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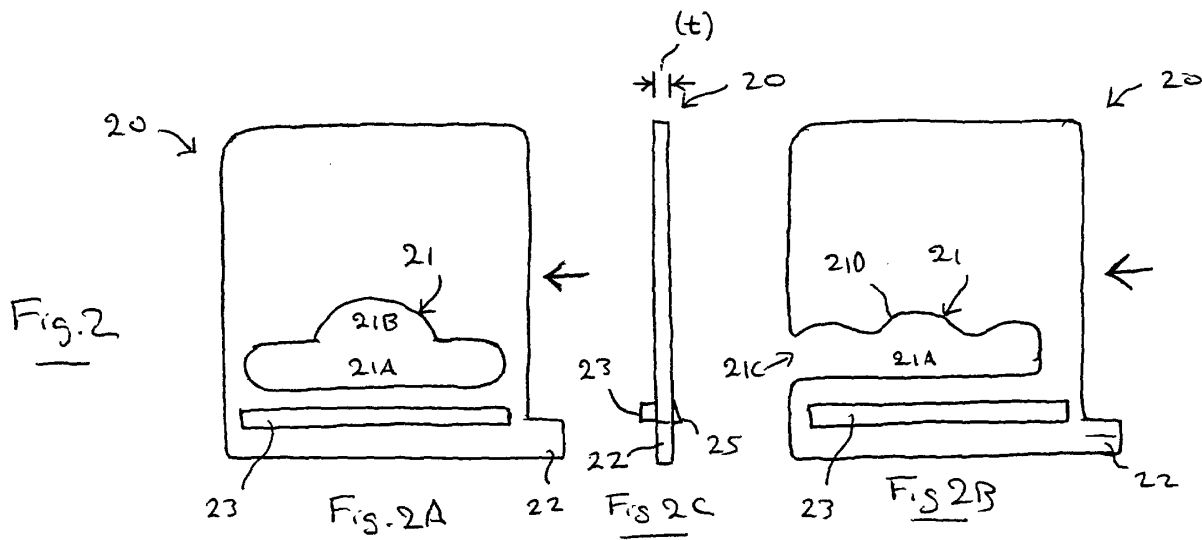
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(54) **Mounting device for a container**

(57) A hanging system for articles (10), comprising a hook part (20) attached to the article (10). The hook part (20) has an aperture (21) for hanging the article (10) on a pin threaded therethrough. The hook part (20) is a

separate part attachable to the article (10). Two independently selectable forms of the hook part are provided. One form has an aperture (21) with a closed perimeter, and the other form has an aperture (21) with an opening (21C) in its perimeter.



Description

[0001] This invention relates to a novel device, being a package for articles, particularly a package in which articles may be displayed for example in a supermarket or other retail outlet.

[0002] Often articles or packages containing products are displayed in retail outlets such as supermarkets on a display stand, from which project one or more usually a plurality of pins, by means of a hook part on the article or package having an aperture therein through which the pin may be threaded and the article or package hung. Such a pin may for example be a metal rod or elongated loop.

[0003] The state of the art discloses numerous ways in which hook parts may be attached to articles such as packages. US-A-4 349 102 discloses a hook part which is held between the parts of a package. US-A-4 632 242 discloses a hook part which may be attached to a package and can slide into the package to be concealed. US-A-4 899 882 discloses a hook part which can fit between the hinged walls of a package. US-A-5 509 528 discloses hook parts with attachment legs which enable an article to be hung thereon in two configurations rotated by 90°. WO-A-99/51501 discloses a hook part which may be attached to a package, having sideways projecting feet. GB-A-2 278 342 discloses a hook part which may be attached to a package and can slide into the package to be concealed. WO-A-96/03321 discloses a hook which can be retractably set into the wall of a package.

[0004] For standardisation such apertures are almost invariably of a standard shape very well known in trade circles as a "Eurohook". The Eurohook aperture consists of a slot, elongate in the horizontal direction to be generally rectangular, and having one or more cut-out, e.g. a concavity in its upper edge, or e.g. a scalloped upper edge. Various shapes of Eurohook are known. The terms "horizontal" and "upper" and other directional terms used herein are relative to the vertical direction when the package or article is hung. The term "Eurohook" as used hereafter means such an aperture.

[0005] There are two types of Eurohook. A first type has an aperture with a completely closed perimeter, and a second type has a perimeter which is open at one end of the elongate slot. This causes a problem as some retail outlets prefer the first type and others prefer the second. This can potentially result in a supplier's product having one of these two types of Eurohook being rejected in favour of competitors having the other type. Normally the hook part of an article or package is made integral with the article or package, causing the problem that there is little or no possibility of replacement of one type of Eurohook with the other in for example a production line for the articles or packages.

[0006] It is an object of this invention to provide a solution to this problem.

[0007] According to this invention an article, which may be a package for a packaged product therein, is

provided having a hook part attached thereto and by which the article may be hung, the hook part having an aperture therein suitable for hanging the article on a pin threaded therethrough, characterised by:

the hook part being a separate part from the article and being attachable to the article, and by the hook part being provided in two independently selectable forms, one form having an aperture with a closed perimeter, and the other form having an aperture with an opening in its perimeter.

[0008] The present invention also provides an article, which may be a package for a product provided separately from, and attachable to, a hook part and suitable to thereby form an article being a combination of article and hook part as described herein.

[0009] The present invention also provides a hook part provided separately from, and attachable to, an article which may be a package, to thereby form an article being a combination of article and hook part as described herein.

[0010] The present invention also provides a set of parts comprising an article, which may be a package for a packaged product therein, and two independently selectable hook parts by either of which the article may be hung, each hook part having an aperture therein suitable for hanging the article on a pin threaded therethrough, each hook part being a separate part from the article and being attachable to the article, each hook part having either an aperture with a closed perimeter or an aperture with an opening in its perimeter.

[0011] The present invention also provides a method of providing an article, which may be a package for a packaged product therein, for display comprising:

selecting one of two independently selectable hook parts, each hook part having either an aperture with a closed perimeter or an aperture with an opening in its perimeter, each aperture being suitable for hanging the article on a pin threaded therethrough, and attaching the selected hook part to the article.

[0012] The present invention also provides a method of displaying such an article, comprising hanging the article on a pin threaded through the aperture of the selected hook part.

[0013] Preferably the article is a package for a packaged product therein.

[0014] Preferably such a package is a robust plastics material box, envelope or blister pack suitable for containing the product. Alternatively other types of packaging material such as card may be used.

[0015] Suitably the aperture may be a slot, elongate in the horizontal direction to be generally rectangular, and preferably has one or more cut-out, e.g. a concavity in its upper edge, or e.g. a scalloped upper edge, that is an upper edge in the form of a plurality, suitably three,

adjacent curves, e.g. part-circular curves. Preferably the aperture is a Eurohook aperture.

[0016] Suitably one of the two independently selectable forms comprises a slot elongate in the horizontal direction so as to be generally rectangular and having a completely closed perimeter e.g. the first type of Eurohook aperture. The other form may comprise a slot elongate in the horizontal direction to be generally rectangular with an open narrow end, e.g. the second type of Eurohook aperture.

[0017] Preferably the hook part is also made of robust plastic material having an attachment part, by means of which it may be releasably attached to the package, suitably at a lower part, e.g. a lower edge of the hook part.

[0018] Preferably the article or the package, and the hook part have respective co-operating attachment parts which co-operate with each other for the attachment of the article or package to the hook part.

[0019] Various types of attachment parts which co-operate in various ways may be used. Preferably the hook part and article or package are firmly but releasably attachable to each other.

[0020] For example the attachment parts of respectively the hook part and the article or package may co-operate by snap-fit co-operation. For example the attachment parts of the hook part and article or package may comprise respective abutment parts constructed such that an abutment part on the article or package overhangs an abutment part on the hook part so that the package hangs on the hook part. For example the hook part may have a lower part which has at least one horizontally extending projection, and the article or package may have a slot therein into which the lower part of the hook part may fit, and the horizontally extending projection may have an upper surface which extends under a surface of the article or package adjacent to the slot, e.g. adjacent to an end of the slot, so that this surface of the article or package overhangs the upper surface of the horizontally extending projection and abuts against it. For example the hook part and article may have snap fit connection parts, e.g. teeth which snap over and lock behind each other to resist removal of the hook part. For example the attachment parts of the hook part and article or package may wedge together in an interference or friction fit. For example one or both of the article or package, or the hook part may have wedge parts to urge them tightly together. One or more of such attachment means and ways in which they co-operate may be used in the device of this invention.

[0021] A set comprising one or more article and one or more of the hook parts, with the hook part(s) being separate from the article(s) and attachable thereto by a user may be supplied to a user.

[0022] The present invention provides the advantage that the article with the hook part attached may be hung on a pin in two alternative ways. These are, by threading a pin through the aperture in a direction generally perpendicular to the plane of the aperture, which may be

done with both forms of aperture, and by inserting the pin through the opening in the perimeter of the second type of aperture, e.g. with the pin and hook part moving relatively together in a direction generally parallel to the plane of the aperture.

[0023] A further advantage of the present invention, particularly when the article is a package, is that the hook part used for hanging on a display stand can be an inconvenient feature when the package is used by the purchaser as a container for a product therein. By providing a removable hook part according to this invention the hook part may conveniently be detached, to result in a package of a neater appearance.

[0024] The invention will now be described by way of example only with reference to:

[0025] Fig. 1. Which shows a perspective view of the upper part of a package.

[0026] Fig. 2. Which shows front and side views of a hook part.

[0027] Fig. 3. Which shows co-operation of the package and hook parts of Figs. 1 and 2

[0028] Referring to Fig. 1 this shows a perspective view of the upper part of a package being a box 10 for an product being an electric toothbrush and being in two parts 10A, 10B comprising wall parts of the box hinged together by hinge 11 to allow the box to open along the edge 12. The box is made of transparent rigid plastic e.g. polymethylmethacrylate or polystyrene.

[0029] In the top edge 13 of the box 10 is an elongate slot 14 formed in both the back surface 15 and the top surface 16 of the box 10, i.e. along the edge 13 of the box 10. The slot 14 does not extend along the whole length of the back surface 15, but the box 10 has a part 17 underneath hinge 11 adjacent to end 18 of the slot 14. Part 17 has a downward facing underside 17A within the box 10.

[0030] Fig. 2A shows a front view of a hook part 20. This is a generally rectangular part, also of transparent rigid plastic, typically planar and ca. 0.5-1.0 mm thick in its thickness direction "t". There is a Eurohook aperture 21 extending completely through the thickness of part 20 and being of the first type mentioned above having a closed perimeter. The aperture 21 comprises a horizontally extending elongate slot with rounded ends, 21A, with a generally semi-circular cutout 21B in its upper edge. Shown in Fig. 2B is an alternative Eurohook aperture in which the slot 21A has an open end 21C and the upper edge 21D is scalloped.

[0031] The part 20 has an attachment part comprising a horizontally extending small generally rectangular projection 22 in the plane of the part 20. Seen most clearly in side view Fig 2C of the part 20 looking in the direction of the arrow shown in Figs. 2A and 2B there is also a raised ridge 23 on one of the planar surfaces of part 20, extending horizontally along a major proportion of the width of the part 20, and extending horizontally out of the plane of the part 20, and being of generally rectangular cross section as seen in Fig. 2C.

[0032] Referring to Fig. 3 this shows the attachment of the part 20 to the box 10. The width (a) of the part 20 is slightly less than the length (b) of slot 14, and the width (c) of slot 14 is slightly more than the thickness (t) of the part 20 so that when the box 10 is open the part 20 can be threaded as shown through slot 14 from the underneath, i.e. from the interior of the box 10 in the direction of the arrow shown in Fig. 3. As seen in the section through the part of the box 10 in the vicinity of the edge 13 the upper surface of ridge 23 abuts against the underside of the top surface of box 10, and an upper surface of the projection 22 abuts against the underside 17A of part 17 of the box 10, so that the box 10 hangs on the hook part 20 when a pin (not shown) is threaded through aperture 21 so that the hook part 20 itself hangs on the pin. The upper surface of the ridge 23 may be profiled to fit the underside of the top surface 16 of the box 10, for example if this has an arched, e.g. upwardly arched shape

[0033] On the surface 24 of the part 20 are also small wedge-shaped surface teeth 25, tapering so that their narrow end is upward. When the part 20 is threaded through the slot 14 the surface 15 of box 10 bounding slot 14 snap-fits over these wedge shaped teeth 25, the box 10 being made of resilient plastic material, so that the base surface of part 25, opposite the narrow end, abuts against an upward facing edge of slot 14 to resist accidental downward removal or falling of part 20 out of slot 14 into the interior of box 10.

[0034] By means of the invention alternative parts 20 having a selected either one of the two types of Eurohook 21 shown in Fig. 2 may be attached to the box 10 to suit the requirements of any user such as a retail outlet. The combination of box 10 and hook part 20 may then be hung for display on a suitable pin (not shown) threaded through aperture 21. The hook part 20 may also be easily detached from the box 10 to allow the box 10 to be used as a container for the product contained therein.

Claims

1. An article (10) having a hook part (20) attached thereto by which the article (10) may be hung, the hook part (20) having an aperture (21) therein suitable for hanging the article (10) on a pin threaded therethrough, **characterised by:**

the hook part (20) being a separate part from the article (10) and being attachable to the article (10), and by

the hook part (20) being provided in two independently selectable forms, one form having an aperture (21) with a closed perimeter, and the other form having an aperture (21) with an opening (21C) in its perimeter.

2. An article (10) according to claim 1 being a package for a packaged product therein.

3. An article (10) according to claim 1 or 2 wherein the respective apertures (21) of both forms of hook part (20) are slots elongate in the horizontal direction so as to be generally rectangular.

4. An article (10) according to claim 3 wherein one form of hook part (20) has a first type of Eurohook aperture (21), and the other form of hook part (20) has a second type of Eurohook aperture (21).

5. An article (10) according to any one of the preceding claims wherein the article (10), and the hook part (20) have respective co-operating attachment parts (22, 17, 23, 25) which co-operate with each other for the attachment of the article (10) to the hook part (20).

6. An article (10) according to any one of the preceding claims wherein the hook part (20) and article (10) are firmly but releasably attachable to each other.

7. An article (10) provided separately from, and attachable to, a hook part (20) to thereby form an article (10) according to any one of the preceding claims.

8. A hook part (20) provided separately from, and attachable to, an article (10) to thereby form an article (10) according to any one of the preceding claims.

9. A set of parts comprising an article (10), and two independently selectable hook parts (20) by either of which the article (10) may be hung, each hook part (20) having an aperture (21) therein suitable for hanging the article (10) on a pin threaded therethrough, each hook part (20) being a separate part from the article (10) and being attachable to the article (10), each hook part (20) having either an aperture (21) with a closed perimeter or an aperture (21) with an opening (21C) in its perimeter.

10. A method of providing an article (10) for display comprising:

selecting one of two independently selectable hook parts (20), each hook part (20) having either an aperture (21) with a closed perimeter or an aperture (21) with an opening (21C) in its perimeter, each aperture (21) being suitable for hanging the article (10) on a pin threaded therethrough, and attaching the selected hook part (20) to the article (10).

11. A method of displaying an article (10), comprising hanging the article (10) on a pin threaded through

the aperture (21) of a hook part (20), the hook part (20) being a separate part from the article (10) and being attached to the article (10), the hook part (20) being one of two independently selectable forms, one form having an aperture (21) with a closed perimeter, and the other form having an aperture (21) with an opening (21C) in its perimeter.

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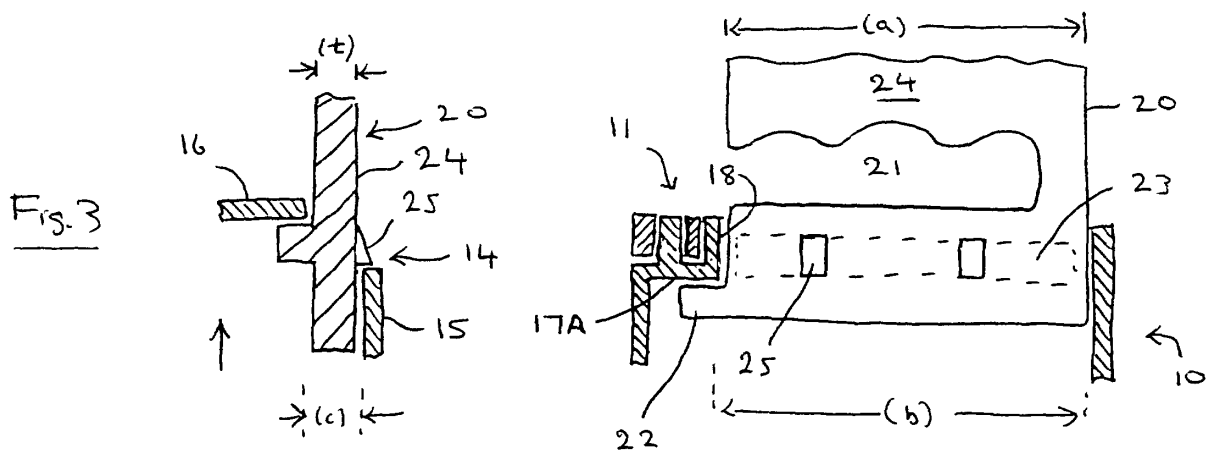
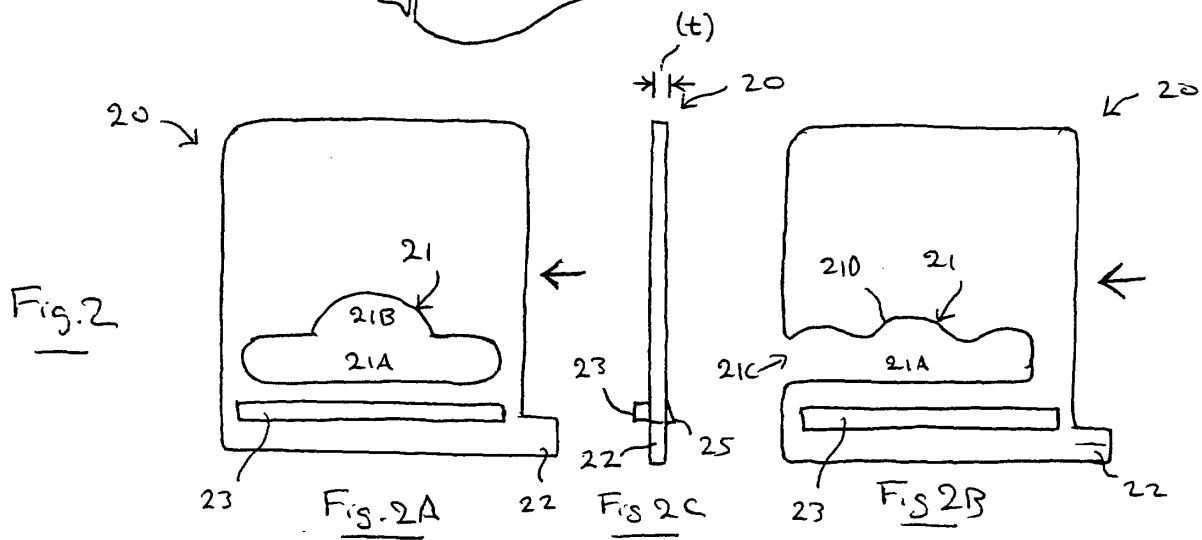
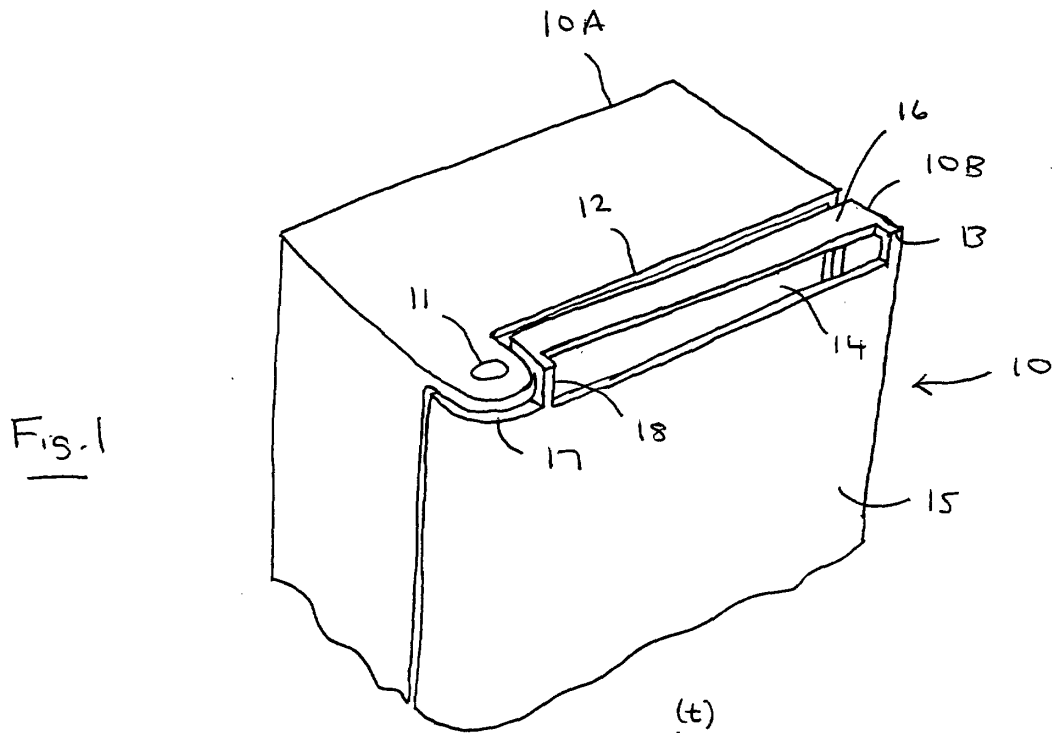
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European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 01 20 2985

DOCUMENTS CONSIDERED TO BE RELEVANT			
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			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
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The present search report has been drawn up for all claims			
Place of search	Date of completion of the search	Examiner	
BERLIN	14 November 2001	Olsson, B	
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention	
X : particularly relevant if taken alone		E : earlier patent document, but published on, or after the filing date	
Y : particularly relevant if combined with another document of the same category		D : document cited in the application	
A : technological background		L : document cited for other reasons	
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EPO FORM 1503.03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 01 20 2985

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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