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Remarks:

Amended claims in accordance with Rule 137(2)
EPC.

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(54) **Box with lid formed by two plates and opened by deforming of the side walls**

(57) A box having a lid formed by two plates (1) attached to the sidewalls of the box with two tapes or strings (2). The lid is opened by pressing the sidewalls from both sides of the box causing the two plates to rotate upwards.

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Description

[0001] Box, which opens by changing its shape. Suitable for different kinds of goods.

[0002] The target of this patent is lids as in introduction, which are attached to opposite sides of box by tape or strings. The plates act as the lids of the box. The box can then be opened by for example pressing one side with thumb and the other side with the other fingers of the same hand.

[0003] The according plates can be added to any kind of box with edges.

[0004] Common ways to open a box by changing its shape are not known. Boxes used for storing for example spread of any kind are practical but their ease of use can be improved. This can be achieved with automatism that opens the box by slightly moving fingers.

[0005] This can be achieved by setting up two plates as in the invention. When pressed from both sides by eg. with thumb on one side and other fingers on the other, the lid opens. If pressed with just thumb, only the side pressed will open. Characterized for the box is what is told on the explanation part of the patent.

[0006] The following explains with the invention with detail by referring to the cross-sectionish pictures. The first one (A) shows the the box from side. The following (B and C) show the box from above, C showing lids that cover the whole upper side of the box, and B only covering part of it. Picture D shows in a cross-sectionish way the box from the side and it demonstrates technique behind the lid-opening.

[0007] Lids made from elastic enough plate (1), which are attached by tape (2) or string to boxes side-edge partially (B) or by whole length (C) as seen on the pictures. The length of the tape or string on the side can vary as can the length of the lid. Thus it can be that the lid opens wholly or just partially, when the rest of the lid is fixed. In pictures (A, B, C, D) the attached lids (1), tapes and strings (2) have been drawn in thicker line.

[0008] The according lids (1) are attached to the sides of the box (3) by tape (2) or strings by whole length (C) or partially (B) of the length. The length of the plates used as lids can vary drastically. Different length of lids can be installed to same type of box. Side-edges of the box then act like hinges. The opening of the lids is demonstrated in pictures (Da, Db, Dc). The drawing (Da) is a cross-section of the box in normal condition. Picture (Db) figurates the box when there's a point-like force towards the side, pushing the side inside. The picture (Dc) illustrates the box when lid is fully open. The point-like force is directed at the structures causing temporary change, pulling the lid and opening it. The tape (2) or string can be re-attachable, so it can be removed and then re-attached.

[0009] The according plates can be of different shapes and they can close the box (3) as wanted. Suitable boxes can also be of different shapes and sizes. Edges can be straight or slightly bent inside (5). Suitable boxes are for example all regular spread and other grocery packings

that have at least a little edge. The edge can also be bent downwards (6). The plate used for the lid must be hard and elastic enough.

[0010] Plates (1) are attached as lids with tape (2) or strings. Plates will be installed on opposite sides, to the whole edge or partially lengthwise on the side-edge. When pushed with fingers on the right area (4), the lid of the box opens automatically.

[0011] These boxes can be used for storing of different objects and products.

Claims

1. A box for different objects and products, which opens by changing the shape, consisting of
 - a box with edges
 - plates acting as lids (1) and
 - two tapes or strings (2) used for attaching the lid-plates (1) to the box, known for its ability to open up when pressed from points (4).
 2. The invention as in Patent claim 1 is known for that it has plates (1) on both sides of the box (3) are attached with tape (2) or strings by the whole length (picture C) and which can be removed and re-attached.
 3. The invention in Patent claim 1 is known for that it has plates (1) on both sides of the box (3) attached with tape (2) or strings by partial length of the box (illustration B), where the length of the tape or string can vary and they can be removed and re-attached.
 4. The invention in Patent claims 1, 2 and 3 is known for that by pressing the box from predefined areas (4), the box lids open without touching them.
 5. The box in Patent claims 1, 2 and 3 is known for its lids that are hard and elastic enough.
 6. The box in Patent claims 1, 2 and 3 is known for that the shape of the sides can vary.
 7. The box in Patent claims 1, 2 and 3 is known for that the lids can be installed to boxes of different size and shape.
 8. The box in Patent claims 1, 2 and 3 is known for that the lids are attached on both sides of the box and the can be of different sizes and shapes and the length of the plate can vary.
 9. The box in Patent claims 1, 4, 5, 6 and 7 is known for that the plates (1) and box (3) can also be made from one material.
- Related to patent, one can also think of differentiating

solutions. The plates (1) and the box (3) can be made from one material, thus eliminating the need of tape (2) or string.

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Amended claims in accordance with Rule 137(2) EPC.

1. A box which opens by changing the shape of the box, consisting of

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- an elastic box with edges
- plates acting as lids and
- two tapes or strings used for attaching the lid-plates to the box.

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or

- a box and lid-plates made of one piece of material.

known for its ability to open up when pressed from sidewalls of the box.

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2. The invention as in Patent claim 1 is known for that it has plates on both sides of the box. Plates are attached with tape or strings by the whole length of the box or partial length of the box.

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3. The invention in Patent claims 1 and 2 is known for that by dressing the box from sides of the box, the box lids rotate upwards opening the box without touching the lids. The size and shape of the box can vary. Lids are attached on both sides of the box and the size and shape of the lids can vary.

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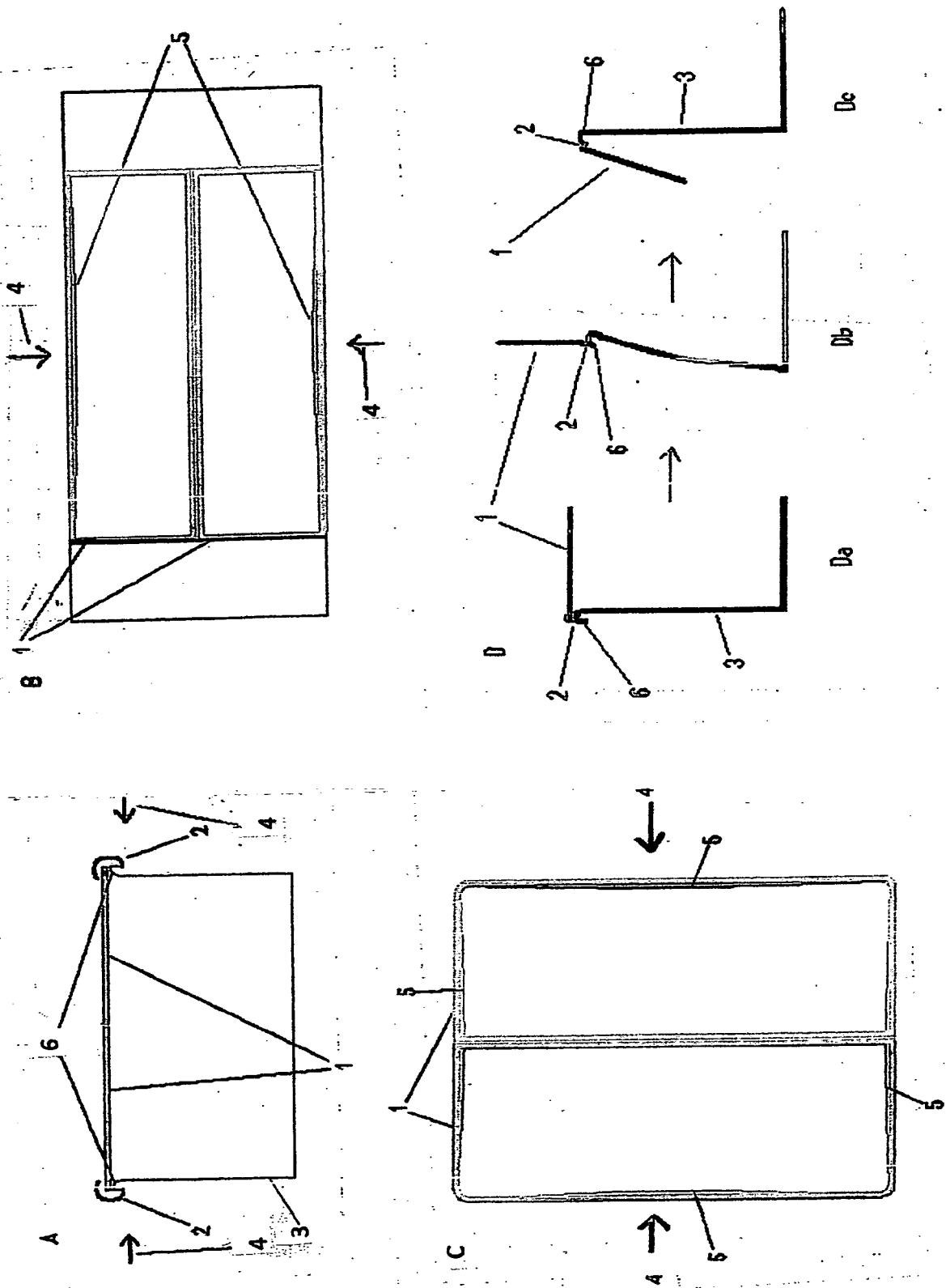
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EUROPEAN SEARCH REPORT

Application Number
EP 10 39 6004

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 1 977 679 A (KREIDER JR GIDEON R) 23 October 1934 (1934-10-23) * page 1, lines 1-3 * * page 2, lines 45-51; figure 8 * -----	1-9	INV. B65D5/66 B65D43/16 B65D43/26
A	US 2 074 315 A (RODGERS NEELY FRANK) 16 March 1937 (1937-03-16) * figure 2 *	1-9	
A	US 2010/001052 A1 (GARDNER JEFFREY M [US]) 7 January 2010 (2010-01-07) * the whole document * -----	1	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
			B65D
1	Place of search The Hague	Date of completion of the search 20 September 2010	Examiner Leijten, René
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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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 10 39 6004

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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20-09-2010

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