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Packaging holders for electric lamp bulbs.

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A packaging holder for an electric lamp bulb comprises a tubular sleeve of square horizontal cross-section of, for example cardboard, having axial lengthwise rigidly for upright display and adjacent to one end thereof means comprising four slots (17) provided symmetrically internally of the sleeve and engageable by four tongues (23) peripherally extending symmetrical of a square positioning card (20).

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Fig .1.

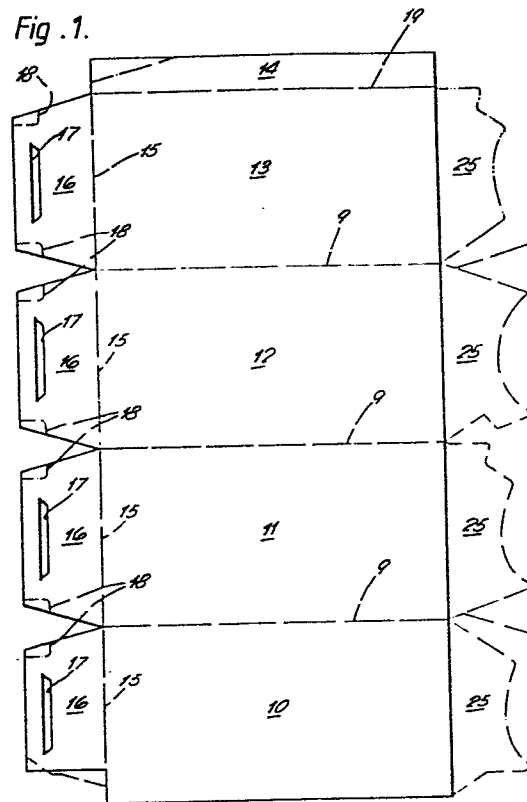
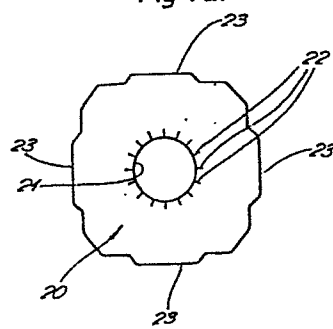


Fig .2.



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PACKAGING HOLDERS FOR ELECTRIC LAMP BULBS

This invention relates to packaging holders for electric lamp bulbs in the form of folding sleeves and positioning cards, such sleeves being manufactured and stored in a flat condition and erected when
5 required for use.

Heretofore, electric lamp bulbs have been packed in tubular holders, one form of which consists of tubes formed of corrugated paper in which the corrugations run normal to the axial length of the tube. A positioning
10 card dimensioned to fit transversely across the inside of the tube is provided to be located in the tube with at least two opposite edges located in a trough between two adjacent corrugations thereby to hold the card in the tube. The positioning card has centrally thereof a hole through
15 which the lamp base of a lamp bulb can be pushed prior to the card being fitted into said tube with the bulb located in the tube. A series of equi-spaced slits or cuts are provided radially around the perimeter of the hole to form therebetween fingers which are relatively flexible to
20 enable them to flex relative to each other and to the card as a lamp base is being pushed through the hole, the hole being of intentionally slightly smaller diameter than that of the lamp base. A disadvantage of such tubes is in their appearance and presentation. The edge at both ends of
25 the tube are easily crushed and frayed during packing of lamp bulbs therein, and of packed bulbs into a carton or box for transportation, and the tubes have very little resistance to axial lengthwise compression and therefor such packed bulbs can not readily without some external
30 support be formed into a stacked sales display. Also, the external surface of the material out of which the tubes are made does not have a good print-receiving characteristic and therefor promotional sales print applied to such surfaces is of poor quality.

35 An object of the present invention is to obviate or mitigate this disadvantage.

In accordance with the present invention, a packaging holder for an electric lamp bulb comprises a tubular sleeve, of for example cardboard, having axial length-wise rigidly and adjacent to one end thereof means
5 engagable by tongues peripherally extending from at least two opposite locations of a positioning card.

Preferably, the sleeve is for upright display and is of square horizontal cross-section, and the positioning card is square having symmetrically thereabout four
10 tongues.

Preferably also, the means are four slots provided symmetrically internally of the sleeve and into each of which a corresponding tongue of the card can engage.

Preferably further, the sleeve is formed from a blank having four parallel crease or other weakening
15 lines to define four side panels of similar width and a glue panel of narrower width at one end, and one crease or other weakening line normal to the other crease lines and across each side panel to define a fold-in end flap,
20 one for each side panel, said end flaps each having a slot whose axis is parallel to said normal crease line.

An embodiment of the present invention will now be described, by way of example, with reference to the accompanying drawings, in which:-

25 Fig. 1 is a plan view of a blank for a sleeve of a packaging holder of the present invention, also showing in broken line modifications to the blank;

Fig. 2 is a plan view of a positioning card for use with said sleeve; and

30 Fig. 3 is a plan view of a positioning card for use with a modified blank.

Referring to Fig. 1 of the drawings, the blank of cardboard for a tubular sleeve has four parallel crease or other weakening lines 9 to define four side panels
35 10, 11, 12 and 13 of same width, and attached to side panels 13 a glue panel 14 of narrower strip width. One crease or other weakening line 15 is provided normal to the other crease lines 9 and across each side panel

to define a fold-in end flap 16, one for each panel. The panels 10, 11, 12 and 13 are of same length. Each end flap 16 has a slot 17 of regular trapeziform whose longitudinal axis and parallel sides are parallel to said normal crease line 15. The sides of adjacent flaps 16 converge towards crease line 9. The blanks are erected into a folded condition for storing by folding the panels and flaps along their crease lines and then adhering glue flap 14 to the inside of side panel 10, the flaps 16 then being folded inside the sleeve so formed. The sleeve is then folded flat by initially pressing the sleeve from a square tube into a diamond shaped tube, and then into a flattened form.

Square positioning cards 20 of cardboard are provided as shown in Fig. 2, each having a hole 21 and radial cuts or slits 22. Four tongues 23 are provided symmetrically of the card 20, each engagable, when the card is positioned in an erected sleeve, with a slot 17. When a card is fitted into a sleeve, the tongues 23 being engaged in the slots 17, prevent unintentional removal of the card and bulb.

In the modifications shown in Fig. 1, a part is cut-away at the outer portion of the flap to provide an edge 18 for a purpose to be described hereinafter. An edge 18 is also provided as shown on the outside sloped edge of flap 16 for side panel 13. Each corner 24 of the card 20 is shaped to fit against the inside corner between two side panels to assist in maintaining the sleeve in a fully erected form. When each card is fitted into a sleeve with the tongues 23 engaged in the slot 17 corners 24 are located in the corners of the sleeve where the flap sides have been cut-away, the corners 24 abutting against edges 18 to prevent unintentional removal of the card and bulb in the opposite direction to which they have been inserted. Cards are normally manufactured in strips, the cards being easily separated from the strip.

The external surface of the cardboard and of the card has a good print-receiving characteristic.

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In use, the lamp base of a lamp bulb is pushed through a hole 21 of a card, the sleeve erected and the bulb and card inserted at the flap end until the tongues 23 engage in the slots 17 and in the modification
5 corners 24 engage the inside corners of the sleeve beyond edges 18.

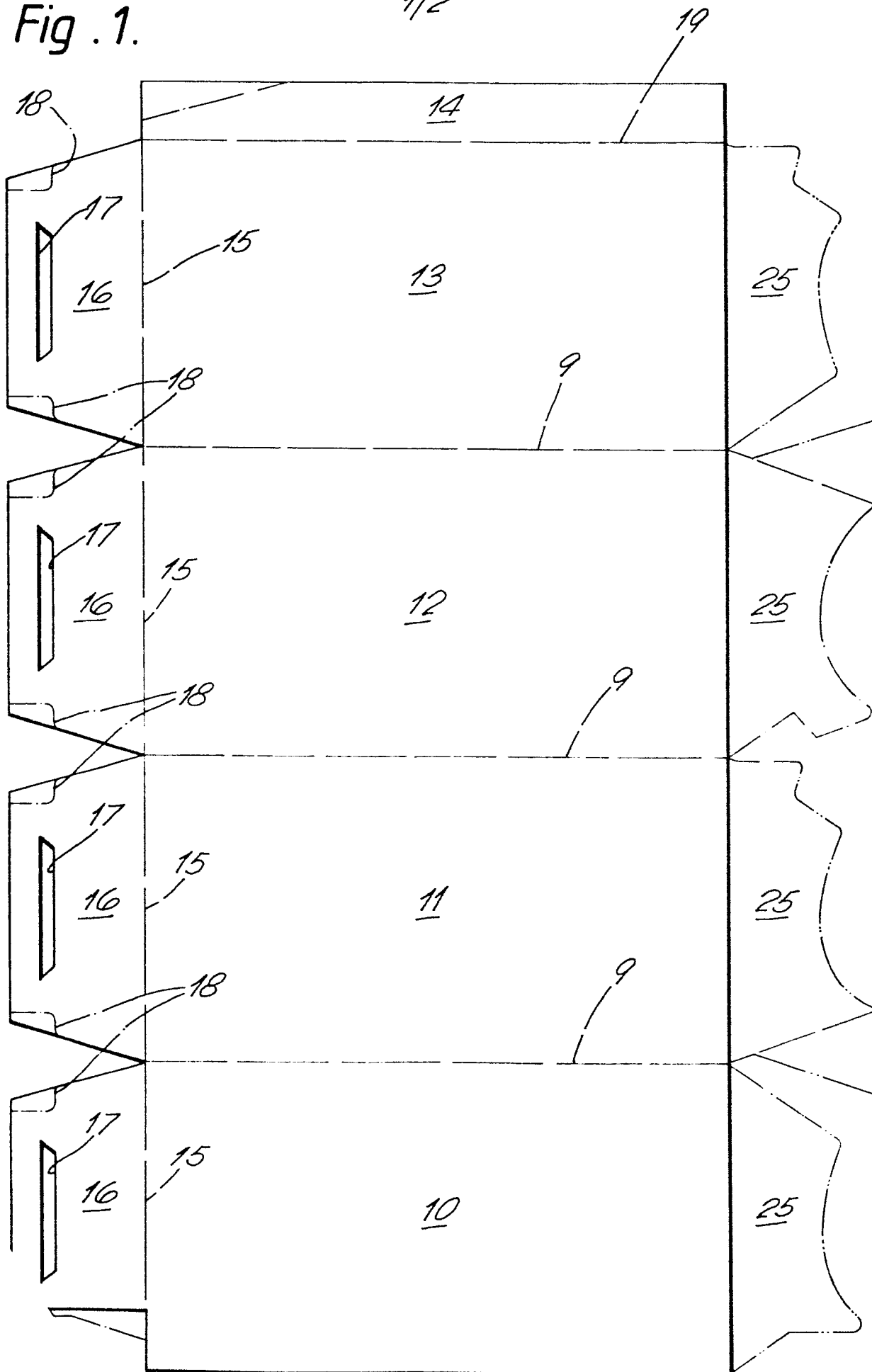
In a further modification shown in Fig. 1 shaped flap portions 25 are provided along the opposite edge of the blank from the flaps 16 to form, when erected, a
10 support at the other end of the sleeve for a bulb, part of which occupies the central space left by the surround. These flaps further prevent unintentional removal of the bulb and gives rigidity to the holder.

CLAIMS

1. A packaging holder for an electric lamp bulb comprises a tubular sleeve of, for example cardboard, characterised in that the sleeve has axial length-wise rigidly, and adjacent to one end thereof, has
5 means (17) engagable by tongues (23) peripherally extending from at least two opposite locations of a positioning card (20) to be located in said sleeve.
2. A holder as claimed in Claim 1, characterised in that the sleeve is for upright display and is of
10 square horizontal cross-section.
3. A holder as claimed in Claim 2, characterised in that the positioning card (20) is square having symmetrically thereabout four tongues (23).
4. A holder as claimed in Claim 3, characterised
15 in that the means are four slots (17) provided symmetrically internally of the sleeve at one end, and into each of which a corresponding tongue (23) of the card (20) can engage.
5. A holder as claimed in any one of Claims 1 to 4,
20 characterised in that the sleeve is formed from a blank having four parallel crease or other weakening lines (9) to define four side panels (10, 11, 12, 13) of similar width and a glue panel (14) of narrower width at one end, and one crease or other weakening line (15)
25 normal to the other crease lines and across each side panel to define a fold-in end flap (16), one for each side panel, said end flaps (16) each having a slot (17) whose axis is parallel to said normal crease line (15).
6. A holder as claimed in Claim 5, characterised
30 in that shaped flap portions (25) are provided along the opposite edge of the blank from flaps (16) to form, when erected, a support for the globe of a bulb.

Fig. 1.

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Fig . 2.

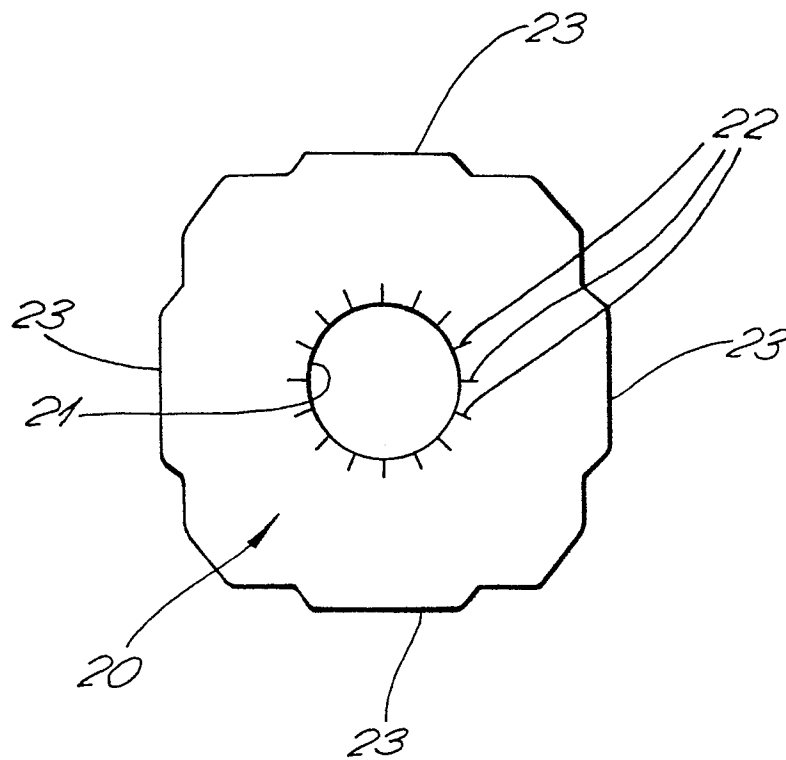
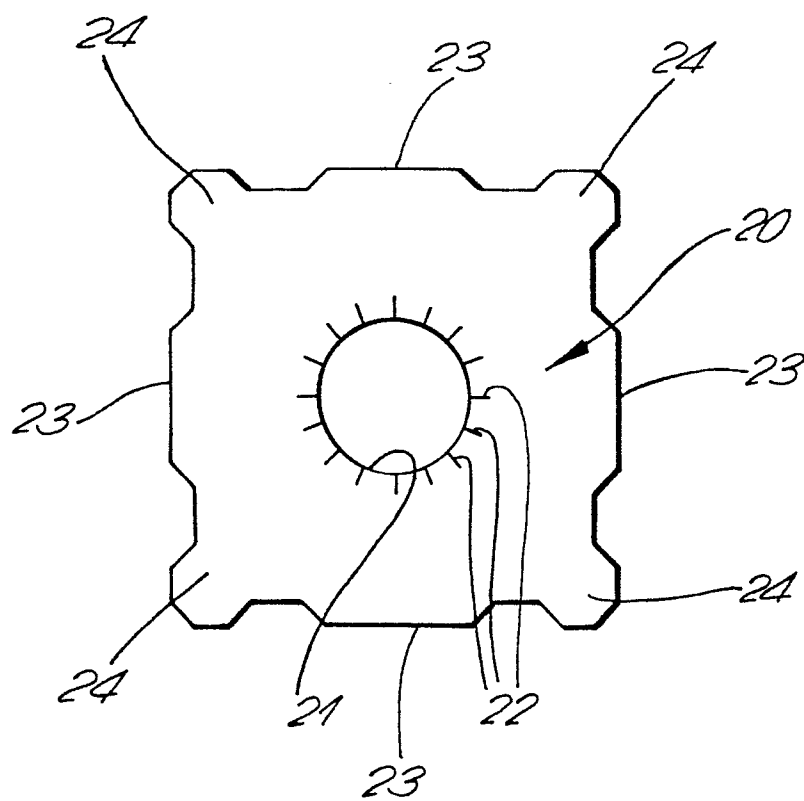


Fig . 3.





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EUROPEAN SEARCH REPORT

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Application number

EP 84 30 4448

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. 4)
X	US-A-4 264 031 (GOEBEL) * Figures 1-4 *	1	B 65 D 5/14 B 65 D 5/50
A		6	
X	GB-A-1 200 913 (HABERT) * Figures 1-3 *	1, 2	
A		3-6	
A	US-A-1 597 065 (DAVIS) * Figures 4-6 *	3	
X	US-A-1 665 359 (HAAS) * Figures 1-4 *	1, 2	
A	US-A-1 445 773 (KOPPELMAN)		TECHNICAL FIELDS SEARCHED (Int. Cl. 4) B 65 D
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 18-02-1985	Examiner BESSY M. J. F. M. G.
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	