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Egli

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[54] **RECLOSABLE RECTANGULAR CARDBOARD BOX**

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[52] **U.S. Cl.** ..... **229/44 CB,** 229/45, 229/51 WB

[51] **Int. Cl.** **B65d 5/66**

[58] **Field of Search** .....229/39 R, 44 R, 44 CB, 229/51 WB, 45

[56] **References Cited**

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[57] **ABSTRACT**

A reclosable rectangular cardboard box is provided with a cover which is swingable about a folding line on the upper edge of the rear wall and has on its front edge a downwardly extending strip overlapping the outer upper margin of the front wall when the cover is closed. Slot-shaped recesses are provided at the ends of the folding line between the cover and said strip for yieldably receiving locking projections formed on the front ends of horizontally disposed flaps which extend from said side walls into the box.

1 Claim, 3 Drawing Figures

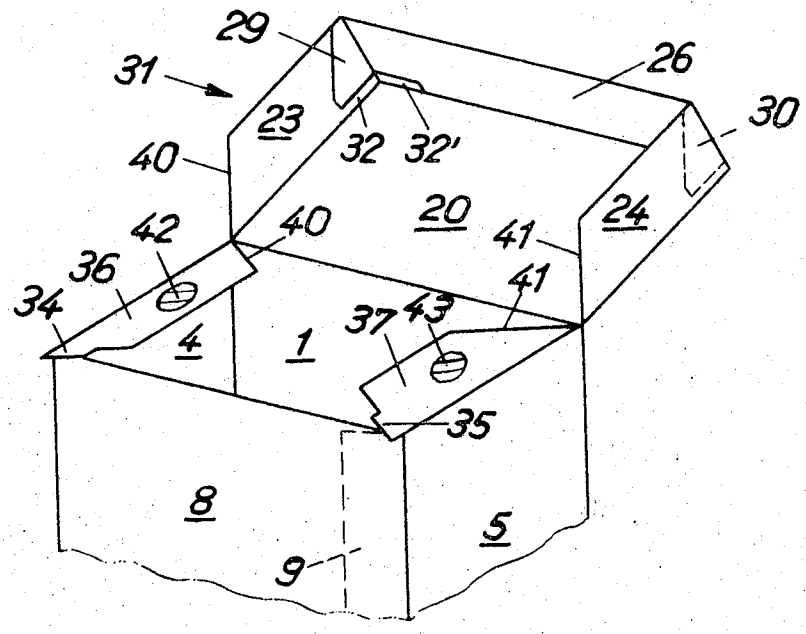


Fig.1

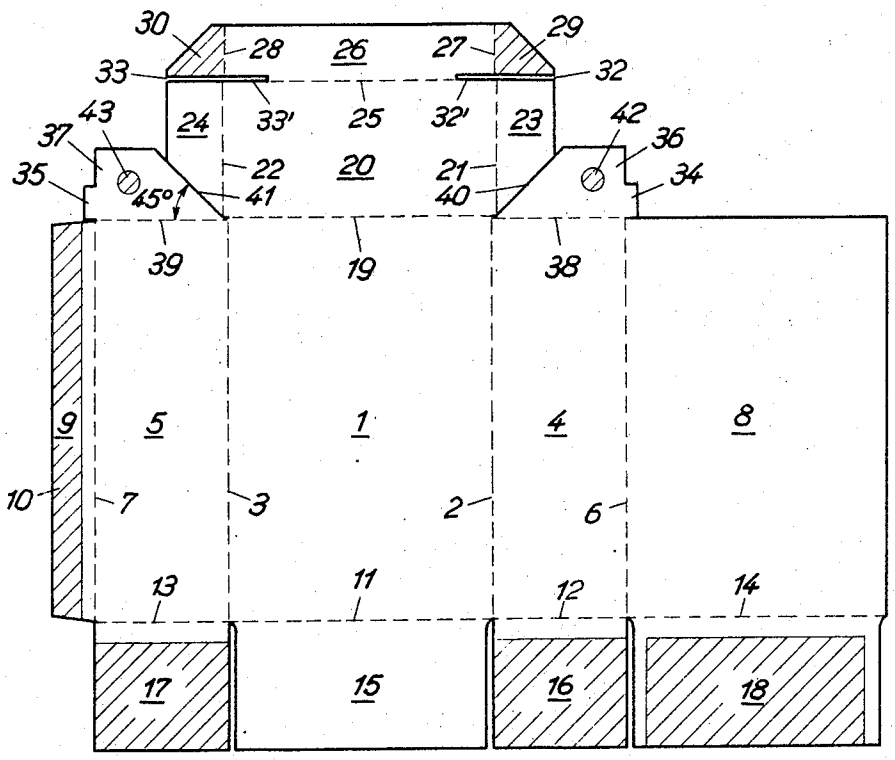


Fig.2

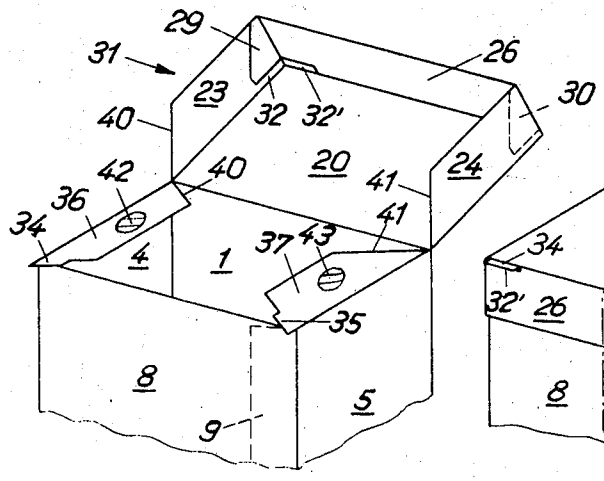
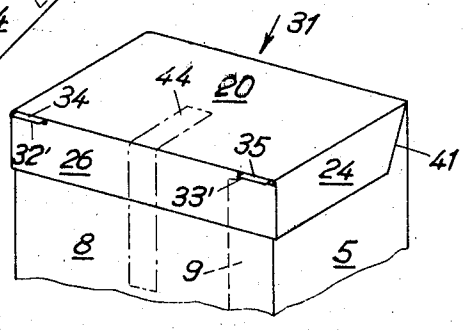


Fig.3



RECLOSABLE RECTANGULAR CARDBOARD BOX

The invention relates to a reclosable rectangular cardboard box with a cover which is swingable about a folding line on the upper edge of the rear wall and having its two oppositely disposed side walls provided at their upper edges with horizontally inwardly folded cover flaps which in the closed condition of the cover engage the inner face of the cover.

An object of the invention is a very simple cardboard box the cover of which can be closed and locked in closed position in a very simple manner. In accordance with the invention the cover of the box has at its forward edge a downwardly folded strip which in the closed position of the cover overlaps the upper margin of the front wall of the box and has two slot-like recesses for receiving two yieldable locking projections provided on the forward ends of the inwardly extending cover flaps when the cover is closed. After opening the cover it can be closed again by slightly moving the cover manually toward closing position which will cause the locking projections to snap into said recesses and lock the cover in its closed position.

The drawing illustrates by way of example one embodiment of the cardboard box in accordance with the invention.

In the drawing:

FIG. **1** is a view of the outer face of a cardboard blank from which can be made a rectangular box with a swingable cover attached thereto:

FIG. **2** illustrates in a perspective view the upper portion of the box with the cover in open position; and

FIG. **3** is a view similar to FIG. **2**, except that the cover is shown in its closed position.

Referring to FIG. **1**, the cardboard blank has a portion denoting the rear wall **1** of the box which, by folding lines **2** and **3**, hangs together with two oppositely arranged side walls **4** and **5**, respectively. The side walls **4** and **5** hang together by folding lines **6** and **7** with a front wall **8** and a connecting strip **9**, respectively; the latter being provided with an adhesive marginal portion **10** — shown by hatched lines — adapted to be glued to the free side margin of the front wall **8** when the blank is folded to form the box. The walls **1, 4, 5** and **8** hang together by folding lines **11, 12, 13** and **14**, respectively, with rectangular bottom wall flaps **15, 16, 17** and **18**, the hatched portions of which are covered with an adhesive, and serve to form the bottom of the box when folded about the respective folding lines, whereby the flap **15** is the last one folded and forms the outermost layer of the bottom of the box.

The rear wall **1** hangs together at its upper edge by a folding line **19** with a rectangular cover part **20**, the dimensions of which are a few thicknesses of the cardboard larger than the open cross section of the covered box. The cover part **20** hangs together with two lateral strips **23** and **24** by folding lines **21** and **22**, respectively, and by a folding line **25** hangs together with a front strip **26**. The lateral strips **23** and **24** and the front strip **26**, when folded downwardly, overlap the outside of the upper portions of the side walls **4** and **5** and the front wall **8**, respectively, when the cover **31** is closed. The front strip **26** hangs together laterally by folding lines **27** and **28** with substantially triangular connecting flaps **29** and **30**, the outer faces of which are provided with an adhesive as indicated by the hatched lines. The connecting flaps **29** and **30**, when the blank is folded,

are folded rearwardly and are glued to the inner face of the rearwardly folded lateral strips **23** and **24** respectively, so that the cover **31** is formed. Between these lateral strips **23** and **24** and the connecting flaps **29** and **30** are formed slots **32** and **33** the width of which is slightly greater than the thickness of the cardboard blank and which extend to both sides of the folding line **25** in the extension thereof; whereby parts **32'** and **33'** of these slots **32** and **33** are also disposed between the cover part **20** and the end parts of the front strip **26**. These slot parts **32'** and **33'** form recesses or apertures in the completed cover **31** into which projections **34** and **35** of the lateral or forwardly extending flaps **36** and **37** may yieldably enter in the form of snap locking members. These projections **34** and **35** hang together with the side walls **4** and **5** by folding lines **38** and **39** respectively.

The lateral flaps **36** and **37** are trapezoidally shaped and in the cardboard blank are separated by cuts **40** and **41** at an angle of 45° from the adjacent folding lines; the respective boundary lines of the parts **23, 24, 36** and **37** are also designated by **40** and **41** in FIG. **2**, as far as they are visible, and also in FIG. **3**.

The lateral flaps **36** and **37** on the side walls **4** and **5** are provided on their upper faces (FIG. **2**) with adhesive spots **42** and **43**, respectively, so that the cover **31** when closed for the first time — after the box has been filled with the desired substance — will be securely glued to these lateral flaps **36** and **37**. In order to open the cover **31** for the first time and to swing it upwardly about the folding line **19** which functions as a hinge, a non-negligible force has to be applied to tear or break the adhesive connections produced by these adhesive spots **42** and **43**. However, when opening the cover again — after it has been closed again — only a very minor force is required, and one can readily feel whether the box has been previously opened or not. Obviously, one may provide the closed box with a special sealing strip **44** covering a part of the cover **31** and a part of the front wall **1** which has to be torn when the box is opened for the first time.

For closing the open cover **31**, it is merely pivotally moved downwardly, and this requires only a very slight pressure, just sufficient to permit the locking projections **34** and **35** on the box to snap yieldably into the recesses **32'** and **33'** in the cover **31**. The flaps **36** and **37** and the folding lines **38** and **39** provide the necessary elastic yieldability. It is obvious that this closure operation of the cover of the invention is much more convenient than a known closure operation in which a cover part hanging together with the cover by a folding line has to be inserted from above behind the upper edge of the front wall of the box.

It is obvious that the box may be provided with an inner bag or liner made for instance, of paper or a plastic, when there exists a possibility that, for instance, a powderlike substance with which the box is filled may escape through the slot-like recesses **32'** and **33'**. If the box alone is not sufficient, one may employ in place of an inner bag a rectangular cover foil between the contents in the box and the lateral flaps **36** and **37** to prevent the escape of the contents of the box from the closed box.

What I claim is:

1. In a reclosable rectangular cardboard box having a front wall, a rear wall, a cover swingable about a folding line on the upper edge of the rear wall and two op-

positely disposed side walls having respective horizontally inwardly extending cover flaps which in the closed position of the box engage the inner face of the cover, wherein the improvement comprises a downwardly extending strip at the front edge of the cover which in the closed position of the box overlaps the upper margin of the front wall of the box, said strip having a slot shaped recess at each of the ends of the folding line between the cover and said strip, a pair of locking projections formed on the respective ones of the forward ends of

the inwardly extending cover flaps on said side walls to yieldably enter the respective slot shaped recesses, and a pair of downwardly extending side strips at respective ends of the cover for overlapping the upper margins of the sidewalls in the closed position of the cover, each of said slot-shaped recesses including portions of slots which extend along the folding line formed between the cover and said side strips.

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