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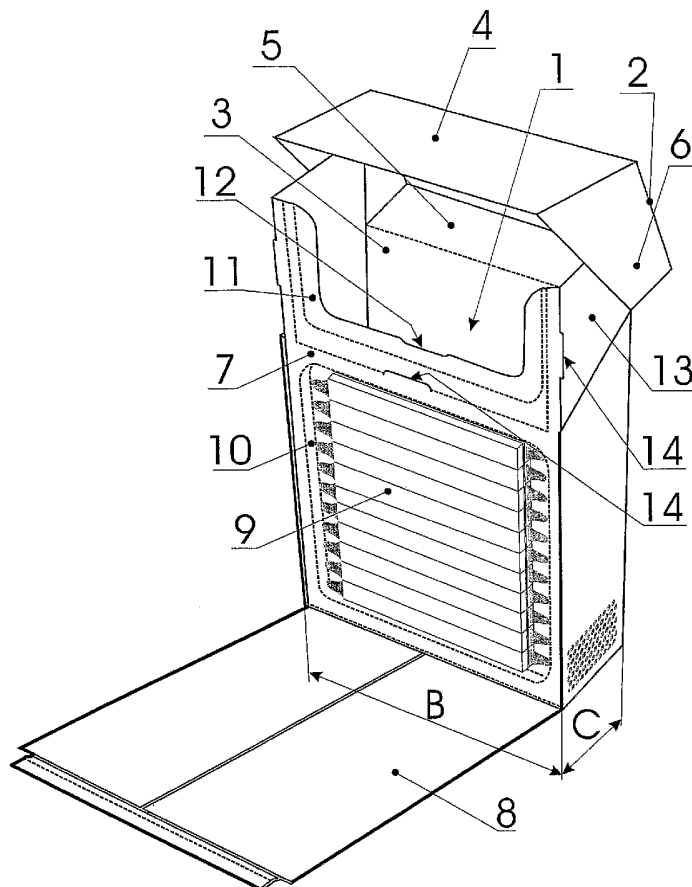
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[Continued on next page]

(54) Title: CIGARETTE BOX AND ITS PASS



(57) Abstract: A cigarette box with a hinged lid and a blank therefore make the subject matter of the invention. The cigarette box of the invention has a hinged lid and the shape of a rectangular prism. It is formed of a storage part (1) intended to accommodate cigarettes in it and a hinged lid (2) connected with a storage part (1) by means of an articulated joint (3) located on the rear wall (4). The front wall (5) of the lid (2) is longer than its rear wall (4), whereas the side walls (6) of the lid (2) are oblique. The storage part (1) is provided with an additional inside front wall (7) and the outside front wall (8) of the storage part (1) is hinged. Between the hinged front wall (8) and the inside front wall (7) there is an additional storage space for matches (9). The depth of the box (C) is 0.43 - 0.52 of the width (B) of the box and the inside front wall (7) has two overpresses (10, 11) oriented towards the box interior, whereas the outside front wall (8) has a narrowed end and is bent to the box interior.

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- with amended claims

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Cigarette box and its pass

A cigarette box with a hinged lid and its pass makes the subject matter of the invention.

A cigarette box and its pass as presented in the description of the invention filed under the number P-355833 is known. The box has the shape of a rectangular prism and a hinged lid. It is formed of a storage part intended to accommodate cigarettes in it and a hinged lid connected with the storage part using an articulated joint located on the rear wall, whereas the front wall of the lid is longer than its longer wall, on the other hand, the side walls of the lid are oblique. The box is characterized by the storage part being provided with an additional inside front wall and the outside front wall of the storage part being hinged, whereas between the hinged front inside wall and the inside front wall there is a storage space. Matches are placed in the storage space. The hinged outside wall has a fixing means at the edge. The inside front wall has a fixing means at the edge. The hinged outside front wall has an edge located under the lid edge. The inside front wall has lateral inside walls fixed to the edge. The inside front wall has the lateral inside walls as well as corner walls fixed to the edge. Matches are positioned along the box. Matches are situated crosswise to the box. Matches are fixed to the hinged front wall. Matches are fixed to the inside front wall.

The cigarette box of the invention has a hinged lid and the shape of a rectangular prism. It is formed of a storage part intended to accommodate cigarettes in it and a hinged lid connected with the storage part using an articulated joint located on the rear wall, whereas the front wall of the lid is longer than its rear wall, on the other hand, the side walls of the lid are oblique. On the other hand, the storage part is provided with an additional inside front wall and the outside front wall of the storage part is hinged. Between the hinged front wall and the inside front wall there is a storage space. The box is characterized by the box depth being 0.43 – 0.52 of the width of the box and the inside front wall having two overpresses oriented to the box interior, whereas the outside front wall has a narrowed end and is bent to the box interior. The lower overpress of the front wall forms a storage space. Placed in the

storage space are matches, the matches being situated along and across the box. Matches are fixed to the hinged front wall. Matches are fixed to the inside front wall.

A pass to obtain a cigarette box with a hinged lid having the shape of a rectangular prism, formed of a storage part intended to accommodate cigarettes in it and a hinged lid located on the rear wall, whereas the front wall is longer than its rear wall, on the other hand, the side walls of the lid are oblique, whereas within the area of the longitudinally spread pass of this box the walls of lid are situated: front, top and rear walls with the side walls connected to them, and adjacent to the walls of the lid is the rear wall of the storage part the bottom wall with the side walls connected to it, whereas adjacent to the rear wall is the wall of the bottom, whereas adjacent to it is the front wall of the storage part, characterized by the width of the side walls being 0.43 – 0.52 of the width of the front wall of the box and having an additional pass of the internal part formed of the front wall and of the lateral walls and the wall of the bottom adjacent to it. The front wall of the box has additional side walls, whereas the length of the side walls is lower than that of the front wall. The side walls of the box are provided with additional walls connected with the side walls by one edge. An additional pass of the front wall has in its top part a trapezoid cut-out with rounded corners, whereas the wall of the bottom has a shape that constitutes a mapping of the cut-out in the top part of the front wall. The trapezoid cut-out has in its central part an additional undercut. The joint of the side walls with the front wall has in its upper part a cut. The front wall of the box has in its extension an additional narrow wall.

A cigarette box with a hinged lid, having the shape of a rectangular prism, formed of a storage part intended to accommodate cigarettes in it and a hinged lid connected with the storage part by means of an articulated joint located on the rear wall, whereas the front wall of the lid is longer than its rear wall, on the other hand, the side walls of the lid are oblique, on the other hand, the storage part is provided with an additional inside front wall and the outside front wall of the storage part is hinged, whereas between the hinged front wall and the inside front wall there is a storage space, characterized by the depth of the box being increased by the magnitude $10 > X > 0.1 \text{ mm}$ – of the storage space for matches, where this magnitude satisfies the dependency $B : A = B : (C - X)$, where
B – width of the box

A – depth of the box to date

C- increased depth of the box

X – storage space for matches,

and the inside front wall has two overpresses oriented towards the box interior, whereas the outside front wall has a narrowed end and is bent to the box interior.

The cigarette box of the invention is characterized by a simple construction and it fulfils, at the same time, two essential functions: it accommodates cigarettes in it and it provides an additional storage space for matches necessary to use those cigarettes, or other objects. This has been achieved as a result of the use of additional elements of the package intended for and making it possible to store matches in it. Besides, the construction of the addition element of the package protects it against the opening by unauthorized persons. The opening of the element of the package that contains matches is possible only in case of opening the cigarette box.

The cigarette box of the invention is explained in more details following an example of its execution as well as in the figure, in which fig.1 presents the box in axonometric view, fig.2 shows the pass of the outside shell of the box, whereas fig.3 and fig.4 are projections of the pass of the inside front wall of the box along with the adjacent walls.

As presented in fig.1 – fig.4, the cigarette box of the invention has the shape of a rectangular prism. It is formed of a storage part 1 intended to accommodate cigarettes in it and a hinged lid 2 connected with the storage part 1 by means of an articulated joint 3 located on the rear wall 4. The front wall 5 of the lid 2 is longer than its rear wall 4, whereas the side walls 6 of the lid 2 are oblique. On the other hand, the storage part 1 is provided with an additional front wall 7 and the outside front wall 8 of the storage part 1 is hinged. Between the hinged front wall 8 and the inside front wall 7 there is an additional storage space for matches 9. The depth of the box C is 0.43 – 0.52 of the width B of the box. The inside front wall 7 has two overpresses 10 and 11 oriented towards the box interior. The outside front wall 8 has a narrowed end and is bent to the box interior. The lower overpress 10 of the inside front wall 7 forms a storage part intended to accommodate matches in it 9. Matches 9 are situated along and across the box. Matches 9 can be fixed to the

hinged front wall 8 or to the inside front wall 7. The inside front wall 7 has in its upper part a trapezoid cut-out with rounded corners, which has in its central part an additional undercut 12 and the joint of the inside front wall 7 with the lateral inside walls 13 adjacent to them has in its upper part cuts 14. The same cut is made in the middle of the line of the upper overpress 11.

A pass to obtain a cigarette box with a hinged lid having the shape of a rectangular prism, in form of all the elements of this box being longitudinally spread, is made up of:

- a lid 2, which has the walls: front 4, top 15 and rear 5 walls and side walls 6 connected with them,
- a rear wall 16 of the storage part 1 along with the side walls 17 connected to it,
- a bottom 18,
- an outside front wall 8, which has additional side walls 19, whereas the length of the side wall is lower than the length of the front wall 8 and, besides, the outside front wall is ended up with a narrowing 21.

Both the walls of the lid 2 and the side walls 17 and the outside front wall 8 have additional walls connected with them by means of an articulated joint for the purpose of their bending and the strengthening, at the same time, of individual walls, thus of the construction of the box.

The pass of the inside part of the box is presented in fig.3 and fig.4 and it is formed of the inside front wall 7, inside lateral walls 13 adjacent to it and an inside bottom 20.

This invention is not limited to the example of the box shapes as presented in the figure and it is not limited to the examples of the pass as presented in the figure.

Patent claims

1. A cigarette box with a hinged lid, having the shape of a rectangular prism, formed of a storage part intended to accommodate cigarettes in it and a hinged lid connected with the storage part by means of an articulated joint located on the rear wall, whereas the front wall of the lid is longer than its rear wall, on the other hand, the side walls of the lid are oblique, whereas the storage part is provided with an additional front wall and the outside front wall of the storage part is hinged, whereas between the hinged front wall and the inside front wall there is an additional storage space for matches, characterized in that the depth of the box (C) is 0.43 – 0.49 of the width (B) of the box and the inside front wall (7) has two overpresses (10,11) oriented towards the box interior, whereas the outside front wall (8) has a narrowed end (21) and is bent into the box interior,
2. A box of claim 1, characterized in that the lower overpress (10) of the inside front wall (7) forms a storage part,
3. A box of claim 2, characterized in that in the storage part placed are matches (9), whereas the matches (9) are located along or across the box,
4. A box of claim 3, characterized in that the matches (9) are fixed to the hinged front wall (8),
5. A box of claim 3, characterized in that the matches (9) are fixed to the inside front wall (7),
6. A pass to obtain a cigarette box with a hinged lid, having the shape of a rectangular prism, formed of a storage part intended to accommodate cigarettes in it and a hinged lid connected with the storage part by means of an articulated joint located on the rear wall, whereas the front wall of the lid is longer than its rear wall, on the other hand, the side walls of the wall are oblique, whereas within the area of the longitudinally spread pass of this box the lid walls are located: front, top and rear walls with the side walls connected to them, and adjacent to the lid walls is the rear wall of the storage part along with the side walls connected to it, on the other hand, adjacent to the rear wall is the bottom wall, whereas adjacent to it is the front wall of the storage part, characterized in that the width (C) of the side walls (17) is 0.43 – 0.52 of the width (B) of the front wall (8) of the box and it has an additional pass of

the inside part formed of the inside front wall (7) and the side walls (13) and the bottom wall (20) adjacent to it,

7. A pass of claim 6, characterized in that the front wall (8) of the box has additional side walls (19), whereas the length of the side walls (19) is lower than the length of the front wall (8),

8. A pass of claim 6, characterized in that the side walls (17) of the box are provided with additional walls connected with the side walls (17) by one edge,

9. A pass of claim 6, characterized in that the additional pass of the internal part has a front wall (7), which, in its top part, has a trapezoid cut-out with rounded corners, whereas the wall of the bottom (20) has a shape that constitutes a mapping of the cut-out in the top part of the front wall (7),

10. A cut-out of claim 9, characterized in that the trapezoid cut-out has an additional undercut (12) in its central part,

11. A cut-out of claim 9, characterized in that the joint of the side walls (13) with the front wall (7) has a cut (14) in its upper part, besides, the cut (14) is made close to the edge of the overpress (11),

12. A cut-out of claim 6, characterized in that the front wall (8) of the box has an additional narrow wall (21) on its extension.

13. A cigarette box, with a hinged lid, of the shape of a rectangular prism, formed of a storage part intended to accommodate cigarettes in it and a hinged lid connected with the storage part by means of an articulated joint located on the rear wall, whereas the front wall of the lid is longer than its rear wall, on the other hand, the side walls of the lid are oblique and the storage part is provided with an additional inside front wall and the outside front wall of the storage part is hinged, whereas between the hinged front wall and the inside front wall there is an additional storage space for matches, characterized in that the depth (C) of the box is increased by the magnitude $10 > X > 0.1 \text{ mm}$ – of the storage space for matches, where this magnitude satisfies the dependency $\underline{B} : A = \underline{B} : (\underline{C} - X)$, where:

B – width of the box

A – depth of the box to date

C - increased depth of the box

X – storage space for matches

and the inside front wall (7) has two overpresses (10, 11) oriented towards the box interior, whereas the outside front wall (8) has a narrowed end and is bent to the box interior.

AMENDED CLAIMS

received by the International Bureau on 12 April 2005 : original claims 1-13 have been replaced by amended claims 1-8.

1. A cigarette box with hinged lid of a rectangular prism shape, formed of a storage part adapted to accommodate cigarettes within and a hinged lid connected with the said storage part by means of an articulated joint placed on the rear wall, whereat the front wall of the lid is longer than its rear wall, and the side walls are oblique, whereas the storage part is provided with an additional inside front wall and the outside front wall of the storage part is hinged; and between the hinged front wall and the inside front wall there is an additional compartment for matches, while the outside front wall has a narrowed end folded under into the direction of the box interior; said cigarette box, characterized in that, the depth of the box (C) is 0,43 – 0,49 of the width (B) of the box and the inside front wall (7) has two extrusion ridges (10,11) oriented towards the box interior whereas the bottom extrusion ridge (10) of the inside front wall (7) forms a storage space, while the narrowed end of the outside front wall (8) is formed of a double folded layer and the remaining part of the front wall (8) is double and is formed of bent side walls (19),
2. A box as claimed in claim 1, characterized in that, the matches placed within the storage space (9) are installed crosswise,
3. A box as claimed in claim 2, characterized in that, the matches (9) installed crosswise within the storage space are arranged in two layers, said both layers of the matches (9) having match heads uncovered.
4. A blank to obtain said cigarette box with a hinged lid in the shape of a rectangular prism, formed of a storage part adapted to accommodate a plurality of cigarettes within and a hinged lid connected with the said storage part by means of an articulated joint, the front wall of said lid being longer than its rear

wall, and the side walls being oblique, whereat within the space of the longitudinally spread blank of the box the following walls are situated: front, upper and bottom with side walls attached thereto, whereas the lid walls, rear storage space wall together with attached thereto side walls are adjacent, and the rear wall adjoins the bottom wall; said blank, characterized in that, the width (C) of the side walls (17) is 0,43 – 0,49 of the width (B) of the front wall (8) of the box and has an additional cut-out pattern of the inside part formed of the inside front wall (7) and the adjacent side walls (13) and the bottom wall (20), while the front wall (8) of the box has additional side walls (19), whereat the length of said side walls (19) is shorter than the length of the front wall (8) and their width is approximately half of the width of the front wall (8),

5. A blank as claimed in claim 4, characterized in that, the side walls (17) of the box are provided with additional walls conjoined with said side walls (17) by means of a single edge,

6. A blank as claimed in claim 4 characterized in that, the bottom wall (20) is of the shape imitating the cut-out in the upper part of the front wall (7),

7. A blank as claimed in claim 4, characterized in that, the trapezoidal cut-out in the inside front wall (7) has in its central part an additional undercutting (12).

8. A cigarette box with hinged lid of a rectangular prism shape, formed of a storage part adapted to accommodate cigarettes within and a hinged lid connected with said storage part by means of an articulated joint located on the rear wall, where the front wall of the lid is longer than its rear wall, and the side walls are oblique, whereat said storage part is provided with an additional inside front wall, whereas the outside front wall of the storage part is hinged, and between the hinged front wall and the inside front wall there is an additional compartment for matches; said cigarette box, characterized in that, the depth of the box (C) is increased by the magnitude of $10 > X > 0,1$ mm. – of the storage space for matches, where said magnitude fulfills dependence of $B : A = B : (C - X)$ where;

B – width of the box

A – former depth of the box

C – increased depth of the box

X – storage space for matches

and at the same time the inside front wall (7) has two extrusion ridges (10,11) oriented towards the box interior.

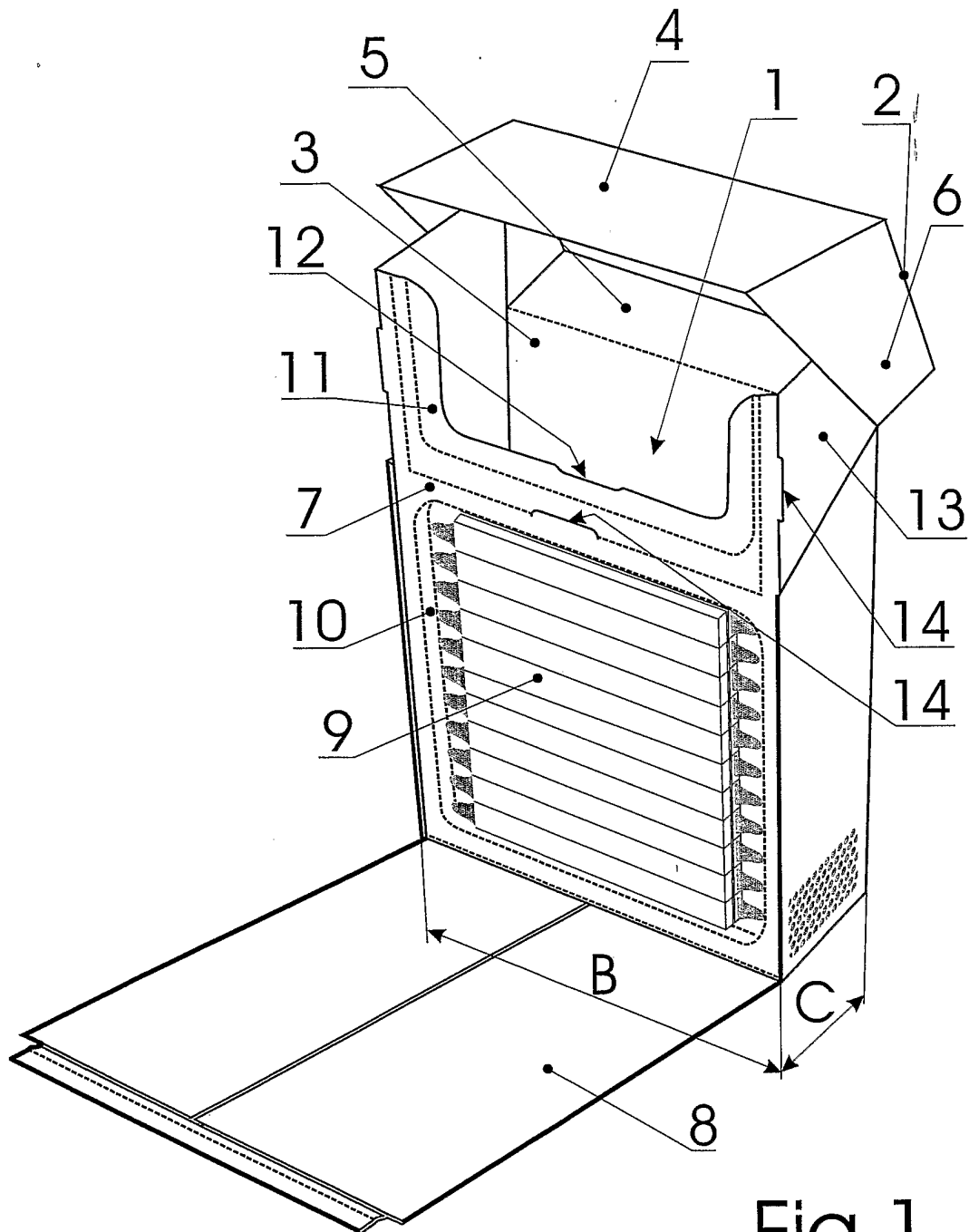
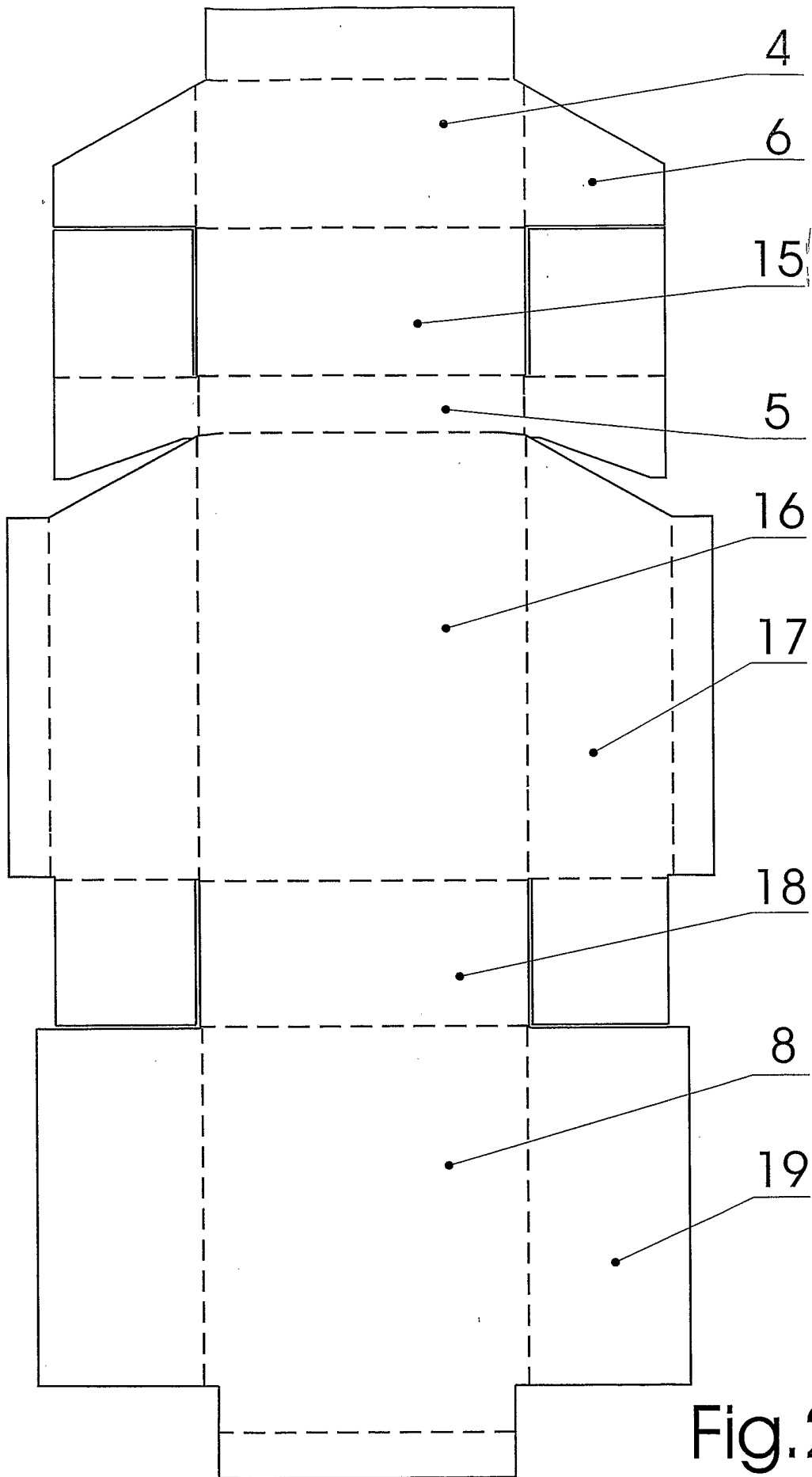


Fig. 1



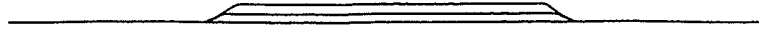


Fig. 3

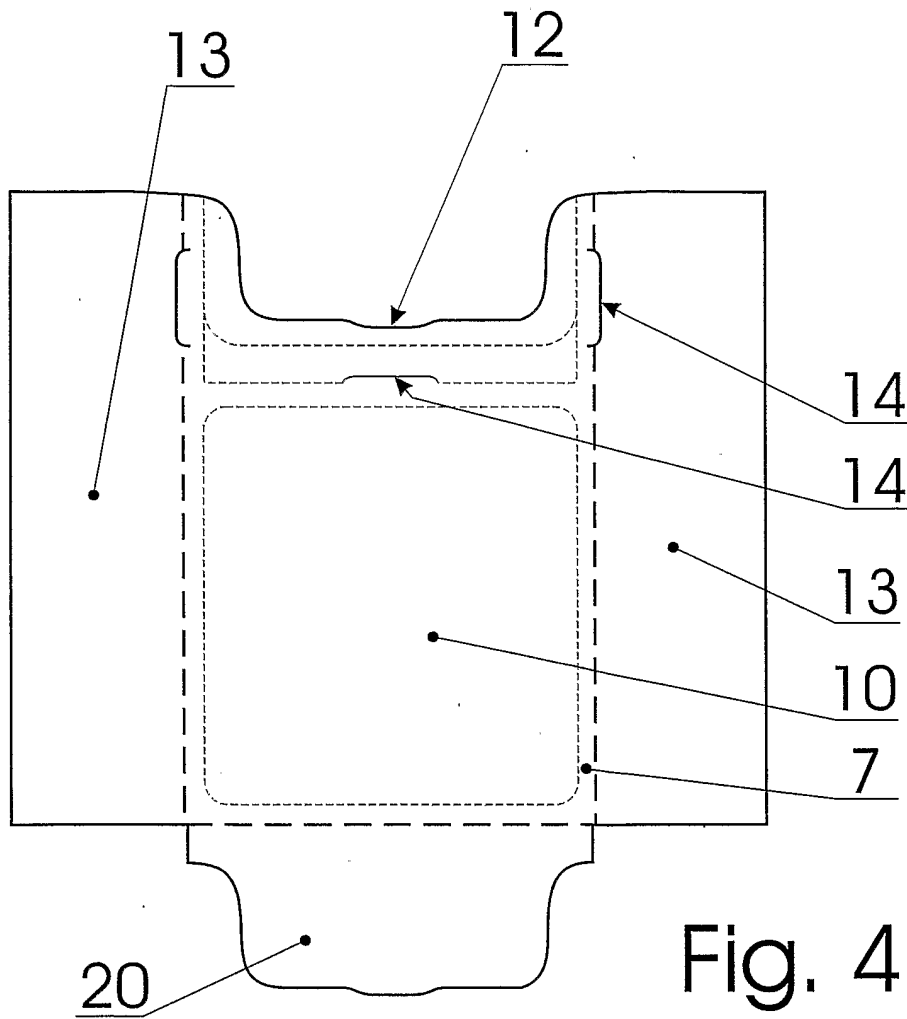


Fig. 4

INTERNATIONAL SEARCH REPORT

International Application No
PC1/PL2004/000074

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B65D85/10

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

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 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 practical, 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	US 3 011 630 A (LUBASH ARNOLD C) 5 December 1961 (1961-12-05)	1-3,5
Y	column 1, lines 34-40; figures 1-8 column 2, line 31 - column 3, line 55	4,6,7,9, 11-13
Y	AU 83630 75 A (KEEYS C J) 10 February 1977 (1977-02-10) page 5, lines 6-14; figure 2	4
Y	US 4 989 728 A (NEYRET STEPHANE ET AL) 5 February 1991 (1991-02-05) figures 1,2	6,7,9,12
Y	GB 2 256 425 A (TAYLOWE LTD) 9 December 1992 (1992-12-09) page 11, lines 22-26; figure 1	11
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Further documents are listed in the continuation of box C. Patent family members are listed in annex.

° Special categories of cited documents :

A document defining the general state of the art which is not considered to be of particular relevance	*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
E earlier document but published on or after the international filing date	*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
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)	*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.
O document referring to an oral disclosure, use, exhibition or other means	*Z* document member of the same patent family
P document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search 11 January 2005	Date of mailing of the international search report 18/01/2005
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Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Jervelund, N
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INTERNATIONAL SEARCH REPORT

International Application No
PCT/PL2004/000074

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6 644 470 B1 (GRAYSON LIBERTY) 11 November 2003 (2003-11-11) column 4, lines 8-23; figure 8 -----	13
A	US 2 894 619 A (ALFREDO GALLO) 14 July 1959 (1959-07-14) the whole document -----	1-13
A	DE 73 08 269 U (PRAHL WALTER) 14 June 1973 (1973-06-14) figure 1 -----	1-13

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
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