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(54) **A box for packaging at least one object**

Dose zum Verpacken mindestens eines Gegenstandes

Boîte pour l'emballage d'au moins un article

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Description

The invention relates to a box for packaging at least one object comprising a first part having opposite main parallel walls interconnected by cross walls which extend substantially along the entire circumference of the main walls leaving open a recess, and a second part for accommodating an object comprising a main wall and cross walls connected to the edges of said main wall and oriented transversely thereto, whereby said second part is at least partly insertable through said recess located between the walls of the first part whilst at least one pair of aligned openings is provided in opposed walls of said first part and said second part of the box, said openings functioning to receive at least one locking means for locking together the two parts of the box in the closed position of the box, so that the object to be packaged can be retained within the box.

Such a box, known from EP-A-0.458721 is made of two parts. For placing an object in or for removing an object from the box the two parts of the box have to be removed from each other. By refilling the box the parts must be put together again. Furthermore, in using such a box the object is only covered for a part by the walls of the box. The object extends on both sides of the recess. Thereby the size of the object has to be adapted to the size of the box.

It is an object of the invention to provide a box which covers at least the major parts of the object to be packaged, whereby the parts of the box are inseparable.

The box according to the invention is characterised in that in the closed position of the box the second part of the box is enclosed by walls of the first part of the box in which closed position the recess is closed by a cross wall of the second part, whilst there is provided abutment means comprising an elongated slot in a wall of one part and a pin being connected to a wall of the other part which pin is movable in the elongated slot for limiting withdrawal of the second part of the box out of the first part of the box, and that the box is furthermore provided with a hole permitting to suspend the box from a rack or the like and at least a part of the walls of said two parts of the box is transparent.

When the box according to the invention is used, one or more objects introduced into the box can be retained within the box by means of the walls of the box surrounding the space accommodating the object(s). When a box of this type is used the object(s) may be removed from the box at the cash desk, where the buyer has to pay for said object(s), and be delivered to the buyer. The parts of the box remain connected and can easily be locked together again.

It is noted, that from US-A-4.140.218 a display wrapping of a single sheet for displaying an article is known. Said wrapping is delivered to the buyer together with the object contained therein, whereby the buyer has to dispose of the pack after having removed the object.

It has to be noted that there are known boxes, which are used for packaging and displaying objects, e.g. in do-it-yourself shops and the like which are mostly in the shape of so-called blister packs. These packs are generally delivered to the buyer together with the objects contained therein, whereby the buyer disposes of the pack after having removed the object. This constitutes a serious burden to the environment.

The invention will be explained in more detail hereafter with reference to embodiments of a box according to the invention diagrammatically illustrated in the accompanying figure.

Figure 1 shows an embodiment of a box according to the invention.

Figure 1 shows a box 15 according to the invention, which is provided with a first part 16 and a second part 17, said second part 17 being movable within said first part 16, in and opposite to the direction of the arrow P2. The first part 16 is provided with two parallel rectangular main walls 1, 2, which are interconnected by cross walls 3, 4, 5, which extend along three sides of each main wall. A recess 18 is located between the fourth side of the main wall 1 and the main wall 2, through which said second part 17 can be slid into said first part 16 and an object can be packaged in the box. The second part 17 is provided with a main wall 19 positioned parallel to the main walls 1, 2 of the first part 16, said main wall 19 being provided with cross walls 20, 21 oriented transversely thereto. The cross wall 21 is provided with a pin 23, which is connected to a plate 24 and which is passed through the opening 6 in the cross wall 21. At its side remote from the plate 24 the cross wall 3 is provided with a cap 25. The cap 25 is provided with an opening, which is aligned with the opening 6 in the cross walls 21, 3, said cap furthermore being provided with a gripping mechanism (not shown), which grips and holds the pin 23 upon insertion of the pin 23 into the cap 25. Said gripping mechanism may be released by means of a magneto (not shown), as a result of which the pin 23 can be moved from the cap 25 in the opposite direction of the arrow P2 and the second part 17 can be moved with respect to the first part 16.

The second part 17 is provided with a cross wall 36, with which the opening 18 in the first part 16 is closed when the second part 17 is moved in the direction of the arrow P2 until the pin 23 engages the gripping mechanism retained within the cap 25. The box 15 is furthermore provided with an elongated slot 37 in the cross walls 4, 5 of the first part 16, and with a pin 38 which is movable therein, said pin 38 being connected to cross walls 20 of the second part 17, as a result of which the second part 17 is movable along a relatively long distance with respect to the first part and a relatively large supply opening for the object to be packaged is obtained. The second part 17 cannot be removed from the first part 16, however.

Particularly when the box is made of a transparent material the buyer will be able to see the object(s)

present inside the box, in a similar manner as with the usual blister packs. The buyer can take the object(s) desired to the cash desk, in order to pay for the objects. At the cash desk the locking means may be removed, in order to take out the object(s) bought.

The locking means may be conventionally provided with a theft protection device, if desired, so that the elongated objects can only be removed by authorized personnel. Furthermore it is possible to provide the box itself with a conventional theft protection device, which activates a signal when the box is taken out of the shop or the like.

The empty box may be re-used for packaging (a) new object(s).

Claims

1. A box (15) for packaging at least one object comprising a first part (16) having opposite parallel main walls (1, 2) interconnected by cross walls (3, 4, 5) which extend substantially along the entire circumference of the main walls (1, 2) leaving open a recess (18), and a second part (17) for accomodating an object comprising a main wall (19) and cross walls (20, 21, 36) connected to the edges of said main wall (19) and oriented transversely thereto, whereby said second part (17) is at least partly insertable through said recess (18) located between the walls (1, 2, 4, 5) of the first part (16) whilst at least one pair of aligned openings (6) is provided in opposed walls (3, 21) of said first part (16) and said second part (17) of the box, said openings (6) functioning to receive at least one locking means (23-25) for locking together the two parts (16, 17) of the box (15) in the closed position of the box, so that the object to be packaged can be retained within the box, characterised in that in the closed position of the box (15) the second part (17) of the box (15) is enclosed by walls (1, 2, 4, 5) of the first part (16) of the box (15) in which closed position the recess (18) is closed by a cross wall of the second part, whilst there is provided abutment means (37, 38) comprising an elongated slot (37) in a wall of one part (16, 17) and a pin (38) being connected to a wall of the other part (17, 16) which pin is movable in the elongated slot (37) for limiting withdrawal of the second part (17) of the box (15) out of the first part (16) of the box (15), and that the box (15) is furthermore provided with a hole (7) permitting to suspend the box from a rack or the like and at least a part of the walls of said two parts (16, 17) of the box (15) is transparent.
2. A box according to claim 1, characterised in that the main wall (19) of said second part (17) is provided with an opening, which is aligned with openings in the walls (1, 2) of said first part (16), whereby a locking means can be passed through said three

openings.

3. A box according to claim 1 or 2, characterised in that said cross walls (20, 21, 36) are positioned along the entire circumference of the main wall (19) of said second part (17).
4. A box according to any one of the preceding claims, characterised in that a locking means can be slid through an opening in the object to be packaged.
5. A box according to any one of the preceding claims, characterised in that said locking means (23-25) for locking together the two parts (16, 17) of the box (15) is provided with a theft protection device (24, 25).

Patentansprüche

1. Ein Kasten (15) zum Verpacken von wenigstens einem Gegenstand, der einen ersten Teil (16) mit gegenüberliegenden, parallelen Hauptwänden (1, 2) aufweist, die durch Querwände (3, 4, 5) verbunden sind, die sich im wesentlichen entlang dem gesamte Umfang der Hauptwände (1, 2) erstrecken, wobei sie eine Ausnehmung (18) offen lassen, und einen zweiten Teil (17) zur Aufnahme eines Gegenstands aufweist, der eine Hauptwand (19) und Querwände (20, 21, 36) umfaßt, die mit den Rändern der genannten Hauptwand (19) verbunden und quer dazu ausgerichtet sind, wodurch der genannte zweite Teil (17) wenigstens teilweise durch die genannte Ausnehmung (18) einführbar ist, die sich zwischen den Wänden (1, 2, 4, 5) des ersten Teils (16) befindet, während wenigstens ein Paar ausgerichtete Öffnungen (6) in gegenüberliegenden Wänden (3, 21) des genannten ersten Teils (16) und des genannten zweiten Teils (17) des Kastens vorgesehen ist, die genannten Öffnungen (6) nutzen das Aufnehmen von wenigstens eine Verriegelungseinrichtung (23-25) zur Verriegelung der zwei Teile (16, 17) des Kastens (15) miteinander in der geschlossenen Stellung des Kastens, so daß der zu verpackende Gegenstand in dem Kasten gehalten werden kann, **dadurch gekennzeichnet**, daß in der geschlossenen Position des Kastens (15) der zweite Teil (17) des Kastens (15) von den Wänden (1, 2, 4, 5) des ersten Teils (16) des Kastens (15) eingeschlossen ist, wobei in der geschlossenen Position die Ausnehmung (18) durch eine Querwand des zweiten Teils geschlossen ist, während eine Anstoßeinrichtung (37, 38) vorgesehen ist, die einen länglichen Schlitz (37) in einer Wand eines Teils (16, 17) und einen Stift (38) umfaßt, der mit einer Wand des anderen Teils (17, 16) verbunden ist, wobei der Stift in dem länglichen Schlitz (37) zur Begrenzung des Herausziehens des zweiten Teils (17) des Kastens (15) aus dem

ersten Teil (16) des Kastens (15) bewegbar ist, und daß der Kasten (15) des weiteren mit einem Loch (7) versehen ist, das erlaubt, den Kasten an einem Gestell oder Ähnlichem aufzuhängen, und wenigstens ein Teil der Wände der genannten zwei Teile (16, 17) des Kastens (15) ist transparent. 5

2. Ein Kasten gemäß Anspruch 1, **dadurch gekennzeichnet**, daß die Hauptwand (19) des genannten zweiten Teils (17) mit einer Öffnung versehen ist, die zu den Öffnungen in den Wänden (1, 2) des genannten ersten Teils (16) ausgerichtet ist, wodurch eine Verriegelungseinrichtung durch die genannten drei Öffnungen hindurchgeführt werden kann. 10 15
3. Ein Kasten gemäß Anspruch 1 oder 2, **dadurch gekennzeichnet**, daß die genannten Querwände (20, 21, 36) entlang dem gesamten Umfang der Hauptwand (19) des genannten zweiten Teils (17) angeordnet sind. 20
4. Ein Kasten gemäß irgendeinem der vorhergehenden Ansprüche, **dadurch gekennzeichnet**, daß eine Verriegelungseinrichtung durch eine Öffnung in dem Gegenstand, der verpackt werden soll, hindurchgleiten kann. 25
5. Ein Kasten gemäß irgendeinem der vorhergehenden Ansprüche, **dadurch gekennzeichnet**, daß die genannte Verriegelungseinrichtung (23-25) zum Verriegeln der zwei Teile (16, 17) des Kastens (15) miteinander mit einer Diebstahlsicherungseinrichtung (24, 25) versehen ist. 30 35

Revendications

1. Boîte (15) pour l'emballage d'au moins un objet comprenant une première partie (16) avec des parois principales parallèles opposées (1, 2) reliées entre elles par des parois transversales (3, 4, 5) qui s'étendent sensiblement sur toute la circonférence des parois principales (1, 2) laissant un évidement ouvert (18) et une seconde partie (17) pour recevoir un objet comprenant une paroi principale (19) et des parois transversales (20, 21, 36) raccordées aux bords de la paroi principale (19) et orientées transversalement par rapport à celle-ci, la seconde partie (17) étant au moins partiellement insérable par l'évidement (18) situé entre les parois (1, 2, 4, 5) de la première partie (16) tandis qu'au moins une paire d'ouvertures alignées (6) est ménagée dans des parois opposées (3, 21) de la première partie (16) et de la seconde partie (17) de la boîte, ces ouvertures (6) servant à recevoir au moins un moyen de blocage (23, 25) pour bloquer ensemble les deux parties (16, 17) de la boîte (15) dans la position fermée de la boîte, de sorte que l'objet à 40 45 50 55

emballer peut être retenu à l'intérieur de la boîte, caractérisée en ce que dans la position fermée de la boîte (15), la seconde partie (17) de la boîte (15) est enfermée par les parois (1, 2, 4, 5) de la première partie (16) de la boîte (15), position fermée dans laquelle l'évidement (18) est fermé par une paroi transversale de la seconde partie, tandis qu'il est prévu des moyens de butée (37, 38) comprenant une fente oblongue (37) dans une paroi d'une partie (16, 17) et un pivot (38) étant raccordé à une paroi de l'autre partie (17, 16), lequel pivot est mobile dans la fente oblongue (37) pour limiter le retrait de la seconde partie (17) de la boîte (15) en dehors de la première partie (16) de la boîte (15) de sorte que la boîte (15) est de plus munie d'un trou (7) permettant la suspension de la boîte à partir d'une étagère ou analogue et au moins une partie des parois des deux parties (16, 17) de la boîte (15) est transparente.

2. Boîte selon la revendication 1, caractérisée en ce que la paroi principale (19) de la seconde partie (17) est munie d'une ouverture qui est alignée sur les ouvertures des parois (1, 2) de la première partie (16), un moyen de blocage traversant les trois ouvertures.
3. Boîte selon la revendication 1 ou 2, caractérisée en ce que les parois transversales (20, 21, 36) sont positionnées sur toute la circonférence de la paroi principale (19) de la seconde partie (17).
4. Boîte selon l'une quelconque des revendications précédentes, caractérisée en ce que l'on peut faire glisser un moyen de blocage à travers une ouverture de l'objet à emballer.
5. Boîte selon l'une quelconque des revendications précédentes, caractérisée en ce que le moyen de blocage (23, 25) destiné à bloquer les deux parties (16, 17) de la boîte (15) est muni d'un dispositif anti-vol (24, 25).

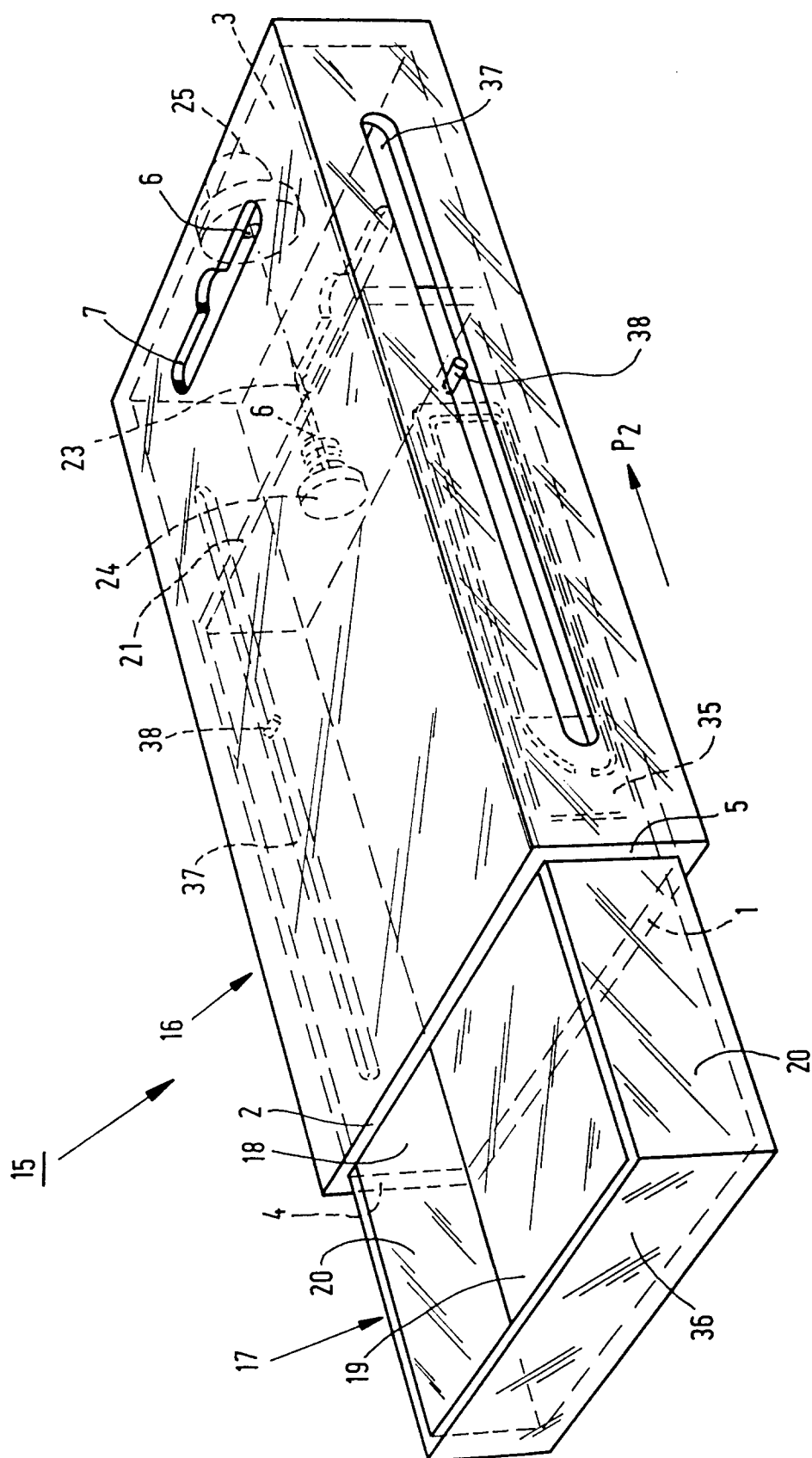


FIG. 1