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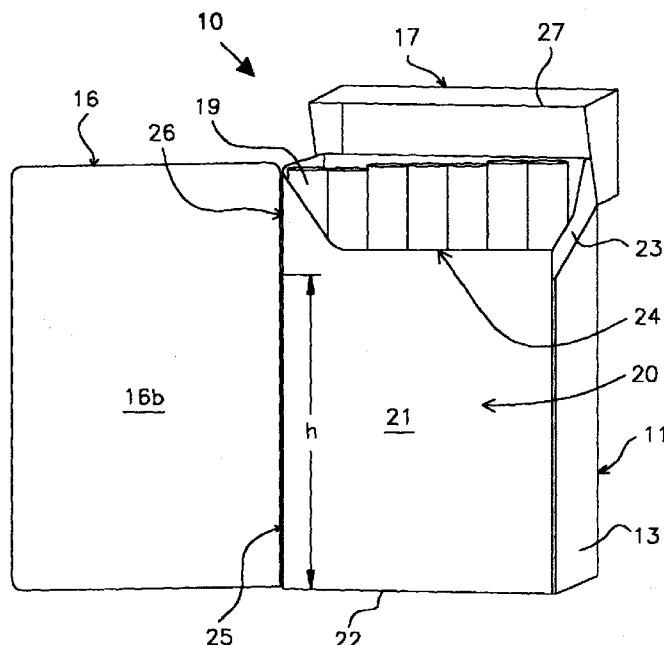
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(54) Title: HINGED-LID PACKET MADE OF THIN CARDBOARD



(57) Abstract: To provide a hinged-lid packet, in particular for cigarettes, which has additional information area while still being essentially in the same standard shape in closed condition, the invention suggests such a packet or box to have with an additional front panel (16) with branding areas, said front panel (16) being hinged to a side wall of an outer box (11) and being movable between an abutment position at a front panel (21) of an inner box (20) and a swung up or opened position remote from said abutment position.

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HINGED-LID PACKET MADE OF THIN CARDBOARD

The invention relates to a hinged-lid packet made of thin cardboard comprising an open inner box and an outer box with a hinged lid.

Hinged-lid cigarette packets are extremely well-known. They are relatively small and follow in their shape essentially the size of the cigarettes contained therein. The visible exterior surfaces are usually needed for brand-identifying information, contents specification, bar codes, etc. However, due to mandatory health warning labels, the area on the outside of the packet for branding is substantially reduced.

To provide a cigarette packet having additional surface areas which can be used for a coupon or other information, US 5,160,024 discloses a box-like stiff cigarette packet in which a stiff outer member has an extension above the normal front wall. This extension continues up to and over the tops of the cigarettes in the box when the lid is first opened. The extension is joined to the outer member front wall along a line which is deliberately weakened to facilitate removal of the extension by tearing or separating along this line, and any desired information can be printed on either one or both sides of this extension. However, this extension is too small to compensate for impact lost through mandatory health warning labels.

It is therefore an object of this invention to provide a hinged-lid packet, in particular for cigarettes, which

presents additional information areas while still being essentially in the same standard shape in a closed condition. According to the invention, this object is accomplished by a hinged-lid packet comprising features of claim 1.

Further advantageous embodiments of claim 1 are characterized in dependent claims, respectively.

Accordingly, the invention provides a hinged-lid packet or box made of a thin cardboard, in particular for cigarettes, comprising an inner box and an outer box. The inner box is closed except for an upper opening for taking out cigarettes. The outer box comprises a bottom wall, two opposite side walls and a back wall which are fastened at the corresponding walls of the inner box. Further, the outer box comprises a front wall or front panel which is hinged at a side wall of the outer box and is adapted to be moved between an abutment position at the front panel of the inner box and a position swung away from said abutment position. In addition to the front panel of the inner box, the surface of the front wall of the outer box is also provided for branding, both at its outside and its inside. In the upper portion of the back wall of the outer box a hinged-lid is provided for closing the upper opening of the inner box, said lid being adapted to be closed both in the abutment position of the front wall of the outer box and in the swung up position thereof.

Advantageously, the information or branding area is increased to compensate for impact lost through mandatory health warning labels and to provide additional branding area, which may carry main branding. It can also comprise an area to note messages which are invisible if the front wall of the outer box is in abutment with the front wall of the inner box.

According to a further embodiment of the invention, the hinge of the front wall of the outer box is provided by the cardboard material and is located below the closing position or the lower end of the hinged lid. This provides advantageously the additional feature that the hinge lid can be closed in the remaining slot while the front wall of the outer box is not in its abutment position. This is advantageous for example by presenting a major branding area while the cigarette box is closed. At the same time, the front wall of the outer box can add to a stable standing of the hinged-lid packet.

According to a preferred further embodiment of the invention, the depth of the hinged-lid is greater than the depth of the bottom wall of the outer box by the width of the cardboard. Due to this design, the hinged lid stays tightly in its closing position, both without abutment of the front panel of the outer box and with abutted front panel of the outer box, thereby acting also as an interference fit device.

According to a further embodiment of the invention, the height of the front panel of the outer box is lower than the height of the back wall of the inner box. Advantageously, this allows the lid to slide over the abutted front panel and to be kept tightly in its closed position due to the slight pressing action exerted by the front panel of the outer box on the inner side of the lid.

To provide sufficient stability of the front panel of the outer box to perform its opening and closing function and to be tightly held in its closed position, the front panel is preferably formed as a double wall.

According to a further embodiment of the invention, the opening of the inner box in the upper portion is increased at its front panel and one side wall, which is opposite the side wall having the front panel of the outer box hinged thereto, to allow easy access to the first cigarette, said opening also being closed in the closed position of the hinged-lid.

Further features of the invention, its nature and various advantageous modifications will be more apparent from the accompanying drawings and the following detailed description of a preferred embodiment. The drawings show in:

- Fig. 1 a perspective view of a hinged-lid box according to the invention in its closed condition;
- Fig. 2 a view of the right side of the hinged-lid box of claim 1;
- Fig. 3 a front view of the hinged-lid box according to Fig. 1;
- Fig. 4 a section along section line A-A in Fig. 3;
- Fig. 5 a perspective view of the hinged-lid box according to Fig. 1, however with an opened lid;
- Fig. 6 a perspective view of the hinged-lid box of Fig. 5, however with opened front panel to reveal communication;

Fig. 7 a side view on the right side of the hinged-lid box according to Fig. 6, however with a closed lid and open front panel; and

Fig. 8 a section along B-B in Fig. 3, however with an opened lid.

Figs. 1 and 2 show a hinged-lid box or packet 10 in its closed condition, wherein an inner box 20 is not accessible. The hinged-lid box 10 comprises an outer box 11 which is formed of a bottom wall 12, two opposite side walls 13, 14 of the same size, a back wall 15, a front panel 16 and a lid 17. The lid 17 which closes the upper portion of the outer box 11 and is hinged to a back wall hinge 18. Both boxes 11, 20 are made of thin cardboard. The hinge 18 is formed by a weakened line of the cardboard and takes advantage of the flexibility thereof.

Fig. 3 shows a front view of the box 10 with a closed lid 17, a lower end 27 thereof being at a height H from the bottom wall 12. The lid 17 covers the upper portion of the front panel 16 with a snug fit.

The section A-A of Fig. 3 is shown in Fig. 4. As apparent from Fig. 4, the box 10 is filled with a stack of cigarettes 19, which are closely arranged in the inner box 20.

Fig. 5 shows the box 10 of Fig. 1, however with the lid 17 open and the front panel 16 still abutting the front panel 21 (Fig. 6) of the inner box 20. The front panel 16 is provided on its entire outside surface with a branding area 16a and on its entire inner surface with a branding area 16b. Further, the front panel 21 of the inner box 20 also presents a branding area.

As seen from Fig. 6, the inner box 20 comprises also a bottom wall 22, two side walls 23 and a back wall 28. The upper portion of the inner box 20 comprises a take out opening 24, which extends with a curve into the upper part of the front panel 21 and the side wall 23, respectively, to provide easy access to the first cigarette.

The front panel 16 is hinged to the front end of the side wall 23 of the outer box 11 by a hinge 25 which is formed by the cardboard itself and its flexibility. The hinge 17 may comprise a weakened line in the material and extends from the bottom wall 12 up to a height h . The height h is smaller than the height H shown in Fig. 3 between the bottom wall 12 and the lower end of the closed lid 17.

Above the hinge 25 is provided a slot 26, into which the lid 17 enters in the closed position of the lid 17, as shown in Fig. 7. Due to the differences of the height H and the height h from the base wall 12, the lower end 27 of the lid 17 does not interfere with the hinge 25 in the closed position of the lid 17.

This allows the closing of the lid 17, even if the front panel 16 is not in abutment with the front panel 21 of the inner box 20, as shown in Fig. 7.

To provide a tight and safe closing of the lid 17, the lid 17 has a depth t , which exceeds a depth T of the bottom wall 12 by the thickness of the cardboard. Further, the height H_B of the back wall 28 of the inner box 20, and all corners of the front panel 16 and of the side walls 23 facing to the front panel 16 are rounded.

Fig. 8 shows a vertical section along the section line B-B in Fig. 3, however with an opened lid 17 and an opened front panel 16. As indicated in the lower left corner of the panel 16, the front panel consists of an outer wall with the surface 16a and an inner wall with the surface 16b.

Claims

1. A hinged-lid packet made of thin cardboard, in particular for cigarettes, comprising an inner box (20) and an outer box (11), said inner box (20) being closed except an upper take out opening (24), said outer box (11) comprising a bottom wall (12), two opposite side walls (13) and a back wall (15) attached to corresponding walls of the inner box (20), as well as a front panel (16) which is hinged to a side wall of the outer box (11) and is adapted to be moved between an abutment position at a front panel (21) of the inner box (20) and a swung up or opened position remote from said abutment position, wherein in addition to the front panel (21) of the inner box (20) also the front panel (16) of the outer box (11) has both its outer face (16a) and its inner face (16b) provided for display of information, and wherein a lid (17) is hinged in the upper portion of the back wall (15) of the outer box (11) for closing the take out opening (24), said lid (17) being adapted to be closed both in the abutment position and in the opened position of the front panel (16) of the outer box (11).
2. The hinged-lid packet according to claim 1, characterized in that the front panel (16) comprises a hinge (25), which ends below a lower end (27) of the lid (17) in the closed position of the lid (17).

3. The hinged-lid packet according to claim 2, characterized in that the hinge (25) is formed by the flexibility of the cardboard material.
4. The hinged-lid packet according to a preceding claim, characterized in that the depth (t) of the lid (17) exceeds the depth (T) of the bottom wall (12) of the outer box (11) by the thickness of the cardboard.
5. The hinged-lid packet according to a preceding claim, characterized in that the height (HP) of the front panel (16) of the outer box (11) is lower than the height (HB) of the back wall (28) of the inner box (20).
6. The hinged-lid packet according to a preceding claim, characterized in that the front panel (16) of the outer box (11) is double-walled.
7. The hinged-lid packet according to a preceding claim, characterized in that the take out opening (24) of the inner box (20) is enlarged in the upper portion of the front wall (21) and a side wall (23) which is opposite to the side wall with the hinge (25), said enlarged take out opening (24) being also covered in the closed position of the lid (17).

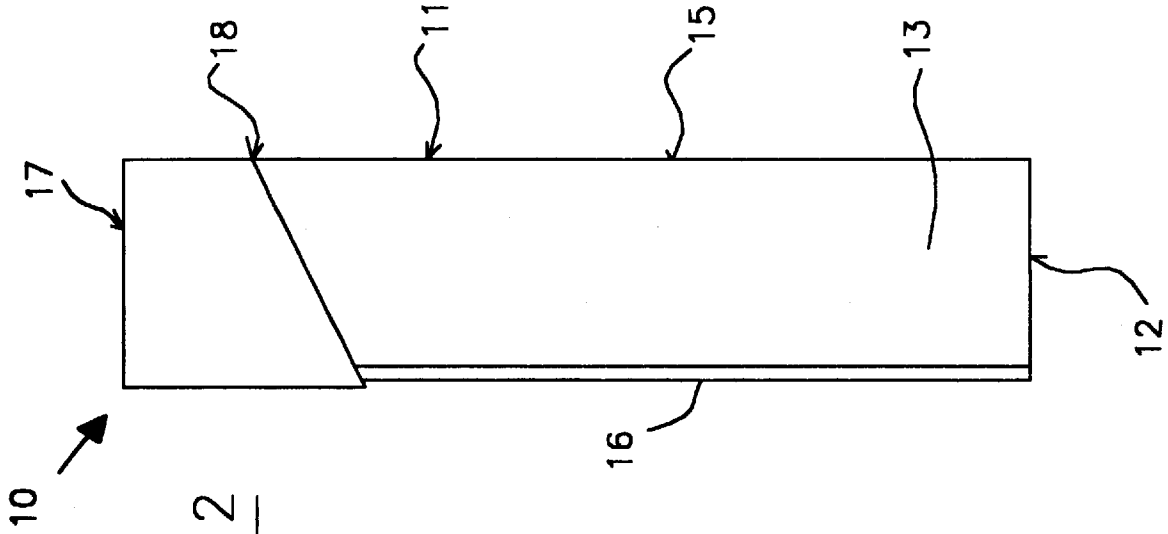


Fig. 2

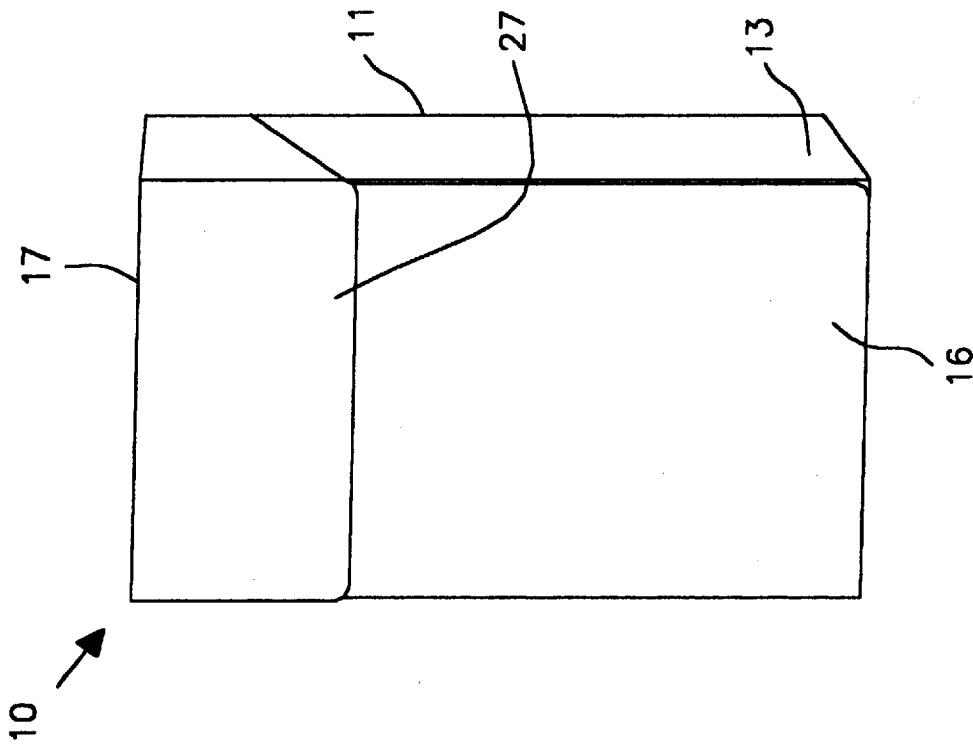


Fig. 1

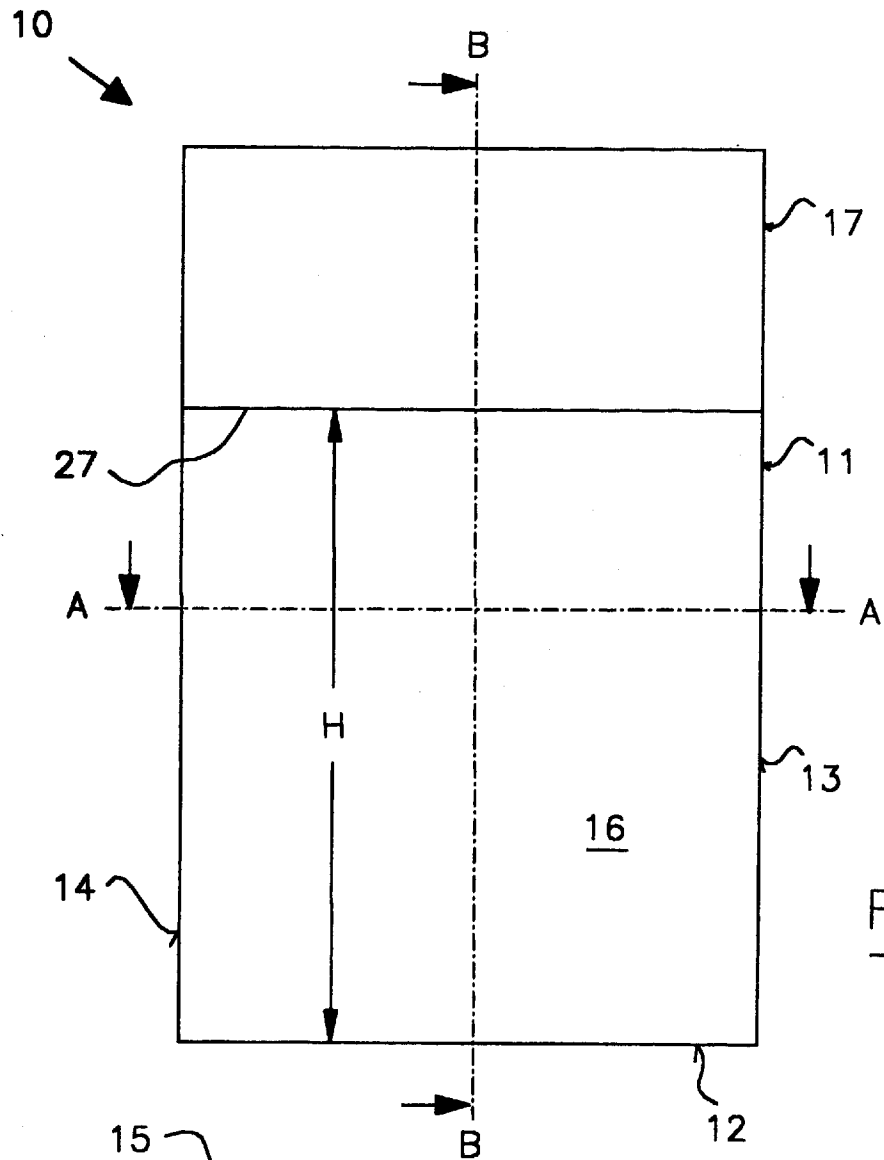


Fig. 3

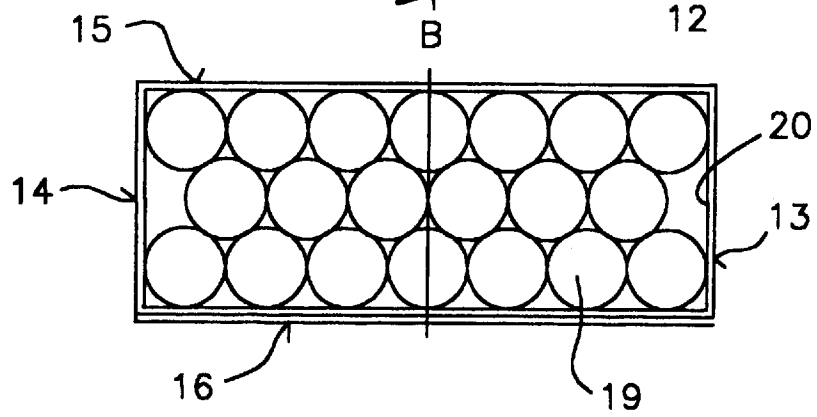


Fig. 4

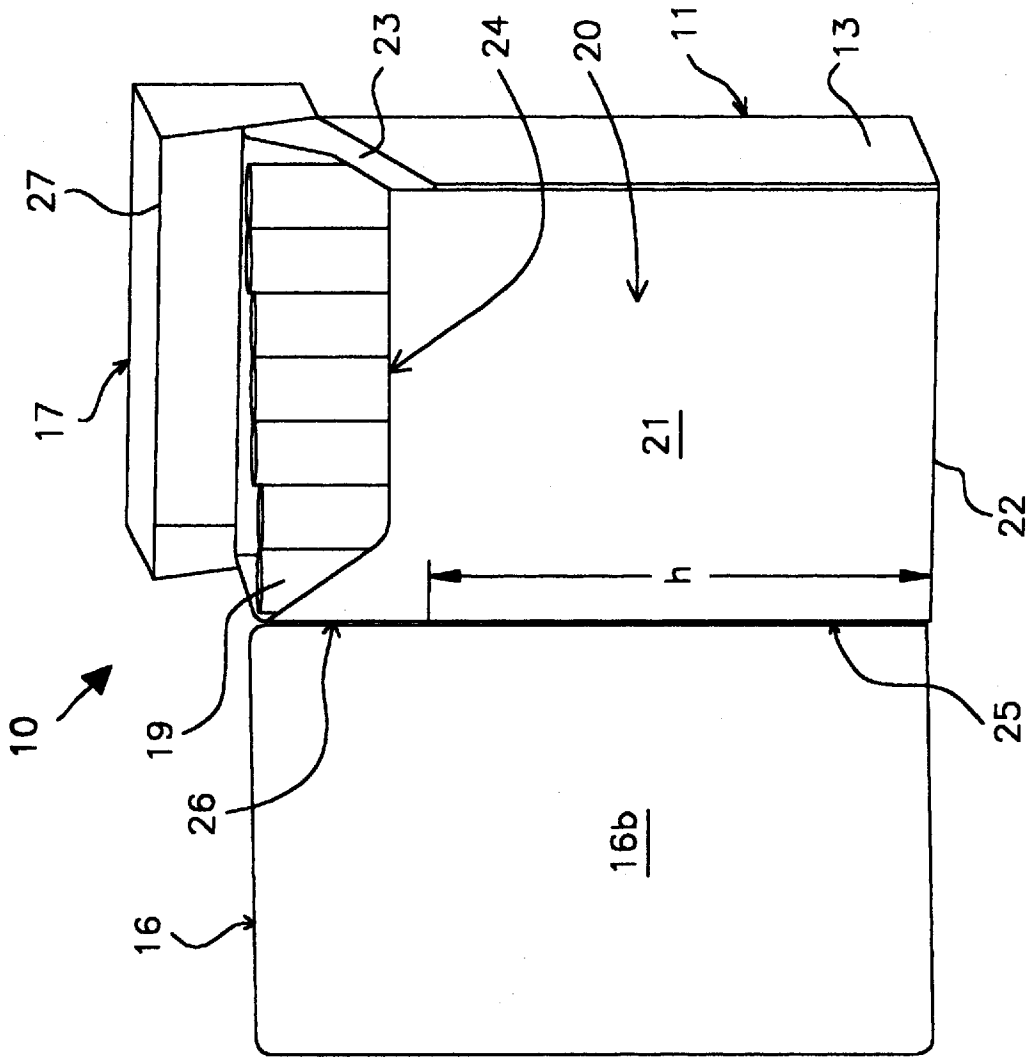


Fig. 5

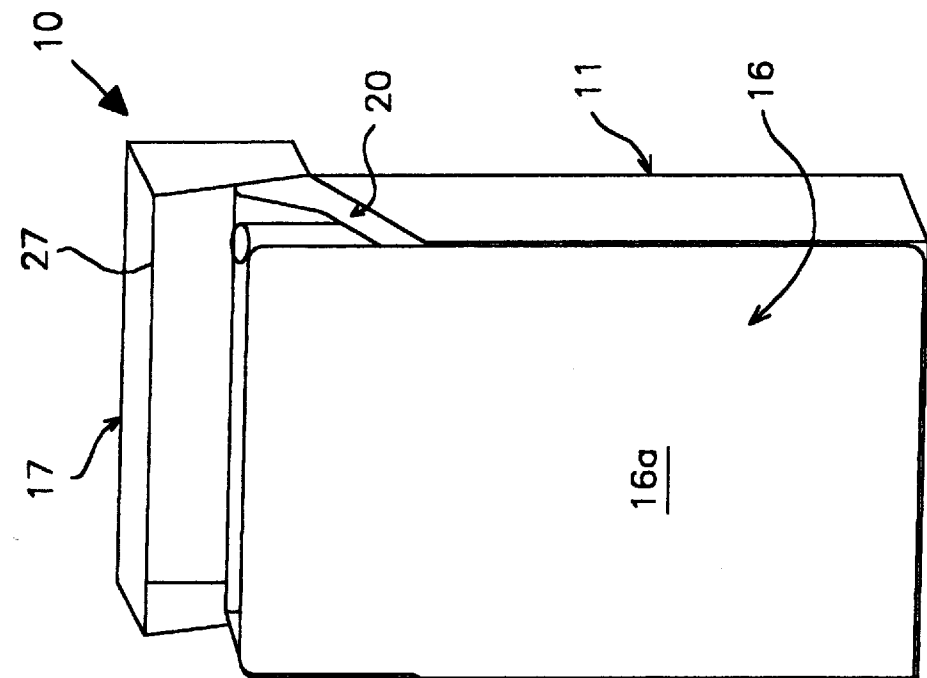


Fig. 6

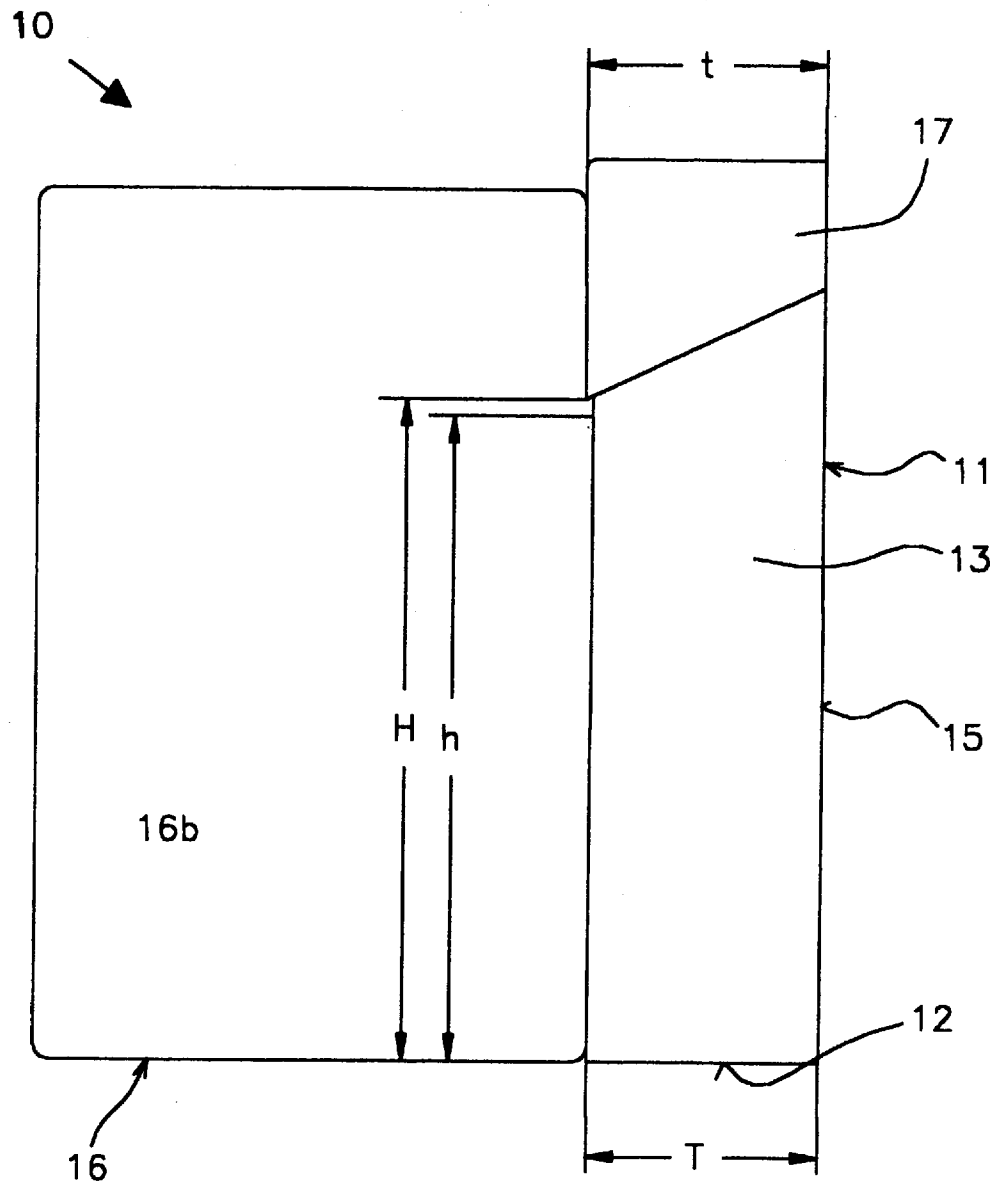


Fig. 7

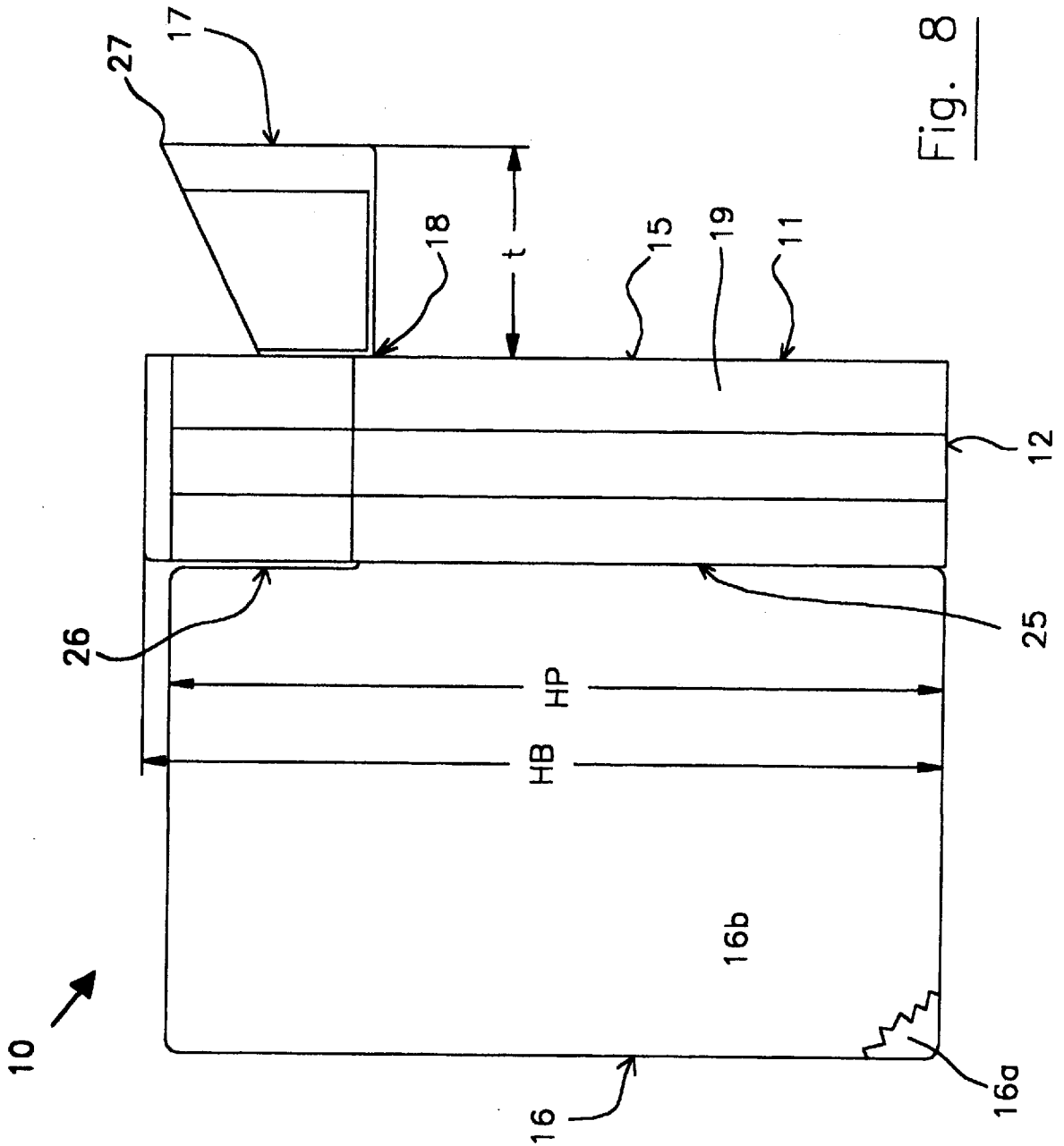


Fig. 8

INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2006/070036

A. CLASSIFICATION OF SUBJECT MATTER INV. B65D5/42 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) 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	EP 1 155 974 A (IMPERIAL TOBACCO LIMITED) 21 November 2001 (2001-11-21) paragraphs [0016], [0018]; figures 8-10,15,16	1,6
X	US 6 786 331 B1 (ZUCCHINI FRANCO) 7 September 2004 (2004-09-07) the whole document	1,6
A	DE 198 14 255 A1 (FOCKE & CO) 7 October 1999 (1999-10-07) the whole document	1-7
A	DE 202 08 729 U1 (CD CARTONDRUCK AG) 22 August 2002 (2002-08-22) the whole document	1-7
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
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Date of the actual completion of the international search <p align="center">26 March 2007</p>		Date of mailing of the international search report <p align="center">02/04/2007</p>
Name and mailing address of the ISA/ European Patent Office, P.B. 5618 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer <p align="center">Pernice, Ciro</p>

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/EP2006/070036

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