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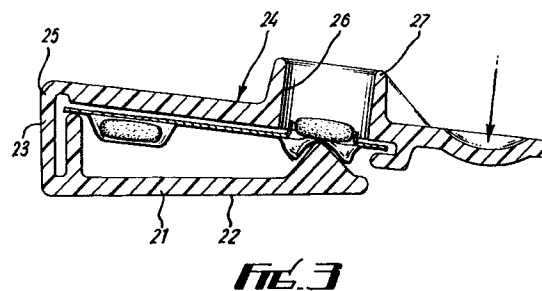
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(54) **Device for pressing objects from blister packs.**

(57) A device 10 for pressing objects 14, for example tablets or capsules, from receptacles 13 in a blister pack has a lower portion 21 for resting on a support and an upper portion 24 hinged at 25 and including a channel 32 for guiding one side of a blister pack which rests on a rib 33. If a tab 28 is pressed down a boss 30 pushes the object through the sheet 11 of the pack into an open-topped receiver section defined by wall 27. The device 10 can then be moved to transfer the object 14 to a user's mouth. The device may be useful for the elderly.



This invention relates to devices for pressing objects from blister packs.

According to this invention a device for pressing an object from a receptacle in a blister pack comprises first and second portions connected for movement towards and away from each other, the first portion including a press member, the second portion comprising a receiver for receiving an object pressed from a receptacle by the press member, the receiver having an inlet for the object and an upwardly facing outlet further from the press member than the inlet.

The receiver may comprise an aperture provided with a peripheral wall extending away from the first and second portions.

The portions may provide guide means for a blister pack.

The guide means may comprise a channel movable with the second portion for receiving an edge of the pack.

The first portion may have a flat surface remote from the second portion for resting on a support surface.

The first and second portions may comprise elongate members hinged at one end, and the second portion includes a press section which can be pressed to move the portions towards each other, the press section being further from the one end than the press member and the receiver.

The invention may be performed in various ways and one specific embodiment with possible modifications will now be described by way of example with reference to the accompanying drawings, in which:

Fig. 1 is a perspective view of a device associated with a blister pack;

Fig. 2 is a section on the line 2 - 2 of Fig. 1; and
Fig. 3 is similar to Fig. 2 but with the device in a different operating condition.

Fig. 4 is a perspective view of another example of a device;

The device 10 is for use in pressing an object from a so-called blister in a blister pack. A blister pack is known and typically is in the form of a flat sheet 11 of deformable material, for example thin metal foil, and another sheet 12, for example of plastics, shaped to provide a plurality of pockets or recesses 13. Objects 14 are placed in the pockets 13, the so-called blisters, and the sheet 11 is placed over the sheet 12 to close the pockets 13 and is adhered to the sheet 12 in the areas 15 between the pockets 13. In the arrangement shown in a pack 18 of objects the pockets 13 form two parallel rows 16, 17 with the pockets 13 equi-spaced in each row.

The objects 14 may for example be pills, tablets or capsules containing medicament e.g. pharmaceutical items.

For someone who is infirm, perhaps as a result of age, or handicapped, it may be difficult to press the outer surface 19 of a blister 13 to cause the object in

that blister to burst through the portion 20 of the sheet 11 which closes that blister, or it may be difficult to manipulate the pack 18 during removal of an object from the pack. The device 10 is intended to assist in such circumstances.

The device 10 may be formed from plastics and includes a flat portion 21 having an underface 22 which may in use rest on a flat surface of a support e.g. a table. At one end of the portion 21 is an upstanding wall 23 from which extends forwardly an upper portion 24. The portion 24 can pivot up and down about its junction 25 with the wall 23 because of the flexibility of the construction in the region of the junction 25.

The portion 24 has an aperture 26 therethrough which is provided with an upstanding peripheral wall 27. Forwards of the wall 27 is a tab portion 28 including a depression 29.

Upstanding from a front region of the portion 21 is a boss 30 generally in the form of an inverted V. An L-shaped rib 31 depends from the portion 24 to define a channel 32 and a flat rib 33 upstands from portion 21 in front of the wall 23.

Opposed side marginal portions 34, 35 of the pack 18 are respectively locatable in the channel 32 and on the rib 33, see Figs. 2, 3.

In use, a pack 18 is inserted into the device, for example from the left in Fig. 1, until a blister 13 is above the boss 30 and the tab portion 28 is then pressed down as indicated by the arrow to cause the boss 30 to press the object 14 in the blister through the sheet 11 closing that blister and into the aperture 26. In the arrangement shown, the boss 30 does not enter the aperture 26. The object can then be removed from the receptance region defined by the wall 27. However preferably in the case of the object being a medicament, it may be transferred to a user's mouth by lifting the device 10 as a whole and allowing the object to fall from inside the wall 27 into a user's mouth. This is of advantage in circumstances if the user is infirm or manually handicapped.

The tab portion may be pressed down by another part of a user, e.g. by an elbow.

Preferably the aperture 26 and wall 27 are such that an object 14 cannot be removed from within the wall 27 using the fingers, particularly a child's fingers. This is a safety feature, particularly if the object 14 is an item containing a medicament.

The channel 32 assists in guiding movement of the pack 18 which can be moved step by step and the device 10 operated to remove successive objects from successive blisters in a row, see Fig. 1. As shown, the pack 18 has two rows of blisters 13 and can be removed from the device, rotated through 180° and reinserted into the device to enable both rows of blisters to be burst.

The portion 21 may include a flat lateral part 50 for engaging a support surface to provide added sta-

bility.

Another example of a device of the invention is shown in figure 4.

Claims

1. A device for pressing an object from a receptacle in a blister pack comprising first and second portions connected for movement towards and away from each other, the first portion including a press member, the second portion comprising a receiver for receiving an object pressed from a receptacle by the press member, the receiver having an inlet for the object and an upwardly facing outlet further from the press member than the inlet. 10 15
2. A device as claimed in Claim 1, in which the receiver comprises an aperture provided with a peripheral wall extending away from the first and second portions. 20
3. A device as claimed in Claim 1 or Claim 2, in which the portions provide guide means for a blister pack. 25
4. A device as claimed in Claim 3, in which the guide means comprises a channel movable with the second portion for receiving an edge of the pack. 30
5. A device as claimed in any preceding claim, in which the first portion has a flat surface remote from the second portion for resting on a support surface. 35
6. A device as claimed in any preceding claim, in which the first and second portions comprise elongate members hinged at one end, and the second portion includes a press section which can be pressed to move the portions towards each other, the press section being further from the one end than the press member and the receiver. 40 45
7. A device for pressing an object from a receptacle in a blister pack substantially as hereinbefore described with reference to and as shown in the accompanying drawings. 50

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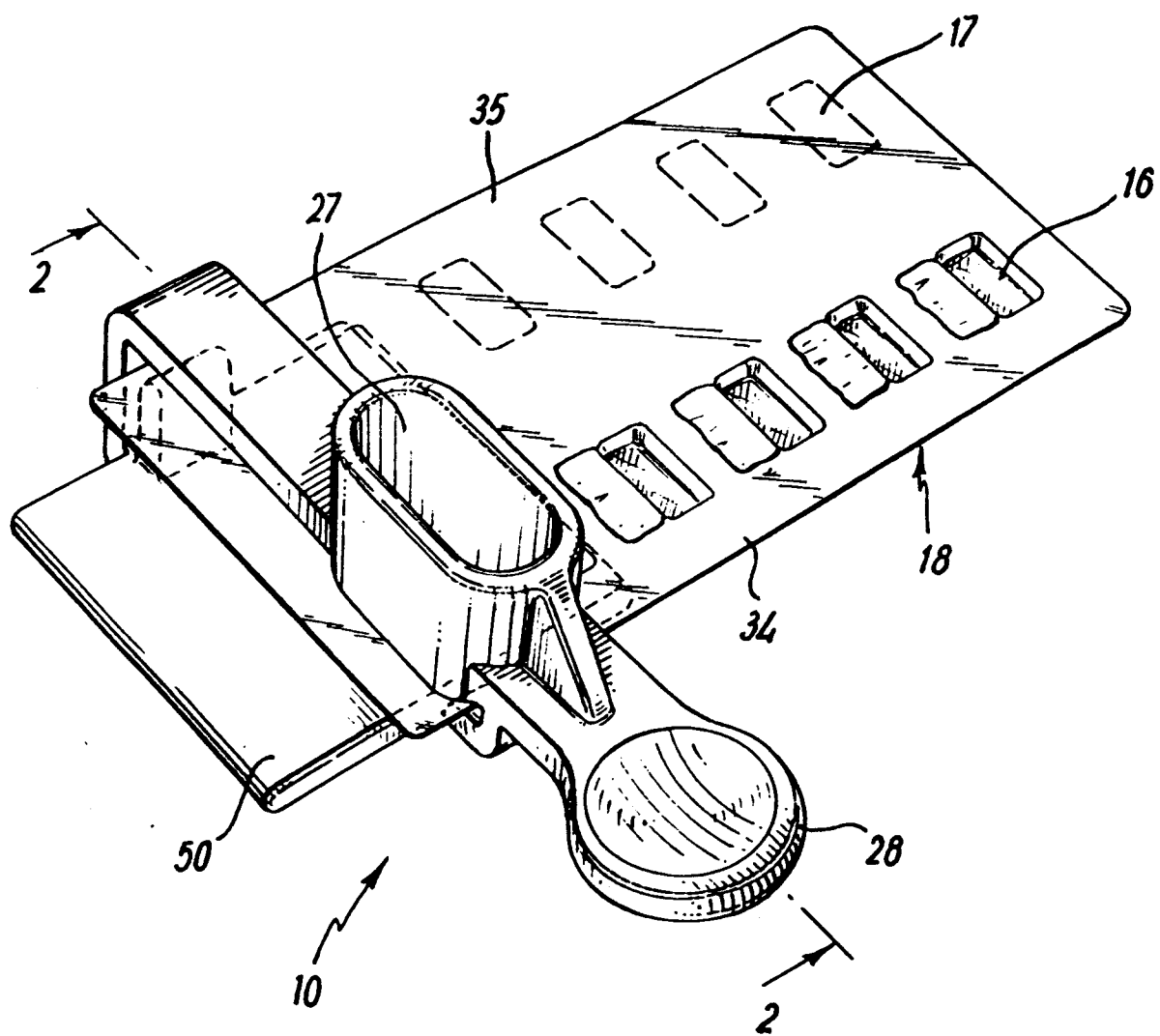


FIG. 1

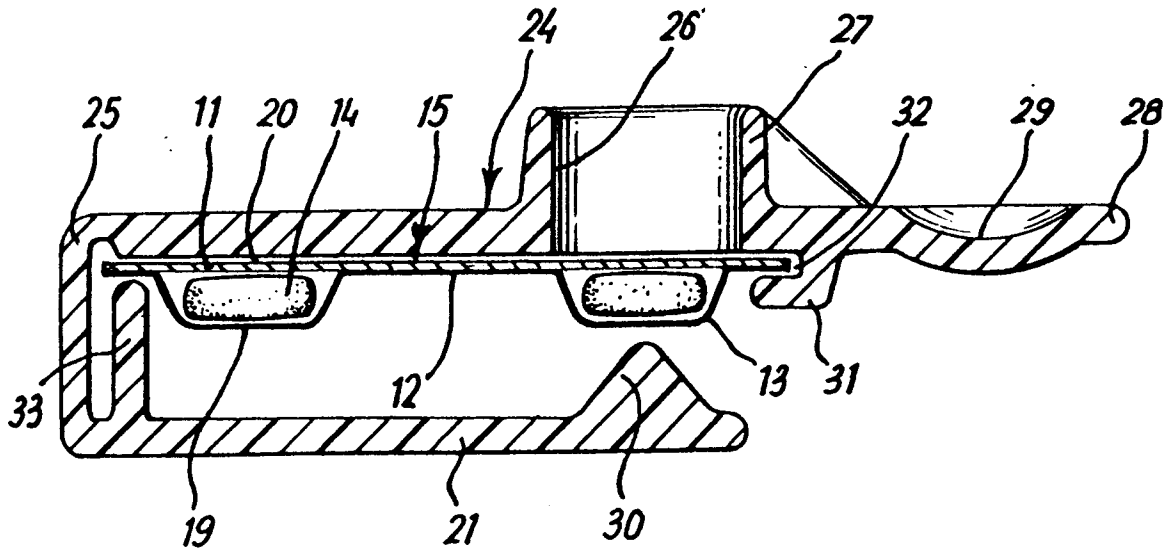


FIG. 2

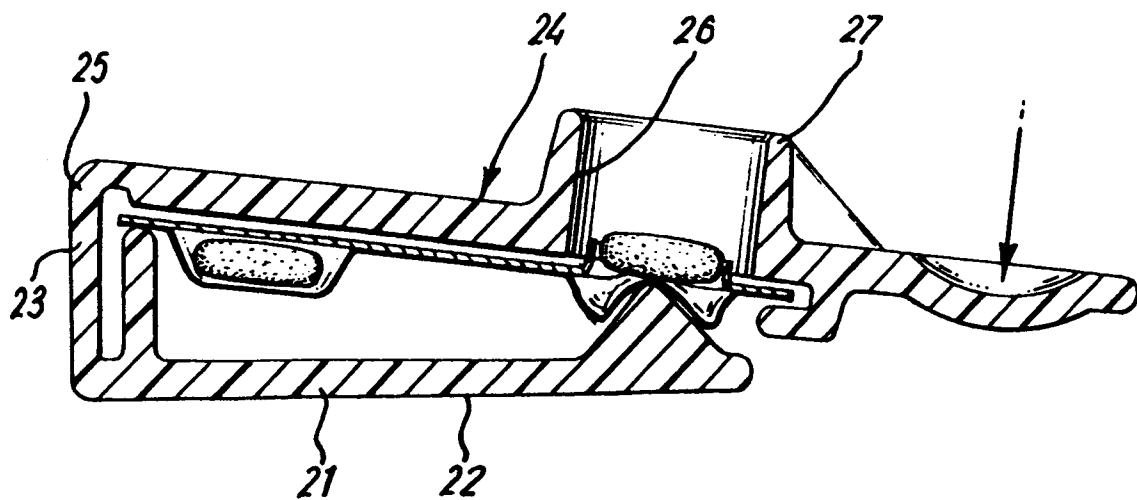


FIG. 3

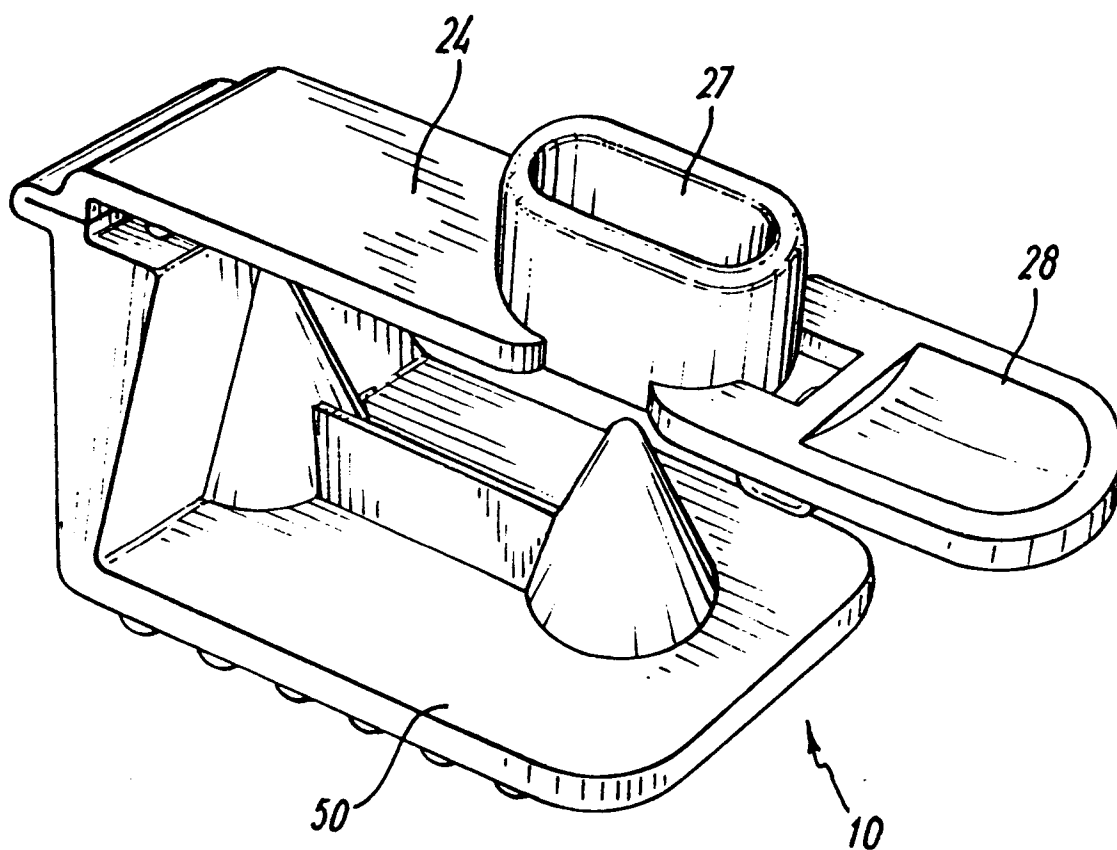


Fig. 4



European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 94 30 4227

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.5)
X	GB-A-2 192 827 (M. DIAMANT) * page 2, line 42 - page 3, line 57; figures *	1,2,6	B65B69/00 B65D83/04
Y	---	3-5	
Y	DE-A-33 17 549 (L. PREIS) * page 7, line 1 - page 9, line 27; figures *	3-5	
A	---	1,6	
X	US-A-5 009 561 (P. LOMBARDINO) * column 2, line 6 - column 3, line 25; figures *	1-3,6	
A	US-A-3 904 075 (J. RICHARDSON)		
A	EP-A-0 315 951 (WARNER-LAMBERT)		
A	FR-A-2 638 430 (J.-L. CHOLLET)		
			TECHNICAL FIELDS SEARCHED (Int.Cl.5)
			B65B B65D A61J
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 7 September 1994	Examiner Jagusiak, A
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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