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REPUBLICATION

(54) **PACKAGING**

(71) Applicant: **Cadbury Holdings Limited**, Uxbridge, Middlesex (GB)

(72) Inventors: **Parbinder Cheema**, Bournville (GB); **Jason Denis Willey**, Barry (GB)

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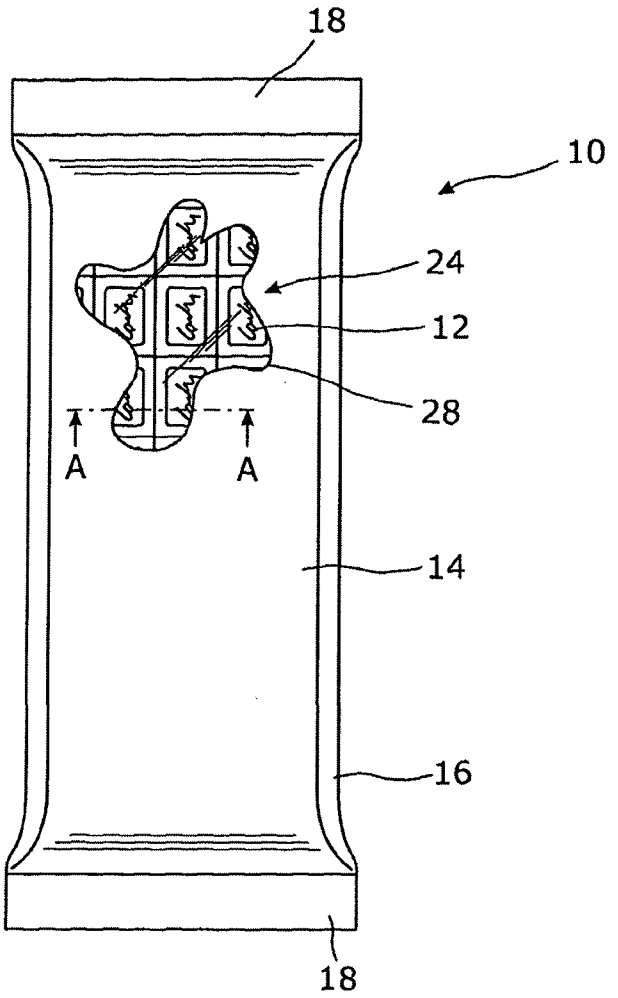
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(57) **ABSTRACT**

A method of manufacturing a packaging material comprises laminating together at least two layers of materials to form a laminated packaging material having an inner laminate structure (**20**) and an outer laminate structure (**22**), one of which (**22**) is translucent or transparent and the other (**20**) opaque. The method includes forming a score line (**28**) in the opaque laminate structure to define a section (**26**) within the opaque laminate structure which can be wholly or partially removed. The score line (**28**) can encircle the section to allow its removal after lamination to form a window (**14**, FIG. **1**) in the packaging. Alternatively, the score line (**328**, FIG. **7**) may only partially encircle the section (**326**, FIG. **7**) such that it remains attached to the remainder of the opaque laminate structure along a line (**332**, FIG. **5**) about which section of opaque laminate structure can be folded in the manner of a flap.



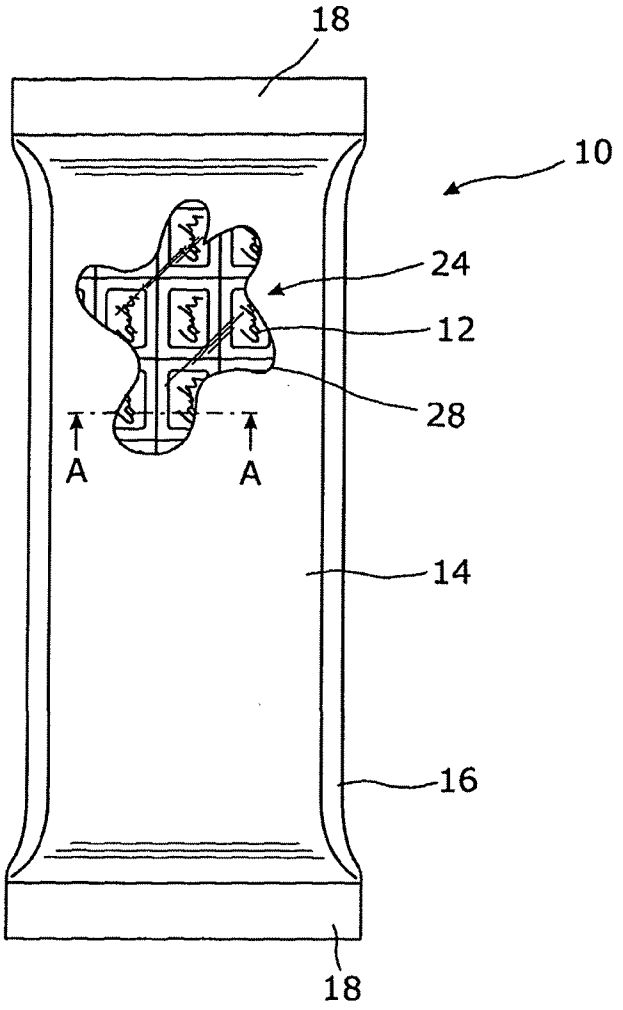


Fig. 1

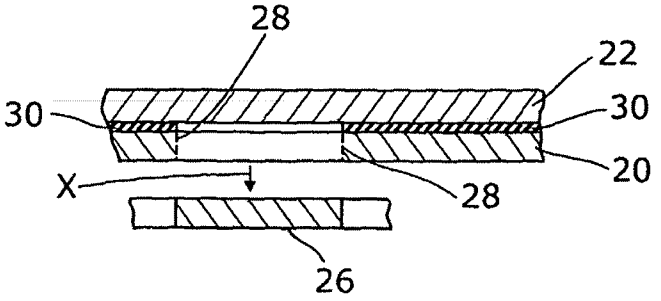


Fig. 2

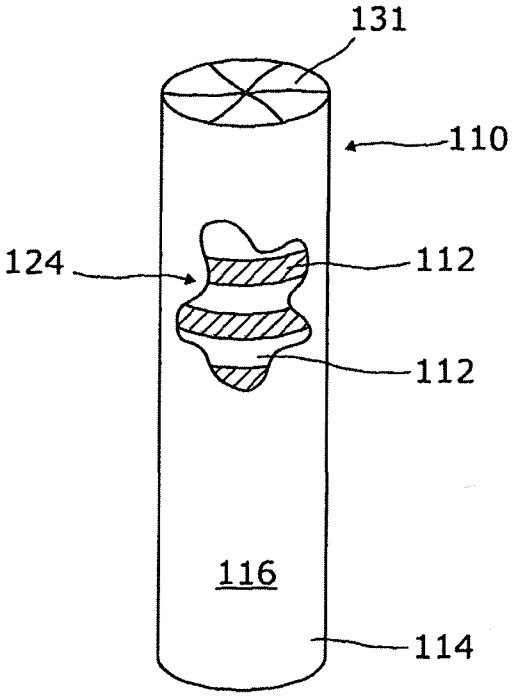


Fig. 3

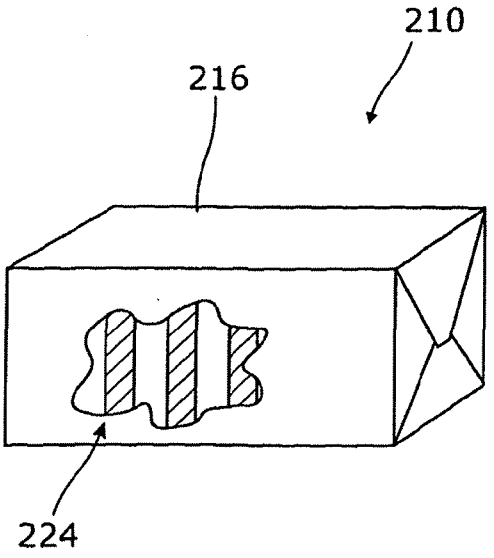


Fig. 4

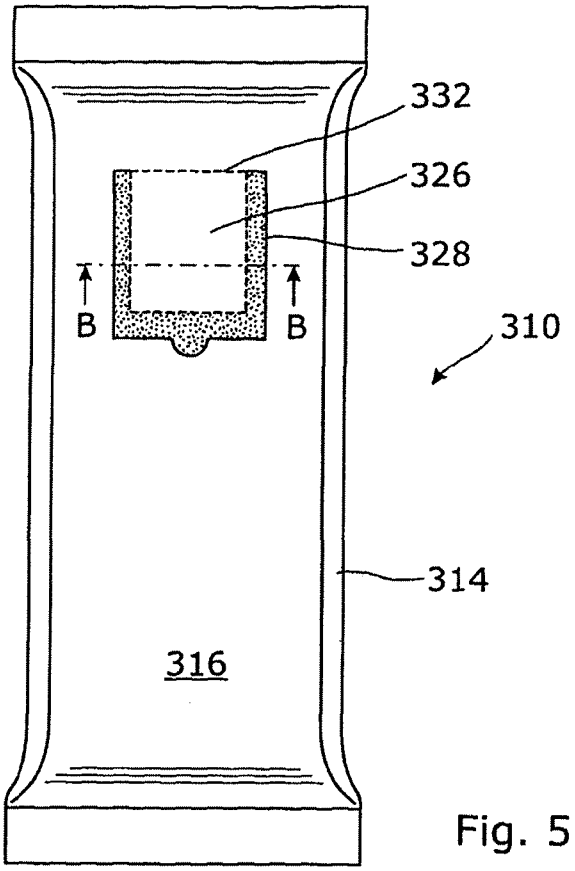


Fig. 5

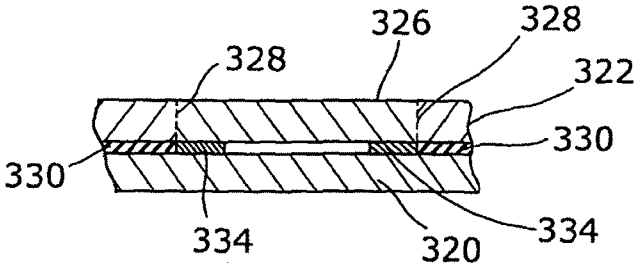


Fig. 7

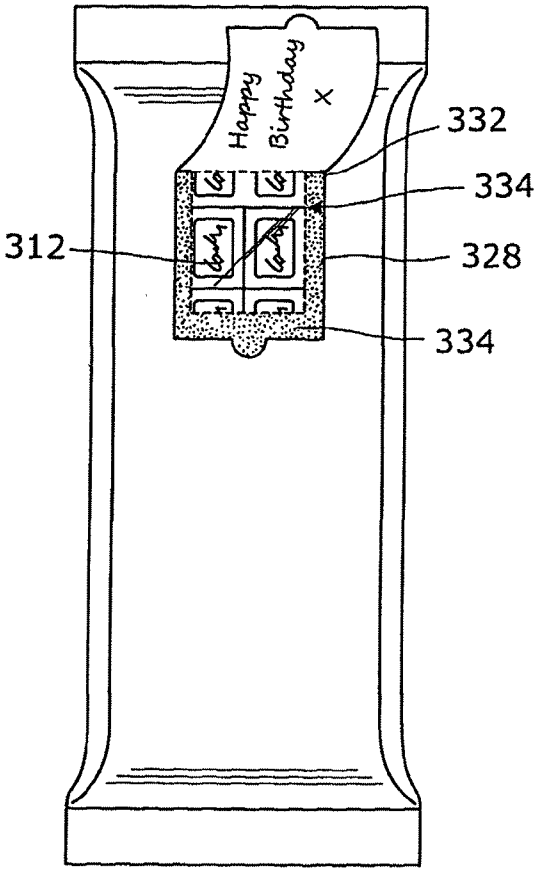


Fig. 6

PACKAGING

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application is a continuation application of U.S. patent application Ser. No. 13/703,500, filed Dec. 11, 2012; which is the National Stage of International Application No. PCT/GB2011/051041, which designates the U.S., filed Jun. 2, 2011, which claims the benefit of Great Britain Application No. GB 1009899.4 filed Jun. 14, 2010, the contents of which are incorporated by reference herein.

TECHNICAL FIELD OF THE INVENTION

[0002] The present invention relates to packaging. The invention relates in particular, but not exclusively, to packaging for consumable products such as confectionery. The present invention also relates to methods of manufacturing such packaging.

BACKGROUND TO THE INVENTION

[0003] Packaging for products often serves a number of functions. These may include protecting the product and providing information about the product. In some cases, the primary function of the packaging is to be attractive to the customer. This may be particularly so where the product is a confectionery or other food product which may be given as a treat or gift and where the visual appearance of the packaging plays an important part in the overall experience for the end user.

[0004] It is known to package consumable products such as chocolate bars and other snack type confectionery products in a package which is formed from a wrapper of flexible material. Such known wrappers may be in the form of a length of flat, foldable material having an inner surface directed to the product and an outer surface. The material may be printed on or otherwise be provided with information which is visible to the consumer on the outside of the formed package. In some packaging processes, the wrapper is supplied as part of a continuous roll or film of wrappers.

[0005] One known packaging arrangement is commonly referred to as a flow-wrap package. This type of package is produced using a flow-wrap method in which a film of material is supplied in a roll to package a number of products in a substantially continuous process. The material is fed through a machine which folds it about each product or each stack of products in turn so that opposing longitudinal side edges are brought into contact, inner face to inner face, and bonded together to form a longitudinal fin seam. The material is crimped at either end of the product or stack to form end seams and the material is cut to separate each package in turn from the remainder of the film. The seams may be formed using an adhesive to bond the opposing surfaces of the wrapper or by heating the material under pressure so that the opposing surfaces melt and fuse together to form a welded seam.

[0006] The flow-wrap method is often used to package generally blocked shaped products such as chocolate or other confectionery bars and the like. However, the method can be modified to package products of a different shape or to package a stack or array of smaller products positioned side-by-side.

[0007] It is also known to package a number of products arranged in an array or stack by folding a wrapper around the stack and securing the wrapper in the folded condition to form a tubular package. The wrapper is folded circumferentially about the stack so that one longitudinal edge of the wrapper overlaps the other longitudinal edge and is held in place by means of adhesive or otherwise bonded to form a longitudinal seal. The wrapper is longer than the stack and the protruding ends of the wrapper are folded to form tabs in an overlapping arrangement to close the ends of the package. The end closure tabs can be adhered to one another so that the wrapper forms a sealed package for the products. This type of packaging is used for a variety of consumable products such as biscuits and confectionery items including chewing or bubble gum pellets and sticks, mints, gums, hard boiled sweets, candies, chocolates, toffee and the like.

[0008] For either type of packaging, suitable wrappers can be made from a variety of materials including polymeric materials, metallic foil, and paper. Often the wrapper will be formed as a laminate having two or more layers of different materials. For packaging confectionery products, a commonly used laminate comprises a metallic, often aluminium, foil which may be laminated together with a paper layer. However, other materials can be used including polymeric materials which may include thermoplastic materials such as polyethylene terephthalate (PET), for example. Depending on the types of materials used, the known wrappers can be used to form a fully sealed package which is substantially gas and moisture impervious. However, for some consumable product applications, a hermitically sealed package is not desirable.

[0009] The shape and construction of the known types of packaging are largely functional, with the intention of providing a closed and often sealed package to protect the contents. Any visual attractiveness is generally provided by the design printed on the outside of the wrapper.

[0010] It is an object of the invention to provide an alternative form of packaging which is attractive to potential customers.

[0011] It is a further object of the invention to provide an alternative method of manufacturing packaging materials that can be used to produce packaging having an attractive appearance and/or to provide an alternative method of manufacturing such packaging.

SUMMARY OF THE INVENTION

[0012] In accordance with a first embodiment of the invention, there is provided a method of manufacturing a packaging material for using in forming a package to enclose one or more items, the method comprising:

[0013] laminating together at least two layers of materials to form a laminated packaging material having an inner laminate structure and an outer laminate structure, one of the inner and outer laminate structures being translucent or transparent and the other being opaque;

[0014] forming a score line in the opaque laminate structure to define a section within the opaque laminate structure which can be wholly or partially removed.

[0015] In one arrangement, the method comprises forming the score line in the opaque layer so as to completely encircle the section, such that the section can be completely removed from the material. In this case, the method may comprise subsequently removing the section of the opaque laminate structure after lamination of the at least two layers.

[0016] In an alternative arrangement, the method comprises forming the score line so that it only partially encircles

the section such that the section remains attached to the remainder of the opaque laminate structure along a line about which the opaque laminate structure can be folded. In this case, the method may also comprise forming a line of weakness in the opaque laminate structure along which the opaque laminate structure may be torn to completely remove the section.

[0017] The method may comprise permanently bonding the inner and outer laminate structures together over substantially the whole of their opposed surface areas except for an area which is, or is to be, bounded by the score line. The method may comprise applying a permanent laminating adhesive to substantially the whole of the lamination face of at least one of the inner and outer laminate structures except for an area which is, or is to be, bounded by the score line and bringing the lamination faces of the inner and outer laminate structures into contact. In one arrangement, the method comprises leaving the lamination faces of the inner and outer laminate structures in the area which is, or is to be, bounded by the score line free of any adhesive. In an alternative arrangement, the method comprises applying a peelable adhesive to the lamination face of at least one of the inner and outer laminate structures within the area which is, or is to be, bounded by the score line. Where the method comprises forming the score line so that it only partially encircles the section such that the section remains attached to the remainder of the opaque laminate structure along a line about which the opaque laminate structure can be folded, the method may further comprise applying a peelable, and more particularly a re-sealable, adhesive to the lamination face of at least one of the inner and outer laminate structures within an outer peripheral region of the area which is, or is to be, bounded by the score line.

[0018] The method may comprise forming a continuous length of laminated packaging material defining a plurality of package forming portions along its length, and forming at least one said score line in the opaque laminate structure within each of the package forming portions. The laminated packaging material may be a flexible material, each of the package forming portions comprising a wrapper for forming into a package for enclosing one or more items and the method may comprise forming the continuous length of flexible packaging material into a roll. Where the sections of the opaque laminate structure are wholly removable, the method may comprise removing the sections prior to the material being formed into a roll.

[0019] The method may comprise forming the laminated material so that the inner laminate structure is opaque and the outer laminate structure is translucent or transparent.

[0020] The method may comprise forming the laminated material so that the outer laminate structure is opaque and the inner laminate structure is translucent or transparent.

[0021] The method may comprise printing on the opaque laminate structure so that the printing is visible on the inner surface of the section of the opaque laminate structure.

[0022] The laminated material may be stiff but foldable and method may comprise forming the laminated material into a blank for folding into a carton. The laminated material may be a laminated cardboard or paperboard.

[0023] The method may comprise forming the score line by laser etching.

[0024] In accordance with a second embodiment of the invention, there is provided a method of manufacturing a packaging assembly comprising at least one item and a package enclosing the at least one item using a packaging material manufactured in accordance with the first embodiment of the invention, the method comprising, folding the material about the at least one item so as to enclose the item, with the inner laminate structure proximal to the at least one item and the outer laminate structure distal from the at least one item.

[0025] Where the method in accordance with the first embodiment comprises forming a continuous length of flexible laminated packaging material having a plurality of packaging wrappers defined along its length, the method in accordance with the second embodiment may comprise folding each wrapper about the at least one item and securing the wrapper in position. The method may comprise flow-wrapping each wrapper about the at least one item, more particularly using a form fill seam machine. The method may comprise removing the section of the opaque laminate structure prior to forming the wrapper about the at least one item.

[0026] Where the method in accordance with the first embodiment of the invention comprises forming the laminated material into a blank for folding into a carton, the method of the second embodiment may comprise folding the blank to form a carton.

[0027] In accordance with a third embodiment of the invention, there is provided a package assembly comprising at least one item and a package enclosing the at least one item, in which the package is formed using a packaging material manufactured in accordance with the first embodiment of the invention.

[0028] In accordance with a fourth embodiment of the invention there is provided a package assembly comprising at least one item and a package enclosing the at least one item, the package being formed from a laminated material having an inner laminate structure and an outer laminate structure, one of the inner and outer laminate structures being translucent or transparent, the other of the inner and outer laminate structures being opaque, in which the opaque laminate structure has an opening through which the contents of the package to be viewed through the translucent or transparent laminate structure.

[0029] In one arrangement, the outer laminate structure is translucent or transparent and the inner laminate structure is opaque.

[0030] In an alternative arrangement, the inner laminate structure is translucent or transparent and the outer laminate structure is opaque.

[0031] The opening in the opaque laminate structure may be provided by removing a section of the opaque laminate structure.

[0032] In accordance with a fifth embodiment of the invention there is provided a package assembly comprising at least one item and a package enclosing the at least one item, the package being formed from a laminated material having an inner and an outer laminate structure, the inner laminate structure being translucent or transparent and the outer laminate structure being opaque, in which a section of the outer laminate structure is movable relative to the inner laminate structure about a fold between a closed position in which it overlies a corresponding section of the inner laminate structure and an open position in which it is displaced from the inner laminate structure to enable the contents of the package to be at least partially seen through the inner laminate structure.

[0033] A line of weakness may be provided in the outer laminate structure by means of which the section can be fully

removed after opening. The section of the outer laminate structure may be bonded to the inner laminate structure by means of a peelable adhesive. The peelable adhesive may be resealable so that the section can be reclosed. The peelable/re-sealable adhesive may be provided about a peripheral edge region of the section of the outer laminate structure and/or a peripheral edge region of the corresponding section of the inner laminate structure. Printing may be applied to the outer laminate structure within the section so as to be visible from the inner surface of the section when the section is moved to the open position.

DETAILED DESCRIPTION OF THE INVENTION

[0034] Several embodiments of the invention will now be described, by way of example only, with reference to the accompanying drawings, in which:

[0035] FIG. **1** is a plan view of a package assembly in accordance with a first embodiment of the invention;

[0036] FIG. **2** is a cross sectional view on an enlarged through a section of a laminated wrapper forming part of the packaging assembly of FIG. **1**, taken on line A-A;

[0037] FIG. **3** is a perspective view of a package assembly in accordance with a second embodiment of the invention;

[0038] FIG. **4** is a perspective view of a package assembly in accordance with a third embodiment of the invention;

[0039] FIG. **5** is a plan view of a package assembly in accordance with a fourth embodiment of the invention, showing a window cover flap in a closed position;

[0040] FIG. **6** is a view similar to that of FIG. **5** but showing the window cover flap in an open position; and

[0041] FIG. **7** is a cross sectional view through a section of a laminated wrapper forming part of the packaging assembly of FIG. **5**, taken on line B-B.

[0042] The same reference numerals but increased by 100 in each case will be used to identify the same or similar features in the various embodiments described below.

[0043] FIG. **1** illustrates a first embodiment of a packaging assembly **10** in accordance with the invention. The package assembly **10** include one or more items or products, in this case a chocolate bar **12**, which is encased in a tubular package **14** formed from a wrapper **16** of flexible material.

[0044] The package **14** is a flow-wrap package in which the wrapper **16** of flexible material is folded around the product and sealed to fully enclose the product. Longitudinal edge regions of the wrapper **16** are bonded together, inner face to inner face, to form a longitudinal sealed fin seam (not shown) which extends along a rear face of the package in a known manner. Opposing end edge regions of the wrapper that extend beyond the ends of the chocolate bar are bonded together in face to face relation to form transverse sealed seams **18** at either end of the product, also in a known manner. The longitudinal and transverse seams **18** can be formed using an adhesive to bond the opposing surfaces of the wrapper or by heating the material under pressure so that the opposing surfaces melt and fuse together to form a welded seam. The longitudinal seam is referred to as a "fin seam" because it projects outwardly in the manner of a fin when first formed. Usually, however, the fin seam will be folded over to one side or the other when the package is completed.

[0045] The package **14** is formed using a form-fill-seal (FFS) packaging machine (not shown). The wrapper **16** is provided as part of a continuous roll or film of wrappers that is roll fed into the machine and folded about each product in turn. The inner surfaces of opposing longitudinal edge regions of the wrapper are brought into contact and bonded together to form the longitudinal fin seam. Opposing regions of the material at either end of the product are also brought into contact and bonded to form the transverse end seams **18** and the material is cut to separate each package **14** from the remainder of the film.

[0046] The wrapper **16** comprises a lamination of two or more layers of flexible materials that are bonded together face to face. Where the product is a consumable product, at least one of the layers may be substantially moisture and gas impervious and the package can be hermetically sealed. It should be noted though that for some consumable products, a hermetically seal package is not desirable.

[0047] For the purposes of the following description and the accompanying claims, the laminated wrapper **16** can be considered has having an inner laminate structure **20**, for positioning proximal to the product, and an outer laminate structure **22**, for positioning distal from the product. The inner and outer laminate structures **20**, **22** are bonded together face to face and each comprises one or more layers of material. For example, the material could be a lamination of only two layers of material, an inner layer which forms the inner laminate structure **20** and an outer layer which forms the outer laminate structure **22**. However, in more complex embodiments, one or both of the inner and outer laminate structures may be made up of more than layer of material.

[0048] One of the inner and outer laminate structures **20**, **22** is opaque whilst the other is not opaque. The other laminate structure is at least translucent but is preferably transparent. A viewing window **24** through which the contents of the package can be at lease partially seen is provided by removing a section **26** of the opaque laminate structure. In the present embodiment, the outer laminate structure **22** is the non-opaque laminate structure whilst the inner laminate structure **20** is opaque. This is advantageous as it means the outer surface of the package is continuous, with no exposed step around the periphery of the viewing window which can become contaminated with dirt or other debris and which might otherwise become damaged when the packaging assembly is handled. However, this is not essential and the opaque laminate structure can be provided on the outside of the wrapper **16** in some embodiments.

[0049] It is envisaged that in most embodiments the non-opaque laminate structure will be substantially transparent so that the contents of the package can be seen clearly through the window **24**. However, in some embodiments the window may be translucent and could, for example, have a frosted effect but through which the contents can still be seen. In the remainder of the specific description, the non-opaque laminate structure will be described as being transparent for convenience but it should be borne in mind that it could also be translucent.

[0050] The inner and outer laminate structures **20**, **22** can be made of any suitable materials for use in packaging the products, subject to the requirement that one is transparent and the other opaque. For example, the opaque laminate structure may comprise a metallic foil, such as an aluminium foil, and/or a layer of paper. The transparent laminate **22** structure may comprise a polymeric material. Many transparent polymeric materials are used in the production of laminated packaging materials, as will be well known by the skilled addressee, and any suitable such materiel can be adopted in the present embodiment.

[0051] The laminate wrapper **16** is formed by laminating the inner **20** and outer **22** laminate structures together in face to face relation. A score line **28** is formed through the opaque laminate structure, in this case the inner laminate structure **20**, to define the section **26** which is to be removed to form the viewing window **24**. The removable window section **26** is subsequently removed as indicated by the arrow X in FIG. **2** which illustrates schematically removal of the section **26**. The opaque laminate structure may be scored before, during or after the lamination process. Similarly, the opaque section can be removed, before, during or after the lamination process. The removable window section may be removed prior to the wrapper being formed into a package **14** about the product or it may be removed during or after the wrapping process. In one embodiment, the removable window section is removed using a suction device. The suction device could be part of a "pick and place" device used to move a packaged item from a production line into a carton or other outer packaging arrangement. One of the suckers on the device can be arranged to contact the removable widow section and be raised higher than the rest to peel the removable window section away.

[0052] The wrapper **16** may be formed as part of a continuous length of laminated material having a number wrappers defined along its length, each with a viewing window. The continuous length of material may be formed into a roll for subsequent use in a FFS packaging machine as described above to produce the finished packaging assembly. The removable window section **26** of the opaque laminate structure may be removed prior to the material being formed into a roll or it may be removed after the material has been formed into a roll as part of the flow-wrapping process.

[0053] The opposed faces of the inner and outer laminate structures **20**, **22** that are bonded together in the lamination process will be referred to herein and the laminations faces.

[0054] The score line **28** can be produced by any suitable means. In one embodiment, the score line is produced by means of laser etching through the opaque laminate structure, in a known manner. The use of laser etching to produce the score line is advantageous as it enables viewing windows **24** of almost any desired shape to be produced, including complex shapes with non-linear edges. Laser etching is also adaptable to allow the same machinery to produce material having different shaped viewing windows. However, the score line may be produced by other means. For example, the score line **28** can be produced using a pair of contra-rotating die cylinders (not shown) positioned on opposite sides of the laminated material, one of the die cylinders being positioned for contact with the opaque laminate structure and having a blade for forming the score line, the other die cylinder being arranged for contact with the transparent laminate structure and having no blade.

[0055] The inner and outer laminate structures **20**, **22** are laminated together using any suitable method as known in the art. In one method, the laminate structures **20**, **22** are bonded together using a permanent laminating adhesive **30**. The adhesive is applied to a laminating surface of one or both of the laminate structures, except in the area in which the viewing window **24** is defined by the score line **28**, or which is to be defined by the score line if scoring takes place during or after lamination. Within the area in which the viewing window is, or is to be defined by the score line **28**, either no adhesive is applied so that the inner and outer laminate structures **20**, **22** are not laminated in this region or a peelable adhesive may be applied so that the removable window section **26** of the opaque laminate structure can be peeled away from the transparent laminate structure after the score line **28** has been produced. This later arrangement enables greater control over the removal of the section **26**. Where a peelable adhesive is used, the adhesive may be applied to the opaque laminate structure and be configured so that it peels away from the transparent laminate structure preferentially so that no or only minimal residue is left on the transparent laminate structure.

[0056] The provision of a viewing window **24** gives the packaging assembly **10** an attractive and unusual appearance for the type of packaging and can be adapted in various ways to appeal to consumers. Printing may be applied to the laminate material which is visible to the consumer on the outside of the package to provide an attractive design and the window **24** can be shaped to form part of the overall design and/or to fit within a theme of the design. The window might be shaped to conform to a brand mark or image for example. In another example, for confectionery material packaged especially for Valentines Day, the window might be shaped like a heart. Other novel shapes for the window **24** could also be used such as animal shapes or cartoon figures. The shape and position of the window **24** can also be designed to reveal the contents of the package in an attractive and/or unusual manner to appeal to a consumer.

[0057] FIG. **3** illustrates a second embodiment of a packaging assembly **110** in accordance with the invention. The packaging assembly **110** in accordance with the second embodiment includes a number of individual items or products **112** arranged side by side in a stack. The stack of products **112** is encased in a tubular package **114** formed from a wrapper **116** of flexible material in a known manner. The products may be any products such as biscuits and confectionery items including chewing or bubble gum pellets and sticks, mints, gums, hard boiled sweets, candies, chocolates, toffee and the like.

[0058] The wrapper **116** is similar to the wrapper **16** in the first embodiment and is made from a laminated material having inner and outer laminate structures, one of which is transparent and the other opaque. A viewing window **124** is formed in the wrapper **116** by removing a section of the opaque laminate structure using any of the methods described above in relation to the first embodiment.

[0059] The packaging assembly **110** of the second embodiment differs from the first in that the package is not formed using a FFS process. Rather, in this case the wrapper **116** is folded circumferentially about the stack so that one longitudinal edge of the wrapper overlaps the other longitudinal edge and is held in place by means of adhesive or otherwise bonded to form a flat longitudinal seam. The wrapper is longer than the stack and the protruding ends of the wrapper are folded to form tabs **130** in an overlapping arrangement to close the ends of the package. The end closure tabs **131** can be adhered to one another so that the wrapper forms a sealed package for the products.

[0060] With this type of packaging, the overall shape of the package **114** is determined largely by the shape of the products. In the packaging assembly **110** in accordance with the second embodiment, the products **112** have a circular outer profile and as a consequence the package **114** has a generally cylindrical shape. FIG. **4**, illustrates an alternative embodiment of a packaging assembly **210** in which the products **212** have a rectangular or square outer periphery such that the

package **114** has a corresponding square or rectangular shape in lateral cross section. In all other respects, the packaging assembly **210** is the same as the packaging assembly **110** and includes a package made from a wrapper **216** of a laminated material having inner and outer laminate structures, one of which is transparent and the other opaque. A viewing window **224** is formed in the wrapper **216** by removing a section of the opaque laminate structure using any of the methods described above in relation to the first embodiment.

[0061] FIGS. **5** to **7** illustrate a fourth embodiment of a packaging assembly **310** in accordance with the invention. The packaging assembly **310** of the fourth embodiment is similar to the packaging assembly **10** of the first embodiment and includes one or more items or products, which in this case is also a chocolate bar **312**, encased in a tubular package **314** formed from a wrapper **316** of flexible material using flow-wrap techniques.

[0062] The packaging assembly **310** of the fourth embodiment differs from the packaging assembly **10** of the first embodiment in that the window is only partially formed. In this embodiment, the removable window section **326** of the opaque laminate structure is not wholly removed and forms a flap covering the window. The opaque laminate **322** structure is provided on the outside of package such that the flap is accessible to a consumer and the inner laminate structure **320** is transparent. To produce the window cover flap **326**, the score line **328** which defines the widow **324** is formed about three sides only the window so that the section **326** of the opaque laminate structure remains connected with the remainder of the opaque laminate structure **322** along a fold line **332** on one side. The section **326** thus forms a window cover flap, which is movable about the fold line **332** between a closed position in which it overlies the transparent laminate structure **320** to cover the window **324** (as shown in FIG. **5**) and an open position in which it extends away from the transparent laminate structure **320** so that the product **312** can be seen through the window **324** (as shown in FIG. **6**).

[0063] A peelable adhesive **334** is used to hold the window cover flap **326** in the closed position. The peelable adhesive **334** can be applied about the periphery of the window **324** on the inner laminate structure so as to leave a central region of the window clear through which the interior of the package can be viewed. Alternatively, the peelable adhesive can be applied to the inner surface of the flap **326** or to both the window and the flap. The peelable adhesive may be a cold seal or any other suitable peelable adhesive and may be applied as a continuous layer or in a pattern. In an advantageous embodiment, the peelable adhesive **334** is a re-sealable adhesive so that the window cover flap **326** can be re-closed a number of times after initial opening. A line of weakness, such as a score line or a line of perforations, can be formed in the opaque laminate structure along the fold line **332** to enable the window closure flap **326** to be removed after opening.

[0064] The window closure flap **326** adds a further aspect to the packaging which can be used to make it attractive to consumers and can be adapted in a variety of ways. For example, the opaque laminate structure **322** may be printed on to provide a message or other information which can read on the inside of the window cover flap **326** when it is opened. This could be used to convey a message or greeting such as "Happy Birthday" for example. The packaging can be configured so that the inner surface of the window closure flap **326** can be written on by a consumer and the flap re-closed. This may be particularly beneficial where the product is expected to be given a gift as it provides the opportunity for the giver to add a personal message or greeting. Alternatively, a greeting or message card or the like can be provided for insertion under the flap. Such a card may have a pre-printed message or greeting and/or may be configured to be written on.

[0065] In a further alternative application, statutory or other useful information can be printed on the opaque laminate structure so as to be visible on the inside of the window closure flap **326** when it is opened. This can be used to advantageously leave the whole, or at least a larger area, of the exterior of package **314** free of such information providing greater freedom to apply an attractive design to the package to appeal to consumers. Promotional information such as prize codes and vouchers can also be proved on the inside of the flap. In this case, the window closure flap **326** may be removable as described above.

[0066] A window closure flap as taught in relation to the fourth embodiment can be provided in any of the embodiments disclosed herein.

[0067] Whilst the preferred embodiments all comprise packaging assemblies in which a package is formed from a wrapper of flexible material, the invention can be extended to other forms of packaging. For example, a packaging assembly comprising one or more items contained in a package in the form of a carton made from a blank of stiff but foldable material can be produced in accordance with the invention. The material from which the blank is produced is laminated to have an inner and an outer laminate structure, one of which is transparent and one opaque. A viewing window is produced by scoring the opaque laminate structure to wholly or partially remove a section of the opaque laminate structure in accordance with the methods taught above. Where the section is only partially removed, it forms a window closure flap similar to that in the fourth embodiment described above in relation to FIGS. **5** to **7**, except that the flap will be somewhat stiffer and so more like a card. The card could be adapted to form a greetings card and may be removably attached to the remainder of the opaque laminate structure via a line of weakness. This type of packaging may have particular application in packaging for confectionery products such as chocolates, for example.

[0068] Whilst the invention has been described in particular in relation to packaging for consumable products and especially confectionery products, it can be adapted to package any suitable type of products.

[0069] The foregoing embodiments are not intended to limit the scope of protection afforded by the claims, but rather to describe an example as to how the invention may be put into practice.

1. A method of manufacturing a packaging material for use in forming a package to enclose one or more items, the method comprising:

a. laminating together at least two layers of materials to form a laminated packaging material having an inner laminate structure and an outer laminate structure, one of the inner and outer laminate structures being translucent or transparent and the other being opaque;

b. forming a score line in the opaque laminate structure to define a section within the opaque laminate structure which can be wholly or partially removed.

2. A method as claimed in claim 1, wherein the score line in the opaque layer is formed so as to completely encircle the section, such that the section can be completely removed from the material.

3. A method as claimed in claim 2, wherein the method comprises subsequently removing the section of the opaque laminate structure after lamination of the at least two layers.

4. A method as claimed in claim 1, comprising forming the score line so that it only partially encircles the section such that the section remains attached to the remainder of the opaque laminate structure along a line about which the opaque laminate structure can be folded.

5. A method as claimed in claim 4, the method comprising forming a line of weakness in the opaque laminate structure along which the opaque laminate structure may be torn to completely remove the section.

6. A method as claimed in claim 1, the method comprising bonding the inner and outer laminate structures together over substantially the whole of their opposed surface areas except for an area which is, or is to be, bounded by the score line.

7. A method as claimed in claim 6, the method comprising applying a permanent laminating adhesive to substantially the whole of the lamination face of at least one of the inner and outer laminate structures except for an area which is, or is to be, bounded by the score line and bringing the lamination faces of the inner and outer laminate structures into contact.

8. A method as claimed in claim 7, the method comprising leaving the lamination faces of the inner and outer laminate structures in the area which is, or is to be, bounded by the score line free of any adhesive.

9. A method as claimed in claim 7, the method comprising applying a peelable adhesive to the lamination face of at least one of the inner and outer laminate structures within the area which is, or is to be, bounded by the score line.

10. A method as claimed in claim 7, the method comprising applying a peelable, and more particularly a re-sealable, adhesive to the lamination face of at least one of the inner and outer laminate structures within an outer peripheral region of the area which is, or is to be. bounded by the score line.

11. A method as claimed in claim 1, the method comprising forming a continuous length of laminated packaging material defining a plurality of package forming portions along its length, and forming at least one said score line in the opaque laminate structure within each of the package forming portions.

12. A method as claimed in claim 1, wherein the material is a flexible material and the method comprises forming the continuous length of flexible packaging material into a roll.

13. A method as claimed in claim 1, wherein the method comprises forming the laminated material so that the inner laminate structure is opaque and the outer laminate structure is translucent or transparent.

14. A method as claimed in claim 1, wherein the method comprises forming the laminated material so that the outer laminate structure is opaque and the inner laminate structure is translucent or transparent.

15. A method as claimed in claim 1, wherein the method comprises printing on the opaque laminate structure so that the printing is visible on the inner surface of the section of the opaque laminate structure.

16. A method of manufacturing a packaging assembly comprising at least one item and a package enclosing the at least one item using a packaging material manufactured in accordance with claim 1, the method comprising: folding the material about the at least one item so as to enclose the item, with the inner laminate structure proximal to the at least one item and the outer laminate structure distal from the at least one item.

17. A method as claimed in claim 16, in which the packaging material is formed as a continuous length of flexible laminated packaging material having a plurality of packaging wrappers defined along its length, the method comprising folding each wrapper about the at least one item and securing the wrapper in position.

18. A method as claimed in claim 17, the method comprising flow-wrapping each wrapper about the at least one item, more particularly using a form fill seam machine.

19. A method as claimed in claim 18, the method comprising removing the section of the opaque laminate structure prior to forming the wrapper about the at least one item.

20. (canceled)

21. A package assembly comprising at least one item and a package enclosing the at least one item, in which the package is formed using a packaging material manufactured in accordance with claim 1.

22. A package assembly comprising at least one item and a package enclosing the at least one item, the package being formed from a laminated material having an inner laminate structure and an outer laminate structure, one of the inner and outer laminate structures being translucent or transparent, the other of the inner and outer laminate structures being opaque, in which the opaque laminate structure has an opening through which the contents of the package can be at least partially viewed through the translucent or transparent laminate structure.

23. A package assembly as claimed in claim 22, wherein the outer laminate structure is translucent or transparent and the inner laminate structure is opaque.

24. A package assembly as claimed in claim 22, wherein the inner laminate structure is translucent or transparent and the outer laminate structure is opaque.

25. A package assembly comprising at least one item and a package enclosing the at least one item, the package being formed from a laminated material having an inner and an outer laminate structure, the inner laminate structure being translucent or transparent and the outer laminate structure being opaque, in which a section of the opaque outer laminate structure is movable relative to the inner laminate structure about a fold line between a closed position in which it overlies a corresponding section of the inner laminate structure and an open position in which it is displaced from the inner laminate structure to enable the contents of the package to be at least partially seen through the inner laminate structure.

26. A package assembly as claimed in claim 25, in which a line of weakness is provided in the outer laminate structure by means of which the section can be fully removed after opening.

27. A package assembly as claimed in claim 25, wherein the section of the outer laminate structure is bonded to the inner laminate structure by means of a peelable and preferably a re-sealable adhesive.

28. A package assembly as claimed in claim 27, in which the peelable/re-sealable adhesive is provided about a peripheral edge region of the section of the outer laminate structure and/or a peripheral edge region of the corresponding section of the inner laminate structure.

29. A package assembly as claimed in claim 25, in which printing is applied to the outer laminate structure within the

section so as to be visible from the inner surface of the section when the section is moved to the open position.

30. (canceled)

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