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(54) Pack of tissues with an indicia on the reseal tape

(57) A pack of tissues such as a pack of paper handkerchiefs or of other disposable absorbing articles is described. The pack (1) comprises a reseal tape (15) facil-

itating the reversibly closure and opening of the dispensing orifice (5). The reseal tape comprises an indicia (11) that is not visible to an observer when the dispensing orifice is closed.

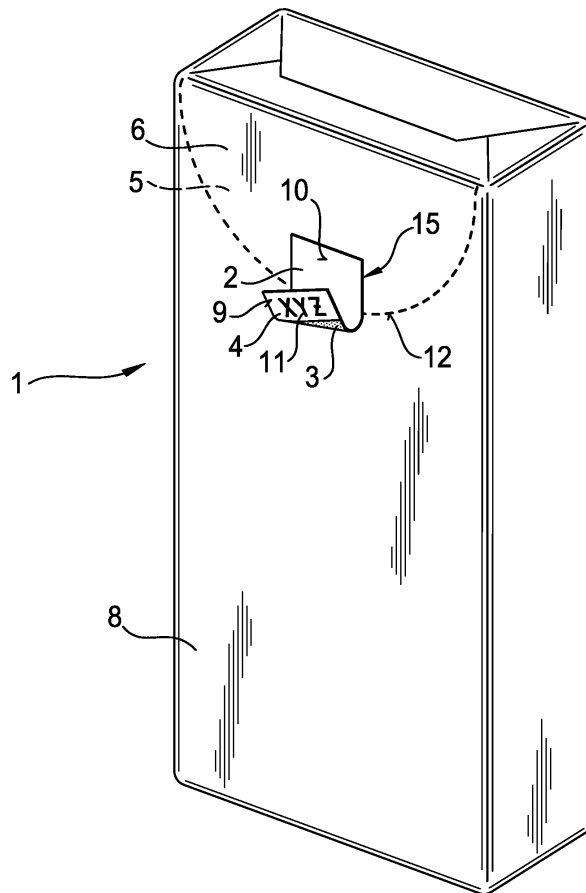


Fig. 2

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Description

FIELD OF THE INVENTION

[0001] The invention relates to packs of tissues and other disposable absorbent products. In certain aspects it relates to providing an indicia in a particular position on the packs of tissues in such a way that the indicia remain invisible from the outside of the pack.

BACKGROUND OF THE INVENTION

[0002] Tissues are commonly provided in packs comprising a multiplicity of tissues. Such packs are conventionally formed from a flexible film. The film generally also comprises certain information, such as the product description and the brand name, conventionally printed on the film in a way that makes the information visible to the user.

[0003] Conventionally, the information is printed on the film material after the production of the film (off-line printing of the film). This is a typical process for printing for example the brand name on the film used to pack tissues. Alternatively, but still conventionally, the information is printed after the formation of the pack (on-line printing of the packs). On-line printing is generally limited to simple information strings such as a code dating or a coding corresponding to producing site. The speed of the packs production line indeed limits such printing when done on-line, while it is conceivable to print detailed indicia after the formation of the pack at low speed or even off-line, post production.

[0004] Additional information can be attached to a pack of tissues by the addition of an extraneous material, such as a sticker or a label, after or during the formation of the pack on the pack production line.

[0005] In some instances, it may be desired to have the pack bear some information or an indicia that is not externally visible to the user until he/she manipulates the pack. However, the information or indicia must remain easily accessible to the user during the manipulation of the pack.

[0006] Conventional options for inclusion of invisible information/indicia includes (a) printing the information on the film and covering it with a sticker, (b) printing the information on the inner side of a detachable sticker and adhering the sticker to the pack surface, (c) using a dual-layer sticker that is adhered permanently to the pack surface while one of the layer can be peeled away to reveal the indicia or information, or (d) including a support (e.g. a piece of paper) having the information/indicia inside the pack.

[0007] There is a need to provide alternative solutions for providing an indicia to a pack of tissues in a way that the indicia remains externally invisible to the user until the user manipulates the pack. There is a need for providing this while, however, the indicia remain easily and conveniently available / accessible to the user.

[0008] There is a need to provide such solutions that would be simple and cost-efficient, and that would allow to change the indicia easily.

[0009] There is a need to provide such solutions that would not interfere with the conventional manufacturing of the packs.

[0010] There is a need to provide such solutions that would allow for the easy individualization of the indicia provided.

SUMMARY OF THE INVENTION

[0011] The invention provides a pack of tissues such as pack of paper handkerchiefs or of other disposable absorbing articles having an external envelope, a multiplicity of tissues enclosed by said external envelope, a dispensing orifice and a reseal tape having a first, a second and a third region. The external envelope comprises a flap is configured to at least partially cover the dispensing orifice. The reseal tape can reversibly reseal the flap over the dispensing orifice by attachment of the reseal tape to the external envelope. The first region of the reseal tape is joined to the flap. The second region comprises attaching means to facilitate the resealable attachment of the reseal tape to the external envelope. The third region is distal from the first region and is substantially free of the attaching means, such as to facilitate the operation of the reseal tape. The third region has an internal surface facing the external envelope when the second region is attached to the external envelope, and also has an external surface opposite thereto. The internal and/or external surface comprises an indicia invisible to the naked eye of an observer observing the pack externally while the reseal tape is attached to said external envelope so as to cover at least partially the dispensing orifice

BRIEF DESCRIPTION OF THE DRAWINGS

[0012]

Figure 1 is a perspective view of a pack of the invention.

Figure 2 is a perspective view of a pack of the invention with the reseal tape partially lifted to show the indicia thereon.

Figure 3 is a perspective view of the pack of the invention with the flap in an open position.

Figure 4 is a perspective view of a pack of the invention with the rub-off material partially removed to show the indicia hereunder.

DETAILED DESCRIPTION OF THE INVENTION

Conventional articles and definitions:

[0013] "Tissues" are substantially flat absorbing articles generally comprising cellulosic fibers.. Tissues can

however comprise other types of fibers such as fibers derived from cellulose or other types of natural fibers or synthetic fibers. Tissues are usually disposable articles but can include article intended to be used a number of times. Typical tissues include paper handkerchiefs, paper towels, toilet paper, bath tissues, wiping and cleaning articles as well as other disposable absorbing articles.

[0014] "Packs of tissues" are conventional units in which multiple tissues are provided. Conventional packs comprise typically 5, 10, or 20 tissues (such as paper handkerchiefs) and an external envelope. The tissues are enclosed in the external envelope.

[0015] "Film material" is a substantially flat and flexible material conventionally used as packaging material for packs of tissues such as pocket packs of paper handkerchiefs. Typically the film material forms the external envelope, in part or totally. Typical examples of film materials include film made of, or comprising, polypropylene or polyethylene. Film materials are typically provided in rolls. The rolls of film material are typically provided with an indicia (for example a print) that is visible at the surface of the external envelope of the packs once it is formed.

[0016] "Dispensing orifice" is the orifice through which the tissues are intended to be dispensed out of the packs. A typical dispensing orifice is formed by a discontinuity in the external envelope. The discontinuity can be present in the external envelope ab-initio or be created during the first use of the pack. In the latter case, a line of preferential rupture (e.g. a line of weakness in the material) can be present to induce the rupture of the external envelope along the line to form a dispensing orifice of a predetermined shape in a predetermined position. For the purpose of the invention, a dispensing orifice is also to be considered as being present when the dispensing orifice is formed after a first manipulation of the pack (for example, when a region of the external envelope must be unfolded or torn-off to reveal the intended dispensing orifice).

[0017] "Flap": In some conventional packs the dispensing orifice can reversibly be covered by a flap, i.e. a piece of the film material that hingily connects to the external envelope. The flap can cover all of the dispensing orifice or a part of it. In some packs the flap is integral to the external envelope. In other packs the flap is non-integral and can be made of a different material from the film material of the external envelope. In some conventional packs, the flap originally covers the dispensing orifice. A manipulation of the pack can tear a region of the external envelope and can reveal both the flap and the dispensing orifice.

[0018] The flap can be secured in a closed position (covering at least partially the dispensing orifice) by a "reseal tape". The reseal tape is conventionally provided as a separate material from the film material of the external envelope, typically also substantially flat and flexible. Alternatively, the reseal tape can be integral to the external envelope and/or the flap (e.g. formed by a region of the external envelope or a region of the flap). A first

region of the reseal tape is joined to the flap, for example by a substantially permanent adhesive. A second region of the reseal tape is usually provided with a resealable adhesive and positioned such as to reversibly reseal by connecting to the external envelope when the flap is in a closed position. A third region of the reseal tape is conventionally provided. The third region, also called gripping end, is substantially free of any adhesive and is conventionally located at an end of the reseal tape, distal from the first region. The third region (gripping end) enables an easy grip and a convenient operation of the reseal tape to open /close and maintain the flap over the dispensing orifice. The third region of the reseal tape has an internal surface facing the external envelope of the pack when the flap is in a closed position, covering the dispensing orifice, and when the second region of the reseal tape affixed to the external envelope. The reseal tape has an external surface opposite to the internal surface.

Pack of tissues of the invention:

[0019] Figures 1 and 2 show a pack (1) of the invention with the flap (6) in a closed position, i.e. covering the dispensing orifice (5). The first region (2) of the reseal tape (15) is positioned and affixed closed to the edge (12) of the flap (6). The second region (3) of the reseal tape (15) extends over the edge (12) of the flap (6) and is in contact with the external envelope (8) of the pack (1). The second region (3) of the reseal tape (15) comprises on its internal surface (9) attaching means to reversibly attach the second region (3) to the external envelope (8). The means can comprise a pressure sensitive adhesive. Other attaching means can be used to reversibly reseal the second region (3) of the reseal tape (15), such as mechanical means (e.g. hook and loops), other type of chemical adhesives, or combination of mechanical and chemical means.

[0020] The reseal tape (15) comprises a third region (4). The third region (4) is distal from the first region (2). The third region (4) is substantially free of any of the attaching means and hence, facilitates the operation of the reseal tape (15) by providing a region that can be easily gripped in order to lift the reseal tape (15) and the flap (6) to uncover the dispensing orifice (5).

[0021] On Figure 3, the flap (6) is shown in an open position with the dispensing orifice (5) substantially uncovered. The tissue (7) (shown as paper handkerchiefs on Figure 3) are visible through the dispensing orifice (5) folded into the pack (1). In this particular embodiment, an indicia (13) on the first paper handkerchief is visible through the dispensing orifice (5).

[0022] The reseal tape (15) has an internal surface (9) and an external surface (10). The internal surface (9) faces the external envelope (8) when the second region (3) is attached to the external envelope (8) partially covering the dispensing orifice (5). The external surface (10) is opposite to the internal surface (9), i.e. facing outwardly

from the external envelope (8). A surface of the reseal tape (9 and/or 10) is provided with an indicia (11). In one embodiment, the internal surface (9) of the reseal tape (15) is provided with the indicia (11), as shown on Figures 2 and 3. The indicia (11) can comprise an alphabetical character (as illustrated on Figures 2 and 3), a word, a number, a graphical indicia of any type (e.g. a non alphabetical character, a drawing, a sign, a color, a combination of colors, a picture, a sentence, an animal, a series of figures, a representation of an object, an animated representation, the representation of an animated or inanimate entity), or combinations thereof. The indicia (11) can be directly provided on one surface (9, 10) of the reseal tape (15) or can be provided on a piece of material itself provided one surface (9, 10) of the reseal tape. When provided directly on one surface (9, 10) of the reseal tape (15), the indicia (11) can be printed thereon. Printing can be executed by any conventional printing process known in the art (e.g. roto-gravure) and compatible with the material of the reseal tape (15). Alternatively, the indicia (11) can be engraved, sprayed, attached, glued or provided by any other means or by combination of means.

[0023] The indicia (11) is however invisible to the naked eye of an observer observing the pack (1) externally while the reseal tape is attached to the external envelope (8) and consequently the flap (6) is in a closed position, as show on Figure 1. It is understood that the observation is made by an observer having a substantially normal vision capability and is performed from a frontal view point (frontal to the flap (6)) at a distance of between 10cm and 2m, under usual lighting conditions (substantially day-light spectrum, intensity substantially corresponding to a typical office workplace). For the observation, the pack (1) comprises the tissues (7) enclosed therein.

[0024] The mere position of the indicia (11) can provide for the non-visibility of the indicia (11) to the observer, as in Figures 2 and 3 where the indicia is provided on the internal surface (9) of the reseal tape. Alternatively or additionally, the indicia can be covered by another material to render it invisible to the observer. A typical example is a opaque or semi-opaque layer of rub-off material that is applied over the indicia (11). For example the layer can be a coating of an opaque material as conventionally used in different technical fields to render a print temporarily invisible but which can easily be rubbed-off. Rubbing off the material by the user of the pack then easily reveals the indicia (11). Figure 4 shows such an embodiment of the invention, with the indicia (11) partially revealed under the layer of rub-off material (14) that has been partially removed. In such embodiments, it is important to ensure that the indicia (11) are more resistant to rubbing than the layer of rub-off material (14). This ensures that the indicia (11) will not be too easily removed while the rub-off material is removed by the user of the pack. Another typical example is an opaque or semi-opaque sticker removably affixed to the surface of the reseal tape having the indicia (11), by a non permanent

adhesive. Removing the sticker then easily reveals the indicia (11). The removable sticker can be joined to the external envelope (8) such as to automatically being removed when the reseal tape is lifted for the opening of the flap (6). In another embodiment the indicia (11) is transferred from the reseal tape to the external envelope (8) upon opening of the flap (6). Such transfer reveals it to the observer.

[0025] In an embodiment of the invention, the indicia (11) allows the selective identification of the pack among other packs having no indicia or different indicia (11). The selective identification can be facilitated by the indicia (11) comprising a specific sign (for example a specific alphabetical character, a specific word a specific number or a combination thereof). The selective identification of a pack among other packs facilitates the identification of the holder of the pack. The holder of the pack is the person who is in legal possession of the pack, preferably having acquired it through purchase or donation. A representative of the holder of the pack, acting on his/her behalf, is to be considered as the holder for the purpose of this invention. In a further embodiment the holder of the pack is provided with a benefit. Such benefit can be in the form of valuable goods, services or anything beneficial to the holder or to persons or entities designated by the holder.

[0026] A collection of packs comprising at least one pack (1) of the invention is contemplated as being part of the invention. Such collection can include a high number of packs (e.g. the entire production or a subset of it, of a specific pack of tissues) or can be limited to a small number of packs (for example 2, 5, 10, 20 or 30). At least one pack of the collection is as defined herein. In one embodiment, a collection of packs is enclosed in a packaging unit (such as a bundle). The packaging unit comprises typically 5, 10 or 20 packs, at least one of them being as defined in the claims. The packaging unit (e.g. the bundle) can be formed by a flexible film enclosing the collection of packs. The packaging unit prevents the access to the pack without destructing at least partially the packaging unit.

[0027] When more than one pack of the collection is as defined herein, the indicia of at least one pack of the collection is different from the indicia of the other packs. In one embodiment, a small number of packs, for example only one pack has a first indicia while the remaining packs of the collection have an indicia different from the first indicia or no indicia at all. The remaining packs can all have the same indicia or different indicia (or no indicia).

[0028] The invention also includes a process comprising the steps of selecting a specific indicia among all the indicia of a collection of packs, identifying the holder of the pack having the selected indicia and providing the holder with a benefit. The selection step can be a random selection. The identification of the holder can require an active participation of the holder to check whether his/her pack has the selected indicia and can require him/her to execute any action allowing him to be identified (such as

calling a phone number, or connecting to the internet, for example with the indicia serving as a code or password). The benefit provided to the holder can include valuable goods, services or anything beneficial to the holder or to persons or entities designated by the holder. For example it can include the authorization, the instructions and a license for downloading and using a musical file from the internet.

Claims

1. A pack of tissues comprising an external envelope, a multiplicity of tissues enclosed by said external envelope, a dispensing orifice and a reseal tape having a first, a second and a third region; said external envelope comprising a flap being configured to at least partially cover said dispensing orifice; said reseal tape being able to reversibly reseal said flap over said dispensing orifice, said first region being joined to said flap; said second region comprising attaching means to facilitate the resealable attachment of said reseal tape to said external envelope; said third region being distal from said first region and being substantially free of said attaching means, such as to facilitate the operation of said reseal tape; said third region having an internal surface facing said external envelope when said second region is attached to said external envelope, and having an external surface opposite thereto;
characterized in that
one of said internal and said external surfaces comprises an indicia invisible to the naked eye of an observer observing said pack externally while said reseal tape is attached to said external envelope such as to at least partially cover said dispensing orifice.
2. The pack of claim 1 wherein said internal surface comprises said indicia.
3. The pack of any of the preceding claims wherein said indicia is printed on said internal or external surface.
4. The pack of any of the preceding claims wherein said third region of said reseal tape further comprises a rub-off material covering said indicia, rendering said indicia invisible to the naked eye of said observer.
5. The pack of any of the preceding claims wherein said attaching means comprises an adhesive, preferably a pressure sensitive adhesive.
6. The pack of any of the preceding claims wherein said indicia enables the selective identification of the pack.
7. The pack of any of the preceding claims wherein said indicia comprises an alphabetical character a number or a combination thereof
8. The pack of any of the preceding claims wherein said indicia facilitates the identification of the holder of said pack and enables said holder to be provided with a benefit.
9. The pack of any of the preceding claims wherein said tissues are paper handkerchiefs.
10. A collection of packs of tissues comprising at least one pack of any of the preceding claims wherein said indicia of said at least one pack is different from the indicia of the other packs.
11. The collection of claim 10 wherein said collection is enclosed in a packaging unit preventing the access to the packs without at least partially destroying said packaging unit.
12. A selection process comprising the steps of selecting a specific indicia among those indicia of said collection of packs of claims 10 or 11, identifying the holder of the pack and providing said holder with a benefit.

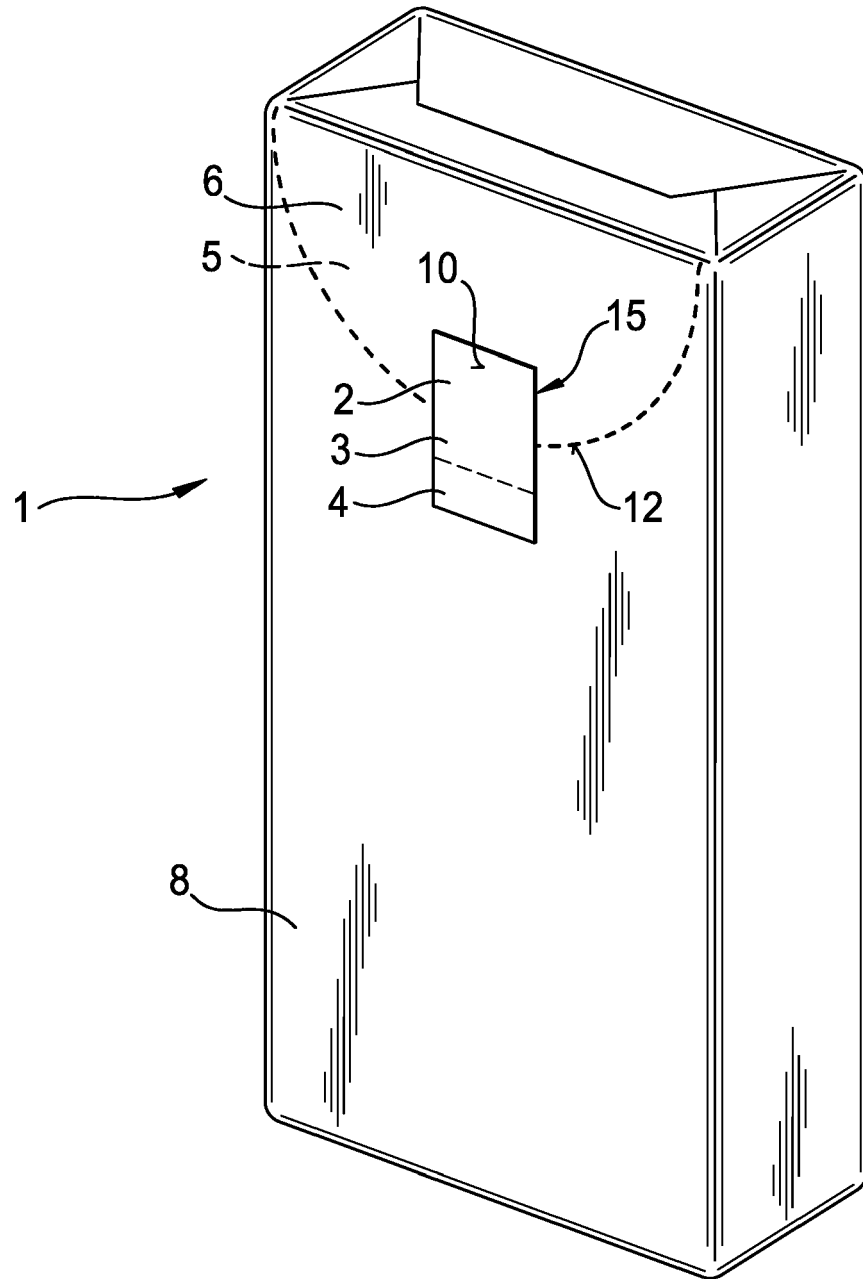


Fig. 1

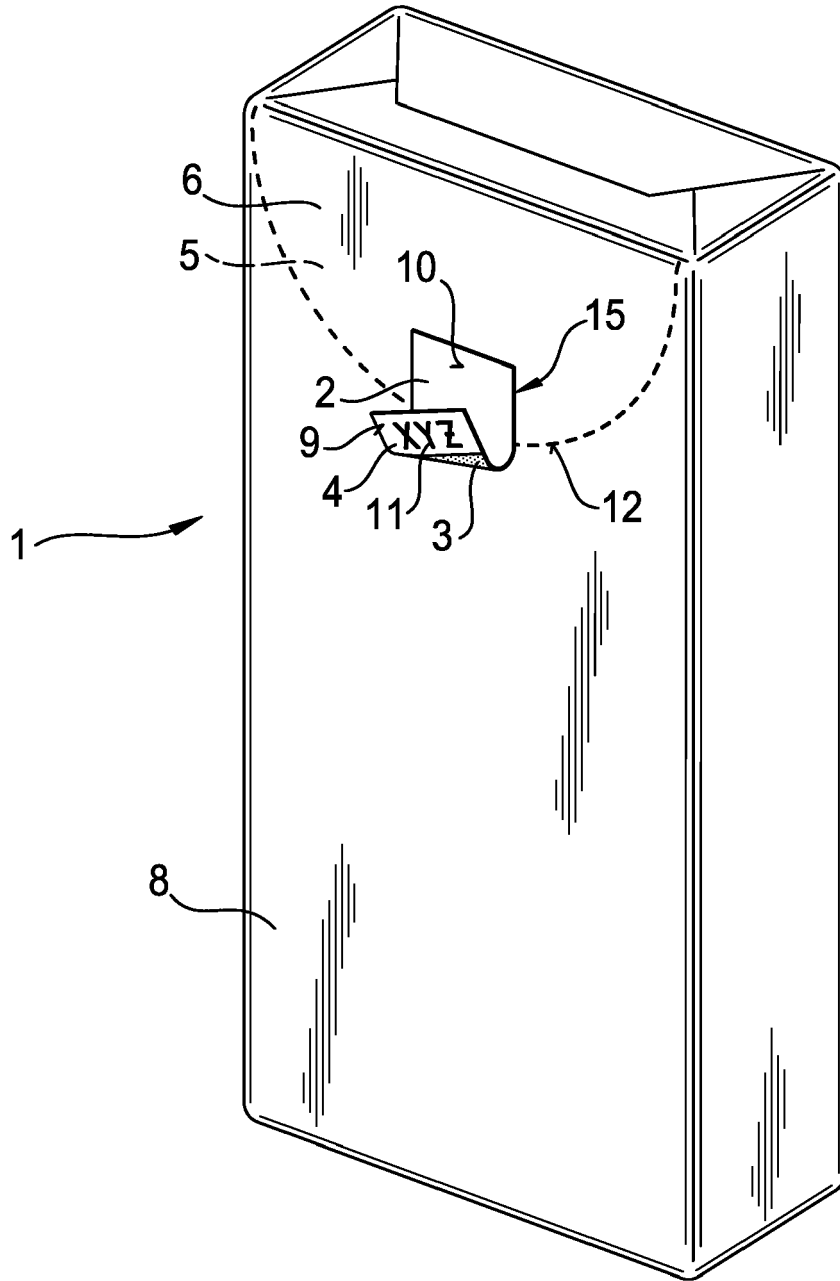


Fig. 2

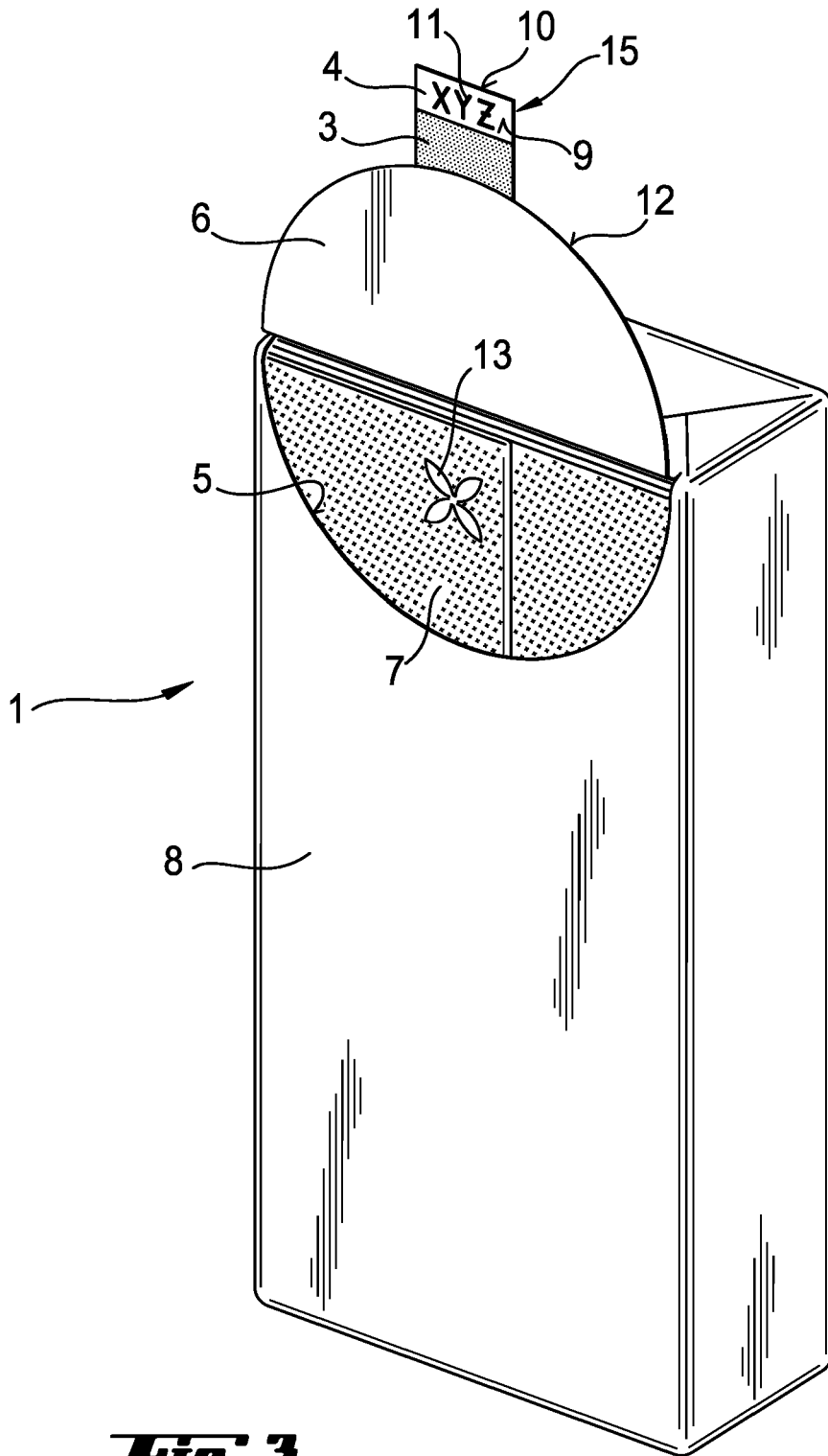


Fig. 3

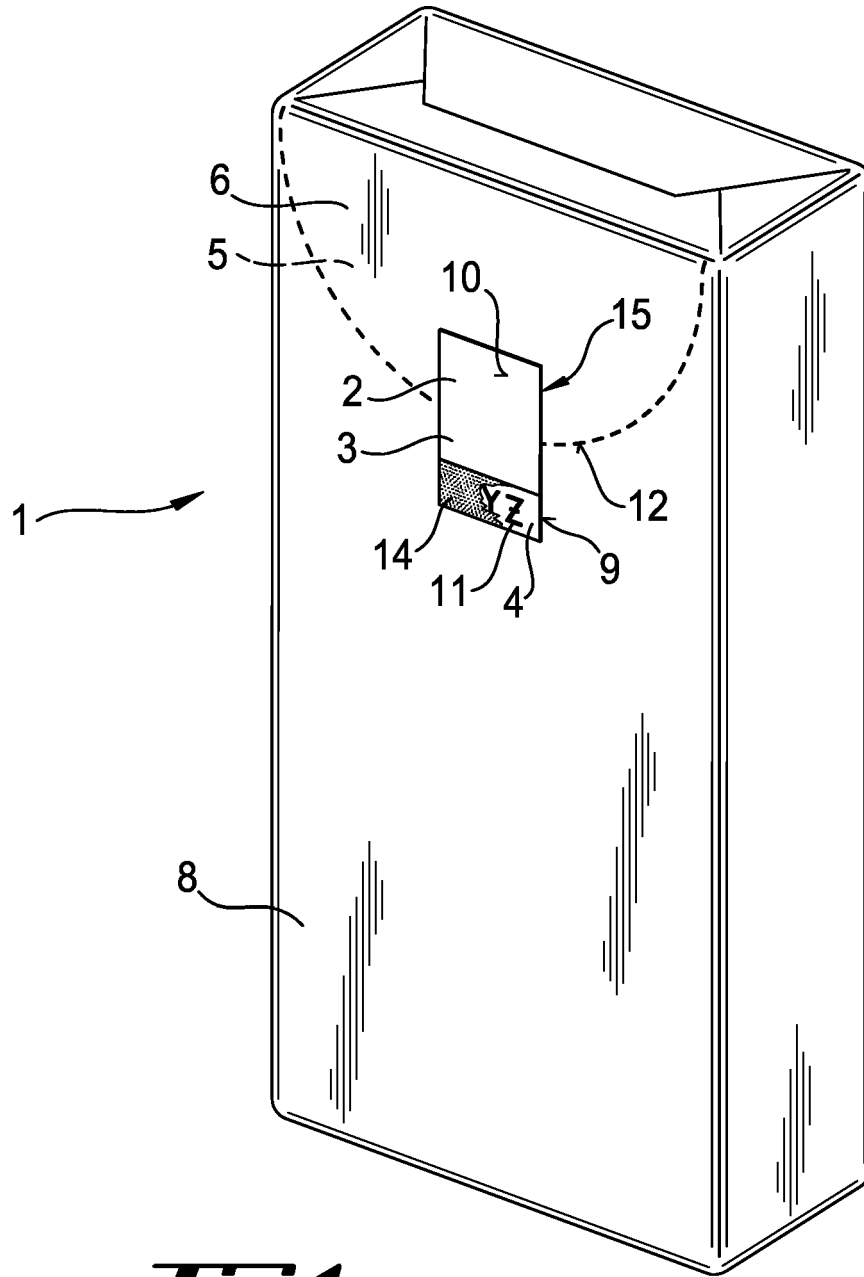


Fig. 4



European Patent Office

PARTIAL EUROPEAN SEARCH REPORT

Application Number

which under Rule 45 of the European Patent Convention EP 05 10 8073 shall be considered, for the purposes of subsequent proceedings, as the European search report

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	EP 1 466 843 A (THE PROCTER & GAMBLE COMPANY) 13 October 2004 (2004-10-13) * paragraphs [0065] - [0067]; figures 1,6,6a *	1,5,9	B65D75/58
A	----- US 6 213 642 B1 (JENSEN KURT) 10 April 2001 (2001-04-10) * column 1, line 57 - column 2, line 36; figures 1-4 *	1-3	
A	----- DE 20 2004 009971 U1 (WILHELM HONSEL GMBH) 2 September 2004 (2004-09-02) * paragraphs [0022], [0023]; figures 1,2 *	4	

INCOMPLETE SEARCH			
<p>The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC to such an extent that a meaningful search into the state of the art cannot be carried out, or can only be carried out partially, for these claims.</p> <p>Claims searched completely :</p> <p>Claims searched incompletely :</p> <p>Claims not searched :</p> <p>Reason for the limitation of the search: see sheet C</p>			
Place of search Munich		Date of completion of the search 20 January 2006	Examiner Galli, M
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	

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EPO FORM 1503 03.02 (P04C07)



Claim(s) searched completely:
1-7,9-11

Claim(s) not searched:
8,12

Reason for the limitation of the search (non-patentable invention(s)):

A meaningful search is not possible on the basis of all claims because the additional features of dependent claim 8 and the features of independent claim 12 relate to mere activities of marketing which do not involve any technical steps; therefore, the additional features of claim 8 and the subject-matter of claim 12 relate to a method for doing business (Art. 52 (2)(c)).

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 05 10 8073

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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20-01-2006

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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			US 2004195256 A1	07-10-2004
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