

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(10) International Publication Number

WO 2012/143855 A1

**(43) International Publication Date
26 October 2012 (26.10.2012)**

WIPO | PCT

(51) International Patent Classification:
B65D 5/52 (2006.01) B65D 85/10 (2006.01)

(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, 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, IS, JP, KE, KG, KM, 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, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, 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.

(21) International Application Number: PCT/IB2012/051923

(22) International Filing Date: 17 April 2012 (17.04.2012)

(25) Filing Language: Italian

(30) Priority Data: English

(71) **Applicant** (for all designated States except US): **G.D.**

(72) Inventors; and

(75) **Inventors/Applicants (for US only):** TACCHI, Alver [IT/IT]; Via Vittoria, 2, I-40133 Bologna (IT). BIONDI, Andrea [IT/IT]; Via Piave, 6, I-40133 Bologna (IT).

(74) **Agent: BIANCIARDI, Ezio; BUGNION S.p.A., Via di Corticella, 87, I-40128 Bologna (IT).**

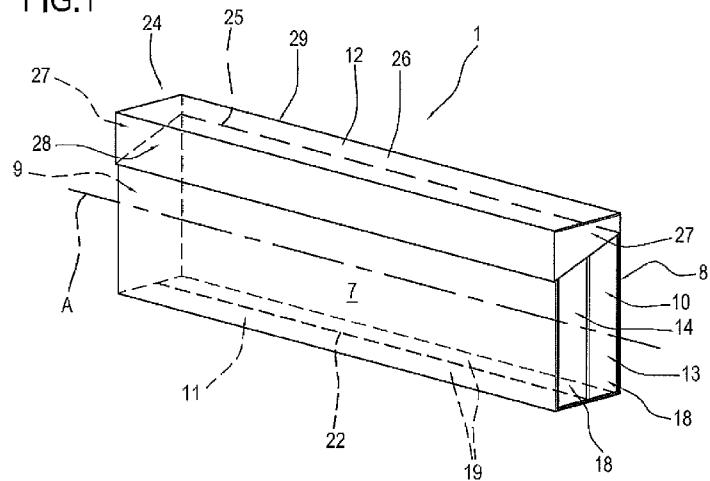
(84) **Designated States** (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

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

(54) Title: CARTON OF PACKETS OF TOBACCO PRODUCTS

FIG. 1



(57) Abstract: A carton of packets (2) of tobacco products comprising a plurality of side walls (7, 8, 9, 10, 11, 12) forming a front wall (7), a rear wall (8), two side walls (9, 10) which are transversal to the front wall (7) and the rear wall (8), a bottom wall (11) and a top wall (12); the carton (1) comprising two containers (13, 14), each for containing a row (15) of packets (2) of tobacco products, and the containers (13, 14) being connected to each other along at least a first pre-fold line and/or line of weakness (22) provided along at least one of the side walls (7, 8, 9, 10, 11, 12); the containers (13, 14) being able to rotate about the first pre-fold line and/or line of weakness (22) between a position in which they are opened like a book for picking up the packets (2) and a closed position in which the containers (13, 14) are substantially side by side and/or superposed; the carton (1) also comprising means (24) for locking the containers (13, 14) in the closed position.

WO 2012/143855 A1

DescriptionCarton of packets of tobacco productsTechnical Field

This invention relates to a carton of packets of tobacco products.

In particular, this invention relates to a carton for containing a plurality of packets of cigarettes.

5

Background Art

In general, cartons for packets of cigarettes consist of a rigid wrapper with hinged lid, having the shape of a substantially rectangular parallelepiped, mainly extending along a longitudinal axis.

10 Such cartons have a lower container and an upper cup-shaped lid hinged at one edge of the lower container in such a way that it can rotate between an open position and a closed position.

15 The lower container has a front wall and a rear wall which are opposite and parallel with each other, two side walls which are parallel with each other and perpendicular to the front and rear walls, and a bottom wall.

20 The dimensions of the container walls are such that it can contain two superposed rows of packets of cigarettes, each comprising five packets of cigarettes in contact with each other along a respective front and/or rear wall. The packets of a respective upper or lower row are in contact with each other along a respective smaller side wall.

With the carton in the open position, the packets forming the upper row are easily accessible for the user, while the packets of the lower row are accessible once the packets of the upper row have been removed.

25 In such a package, one may encounter some difficulty removing the packets of cigarettes forming the lower row. In fact, since it has the shape of an elongate parallelepiped, the container only allows access to the upper wall of those packets,

hindering their pickup.

Moreover, removing the packets is more difficult when the lower row is complete, since each packet presses against the others.

In these conditions, during attempts to pick up the packets, the user not only finds it difficult to grip the packets to take them out, but may also deform and dent the rigid wrapper of the carton, compromising its integrity.

Disclosure of the Invention

The aim of this invention is to provide a carton of packets of tobacco products able to overcome the above-mentioned disadvantage, that is to say, a carton which allows the easy pickup of the packets of tobacco products arranged in at least two rows and which at the same time allows the integrity of its rigid wrapper to be preserved during use.

The technical purpose indicated and the aims specified are achieved by a carton of packets of tobacco products having the features described in the appended claims.

Brief Description of the Drawings

The invention will now be described with reference to the accompanying drawings which illustrate a preferred embodiment of it and in which:

- Figures 1, 2, 3 are perspective views of the carton according to this invention in three different configurations, respectively closed, half open and open;
- Figure 4 shows a scaled-up detail from Figure 3;
- Figure 5 is a perspective view, with some parts cut away in order to better illustrate others, of the carton in the open configuration;
- Figures 6, 7, 8 are perspective views of three different alternative embodiments of the carton according to this invention;
- Figure 9 is a perspective view of a second embodiment of the carton according to the invention in the half open configuration;
- Figure 10 is a perspective view of an alternative embodiment of the carton

of Figure 9;

- Figure 11 is a cross-section of a scaled-up detail from Figure 9;
- Figures 12 and 13 are plan views showing the three blanks used to make the carton of Figures 1, 2 and 3;
- 5 - Figure 14 is a plan view of the blank used to make the carton of Figure 9;
- Figures 15 and 16 are perspective views of a third embodiment of the carton according to the invention in two different configurations, respectively closed and open;
- 10 - Figures 17 and 18 are perspective views of a fourth embodiment of the carton according to the invention in two different configurations, respectively closed and open;
- Figures 19 and 20 are perspective views of a fifth embodiment of the carton according to the invention in two different configurations, respectively closed and open;
- 15 - Figure 21 is a perspective view of a first alternative embodiment of the carton according to the invention in the half open configuration;
- Figure 22 is a plan view of the flat blank used to make the carton of Figure 21;
- 20 - Figures 23 and 24 are perspective views of a second alternative embodiment of the carton according to the invention, respectively in the closed and half open configurations; and
- Figure 25 is a plan view of the flat blank used to make the carton of Figures 23 and 24.

25 Detailed Description of the Preferred Embodiments of the Invention

With reference to Figures 1, 2 and 3, the numeral 1 denotes in its entirety a carton of packets 2 of tobacco products, for example packets of cigarettes. In general, the packets 2 have the shape of a rectangular parallelepiped comprising a front wall 3, a rear wall 4, two smaller side walls 5 and two larger side walls 6.

30 The carton 1 extends along a longitudinal axis A. In particular, it has the shape of

a substantially rectangular parallelepiped.

The carton 1 comprises a plurality of side walls respectively labelled 7, 8, 9, 10, 11 and 12.

In particular, the side walls are formed by a front wall 7, a rear wall 8, two side walls 9 and 10 which are transversal to the front wall 7 and the rear wall 8, a bottom wall 11 and a top wall 12.

The carton 1 comprises at least two containers 13 and 14, each for containing at least one row 15 of packets 2 of tobacco products. In this specific case, each row 15 comprises five packets 2 of cigarettes.

10 Hereinafter, the containers are referred to as the first container 13 and the second container 14.

Each container 13 and 14 comprises a bottom wall 16, a first and second smaller side wall 17 and 18 and a first and second larger side wall 19 and 20.

15 The first and second smaller side walls 17 and 18 of the first and second containers 13 and 14 respectively form the side walls 9 and 10 of the carton 1.

The first larger side walls 19 of the first and second containers 13 and 14 form the bottom walls 11 of the carton 1.

Each container 13 and 14 comprises at least one zone 21 for facilitated removal of the packets 2.

20 The removal zone 21 allows a packet 2 to be easily picked up from the row 15 when the row is complete, and in this way once the first packet 2 in the row 15 has been picked up, it is easy to also pick up the remaining packets 2.

The removal zone 21 is formed by a "U"-shaped notch.

Alternatively, the removal zone 21 may be formed by a notch having any shape.

25 Preferably, the second larger side wall 20 of each container 13 and 14 comprises the notch 21 at its centre.

Furthermore, both the first and the second larger side walls 19 and 20 comprise the "U"-shaped notch 21.

30 The bottom wall 16 of each container 13 and 14 is designed to house the row 15 of packets 2 of cigarettes. In particular, the packets 2 are arranged in an orderly fashion

in such a way that their rear wall 4 is in contact with the bottom wall 16, meaning that the larger side walls 6 of the packets are alongside one another. Alternatively, the packets 2 may be positioned in each container 13 and 14 opposite each other, in such a way that the larger or smaller side wall 5 or 6 is in contact with the bottom wall 16 of each container 13 and 14.

The first and second containers 13 and 14 are connected to each other at least along a first pre-fold line and/or line of weakness 22 provided along the bottom wall 11 of the carton 1.

In this way, the containers 13 and 14 can rotate about the first pre-fold line and/or line of weakness 22 between a position in which they are opened like a book for picking up the packets 2 and a closed position in which the container 13 and 14 are substantially side by side and/or superposed.

In the closed position, the "U"-shaped notches 21 of each container 13 and 14 are facing each other, forming a preferred zone 23 for carton 1 opening by the user, as shown in Figure 2.

The carton 1 also comprises locking means 24 for keeping it in the closed position.

The locking means comprises a lid 24 which at least partly covers at least the top wall 12. In embodiments not illustrated of the carton 1 there are two or more lids 24 designed to partly cover two or more containers connected to each other in pairs along pre-fold lines and/or lines of weakness.

The lid 24 is connected to at least one of the containers 13 and 14 along a second pre-fold line and/or line of weakness 25. Preferably, the lid 24 is connected to the first container 13.

In this case the second pre-fold line and/or line of weakness 25 is provided along the rear wall 8 of the carton 1.

In particular, the lid 24 comprises a top wall 26, two side walls or sides 27 and a front wall 28.

When the lid 24 is in the carton 1 closed position, it covers the top wall 12 and, at least partly, the front wall 7 and the side walls 9, 10.

In an embodiment not illustrated, the lid 24 comprises the top wall 26 and the front wall 28, covering the top wall 12 and partly covering the front wall 7 of the carton.

5 In the first embodiment illustrated in Figure 1, the second pre-fold line and/or line of weakness 25 is parallel with the first pre-fold line and/or line of weakness 22 for rotation of the containers 13, 14 relative to each other.

In an embodiment not illustrated, the second pre-fold line and/or line of weakness 25 may be provided along one edge 29 of the top wall 12 of the carton 1 or along the top wall 12 of the carton 1.

10 The carton 1 also comprises means 30 for retaining each packet 2 of the respective row 15 in the respective container 13 and 14.

15 Preferably, the retaining means comprise at least one layer of adhesive substance 30 applied on the bottom wall 16 and forming a temporary connection between each packet 2 and the respective container 13 and 14, until the user picks up the packet 2. Said adhesive substance preferably has a weak adhesive action, for example a repositionable adhesive which does not dry.

20 In an embodiment not illustrated, the retaining means 30 could be obtained from flat blanks of wrapping material suitably shaped and fixed to the respective container 13 and 14, or which are part of the container 13 and 14, so as to prevent the packets 2 from coming out of the carton 1. For example, with reference to Figures 6, 7 and 8, the carton 1 retaining means 30 comprise at least one screening element 31, associated with a respective container 13 and 14, at least partly covering the row 15 of packets 2 in the container 13 and 14. For example, the screening element 31 may be a panel of wrapping material, plastic material or another type of material. In particular, with reference to Figure 6, the screening element 31 completely covers the rows 15 of packets 2 and is fully removable, in such a way that the user can access the row 15 of packets 2 of one container 13 and 14 at a time. As shown in Figure 7, the screening element 31 partly screens the packets 2, leaving in view at least one portion of packet 2 to facilitate packet pickup. Alternatively, with reference to Figure 8, the screening element 31 is partly removable. In fact, a continuous pre-cut line 32 allows removal of

a first portion 33a of the screening element 31 in such a way that a second portion 33b at least partly screens the packets 2.

The carton 1 comprises means 34 for connecting the containers 13 and 14 at the bottom wall 11. Specifically, the connecting means 34 form the first pre-fold line and/or line of weakness 22.

In an embodiment not illustrated, the connecting means 34 comprise a band at least partly covering the bottom wall 11. The band may extend in such a way that it at least partly covers the rear wall 8 and/or the front wall 7.

With reference to Figure 10, the carton 1 comprises at least one element 35 for coupling with a respective opening 36 able to prevent unwanted opening of the lid 24 and, if necessary, able to emit a sound during closing and/or opening of the locking means 24. The coupling element 35 is positioned at the inner face 37 of the front wall 28 of the lid 24 and the corresponding opening 36 is made in the front wall 7 of the carton 1.

According to an embodiment not illustrated, the coupling element 35 is positioned at the front wall 7 of the carton 1 and the corresponding opening 36 is made in the front wall 28 of the lid 24.

The coupling element 35 and the opening 36 are of the type described in Italian patent application BO2011A000151 which is referred to here in its entirety for a complete description.

According to the second embodiment illustrated in Figure 10, the coupling element 35 and the respective opening 36 have a round shape and are positioned respectively at the centre of the inner face 37 of the lid 24 and of the front wall 7 of the carton 1.

In an alternative embodiment there may be two or more coupling elements 35 and respective openings 36 positioned where required. For example, Figure 10 shows two coupling elements 35 and the respective openings 36 in an off-centre position.

The coupling element 35 is only partly glued to the inner face 37 of the front wall 28 in such a way that it has a glued upper portion 38 and a non-glued lower portion 39.

The opening 36 is a hole through the front wall 7 of the carton 1.

Thanks to the fact that the lower portion 39 is not glued to the inner face 37, it gradually bends with each opening/closing action of the lid 24 each time the coupling element 35 enters/exits the opening 36 (Figure 10), making a sound like a “click”.

5 The third embodiment of the carton 1 shown in Figures 15 and 16 differs from the first embodiment because the containers 13 and 14 are connected to each other along the first pre-fold line and/or line of weakness 22 provided along one of the two side walls 9 or 10. Therefore, the means 34 for connecting the containers 13 and 14 are provided at one of the two side walls 9 or 10 forming the first pre-fold line and/or line of weakness 22.

10 Consequently, the second pre-fold line and/or line of weakness 25 provided along the rear wall 8 of the carton 1 is transversal to the first pre-fold line and/or line of weakness 22 for rotation of the containers 13 and 14 relative to each other.

15 With reference to the fourth embodiment in Figures 17 and 18, the second smaller side walls 18 of the first and second containers 13 and 14 form the bottom wall 11, while the first and second larger side walls 19 and 20 of the first and second containers 13 and 14 respectively form the side walls 9 and 10 of the carton.

20 Similarly to the first embodiment, the containers 13 and 14 are connected to each other along the first pre-fold line and/or line of weakness 22 provided along the bottom wall 11. The means 34 for connecting the containers 13 and 14 are therefore provided at the bottom wall 11.

Similarly to the first embodiment, the second pre-fold line and/or line of weakness 25 is provided along the rear wall 8 of the carton 1, running parallel with the first pre-fold line and/or line of weakness 22 for rotation of the containers 13 and 14 relative to each other.

25 The fifth embodiment shown in Figures 19 and 20 differs from the fourth embodiment of the carton 1 because the containers 13 and 14 are connected to each other along the first pre-fold line and/or line of weakness 22 provided along one of the two side walls 9 or 10.

30 Therefore, the means 34 for connecting the containers 13 and 14 are provided at one of the side walls 9 or 10 and form the first pre-fold line and/or line of weakness 22.

In this case, the second pre-fold line and/or line of weakness 25, provided along the rear wall 8 of the carton 1, is transversal to the first pre-fold line and/or line of weakness 22 for rotation of the containers 13 and 14 relative to each other.

5 In an embodiment not illustrated, the first pre-fold line and/or line of weakness 22 is provided along the top wall 12.

The carton 1 described is made starting with at least one flat blank made of wrapping material.

Figures 12 and 13 show three flat blanks made of wrapping material, for making the embodiment of the carton 1 shown in Figures 1, 2 and 3.

10 The first and second containers 13 and 14 are obtained, respectively, from a first and a second flat blank 40 and 41 made of wrapping material. Each blank 40 and 41 has a substantially rectangular shape with a main longitudinal axis B.

With reference to Figure 13, each of the blanks 40 and 41 has a central panel 42, forming the bottom wall 16 of the first and second containers 13 and 14.

15 The blanks 40 and 41 also comprise a first and a second smaller side flap 43 and 44, each connected to the central panel 42 by a respective fold line 45 substantially perpendicular to the longitudinal axis B.

20 Each blank 40 and 41 also comprises a first and a second larger side flap 46 and 47, each connected to the central panel 42 by a respective fold line 50 substantially parallel with the longitudinal axis B.

25 The first and second larger side flaps 46 and 47 have a respective pair of tongues 48, each of which is connected to the respective larger side flap 46 and 47 by a fold line 45 substantially perpendicular to the longitudinal axis B of the blanks 40 and 41. Specifically, the first and second smaller side flaps 43 and 44, and the first and second larger side flaps 46 and 47 and the respective pairs of tongues 48 form the respective side walls 17, 18, 19 and 20 of the container 13 and 14.

30 The ‘‘U’’-shaped notch 21 is made at least in one of the larger side flaps 46 and 47. Precisely, in Figure 13 each blank 40 and 41 has only one notch 21, which is in a substantially central position of the second larger side flap 47, with the opening towards the outside of the blank 40 and 41.

The locking means 24 and the means 34 for connecting the containers 13 and 14 are obtained from a third flat blank 51 made of wrapping material.

The third blank 51, illustrated in Figure 12, has a substantially rectangular shape.

The third blank 51 has a first panel 52, and a second panel 53 connected to the 5 first panel 52 by a second pre-fold line and/or line of weakness 25.

The blank 51 also comprises a first pair of side tongues 54, connected to the second panel 53 by a respective fold line 55 transversal to the second pre-fold line and/or line of weakness 25.

10 The side tongues 54 each comprise a substantially rectangular first portion 56 connected by a first line of weakness 57 to a second portion 58 connected to the second panel 53 by the fold line 55.

15 A third panel 59 is connected to the second panel 53 by a first fold line 60 parallel with the second pre-fold line and/or line of weakness 25. A second pair of side tongues 61 is connected to the third panel 59 by a respective fold line 62 transversal to the second pre-fold line and/or line of weakness 25. In particular, the third panel 59 comprises a first sub-panel 63 connected to the second panel 53 by the first fold line 60.

A second sub-panel 64 is connected to the first sub-panel 63 by a first second line of weakness 65. A projection 66 is in turn connected to the second sub-panel 64 by a third second line of weakness 67.

20 The side tongues 61 are connected by the fold line 62 to the second sub-panel 64.

The first sub-panel 63 is designed to form the top wall 26 of the lid 24.

25 The second sub-panel 64 and the projection 66 are designed to form the front wall 28 of the lid 24. The projection 66 is the strengthening element of the front wall 28 of the lid 24.

A fourth panel 68 is connected to the first panel 52 by a second fold line 69 parallel with the second pre-fold line and/or line of weakness 25.

30 A fifth panel 70 is connected to the fourth panel 68 by the first pre-fold line and/or line of weakness 22 parallel with the second pre-fold line and/or line of weakness 25.

The second and third panels 53 and 59 and the respective pairs of side tongues 61 form the carton 1 locking means 24 and the fourth and fifth panels 68 and 70 form the means 34 for connecting the containers 13 and 14.

5 The third blank 51 also comprises a sixth panel 71 connected to the fifth panel 70 by a third fold line 72 parallel with the second pre-fold line and/or line of weakness 22.

The first and second panels 52 and 53 of the third blank 51 are connected to the central panel 42 of the first container 13 forming the rear wall 8 of the carton 1. The fourth and fifth panels 68 and 70 of the third blank 51 are connected to each first larger side flap 46 of the respective first and second containers 13 and 14 forming the bottom 10 wall 11 of the carton 1.

The sixth panel 71 of the third blank 51 is connected to the central panel 42 of the second container 14 forming the front wall 7 of the carton 1.

15 With reference to Figure 14, the third blank 51 differs from the blank 51 previously described since it has no sixth panel 71. In this case, the first and second panels 52 and 53 of the third blank 51 are connected to the central panel 42 of one of the containers 13 or 14 forming the rear wall 8 of the carton 1. The fourth and fifth panels 68 and 70 of the third blank 51 are connected to each first larger side flap 46 of the respective first and second containers 13 and 14 forming the bottom wall 11 of the carton 1 in its second embodiment.

20 According to an alternative embodiment, the carton may be obtained from at least a single flat blank 75 and 76 of wrapping material.

As illustrated in Figure 22, the flat blank 75 comprises a lower portion 75a and an upper portion 75b which are connected by the second pre-fold line and/or line of weakness 25.

25 The lower portion 75a is designed to form the containers 13 and 14, while the upper portion 75b is designed to form the lid 24.

The lower portion 75a is formed by joining the first and second flat blanks 40 and 41 described above along the first pre-fold line and/or line of weakness 22. In particular, the first pre-fold line and/or line of weakness 22 joins the first larger side flap 46 and the respective pair of tongues 48 of each blank 40 and 41. Similarly to the first 30

and second blanks 40 and 41, the second larger side flaps 47 of each container 13 and 14 may have "U"-shaped notches 21 made in them.

A seventh panel 73 is connected to the second larger side flap 47 by a fourth fold line 74.

5 The seventh panel 73 is further connected to the second pre-fold line and/or line of weakness 25.

The upper portion 75b of the blank 75 differs from the third panel 59 shown in Figures 12 and 14 solely due to the fact that the two side tongues 54 are formed by the first portion 58 connected to the first sub-panel 63 by the fold line 55.

10 Therefore, the carton 1 shown in Figure 21 is obtained from the flat blank 75. In particular, the seventh panel 73 may be connected to the second larger side flap 47 of the container 13 by the retaining means 30.

15 With reference to Figure 25, the flat blank 76 comprises a lower portion 76a and an upper portion 76b which are connected by the second pre-fold line and/or line of weakness 25.

The portion 76b is similar to the portion 75b and therefore is designed to form the lid 24.

20 The lower portion 76a is similar to the portion 75a but without the seventh panel 73, therefore the second larger side flap 47 is connected to the first sub-panel 63 by the second pre-fold line and/or line of weakness 25.

25 Therefore, the carton 1 shown in Figures 23 and 24 is obtained from the flat blank 76. In this case, as shown in Figure 23, when the lid 24 is in the carton 1 closed position, it covers the second larger side wall 20 of the second container 14 and, at least partly, the front wall 7 and the side walls 9 and 10. Therefore, the second pre-fold line and/or line of weakness 25 is positioned along the top wall 12 of the carton 1.

30 From the above description it is apparent how rotation of the containers 13 and 14 makes carton 1 opening easy, allowing the packets 2 of cigarettes to be picked up by the user and avoiding denting or deformation of the carton 1. Therefore, the position in which the containers 13 and 14 are open like a book fulfils the need to obtain a carton 1 which as well as being functional and easy to handle is a pleasure to use.

Claims

- 1) A carton of packets of tobacco products comprising a plurality of side walls (7, 8, 9, 10, 11, 12), the carton (1) comprising at least two containers (13, 14), each for containing at least one row (15) of packets (2) of tobacco products; each container (13, 14) comprising a bottom wall (16), a first and a second smaller side wall (17, 18) and a first and a second larger side wall (19, 20), the first and second smaller side walls (17, 18) of the first and second containers (13, 14) respectively forming the side walls (9, 10) of the carton (1), the first larger side wall (19) of the first and second containers (13, 14) forming the bottom wall (11) of the carton (1) and the bottom wall (16) of each container (13, 14) being designed to house the row (15) of packets (2) of cigarettes, the packets (2) being arranged in an orderly fashion in such a way that their rear wall (4) is in contact with the bottom wall (16), meaning that their larger side walls (6) are alongside each other; the containers (13, 14) being connected to each other along at least a first pre-fold line and/or line of weakness (22) provided along at least one of the side walls (7, 8, 9, 10, 11, 12) and being able to rotate about the first pre-fold line and/or line of weakness (22) between a position in which they are opened like a book for picking up the packets (2) and a closed position in which the containers (13, 14) are substantially side by side and/or superposed; the carton (1) comprising means (24) for locking the containers (13, 14) in the closed position.
- 2) The carton according to claim 1, characterised in that the side walls (7, 8, 9, 10, 11, 12) form a front wall (7), a rear wall (8), two side walls (9, 10) which are transversal to the front wall (7) and the rear wall (8), a bottom wall (11) and a top wall (12); the locking means comprising at least one lid (24) at least partly covering at least the top wall (12) and connected to at least one of the containers (13, 14) along a second pre-fold line and/or line of weakness (25).

3) The carton according to claim 2, characterised in that the second pre-fold line and/or line of weakness (25) is parallel with or transversal to the first pre-fold line and/or line of weakness (22) for rotation of the containers (13, 14) relative to each other.

5

4) The carton according to claim 2 or 3, characterised in that the lid (24) partly covers the front wall (7).

5) The carton according to any of the claims from 2 to 4, characterised in that
10 the lid (24) comprises a top wall (26), two side walls or sides (27) and a front wall (28); the lid (24) when it is in the carton (1) closed position, covering the top wall (12) and, at least partly, the front wall (7) and the side walls (9, 10).

6) The carton according to any of the claims from 2 to 5, characterised in that
15 the second pre-fold line and/or line of weakness (25) is provided along one edge (29) of the top wall (12) of the carton (1).

7) The carton according to any of the claims from 2 to 5, characterised in that
20 the second pre-fold line and/or line of weakness (25) is provided along the rear wall (8) of the carton (1).

8) The carton according to any of the claims from 2 to 5, characterised in that
the second pre-fold line and/or line of weakness (25) is provided along the top wall (12) of the carton (1).

25

9) The carton according to any of the claims from 1 to 8, characterised in that
it comprises means (30) for retaining each packet (2) of the respective row (15) in
the respective container (13, 14).

10) The carton according to claim 9, characterised in that the retaining means (30) comprise at least one layer of adhesive substance applied on a wall (16) and forming a temporary connection between each packet (2) and the respective container (13, 14).

5

11) The carton according to claim 9, characterised in that the retaining means (30) comprise at least one screening element (31), associated with a respective container (13, 14), at least partly covering the row (15) of packets (2) in the container (13, 14).

10

12) The carton according to claim 11, characterised in that the screening element (31) is at least partly removable.

15

13) The carton according to any of the claims from 1 to 12, characterised in that it comprises means (34) for connecting the containers (13, 14) provided at the bottom wall (11) or at one of the two side walls (9, 10), the connecting means (34) forming the first pre-fold line and/or line of weakness (22).

20

14) The carton according to claim 13, characterised in that the connecting means (34) comprise a band at least partly covering the bottom wall (11) or one of the two side walls (9, 10).

15) The carton according to claim 14, characterised in that the band extends in such a way that it at least partly covers the rear wall (8) and/or the front wall (7).

25

16) The carton according to any of the claims from 1 to 15, characterised in that it comprises at least one element (35) for coupling with a respective opening (36) able to prevent unwanted opening of the lid (24) and, if necessary, able to emit a sound during closing and/or opening of the lid (24); the coupling element

(35) being positioned at the inner face (37) of the front wall (28) of the lid (24) and the corresponding opening (36) being made in the front wall (7) of the carton (1).

17) The carton according to any of the claims from 1 to 15, characterised in
5 that it comprises at least one element (35) for coupling with a respective opening
(36) able to prevent unwanted opening of the lid (24) and, if necessary, able to
emit a sound during closing and/or opening of the lid (24); the coupling element
(35) being positioned at the front wall (7) of the carton (1) and the corresponding
opening (36) being made in the front wall (7) of the lid (24).

10

18) The carton according to any of the claims from 1 to 17, characterised in
that each container (13, 14) comprises at least one zone (21) for facilitated removal
of the packets (2).

15

19) The carton according to any of the claims from 1 to 18, characterised in
that it is obtained from at least a single flat blank of wrapping material.

20

20) The carton according to any of the claims from 1 to 18, characterised in
that the carton comprises a first container (13) and a second container (14), each
container (13, 14) being obtained respectively from a first flat blank (40) or from a
second flat blank (41) of wrapping material which is substantially rectangular,
having a main longitudinal axis (B), each blank (40, 41) comprising a central panel
(42) forming a bottom wall (16) of the container (13, 14); a first smaller side flap
(43) and a second smaller side flap (44), each connected to the central panel (42)
25 by a respective fold line (45) substantially perpendicular to the longitudinal axis
(B); a first larger side flap (46) and a second larger side flap (47), each connected
to the central panel (42) by a respective fold line (50) substantially parallel with the
longitudinal axis (B); the first larger side flap (46) and the second larger side flap
(47) comprising a respective pair of tongues (48); each pair of tongues (48) being
30 connected to the respective larger side flap (46, 47) by the fold line (45)

substantially perpendicular to the longitudinal axis (B); the first smaller side flap (43) and the second smaller side flap (44), the first larger side flap (46) and the second larger side flap (47) and the respective pairs of tongues (48) forming respective side walls (17, 18, 19, 20) of the container.

5

21) The carton according to claim 20, characterised in that the lid (24) and the means (34) for connecting the containers (13, 14) are obtained from a third flat blank (51) made of wrapping material.

10

22) The carton according to claim 21, characterised in that the third blank (51) has a substantially rectangular shape; the third blank (51) comprising a first panel (52); a second panel (53) connected to the first panel (52) by the second pre-fold line and/or line of weakness (25); a first pair of side tongues (54) connected to the second panel (53) by a respective fold line (55) transversal to the second pre-fold line and/or line of weakness (25); a third panel (59) connected to the second panel (53) by a first fold line (60) parallel with the second pre-fold line and/or line of weakness (25); a second pair of side tongues (61) connected to the third panel (59) by a respective fold line (62) transversal to the second pre-fold line and/or line of weakness (25); a fourth panel (68) connected to the first panel (52) by a second fold line (69) parallel with the second pre-fold line and/or line of weakness (25); a fifth panel (70) connected to the fourth panel (68) by the first pre-fold line and/or line of weakness (22) parallel with the second pre-fold line and/or line of weakness (25); the second panel (53) and the third panel (59) and the respective pairs of side tongues (54; 61) forming the lid (24), and the fourth panel (68) and the fifth panel (79) forming the means (34) for connecting the containers (13, 14).

15

20

25

30

23) The carton according to claim 22, characterised in that the first panel (52) and the second panel (53) of the third blank (51) are connected to the central panel (42) of one of the containers (13, 14) forming the rear wall (8) of the carton (1), and the fourth panel (68) and the fifth panel (70) of the third blank (51) are

connected to each first larger side flap (46) of the respective first container (13) and second container (14), forming the bottom wall (11) of the carton (1).

24) The carton according to claim 22, characterised in that the third blank (51) 5 comprises a sixth panel (71) connected to the fifth panel (70) by a third fold line (72) parallel with the second pre-fold line and/or line of weakness (25).

25) The carton according to claim 24, characterised in that the first panel (52) and the second panel (53) of the third blank (51) are connected to the central panel 10 (42) of the first container (13) forming the rear wall (8) of the carton (1), the fourth panel (68) and the fifth panel (70) of the third blank (51) being connected to each first larger side flap (46) of the respective first container (13) and second container (14), forming the bottom wall (11) of the carton (1), the sixth panel (71) of the third blank (51) being connected to the central panel (46) of the second 15 container (14), forming the front wall (7) of the carton (1).

1/14

FIG.1

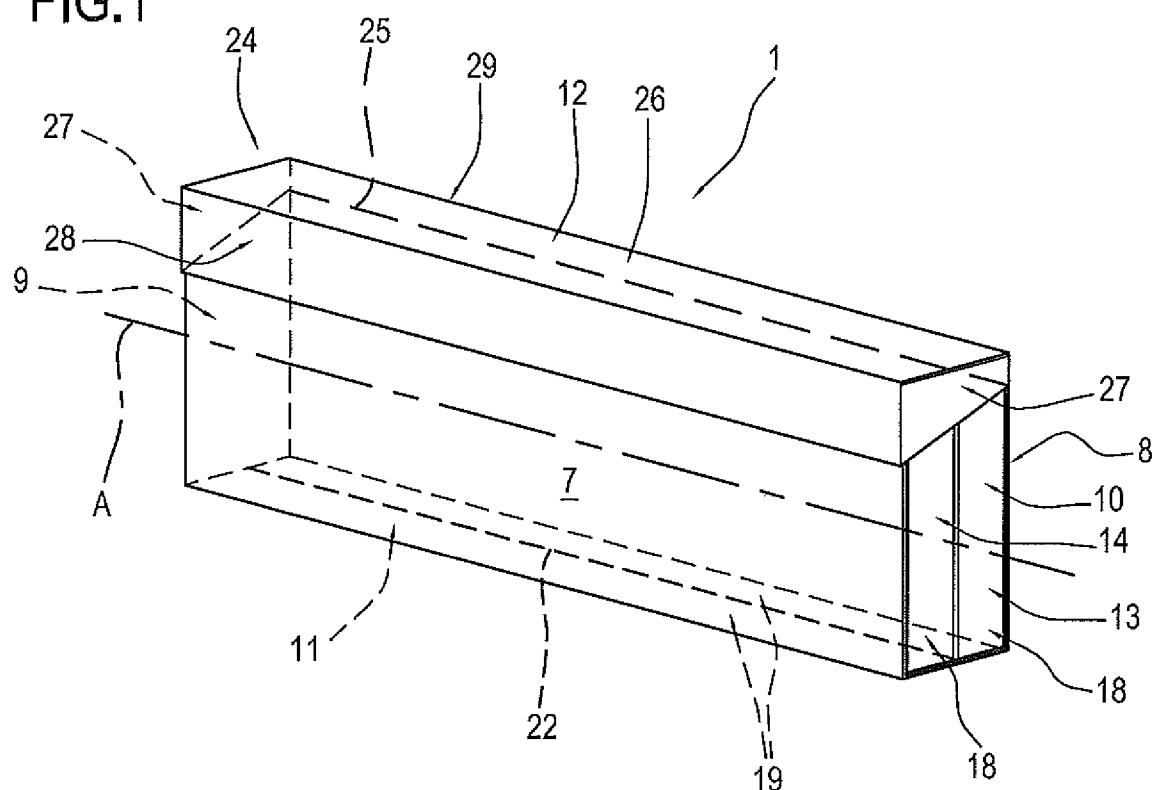
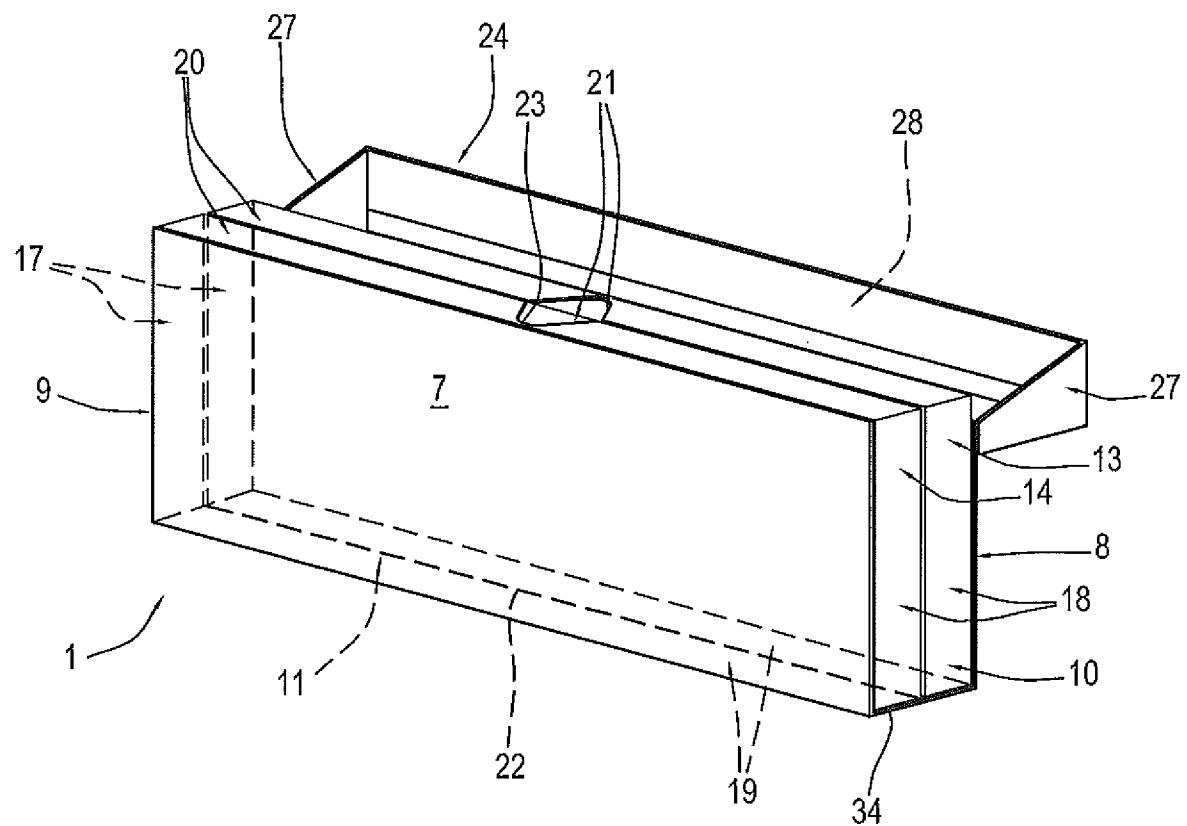


FIG.2



2/14

FIG.3

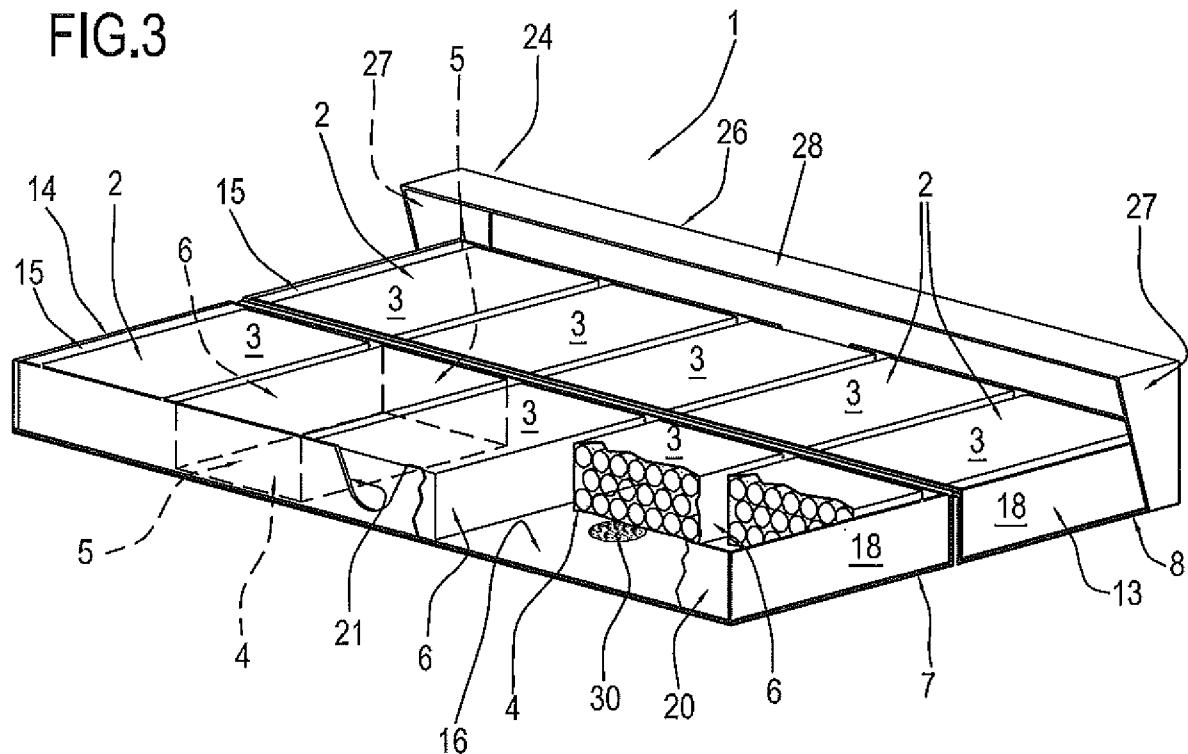
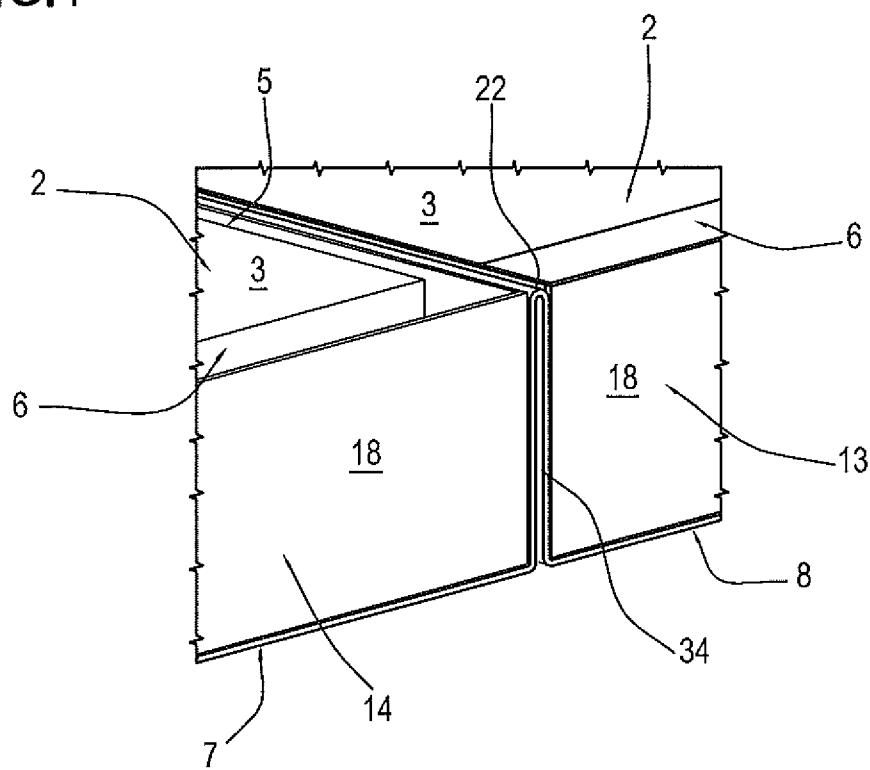


FIG.4



3/14

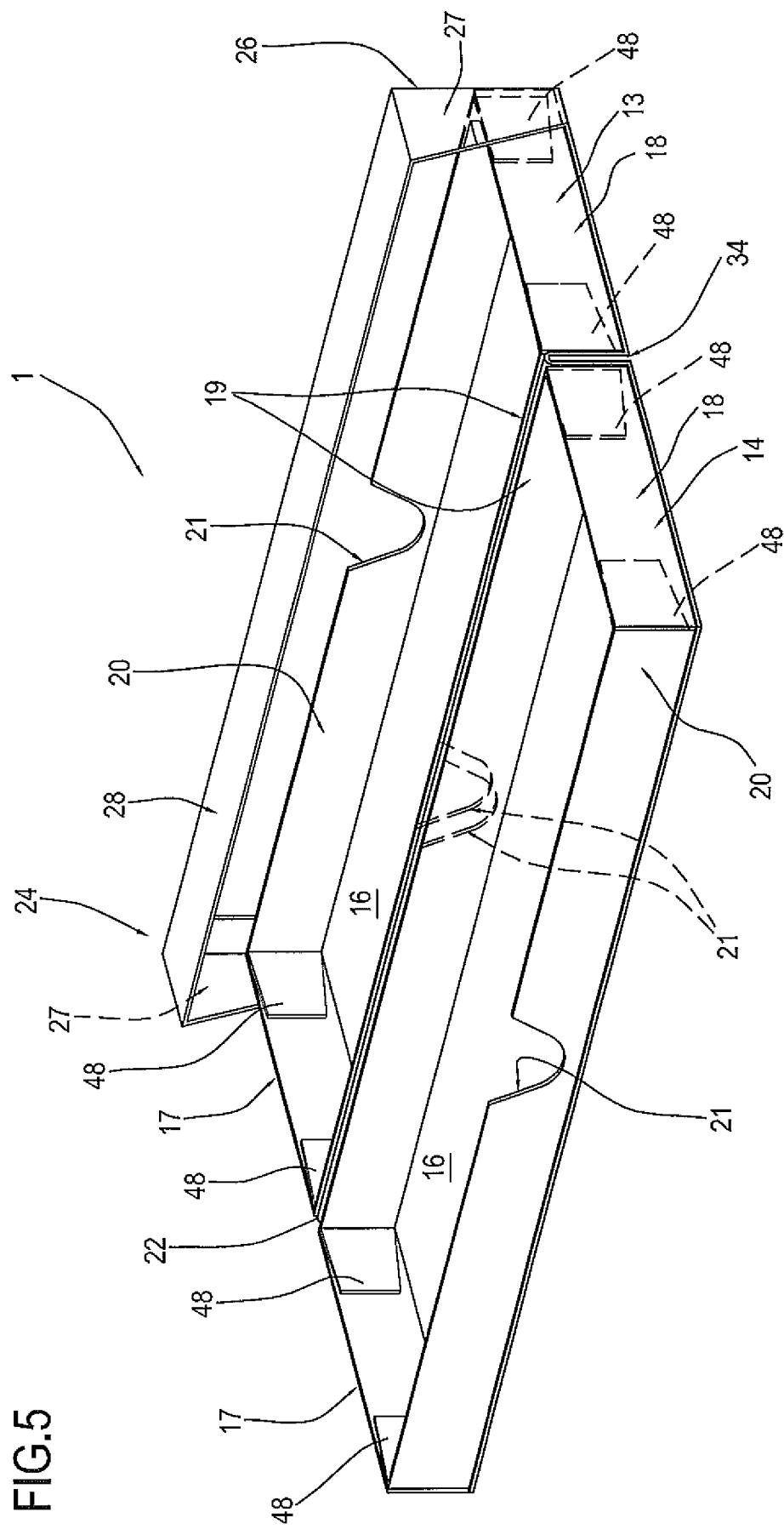


FIG.5

4/14

FIG.6

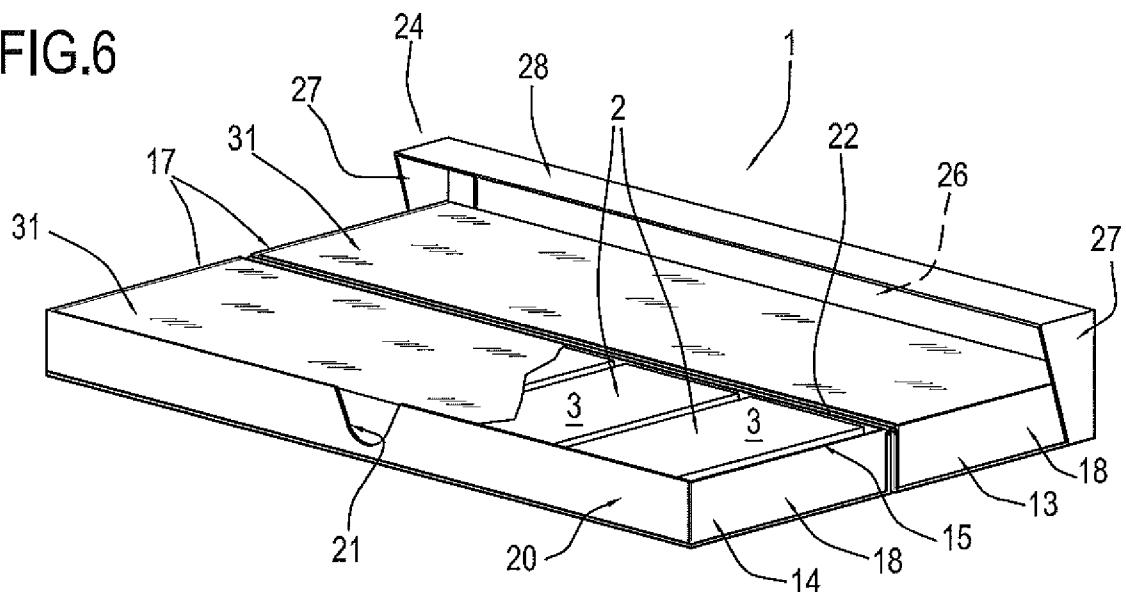


FIG.7

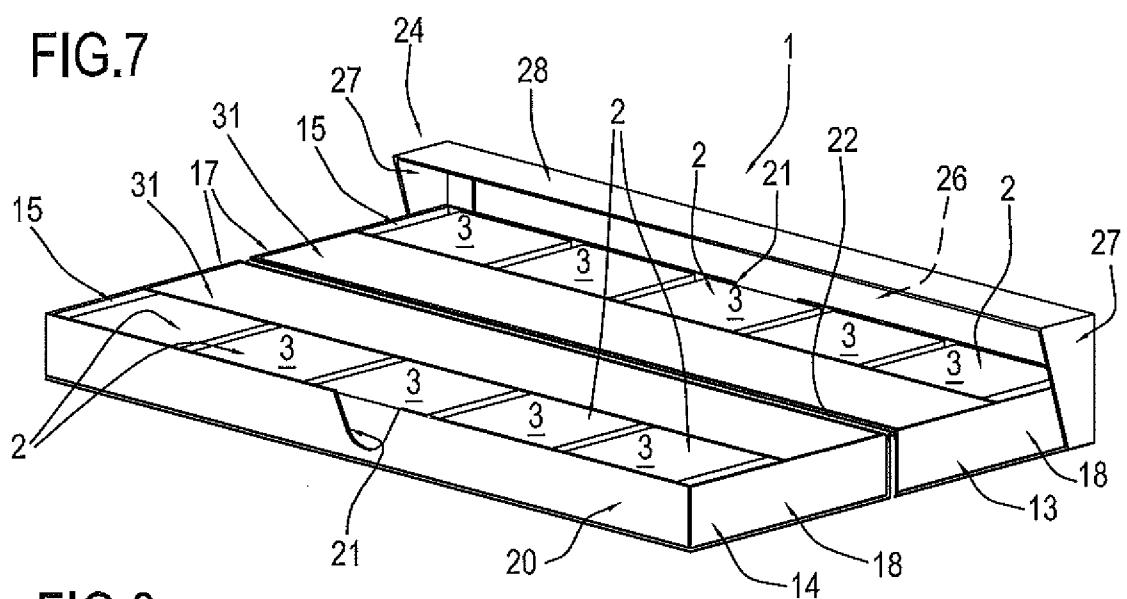
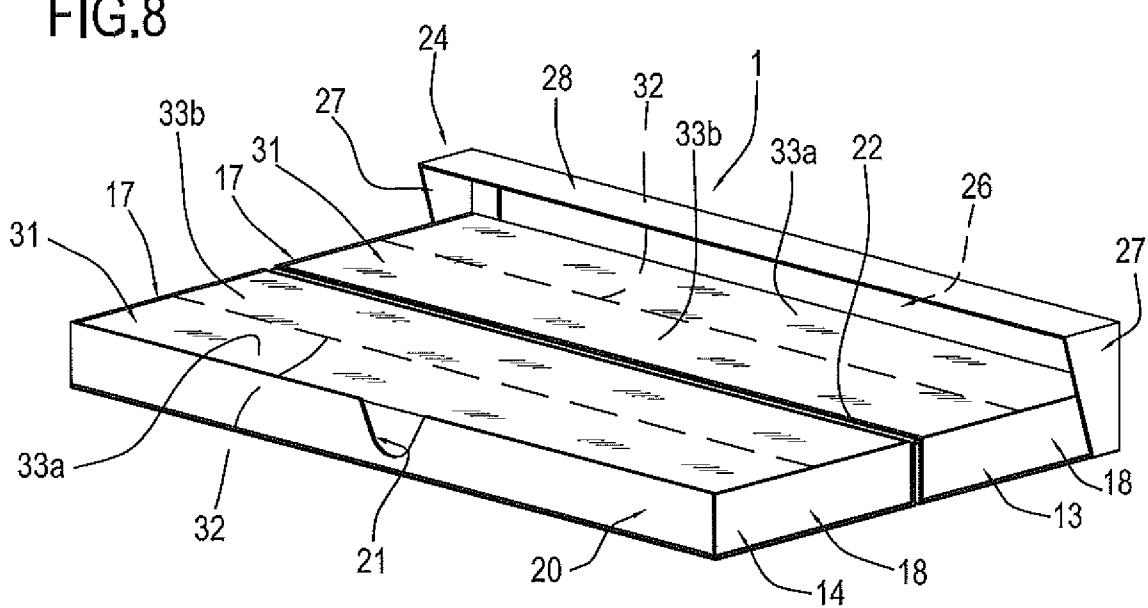


FIG.8



5/14

FIG.9

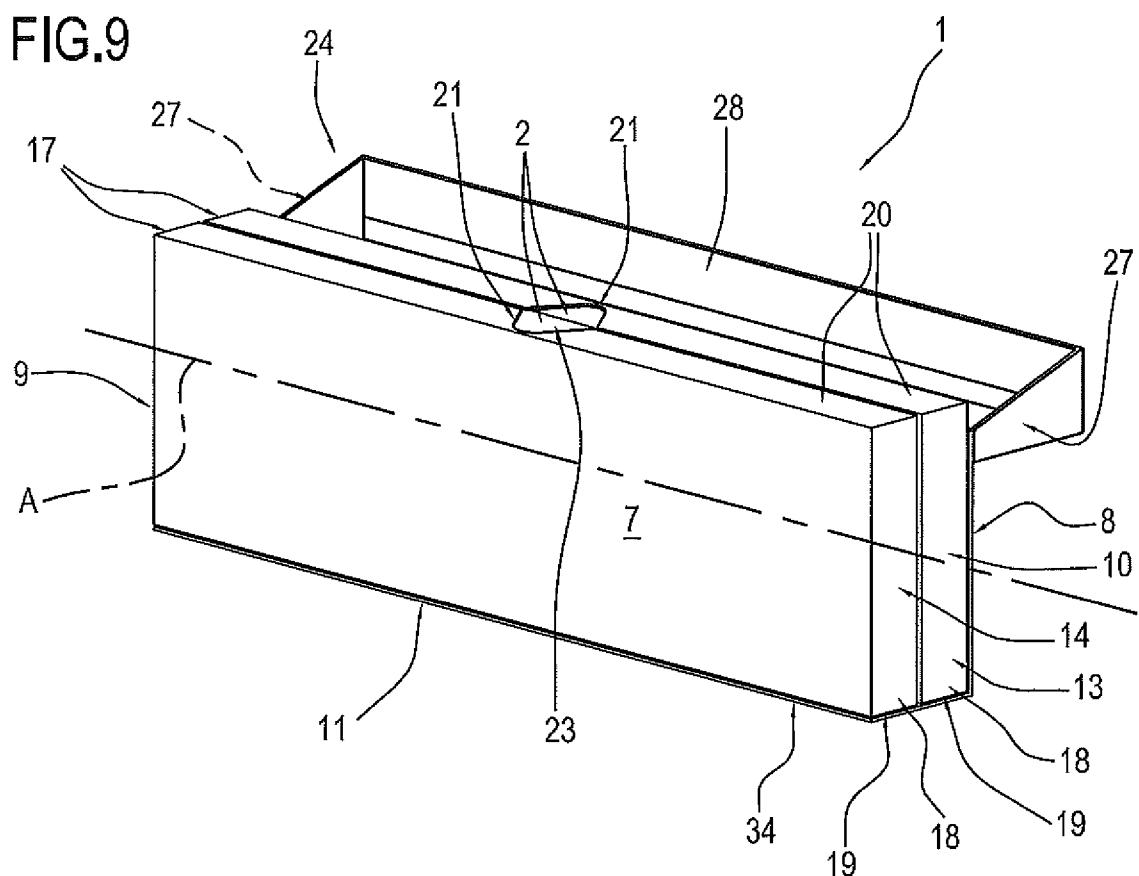
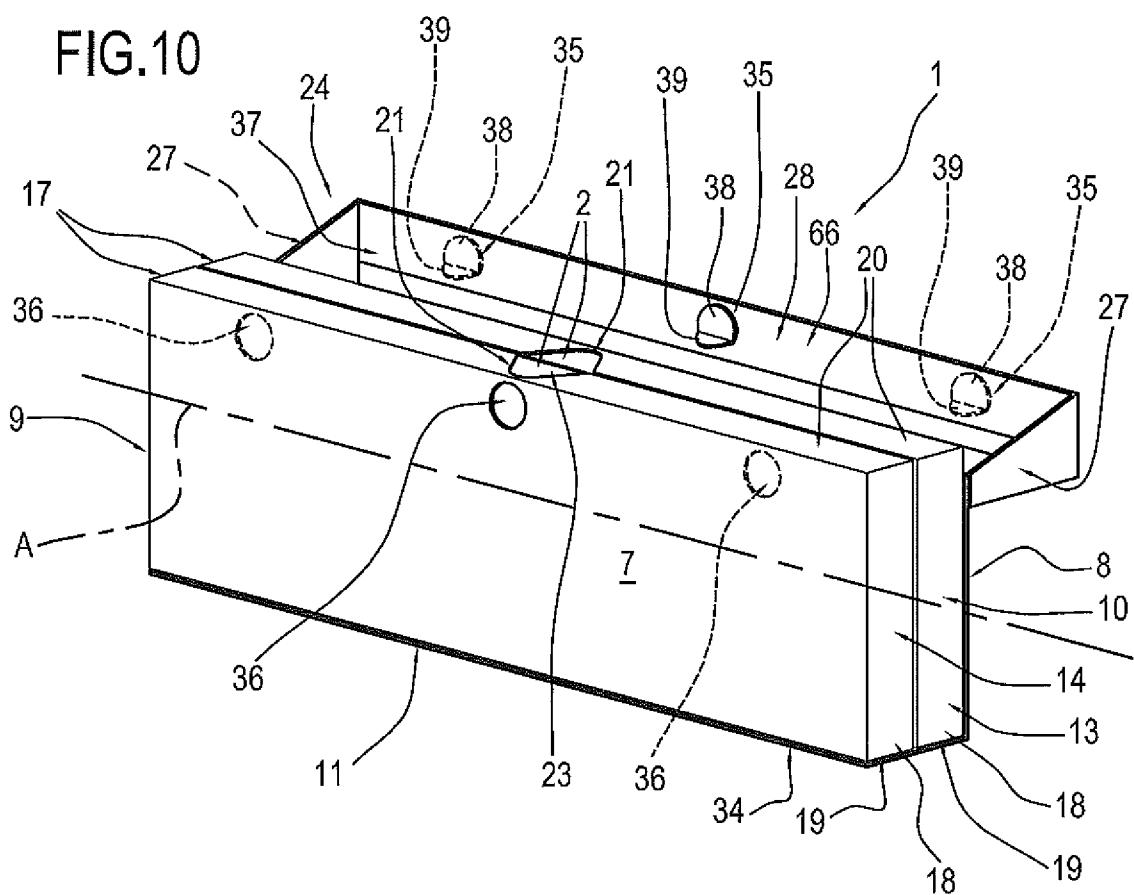


FIG.10



6/14

FIG.11

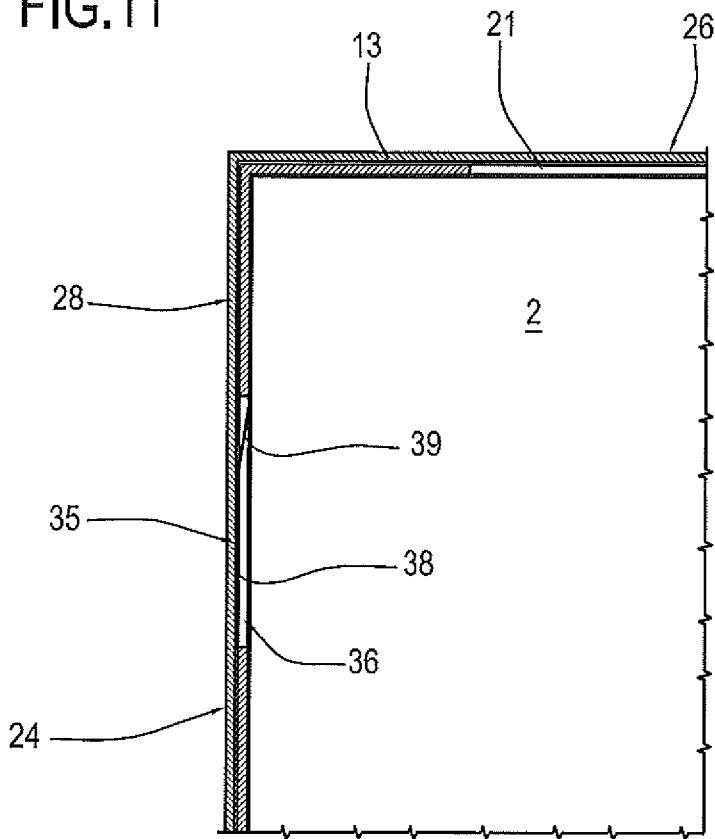
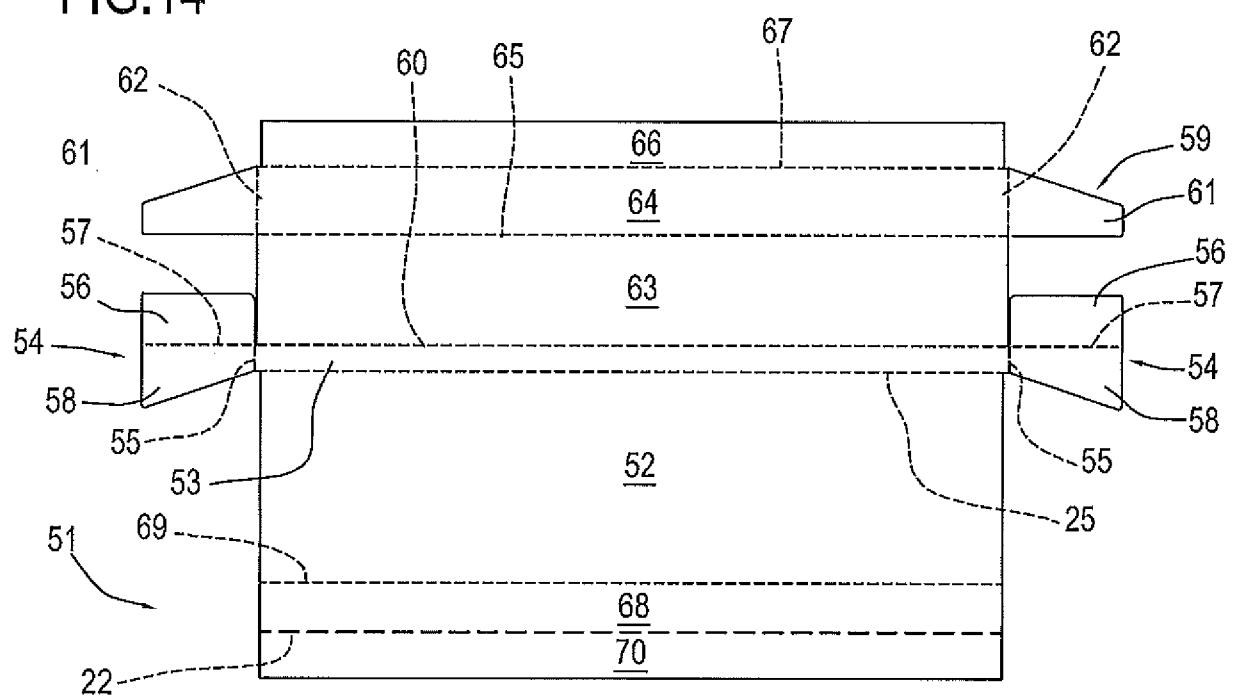


FIG.14



7/14

FIG.12

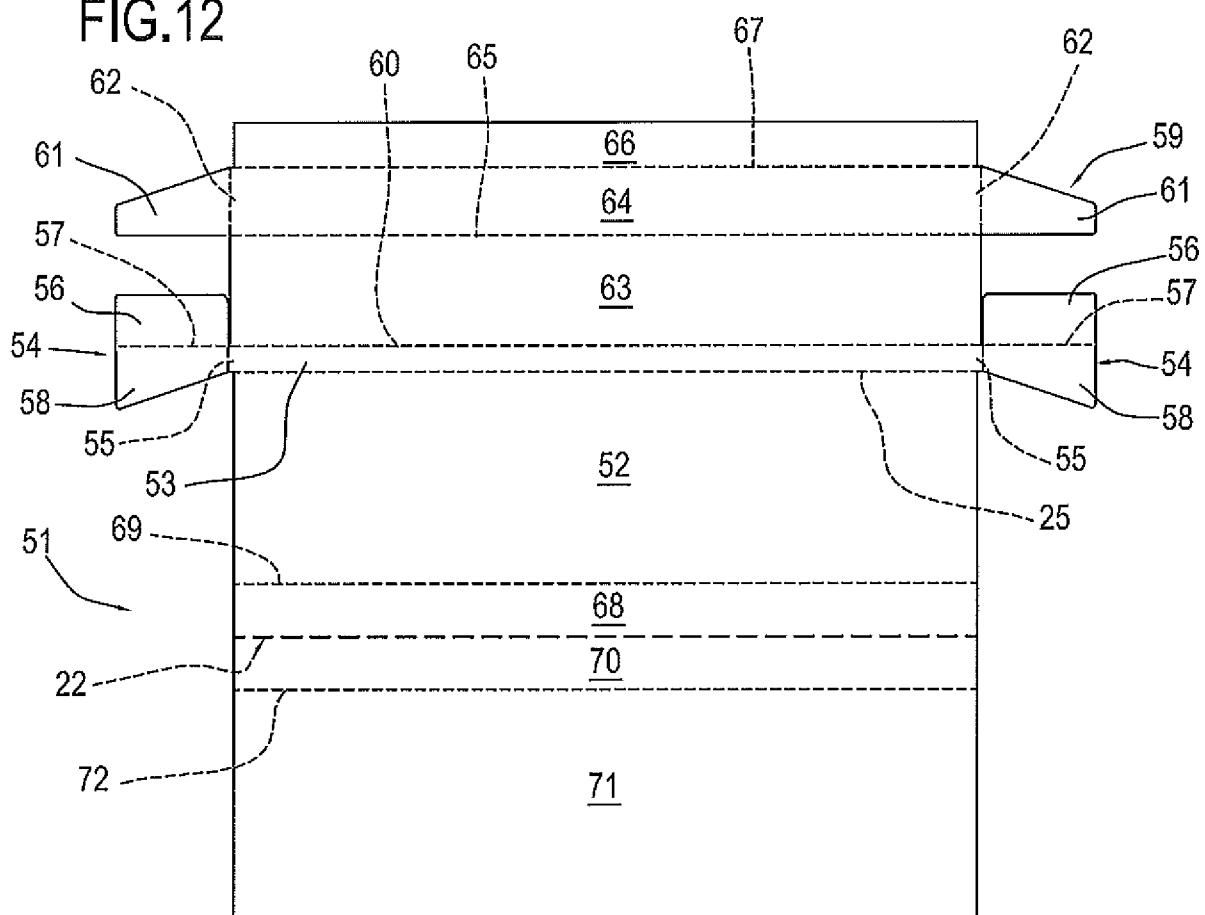
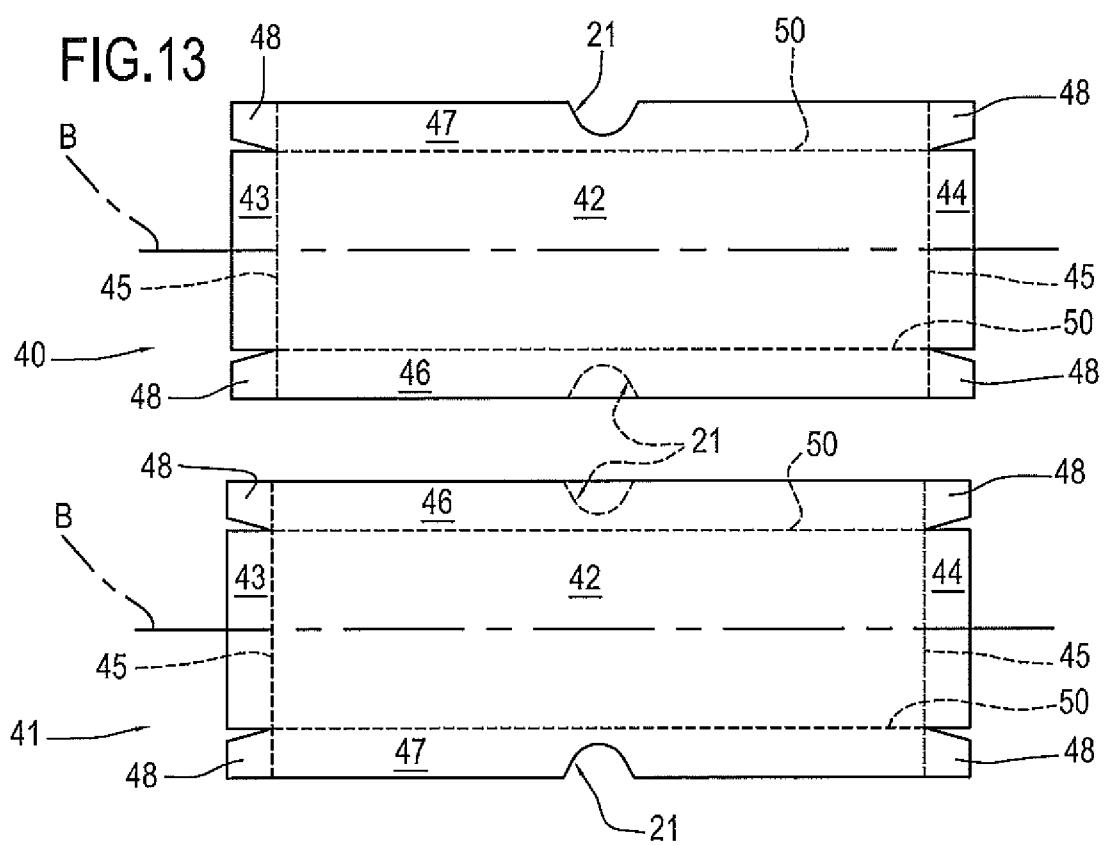


FIG.13



8/14

FIG.15

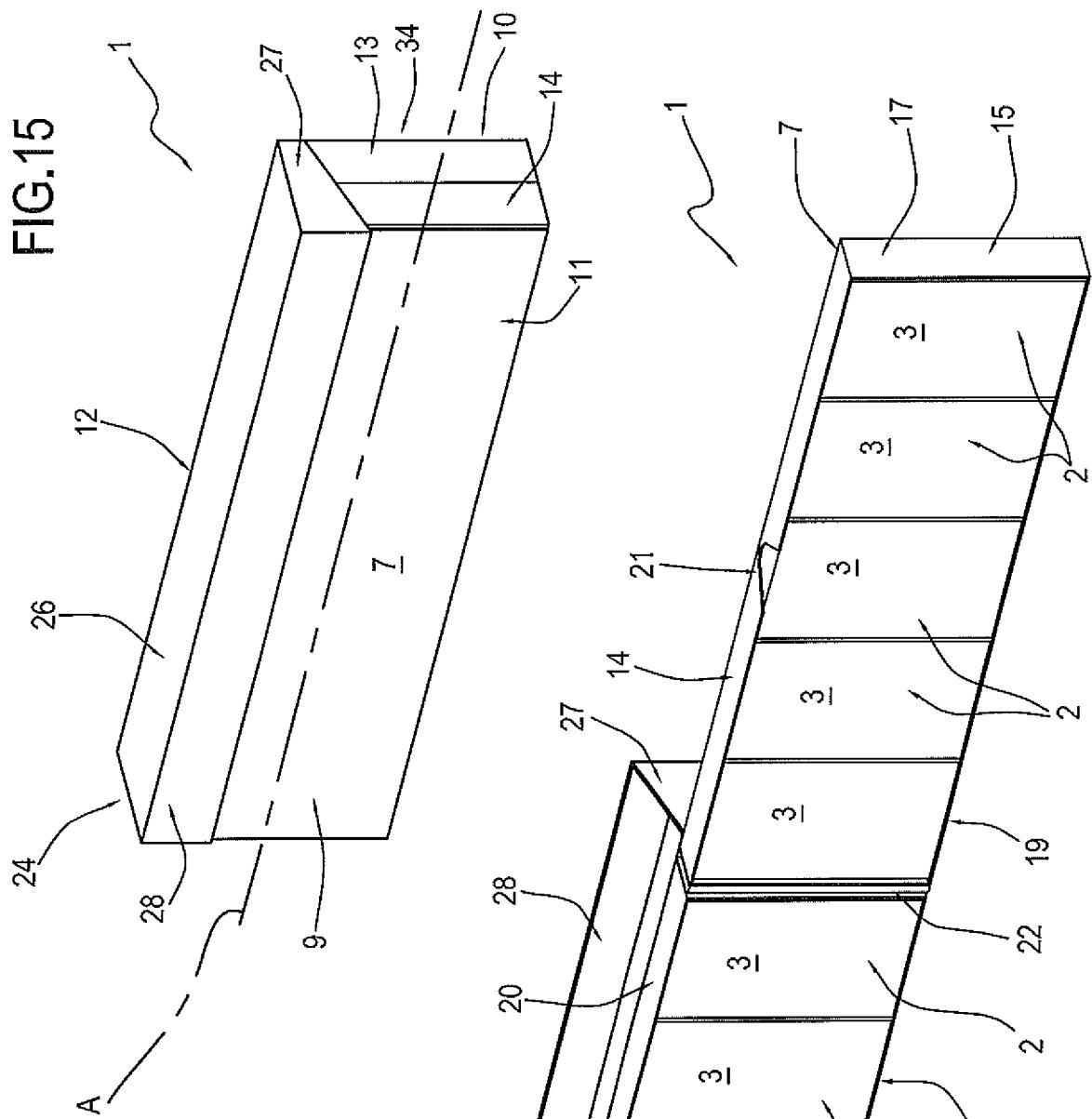
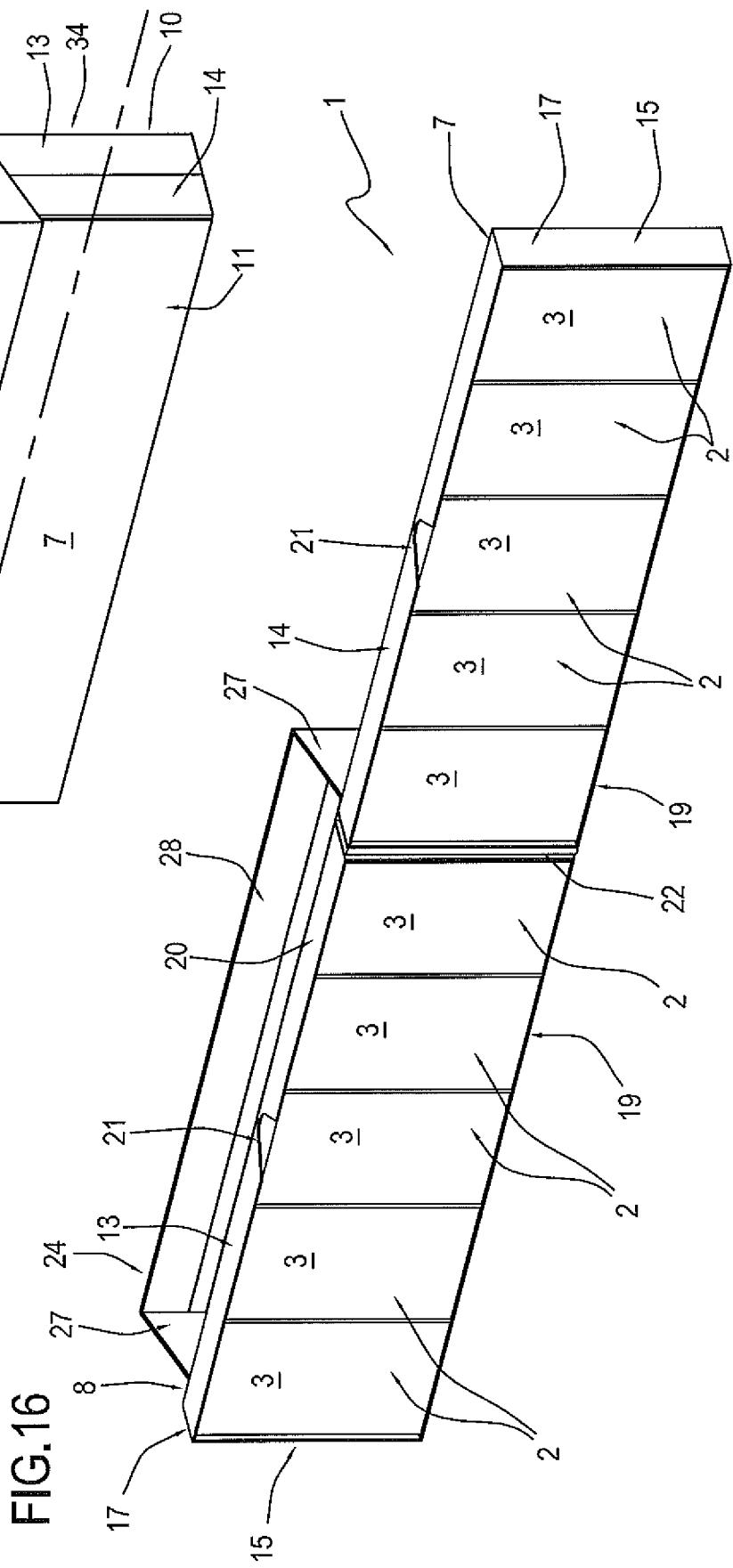
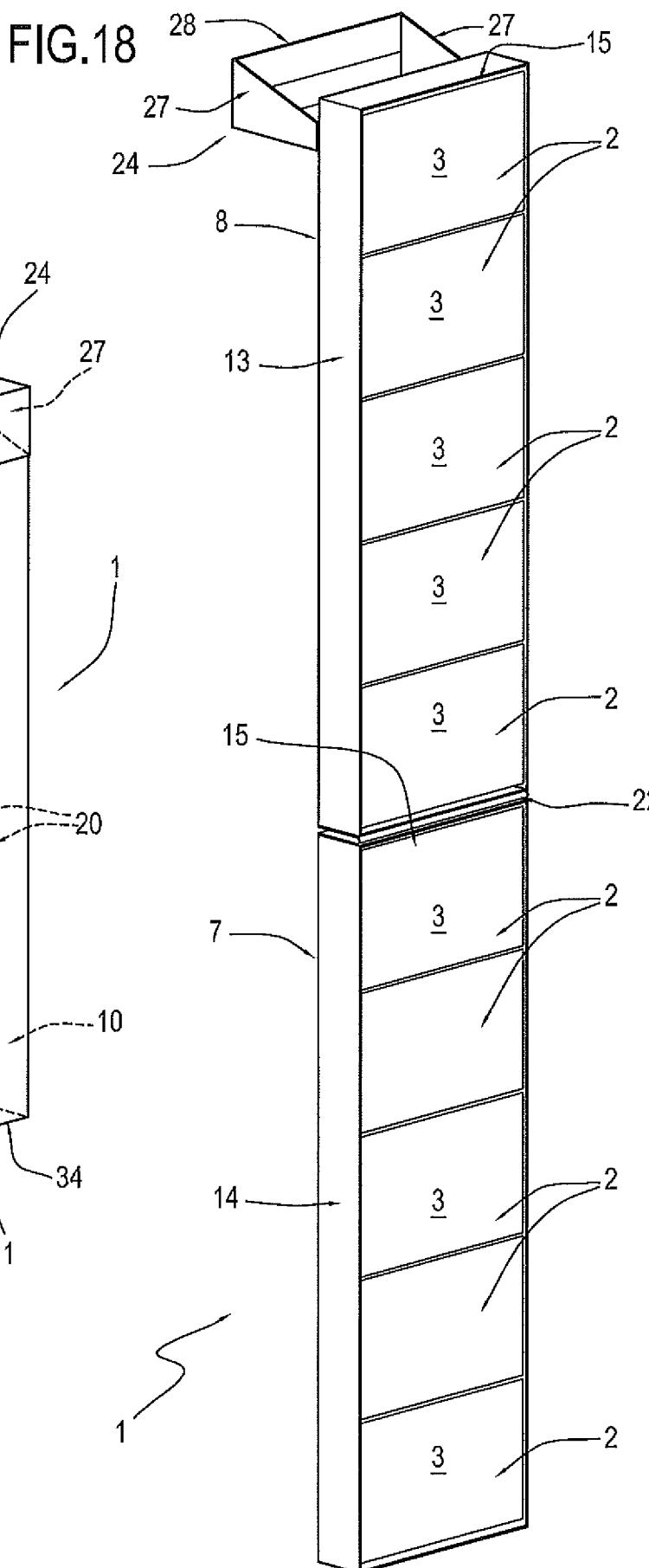
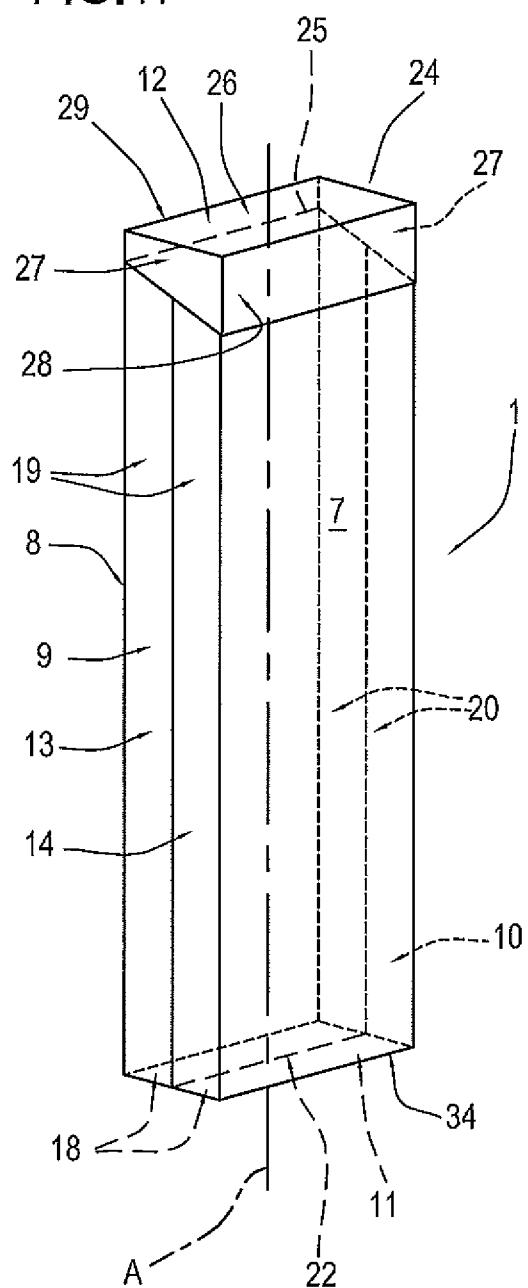


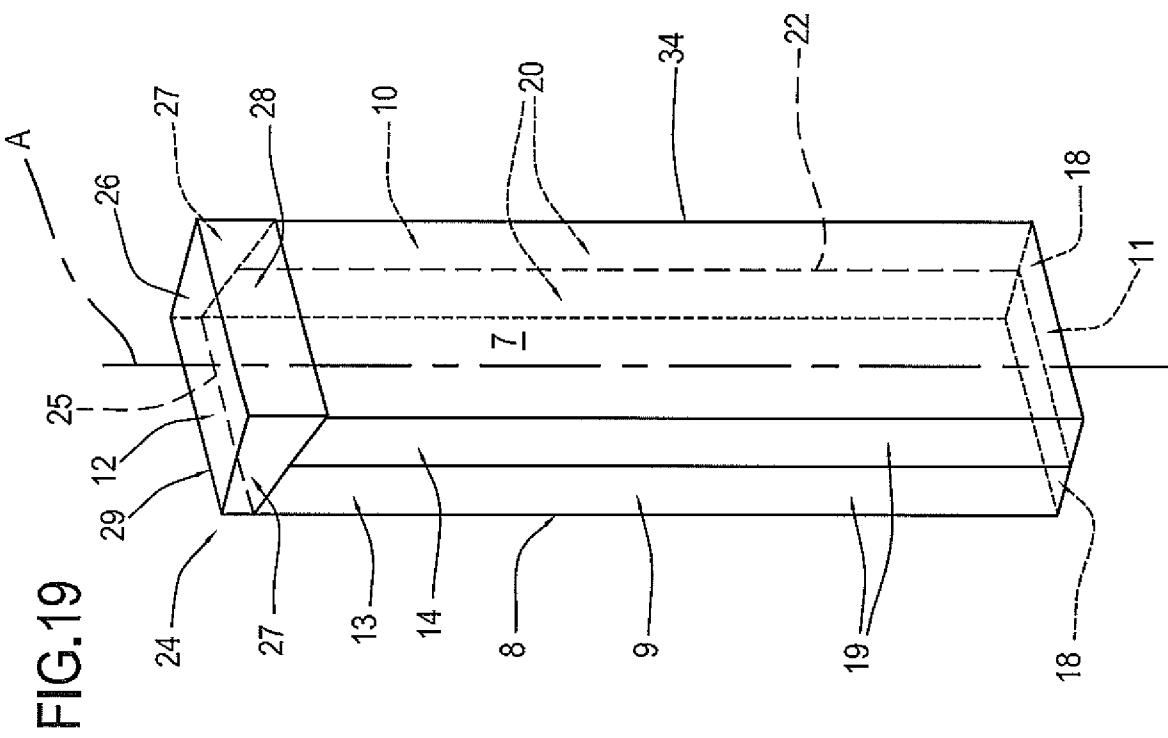
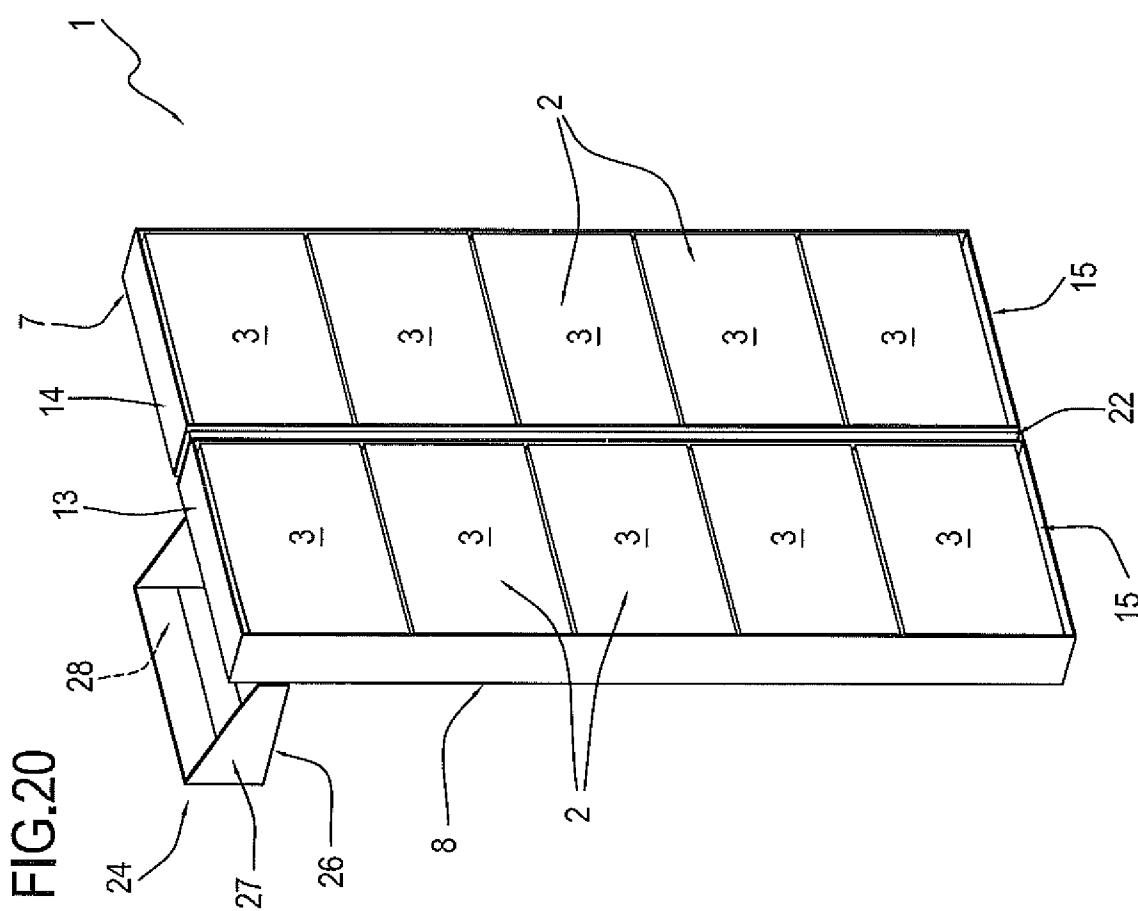
FIG.16



9/14

**FIG.17**

10/14



11/14

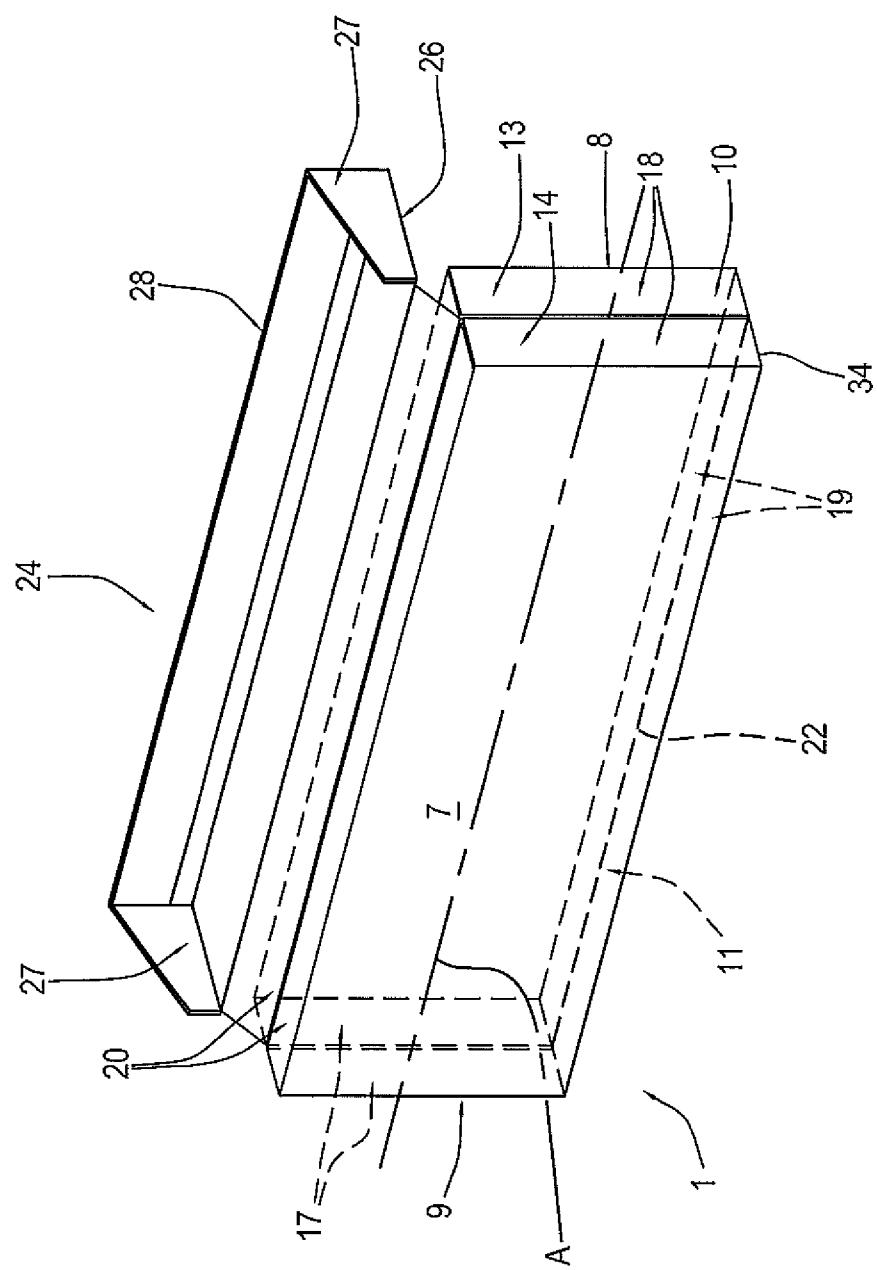
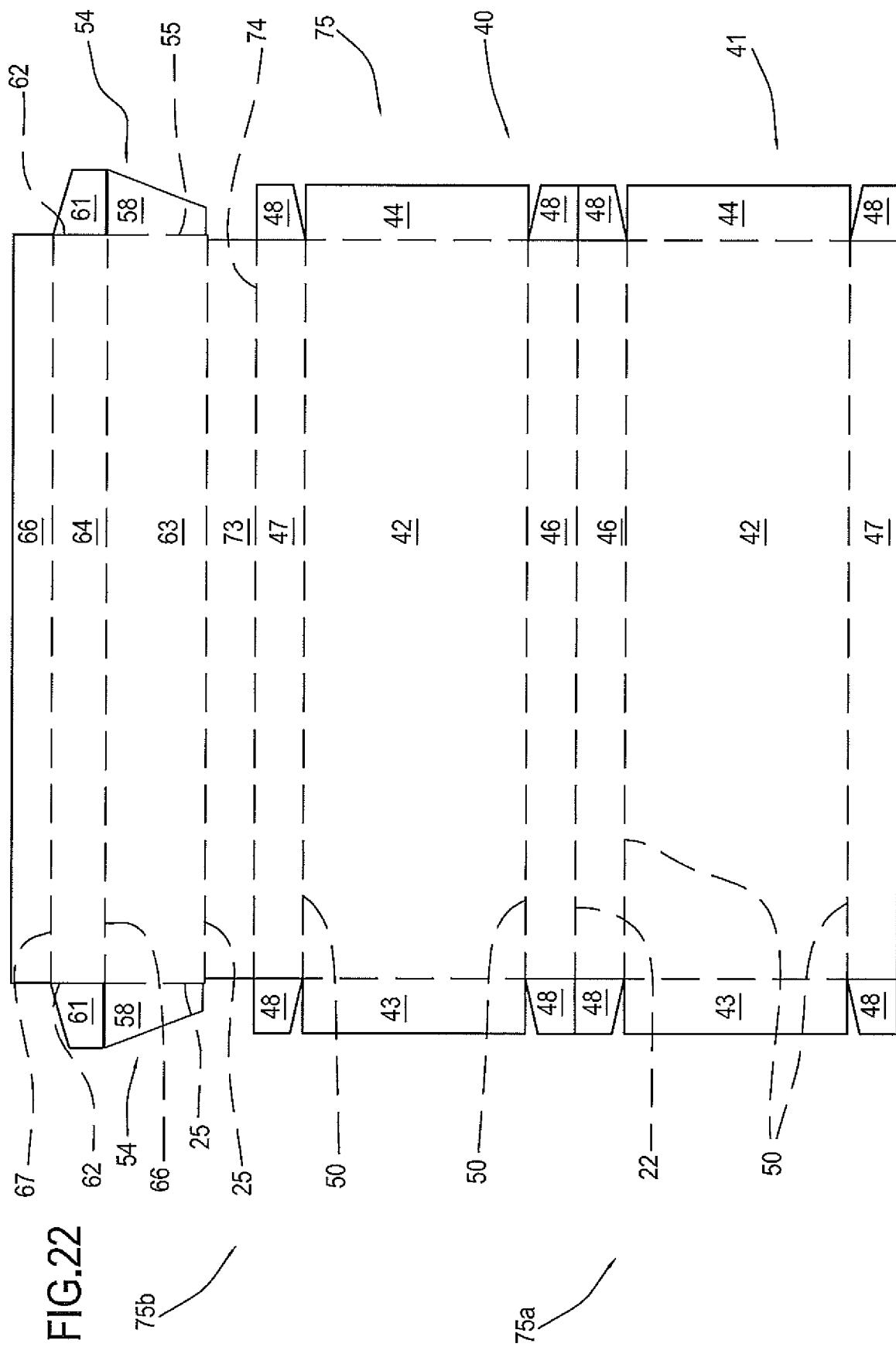


FIG.21

12/14



13/14

FIG.23

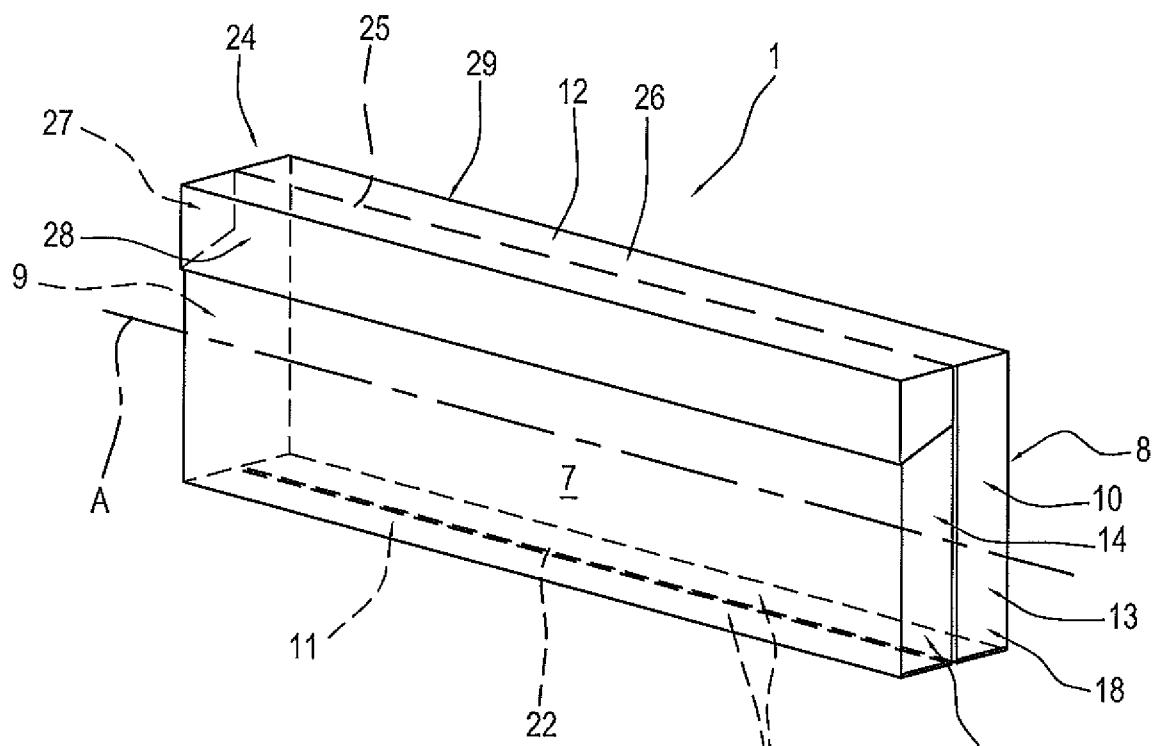
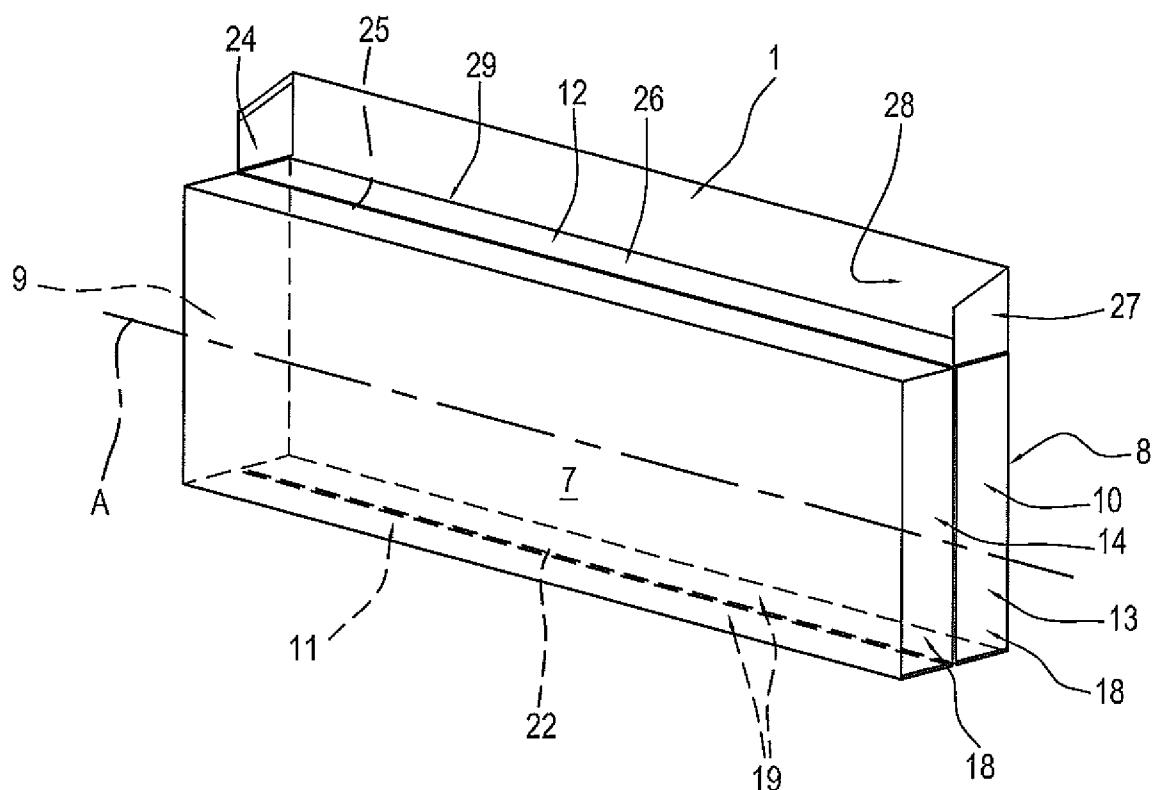
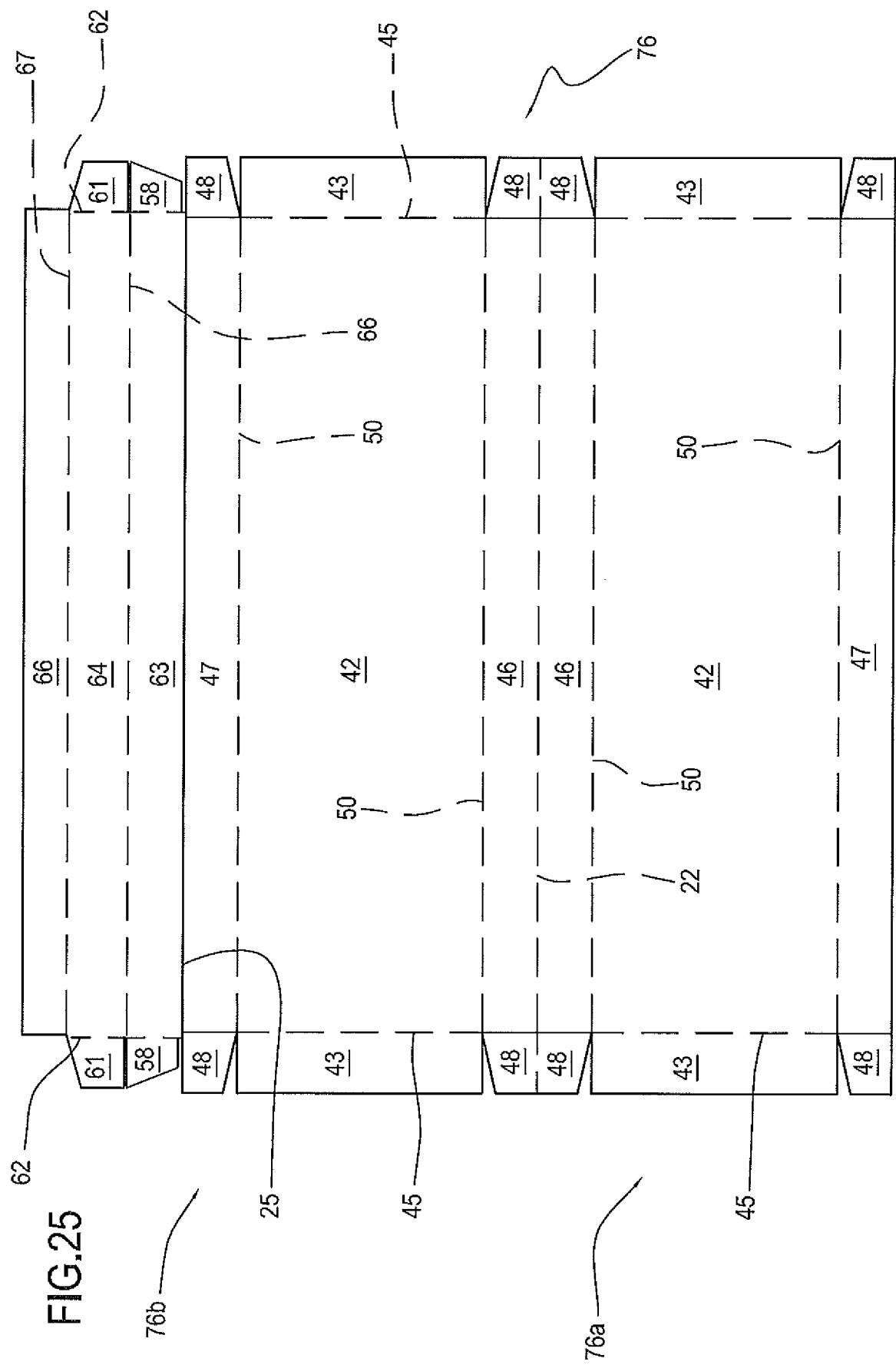


FIG.24



14/14



INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2012/051923

A. CLASSIFICATION OF SUBJECT MATTER
INV. B65D5/52 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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2009/021856 A1 (BRITISH AMERICAN TOBACCO LTD [GB]; STEPHENSON DARRYL [GB]; GIBSON PAUL) 19 February 2009 (2009-02-19) page 23, line 17 - page 36, line 22; figures 1-19	1-8, 13-15, 19-25
Y	----- US 2004/118713 A1 (FATH SCOTT A [US] ET AL) 24 June 2004 (2004-06-24) paragraph [0037] - paragraph [0039]; figures 1-12	9,10,16, 17
Y	----- EP 0 884 247 A1 (JAPAN TOBACCO INC [JP]) 16 December 1998 (1998-12-16) column 6, line 26 - column 7, line 11; figures 1-7	16,17
	----- -/-	

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	Date of mailing of the international search report
2 July 2012	10/07/2012
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 Grondin, David

INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2012/051923

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2006/067621 A1 (GD SPA [IT]; GHINI MARCO [IT]; POLLONI ROBERTO [IT]; NEGRINI STEFANO [) 29 June 2006 (2006-06-29) page 3, line 9 - page 12, line 30; figures 1-17 -----	1-9,11, 12,18-25
X	US 2 541 258 A (LANE LOUIS I) 13 February 1951 (1951-02-13) column 2, line 2 - column 3, line 20; figures 1-5 -----	1-4,7, 11,18,19

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/IB2012/051923

Patent document cited in search report	Publication date	Patent family member(s)	
		Publication date	
WO 2009021856	A1 19-02-2009	AR 067950 A1 AT 506289 T AU 2008288525 A1 EP 2200908 A1 JP 4909436 B2 JP 2010536663 A KR 20100044894 A RU 2010109448 A TW 200938104 A WO 2009021856 A1 ZA 201000755 A	28-10-2009 15-05-2011 19-02-2009 30-06-2010 04-04-2012 02-12-2010 30-04-2010 27-09-2011 16-09-2009 19-02-2009 27-10-2010
US 2004118713	A1 24-06-2004	AU 2003299739 A1 US 2004118713 A1 WO 2004056663 A2	14-07-2004 24-06-2004 08-07-2004
EP 0884247	A1 16-12-1998	CN 1206384 A DE 69719960 D1 DE 69719960 T2 EP 0884247 A1 JP 10129656 A US 6105856 A WO 9818683 A1	27-01-1999 24-04-2003 04-12-2003 16-12-1998 19-05-1998 22-08-2000 07-05-1998
WO 2006067621	A1 29-06-2006	AT 457278 T EP 1838599 A1 JP 2008525279 A KR 20070086612 A US 2008047852 A1 WO 2006067621 A1	15-02-2010 03-10-2007 17-07-2008 27-08-2007 28-02-2008 29-06-2006
US 2541258	A 13-02-1951	NONE	