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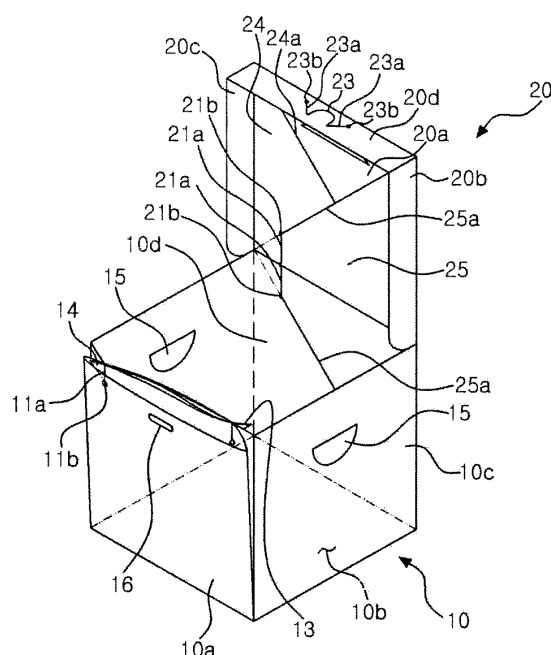
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(54) **Paper box**

(57) The present invention relates to a packing paper box, in which a piece of packing paper is folded, first and second connecting sections (13, 14) are combined, and third and fourth connecting sections (24, 25) are combined, whereby a user can easily make without cutting packing paper. To this end, a packing paper box comprises a body portion (10) having an accommodation space defined therein and including first and second connecting sections (13, 14); a cover portion (20), the body portion (10) being covered with the cover portion (20); and a connection portion including third and fourth connecting sections (24, 25) formed to each other between the body portion (10) and the cover portion (20), wherein the first and second connecting sections (13, 14) are combined with each other, and the third and fourth connecting sections (24, 25) are combined with each other.

**Fig. 4**



## Description

### BACKGROUND OF THE INVENTION

#### 1. Field of the Invention

**[0001]** The present invention relates to a packing paper box, and more particularly, to a packing paper box, in which a piece of packing paper is folded, first and second connecting sections are combined, and third and fourth connecting sections are combined, whereby a user can easily make the packing paper box without cutting the packing paper.

#### 2. Description of the Related Art

**[0002]** In general, a packing paper box is used to pack articles on a box basis. A conventional packing paper box is formed by cutting packing paper alternately or integrally so that a wide width face defining front and rear surfaces and a narrow width face defining both side surfaces can be folded. Wings defining adhesion portions are formed integrally with upper and lower portions of each face. After the respective faces are bent at a right angle, the wings overlapping with each other adhere to each other for an upper portion to be open, thereby defining an accommodation space for a rectangular hexahedral article. In a state where articles are put in the accommodation space, the wings of the open portion are bent to overlap with each other, and their contact portions adhere to each other to pack the articles.

**[0003]** As the packing paper box is made by cutting the packing paper, a lot of packing paper wastes are generated, which increases resource consumption and incurs expenses of processing the packing paper wastes. Therefore, the packing paper box is not economical and environment-friendly.

**[0004]** In addition, when food is packed with the packing paper box, a user should put his/her hand into the packing paper box accommodating the food to take the food out. Moreover, the user should put the food accommodated in the packing paper box in a container such as a tray or a dish to conveniently enjoy the food, which is inconvenient.

### SUMMARY OF THE INVENTION

**[0005]** An object of the present invention is to allow a user to easily make a packing paper box without cutting packing paper by folding a piece of packing paper, combining first and second connecting sections, and combining third and fourth connecting sections.

**[0006]** According to an aspect of the present invention for achieving the object, there is provided a packing paper box made of packing paper having an advertising surface. The packing paper box comprises a body portion having an accommodation space defined therein and including first and second connecting sections; a cover por-

tion, the body portion being covered with the cover portion; and a connection portion including third and fourth connecting sections formed to each other between the body portion and the cover portion, wherein the first and second connecting sections are combined with each other, and the third and fourth connecting sections are combined with each other.

**[0007]** Each of the first and second connecting sections may comprise a pair of cut-off lines formed in same position in a folded state, the corresponding connecting section being inserted into the pair of cut-off lines.

**[0008]** Each of the third and fourth connecting sections may comprise a pair of cut-off lines formed in facing positions in a folded state, the corresponding connecting section being inserted into the pair of cut-off lines.

**[0009]** The connecting sections may comprise perforations formed to extend from the pair of cut-off lines.

**[0010]** The body portion may comprise a bottom section, left and right sections, a front section and a rear section to define the accommodation space.

**[0011]** At this time, vents are preferably formed in the left and right sections.

**[0012]** The cover portion may comprise an upper section, and an extension section extending from the upper section to be bent.

**[0013]** At this time, the extension section preferably comprises a catching portion to be inserted into a fixing hole formed in the body portion.

**[0014]** Preferably, the cover portion further comprises left and right extension sections extending from the upper section to left and right sides to be bent.

**[0015]** In a folded state, any one of the first and second connecting sections may have a first cut-off line formed to be open downward, and the other connecting section may have a second cut-off line formed to be open upward, the connecting sections being combined by fitting the second cut-off line to the first cut-off line.

**[0016]** At this time, each of the third and fourth connecting sections may comprise a pair of cut-off lines formed in facing positions in the folded state, and a cut-off line formed in a position corresponding to the pair of cut-off lines, the corresponding connecting section being inserted into the pair of cut-off lines and the cut-off line.

**[0017]** A vent may be formed in the upper section.

**[0018]** An opening/closing portion for opening and closing the vent may be installed to the cover portion.

**[0019]** Preferably, a cut-off line is formed between diagonal fold lines in any one of the third and fourth connecting sections, and perforations are formed in diagonal fold lines in the other connecting section, the connecting section with the cut-off line formed therein being combined with the perforations, the connecting section with the perforations formed being fit and fixed into the cut-off line.

**[0020]** Left and right connection portions of the body portion may be rounded.

**[0021]** The left and right extension sections of the cover portion may be rounded.

[0022] A string for portability may be attached to the extension section.

## BRIEF DESCRIPTION OF THE DRAWINGS

[0023]

Fig. 1 is a developed view illustrating a packing paper box according to one embodiment of the present invention;

Figs. 2 to 5 are views successively illustrating a process of making the packing paper box according to the embodiment of the present invention;

Fig. 6 is a developed view illustrating a packing paper box according to another embodiment of the present invention;

Figs. 7 to 10 are views successively illustrating a process of making the packing paper box according to the other embodiment of the present invention;

Fig. 11 is a developed view illustrating a modified example of the packing paper box according to the embodiment of the present invention;

Figs. 12 and 13 are developed views illustrating modified examples of the packing paper box according to the other embodiment of the present invention;

Fig. 14 is a developed view illustrating a packing paper box according to a further embodiment of the present invention;

Figs. 15 and 16 are views illustrating a process of making the packing paper box of Fig. 14;

Fig. 17 is a developed view illustrating a packing paper box according to a still further embodiment of the present invention; and

Fig. 18 is a view illustrating an assembled state of the packing paper box of Fig. 17.

## DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0024] Hereinafter, preferred embodiments of the present invention will be described in detail with reference to the accompanying drawings.

[0025] A packing paper box according to one embodiment of the present invention will be described with reference to Figs. 1 to 5.

[0026] Fig. 1 is a developed view illustrating a packing paper box according to one embodiment of the present invention, and Figs. 2 to 5 are views successively illustrating a process of making the packing paper box according to the embodiment of the present invention.

[0027] Referring to Fig. 1, the packing paper box according to the embodiment of the present invention includes a piece of packing paper 1 having an advertising surface, and first to fourth connecting sections (not shown) for maintaining a box shape after a body portion 10 and a cover portion 20 are formed by folding the packing paper 1.

[0028] A material of the packing paper 1 is paper.

[0029] Although paper is used as the material of the packing paper 1 in this embodiment, the present invention is not limited thereto. Any foldable material can be used.

5 [0030] On the packing paper 1, fold lines 1 a to 1f are formed in vertical and horizontal directions, and fold lines 13a, 14a, 24a and 25a are formed in diagonal directions.

[0031] In addition, in the packing paper 1, each pair of first and second cut-off lines 11 a and 12a are formed at the same position in a folded state, and each pair of third and fourth cut-off lines 21 a and 22a are formed at facing positions in the folded state.

10 [0032] Moreover, in the packing paper 1, first to fourth perforations 11 b, 12b, 21 b and 22b are formed to extend from the first to fourth cut-off lines 11 a, 12a, 21 a and 22a, respectively.

15 [0033] Further, in the packing paper 1, vents 15 are formed in left and right sections of the body portion 10, and a vent 27 is formed in an upper section of the cover portion 20.

20 [0034] In this embodiment, referring to Fig. 1, the vents 15 formed in the body portion 10 and the vent 27 formed in the upper section of the cover portion 20 have a half-moon shape. However, the present invention is not limited thereto. The vents 15 and 27 may be formed in different shapes as shown in Fig. 11.

25 [0035] Particularly, as shown in Fig. 11, a pair of vents 27 may be formed in an upper section of a cover portion 20. In addition, a pair of vents 15 may be formed in left and right sections of a body portion 10.

30 [0036] Moreover, a fixing hole 16 is formed in the packing paper 1 so that a catching portion 23 formed in an extension section of the cover portion 20 can be fixedly inserted thereto.

35 [0037] At this time, fifth and sixth cut-off lines 23a are formed to extend to both sides of the catching portion 23 formed in the cover portion 20, and fifth and sixth perforations 23b are formed to extend from the fifth and sixth cut-off lines 23a.

40 [0038] Referring to Figs. 2 and 3, the body portion 10 includes a front section 10a, a bottom section 10b, left and right sections 10c and a rear section 10d. The body portion 10 has an accommodation space.

[0039] The front section 10a is formed by folding the packing paper 1. That is, the packing paper 1 is folded along the first and second fold lines 13a and 14a formed on the body portion 10 in the diagonal directions, so that first and second connecting sections 13 and 14 are formed. An end of the first connecting section 13 is fit into and connected to the pair of second cut-off lines 12a formed in the second connecting section 14, and an end of the second connecting section 14 is fit into and connected to the pair of first cut-off lines 11 a formed in the first connecting section 13, whereby the front section 10a is completed.

45 [0040] The front section 10a is formed with a region of the packing paper 1 provided with the first and second diagonal fold lines 13a and 14a and the fixing hole 16

with respect to the third fold line 1c crossing the first and second fold lines 1a and 1b.

**[0041]** At this time, the first and second cut-off lines 11a and 12a are formed in the same position in the folded state, and the first and second perforations 11b and 12b are formed to extend from the first and second cut-off lines 11a and 12a.

**[0042]** Although the end of the second connecting section 14 is inserted into the first cut-off lines 11a, the first perforations 11b prevent the packing paper 1 around the first cut-off lines 11a from tearing.

**[0043]** In addition, although the end of the first connecting section 13 is inserted into the second cut-off lines 12a, the second perforations 12b prevent the packing paper 1 around the second cut-off lines 12a from tearing.

**[0044]** When the front section 10a is formed, the left and right sections 10c and the bottom section 10b are also completed. The bottom section 10b is made with a central region which does not have the vent 15 among regions of the packing paper 1 between the third fold line 1c and the fourth fold line 1d. The left and right sections 10c are made with regions of the packing paper 1 with the vents 15 formed therein between the third fold line 1c and the fourth fold line 1d.

**[0045]** Referring to Fig. 4, the rear section 10d is formed by combining third and fourth connecting sections 24 and 25, which are respectively fit into and connected to the fourth and third cut-off lines 22a and 21a between the body portion 10 and the cover portion 20.

**[0046]** That is, when the packing paper 1 is folded along the third and fourth fold lines 24a and 25a formed between the body portion 10 and the cover portion 20 in the diagonal directions, the third and fourth connecting sections 24 and 25 are formed. An end of the third connecting section 24 is fit into and connected to the pair of fourth cut-off lines 22a formed in the fourth connecting section 25, or an end of the fourth connecting section 25 is fit into and connected to the pair of third cut-off lines 21a formed in the third connecting section 24, whereby the rear section 10d is completed.

**[0047]** At this time, the third and fourth cut-off lines 21a and 22a are formed in the facing positions in the folded state, and the third and fourth perforations 21b and 22b are formed to extend from the third and fourth cut-off lines 21a and 22a.

**[0048]** When the end of the third connecting section 24 is inserted into the fourth cut-off lines 22a, or when the end of the fourth connecting section 25 is inserted into the third cut-off lines 21a, the third and fourth perforations 21b and 22b prevent the packing paper 1 around the third and fourth cut-off lines 21a and 22a from tearing.

**[0049]** As described above, the front section 10a, the bottom section 10b, the left and right sections 10c and the rear section 10d of the body portion 10 can be easily formed by folding the packing paper 1 along the first to sixth fold lines 1a to 1f of the horizontal and vertical directions and the first to fourth fold lines 13a, 14a, 24a

and 25a of the diagonal directions, and combining the first to fourth connecting sections 13, 14, 24 and 25. The body portion 10 is covered with the cover portion 20, thereby completing the packing paper box.

**[0050]** The cover portion 20 includes an upper section 20a, and first to third extension sections 20b to 20d extending from the upper section 20a to be bent. At this time, the first and second extension sections 20b and 20c are left and right extension sections extending from the upper section 20a to the left and right sides to be bent, and are formed at the left and right sides of the third extension section 20d with the catching portion 23 formed therein.

**[0051]** The catching portion 23 formed in the third extension section 20d is inserted and fixed into the fixing hole 16 formed in the body portion 10. Therefore, unless the cover portion 20 is open by external force, the cover portion 20 would not be open.

**[0052]** As set forth herein, the catching portion 23 formed in the third extension section 20d of the cover portion 20 is inserted and fixed into the fixing hole 16 formed in the body portion 10, thereby completing the packing paper box. Fig. 5 shows the completed packing paper box.

**[0053]** Accordingly, the packing paper box including the body portion 10 and the cover portion 20 can be easily formed by folding a piece of packing paper 1 and combining the first to fourth connecting sections 13, 14, 24 and 25.

**[0054]** In addition, since the packing paper box is made to accommodate food in the body portion 10, a user can have the food in the packing paper box by simply releasing the first to fourth connecting sections 13, 14, 24 and 25.

**[0055]** Although in this embodiment, the food is accommodated in the packing paper box, the present invention is not limited thereto.

**[0056]** A packing paper box according to another embodiment of the present invention will be described with reference to Figs. 6 to 10.

**[0057]** Fig. 6 is a developed view illustrating a packing paper box according to another embodiment of the present invention, and Figs. 7 to 10 are views successively illustrating a process of making the packing paper box according to the other embodiment of the present invention.

**[0058]** The packing paper box according to the other embodiment of the present invention as shown in Fig. 6 is identical to the packing paper box according to the previous embodiment of the present invention in that the packing paper box includes first to fourth connecting sections (not shown) for maintaining a combined box shape of a body portion 30 and a cover portion 40 after the body portion 30 and the cover portion 40 are formed by folding a piece of packing paper 1.

**[0059]** However, the packing paper box according to the other embodiment of the present invention is different from the packing paper box according to the previous

embodiment of the present invention in the configuration of the first to fourth connecting sections. The following description will be made mainly in connection with such a difference.

**[0060]** On packing paper 2, fold lines 2a to 2f are formed in vertical and horizontal directions, and fold lines 33a, 34a, 44a and 45a are formed in diagonal directions.

**[0061]** In addition, the packing paper 2 has a first cut-off line 31 a formed to be open downward in a folded state, a second cut-off line 32a formed to be open upward in the folded state, a pair of third cut-off lines 41 a formed in facing positions in the folded state, a fifth cut-off line 41 b formed in a position corresponding to the third cut-off lines 41 a, a pair of fourth cut-off lines 42a formed in facing positions in the folded state, and a sixth cut-off line 42b is formed in a position corresponding to the fourth cut-off lines 42a.

**[0062]** A body portion 30 having an accommodation space formed by folding the packing paper 2 is formed with a fixing hole 36 which a catching portion 43 formed in an extension section of a cover portion 40 can be inserted and fixed into.

**[0063]** At this time, seventh and eighth cut-off lines 43a are formed to extend from both sides of the catching portion 43 formed in the cover portion 40, and seventh and eighth perforations 43b are formed to extend from the seventh and eighth cut-off lines 43a.

**[0064]** Referring to Figs. 7 to 9, the body portion 30 includes a front section 30a, a bottom section 30b, left and right sections 30c and a rear section 30d.

**[0065]** The front section 30a is formed by folding the packing paper 2. That is, when the packing paper 2 is folded along the first and second fold lines 33a and 34a formed in the body portion 10 in the diagonal directions, first and second connecting sections 33 and 34 are formed. The second cut-off line 32a of the second connecting section 34 is fitted into the first cut-off line 31 a of the first connecting section 33, thereby completing the front section 30a.

**[0066]** The front section 30a is made with a region of the packing paper 2 provided with the first and second diagonal fold lines 33a and 34a and the fixing hole 36 with respect to the third fold line 2c crossing the first and second fold lines 2a and 2b.

**[0067]** At this time, the first cut-off line 31 a open downward in the folded state is formed in the first connecting section 33, and the second cut-off line 32a open upward in the folded state is formed in the second connecting section 34.

**[0068]** When the front section 30a is formed, the left and right sections 30c and the bottom section 30b are also completed. The bottom section 30b is made with a central region among regions of the packing paper 2 between the third fold line 2c and the fourth fold line 2d. The left and right sections 30c are made with left and right regions of the packing paper 2 between the third fold line 2c and the fourth fold line 2d.

**[0069]** Then, as shown in Fig. 9, the rear section 30d

is formed by combining third and fourth connecting sections 44 and 45 fit and connected to the fourth and third cut-off lines 42a and 41 a between the body portion 30 and the cover portion 40.

**[0070]** That is, when the packing paper 2 is folded along the third and fourth fold lines 44a and 45a formed between the body portion 30 and the cover portion 40 in the diagonal directions, the third and fourth connecting sections 44 and 45 are formed. An end of the third connecting section 44 is inserted into the pair of fourth cut-off lines 42a formed in the fourth connecting section 45 and the sixth cut-off line 42b formed in the position corresponding to the fourth cut-off lines 42a, and an end of the fourth connecting section 45 is inserted into the pair of third cut-off lines 41 a formed in the third connecting section 44 and the fifth cut-off line 41 b formed in the position corresponding to the third cut-off lines 41 a, thereby completing the rear section 30d.

**[0071]** As described above, the end of the third connecting section 44 is inserted into the fourth and sixth cut-off lines 42a and 42b and the end of the fourth connecting section 45 is firmly inserted into the third and fifth cut-off lines 41 a and 41 b, so that the third connecting section 44 and the fourth connecting section 45 are fixed not to be released.

**[0072]** Although in this embodiment, the ends of the third connecting section 44 and the fourth connecting section 45 are respectively inserted into the corresponding cut-off lines, the present invention is not limited thereto. An end of any one of the third connecting section 44 and the fourth connecting section 45 may be inserted into the corresponding cut-off lines.

**[0073]** As described above, the front section 30a, the bottom section 30b, the left and right sections 30c and the rear section 30d of the body portion 30 can be easily formed by folding the packing paper 2 along the first to sixth fold lines 2a to 2f of the horizontal and vertical directions and the first to fourth fold lines 33a, 34a, 44a and 45a of the diagonal directions, and combining the first to fourth connecting sections 33, 34, 44 and 45. The body portion 30 is covered with the cover portion 40, thereby completing the packing paper box.

**[0074]** The cover portion 40 includes an upper section 40a, and first to third extension sections 40b to 40d extending from the upper section 40a to be bent. At this time, the first and second extension sections 40b and 40c are left and right extension sections extending from the upper section 40a to left and right sides to be bent, and are formed at the left and right sides of the third extension section 40d with the catching portion 43 formed therein.

**[0075]** The catching portion 43 formed in the third extension section 40d is inserted and fixed into the fixing hole 36 formed in the body portion 30.

**[0076]** As explained above, the catching portion 43 is inserted and fixed into the fixing hole 36 formed in the body portion 30, thereby completing the packing paper box. Fig. 10 shows the completed packing paper box.

**[0077]** As a modified example of the other embodiment of the present invention, a pair of vents 47 formed in the upper section of the cover portion 40 are added to the packing paper box according to the other embodiment of the present invention as shown in Fig. 12.

**[0078]** Accordingly, the packing paper box including the body portion 30 and the cover portion 40 can be easily formed by folding a piece of packing paper 2 and combining the first to fourth connecting sections 33, 34, 44 and 45, without a cutting process of making the packing paper box.

**[0079]** Although the packing paper box is formed in the shape of a regular hexahedron according to the first embodiment of the present invention and a rectangular hexahedron according to the second embodiment of the present invention, the present invention is not limited thereto.

**[0080]** That is, as shown in Fig. 13, fold lines are formed so that a bottom section 30b of a body portion 30 and an upper section 40a of a cover portion 40 are larger than the bottom section 30b and the upper section 40a of Fig. 12 and so that extension sections 40b to 40d of the cover portion 40 are smaller than the extension sections 40b to 40d of Fig. 12. Then, first to fourth connecting sections 33, 34, 44 and 45 are combined in a folded state, thereby making a rectangular hexahedral packing paper box having a different shape from that of the second embodiment of the present invention. At this time, a catching portion 43 formed in the third extension section 40d of the cover portion 40 is inserted and fixed into a fixing hole 36 formed in the body portion 30.

**[0081]** Fig. 14 is a developed view illustrating a packing paper box according to a further embodiment of the present invention, and Figs. 15 and 16 are views illustrating a process of making the packing paper box of Fig. 14.

**[0082]** Referring to Fig. 14, the packing paper box according to the further embodiment of the present invention is identical to the packing paper boxes according to the previous embodiments of the present invention in that the packing paper box includes first to fourth connecting sections for maintaining a combined box shape of a body portion 50 and a cover portion 60 after the body portion 50 and the cover portion 60 are formed by folding a piece of packing paper 3.

**[0083]** However, the packing paper box according to the further embodiment of the present invention is modified from the packing paper boxes according to the foregoing embodiments of the present invention in the combination method of the third and fourth connecting sections. The following description will be made mainly in connection with such a difference.

**[0084]** On the packing paper 3, fold lines 3a to 3f are formed in vertical and horizontal directions, and fold lines 53a, 54a, 64a and 65a are formed in diagonal directions. The packing paper 3 with the above fold lines formed thereon has a first cut-off line 51 a formed to be open downward in a folded state, a second cut-off line 52a

formed to be open upward in the folded state, a third cut-off line 61 a formed between the diagonal fold lines 64a, and a pair of perforations 62b formed in the diagonal fold lines 65a.

**[0085]** Specifically, the front section 50a, which is formed by folding the packing paper 3, includes left and right connection portions 501 and 502 and a front portion 503. The first and second fold lines 53a and 54a are formed on the left and right connection portions 501 and 502 in the diagonal directions, respectively.

**[0086]** As shown in Fig. 15, in folding the packing paper, a front section 50a is formed by combining first and second connecting sections 53 and 54. As the left and right connection portions 501 and 502 are connected when folding the packing paper, the first and second connecting sections 53 and 54 are formed to be combined in the rear of the front portion 503. When the front section 50a is formed as described above, left and right sections 50c and a bottom section 50b are also completed.

**[0087]** Then, when the packing paper 3 is folded along the third and fourth fold lines 64a and 65a, third and fourth connecting sections 64 and 65 are formed. The pair of perforations 62b of the fourth connecting section 65 are fit into the third cut-off line 61 a of the third connecting section 64, thereby completing a rear section 60d. It is well shown in Fig. 16.

**[0088]** That is, the third connecting section 64 having the third cut-off line 61 a formed therein is combined to the perforations 62b formed in the fold lines 65a of the fourth connecting section 65. Then, the fourth connecting section 65 having the perforations 62b formed therein is fitted and fixed into the third cut-off line 61 a. The pair of perforations 62b prevent the fourth connecting section 65 from escaping from the third cut-off line 61 a.

**[0089]** As described above, the front section 50a, the bottom section 50b, the left and right sections 50c and the rear section 50d of the body portion 50 can be easily formed by combining the first to fourth connecting sections 53, 54, 64 and 65. The body portion 50 is covered with the cover portion 60, thereby completing the packing paper box.

**[0090]** The cover portion 60 includes an upper section 60a, and first to third extension sections 60b to 60d extending from the upper section 60a to be bent. Here, a pair of vents 67 are formed in the upper section 60a, and an opening/closing portion (not shown) may be formed to open and close the vents 67. In addition, the vents 67 may be formed by fully cutting off a portion of the upper section 60a or by partially cutting a portion of the upper section 60a for its side to be foldable. This opening/closing portion may be applied to the previous embodiments. A catching portion 63 formed in the third extension section 60d is inserted and fixed into a fixing hole 56 formed in the body portion 50. As the catching portion 63 is inserted and fixed into the fixing hole 56 of the body portion 50, the packing paper box is completed.

**[0091]** Holes 69 are formed in the first and second extension sections 60b and 60c so that a string 68 can be

attached thereto, and the string 68 is coupled to the holes 69. Therefore, a user can easily bring the packing paper box with him/her. It is apparent that the string 68 is applicable to the foregoing embodiments.

**[0092]** Fig. 17 is a developed view illustrating a packing paper box according to a still further embodiment of the present invention, and Fig. 18 is a view illustrating an assembled state of the packing paper box of Fig. 17.

**[0093]** The packing paper box according to the still further embodiment of the present invention is a modified example of the further embodiment of the present invention. As shown in Fig. 17, left and right connection portions 701 and 702 of a body portion 70 and a first extension section 80b (left side) and a second extension section 80c (right side), which extend from an upper section 80a of a cover portion 80 to be bent, are rounded.

**[0094]** In the packing paper box including the rounded left and right connection portions 701 and 702 of the body portion 70 and the rounded first and second extension sections 80b and 80c of the cover portion 80, as shown in Fig. 18, a piece of packing paper is folded along first and second fold lines 73a and 74a formed on the rounded left and right connection portions 701 and 702 of the body portion 70, so that first and second connection portions 73 and 74 are formed. The first and second connection portions 73 and 74 are respectively combined with first and second cut-off lines 71a and 72a, thereby completing a front section 70a. When the front section 70a is formed, left and right sections 70c and a bottom section 70b are also completed. When the piece of packing paper is folded along third and fourth fold lines 84a and 85a, third and fourth connecting sections 84 and 85 are formed. The third and fourth connecting sections 84 and 85 are combined with a third cut-off line 81a and a pair of perforations 82b, respectively, thereby completing a rear section 70d.

**[0095]** Thereafter, the body portion 70 including the front section 70a, the bottom section 70b, the left and right sections 70c and the rear section 70d is covered with the cover portion 80, so that the packing paper box can be easily completed by folding without a cutting process. In addition, as compared with the first and second extension sections 60b and 60c with which the left and right sections 50c of the body portion 50 are covered in the previous embodiment, the left and right sections 70c of the body portion 70 can be conveniently covered with the rounded first and second extension sections 80b and 80c. At this time, holes 89 are formed in the first and second extension sections 80b and 80c so that a string 88 for portability can be attached thereto, and the string 88 is coupled to the holes 89.

**[0096]** The present invention is not limited to the embodiments described above. It will be apparent that those skilled in the art can make various modifications and changes thereto. Such modifications and changes belong to the spirit and scope of the invention defined by the appended claims.

**[0097]** As discussed above, according to the present invention, a packing paper box including a body portion

and a cover portion can be easily formed by folding a piece of packing paper and combining first to fourth connecting sections. Accordingly, a packing paper cutting process is not necessary, and thus packing paper waste is not generated, so that resources can be economically used.

**[0098]** In addition, according to the present invention, as first to fourth perforations are formed to extend from first to fourth cut-off lines formed in first to fourth connecting sections, when the first and second connecting sections are combined with each other and the third and fourth connecting sections are combined, the packing paper around the first to fourth cut-off lines does not tear.

**[0099]** Moreover, according to the present invention, a first cut-off line is formed to be open in a downward direction of one connecting section and a second cut-off line is formed to be open in an upward direction of another connecting section in a folded state, so that the connecting sections can be easily combined and a body portion with an accommodation space can be easily formed.

**[0100]** Further, according to the present invention, as a catching portion formed on a cover portion is inserted and fixed into a fixing hole formed in a body portion, unless external force of a user is applied thereto, the cover portion would not separate from the body portion.

**[0101]** Furthermore, according to the present invention, an end of a third connecting section is inserted into a pair of fourth cut-off lines and a sixth cut-off line formed in a position corresponding to the fourth cut-off lines, and an end of a fourth connecting section is inserted into a pair of third cut-off lines and a fifth cut-off line formed in a position corresponding to the third cut-off lines. Therefore, the ends of the connecting sections can be fixed to the third to sixth cut-off lines.

**[0102]** Still furthermore, according to the present invention, since first to fourth connecting sections of the packing paper box accommodating the food can be easily released, a user does not have to put his/her hand into a packing paper box to take food out or prepare a container for containing the food.

**[0103]** Still furthermore, according to the present invention, as vents are formed in left and right surfaces of a packing paper box, the contents accommodated in the packing paper box, for example, food can be kept fresh for an available period.

**[0104]** Still furthermore, according to the present invention, a string can be attached to first and second extension sections, so that a user can easily bring a packing paper box with him/her.

**[0105]** Still furthermore, according to the present invention, left and right extension sections of a cover portion are rounded, so that left and right sections of a body portion can be conveniently covered therewith.

## Claims

1. A packing paper box made of packing paper (1; 2)

having an advertising surface, **characterized in that** it comprises:

- a body portion (10; 30; 50; 70) having an accommodation space defined therein and including first and second connecting sections (13, 14; 33, 34; 73, 74);
  - a cover portion (20; 40; 60; 80), the body portion (10; 30; 50; 70) being covered with the cover portion (20; 40; 60; 80); and
  - a connection portion including third and fourth connecting sections (24, 25; 44, 45; 84, 85) formed to each other between the body portion (10; 30; 50; 70) and the cover portion (20; 40; 60; 80), wherein the first and second connecting sections (13, 14; 33, 34; 73, 74) are combined with each other, and the third and fourth connecting sections (24, 25; 44, 45; 84, 85) are combined with each other.
2. The packing paper box as claimed in claim 1, **characterized in that** each of the first and second connecting sections (13, 14; 33, 34) comprises a pair of cut-off lines (11 a, 12a; 31 a, 32a) formed in same position in a folded state, the corresponding connecting section being inserted into the pair of cut-off lines.
  3. The packing paper box as claimed in claim 1 or 2, **characterized in that** each of the third and fourth connecting sections (24, 25; 44, 45) comprises a pair of cut-off lines (21 a, 22a; 41 a, 42a) formed in facing positions in a folded state, the corresponding connecting section being inserted into the pair of cut-off lines.
  4. The packing paper box as claimed in claim 2 or 3, **characterized in that** the connecting sections (13, 14, 24, 25) comprise perforations (11 b, 12b, 21 b, 22b) formed to extend from the pair of cut-off lines (11 a, 12a, 21 a, 22a).
  5. The packing paper box as claimed in any one of claims 1 to 4, **characterized in that** the body portion (10; 30) comprises a bottom section (10b; 30b), left and right sections (10c; 30c), a front section (10a; 30a) and a rear section (10d; 30d) to define the accommodation space.
  6. The packing paper box as claimed in claim 5, **characterized in that** vents (15) are formed in the left and right sections (10c).
  7. The packing paper box as claimed in any one of claims 1 to 6, **characterized in that** the cover portion (20; 40) comprises an upper section (20a; 40a), and an extension section (20d; 40d) extending from the upper section to be bent.

8. The packing paper box as claimed in claim 7, **characterized in that** the extension section (20d; 40d) comprises a catching portion (23; 43) to be inserted into a fixing hole (16, 36) formed in the body portion (10; 30).
9. The packing paper box as claimed in claim 7 or 8, **characterized in that** the cover portion (20; 40) further comprises left and right extension sections (20b, 20c; 40b, 40c) extending from the upper section (20a; 40a) to left and right sides to be bent.
10. The packing paper box as claimed in any one of claims 1 to 9, **characterized in that** in a folded state, any one of the first and second connecting sections (13, 14; 33, 34) has a first cut-off line (11 a, 12a; 31 a, 32a) formed to be open downward, and the other connecting section has a second cut-off line formed to be open upward, the connecting sections being combined by fitting the second cut-off line to the first cut-off line.
11. The packing paper box as claimed in claim 10, **characterized in that** each of the third and fourth connecting sections (24, 25; 44, 45) comprises a pair of cut-off lines (21 a, 22a; 41 a, 42a) formed in facing positions in the folded state, and a cut-off line formed in a position corresponding to the pair of cut-off lines, the corresponding connecting section being inserted into the pair of cut-off lines and the cut-off line.
12. The packing paper box as claimed in claim 7, **characterized in that** a vent (27; 67) is formed in the upper section (20a; 60a).
13. The packing paper box as claimed in claim 6 or 12, **characterized in that** an opening/closing portion for opening and closing the vent (67) is installed to the cover portion (60).
14. The packing paper box as claimed in any one of claims 1 to 13, **characterized in that** a cut-off line (51 a) is formed between diagonal fold lines in any one of the third and fourth connecting sections (64, 65), and perforations (62b) are formed in diagonal fold lines in the other connecting section, the connecting section with the cut-off line (51 a) formed therein being combined with the perforations (62b), the connecting section with the perforations (62b) formed being fit and fixed into the cut-off line (51 a).
15. The packing paper box as claimed in any one of claims 1 to 14, **characterized in that** left and right connection portions (701, 702) of the body portion (70) are rounded.
16. The packing paper box as claimed in claim 9, **characterized in that** the left and right extension sections



(80b, 80c) of the cover portion (80) are rounded.

17. The packing paper box as claimed in claim 7 or 9, **characterized in that** a string (88) for portability is attached to the extension section (80b, 80c).

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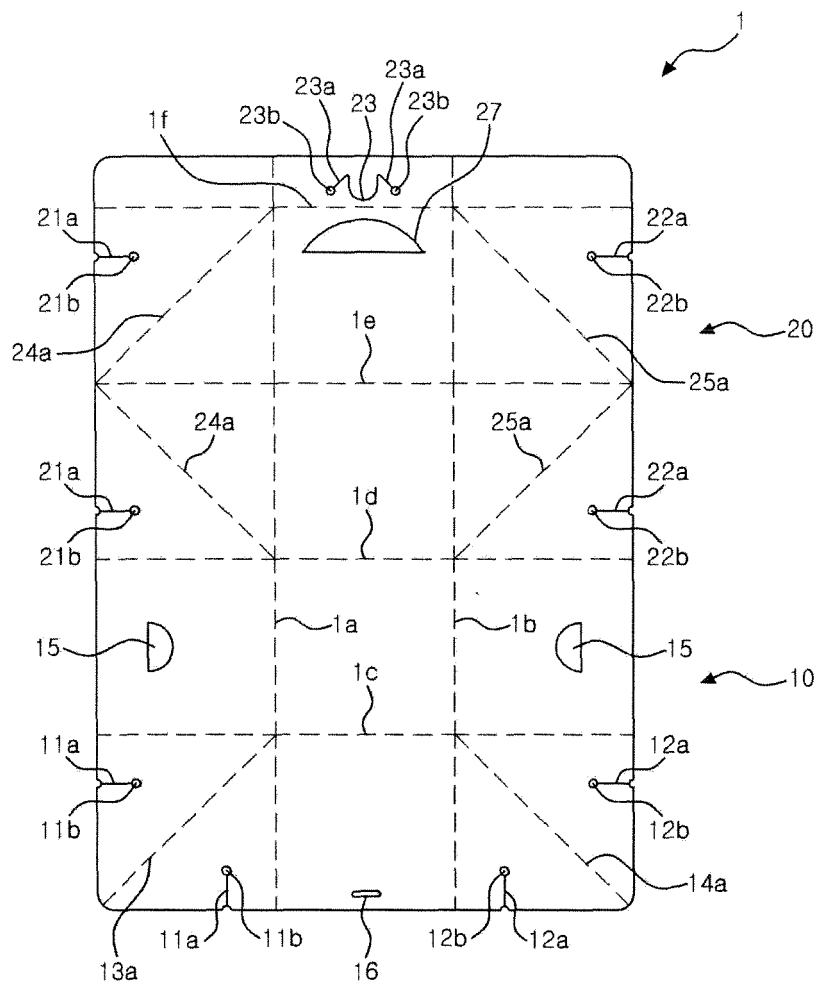
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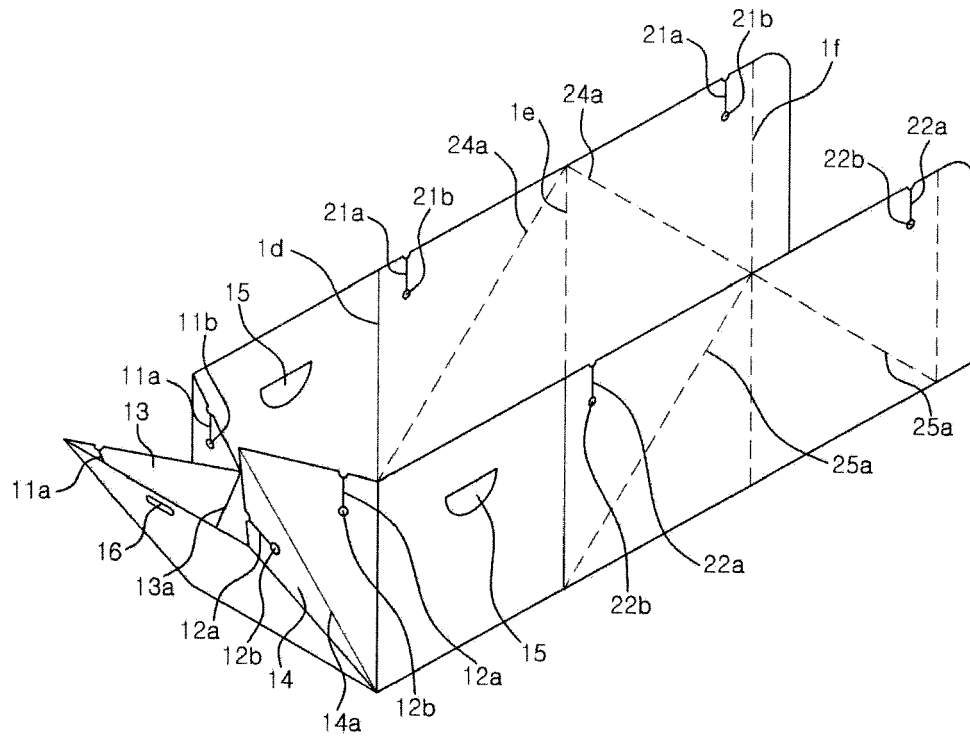
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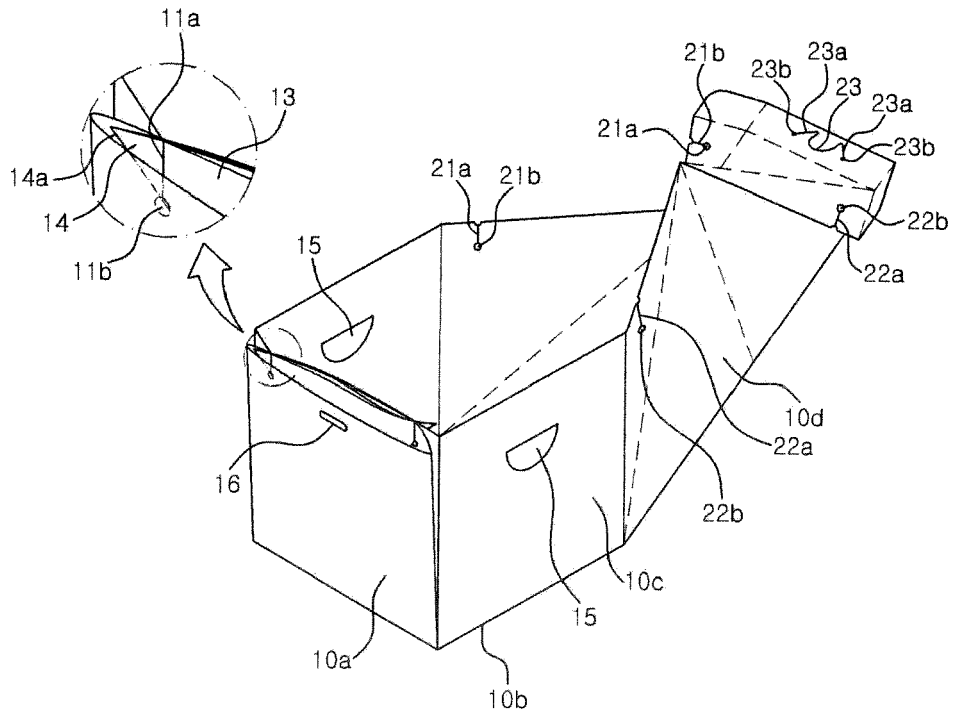
Fig. 1



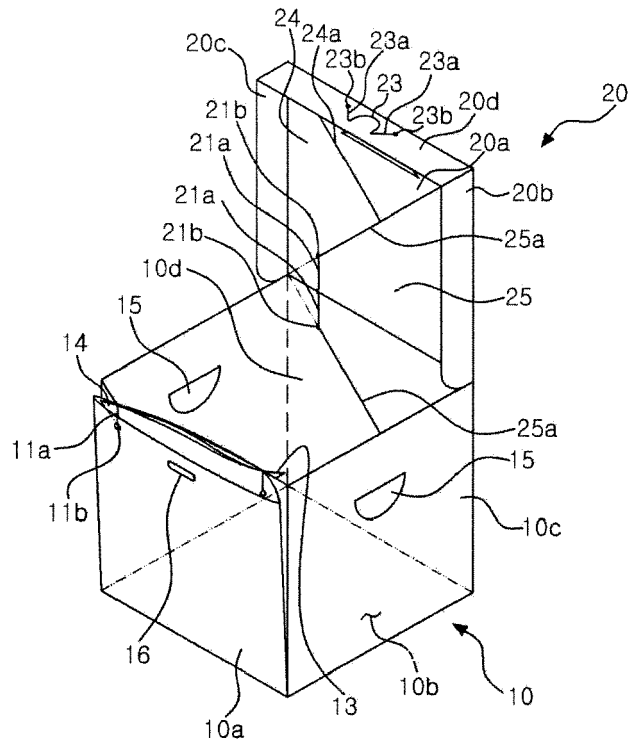
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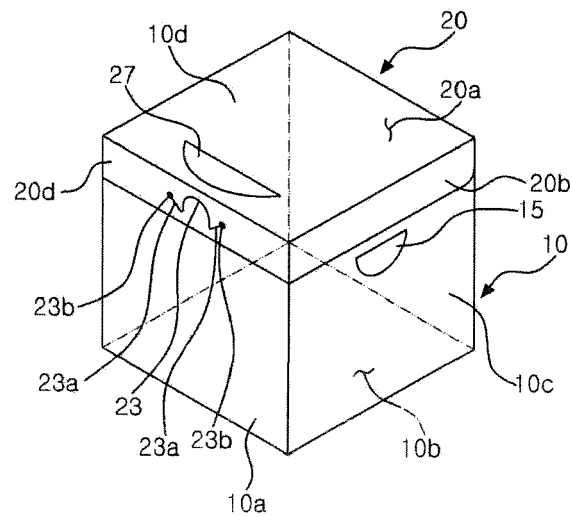
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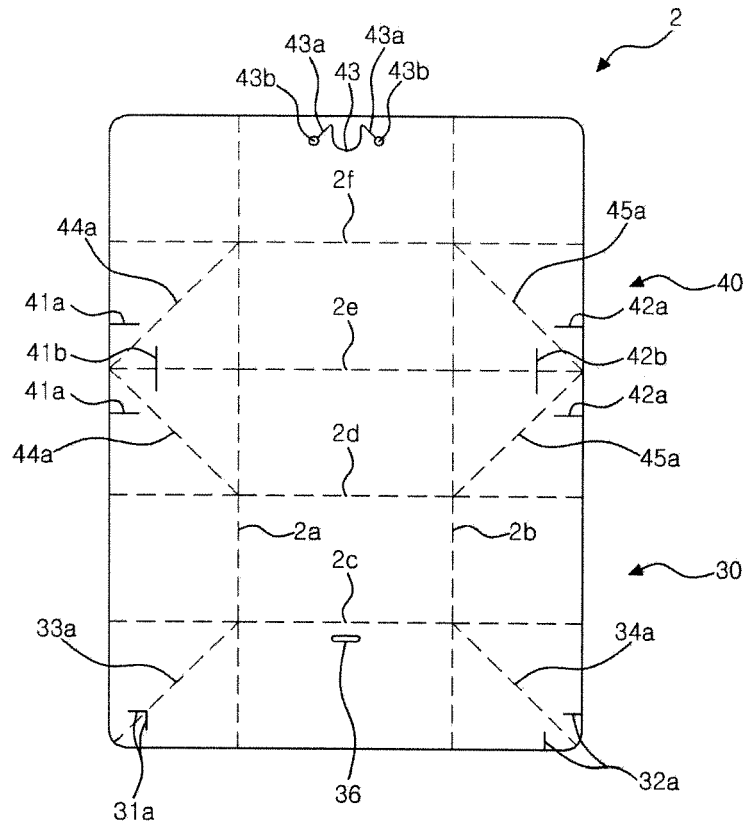
**Fig. 4**



**Fig. 5**



**Fig. 6**



**Fig. 7**

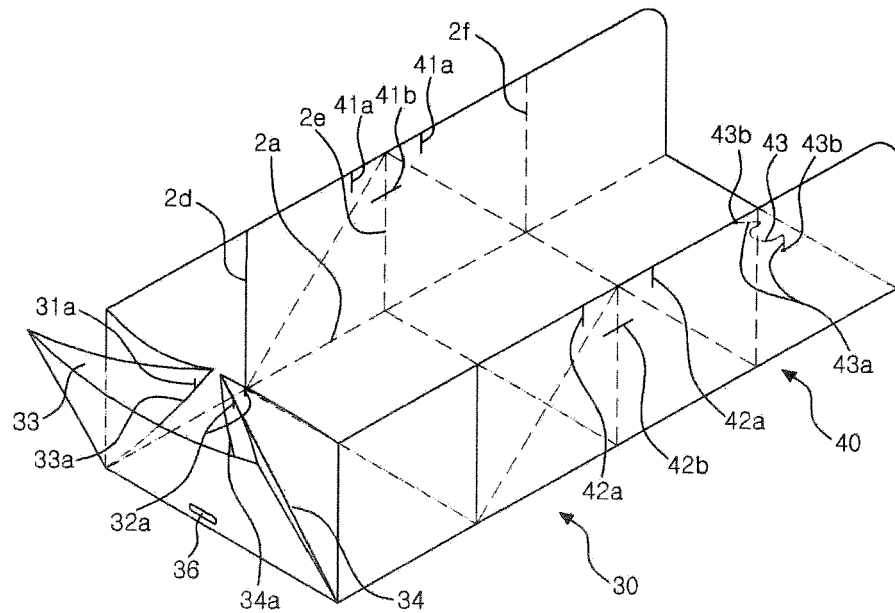


Fig. 8

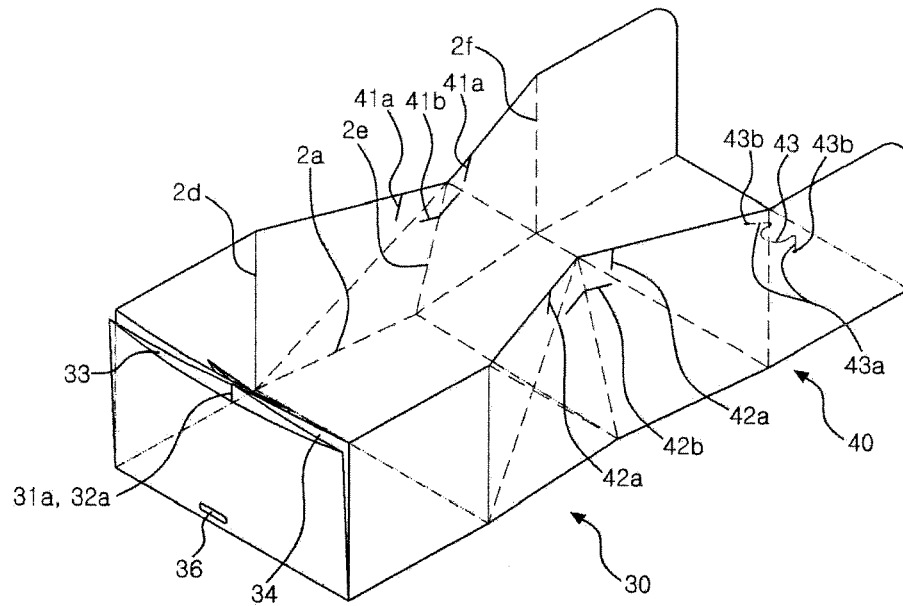
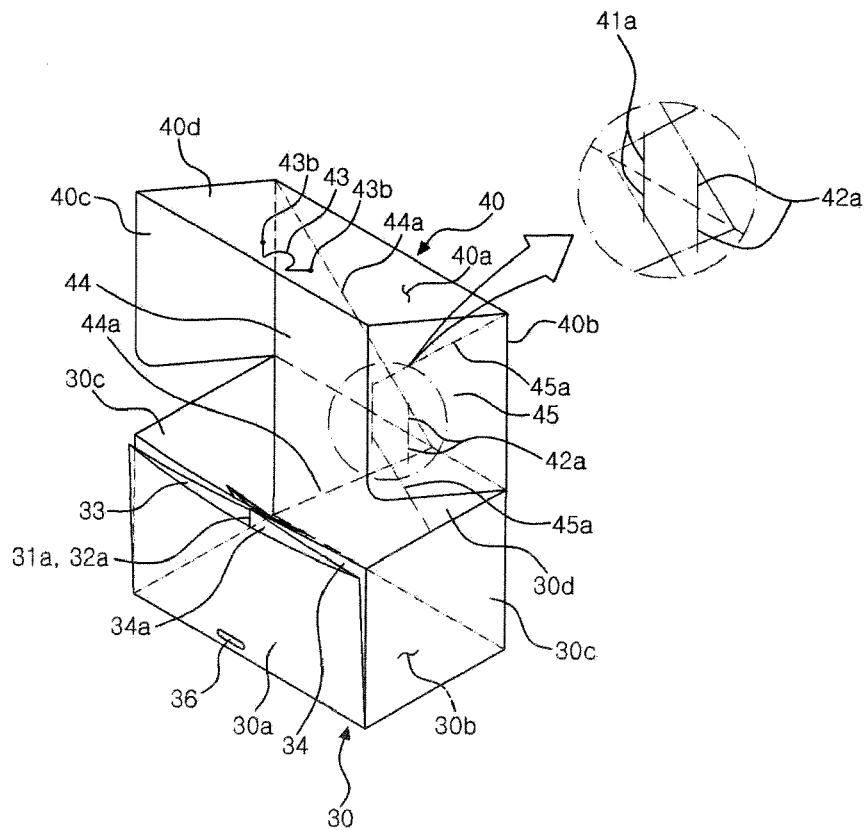
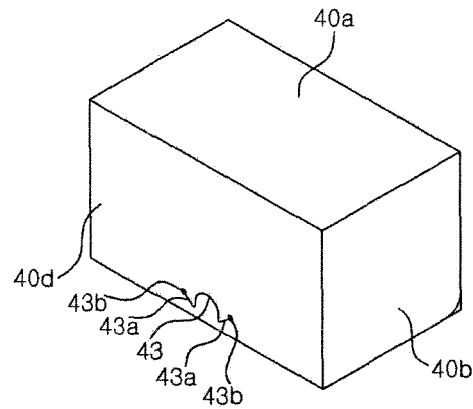


Fig. 9



**Fig. 10**



**Fig. 11**

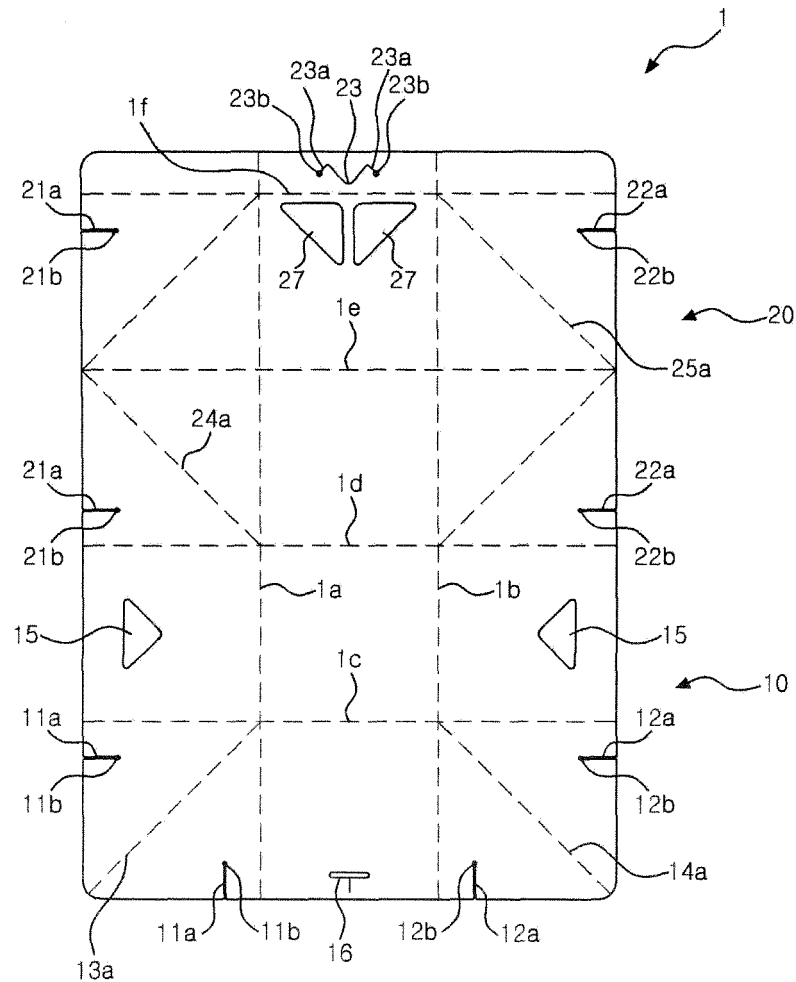
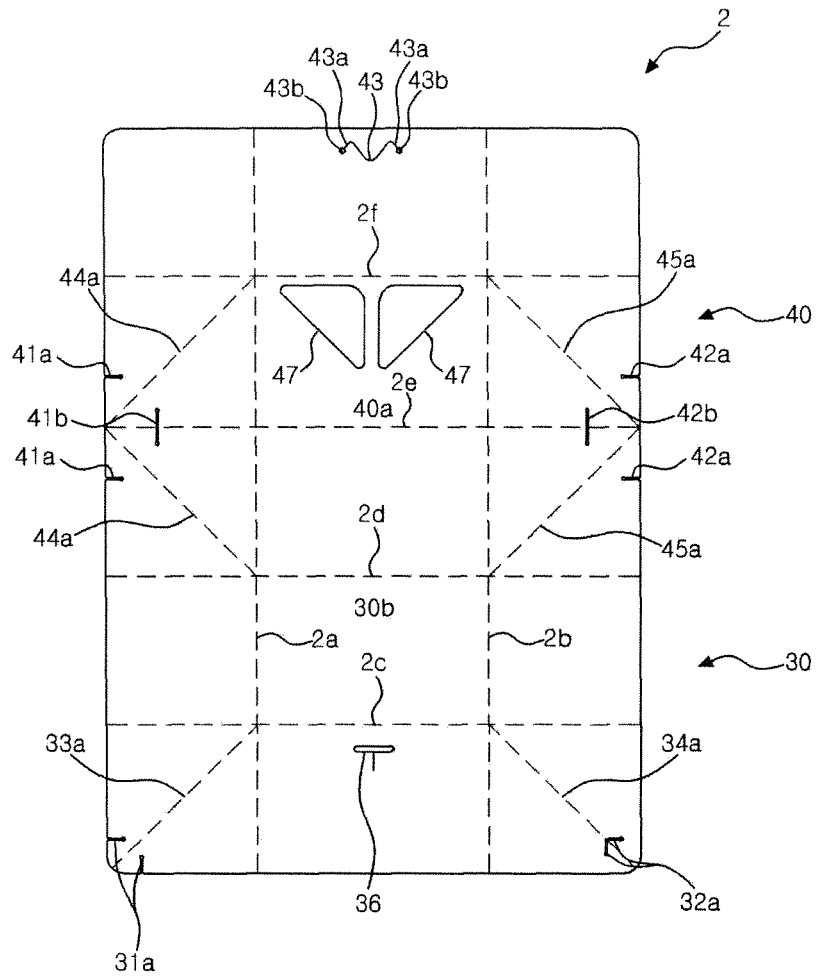


Fig. 12





**Fig. 13**

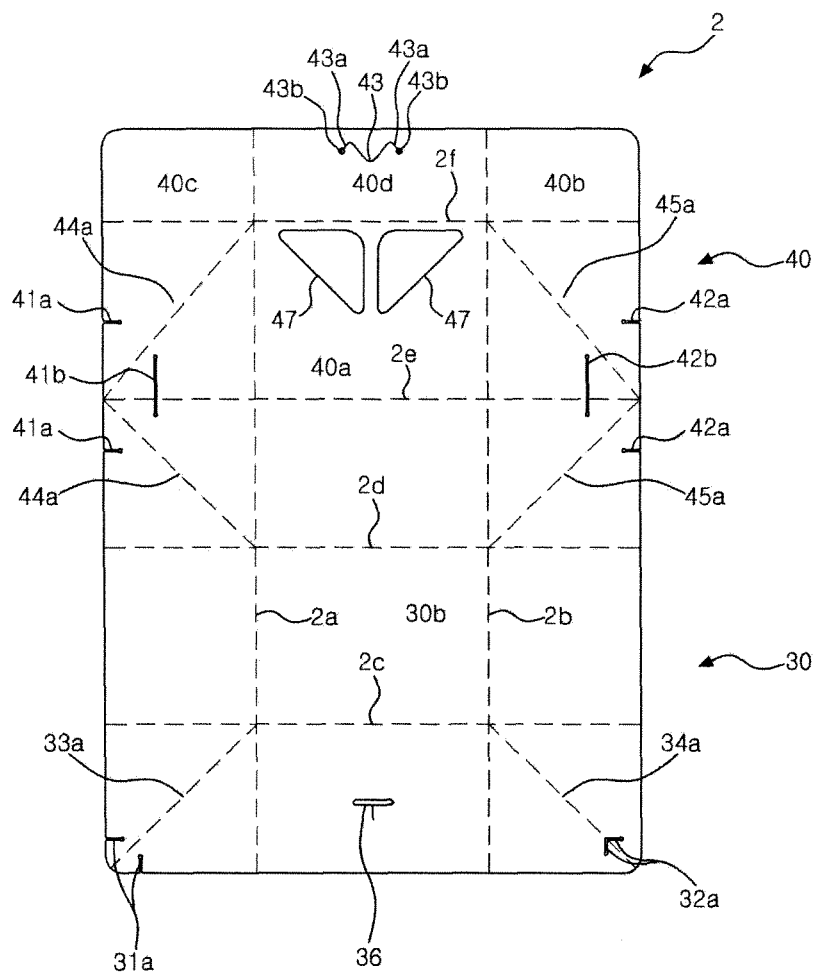
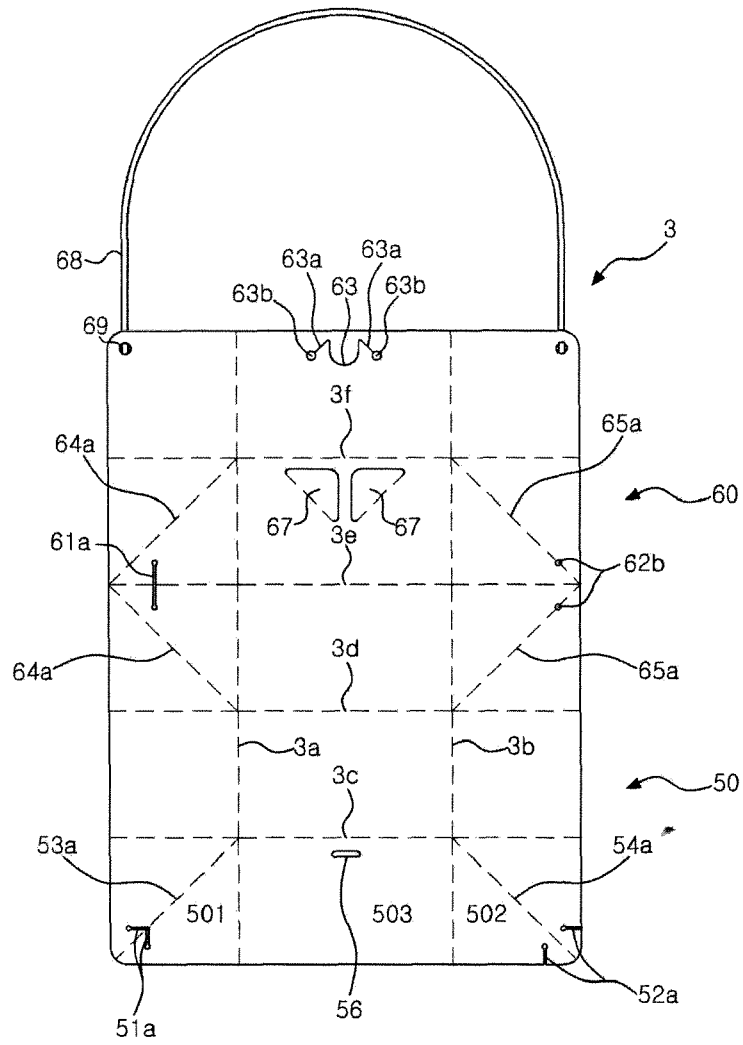
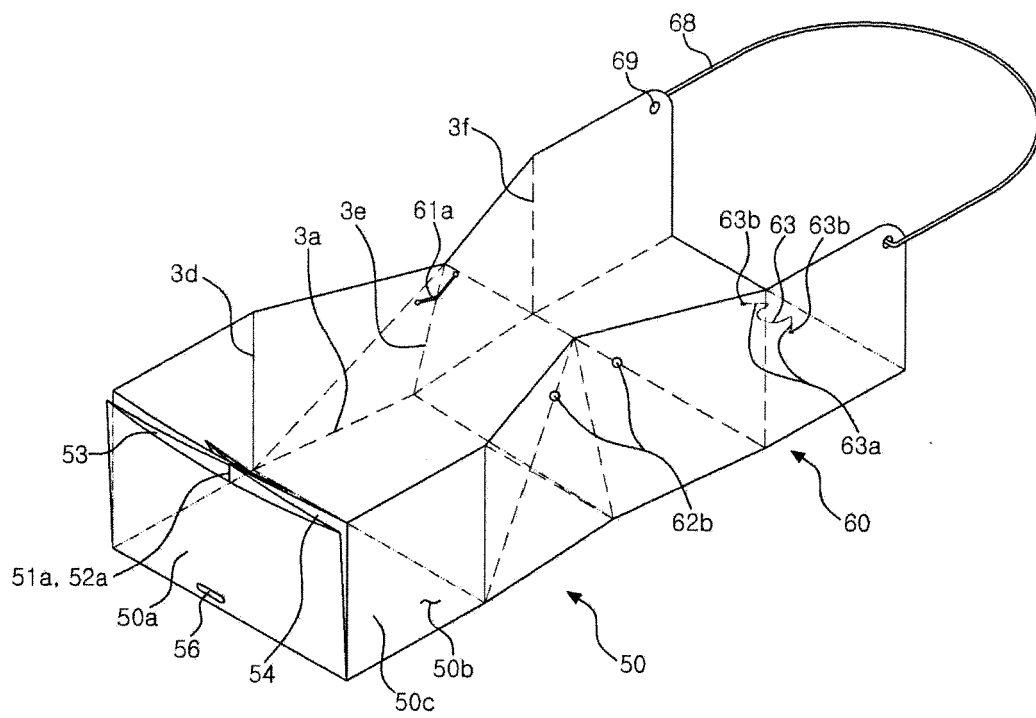


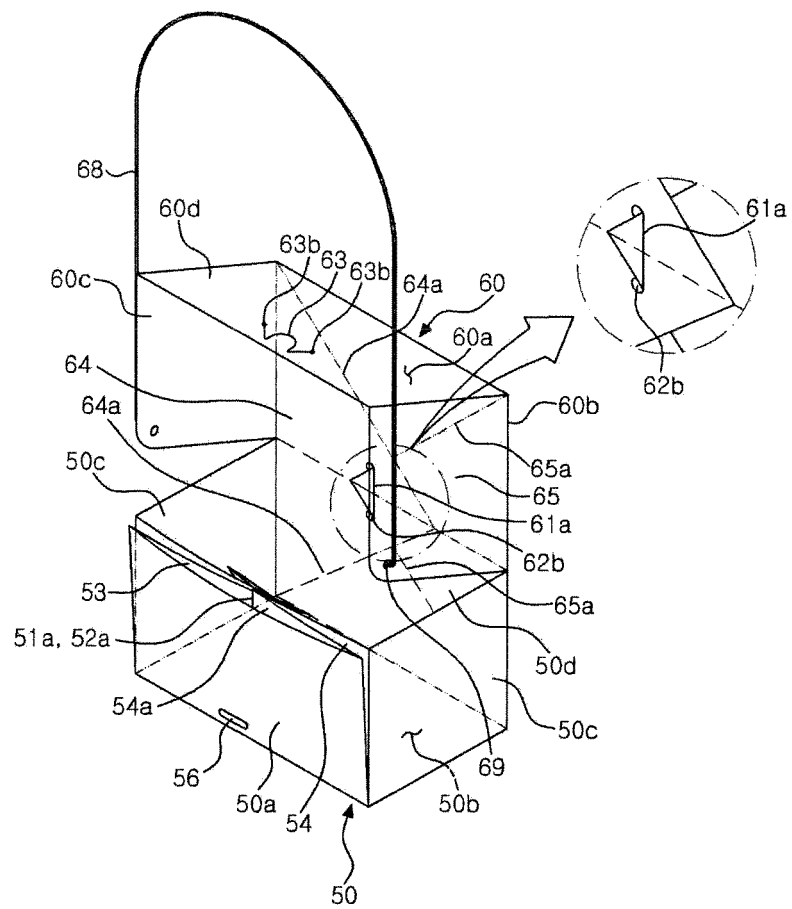
Fig. 14



**Fig. 15**



**Fig. 16**



**Fig. 17**

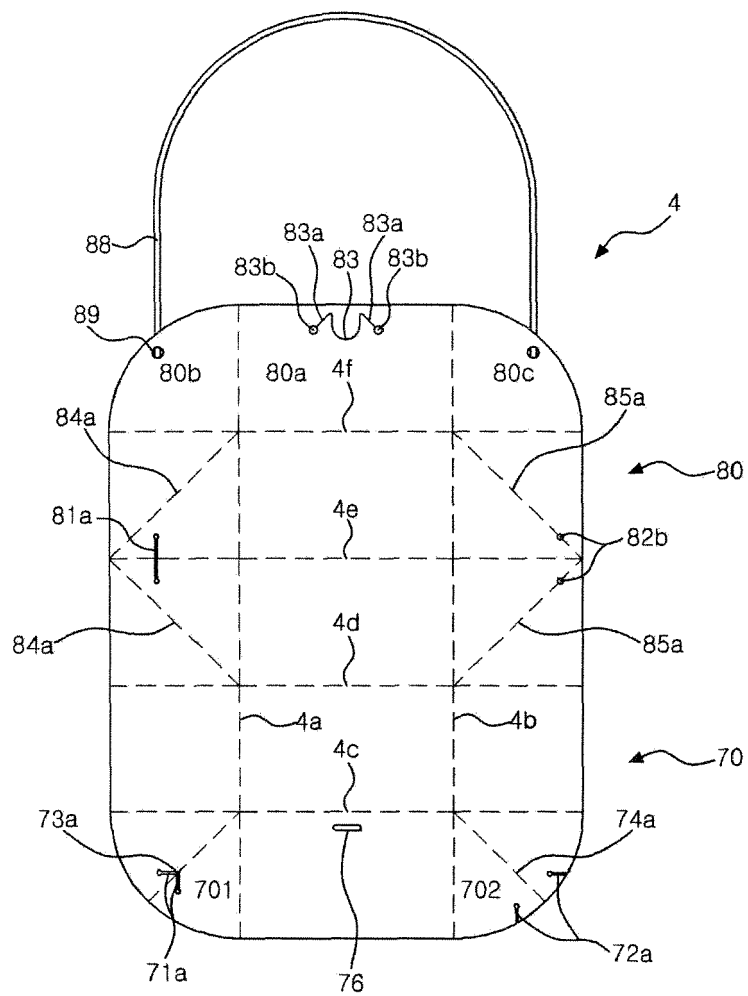
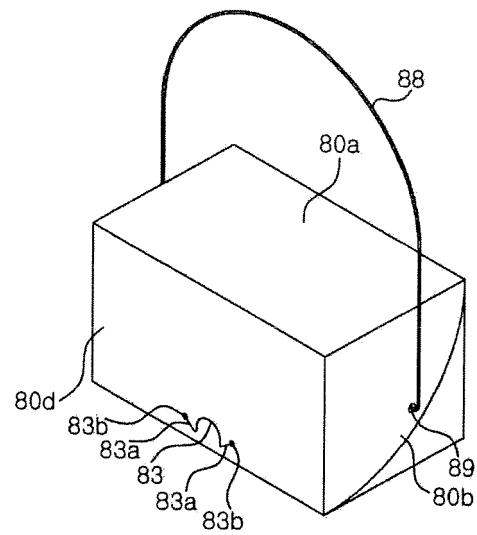


Fig. 18





European Patent  
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# EUROPEAN SEARCH REPORT

Application Number  
EP 07 15 0301

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	GB 2 257 959 A (RANDALL ANTHONY [GB]) 27 January 1993 (1993-01-27) * page 7, line 27 - line 28; figures 1-3,15 * * page 12, last line - page 13, line 3 * -----	1-13, 15-17	INV. B65D5/24 B65D5/478 B65D5/66 B65D5/42
A	US 3 191 845 A (DANIEL WAINBERG) 29 June 1965 (1965-06-29) * column 4, line 66 - column 5, line 9; figures 10,11 * -----	1	
			TECHNICAL FIELDS SEARCHED (IPC)
			B65D
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 15 April 2008	Examiner Sundell, Olli
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 07 15 0301

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15-04-2008

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
GB 2257959	A	27-01-1993	NONE	
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US 3191845	A	29-06-1965	NONE	
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