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(54) **CIGARETTE PACK HAVING BUTT RECEIVING FUNCTION**

(57) A cigarette pack able to store cigarette butts includes an outer case, a foil packing, and a foldable bag. The foil packing is a piece of conventional foiling packing paper to pack cigarettes. One side of the outer case is cut beforehand to form an outer flip piece. The foldable bag is hidden and coupled between the outer flip piece and the foil packing. The foldable bag has a sealing open-

ing which can be opened or closed repeatedly by tearing and adhering. When in use, the outer flip piece is opened to open the sealing opening of the foldable bag synchronously for storing butts. When the outer flip piece is pushed back to close the sealing opening of the foldable bag, the outer case is restored to its original shape.

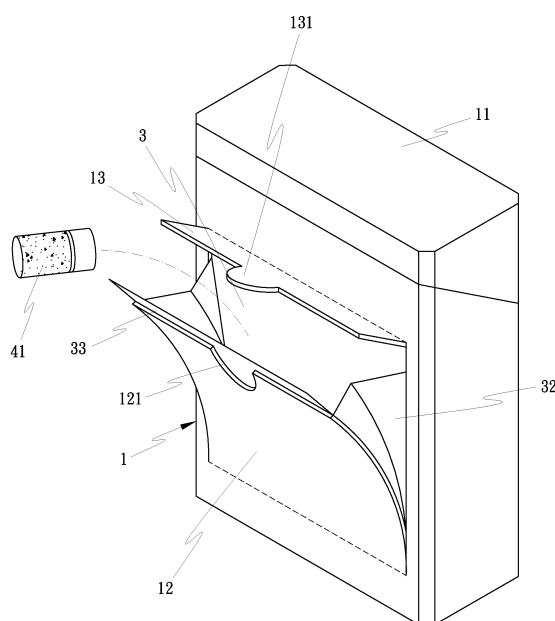


FIG. 3

## Description

### BACKGROUND OF THE INVENTION

#### (A) FIELD OF THE INVENTION

**[0001]** The present invention relates to a cigarette pack able to store cigarette butts. An outer case is cut beforehand to form an outer flip piece. A foldable bag is hidden and coupled between the outer flip piece and a foil packing. The foldable bag can be opened or closed repeatedly for storing butts.

#### (B) DESCRIPTION OF THE PRIOR ART:

**[0002]** A conventional cigarette pack includes an outer case. The outer case is provided with a cover. Cigarettes are wrapped with a foil packing beforehand and placed into the outer case.

**[0003]** These days, antismoking has been paid more attention in civilized countries. Therefore, smoking is prohibited at a lot of places. Some smokers litter butts everywhere to dirty and pollute the environment. So far, there is no ban on smoking absolutely. Regarding the disposal of cigarette butts, smokers should think properly to prevent the butts from polluting the environment.

**[0004]** There are many patents regarding the improvement of a cigarette box, such as Taiwan Utility Model Publication No. 296550 titled "a cigarette case with an ashtray", Taiwan Utility Model Patent No. M363804 titled "a cigarette case able to store butts and ash", Taiwan Utility Model Patent No. M404608 titled "a cigarette case", Taiwan Patent No. I351927 titled "a cigarette case combined with an ashtray". The conventional cigarette boxes have their respective advantages. However, the appearance and structure of the existing box must be changed greatly. As a result, the size of the outer case is increased, or the structure is complicated or the cost is increased. They are not used widely. Accordingly, the inventor of the present invention has devoted himself based on his many years of practical experiences to solve this problem.

### SUMMARY OF THE INVENTION

**[0005]** The primary object of the present invention is to provide a cigarette pack able to store cigarette butts. The cigarette pack doesn't change the appearance and shape of the existing cigarette pack. The outer case of the cigarette pack is provided with a foldable bag therein in a simply way. The cigarette pack has a simple structure and can be used conveniently, and the cost is very lower. The present invention can prevent smokers from littering butts to pollute the environment.

**[0006]** In order to achieve the aforesaid object, the cigarette pack able to store cigarette butts of the present invention comprises an outer case, a foil packing, and a foldable bag. The foil packing is a piece of conventional

foiling packing paper to pack cigarettes. One side of the outer case is cut beforehand to form an outer flip piece. The foldable bag is hidden and coupled between the inner side of the outer flip piece and a partial face of the foil packing. The foldable bag has a sealing opening which can be opened or closed repeatedly by tearing and adhering. When in use, the outer flip piece is opened to open the sealing opening of the foldable bag synchronously in order to store butts. When the outer flip piece is pushed back to close the sealing opening of the foldable bag, the butts are stored in the foldable bag. The present invention has a simple structure and can be used easily and has a lower cost, so it is beneficial to be used widely so as to prevent the butts from being littered and to prevent the environment from being polluted.

**[0007]** The outer case is provided with an upper flip piece above the outer flip piece. The sealing opening of the foldable bag is provided with an extension piece. When the foldable bag is folded, the upper flip piece and the extension piece are bond temporarily. The upper flip piece is adhered to the sealing opening of the foldable bag so as to prevent the sealing opening from bursting.

**[0008]** The outer flip piece of the outer case is selectively disposed at the back or one side or two sides of the outer case. The outer flip piece is formed by cutting. The foldable bag is switched and hidden between the outer flip piece and the foil packing.

**[0009]** Two ends of the foldable bag are foldable pieces, such that the foldable bag can be folded to form a flat shape or pulled out to form a butt storage space.

**[0010]** The sealing opening of the foldable bag is provided with an adhesive layer which can be torn and adhered repeatedly, enabling the sealing opening of the foldable bag to be opened and closed repeatedly.

### BRIEF DESCRIPTION OF THE DRAWINGS

#### [0011]

FIG. 1 is an exploded view of the present invention;

FIG. 2 is a schematic view showing the outer case of the present invention in an unfolded state;

FIG. 3 is a schematic view of the present invention when in use;

FIG. 4 is a sectional view of the present invention when in use;

FIG. 5 is a perspective view showing the outer flip piece of the present invention in a closed state;

FIG. 6 is a sectional view showing the outer flip piece of the present invention in a closed state;

FIG. 7 is a perspective view of another embodiment of the present invention showing the outer flip piece

disposed on another side of the outer case;

FIG. 8 is a schematic view showing that the outer flip piece and the upper flip piece of the present invention are formed by H-shaped broken lines; and

FIG. 9 is a perspective view of another embodiment the present invention when in use, without the upper flip piece.

#### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

**[0012]** Embodiments of the present invention will now be described, by way of example only, with reference to the accompanying drawings.

**[0013]** As shown in FIG. 1 through FIG. 3, a cigarette pack able to store cigarette butts according to a preferred embodiment of the present invention comprises an outer case 1, a foil packing 2, and a foldable bag 3.

**[0014]** The outer case 1 has a conventional cover 11. One side of the outer case 1 is cut beforehand to form an outer flip piece 12.

**[0015]** The foil packing 2 is a piece of conventional foiling packing paper to pack cigarettes 4.

**[0016]** The foldable bag 3 has a sealing opening 31 which can be opened or closed repeatedly by tearing and adhering. Two ends of the foldable bag 3 are foldable pieces 32, such that the foldable bag 3 can be folded inward to form a flat shape or pulled out to form a butt storage space.

**[0017]** According to the aforesaid parts, the foldable bag 3 is hidden and coupled between the outer flip piece 12 of the outer case 1 and a partial face 21 of the foil packing 2. When in use, the outer flip piece 12 is opened to open the sealing opening 31 of the foldable bag 3 synchronously for storing butts 41, as shown in FIG. 3 and FIG. 4. When the outer flip piece 12 is pushed back to close the sealing opening 31 of the foldable bag 3, the butts 41 are stored in the foldable bag 3. The outer case 1 can be restored to its initial state, as shown in FIG. 5 and FIG. 6. The present invention has a simple structure and can be used easily and has a lower cost, so it is beneficial to be used widely so as to prevent the butts from being littered and to prevent the environment from being polluted.

**[0018]** Two sides of the foldable bag 3 are respectively adhered to the inner side of the outer flip piece 12 and the partial face 21 of the foil packing 2, such that the foldable bag 3 is switched and hidden between the outer flip piece 12 and the foil packing 2.

**[0019]** The sealing opening 31 of the foldable bag 3 is provided with an adhesive layer 311 which can be torn and adhered repeatedly, enabling the sealing opening 31 of the foldable bag 3 to be opened and closed repeatedly.

**[0020]** According to the preferred embodiment as shown in the shown in FIG. 1 through FIG. 6, the outer

case 1 is provided with an upper flip piece 13 above the outer flip piece 12, so that the outer flip piece 12 and the upper flip piece 13 can be opened oppositely, as shown in FIG 3 and FIG. 4. The outer flip piece 12 and the upper flip piece 13 are formed with a notch 121 and a protrusion 131 at their central portions to mate with each other. The protrusion 131 assists the upper flip piece 13 in opening upwardly. When closed, the protrusion 13 leans against the notch 121, as shown in FIG. 5. The sealing opening 31 of the foldable bag 3 is provided with an extension piece 33. The outer side of the extension piece 33 is provided with an adhesive layer which can be torn and adhered repeatedly. When the foldable bag 3 is folded, the upper flip piece 11 and the extension piece 33 form a sealing. The upper flip piece 11 is adhered to the sealing opening 31 of the foldable bag 3 so as to prevent the sealing opening 31 from bursting, as shown in FIG. 6.

**[0021]** The outer flip piece 12 of the outer case 1 is selectively disposed at the back or one side or two sides of the outer case 1, as shown in FIG. 7. The outer flip piece 12 and the upper flip piece 13 are formed by cutting. The foldable bag 3 is switched and hidden between the outer flip piece 12 and the foil packing 2. It can be seen that the position of the outer flip piece 12 is not limited to the back or one side or two sides of the outer case 1.

**[0022]** The outer flip piece 12 and the upper flip piece 13 are formed by a cutting technic, enabling the outer flip piece 12 and the outer case 1 to be connected in a discontinuous way before separated, such as H-shaped broken lines as shown in FIG. 8. Before use, the integrity of the side of the outer case 1 can be kept, so that the printed pattern and characters on the side of the outer case won't be damaged. When in use, the user can separate the outer flip piece 12 from the upper flip piece 13 to pull the foldable bag 3 out.

**[0023]** The aforesaid embodiment is only to disclose the main technical features of the present invention, not to limit the technical scope of the present invention. As shown in FIG. 9, an outer case 1a is provided with an outer flip piece 12a, without an upper flip piece. With the only outer flip piece 12 a, the foldable bag is still switched and hidden between the outer flip piece 12a and a foil packing. The sealing opening of the foldable bag is provided with an adhesive layer which can be torn and adhered repeatedly to achieve the same effect. Similarly, the outer flip piece 12a and the outer case 1a are formed with a notch 121a and a protrusion 101a which correspond in position and in shape to each other, so that the notch 121a and the protrusion 101a are mated with each other. Therefore, the outer flip piece 12a can be opened and closed conveniently. The design of the sealing opening 31 of the foldable bag 3 is not limited to the adhesive layer. The position of the adhesive layer can be changed to achieve the same purpose.

**[0024]** In summary there is disclosed a cigarette pack able to store cigarette butts and including an outer case, a foil packing, and a foldable bag. The foil packing is a piece of conventional foiling packing paper to pack cig-

arettes. One side of the outer case is cut beforehand to form an outer flip piece. The foldable bag is hidden and coupled between the outer flip piece and the foil packing. The foldable bag has a sealing opening which can be opened or closed repeatedly by tearing and adhering. When in use, the outer flip piece is opened to open the sealing opening of the foldable bag synchronously for storing butts. When the outer flip piece is pushed back to close the sealing opening of the foldable bag, the outer case is restored to its original shape.

**[0025]** Although particular embodiments of the present invention have been described in detail for purposes of illustration, various modifications and enhancements may be made without departing from the spirit and scope of the present invention. Accordingly, the present invention is not to be limited except as by the appended claims.

### Claims

1. A cigarette pack able to store cigarette butts, comprising an outer case, a foil packing, and a foldable bag, the outer case having a cover, the foil packing being a piece foiling packing paper to pack cigarettes and placed into the outer case, **characterized in that:** one side of the outer case is cut beforehand to form an outer flip piece, the foldable bag is hidden and coupled between the outer flip piece of the outer case and a partial face of the foil packing, when the outer flip piece is opened, a sealing opening of the foldable bag is opened synchronously to form a butt storage space.
2. The cigarette pack able to store cigarette butts as claimed in claim 1, wherein two sides of the foldable bag are respectively adhered to an inner side of the outer flip piece and the partial face of the foil packing, such that the foldable bag is switched between the outer flip piece and the foil packing.
3. The cigarette pack able to store cigarette butts as claimed in claim 1 or 2, wherein two ends of the foldable bag are foldable pieces.
4. The cigarette pack able to store cigarette butts as claimed in one of the preceding claims, wherein the sealing opening of the foldable bag is provided with an adhesive layer which can be torn and adhered repeatedly.
5. The cigarette pack able to store cigarette butts as claimed in one of the preceding claims, wherein the outer flip piece and the outer case are formed with a notch and a protrusion which correspond in position and in shape to each other.
6. The cigarette pack able to store cigarette butts as claimed in one of the preceding claims, wherein the

outer flip piece of the outer case is selectively disposed at a back or one side of the outer case.

7. The cigarette pack able to store cigarette butts as claimed in one of the preceding claims, wherein the outer flip piece and the outer case are connected in a discontinuous way before separated.
8. The cigarette pack able to store cigarette butts as claimed in one of the preceding claims, wherein the outer case is provided with an upper flip piece above the outer flip piece, such that the outer flip piece and the upper flip piece can be opened oppositely
9. The cigarette pack able to store cigarette butts as claimed in one of the claims 1-7, wherein the outer case is provided with an upper flip piece above the outer flip piece, such that the outer flip piece and the upper flip piece can be opened oppositely, the sealing opening of the foldable bag is provided with an extension piece, and the extension piece is adhered to the upper flip piece.
10. The cigarette pack able to store cigarette butts as claimed in claim 8, wherein the outer flip piece and the upper flip piece are formed with a notch and a protrusion which correspond in position and in shape to each other.

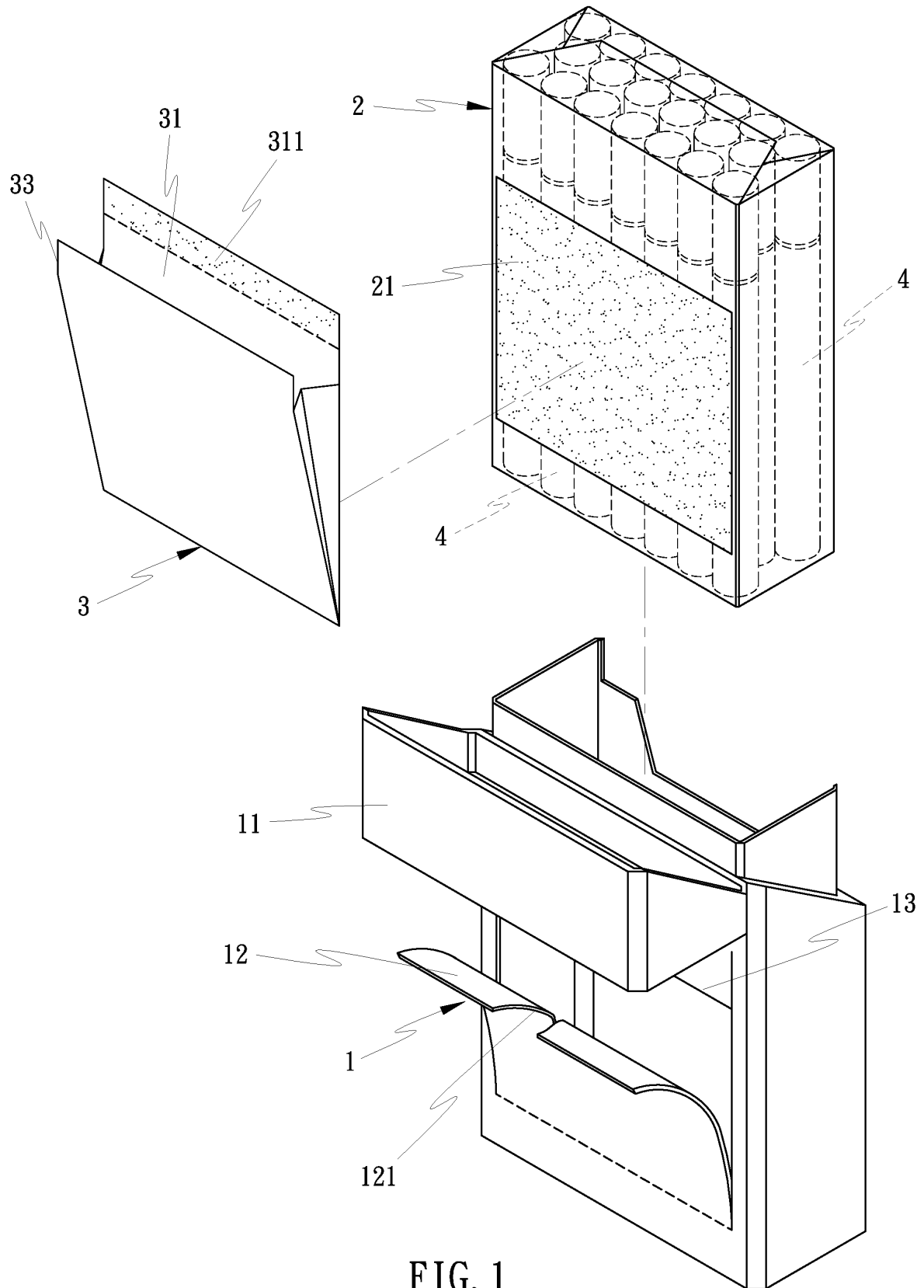


FIG. 1

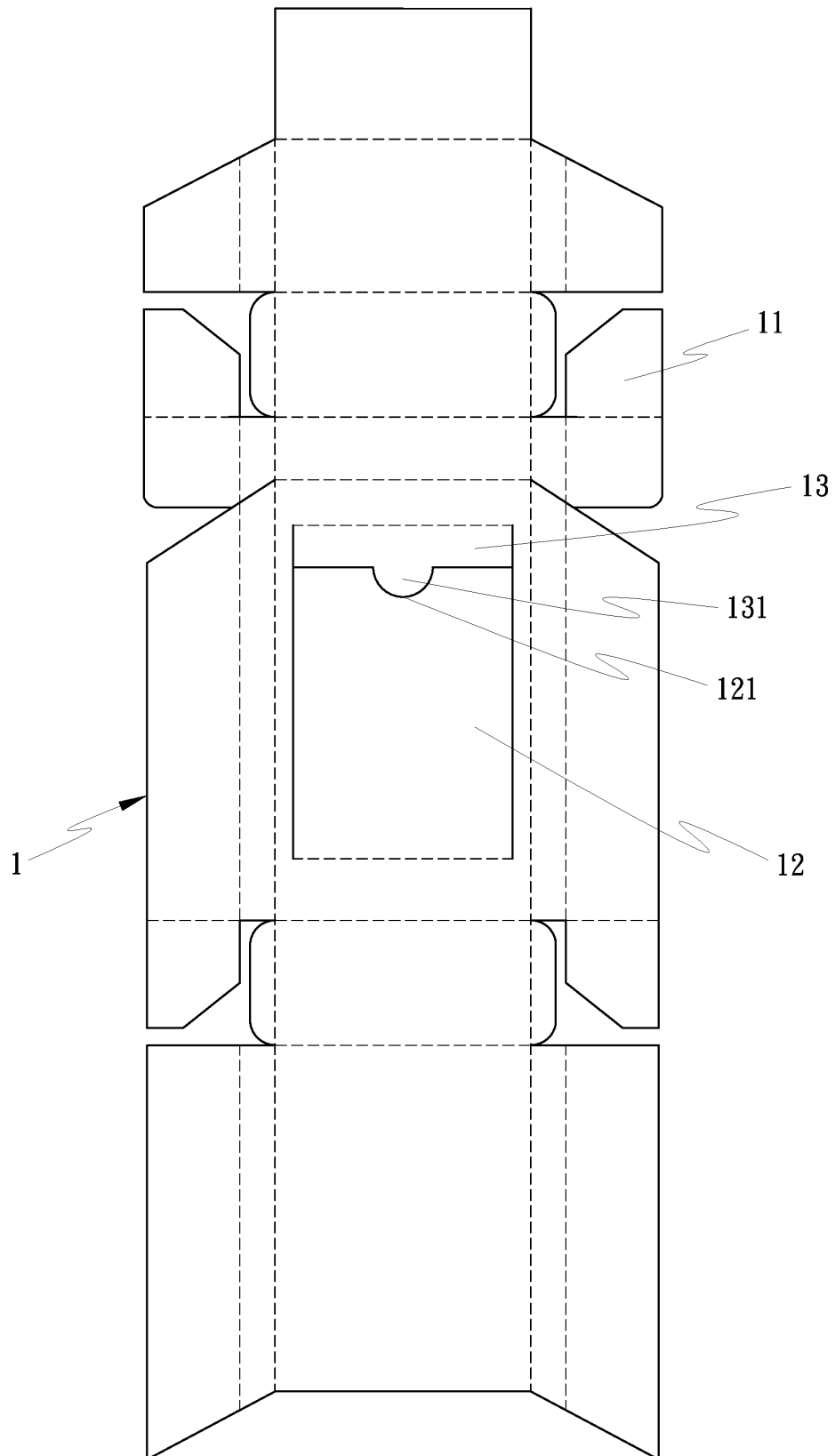


FIG. 2

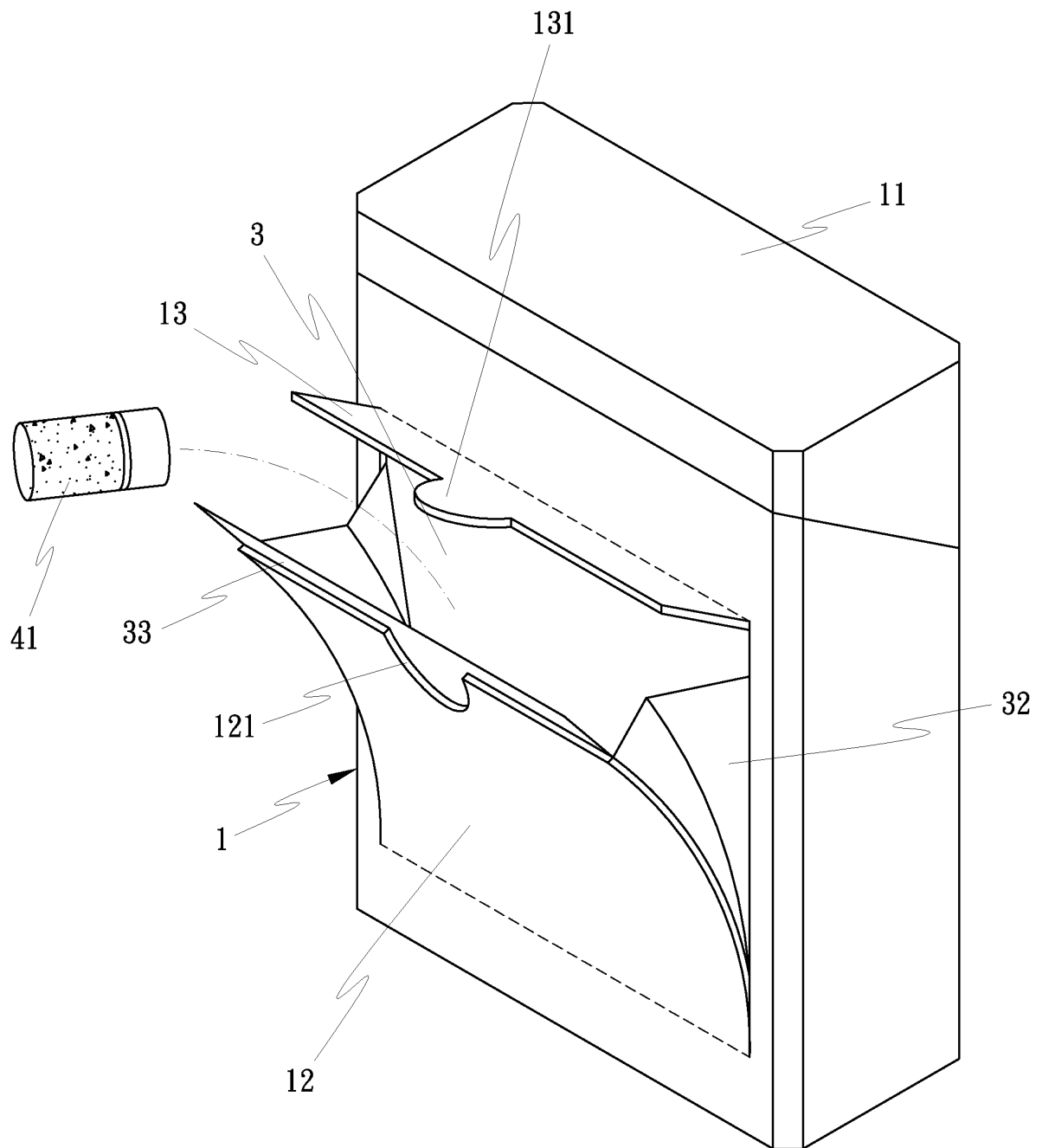


FIG. 3

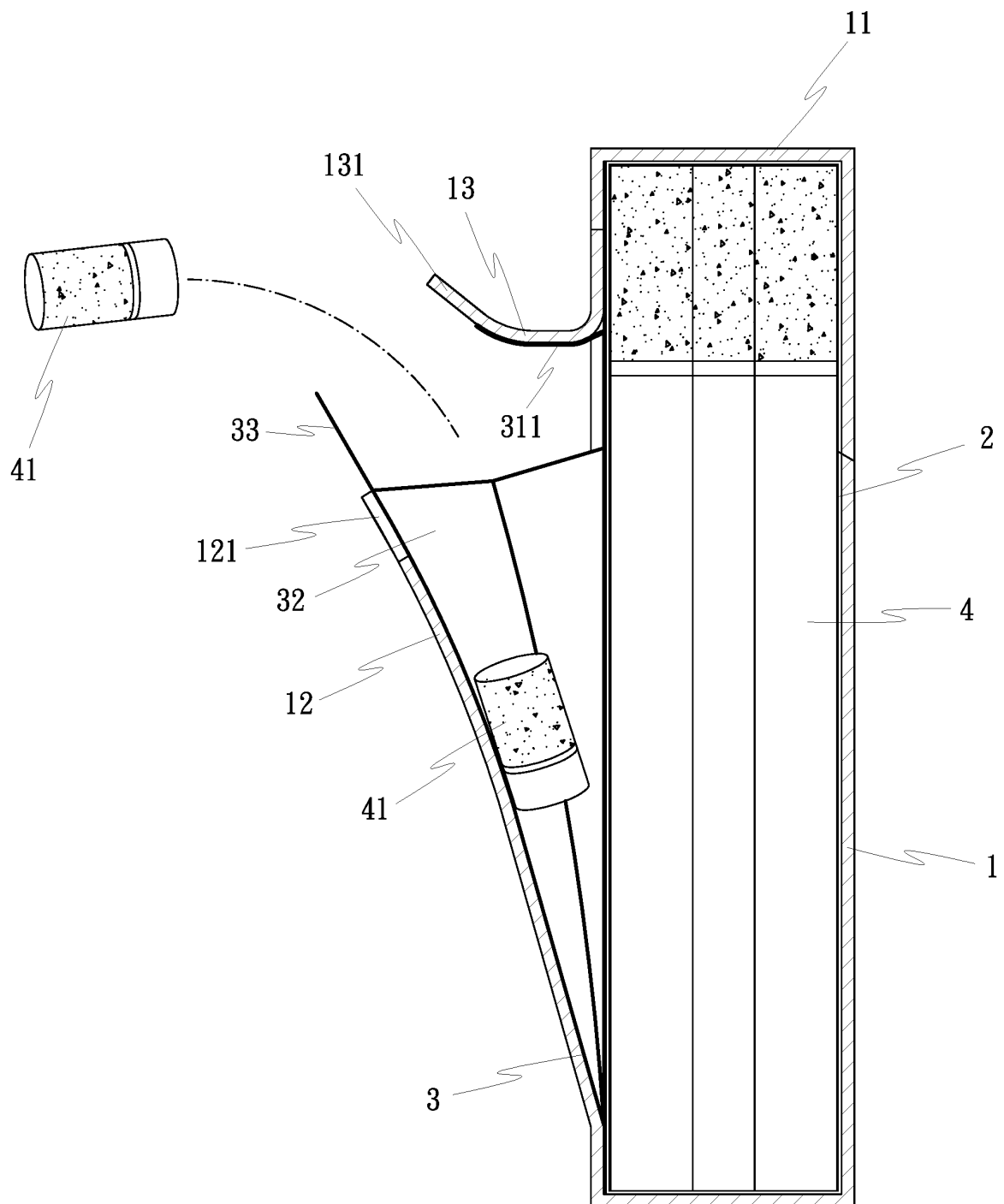


FIG. 4



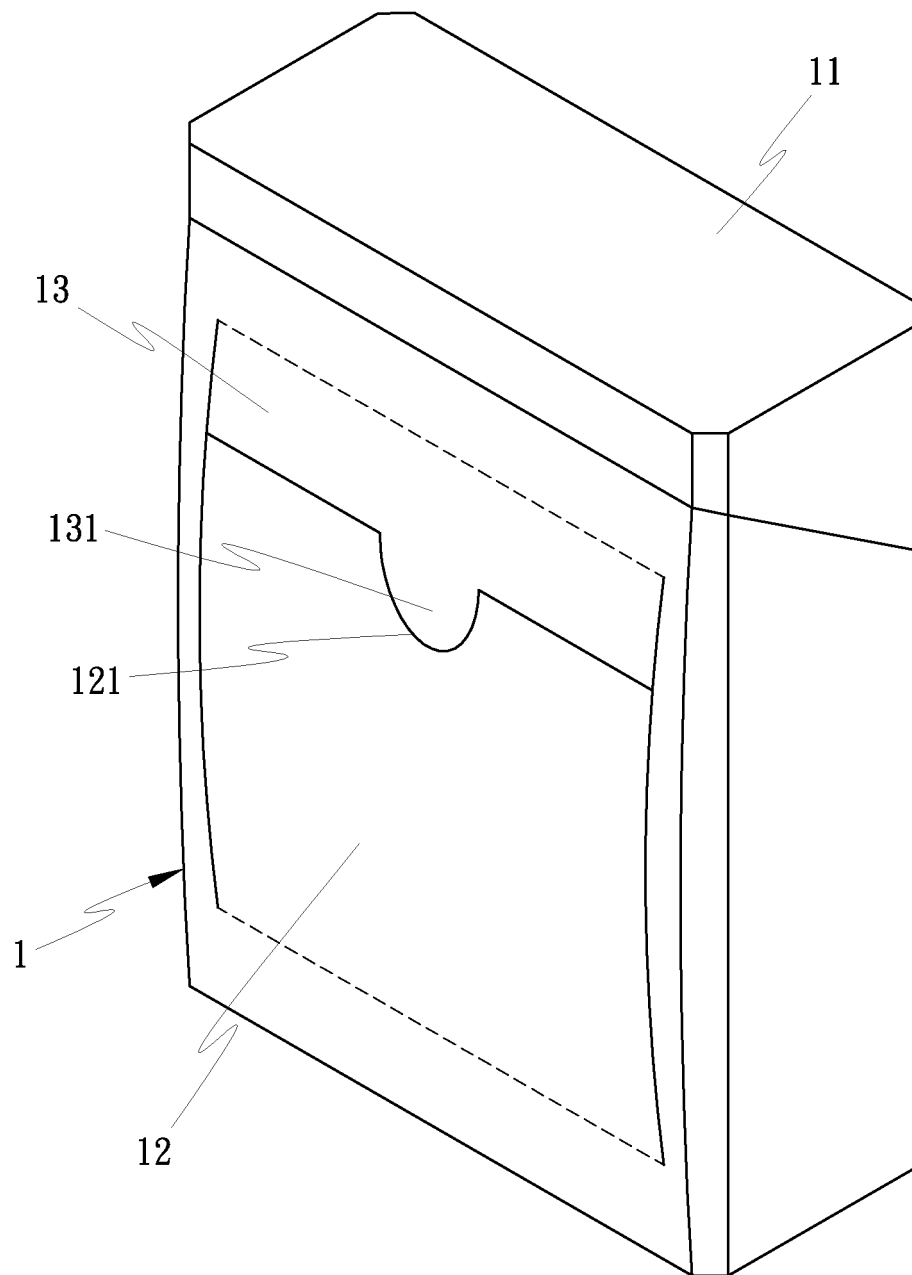


FIG. 5

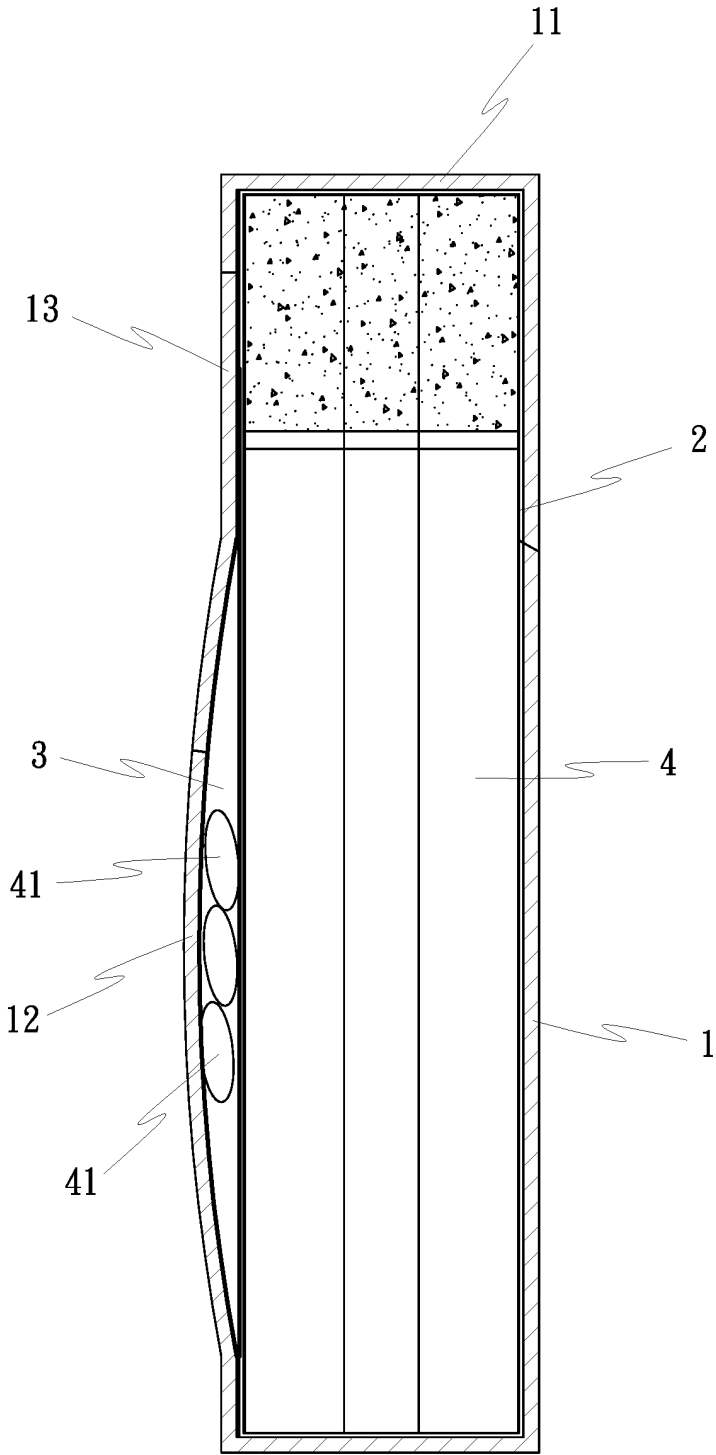


FIG. 6

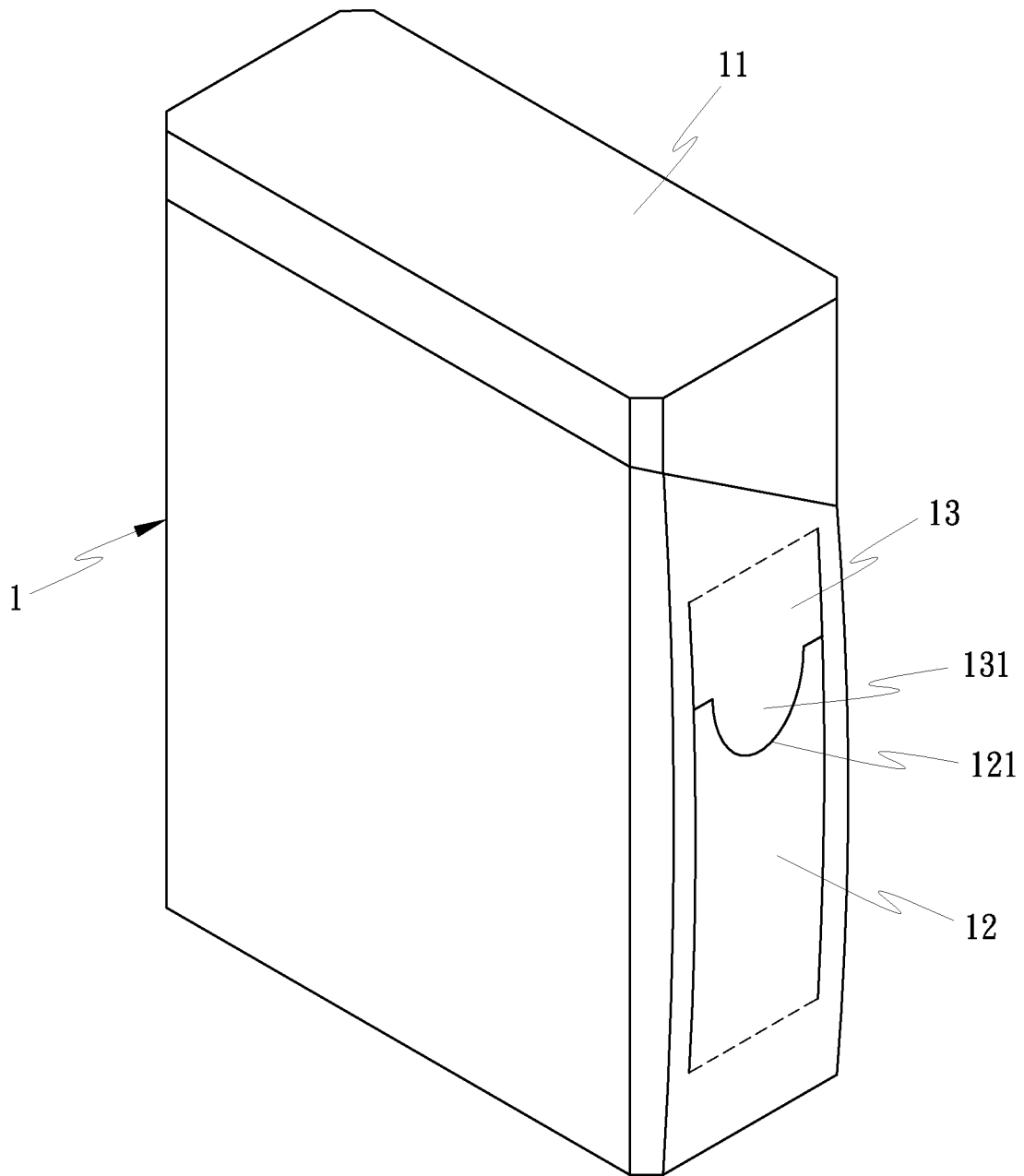


FIG. 7

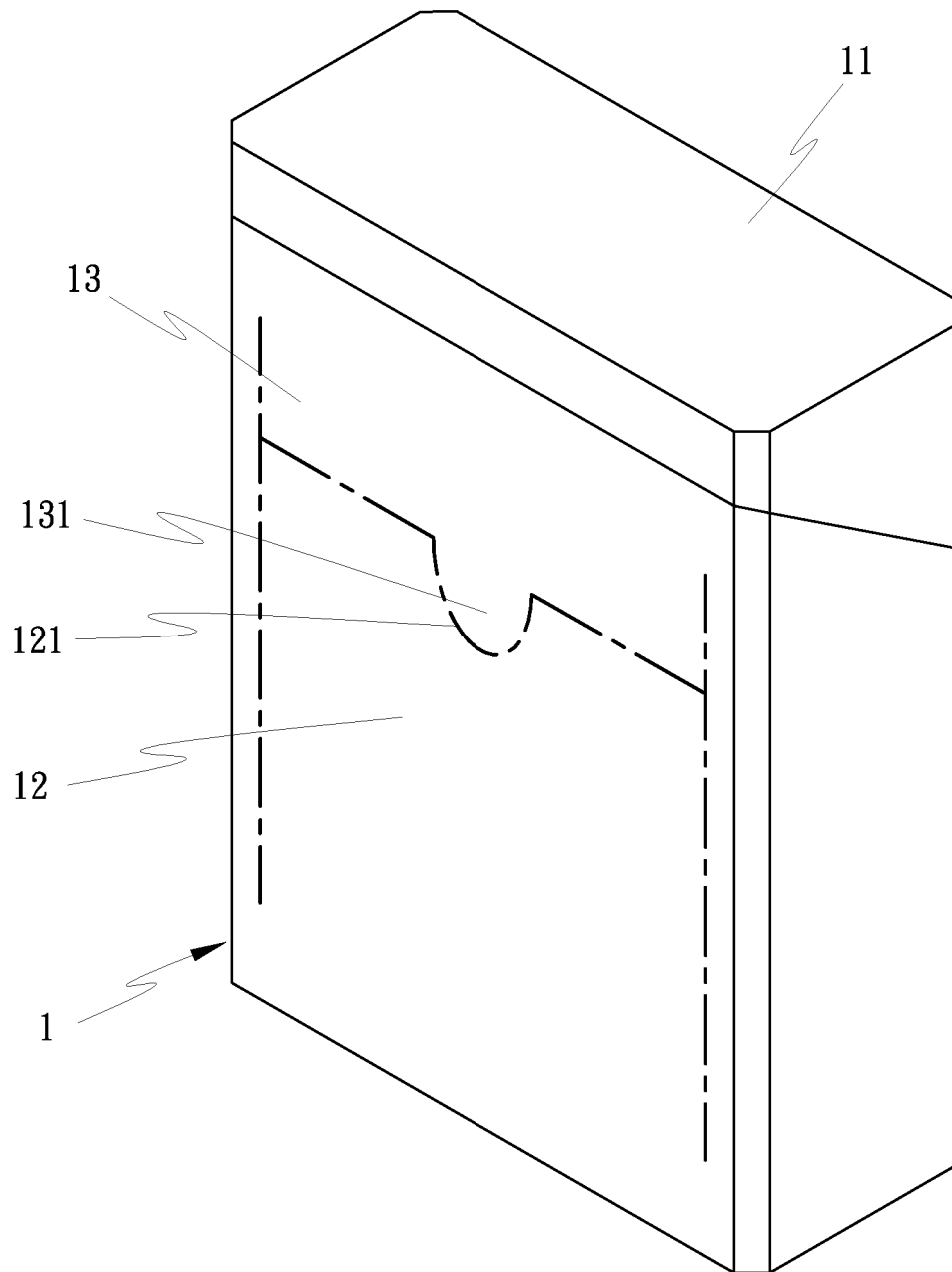


FIG. 8

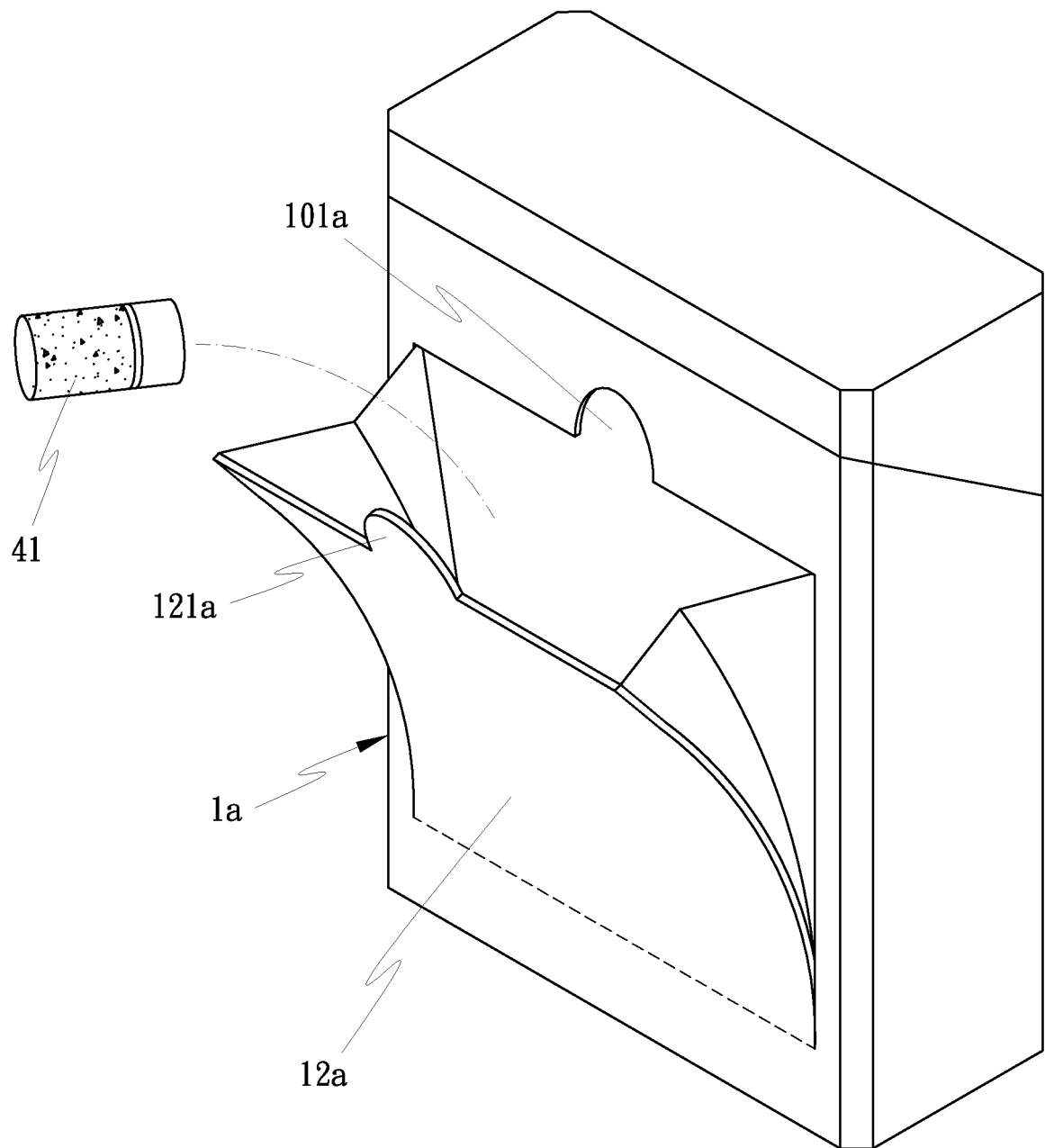


FIG. 9

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/CN2013/084965

## A. CLASSIFICATION OF SUBJECT MATTER

B65D 85/10 (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)

IPC: B65D

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

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

CNPAT, CNKI, WPI, EPODOC: ash??, butt?, bag?

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2958417 A (ADAMS, A.B.), 01 November 1960 (01.11.1960), description, column 3, line 1 to column 5, line 13, and figures 1-6	1, 2, 4-7
Y		3
Y	CN 2231234 Y (HUANG, Jianjun), 17 July 1996 (17.07.1996), description, pages 1-2, and figure 1	3
A	US 3090482 A (SANDACZ, G.U.), 21 May 1963 (21.05.1963), the whole document	1-10
A	US 4789059 A (KIM, H.K.), 06 December 1988 (06.12.1988), the whole document	1-10
A	CN 201109589 Y (FANG, Kai), 03 September 2008 (03.09.2008), the whole document	1-10

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

\* Special categories of cited documents:

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Date of the actual completion of the international search

27 December 2013 (27.12.2013)

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Form PCT/ISA/210 (patent family annex) (July 2009)

**REFERENCES CITED IN THE DESCRIPTION**

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**Patent documents cited in the description**

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- TW 363804 M [0004]
- TW 404608 M [0004]
- TW 351927 I [0004]