



- (51) International Patent Classification:
B65D 5/50 (2006.01) *B65D 85/10* (2006.01)
- (21) International Application Number:
PCT/GB2014/052071
- (22) International Filing Date:
8 July 2014 (08.07.2014)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
61/859,586 29 July 2013 (29.07.2013) US
- (71) Applicant: NICOVENTURES HOLDINGS LIMITED
[GB/GB]; 22 Tudor Street, London EC4Y 0AY (GB).
- (72) Inventors: MCKEON, Thomas Michael; c/o CREATA (USA) Inc., 1801 South Meyers Road, Suite 400, Oakbrook Terrace, Illinois, Illinois 60181 (US). SCHENNUM, Steven Michael; c/o CREATA (USA) Inc., 1801 South Meyers Road, Suite 400, Oakbrook Terrace, Illinois, Illinois 60181 (US).

- (74) Agent: DAVIES, Simon; D Young & Co LLP, 120 Holborn, London EC1N 2DY (GB).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,

[Continued on next page]

(54) Title: PACKAGING FOR E-SMOKING DEVICE

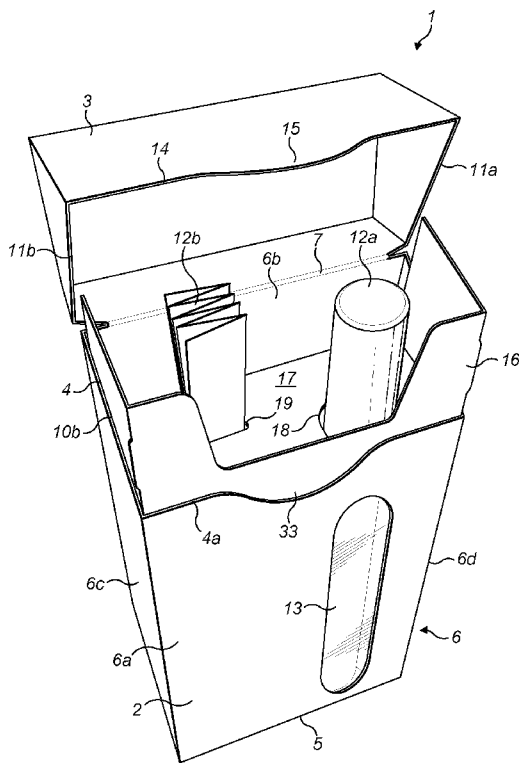


FIG. 1b

(57) Abstract: Innovative packaging, particularly a hinged-lid pack for an electronic nicotine delivery system, is disclosed. The pack has a body with a base wall and a side wall extending from the base wall to an open upper end. An inner frame is received in the body so as to protrude therefrom and the pack also has a lid, pivotally attached to the open upper end of body, which cooperates with the inner frame when the lid is closed. The inner frame comprises a dividing wall between the base wall and the lid to divide the interior of the body. The dividing wall has an opening therein to receive and support an elongate electronic nicotine delivery system inserted into the body through the opening. The opening extends to a peripheral edge of the dividing wall.

WO 2015/015156 A1

TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG). **Published:**

— with international search report (Art. 21(3))

PACKAGING FOR E-SMOKING DEVICE

1

2 **[0001]** This provisional application for letters patent document discloses and describes
3 inventive aspects that include various novel innovations (hereinafter “disclosure”) and contains
4 material that is subject to copyright, mask work, and/or other intellectual property protection.
5 The respective owners of such intellectual property have no objection to the facsimile
6 reproduction of the disclosure by anyone as it appears in published Patent Office file/records,
7 but otherwise reserve all rights.

8

FIELD

9 **[0002]** This disclosure is related to packaging for electronic nicotine delivery systems,
10 particularly but not exclusively to a hinged-lid pack for an electronic cigarette.

11

BACKGROUND

12 **[0003]** Electronic nicotine delivery systems may be used in situations where traditional
13 smoking is prohibited. Such devices may function by allowing a user to inhale a nicotine vapour
14 from a liquid store by applying a suction force to a mouthpiece. Electronic nicotine delivery
15 systems include electronic cigarettes.

SUMMARY

1

2 **[0004]** In accordance with embodiments of the invention, there is provided a
3 hinged-lid pack for an electronic nicotine delivery system defining a body having a base
4 wall and a side wall extending from said base wall to an open upper end, an inner frame
5 being received in the body so as to protrude therefrom, and a lid, pivotally attached to
6 the open upper end of body, which cooperates with said inner frame when said lid is
7 closed, wherein said inner frame comprises a dividing wall between said base wall and
8 said lid to divide the interior of the body, said dividing wall having an opening therein
9 to receive and support an elongate electronic nicotine delivery system inserted into the
10 body through said opening, wherein the opening extends to a peripheral edge of said
11 dividing wall.

12 **[0005]** The hinged-lid pack may comprise a supporting insert received in the body
13 and positioned against the side wall so as to enclose a space within the body defined by
14 the supporting insert and said side wall, the supporting insert and the opening in the
15 dividing wall may be positioned relative to each other so that an electronic nicotine
16 delivery system inserted through the opening passes into said space defined by the
17 supporting insert.

18 **[0006]** The supporting insert may be attached to the side wall.

19 **[0007]** The supporting insert may extend through the opening in the dividing wall
20 such that the dividing wall supports the supporting insert.

21 **[0008]** A first end of the supporting insert may be tapered to receive an electronic
22 nicotine delivery system.

1 **[0009]** The supporting insert may comprise an open second end, which is
2 opposite to the first end, such that an elongate electronic nicotine delivery system
3 received in the space rests on the base wall of the pack.

4 **[0010]** The supporting insert may comprise a pair of flanges extending from said
5 insert for attachment of the supporting insert to the side wall.

6 **[0011]** The side wall may include an opening positioned in alignment with the
7 space enclosed by the supporting insert such that an elongate electronic nicotine
8 delivery system received in the space is visible through the opening.

9 **[0012]** A transparent material may extend across the opening in the side wall.

10 **[0013]** The supporting insert may comprise a thermoformed polymer material.

11 **[0014]** The dividing wall may comprise a second opening spaced from said
12 opening.

13 **[0015]** The second opening may be configured to receive and support an ancillary
14 article, such as a product information leaflet.

15 **[0016]** The second opening may be configured to received and support an
16 electronic nicotine delivery system.

17 **[0017]** The second opening may extend to a peripheral edge of said dividing wall.

18 **[0018]** The inner frame may comprise a second dividing wall which is disposed
19 parallel to and spaced from said dividing wall, said second dividing wall comprising a
20 second dividing wall opening positioned in alignment with the second opening of the
21 dividing wall, such that an elongate electronic nicotine delivery system received in said
22 pack is supported by the second opening and the second dividing wall opening.

- 1 **[0019]** The inner frame may comprise a front wall, a rear wall and side walls
2 extending therebetween, the dividing wall being formed from a portion of the rear wall.
- 3 **[0020]** The portion of the rear wall may be foldable relative to the rear wall to
4 form the dividing wall.
- 5 **[0021]** The peripheral edge of the dividing wall may abut on an interior face of the
6 front wall of the inner frame.
- 7 **[0022]** The body and lid may comprise a card material.
- 8 **[0023]** An electronic nicotine delivery system may be received in the opening such
9 that it protrudes from the dividing wall.
- 10 **[0024]** The electronic nicotine delivery system may be an electronic cigarette.
- 11 **[0025]** According to another aspect of the invention, there may be provided an
12 inner frame for a hinged-lid pack having a base wall and an open end and a lid attached
13 to said open end, said inner frame comprising a dividing wall that, when said inner
14 frame is received in a hinged-lid pack, divides the interior of the body between the base
15 wall and the lid, said dividing wall having an opening therein to receive an elongate
16 nicotine delivery system inserted into the body through said opening, the opening
17 extending to a peripheral edge of said dividing wall.
- 18 **[0026]** The dividing wall may comprise a second opening spaced from said
19 opening, said second opening being configured to support an elongate electronic
20 nicotine delivery system.
- 21 **[0027]** The second opening may extend to a peripheral edge of said dividing wall.

1 **[0028]** The inner frame may further comprise a second dividing wall which is
2 disposed parallel to and spaced from said dividing wall, said second dividing wall
3 comprising a second dividing wall opening positioned in alignment with the second
4 opening of the dividing wall, such that an elongate electronic nicotine delivery system
5 received in said pack is supported by the second opening and the second dividing wall
6 opening.

BRIEF DESCRIPTION OF THE DRAWINGS

1
2 **[0029]** Embodiments of the invention will now be described, by way of example
3 only, with reference to the accompanying drawings, in which:

4 **[0030]** Figure 1a shows a hinged-lid pack for an electronic nicotine delivery
5 system, with the lid closed;

6 **[0031]** Figure 1b shows the pack of Figure 1a, with the lid open;

7 **[0032]** Figure 1c shows a front view of the pack of Figures 1a and 1b, with the lid
8 open;

9 **[0033]** Figure 2 shows the inside of the pack of Figures 1a to 1c, with the inner
10 frame removed;

11 **[0034]** Figure 3a shows a front perspective view of the inner frame of the pack of
12 Figures 1a to 1c;

13 **[0035]** Figure 3b shows a rear perspective view of the inner frame of Figure 3a;

14 **[0036]** Figure 3c shows a bottom view of the inner frame of Figures 3a and 3b;

15 **[0037]** Figure 4a shows an unfolded blank of the body of the pack of Figures 1a to
16 1c;

17 **[0038]** Figure 4b shows an unfolded blank of the inner frame of Figures 1a to 1c
18 and Figures 3a to 3c;

19 **[0039]** Figure 5 shows a hinged-lid pack for two electronic nicotine delivery
20 systems, with the lid open;

1 **[0040]** Figures 6a and 6b show the inner frame of the pack of Figure 5; and,

2 **[0041]** Figure 7 shows an unfolded blank of the inner frame of Figures 6a and 6b.

3

DETAILED DESCRIPTION

PACKAGING

1
2
3 **[0042]** Figure 1a shows a hinged-lid pack 1 having a body 2 and a hingedly
4 attached lid 3. The body 2 has a base wall 5 and a side wall 6 that extends from the base
5 wall 5 to form a generally tubular body with an open end 4. In this example, the side
6 wall 6 has four parts – a front part 6a, a rear part 6b, a left side part 6c and a right side
7 part 6d, arranged in a cuboid configuration with the open end 4. In this example, the
8 front part 6a and rear part 6b are wider than the left and right side parts 6c, 6d so that
9 the pack has a cuboid shape. The lid is hingedly attached to the rear part 6b. However,
10 it will be appreciated that the invention as defined in the claims is not limited to a
11 cuboid shape pack and may be applied to hinged-lid packs having a different shape
12 with a different number of sides.

13 **[0043]** As shown in Figures 1a and 1b, the lid 3 is hingedly attached to side wall 6
14 of the body via a hinge 7 positioned on an edge 7 of the open end 4 of the body 2. In this
15 example, the lid 3 and the body 2 are formed from a single blank of material and the
16 hinge 7 comprises a fold line between the rear part 6b of the side wall 6 and the lid 3. As
17 shown in Figure 1a, the lid 3 comprises a similar construction to the body 2, having a
18 front part 8a, a rear part 8b, a left side part 8c and a right side part 8d and a top wall 9.
19 When the lid 3 is closed the pack 1 has a generally cuboid outer shape.

20 **[0044]** As shown in Figures 1a and 1b, the open end 4 of the body 2 is angled such
21 that the edge of the open end 4 on the front part 6a of the side wall 6 is at a different

1 level to the edge of the open end 4 on the rear part 6b of the side wall, where the hinge
2 7 is located. Therefore, the side edges 10a (see Figure 1a), 10b (see Figure 1b) of the
3 open end 4, and the corresponding side edges 11a, 11b of the lid 3, are angled relative to
4 the base wall 5. This arrangement makes it easier for a user to grasp articles within the
5 pack 1 when the lid 3 is open.

6 **[0045]** As described above, the pack 1 has a body 2 with a hingedly attached lid 3
7 that covers the open end 4 of the body 2 in a closed position and exposes the open end
8 4 of the body 2 in an open position, to allow a user to insert articles into, and remove
9 articles from, the space defined within the body 2. The configuration of the lid 3, with a
10 top wall 9 and side walls 8a – 8d that define a space within the lid 3, allows articles that
11 are longer than the body 2 to be received in the pack 1. As shown in Figure 1c, an article
12 12a, 12b, for example an electronic nicotine delivery system 12a or an ancillary article
13 12b, received in the pack 1 can extend past the open end 4 of the body 2 and into the
14 space within the lid 3.

15 **[0046]** As shown in Figures 1a to 1c, the front part 6a of the side wall 6 of the body
16 2 is provided with a window 13. The window 13 is elongate and offset to one side to
17 align with an electronic nicotine delivery system 12a received in the pack 1. As will be
18 described hereinafter, the electronic nicotine delivery system 12a is held in position
19 such that it is viewable from the outside of the pack 1 through the window 13. It will be
20 appreciated that the shape and position of the window 13 described above and shown in
21 Figures 1a to 1c is merely an example and the window 13 may be a different shape and
22 may be positioned in a different wall of the pack 1. Additionally, the pack may include
23 multiple windows.

1 **[0047]** The window 13 in the pack 1 may be an aperture formed in the side wall 6
2 of the pack 1 that extends through to the space within the body 2. In one example, a
3 transparent member may extend across the opening of the window 13 so that the
4 electronic nicotine delivery system 12a within the pack 1 is visible and the transparent
5 member provides protection and separates the space inside of the pack 1 from the
6 outside. Alternatively, a translucent member may extend across the opening of the
7 window 13, the electronic nicotine delivery system 12a being visible through the
8 translucent member.

9 **[0048]** The window 13 allows a user to see whether or not the pack contains an
10 electronic nicotine delivery system. Moreover, the window 13 allows a user to see and
11 inspect an electronic nicotine delivery system within the pack before opening the pack,
12 which may be useful when the user is deciding whether or not to purchase the product.

13 **[0049]** Also shown in Figure 1b, the front edge 4a of the open end 4 of the body 2
14 has a curved recess 33 extending towards the base wall 5 and the front edge 14 of the lid
15 3 has a curved protrusion 15 that extends into the curved recess 33 when the lid 3 is
16 closed. The curved protrusion 15 provides a finger tab for a user to push for opening
17 and closing the lid 3.

18 **[0050]** The pack 1 shown in Figures 1a to 1c also has an inner frame 16 which is
19 received in and protrudes from the open end 4 of the body 2. The inner frame 16
20 includes a dividing wall 17, visible in Figure 1b, which extends across the open end 4 of
21 the body 2 to close the space within the body 2. In this example, the dividing wall 17 is
22 positioned between the base wall 5 and the open end 4 of the body 2. In particular, the
23 dividing wall 17 is positioned proximate to the open end 4 of the body 2, with the inner

1 frame 16 extending out of the open end 4. In this way, the space within the body 2 is
2 divided by the dividing wall 17. However, it will be appreciated that the dividing wall 17
3 may be positioned elsewhere within the pack 1, either above or below the open end 4 of
4 the body 2. For example, the dividing wall 17 may be positioned within the inner frame
5 16 and above the open end 4 of the body 2.

6 **[0051]** In this example, as shown in Figure 1b, the dividing wall 17 of the inner
7 frame 16 comprises two openings: a first opening 18 configured to allow an electronic
8 nicotine delivery system 12a to be received in the pack 1 and extend into the space
9 within the body 2; and, a second opening 19 configured to allow an ancillary article 12b
10 to be received in the pack 1 and extend into the space within the body 2. The ancillary
11 article 12b may be any article that accompanies the electronic nicotine delivery system
12 12a, for example a product information leaflet, a voucher, a spare or replacement part,
13 such as a battery or replacement cartridges, or any other article. Accordingly, the
14 second opening 19 may be any shape and size that is suitable for the ancillary article.

15 **[0052]** In the example shown in Figures 1b and 1c, the ancillary article 12b is a
16 product information leaflet that is folded into an elongate shape. The elongate folded
17 leaflet 12b and the elongate electronic nicotine delivery system 12a are placed through
18 the second opening 19 and first opening 18 respectively, so that they are received within
19 the space in the body 2 of the pack 1, below the dividing wall 17. As shown, the ends of
20 the electronic nicotine delivery system 12a and ancillary article 12b protrude from the
21 first opening 18 and second opening 19 of the dividing wall 17 into the space between
22 the dividing wall 17 and the lid 3. Therefore, as shown in Figure 1b, when the lid 3 is in

1 an open position a user is able to grasp the ends of the electronic nicotine delivery
2 system 12a and the ancillary article 12b to remove them from the pack 1.

3 **[0053]** When the electronic nicotine delivery system 12a and the ancillary article
4 12b are received in the pack 1, they extend through the first and second openings 18, 19
5 respectively and into the space within the body 2. The ends of the electronic nicotine
6 delivery system 12a and the ancillary article 12b will rest on the base wall 5 of the body
7 2, or on some member disposed on the base wall 5 of the body 2. In this way, the first
8 opening 18 supports the electronic nicotine delivery system 12a in an upright position
9 within the pack 1 so that the electronic nicotine delivery system 12a can easily be
10 removed from and inserted into the pack 1. Likewise, the second opening 19 supports
11 the ancillary article 12b in an upright position in the pack 1.

12 **[0054]** An example of an electronic nicotine delivery system, an electronic
13 cigarette, comprises two main parts - a mouthpiece and a body. The mouthpiece and
14 the body are cylindrical and have a constant outer diameter. The mouthpiece is shorter
15 than the body.

16 **[0055]** The dividing wall 17 is positioned such that a sufficient amount of the
17 electronic nicotine delivery system 12a protrudes above the dividing wall 17, such that a
18 user can grasp the electronic nicotine delivery system 12a. In one example, the body 2,
19 inner frame 16 and dividing wall 17 are configured such that the dividing wall 17 is
20 substantially aligned with the boundary between the mouthpiece and body of the
21 electronic nicotine delivery system 12a. In this way, the mouthpiece protrudes from the
22 first opening 18 above the dividing wall 17, while the body of the electronic nicotine
23 delivery system 12a is disposed within the space below the dividing wall 17.

1 **[0056]** As shown in Figure 1c, the edges of the inner frame 16 may include anti-
2 yawning tabs 20 that cooperate with the lid 3 to hold the lid 3 in a closed position. The
3 anti-yawning tabs 20 are configured to engage with recesses formed in the lid 3 when
4 the lid 3 is closed so that the lid 3 is held in a closed position. Alternatively, the anti-
5 yawning tabs 20 may engage with an inside surface of the lid and retain the lid in a
6 closed position by friction between the tabs 20 and the lid 9. A user is able to pull the
7 lid 3 to disengage the anti-yawning tabs 20 and open the lid 3.

8 **[0057]** As will be apparent from Figures 1b and 1c, the first opening 18 in the
9 dividing wall 17, for the electronic nicotine delivery system 12a, is positioned in line
10 with the window 13 in the front part 6a of the side wall 6 of the base 2. In this way, the
11 electronic nicotine delivery system 12a is supported within the pack 1 and is visible
12 through the window 13. The second opening 19, for the ancillary article 12b, is
13 positioned elsewhere within the dividing wall 17. In this example, the first opening 18 is
14 offset to one side of the pack 1 such that there is sufficient space for the second opening
15 19 and the ancillary article 12b. However, it will be appreciated that the pack 1 may not
16 comprise a window 13, and if the pack 1 does not include the window 13, then the first
17 opening 18 may be positioned anywhere in the dividing wall 17. Moreover, the second
18 opening 19 may be positioned anywhere in the dividing wall 17.

19 **[0058]** As shown in Figure 1b, the dividing wall 17 of this example is disposed
20 close to the open end 4 of the body 2 and when the user opens the lid 3 they are not
21 able to see within the pack 1 because the dividing wall 17 hides the space within the
22 body 2, except via the first and second openings 18, 19. Therefore, the dividing wall 17
23 acts to close the space within the pack 1 and present a user with a clean and clear

1 product on opening the lid 3. In particular, the articles 12a, 12b within the pack 1 are
2 presented in a neat manner and the user is able to quickly identify the articles, grasp
3 them and remove them from the pack 1. Moreover, the dividing wall 17 will close the
4 space within the body 2 and thereby help to prevent any unwanted dirt or dust entering
5 the body 2. Furthermore, the dividing wall acts to hold the electronic nicotine delivery
6 system 12a and the ancillary article 12b apart from each other to prevent transfer of
7 substances between them.

8 **[0059]** Referring now to Figure 2, which shows the inside of the pack 1 with the
9 inner frame removed, the pack 1 may comprise a supporting insert 21. As shown, the
10 supporting insert 21 has an elongate, semi-tubular shape and is attached to an inside
11 face of the side wall 6 of the body 2, in this case the front part 6a of the side wall 6.

12 **[0060]** The supporting insert 21 has a curved wall 21a and two adjacent edges 21b
13 that face in the same direction towards the side wall 6. In this example, the edges 21b
14 have flanges 21c which extend in an outwards direction such that each flange 21c has a
15 planar face arranged in the same orientation. The planar faces of these outwardly
16 extending edges 21c are attached to the inside surface of the side wall 6 of the pack 1 by
17 means of adhesive. In another example, the edges 21b themselves are adhered to the
18 side wall 6 of the pack.

19 **[0061]** In this way, the supporting insert 21 and the side wall 6 of the body 2
20 together define a tubular space 22 with a first open end 23 at the top of the supporting
21 insert 21 and a second open end (not shown) at the bottom of the supporting insert 21.
22 An electronic nicotine delivery system can be received in the space 22 defined by the
23 supporting insert 21 and can extend through the first open end 23 and the second open

1 end of the supporting insert 21. The second open end of the supporting insert 21, at the
2 bottom of the pack 1, is disposed adjacent to the base wall 5 (see Figures 1a to 1c) of the
3 body 2. Therefore, the end of an electronic nicotine delivery system received in the
4 supporting insert 21 will protrude from the second open end and rest on the base wall 5
5 (see Figures 1a to 1c) of the pack 1.

6 **[0062]** In an alternative embodiment, the second end (not shown) of the
7 supporting insert 21, at the bottom of the pack 1, may be closed, such that an electronic
8 nicotine delivery system received in the supporting insert 21 is retained in the insert 21
9 and does not rest on the base wall 5 (see Figures 1a to 1c) of the body.

10 **[0063]** As described above, an electronic nicotine delivery system may be received
11 in the supporting insert 21 and therefore be supported in an upright position within the
12 pack 1. In particular, the curved body 21a of the supporting insert 21 will retain the
13 electronic nicotine delivery system and against the inside surface of the side wall 6 of
14 the pack 1.

15 **[0064]** The supporting insert 21 is attached to the side wall 6 such that the first
16 open end 23, at the top of the pack 1, is aligned with the first opening 18 (see Figure 1b)
17 in the dividing wall 17 (see Figure 1b) of the inner frame 16 (see Figure 1b), as described
18 with reference to Figure 1b. Therefore, when the inner frame 16 is fixed in the pack 1,
19 an electronic nicotine delivery system 12a can be inserted through the first opening 18
20 in the dividing wall 17 into the space 22 defined by the supporting insert 21 and the side
21 wall 6 of the body 2. The first open end 23 of the supporting insert 21 may be disposed
22 against the dividing wall 17 or below the dividing wall 17, or alternatively the
23 supporting insert 21 may extend at least partially into the first opening 18 of the

1 dividing wall 17. In any case, the first opening 18 of the dividing wall 17 and the space
2 22 defined by the supporting insert 21 are aligned.

3 **[0065]** The supporting insert 21 is also positioned such that the space 22 defined
4 between the supporting insert 21 and the side wall 6 of the pack 1 is aligned with the
5 window 13 (see Figures 1a to 1c) in the side wall 6 of the pack 1, as described with
6 reference to Figures 1a to 1c. The flanges 21c of the supporting insert 21, which are
7 attached to the inside face of the side wall 6 of the body 1, are attached on either side of
8 the window 13. In this way, when an electronic nicotine delivery system is received in
9 the pack 1, through the first opening 18 in the dividing wall 17 and into the supporting
10 insert 21, the electronic nicotine delivery system is visible through the window 13.

11 **[0066]** Also shown in Figure 2, the first, top end of the supporting insert 21 has a
12 tapered mouth 24, disposed towards the dividing wall 17 (see Figure 1b) of the inner
13 frame 16 (see Figure 1b). The tapered mouth 24 of the supporting insert 21 is outwardly
14 tapered so that an electronic nicotine delivery system can more easily be inserted into
15 the space 22 defined by the supporting insert 21. This is useful because an electronic
16 nicotine delivery system, such as an electronic cigarette, is reusable and will re-inserted
17 into the pack several times. As shown in Figure 2, the outwardly extending flanges 21c
18 which are attached to the side wall 6 of the body 2 extend most of the length of the
19 supporting insert 21 and are attached to the main curved part 21a of the supporting
20 insert 21. However, the outwardly extending flanges 21c are not attached to the tapered
21 mouth 24 disposed at the top end of the supporting insert 21, so that an electronic
22 nicotine delivery system can more easily be inserted into the space 22 defined by the
23 supporting insert 21. Moreover, the flanges 21c do not extend to the end of the

1 supporting insert 21 to avoid the inner frame 16 (see Figure 1b), which extends along
2 the front part 6a of the side wall 6 when the inner frame is received in the pack.

3 **[0067]** It will be appreciated that an additional supporting insert, similar to that
4 described above, may be provided for the ancillary article received through the second
5 opening 19 (see Figure 1b) in the dividing wall 16 (see Figure 1b). This additional
6 supporting insert may be separate to the supporting insert for the electronic nicotine
7 delivery system or the supporting inserts may be integrally formed.

8 **[0068]** The supporting insert 21 described with reference to Figures 3a to 3c may
9 be made from a thermoformed polymer material. For example, the supporting insert 21
10 may be made from a thermoformed polystyrene material. The thermoformed material
11 means it is easier to form the flanges 21c and tapered end 23 of the supporting insert
12 21.

13 **[0069]** Figures 3a to 3c show the inner frame 16 that has been removed from the
14 pack 1 of Figures 1a to 1c. As shown, the inner frame 16 has a front wall 16a, a rear wall
15 16b, a right side wall 16c and a left side wall 16d which extend between the front and
16 rear walls 16a, 16b to form a generally tubular inner frame 16 having an outer end 16e
17 and an inner end 16f. The dividing wall 17 is attached to the rear wall 16b part-way
18 between the outer and inner ends 16e, 16f and extends to the front wall 16a. The rear
19 wall 16b does not extend above the dividing wall 17, the rear wall 16b does not extend to
20 the outer end 16e of the inner frame 16. The inner frame 16 fits within the open end 4
21 (see Figure 1b) of the body 2 (see Figure 1b), with no space between the outside faces of
22 the inner frame 16 and the inside faces of the body 2. The inner frame 16 is adhered to
23 the body of the pack.

1 **[0070]** As shown in Figures 3a and 3b, the dividing wall 17 extends from the rear
2 wall 16b across the inner frame 16 and abuts against the front wall 16a of the inner
3 frame 16. The dividing wall 17 extends across the inner frame 16 and is configured such
4 that a peripheral edge 16g of the diving wall 17 abuts the front wall 16a of the inner
5 frame 16 at a position where the dividing wall 17 is perpendicular to the front wall 16a.
6 In this way, the dividing wall 17 which extends across the inner frame 16 to divide the
7 space within the pack is formed, with the first opening 18 and the second opening 19, as
8 shown.

9 **[0071]** Also shown in Figures 3a to 3c, the inner frame 16 may comprise anti-
10 yawning tabs 20 formed on the front edges of the inner frame 16, between the front
11 wall 16a and each of the right and left side walls 16c, 16d. The inner frame 16 is received
12 in the open end 4 (see Figure 1b) of the body 2 (see Figure 1b) such that the inner frame
13 16 protrudes from the open end 4. Due to the angled form of the open end 4 of the body
14 2, as described with reference to Figure 1a, the inner frame 16 will protrude from the
15 open end 4 by a greater amount at the front of the pack 1. The inner frame 16 is
16 received in the body 2 such that the front wall 16a of the inner frame 16, against which
17 the dividing wall 17 abuts, is positioned at the front of the pack 1, on an opposite side to
18 the hinge 7 (see Figure 1b).

19 **[0072]** Also shown in Figures 3a and 3b, the front wall 16a of the inner frame 16 is
20 provided with two cut-outs: an outer cut-out 25, shown in Figures 3a and 3b, which is
21 provided in the part of the front wall 16a that extends above the open end 4 (see Figure
22 1b) of the body 2; and, an inner cut-out 26, shown in Figures 3a and 3c, which is
23 disposed below the open end 4, within the body 2. The outer cut-out 25 is visible when

1 the lid 3 of the pack is open and this cut-out allows a user to more easily grasp an
2 article received in the pack. The outer cut-out 25 extends from the outer end 16e of the
3 front wall 16a and allows a user to see and grasp any article placed in the pack through
4 the first and second openings 18, 19 in the dividing wall 17. The inner cut-out 26 is
5 formed in the part of the front wall 16a which is disposed within the body when the
6 inner frame 16 is received in the pack 1. Therefore, the inner cut-out 26 is disposed
7 behind the side wall 6 (see Figure 1b) of the body 2 and is not visible from the outside
8 of the pack. The inner cut-out 26 is aligned with the supporting insert 21 (see Figure 2)
9 and provides space that allows the flanges 21c (see Figure 2) of the supporting insert 21
10 to be attached to the side wall 6 of the body 2.

11 **[0073]** Figure 3b shows a rear view of the inner frame 16 and shows the dividing
12 wall 17 which extends from the rear wall 16b to the front wall 16a of the inner frame 16.
13 Also, as previously explained, the front wall 16a of the inner frame 16 has an outer cut-
14 out 25 to provide access to the electronic nicotine delivery system and ancillary article
15 which are received in the first and second openings 18, 19 in the dividing wall 17. As
16 shown, the rear wall 16b of the inner frame 16 does not extend past the dividing wall 17.
17 The rear wall 16b is joined to the dividing wall 17 along line 29.

18 **[0074]** As shown in Figures 3b and 3c, the first opening 18 is disposed at a front,
19 peripheral edge 16g of the dividing wall 17, adjacent to the front wall 16a of the inner
20 frame 16. The first opening 18 comprises a curved, semi-circular edge and two parallel
21 edges that extend to the front edge 16g of the dividing wall 17. In this way, the shape of
22 the first opening 18 is substantially the same as the shape of the space 22 (see Figure 2)
23 defined between the supporting insert 21 (see Figure 2) and the side wall 6 (see Figure

1 2) of the body. The first opening 18 is configured to receive a cylindrical electronic
2 nicotine delivery system. The first opening 18 is arranged to align with the supporting
3 insert 21 (see Figure 2) so that the electronic nicotine delivery system is supported
4 against the side wall of the body.

5 **[0075]** Figure 3c shows a view of the inner frame 16 from underneath, with the
6 dividing wall 17 shown with first and second openings 18, 19. As previously described,
7 the front wall 16a of the inner frame 16 has a cut-out 26 which is aligned with the first
8 opening 18 in the dividing wall 17 and allows the flanges 21c (see Figure 2) of the
9 supporting insert 21 (see Figure 2) to be adhered to the side wall of the body. Also
10 shown in Figure 3c, the construction of the inner frame 16, which will be described in
11 more detail with reference to Figure 4b, means that the lower part of the right side wall
12 16c and the lower part of the front wall 16a, both of which are disposed below the
13 dividing wall 17 when the inner frame 16 is received in the pack, comprise a double
14 thickness material. That is, tabs that form the structure of the inner frame 16 are
15 adhered to the lower parts of the right side wall 16c and front wall 16a of the inner
16 frame 16.

17 **[0076]** As shown in each of Figures 3a to 3c, the second opening 19 in the dividing
18 wall 17 is disposed adjacent to the first opening 18 and mid-way between the front and
19 rear walls 16a, 16b of the inner frame 16. Unlike the first opening 18, the second
20 opening 19 is not disposed at an edge of the dividing wall 16. In this example, the
21 second opening 19 comprises an elongate slot configured to receive and support a
22 folded leaflet. However, it will be appreciated that the second opening 19 may be
23 positioned anywhere on the dividing wall 17, may extend to an edge of the dividing wall

1 and may be any shape, depending on the size and shape of the ancillary article to be
2 supported.

3 **[0077]** It will be appreciated that the first opening 18 and the second opening 19
4 may be provided in any position in the dividing wall 17 and each may or may not extend
5 to a peripheral edge of the dividing wall 17 in the manner described above. Moreover,
6 the second opening 19 may only be provided if the pack 1 should support an ancillary
7 article as well as an electronic nicotine delivery system.

8 **[0078]** The construction and structure of the pack 1 described with reference to
9 Figures 1a to 3c will now be described with reference to Figures 4a and 4b, which show
10 the unfolded blanks for the body 2, lid 3 and inner frame 16 of the pack. In Figures 4a
11 and 4b, dotted lines represent fold lines and solid lines represent cut lines.

12 **[0079]** Figure 4a shows the unfolded blank for the body 2 and lid 3 of the pack.
13 This blank can be folded and adhered to assemble the body 2 and lid 3 of the pack
14 described with reference to Figures 1a to 2. In particular, the blank comprises the base
15 wall 5 which is attached to the side wall 6 formed of a front part 6a, a rear part 6b, a left
16 side part 6c and a right side part 6d. The blank also includes a number of tabs 27 which
17 are adhered to the parts 6a-6d of the side wall 6 of the body 2 to form the pack. The lid
18 3 comprises a top wall 9, a front wall 8a, a left side wall 8d, a right side wall 8c and a
19 rear wall 8b which is attached to the rear edge of the body to form the hinge 7. The lid 3
20 also comprises a number of tabs 28 which are adhered to walls 8a-8d, 9 of the lid 3.

21 **[0080]** As shown in Figure 4a, the front wall 6a of the body 2 is provided with a
22 curved recess 33 and the corresponding part of the lid 3 is provided with a matching
23 protrusion 15, as previously described. The aperture for the window 13 may be cut from

1 the front wall 6a of the body 2, or alternatively from another wall of the main body, for
2 example a rear wall or side wall.

3 **[0081]** Figure 4b shows an unfolded blank for the inner frame 16 described with
4 reference to Figures 1a to 3c. The inner frame 16 can be assembled by folding and
5 adhering the blank shown in Figure 4b and the inner frame 16 can then be attached to
6 the body 2 of the pack described with reference to Figure 4a. In particular, the inner
7 frame 16 is adhered to the body 2 such that it protrudes from the open end 4 of the
8 body, as previously described with reference to Figures 1a to 3c.

9 **[0082]** As shown, the blank of the inner frame 16 comprises the front wall 16a and
10 the left and right side walls 16d, 16c are attached to either side of the front wall 16a. The
11 rear wall 16b is attached to one of the side walls, in this example the right side wall 16d.
12 The rear wall 16b comprises a fold line 29 along which the dividing wall 17 is attached
13 to the rear wall 16b. The dividing wall 17 also comprises a first tab 30 which is attached
14 to a front edge of the dividing wall 17. When the inner frame 16 is assembled, the first
15 tab 30 is arranged to be adhered to the front wall 16a, so that the dividing wall 17 is
16 held in place extending across the inner frame 16, as previously described with
17 reference to Figures 3a to 3c. A second tab 31 is attached to a side edge of the rear wall
18 16b and the second tab 31 is arranged to be adhered to the left side wall 16c, so that the
19 inner frame 16 is held together and the dividing wall 17 is held in place by the first and
20 second tabs 30, 31 being adhered to the relevant parts of the inner frame 16. In this
21 way, as shown in Figure 3c, the lower parts of the front wall 16a and the side wall 16c
22 have a tab adhered to them and so have a double thickness.

1 **[0083]** As shown in Figure 4b, the first tab 30, which extends from the front edge
2 of the dividing wall 17 and is adhered to the inside face of the lower part of the front
3 wall 16a, is provided with a cut-out 32 to match the previously described inner cut-out
4 26 in the front wall 16a of the inner frame 16, as shown in Figure 3c. As previously
5 explained, this inner cut-out 26 provides space for the supporting insert 21 (see Figure
6 2). Moreover, the front wall 16a is provided with the outer cut-out 25, as previously
7 described with reference to Figures 3a to 3c.

8 **[0084]** The blanks described with reference to Figures 4a and 4b are assembled by
9 folding along the dotted lines and adhering the tabs 27,28,30,31 to relevant parts. The
10 inner frame 16 is made from a separate blank to the body 2 and the lid 3 and the inner
11 frame 16 can be adhered in place in the open end of the body.

12 **[0085]** Figures 5 to 7 show a second example of a hinged-lid pack 1 and, in this
13 example, the pack is configured to receive two electronic nicotine delivery systems 12a.
14 The body 2 and lid 9 of the pack are the same as the body 2 and lid 9 of the previous
15 example described with reference to Figures 1 to 4b. In particular, as shown in Figure 5,
16 the pack 1 comprises a body 2 with a side wall 6 which extends to an open end 4, and a
17 lid 9 which is hingedly attached to the side wall 6 along hinge 7. The front edge 4a of
18 the open end 4 of the body 2 has a curved recess 33 and the corresponding edge 14 of
19 the lid 9 has a curved protrusion 15 which extends into the curved recess 33 when the
20 lid 9 is closed. The curved protrusion 15 allows a user to easily push the lid 9 into the
21 open position. Furthermore, an inner frame 16 is received in the open end 4 of the body
22 2 and the inner frame 16 has a dividing wall 17 that extends across the interior of the
23 body 2.

1 **[0086]** As with the inner frame described with reference to Figures 3a to 3c, the
2 dividing wall 17 of the inner frame 16 has an opening 18 to receive an elongate
3 electronic nicotine delivery system 12a. However, in this example, the second opening
4 34 of the dividing wall 17 of the inner frame 16 is configured to receive a second
5 electronic nicotine delivery system 12a, such that the pack 1 can be used to carry two
6 electronic nicotine delivery systems 12a. The second opening 34 for an electronic
7 nicotine delivery system 12a is spaced from and adjacent to the first opening 18. In this
8 example, the second opening 34 for an electronic nicotine delivery system 12a extends
9 to the peripheral edge of the dividing wall 17, in the same manner as the first opening
10 17, such that the first and second electronic nicotine delivery systems 12a are both
11 supported against the inside face of the front part 6a of the side wall 6 of the body 2.
12 However, it will be appreciated that the second opening may be positioned elsewhere in
13 the dividing wall 17, for example mid-way between the front part 6a and rear part 6b of
14 the side wall 6 of the body 2.

15 **[0087]** In this example, the pack 1 has a supporting insert (not shown in this
16 Figure), similar to that described with reference to Figure 2, attached to an inside face
17 of the front part 6a of the side wall 6. The supporting insert is aligned with the first
18 opening 18 in the dividing wall 17 so that an electronic nicotine delivery system 12a
19 inserted through the first opening 18 is supported in the same manner as described in
20 the previous example described with reference to Figures 1a to 4b. That is, the
21 electronic nicotine delivery system 12a extends through the first opening 18 and into
22 the supporting insert, being supported by the opening 18 and the supporting insert and
23 held against the front part 6a of the side wall 6 of the body 2.

1 **[0088]** As described above, in this example the second opening 34 in the dividing
2 wall 17 is for a second electronic nicotine delivery system 12a and the dividing wall 17
3 does not have an opening for an ancillary article. However, it will be appreciated that
4 the dividing wall 17 may be provided with an opening which, similar to the second
5 opening 19 described with reference to Figure 1b, is configured to receive and support
6 an ancillary article, such as a product information leaflet or a replacement part for the
7 electronic nicotine delivery system 12a.

8 **[0089]** Also shown in Figure 5, the pack 1 of this example has a window 13 which
9 is aligned with the first opening 18 and the supporting insert (not shown in Figure 5), in
10 the same manner as the first example described with reference to Figures 1 to 4b. In
11 particular, the window 13 has an elongate shape and extends along the front part 6a of
12 the side wall 6 so that a portion of an electronic nicotine delivery system 12a received in
13 the first opening 18 and within the supporting insert is visible through the window 13.
14 A transparent material may be attached to the side wall 6 such that it extends across
15 the aperture of the window 13.

16 **[0090]** Figures 6a and 6b show the inner frame 16 of the pack 1 described with
17 reference to Figure 5. As shown, the inner frame 16 of this example has a similar
18 structure to the inner frame 16 of the previous example described with reference to
19 Figures 3a to 3c. In particular, the inner frame 16 has a front wall 16a, a rear wall 16b, a
20 left side wall 16c and a right side wall 16d arranged in a tubular manner with an outer
21 end 16e and an inner end 16f. The dividing wall 17 extends across the inner frame 16
22 and the rear wall 16b does not extend past the dividing wall 17 towards the outer end
23 16e.

1 **[0091]** Moreover, the front wall 16a of the inner frame 16 has a cut-out 26 on the
2 inner end 16f, so that the front wall 16a extends around the supporting insert 21 (see
3 Figure 2) when inserted into the open end 4 (see Figure 5) of the body.

4 **[0092]** As shown in Figure 6b, the inner frame 16 of this example also has a
5 second dividing wall 35 that extends across the inner frame 16 proximate to the inner
6 end 16f of the inner frame 16. In this way, when the inner frame 16 is received in the
7 body 2 of the pack the second dividing wall 35 is disposed below the dividing wall 17,
8 within the pack.

9 **[0093]** The second dividing wall 35 is spaced from and parallel to the dividing
10 wall 17 and comprises a second dividing wall opening 36 which is aligned with, and has
11 the same shape as, the second opening 34 in the dividing wall 17, as shown in Figure 6a.
12 In particular, the second dividing wall opening 34 extends to a peripheral edge of the
13 second dividing wall 35, which is disposed against the front wall 16a of the inner frame
14 16. Therefore, an electronic nicotine delivery system inserted into the pack through the
15 second opening 34 in the dividing wall 17 will be received in and supported by the
16 second dividing wall opening 36 in the second dividing wall. The arrangement of the
17 two aligned openings 34, 36, being spaced from each other, will support the electronic
18 nicotine delivery system within the pack.

19 **[0094]** As shown in Figure 6b, the second dividing wall 35 only extends across the
20 inner frame 16 on the side of the second opening 34 of the dividing wall 17, and not on
21 the side of the first opening 18. That is, the second dividing wall 35 is disposed against
22 the right side wall 6d and extends only partly towards the left side wall 6c. In this way,
23 the second dividing wall opening 36 is aligned with the second opening 34 and when

1 the inner frame 16 is received in the open end of the body, as described with reference
2 to Figure 5, the supporting insert 21 (see Figure 2) is able to extend into the space
3 created by the cut-out 26.

4 **[0095]** In an alternative example, the first opening 18 and the supporting insert
5 (not shown) are positioned towards the right side wall 16d, with the second opening 34
6 and second dividing wall 35 being disposed towards the left side wall 16c.

7 **[0096]** In another alternative example, the second dividing wall 35 extends across
8 the pack, between the left side wall 16d and right side wall 16c, and may comprise two
9 openings – one aligned with the opening 18 in the dividing wall and one aligned with
10 the second opening 34 in the dividing wall. The supporting insert may be disposed
11 immediately below one or both openings of the second dividing wall 35, such that an
12 electronic nicotine delivery system inserted through either opening will be received in
13 the supporting insert. Alternatively, the supporting insert may extend through at least
14 one of the openings in either the dividing wall 17 or the second dividing wall 35.

15 **[0097]** Also shown in Figures 6a and 6b, the inner frame 16 may be provided with
16 anti-yawning tabs 20 that engage with the lid 9 (see Figure 5) when the lid is closed to
17 hold the lid in a closed position until a user pushes the lid into the open position.

18 **[0098]** Figure 7 shows an unfolded blank for the inner frame 16 described with
19 reference to Figures 6a and 6b. The inner frame 16 can be assembled by folding and
20 adhering the blank shown in Figure 7 and the inner frame 16 can then be attached to
21 the body 2 of the pack described with reference to Figure 5. In particular, the inner
22 frame 16 is adhered to the body 2 such that it protrudes from the open end 4 of the
23 body, as previously described with reference to Figure 5.

1 **[0099]** As shown, the blank of the inner frame 16 comprises the front wall 16a and
2 the left and right side walls 16c, 16d are attached to either side of the front wall 16a. The
3 rear wall 16b is attached to one of the side walls, in this example the right side wall 16d.
4 The rear wall 16b comprises a fold line 29 along which the dividing wall 17 is attached
5 to the rear wall 16b. The dividing wall 17 also comprises a first tab 30 which is attached
6 to a front edge of the dividing wall 17. When the inner frame 16 is assembled, the first
7 tab 30 is arranged to be adhered to the front wall 16a, so that the dividing wall 17 is
8 held in place extending across the inner frame 16, as previously described with
9 reference to Figures 6a and 6b.

10 **[00100]** In this example, the second dividing wall 35 is joined to the first tab 30
11 along a fold line, with the second dividing wall opening 36 extending to the fold line
12 between the first tab 30 and the second dividing wall 35. On an opposite side of the
13 second dividing wall 35 a third tab 37 extends from the second dividing wall 35 and,
14 when the inner frame 16 is assembled, the third tab 37 is attached to the rear wall 16b
15 of the inner frame 16. In this way, the second dividing wall 35 is supported across the
16 inner frame 16 such that it is parallel to and spaced from the dividing wall 17. The
17 second dividing wall 35 is held in place by the first tab 30, which is attached to the
18 dividing wall 17 and may also be adhered to the front wall 16a of the inner frame 16,
19 and by the third tab 37, which may be adhered the rear wall 16b of the inner frame 16.
20 Alternatively, the third tab 37 may be attached to the rear wall 16b of the inner frame 16
21 by means of an attachment tab 39 that protrudes through a slot 38 which is formed on
22 the join between the second dividing wall 35 and the third tab 37. The attachment tab
23 39 may extend through the slot 38 and be adhered to the third tab 37 to secure the

1 second dividing wall 35 in place. Either way, the third tab 37 is attached to the rear wall
2 16b of the inner frame 16 and the second dividing wall 35 is supported in place.

3 **[00101]** As with the inner frame described with reference to Figure 4b, the second
4 tab 31 of the blank of Figure 7 is attached to a side edge of the rear wall 16b and the
5 second tab 31 is arranged to be adhered to the left side wall 16c, so that the inner frame
6 16 is held together and the dividing wall 17 is held in place by the first and second tabs
7 30, 31 being adhered to the relevant parts of the inner frame 16.

8 **[00102]** The blank described with reference to Figure 7 also comprises the cut-outs
9 25, 26 in the same manner as described with reference to Figure 4b. In particular, the
10 cut-out 25 in the outer end 16e of the inner frame 16 is provided to allow a user to easily
11 grasp an electronic nicotine delivery system in the pack. Meanwhile the cut-out 26 is
12 provided to allow space for the supporting insert (21, see Figure 2).

13 **[00103]** The blank described with reference to Figure 6b is assembled by folding
14 along the dotted lines and adhering the first, second and third tabs to relevant parts of
15 the inner frame. The assembled inner frame 16 can be adhered in place in the open end
16 of the body in the same way as previously described.

17 **[00104]** The pack, including the body, lid and inner frame, may be made from a
18 card material, a coated card material, a thin polymer material, or any other suitable
19 material. The assembled pack may be provided with a polymer outer wrap to protect
20 the goods during transport and display and provide a tamper evident seal.

21 **[00105]** It will be appreciated that the pack may be provided with more than two
22 openings for electronic nicotine delivery systems. Also, it will be appreciated that the
23 pack may have an additional supporting inserts and/or an additional window for each

1 opening in the dividing wall, such that multiple electronic nicotine delivery systems can
2 be supported by a supporting insert in the pack. Additionally, the pack may be provided
3 with two windows, or an enlarged window, to view the electronic nicotine delivery
4 systems within the pack. For example, the pack described with reference to Figures 5 to
5 7 may be provided with a second window that is positioned such that a part of an
6 electronic nicotine delivery system received in the second opening is visible.

7 **[00106]** It will also be appreciated that, the inner frame, the window and the
8 supporting elements are all independent features and a pack may comprise any one or
9 combination of these features. For example, the pack may comprise an inner frame
10 having a first opening to support an electronic nicotine delivery system, without the
11 supporting element or the window.

12 **[00107]** In order to address various issues and advance the art, the entirety of this
13 disclosure shows by way of illustration various embodiments in which the claimed
14 invention(s) may be practiced and provide for superior packaging for an electronic
15 nicotine delivery system. The advantages and features of the disclosure are of a
16 representative sample of embodiments only, and are not exhaustive and/or exclusive.
17 They are presented only to assist in understanding and teach the claimed features. It is
18 to be understood that advantages, embodiments, examples, functions, features,
19 structures, and/or other aspects of the disclosure are not to be considered limitations
20 on the disclosure as defined by the claims or limitations on equivalents to the claims,
21 and that other embodiments may be utilised and modifications may be made without
22 departing from the scope and/or spirit of the disclosure. Various embodiments may
23 suitably comprise, consist of, or consist essentially of, various combinations of the

1 disclosed elements, components, features, parts, steps, means, etc. In addition, the
2 disclosure includes other inventions not presently claimed, but which may be claimed
3 in future.

4

CLAIMS

1
2 What is claimed is:

3 1. A hinged-lid pack for an electronic nicotine delivery system comprising: a
4 body having a base wall and a side wall extending from said base wall to an open upper
5 end, an inner frame being received in the body so as to protrude therefrom, and a lid,
6 pivotally attached to the open upper end of body, which cooperates with said inner
7 frame when said lid is closed, wherein said inner frame comprises a dividing wall
8 between said base wall and said lid to divide the interior of the body, said dividing wall
9 having an opening therein to receive and support an elongate electronic nicotine
10 delivery system inserted into the body through said opening, wherein the opening
11 extends to a peripheral edge of said dividing wall.

12 2. The hinged-lid pack of claim 1, comprising a supporting insert received in
13 the body and positioned against the side wall so as to enclose a space within the body
14 defined by the supporting insert and said side wall, the supporting insert and the
15 opening in the dividing wall being positioned relative to each other so that an electronic
16 nicotine delivery system inserted through the opening passes into said space defined by
17 the supporting insert.

18 3. The hinged-lid pack of claim 2, wherein said supporting insert is attached
19 to the side wall.

20 4. The hinged-lid pack of claim 2 or claim 3, wherein the supporting insert
21 extends through the opening in the dividing wall such that the dividing wall supports
22 the supporting insert.

1 5. The hinged-lid pack of any of claims 2 to 4, wherein a first end of the
2 supporting insert is tapered to receive an electronic nicotine delivery system.

3 6. The hinged-lid pack of claim 5, wherein the supporting insert comprises
4 an open second end, which is opposite to the first end, such that an elongate electronic
5 nicotine delivery system received in the space rests on the base wall of the pack.

6 7. The hinged-lid pack of any of claims 2 to 5, wherein the supporting insert
7 comprises a pair of flanges extending from said insert for attachment of the supporting
8 insert to the side wall.

9 8. The hinged-lid pack of any of claims 2 to 7, wherein the side wall includes
10 an opening positioned in alignment with the space enclosed by the supporting insert
11 such that an elongate electronic nicotine delivery system received in the space is visible
12 through the opening.

13 9. The hinged-lid pack of claim 8, wherein a transparent material extends
14 across the opening in the side wall.

15 10. The hinged-lid pack of any of claims 2 to 9, wherein the supporting insert
16 comprises a thermoformed polymer material.

17 11. The hinged-lid pack of any preceding claim, wherein the dividing wall
18 comprises a second opening spaced from said opening.

19 12. The hinged-lid pack of claim 11, wherein the second opening is configured
20 to receive and support an ancillary article, such as a product information leaflet.

21 13. The hinged-lid pack claim 11, wherein second opening is configured to
22 receive and support an electronic nicotine delivery system.

23 14. The hinged-lid pack of claim 13, wherein said second opening extends to a
24 peripheral edge of said dividing wall.

1 15. The hinged-lid pack of claim 13 or claim 14, wherein the inner frame
2 comprises a second dividing wall which is disposed parallel to and spaced from said
3 dividing wall, said second dividing wall comprising a second dividing wall opening
4 positioned in alignment with the second opening of the dividing wall, such that an
5 elongate electronic nicotine delivery system received in said pack is supported by the
6 second opening and the second dividing wall opening.

7 16. The hinged-lid pack of any preceding claim, wherein the inner frame
8 comprises a front wall, a rear wall and side walls extending therebetween, the dividing
9 wall being formed from a portion of the rear wall.

10 17. The hinged-lid pack of claim 16, wherein the portion of the rear wall is
11 foldable relative to the rear wall to form the dividing wall.

12 18. The hinged-lid pack of claim 16 or claim 17, wherein the peripheral edge of
13 the dividing wall abuts on an interior face of the front wall of the inner frame.

14 19. The hinged-lid pack of any preceding claim, wherein the body and lid
15 comprise a card material.

16 20. The hinged-lid pack of any preceding claim, having an electronic nicotine
17 delivery system received in the opening such that it protrudes from the dividing wall.

18 21. The hinged-lid pack of any preceding claim, wherein the electronic
19 nicotine delivery system is an electronic cigarette.

1 22. An inner frame for a hinged-lid pack having a base wall and an open end
2 and a lid attached to said open end, said inner frame comprising a dividing wall that,
3 when said inner frame is received in a hinged-lid pack, divides the interior of the body
4 between the base wall and the lid, said dividing wall having an opening therein to
5 receive an elongate nicotine delivery system inserted into the body through said
6 opening, the opening extending to a peripheral edge of said dividing wall.

7 23. The inner frame of claim 22, wherein the dividing wall comprises a second
8 opening spaced from said opening, said second opening being configured to support an
9 elongate electronic nicotine delivery system.

10 24. The inner frame of claim 23, wherein the second opening extends to a
11 peripheral edge of said dividing wall.

12 25. The inner frame of claim 23 or claim 24, further comprising a second
13 dividing wall which is disposed parallel to and spaced from said dividing wall, said
14 second dividing wall comprising a second dividing wall opening positioned in alignment
15 with the second opening of the dividing wall, such that an elongate electronic nicotine
16 delivery system received in said pack is supported by the second opening and the second
17 dividing wall opening.

18 26. A hinged-lid pack substantially as hereinbefore described with reference to
19 any of the drawings.

20

21

22

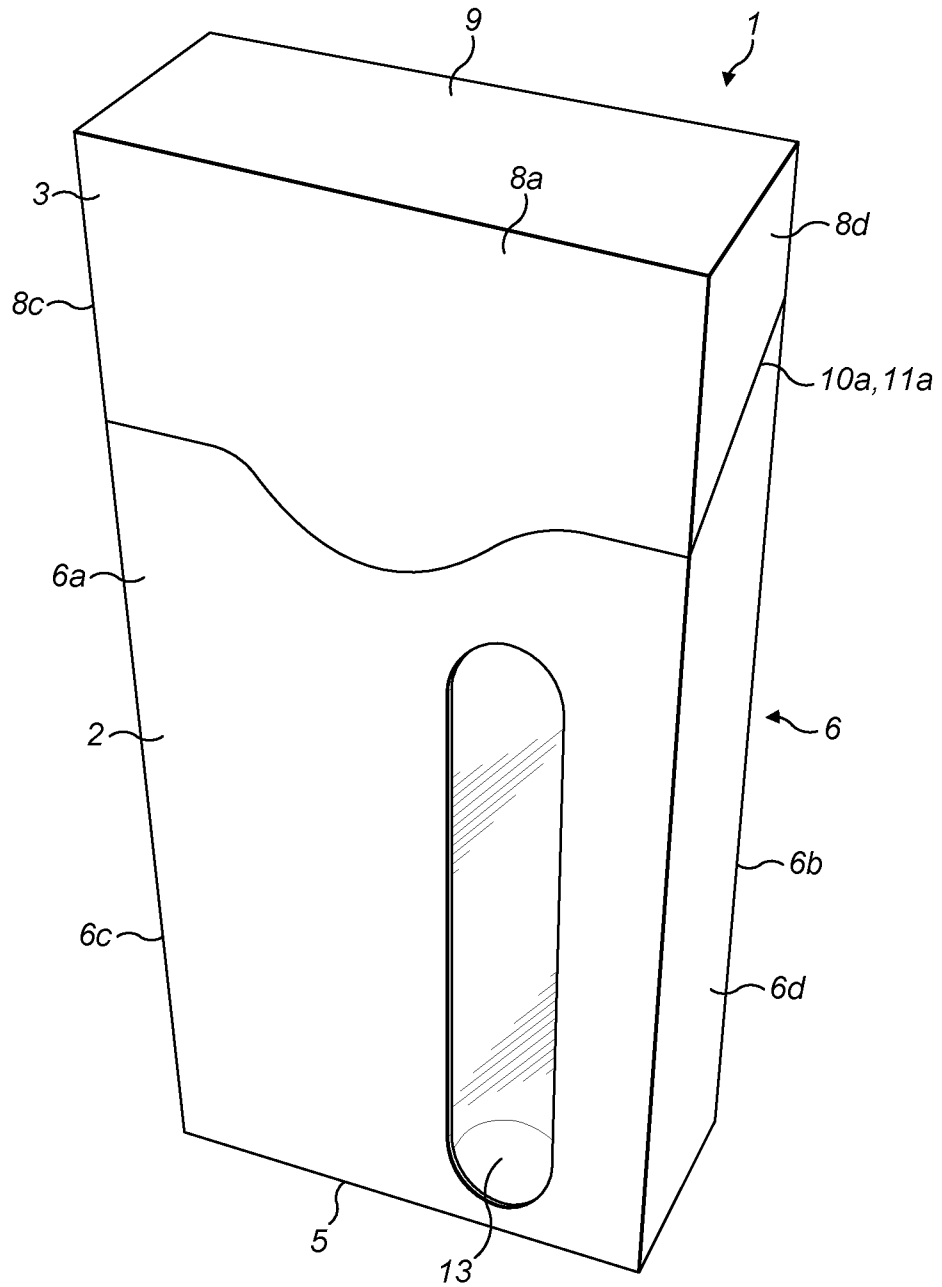


FIG. 1a

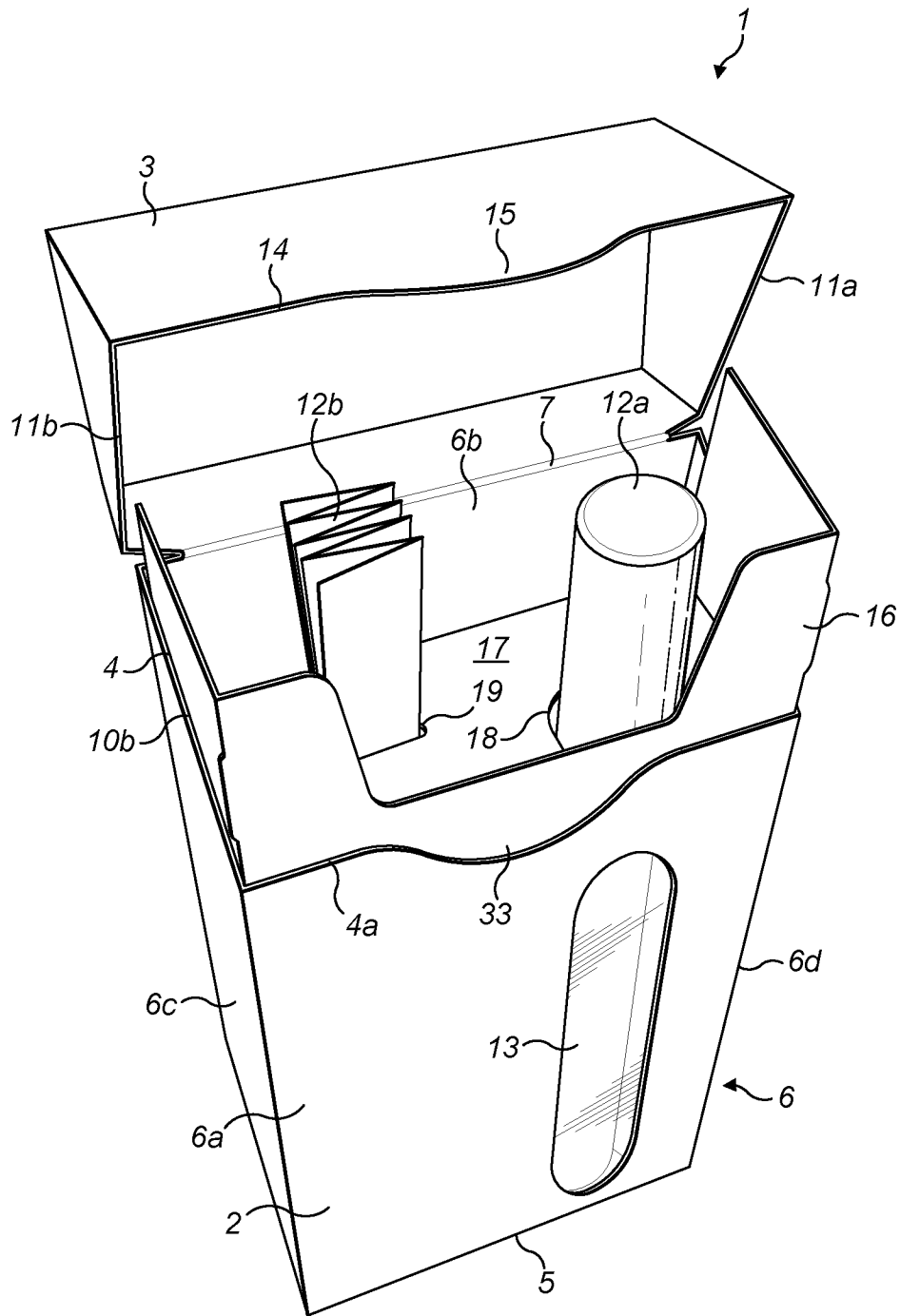


FIG. 1b

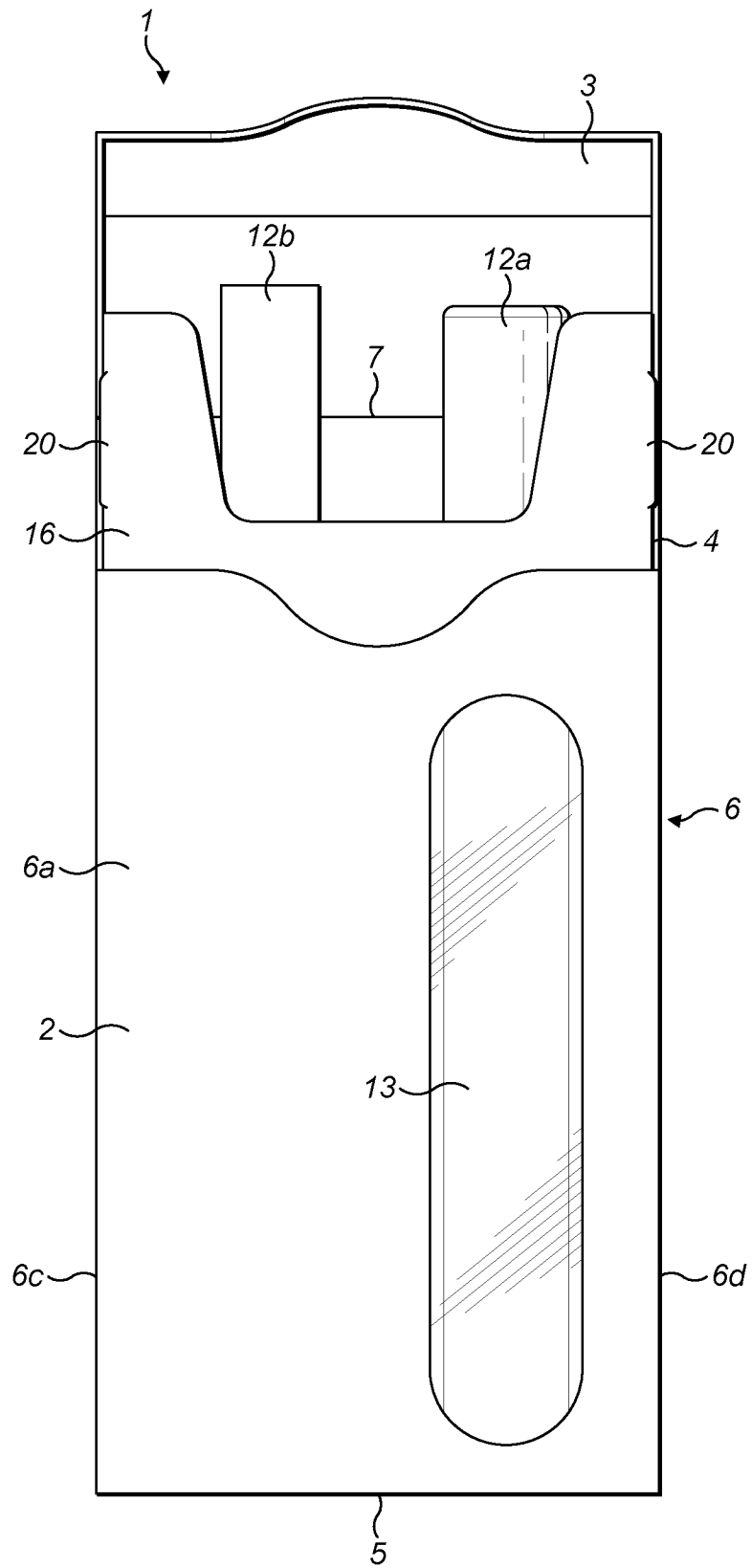


FIG. 1c

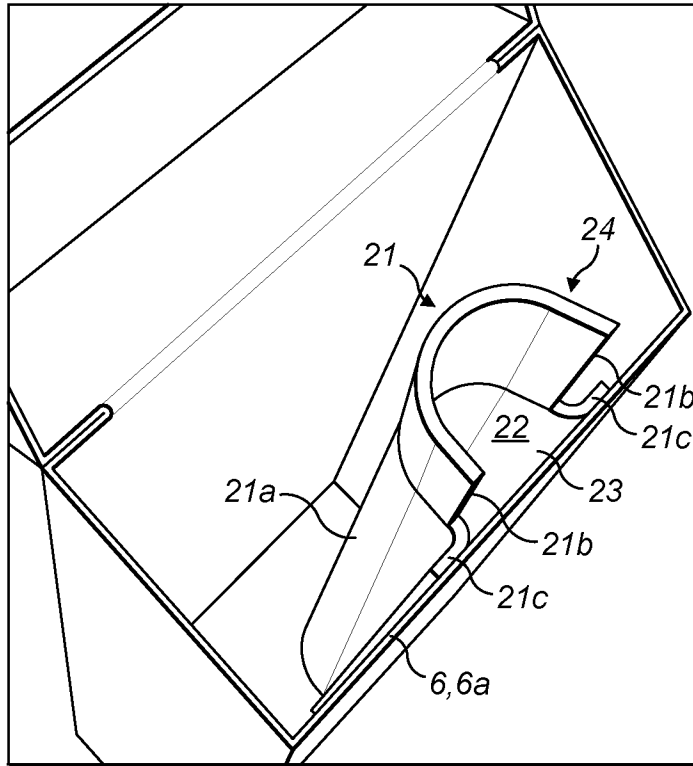


FIG. 2

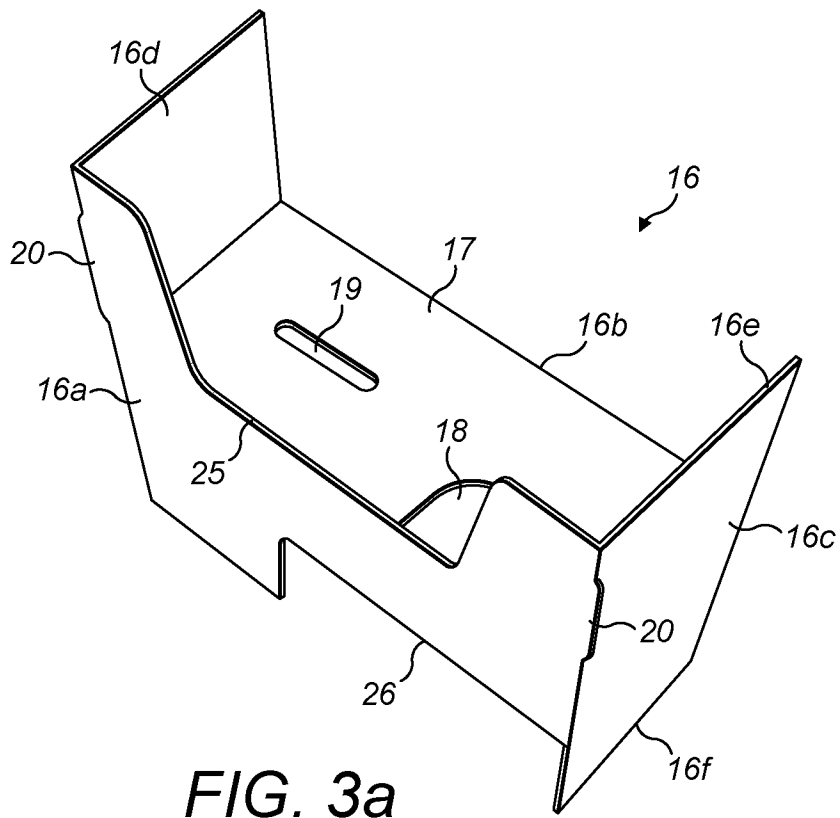


FIG. 3a

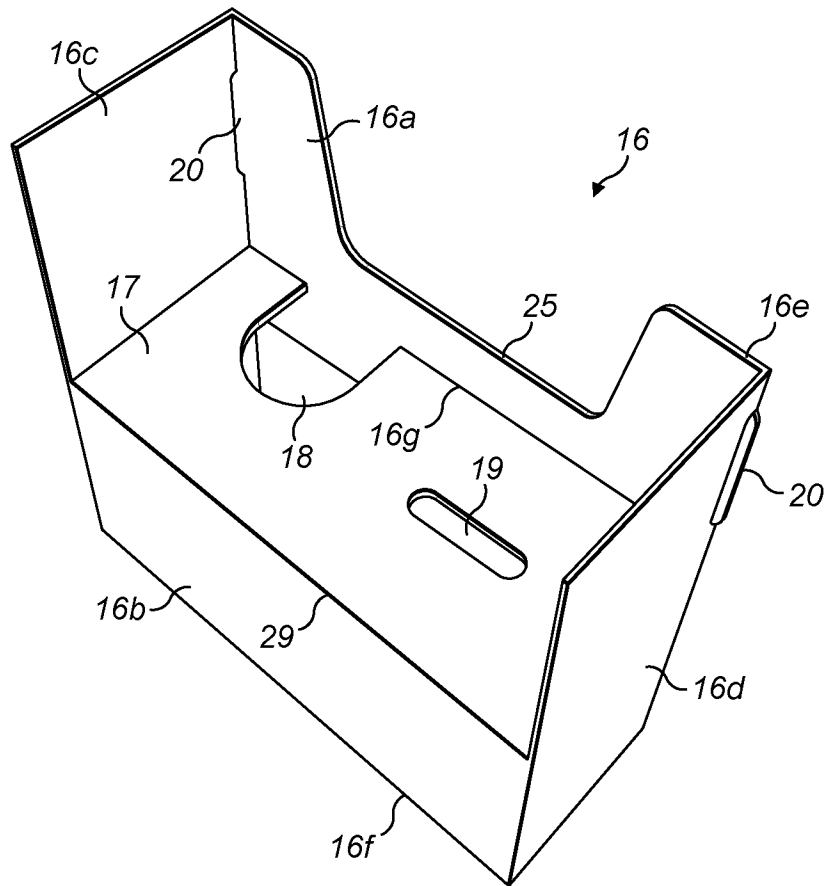


FIG. 3b

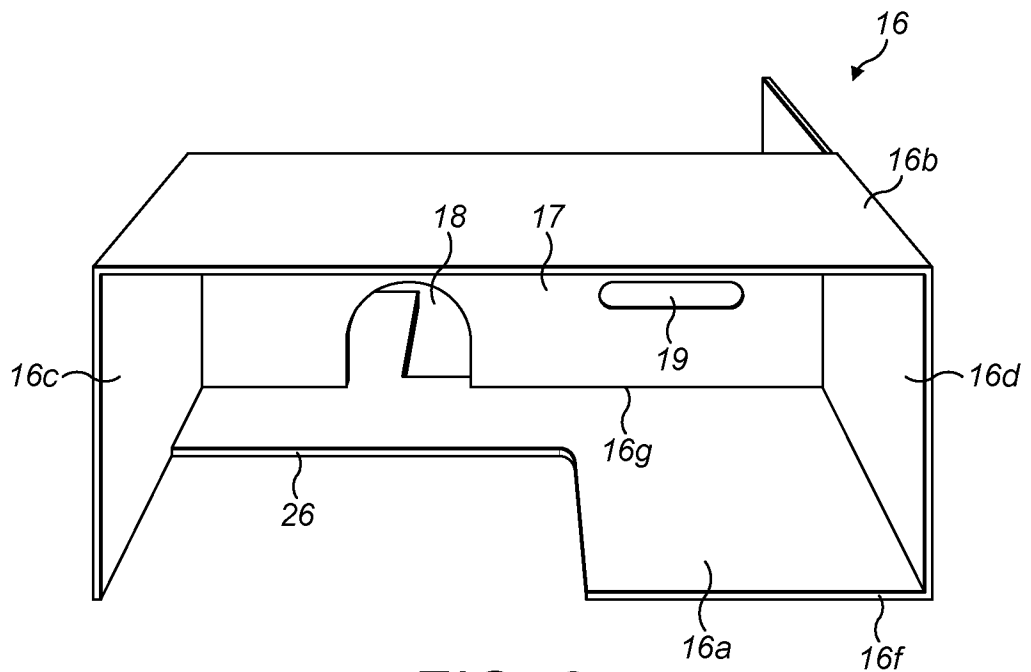


FIG. 3c

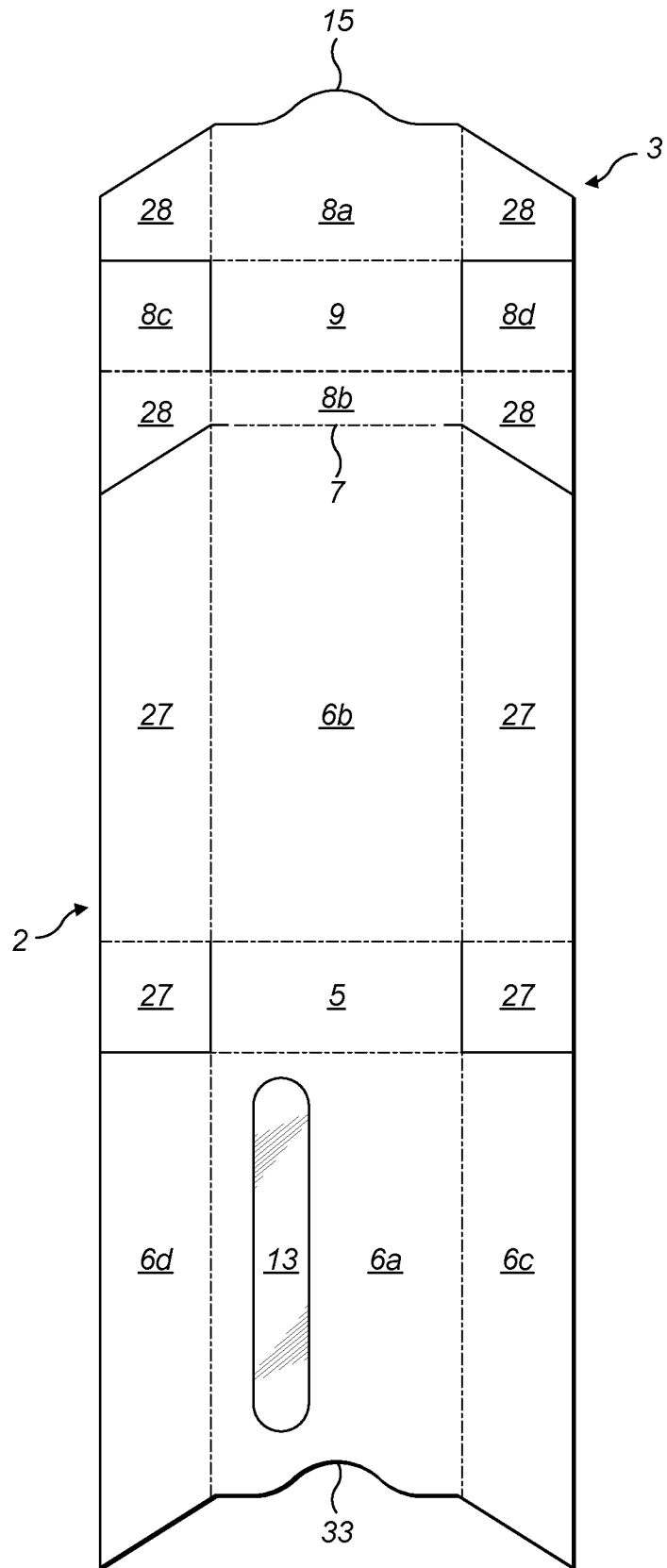


FIG. 4a

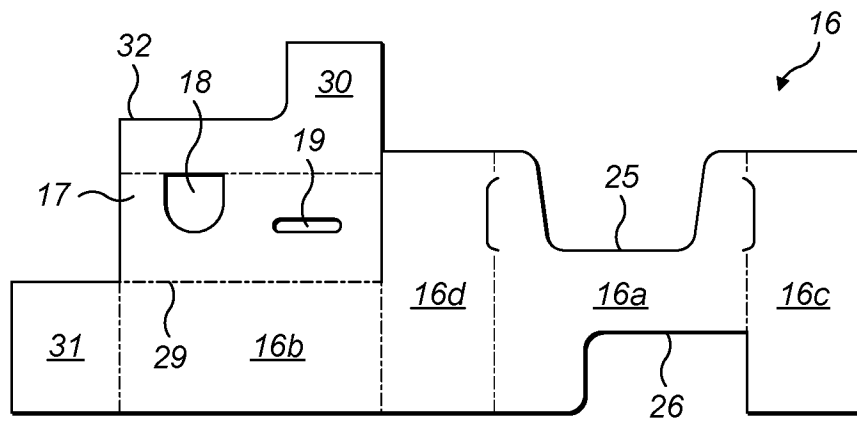


FIG. 4b

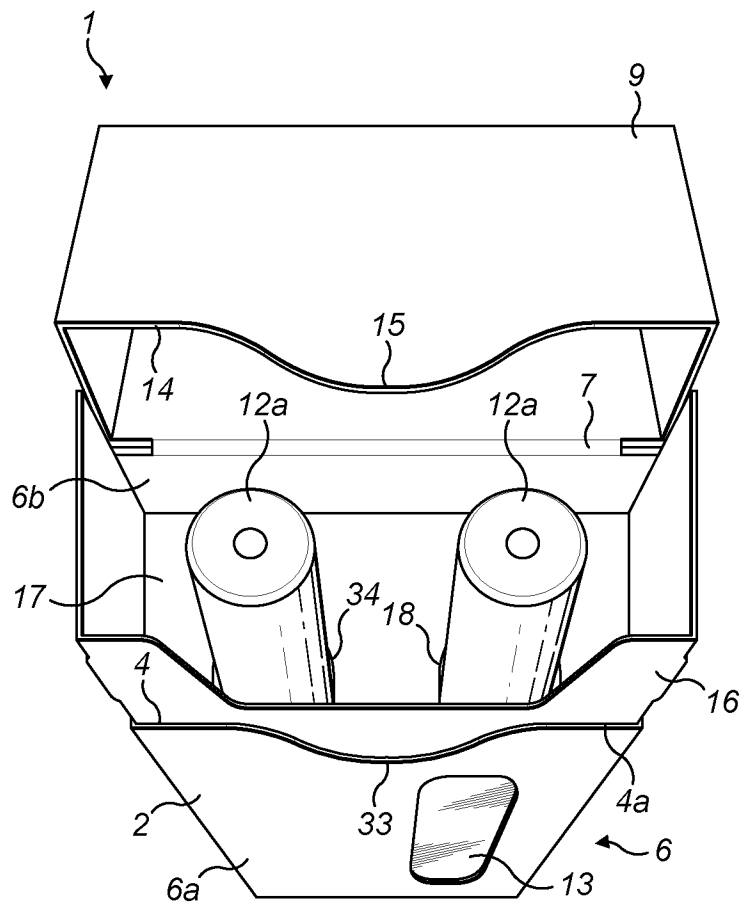


FIG. 5

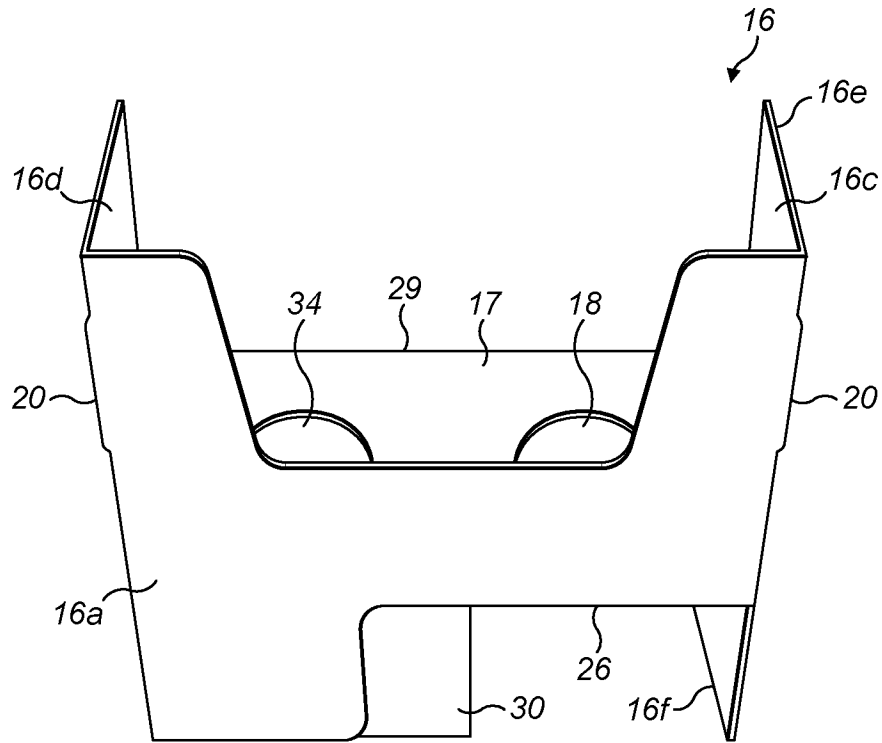


FIG. 6a

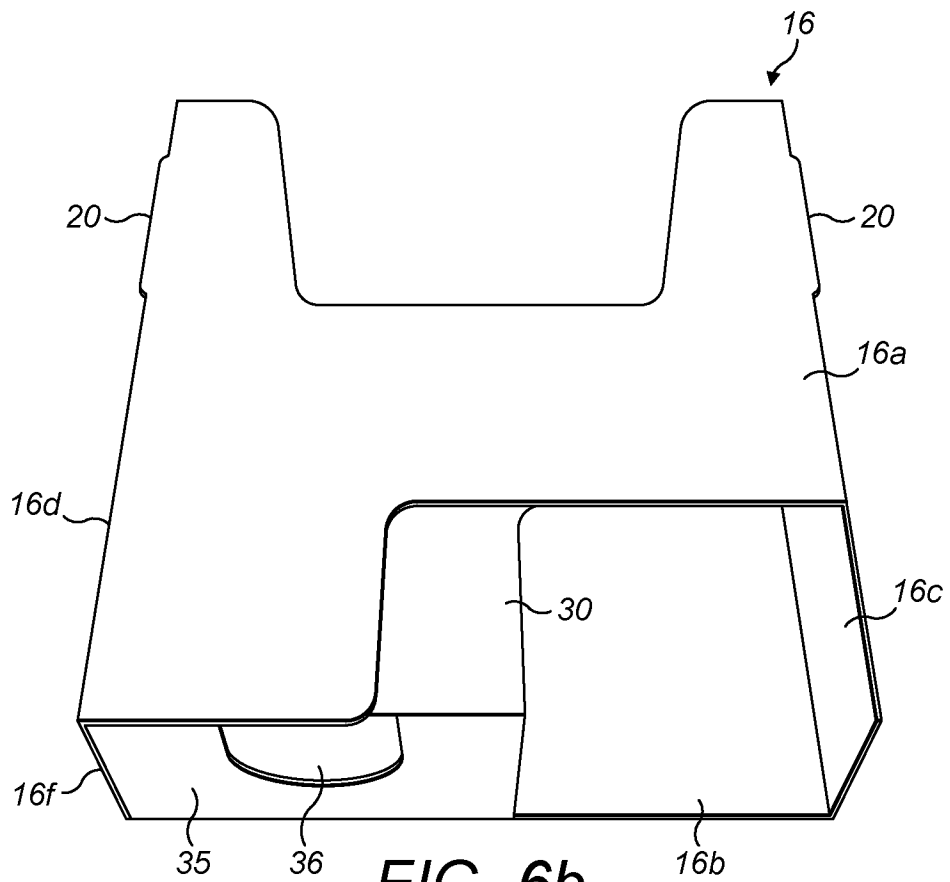


FIG. 6b

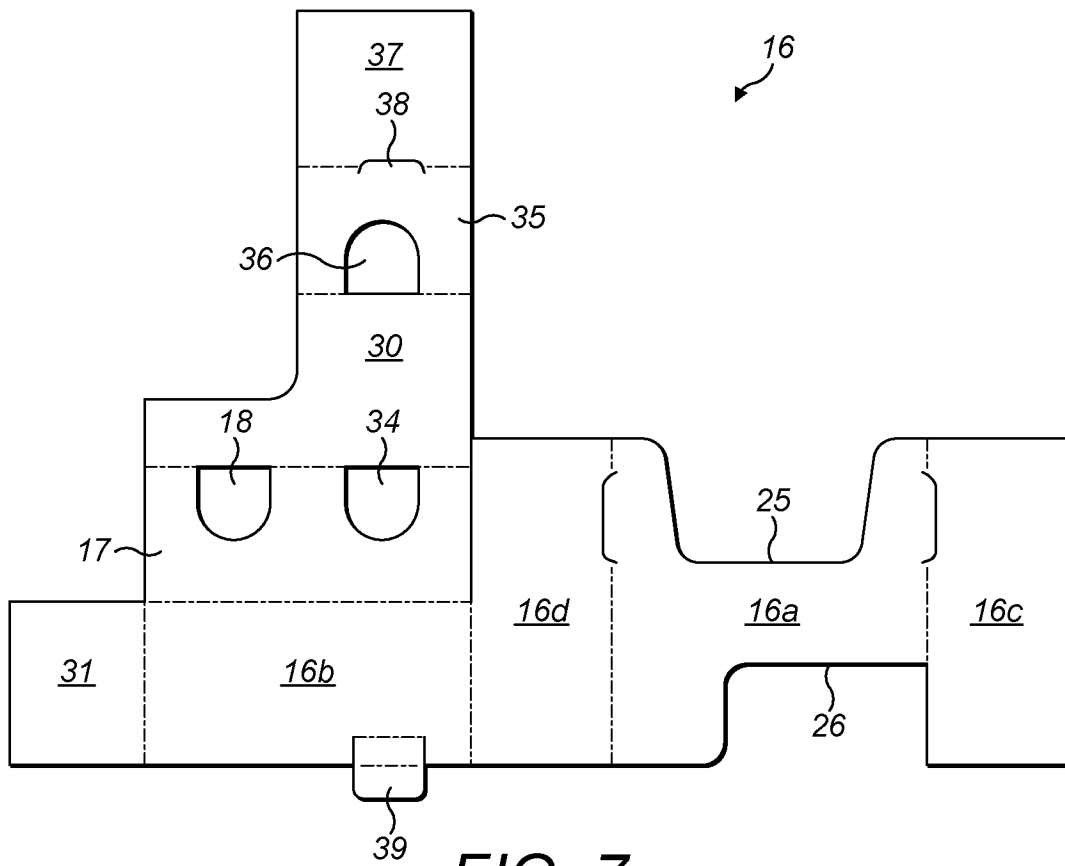


FIG. 7

INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2014/052071

A. CLASSIFICATION OF SUBJECT MATTER
INV. B65D5/50 B65D85/10
ADD.
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)
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)
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 558 216 A (FOCKE HEINZ [DE] ET AL) 24 September 1996 (1996-09-24)	1-3, 11-26
Y	column 1, line 8 - column 1, line 21 column 2, line 13 - column 3, line 24 figures 1-9	4-10
X	FR 836 279 A (NUYTS FRERES) 13 January 1939 (1939-01-13)	1,2, 11-16, 18,19, 22-26
A	page 1, line 1 - page 1, line 5 page 2, line 29 - page 2, line 85 figures 1-16	3-10,17, 20,21
X	US 5 899 326 A (BENHAMOU GUY [US] ET AL) 4 May 1999 (1999-05-04)	1,26
A	column 5, line 20 - column 5, line 43 figures 1-8	2-25
	----- -/--	

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

24 September 2014

Date of mailing of the international search report

02/10/2014

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer

Weyand, Tim

INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2014/052071

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	GB 103 968 A (A. J. HAMPTON) 15 February 1917 (1917-02-15)	4-10
A	page 1, line 34 - page 2, line 14 figures 1-4	1-3, 11-26

A	EP 0 499 577 A1 (DIVIDELLA AG [CH]) 19 August 1992 (1992-08-19) the whole document	1-26

X	DE 94 06 110 U1 (HEUCHEMER VERPACKUNG KG [DE]) 4 August 1994 (1994-08-04)	1
A	the whole document	2-26

X	WO 2012/171636 A1 (PHILIP MORRIS PROD [CH]; NADEAU SANDRINE [CH]) 20 December 2012 (2012-12-20)	1
A	the whole document	2-26

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/GB2014/052071

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5558216	A	24-09-1996	BR 9400840 A 08-11-1994
			CN 1093053 A 05-10-1994
			DE 4307386 A1 15-09-1994
			EP 0614824 A2 14-09-1994
			JP H071616 A 06-01-1995
			JP 3510307 B2 29-03-2004
			US 5558216 A 24-09-1996
FR 836279	A	13-01-1939	
US 5899326	A	04-05-1999	NONE
GB 103968	A	15-02-1917	NONE
EP 0499577	A1	19-08-1992	AT 111409 T 15-09-1994
			AU 647877 B2 31-03-1994
			AU 1072592 A 20-08-1992
			CA 2060784 A1 16-08-1992
			DE 59200480 D1 20-10-1994
			EP 0499577 A1 19-08-1992
			JP H0818626 B2 28-02-1996
			JP H04352669 A 07-12-1992
DE 9406110	U1	04-08-1994	NONE
WO 2012171636	A1	20-12-2012	AR 086923 A1 29-01-2014
			CA 2836349 A1 20-12-2012
			CN 103619715 A 05-03-2014
			EA 201490013 A1 30-04-2014
			EP 2720955 A1 23-04-2014
			JP 2014516887 A 17-07-2014
			KR 20140024413 A 28-02-2014
			TW 201318572 A 16-05-2013
			US 2014124395 A1 08-05-2014
			WO 2012171636 A1 20-12-2012