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Applicant: Noxell Corporation (U.K.) Limited
North House 9 St. Edwards Way
Romford Essex RM1 1UJ(GB)

(72)

Inventor: Rutherford, Paul N.
14 Integer Gardens Forest Road
Leytonstone London, E11 1LJ(GB)

(74)

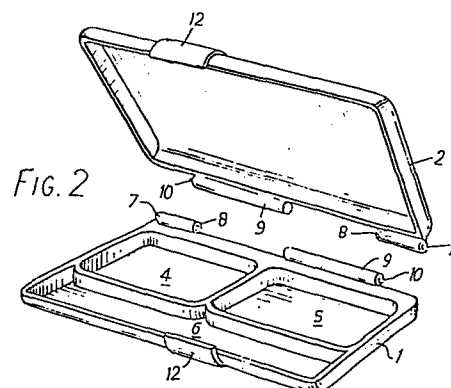
Representative: Day, Jeremy John et al,
REDDIE & GROSE 16 Theobalds Road
London, WC1X 8PL(GB)

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Plastics boxes.

(57)

This invention provides a moulded plastics box comprising a base portion (1) and a lid portion (2) hingedly attached thereto, wherein the hinge (3) is moulded integrally with the box and is formed wholly from plastics material, the hinge (3) extending substantially completely along one side of the assembled box and being formed by co-operation elements (7-10) on the base portion (1) and the lid portion (2), said elements comprising (7-10) on both the base (1) and the lid portions (2) a first element (7) defining a socket (8) and arranged at or towards the end of the side of the box such that when the base (1) and lid portions (2) are assembled the first elements (7) lie one at each end of said side with the sockets (8) in facing relation, and a second elongate element (9) spaced by a distance from said first element (7) and defining at one end a spigot (10) for engagement in the socket (8). The lid portion (1) and the base portion (2) are preferably of substantially identical shape.



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PLASTICS BOXES

This invention relates to boxes made from plastics materials and more especially to moulded boxes having a hinged lid such as those used for make-up compacts, for example, eye shadow compacts.

5 The invention provides a moulded plastics box comprising a base portion and a lid portion hingedly attached thereto, wherein the hinge is moulded integrally with the box and is formed wholly from plastics material, the hinge extending substantially completely along one side of the assembled box and being formed by co-operating elements
10 on the base portion and the lid portion, said elements comprising on both the base and the lid portions a first element defining a socket and arranged at or towards the end of the side of the box such that when the base and lid portions are assembled the first elements lie one at each end of said side with the sockets in facing relation, and a
15 second elongate element spaced by a distance substantially equal to its own length from said first element and defining at one end a spigot for engagement in the socket and at the other end a flat surface such that when the spigots of the second elements are engaged in the sockets of the first elements the two flat surfaces are substantially
20 in abutment.

 Preferably, the lid portion and the base portion are the same general shape, apart possibly for internal moulded detail, so that essentially the same moulding tool can be used for moulding both parts of the box.

The spigots and sockets may be of any desired shape that will allow the two portions of the box to be assembled simply by clipping the spigots into the sockets. They may for example be part spherical or conical or even cylindrical.

5 Although the box has been described as having the sockets on the first hinge element and the spigots on the second hinge element, it is of course possible to reverse this arrangement so that the spigot is on the first element and the socket on the second.

 The box of the invention may be made from any rigid
10 thermosetting or thermoplastic polymer, for example polystyrene, styrene/acrylonitrile copolymers, ABS, polyvinyl chloride or copolymers of vinyl chloride, nylon, urea-formaldehyde or polycarbonate.

 One form of the invention will now be described in greater detail by way of example with reference to the drawings, in which:

15 Fig. 1 is a perspective view of the box;

 Fig. 2 is an exploded view of the box; and

 Fig. 3 is a section through the hinge.

 Referring to the drawings the box according to the invention comprises a base portion 1 and a top portion 2 connected together by
20 a hinge indicated generally by 3.

 The base 1 and top 2 are identical in external shape but the base 1 is formed with a number of compartments 4, 5 and 6 for holding, for example, two different forms of eye make-up and applicator brushes, respectively.

25 The hinge 3 is formed by co-operating elements on the base 1 and the lid 2. These elements comprise a first element 7 in the form of a cylindrical moulding arranged at one end of the hinge line and having

an indentation 8 in its inward facing end and a second element 9 spaced from the first element by a distance equal to its own length and having a projecting part spherical spigot 10 for co-operation with the indentation 8 on the other portion of the box at one end.

5 The ends of the portions 9 remote from the projection 10 are planar so that when the projections 10 are in engagement with the indentations 8 the two planar ends 11 are in abutting relation thereby preventing easy removal of the lid from the base.

 A closure clip 12 is provided on the lid portion and the
10 base portion on the edge opposite to that on which the hinge is formed.

 The box of the invention has a number of advantages over the hitherto known boxes of this type using conventional ball and socket type hinges. It has more aesthetic appeal than the hitherto known boxes because the hinge is a more integral part of the design
15 of the box which allows an unbroken hinge line; it is stronger than the hitherto known boxes since there is less tendency for the hinge elements to break off or to spring apart when the lid of the box is forced beyond its fully open position; and the two portions of the box can be exactly symmetrical allowing the two portions to be made
20 using the same moulding tool.

CLAIMS:

1. A moulded plastics box comprising a base portion and a lid portion hingedly attached thereto, wherein the hinge is moulded integrally with the box and is formed wholly from plastics material, the hinge extending substantially completely along one side of the assembled box and being formed by co-operating elements on the base portion and the lid portion, said elements comprising on both the base and the lid portions a first element defining a socket and arranged at or towards the end of the side of the box such that when the base and lid portions are assembled the first elements lie one at each end of said side with the sockets in facing relation, and a second elongate element spaced by a distance substantially equal to its own length from said first element and defining at one end a spigot for engagement in the socket and at the other end a flat surface such that when the spigots of the second elements are engaged in the sockets of the first elements in two flat surfaces are substantially in abutment.
2. A box as claimed in claim 1, wherein the lid portion and the base portion are substantially identical in shape.
3. A box as claimed in claim 1 or claim 2, wherein the spigots and sockets are part spherical or conical.
4. A box as claimed in any one of claims 1 to 3 moulded from polystyrene.

5. A modification of the box as claimed in claim 1, wherein the spigot and socket joint is formed by spigots on the first hinge elements and sockets on the second hinge elements..

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FIG. 1

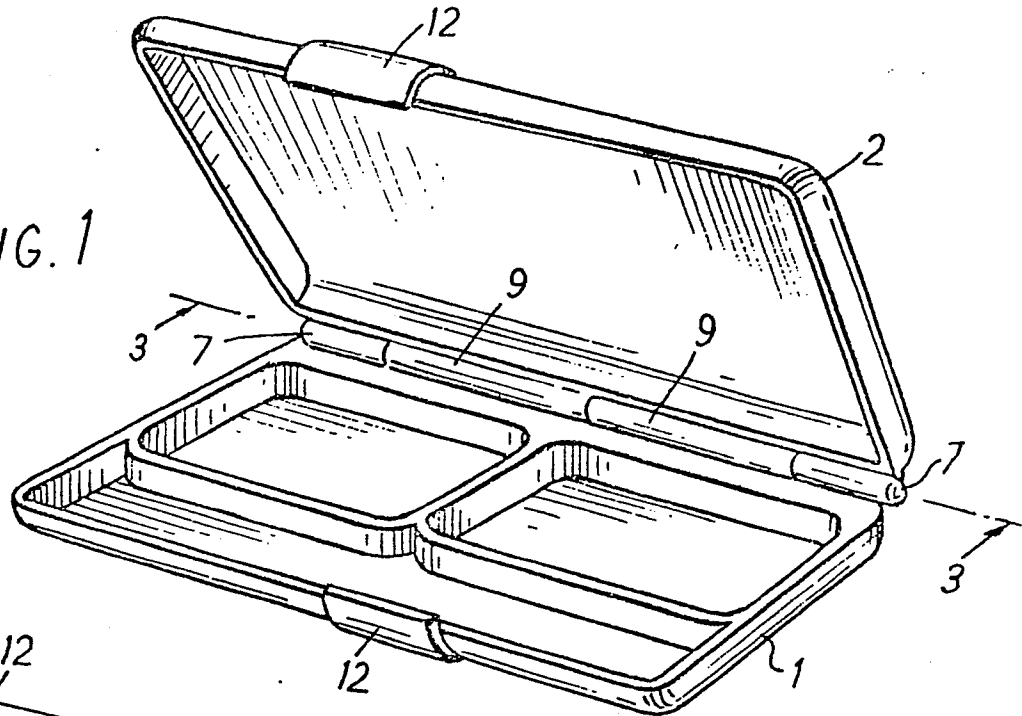


FIG. 2

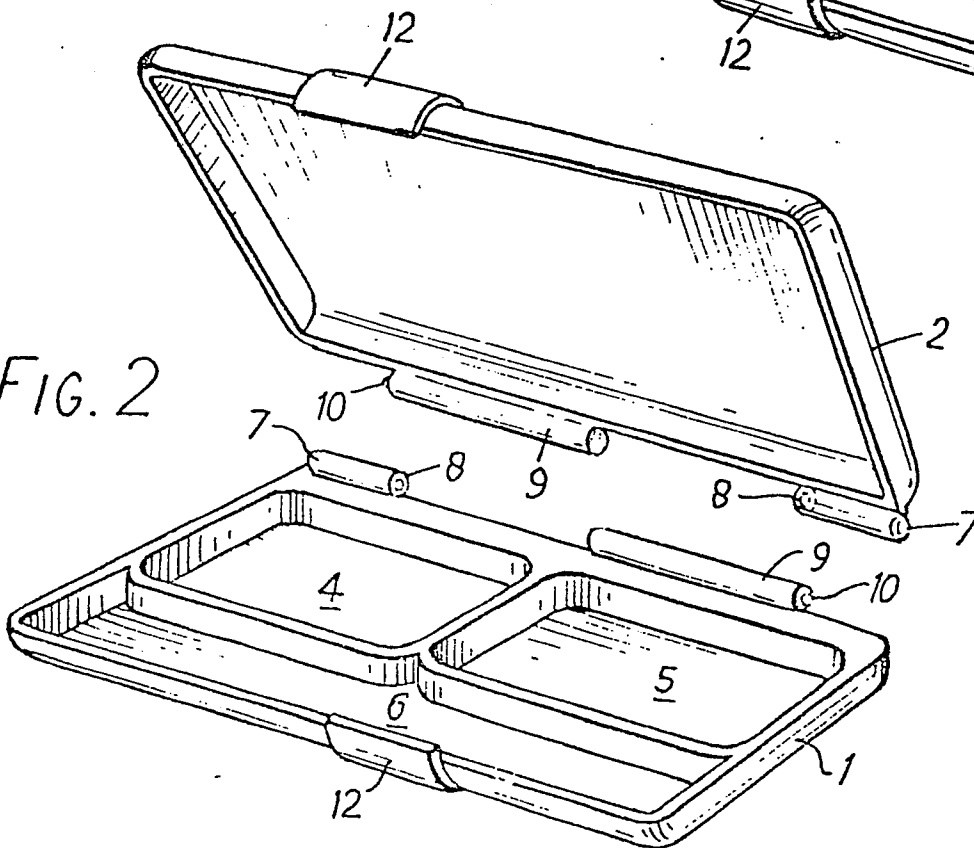


FIG. 3

