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(54) **Cover for palletized goods**

(57) Cover for palletized goods formed from a single die-cut and cut cardboard sheet comprising four sides (1), (2), (3) and (4) arranged in an aligned manner, where the bottom edge of at least two of the sides (1), (2), (3) and (4) and that are facing each other, is a crenellated edge, defining some recesses (2.1) and (4.1), such that once the cover closes, said recesses are facing each

other and wherein from the top edge of sides (1), (2), (3) and (4) there emerge some flaps (5), (6), (7) and (8) respectively, having means of retention of the flaps to each other. The cover is arranged around the palletized goods and allows: avoiding that goods are laterally dispersed, providing a supporting surface at the top, stacking of goods, transmitting forces of the upper pallet to the ground and allows manipulation by a forklift truck.

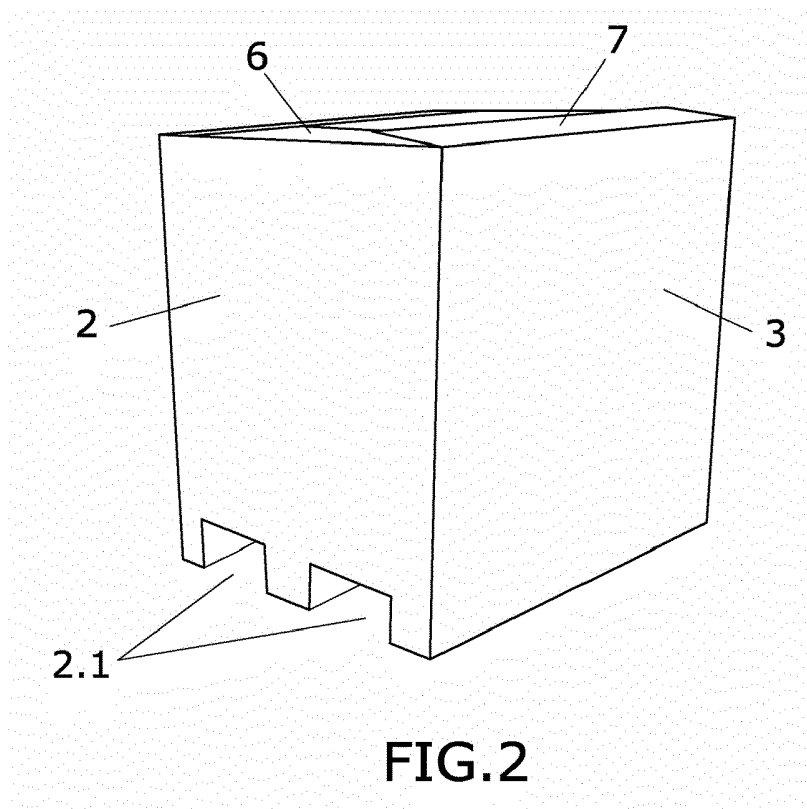


FIG. 2

Description

OBJECT OF THE INVENTION

[0001] It is an object of the present invention, as stated by the title of the invention, a cover for palletized goods, i.e., it refers to a protective cover for goods arranged on a pallet, in order to protect them, and facilitate stacking and transportation of goods.

[0002] The cover object of the invention is obtained from a single die-cut and cut cardboard sheet, upon which there are made some score lines for its folding, as well as having some means of retention of the upper flaps.

[0003] The present invention characterizes the special configuration and design of the cover, in such a way that the purposes of protection of goods are achieved once these are arranged on pallets for transport, allowing the stacking of other pallets without damaging the lower goods.

[0004] Therefore, the present invention is circumscribed within the scope of both cardboard sheets and the transport of goods by means of pallets.

BACKGROUND OF THE INVENTION

[0005] In the transport of goods on pallets, in order to ensure and prevent the fall of stacked goods arranged on the pallets, a deformable plastic film is often used which wrapping the whole pallet prevents side falling of goods.

[0006] However, this solution does not allow in some cases stacking of loaded pallets, since it would mean the pallet directly supporting on top goods of the bottom pallet, causing damage if the goods are not strong enough, and transmission of forces laterally, causing in addition to damage to goods their possible lateral dispersion.

[0007] On the other hand, there are occasions in which the palletizing does not provide a sufficiently flat surface on the top to support another pallet on top, which prevents remounting the goods, wasting transport space.

[0008] Therefore, these solutions do not allow a stacked arrangement of loaded pallets, aspect of special relevance in transport, as it causes higher transport costs.

[0009] Therefore, it is an object of the present invention to develop a cover that overcomes the above disadvantages, which in addition to avoiding lateral dispersion of goods, also protects them and allows a stacked arrangement of pallets, without the goods having to directly support the forces, developing a cover as the one described next and contained in its essence in the first claim.

DESCRIPTION OF THE INVENTION

[0010] The cover for palletized goods is a cover formed from a die-cut and cut cardboard sheet, having four sides, two larger and two smaller arranged in an alternated manner, of length slightly longer than the length of each side

of the pallet.

[0011] On the free edge of one of the end sides there is a locking tab, which affixed to the free edge of the opposing end allows configuring a closed assembly.

[0012] The bottom edge of at least the sides facing each other, the two larger and/or the two smaller, is acrenellated edge, defining some recesses in such a way that once the cover is closed, the recesses are facing each other to allow forklift truck's lifting arms passing.

[0013] From the top edge of all four sides there emerge some flaps, which have next to their edges some means of retention complementary to the flap of the adjacent side, so that the flaps are joined together, avoiding being raised, which would produce an unevenness on the pallet placed immediately above.

[0014] The means of retention of the flaps once folded are multiple, from tabs fitted and retained in cuts made on the overlapped flap to gluing lines or points on the overlapping area of the flaps.

[0015] Thanks to the cover assembly for pallets the following purposes are achieved:

- To avoid that goods are laterally dispersed when defining a closed assembly.
- To provide a supporting surface at the top.
- To allow stacking of palletized goods without the goods themselves being the ones having to support the weight of the pallet arranged on top.
- To transmit the forces of the upper pallet directly to the ground or floor, as the cover rests on the ground.
- To allow the manipulation of palletized goods by a forklift truck.

EXPLANATION OF FIGURES

[0016] As a complement to the present description and in order to help a better understanding of the features of the invention, in accordance with a preferred exemplary embodiment of it, a set of drawings is herein appended as an integral part of said description, where in an illustrative and non-limiting manner, the following has been represented.

Figure 1 shows the die-cut cardboards sheet from which the cover object of the invention is formed.

Figure 2 shows the cover once formed.

Figures 3 and 4 show part of the cover from the top, and how the process of retention of the flaps occurs.

Figures 5 and 6 show part of the cover from the inside, and how the process of retention of the flaps occurs.

PREFERRED EMBODIMENT OF THE INVENTION.

[0017] In view of the figures a preferred embodiment

of the proposed invention is next described.

[0018] Figure 1 shows the die-cut and cut cardboard sheet from which the cover object of the invention is formed, and comprising as shown four sides (1), (2), (3) and (4) arranged in an aligned manner, being two sides (1) and (3) larger sides, and the other sides (2) and (4) smaller sides, and are alternated.

[0019] The width of each of the sides (1), (2), (3) and (4) depends on the plan size of each pallet, so in case of being a square pallet, the width of the sides will be the same for all of them. Therefore the width of the sides corresponds to the plan size of the pallet.

[0020] The height of sides (1), (2), (3) and (4) will be the height to be set for the cover, its maximum height being defined by the goods arranged on a pallet.

[0021] On the free edge of one of the end sides there is a gluing flap (9) such that adhered to the free edge of the opposing end side forms a closed assembly, as shown in Figure 2.

[0022] The lower edge of at least two of sides (1), (2), (3) and (4) and that are facing each other, is a crenellated edge, defining some recesses (2.1) and (4.1), such that once the cover is closed, said recesses are facing each other to allow forklift truck's lifting arms passing.

[0023] From the top edge of sides (1), (2), (3) and (4) there emerge some flaps (5), (6), (7) and (8) respectively, having some means of retention of the flaps to each other (5.1), (6.1), (7.1) and (8.1) arranged at the ends of each flap, and that are coincident when the flaps are folded.

[0024] Figure 2 shows how the cover is formed and is ready to cover a loaded pallet.

[0025] Figures 3 to 6 show in detail the means of retention of the overlapping parts of the flaps and their fitting process. For that, on flaps (5) and (7) there are arranged at the ends some cuts (5.1) and (7.1) respectively which define tabs (5.2) and (7.2) respectively, which are joined to one of the edges. Figure 3 shows the flap (5.2) joined to line (5.3), while flaps (6) and (8) there are arranged at the ends some cuts (6.1) and (8.1) defining tabs (6.2) and (8.2) respectively. Figure 4 shows tabs (6.2), which have some joint edges (6.3) at their junction with flap (6), where said joint edges are arranged transversally to the joint line defined on tabs line (5.2) and (7.2) defined on cuts (5.1) and (7.1).

[0026] Thus, in the manner defined in figures 3 to 6, and thanks to the cuts made on flaps (5), (6), (7) and (8), which define some tabs with some joint lines, the tabs of some flaps are passed onto the other flap such that they leave the overlapping parts of the flaps joined together.

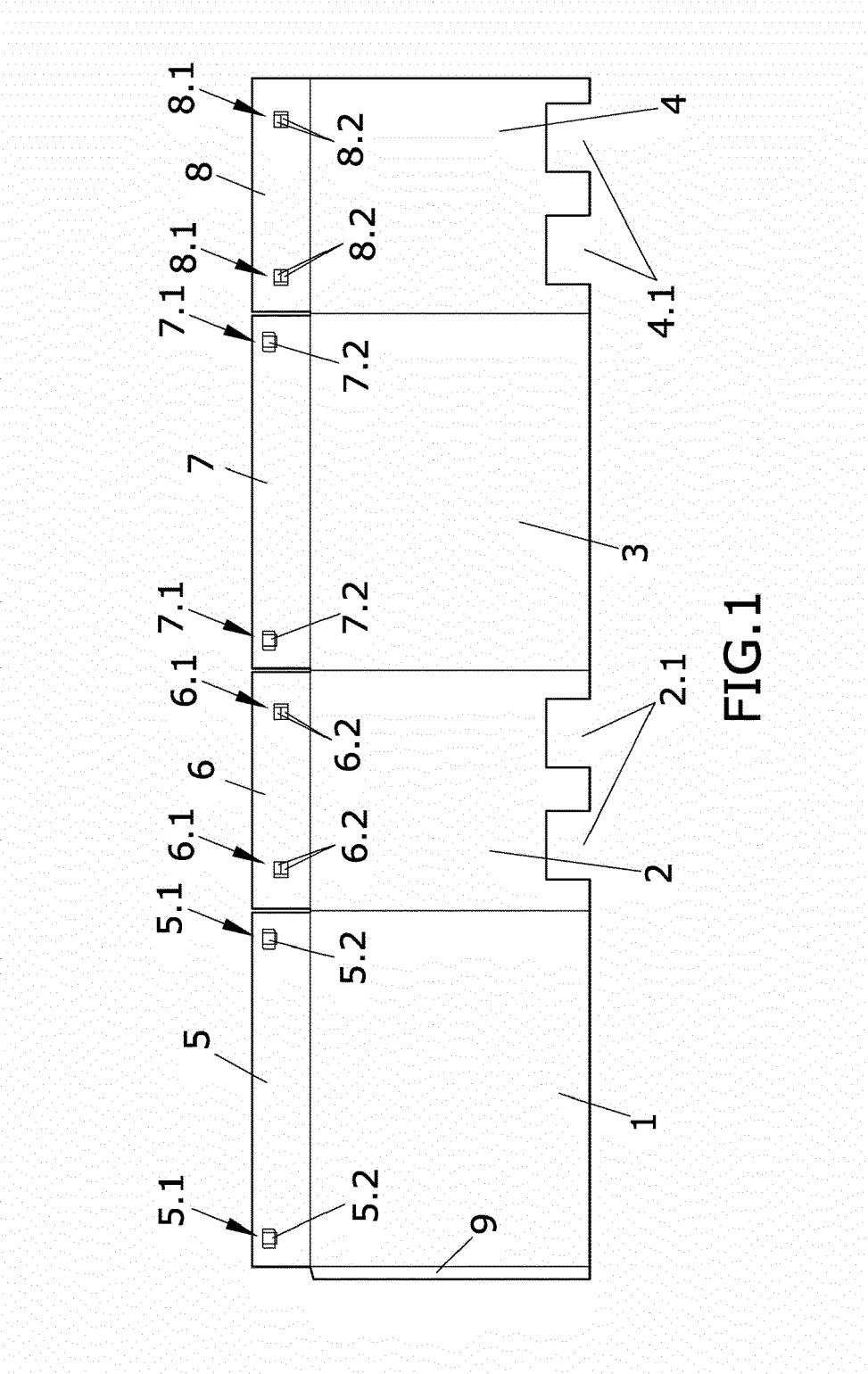
[0027] As already mentioned above, the means of retention of the flaps once folded, are many, from the means described to gluing lines or points on the overlapping area of the flaps.

[0028] Sufficiently described the nature of the present invention, as well as how to put it into practice, it is noted that, within its essence, it may be brought to the practice in other embodiments that differ in detail from the one shown by way of example, and which will also reach the

protection that is sought, provided that its fundamental principle is not altered, changed or modified.

5 Claims

1. Cover for palletized goods **characterised in that** it is formed from a single die-cut and cut cardboard sheet comprising four sides (1), (2), (3) and (4) arranged in an aligned manner, where the bottom edge of at least two of the sides (1), (2), (3) and (4) and that are facing each other, is a crenellated edge, defining some recesses (2.1) and (4.1), such that once the cover closes, said recesses are facing each other and wherein from the top edge of sides (1), (2), (3) and (4) there emerge some flaps (5), (6), (7) and (8) respectively, having means of retention of the flaps to each other.
2. Cover for palletized goods, according to claim 1, **characterised in that** two of the sides (1) and (3) are larger sides, and the other sides (2) and (4) are smaller sides, and are arranged in an alternated manner.
3. Cover for palletized goods, according to claim 1, **characterised in that** the width of each of the sides (1), (2), (3) and (4) corresponds to the plan size of the pallet.
4. Cover for palletized goods, according to claim 1, **characterised in that** the means of retention of the flaps to each other are some cuts (5.1), (6.1), (7.1) and (8.1) arranged at the ends of each flap, which are coincident when the flaps are folded.
5. Cover for palletized goods, according to claim 4, **characterised in that** cuts (5.1), (6.1), (7.1) and (8.1) on the flaps of two opposing sides there are defined some tabs (5.2) and (7.2) having a joint line at their junction with the respective flap, while on the other two flaps, there are made some cuts defining some tabs (6.2) and (8.2), having a joint line at their junction with the flap, such that this joint line is transverse to the joint line of tabs (5.2) and (7.2) at their junction with the flaps.
6. Cover for palletized goods, according to claim 1, **characterised in that** the means of retention of the flaps to each other are gluing lines or points arranged on the overlapping areas of the flaps.



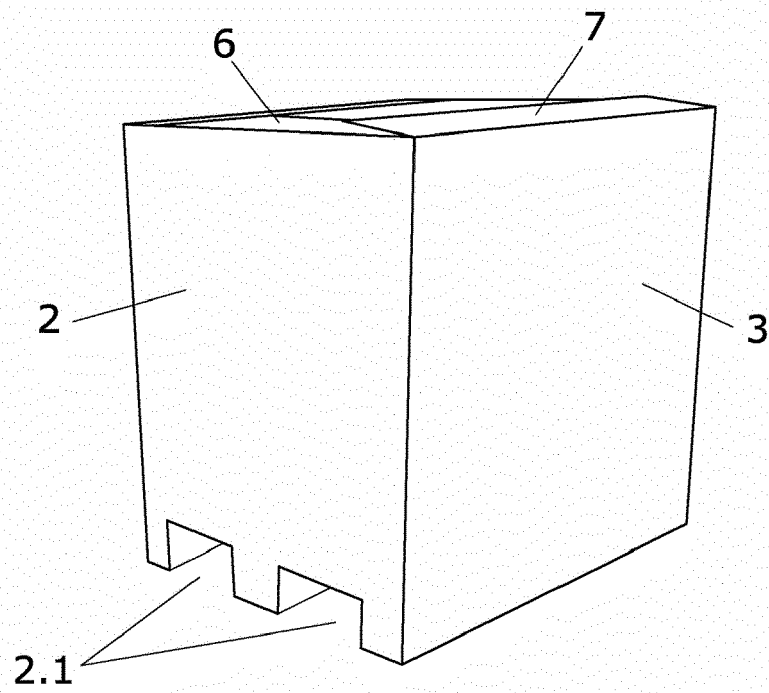


FIG.2

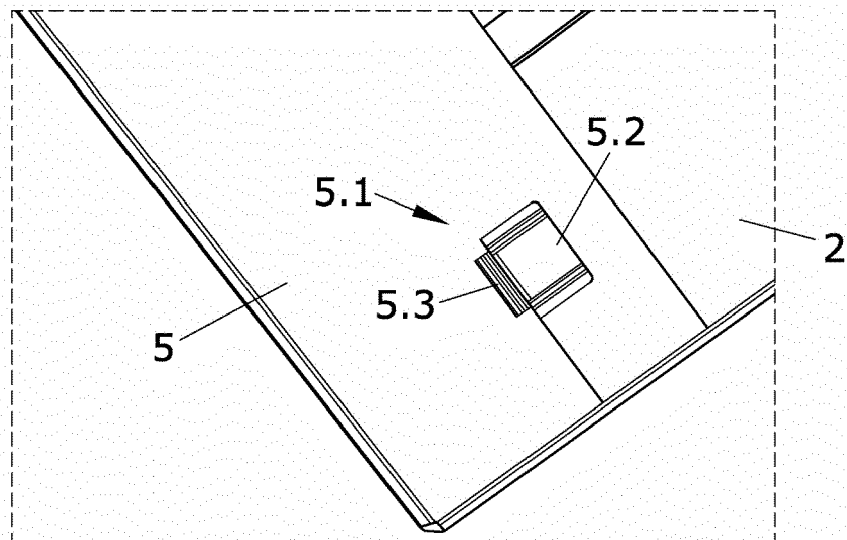


FIG. 3

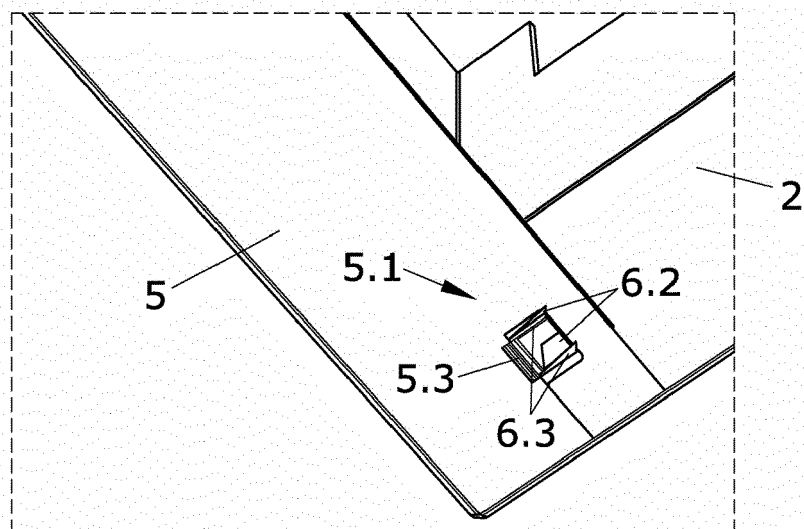


FIG. 4

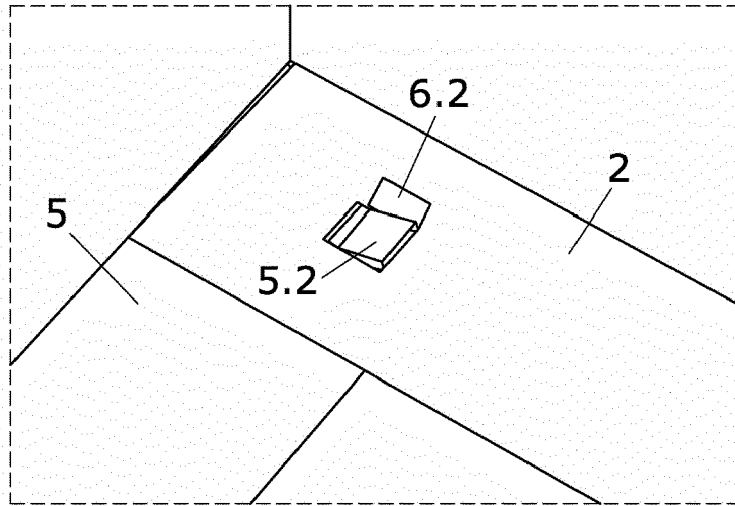


FIG. 5

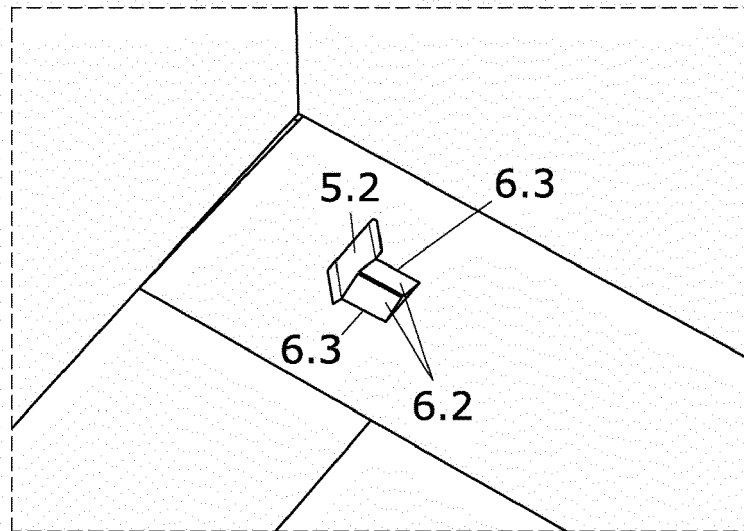


FIG. 6



EUROPEAN SEARCH REPORT

Application Number
EP 12 38 2493

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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 7 June 2013	Examiner Piolat, Olivier
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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EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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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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07-06-2013

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