the illustrated example) in the figure, may be used. In the illustrated example, by combining the release paper 531a and the release paper 531d or combining the release paper 531b and the release paper 531c, the release papers do not interfere with each other and are easy to handle. Further, likewise, as the release paper corresponding to the flap portion 21, a rectangular shaped release paper 531e having a size sufficient to cover the portion, or a release paper 531f having the length longer than the release paper 531e and projecting toward at least one side (the front side in the illustrated example) in the depth direction in the figure, may be used.

[0052] Further, in the above-described embodiment and the modified examples, cases have been exemplified where the lateral plates are directly bonded to each other at the locations where the lateral plates are connected to each other. However, the two plates may be connected to each other without being directly bonded to each other but connected by the decorative paper attached over the two plates.

DESCRIPTION OF THE REFERENCE NUMERALS

[0053]

5	1:	Packaging box sheet
	10:	Base paper
	11a, 11b, 11c, 11d:	Lateral plate
10	13:	Notch groove
	20:	Decorative paper
15	20a:	First portion
	20b:	Second portion
	21:	Flap portion
20	22:	Folding piece
	30:	Adhesive layer
25	31, 32:	Release paper

Claims

- 30 1. A packaging box sheet assembled to obtain a Hari-bako comprising:
- a sheet-like base paper; and
a decorative paper disposed on an outer surface of the base paper;
- 35 wherein the base paper comprises:
- a first bottom plate and a second lateral plate each of which has an outer edge each having a quadrangular shape in a plan view; and
at least a third lateral plate which has an outer edge having a quadrangular shape in a plan view and which is
40 disposed between the first lateral plate and the second lateral plate;
- wherein the decorative paper comprises:
- a first portion which is pre-bonded to the first lateral plate and the third lateral plate;
45 a second portion which corresponds to the second lateral plate, is continuous with the first portion, and has at least a part that is separated from the second lateral plate without being bonded thereto; and
a flap portion which is continuous with the first portion and which is provided so as to be projected from the first portion to a side opposite to the second portion; and
- 50 wherein at least the part of the second portion and the flap portion each comprises:
- an adhesive layer; and
a release paper which covers the adhesive layer.
- 55 2. The packaging box sheet according to claim 1,
wherein the whole part of the second portion is separated from and not bonded to the second lateral plate; and
wherein the whole part of the second portion has the adhesive layer and the release paper.

3. The packaging box sheet according to claim 1,
wherein each of the first the lateral plate, the second lateral plate, and the third lateral plate has a rectangular shape
in a plan view.

4. The packaging box sheet according to claim 1,
wherein each of the first the lateral plate, the second lateral plate, and the third lateral plate has an isosceles
trapezoidal shape in a plan view.

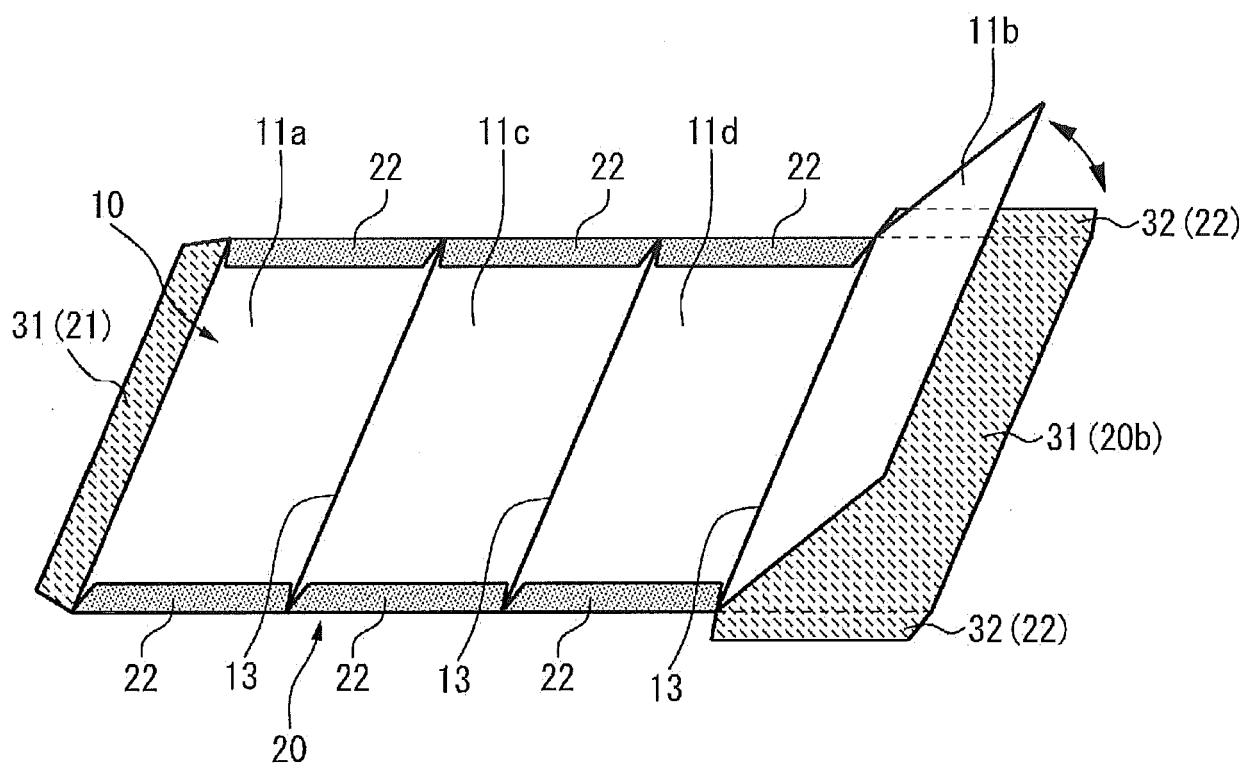
5. The packaging box sheet according to claim 1,
wherein the flap portion of the decorative paper is configured to connect the first lateral plate and the second lateral
plate, by peeling off the release paper, bringing the adhesive layer into contact with the second lateral plate, and
bonding the flap portion to the second lateral plate.

6. The packaging box sheet according to claim 5,
wherein at least the part of the second portion of the decorative paper is configured to cover the flap portion after
the flap portion is bonded to the second lateral plate, and to bond to the second lateral plate.

7. The packaging box sheet according to any one of claims 1 to 6,
wherein the base paper further comprises a rectangular bottom plate arranged adjacent to one of the four sides of
the third lateral plate that is adjacent to neither the first the lateral plate nor the second lateral plate,
wherein the decorative paper further comprises a fourth portion which corresponds to the bottom plate, is separated
from and not bonded to the bottom plate, and is connected to the first portion or the third portion, wherein the fourth
portion of the decorative paper comprises:

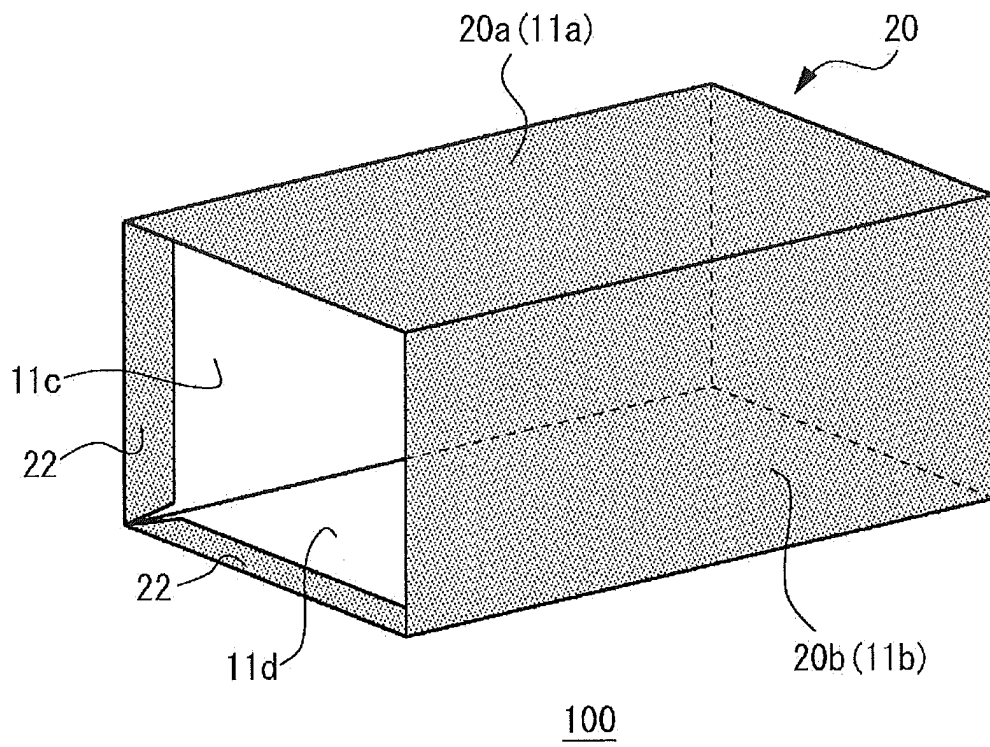
an adhesive layer; and
a release paper which covers the adhesive layer.

FIG. 1

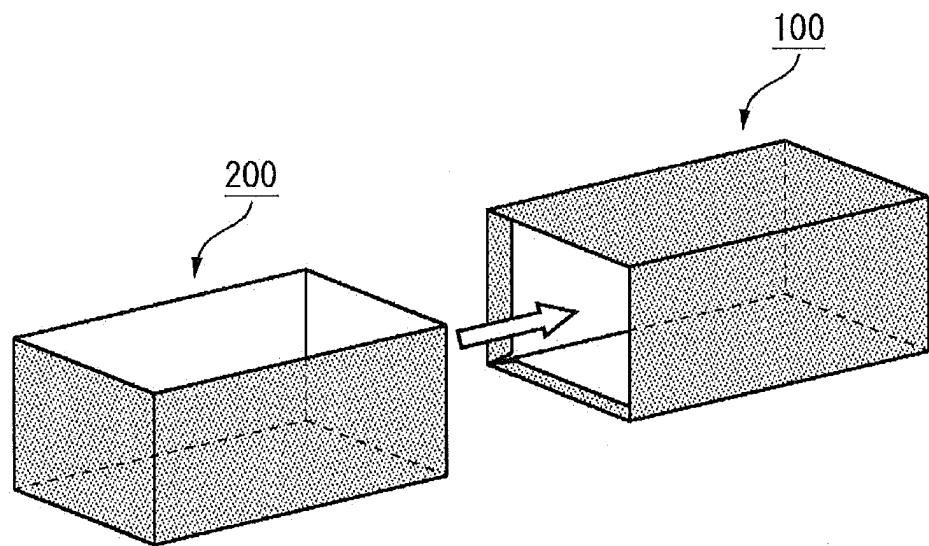


1

FIG. 2



(A)



(B)

FIG. 3

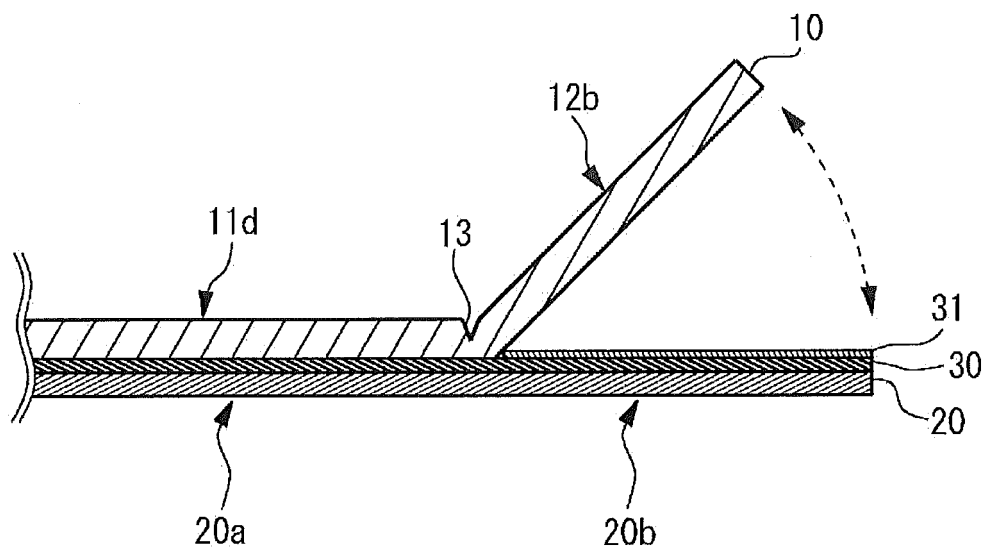


FIG. 4

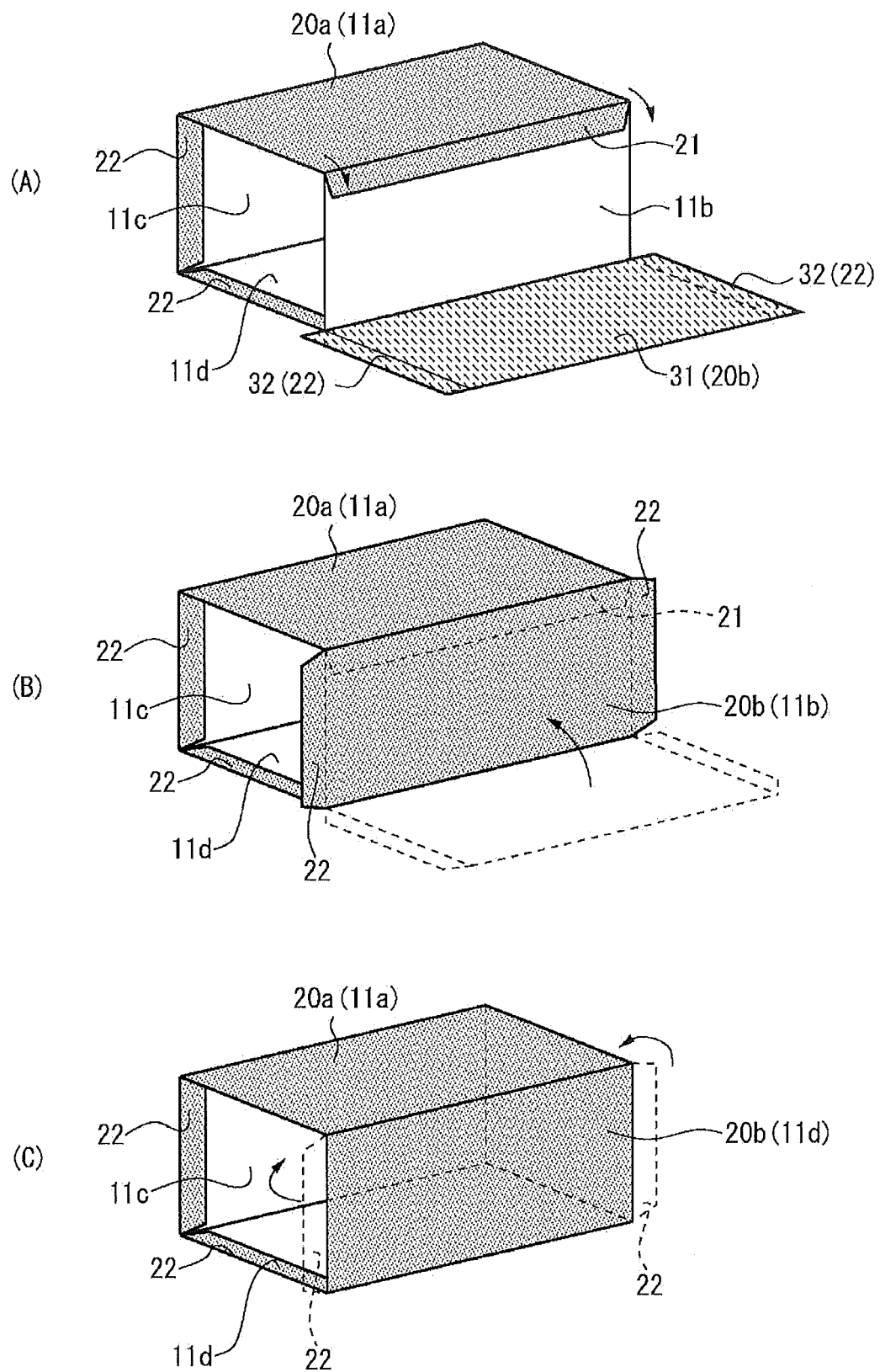
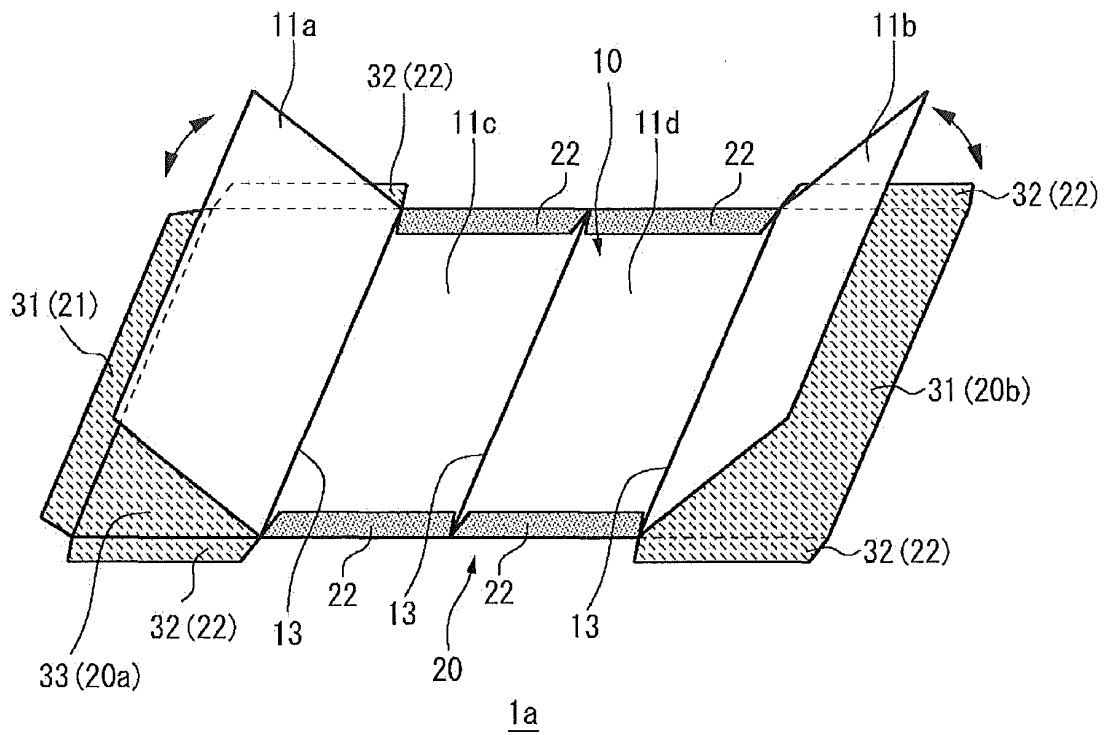
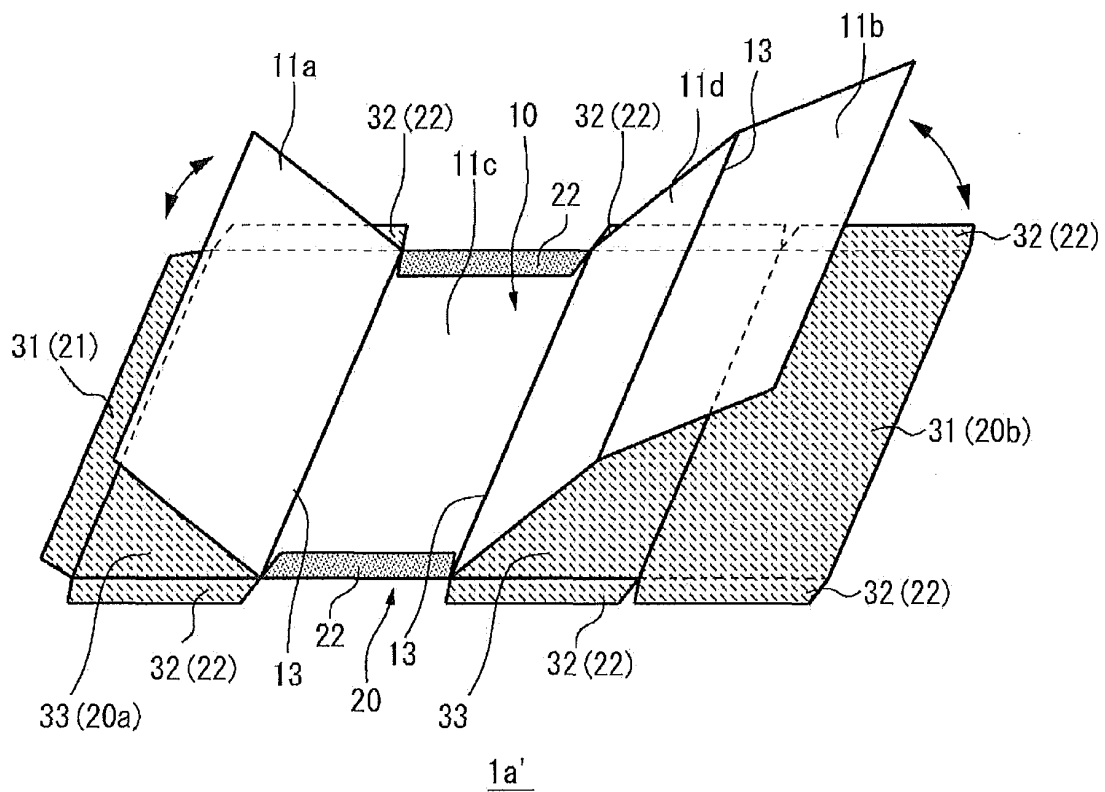


FIG. 5

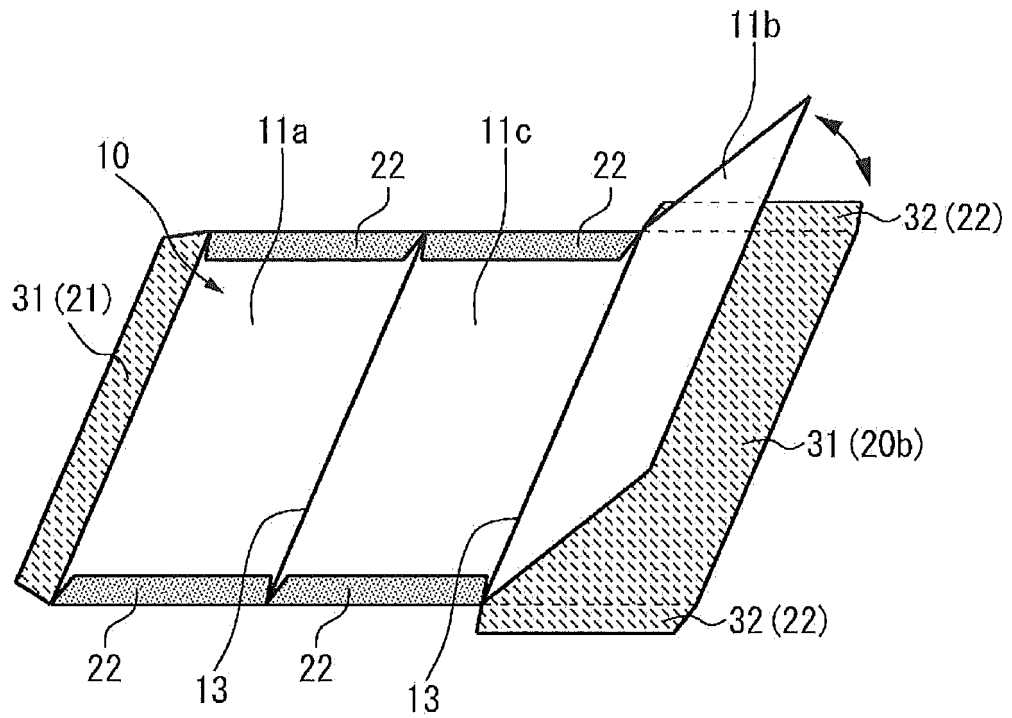


(A)



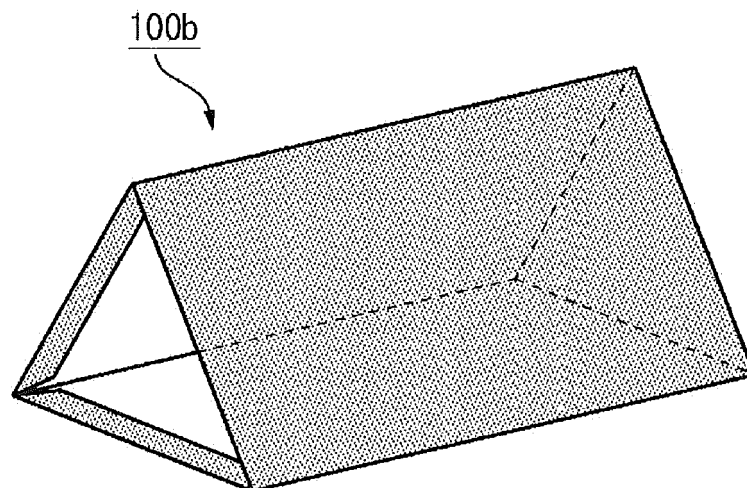
(B)

FIG. 6



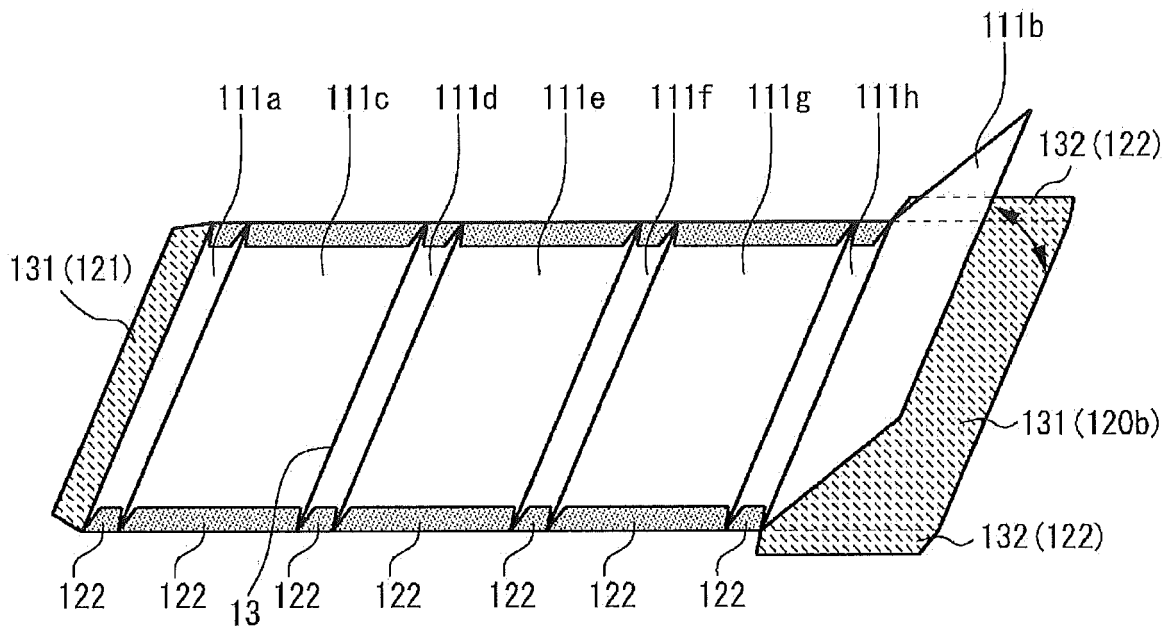
1b

(A)

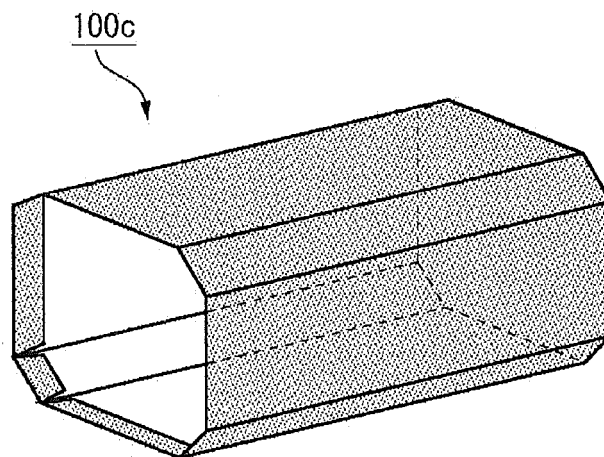


(B)

FIG. 7



1c
(A)



(B)

FIG. 8

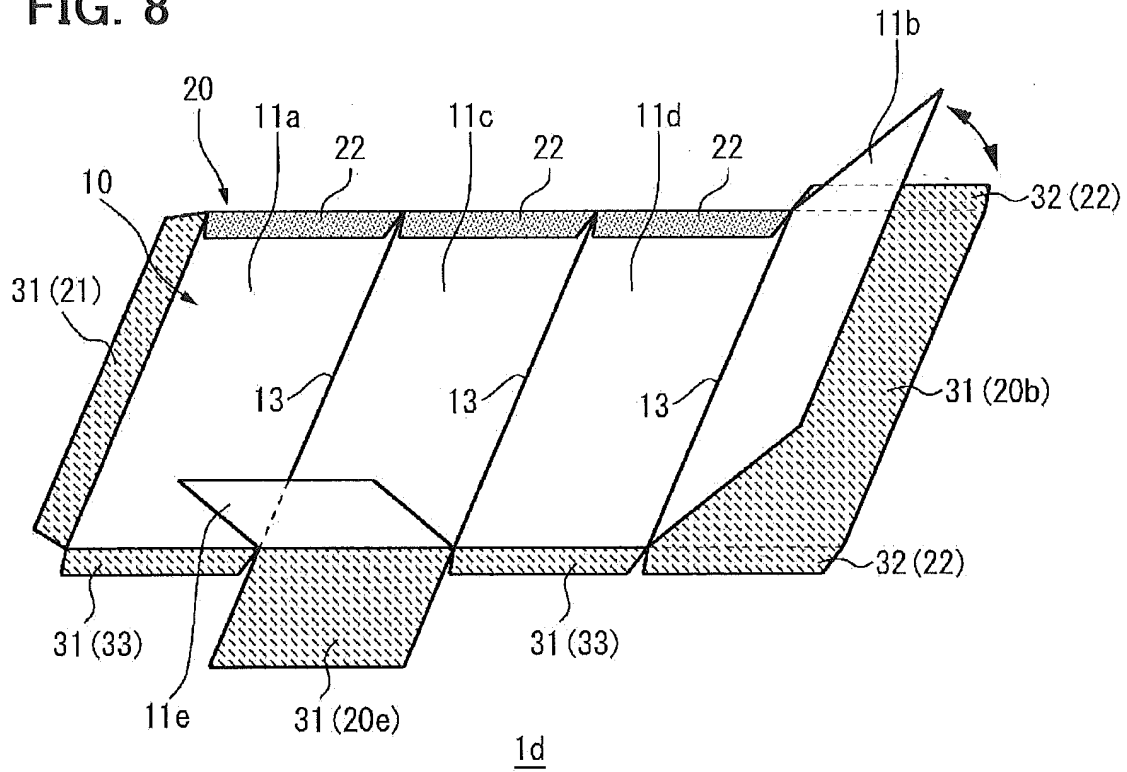


FIG. 9

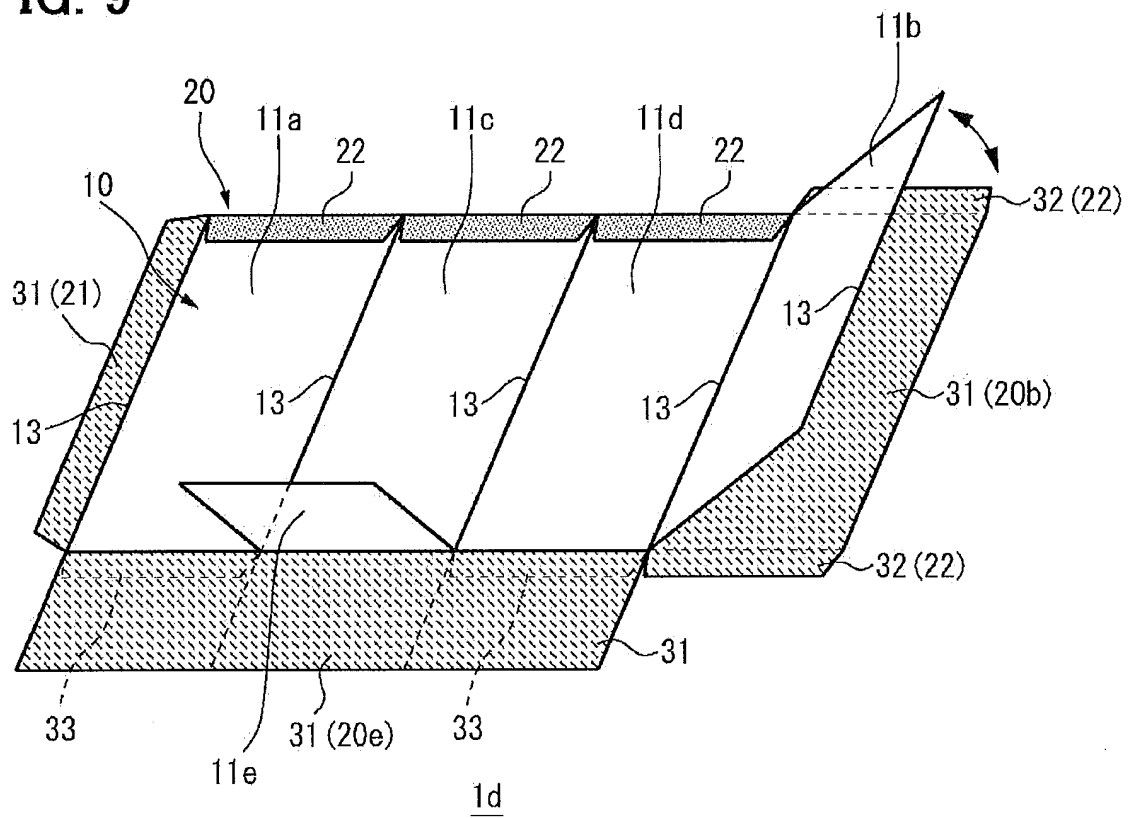


FIG. 10

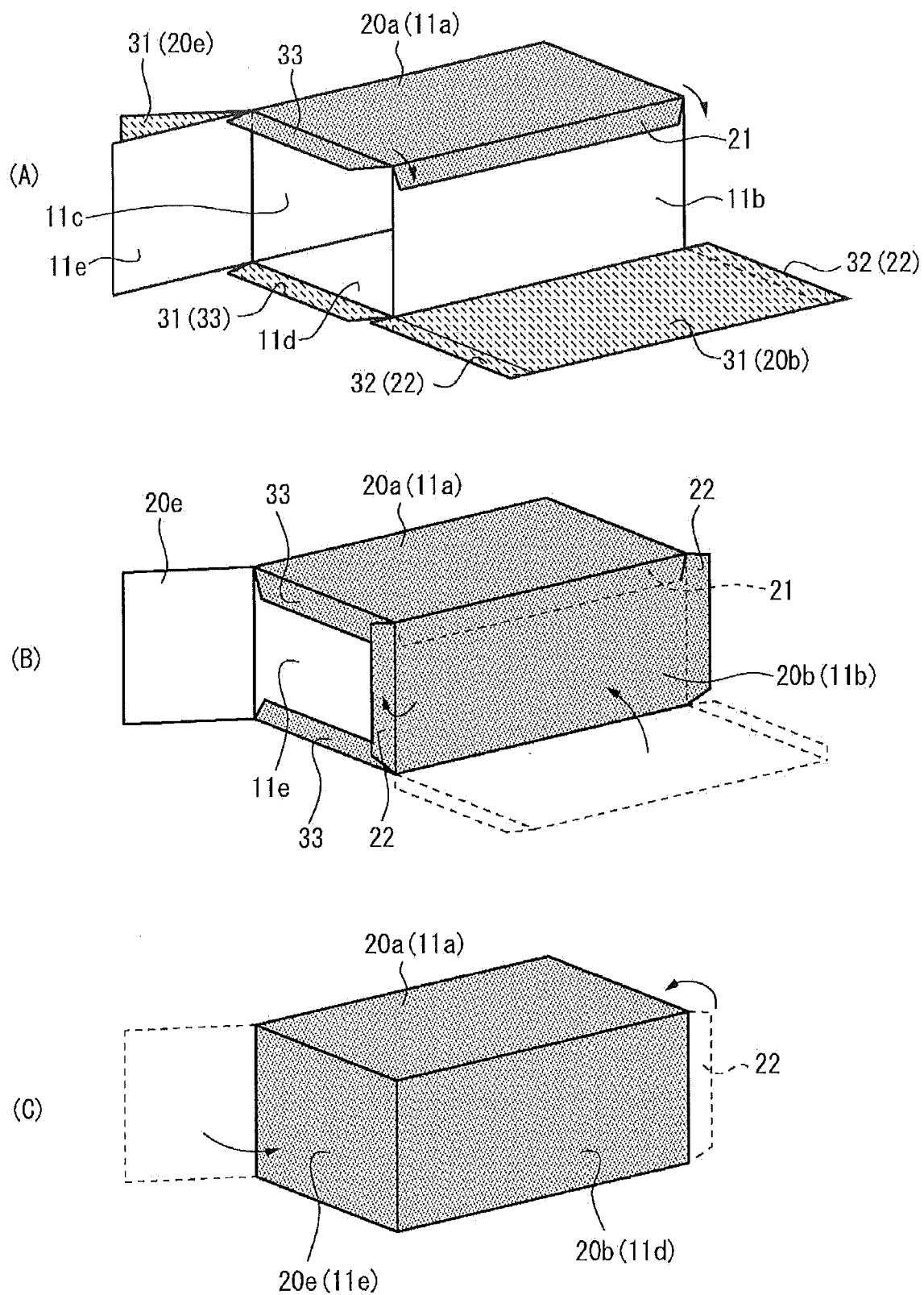
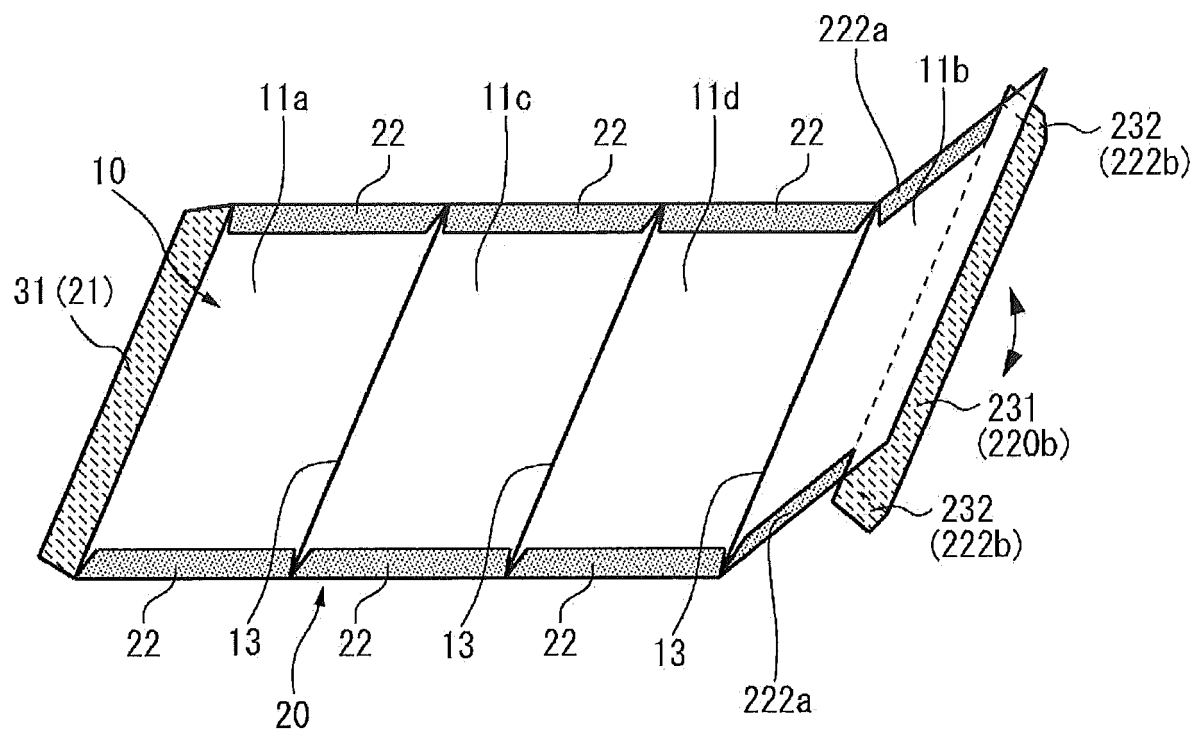
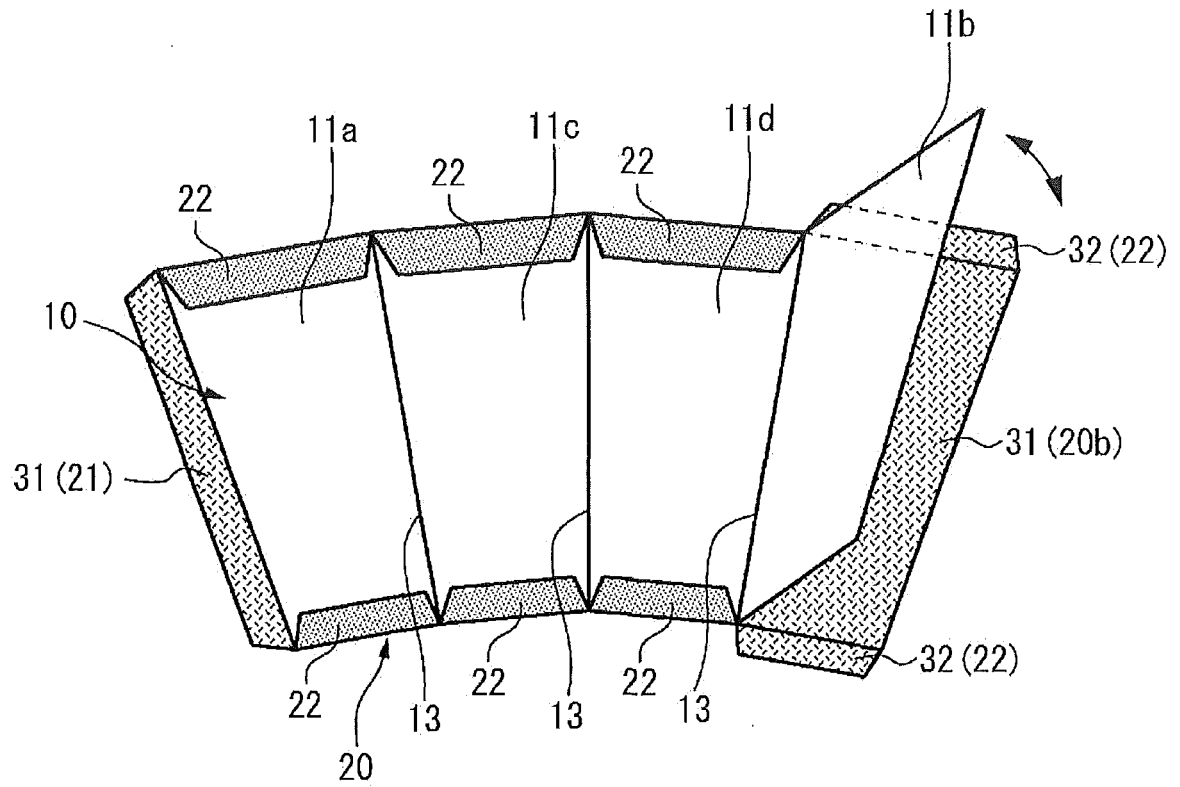


FIG. 11



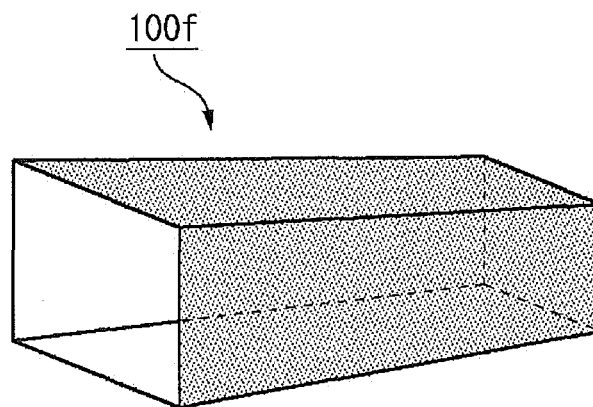
1e

FIG. 12



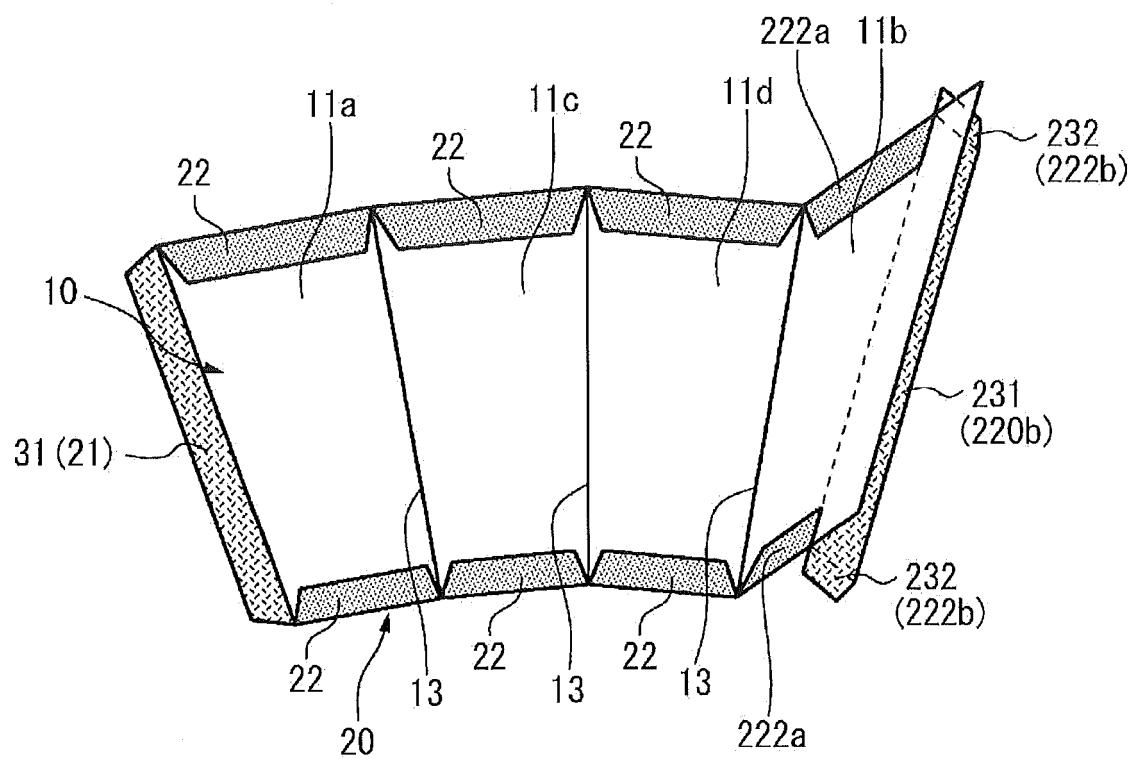
1f

(A)



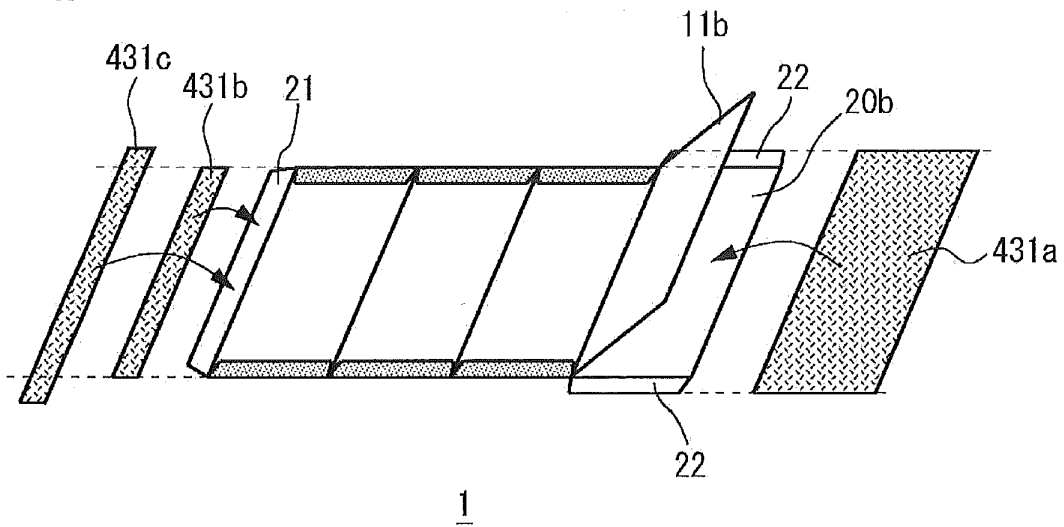
(B)

FIG. 13

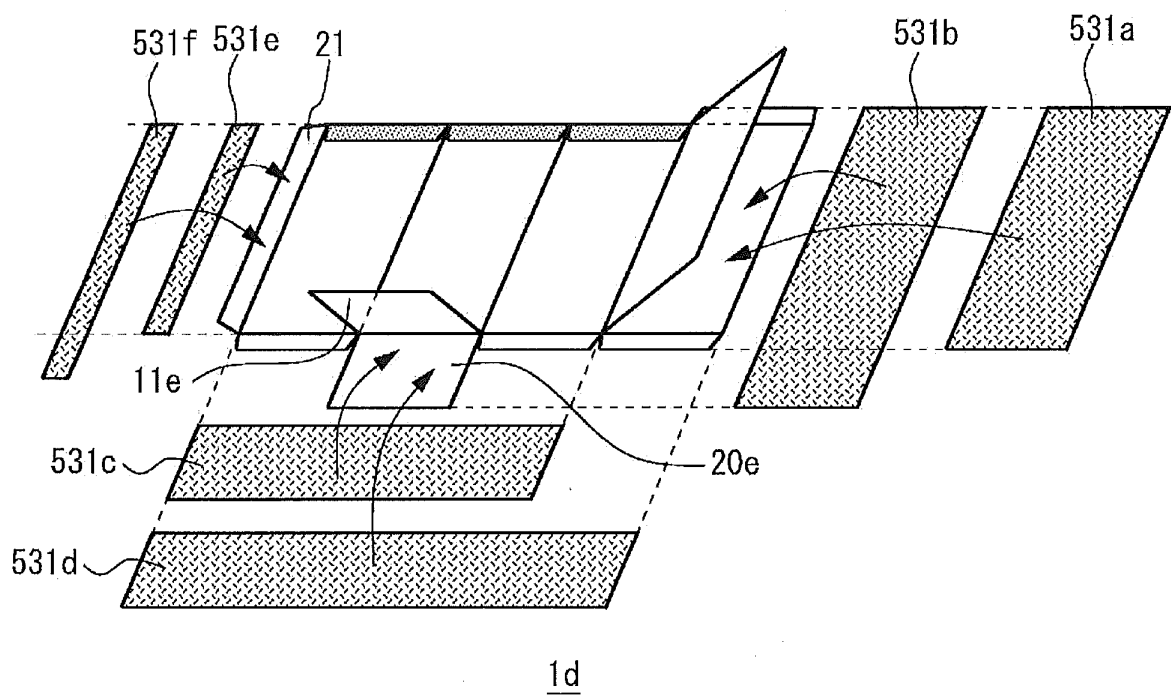


1f'

FIG. 14



(A)



(B)

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2019/021027

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl. B65D5/62 (2006.01) i

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl. B65D5/62

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Published examined utility model applications of Japan 1922-1996

Published unexamined utility model applications of Japan 1971-2019

Registered utility model specifications of Japan 1996-2019

Published registered utility model applications of Japan 1994-2019

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	CN 106379603 A (UNIV JIANGNAN) 08 February 2017, paragraphs [0055]-[0064], fig. 1-16 (Family: none)	1-7
Y	JP 2003-341253 A (KOKUYO CO., LTD.) 03 December 2003, paragraph [0030] (Family: none)	1-7
Y	JP 2005-96785 A (OJI PAPER CO., LTD.) 14 April 2005, claim 1, fig. 1 (Family: none)	4, 7



Further documents are listed in the continuation of Box C.



See patent family annex.

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"P" document published prior to the international filing date but later than the priority date claimed

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"&" document member of the same patent family

Date of the actual completion of the international search

23 August 2019 (23.08.2019)

Date of mailing of the international search report

03 September 2019 (03.09.2019)

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Patent documents cited in the description

- JP H07061441 B [0003] [0004]