A package (1) in which a folded information bearing leaflet (6) is positioned on an inside face of the package and is retained by means of a superimposed label (7) or other glued sheet material. The face (2) of the package adjacent to the leaflet is perforated so that it may be torn back to reveal the leaflet when the package is opened. When this has taken place the contents are protected and the package reinforced by the label which remains in position attached to the inside of the package.
The present invention relates to product packaging. The packages in which products are presented to the public normally bear, on their outer surface, printed information—trademarks, advertising, warnings, instructions for use etc. While this can be an effective way of displaying such information, it does suffer from certain disadvantages. In particular, the amount of information that can be displayed is limited by the surface area of the package, and may be inadequate if, for example, lengthy instructions or details of a product range are required.

The well known alternative method of presenting such data is to include a folded sheet or leaflet loose within the package. While this method can normally provide ample surface area for presenting the information, it too has some drawbacks. Most importantly, the leaflet is likely to be discarded or lost once the package is opened. In addition, the leaflet must be inserted and appropriately arranged within the package during assembly thereof, which in itself requires an additional step in the packaging process.

A third known method is to attach a folded leaflet to the exterior of the package, but such leaflets are vulnerable to damage, prone to unfolding at inappropriate times and difficult to neatly re-fold making the package awkward to handle.

A primary object of the present invention is to provide a package that makes possible presentation of a considerable amount of information without the above described problems associated with the prior art.

A carton is known from EP 0873261 B in which a folded leaflet is mounted between an attached flap and a face of the carton. The leaflet is revealed when the flap is opened to remove the contents of the carton through an opening in an adjacent face. Whilst this gives a convenient and secure display of the leaflet, it suffers from disadvantages in manufacture as will be understood by those skilled in the art. Since the leaflet is attached to the outer face of the blank from which the carton is made, it is not possible to attach the leaflet when the blank is folded and glued by standard means to form a carton. Also the completed carton is difficult to handle when the contents are inserted on a standard packing line since the closed flap with leaflet attached is not adequately restrained.

In accordance with the present invention there is provided a package in which a folded leaflet is applied to the inside surface of a carton and is held in place by attachment means such as a label or other sheet material coated with adhesive. The attachment means is superimposed over the leaflet and is attached to the face of the carton outside the perimeter of the leaflet. It may or may not be attached to the leaflet.

These operations take place on a face of the carton that is exposed during the fabrication of the carton by the standard means of folding and gluing, as is well known to those skilled in the art. They can therefore be carried out on line during fabrication.

The leaflet is completely restrained between the face of the carton and the attachment means and therefore does not impede filling of the carton by standard machinery.

The face of the carton is perforated so that when the carton is opened by the user, preferably by opening a second face that is contingent on the first face, the first face is torn back along the perforations to reveal the leaflet.

At this point the contents of the carton are protected by, and the carton itself held in shape by, the label or sheet material previously mentioned, which remains in place in the position previously occupied by the first face.

On re-closing the carton preferably by tucking in a tab attached to the second face, the first face is returned into position to protect the leaflet and to reinforce the label or sheet material that retains the contents.

The first face of the carton is perforated down each side, starting at the line of intersection between this face and the second face either on the carton fold line, or further in depending upon the leaflet width. These perforations are at least as long as the leaflet. If the perforations are positioned inboard of the carton crease lines, they would extend across the first face at the closing end to ensure that the second face or tuck in flap remains the full width of the carton.

At the end of the perforations opposite to the line of intersection with the second face, there is a transverse perforation or crease or other means of forming a hinge, the label or sheet may or may not sit over this hinge to reinforce it.

The leaflet can be folded in any number of ways, but it is an advantage to fold it in a way that is easy to unfold and refold, such as concertina folded. A preferred fold style might comprise multi concertina folds in the first direction and two concertina folds in the second direction, creating a leaflet that is both easy to open and to close. Alternatively the leaflet can be replaced with a booklet.

The leaflet can alternatively be glued to the face of the carton, and the portion of the label or sheet that contacts the leaflet be devoid of adhesive.

The leaflet can alternatively be glued to both the label or attaching sheet and to the first panel and folded in such a way that the opening of the first face will partly open the leaflet, so making it more tamperproof for the consumer to open. Alternatively a star folded leaflet may be used which will open fully.

The first face of the carton upon which the leaflet sits can have a window cut in it allowing information on the leaflet to be read. This window can be shaped to indicate which end of the carton should be opened by the consumer.

A specific embodiment of the invention will now be described by way of example only with reference to the accompanying figures, wherein:

FIG. 1 and FIG. 2 show the cardboard blank from which the carton is made at various stages of manufacture. FIG. 3 shows a perspective view of the completed carton when opened for use.

In FIG. 1 the die-cut card blank from which the carton is made is shown in plan view. The perforations on the first face of the carton which form the tear down flap are shown at 3. The second face of the carton is shown at 4 with attached tuck in flap 5. The glue flap 10 can be positioned on either side of the blank.
The general form of this blank with the exception of perforation 3 is well known to those skilled in the art, and may include fully glued flaps to form a tamper evident pack, a crash-locked base or any other suitable design to be found in the ECMA code of folding carton styles.

FIG. 2 shows the same card blank 1 after positioning the leaflet 6 and label or glued sheet 7. Perforation 3 has been omitted for clarity.

FIG. 3 shows a perspective view of the completed carton 1 with the second face 2 torn back along the perforations to form a hinged flap 2'. Label 7 is now revealed glued in place to optionally, side faces of the carton 8 & 9, or to face 2, or to both. The second face and closing flap are shown as 4 & 5 respectively. An optional shaped window for viewing the leaflet is shown at 11.

1. A carton in which a label is attached to that surface of the carton blank which is uppermost during the folding and gluing operation and is therefore inside the completed carton. A folded leaflet or other information bearing material is retained between the label and the surface of the carton. Access to this information bearing material is provided by the removal of a part of the carton wall and at this point the label serves to reinforce and retain the shape of the carton and to retain the carton contents.

2. A carton as in claim 1 in which the label is pre-glued and self-adhesive.

3. A carton as in claim 1 in which the label is initially unglued and is attached by a secondary gluing operation.

4. A carton as in claims 1-3 in which the label is glued over its entire surface.

5. A carton as in claims 1-3 in which the label is glued over part of its surface only.

6. A carton as in claims 1-5 in which one or more faces of the carton adjacent to the label is perforated or otherwise weakened to allow those faces to be fully or partially removed.

7. A carton as in claims 1-6 in which the carton fold lines adjacent to the opening panel are creased and partially cut or otherwise suitably weakened.

8. A carton as in claims 1-7 in which removal of the carton face is accomplished as a part of the process of opening the carton.

9. A carton as in claims 1-7 in which removal of the carton face is independent of the process of opening the carton.

10. A carton as in claims 1-9 in which the information bearing leaflet is attached to the label.

11. A carton as in claims 1-9 in which the information bearing leaflet is attached to the face of the carton.

12. A carton as in claims 1-9 in which the information bearing leaflet is attached to both the label and to the face of the carton.

13. A carton as in claims 1-12 in which a passive RFID tag is attached to the label.

14. A carton as in claims 1-12 in which an active RFID tag is attached to the label.

15. A carton as in claims 1-12 in which a passive RFID tag is attached to the leaflet.

16. A carton as in claims 1-12 in which an active RFID tag is attached to the leaflet.

17. A carton as in claims 1-12 in which a passive RFID tag is attached to the carton.

18. A carton as in claims 1-12 in which an active RFID tag is attached to the carton.

19. A carton as in claims 13-18 in which a thin film battery is printed onto the label.

20. A carton as in claims 13-18 in which a thin film battery is printed onto the carton.

21. A carton as in claims 13-18 in which a thin film battery is printed onto the information bearing part or leaflet.

22. A carton as in any of the preceding claims in which one or more windows are provided in the carton to allow a visual check on any of the components of the carton or its contents.

23. A carton as in any of the preceding claims in which any other suitable electronic information bearing device is attached to the carton.

24. A carton as in any of the preceding claims in which any other suitable electronic information bearing device is attached to the label.

25. A carton as in any of the preceding claims in which any other suitable electronic information bearing device is attached to the information bearing part or leaflet.

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