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(54) Wrapped container with label

(57) A wrapped container has a label (2) attached to the container (1) and to the wrapper. The label (2) comprises at least one line of weakness (3). It is affixed to the wrapper with a high tack connection and is less strongly affixed to the container (1) with a low tack connection such that upon removal of the wrapper the label (2) is at least partially ruptured along the at least one line of weakness (3) and is completely removed from the container (1).

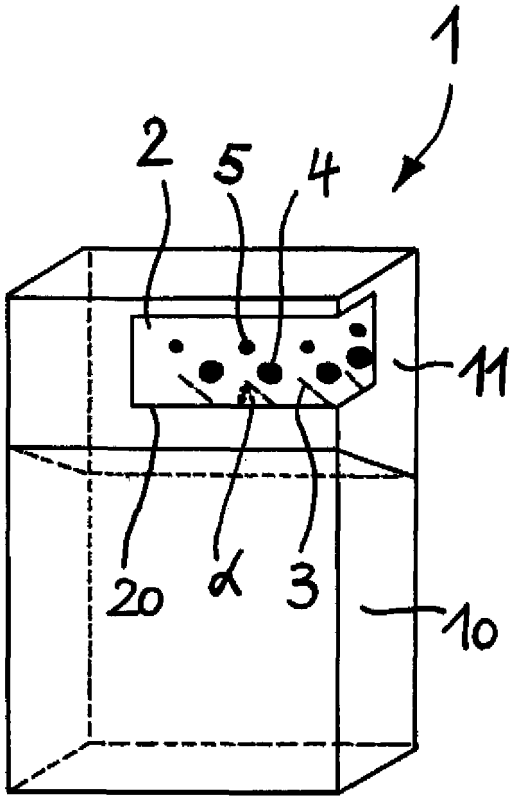

Fig. 1

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Description

[0001] The present invention relates to a wrapped container having a label attached to the container and to the wrapper. In a preferred embodiment, the wrapped container is a container for smoking articles such as a cigarette pack having a tax stamp attached to it.

[0002] In many countries packs for smoking articles and other containers of smoking articles must be labeled with a tax stamp to indicate that the required duty has been paid. Furthermore, the tax stamp must typically be applied in such a way that it is necessarily destroyed when the container of smoking articles is opened by a consumer. To meet this requirement, tax stamps on conventional hinge-lid packs of cigarettes are commonly affixed over the oblique lid line on one of the side faces of the pack so that the tax stamp is torn when the consumer pivots the lid backwards to gain access to the cigarettes held within the pack.

[0003] For containers that do not have such a hinge, for example slide and shell containers a different solution has been provided. The international patent application WO 2006/097850 discloses such a wrapped cigarette pack having the tax stamp applied only to the lid. The tax stamp has two parts, which are separated by a line of weakness such as a pre-perforated line. One part of the tax stamp is affixed to the container and not affixed or only less strongly affixed to the wrapper while the other part of the tax stamp is affixed to the wrapper and not affixed or only less strongly affixed to the container. As a consequence, upon removal of the wrapper the two parts of the tax stamp are at least partially separated along the pre-perforated line.

[0004] Thus, at least the respective part of the tax stamp which is affixed to the container remains affixed to the container after the wrapper has been removed. As with other methods to apply labels or tax stamps to containers, the part of the label remaining on the container requires space on the outside of the container that may be used otherwise, for example for print or decorative elements.

[0005] The present invention now provides a novel wrapped container and a novel method for packaging consumer articles in a wrapped container that allow the complete removal of a label when the wrapper is removed from the wrapped container. At the same time the label is at least partially destroyed during the removal of the wrapper from the wrapped container.

[0006] According to the present invention, there is provided a wrapped container having a label which is attached to the container and to the wrapper, wherein the label comprises at least one line of weakness. The label is affixed to the wrapper with a high tack connection and is affixed to the container with a low tack connection such that upon removal of the wrapper the label is at least partially ruptured along the at least one line of weakness and is completely removed from the container.

[0007] In this context the term "low tack" is used to describe the tackiness of the connection between the label and the container. The term "high tack" is used to describe the tackiness of the connection between the label and the wrapper. The strength of the "low tack" connection and the "high tack" connection is such that when the wrapper is removed, the "high tack" connection remains essentially intact whereas the low tack connection is broken. The strength of the "low tack" connection is such that the removal of the wrapper creates sufficient shear forces to rupture the at least one line of weakness on the label before the "low tack" connection between label and container is broken.

[0008] The wrapped container according to the invention satisfies the requirement that the tax stamp is at least partially destroyed and cannot be used again after the user removes the wrapper from the wrapped container. At the same time, upon complete removal of the wrapper the tax stamp is also completely removed from the container. This allows the full view on all print or other decorative elements of the container.

[0009] In one embodiment of the wrapped container according to the invention the label is affixed to the container and to the wrapper with adhesive, wherein the adhesive for affixing the label to the container is a low tack adhesive, for example a water based polyethylene adhesive, such as TOBACOLL ZD 4404-01 available from Henkel & Cie AG. Preferably the low tack adhesive is affixed stronger to the label than to the container such that the low tack adhesive remains essentially completely on the label once the connection is broken and the container remains essentially adhesive free. This may be achieved for example by the selection of the surface structures of the container and the label. The use of a low tack adhesive, which provides for low adhesion of the label to the container ensures that the label is completely removed from the container upon removal of the wrapper. The adhesive for affixing the label to the wrapper is a high tack adhesive, for example a standard hot-melt adhesive. Hot melt adhesives are commonly used in the manufacturing of containers to form permanent connections. Suitable low tack and high tack adhesives are known in the art.

[0010] In a preferred embodiment of the wrapped container according to the invention the label comprises two to ten lines of weakness that are arranged on the label, more preferably four to six lines of weakness.

[0011] Preferably, the at least one line of weakness is arranged along at least one edge of the label. The respective line of weakness may extend from one edge of the label, forming an angle with that edge of the label. Preferably, this angle is between 5 degrees and 90 degrees, more preferably between 30 degrees and 60 degrees and most preferably about 45 degrees. In the embodiments of the wrapped container according to the invention where the label provides more than one line of weakness, preferably the lines of weakness are parallel.

[0012] In an alternative embodiment of the wrapped container of the invention, the at least one line of weak-

ness intersects with two edges of the label. In a further alternative embodiment, the at least one line of weakness does not intersect with any edge of the label but is located entirely within the label.

[0013] The at least one line of weakness may be a straight line, a wavy line, a zigzag line, a dotted line, a dashed line or of any other suitable form, for example the form of a letter or an icon. In the embodiments of the wrapped container according to the invention where the label provides more than one line of weakness, each line of weakness may have a different form.

[0014] The provision of at least one line of weakness on the label facilitates the destruction of the label upon removal of the wrapper from the wrapped container.

[0015] It is preferred that the wrapped container according to the invention has adhesive spots for affixing the elongated label to the wrapper that are arranged on that side of the label that faces the wrapper. Preferably, the adhesive spots are arranged between the lines of weakness of the label. It is particularly preferable if additional low tack adhesive spots for affixing the elongated label to the container are arranged on the side of the label that faces the container. It is preferred that the high tack adhesive spots on the side of the label that faces the wrapper do not overlie the low tack adhesive spots that are on the side of the label that faces the container. A particularly advantageous arrangement of these adhesive spots is such that at least one line of weakness is arranged between an adhesive spot on the side of the label that faces the wrapper and an adhesive spot that is on the side of the label that faces the container.

[0016] More preferably the at least one line of weakness is arranged asymmetrically between two spots of adhesive on each side of the label. Such an arrangement of the at least one line of weakness creates high shear forces on the line of weakness when the wrapper is removed. This facilitates the destruction of the label when the wrapper is removed.

[0017] It is preferred that in the wrapped container according to the invention the at least one line of weakness is a pre-perforated line. Alternatively, the at least one line of weakness may be a creasing line or a scoring line.

[0018] The wrapped container according to the invention is in particular a pack of smoking articles such as cigarettes. Preferably, the container is a slide and shell pack, and the label is a tax stamp.

[0019] A further aspect of the invention relates to a method for wrapping a container, which comprises the steps of:

applying a low tack adhesive to a label on that side of the label that is facing the container, the label having at least one line of weakness,
glueing the label to a surface of the container,
applying a high tack adhesive to the side of the label that is facing the wrapper, and
wrapping the wrapper around the container and glueing the label to the wrapper.

[0020] This method of the invention provides for a simple and reliable way for packaging smoking articles in a wrapped container.

[0021] Further advantageous aspects of the invention may become apparent from the following description of an exemplary embodiment of the wrapped container according to the invention in which

Figure 1 shows a perspective rear view of an embodimentof a wrapped container according to the invention with a tax stamp affixed.

[0022] Figure 1 shows a perspective rear view of an embodiment of a wrapped container according to the invention in the form of a wrapped cigarette pack 1. The cigarette pack 1 comprises a base 10 and a lid 11. A label in form of a tax stamp 2 is affixed to the lid 11. The transparent wrapper made for example from polypropylene is not shown in the Figure. The transparent wrapper is tightly wrapped around the cigarette pack 1 as known in the art. The wrapper typically comprises a tear tape (not shown) that facilitates the opening of the wrapper.

[0023] As shown in Figure 1, the tax stamp 2 has an elongated rectangular shape. Four lines of weakness 3 are provided in form of pre-perforated lines 3 extending from the lower edge 20 of the tax stamp 2 and form each an acute angle α with the edge 20 of the tax stamp 2.

[0024] High tack adhesive spots 4 affixing the tax stamp 2 to the wrapper are arranged on the outermost side of the tax stamp 2 facing the transparent wrapper. To obtain these adhesive spots a hot-melt adhesive is applied at the respective locations on the tax stamp 2. The hot-melt adhesive provides for high tack adhesion forces, so that the tax stamp 2 will be removed along with the wrapper once the wrapper is removed from the container. As can be seen from the Figure, the high tack adhesive spots 4 are arranged between the pre-perforated lines 3.

[0025] Additional low tack adhesive spots 5 for affixing the tax stamp 2 to the cigarette pack 1 are arranged on the side of the tax stamp 2 that faces the cigarette pack 1. To obtain these additional low tack adhesive spots 5, a low tack adhesive is applied which allows to easily release the tax stamp 2 from the cigarette pack 1. These additional low tack adhesive spots 5 are arranged above the pre-perforated lines 3.

[0026] In use, the wrapper is removed in a direction towards the top of the cigarette pack 1. Thereby the tax stamp 2 ruptures at least partially along at least one of the pre-perforated lines 3 so that the tax stamp 2 cannot be used again. Complete removal of the wrapper from the cigarette pack 1 completely removes the ruptured tax stamp 2 from the cigarette pack 1 as the low tack adhesive affixing the tax stamp 2 to the cigarette pack 1 only provides for low adhesion forces. Any attempts to remove the tax stamp 2 from the wrapper once the wrapper has been completely removed from the cigarette pack 1 result in further damage of the tax stamp 2 due to the high tack

adhesive connection between the wrapper and the tax stamp 2 such that the tax stamp 2 cannot be used again for another container.

[0027] While a specific embodiment of the invention has been described with regard to a cigarette container and a tax stamp, any other container and any other label that should be completely removed from a container upon unwrapping the wrapper from the container is within the scope of the invention. For example, such other labels to be removed include a consumer communication, an onsert, a coupon, a tamper proof item or the like. The rupturing of the label may, for example, open that label to allow additional communication with the consumer. Likewise, the at least partial destruction of a label that is a tamper proof item would indicate to the consumer or the authorities that the container has been tampered with and that for example the freshness of the goods inside the container may be questionable.

[0028] In addition to the specific embodiment described above, alternative embodiments are well conceivable. For example, the specific locations where the adhesive may be applied, that is to say the adhesive pattern, may vary depending on the prescribed or desired position of the tax stamp and depending on the functionality with regard to an optimized removal and destroying of the tax stamp. The adhesive pattern is selected such as to best fit the functionality of the pack, that is, whether it is a hinge lid pack or a slide and shell pack, a side opening pack or any other pack. The same holds true for the position and the direction of the at least one line of weakness.

[0029] The method for packaging smoking articles such as cigarettes is performed by applying the non-permanent adhesive to the tax stamp 2 with its at least one line of weakness on that side of the tax stamp 2 facing the cigarette pack 1 and glueing the tax stamp 2 to a surface of the cigarette pack 1. This may be done in a tax stamp application unit. Later in the process, a holt-melt adhesive is applied to that surface of the tax stamp facing the wrapper to be wrapped around the cigarette pack 1. The wrapper is then wrapped around the cigarette pack 1 in order to strongly affix the tax stamp to the wrapper. This is typically done in a wrapping unit.

Claims

1. A wrapped container having a label (2) attached to the container (1) and to the wrapper, wherein the label (2) comprises at least one line of weakness (3), and wherein the label (2) is affixed to the wrapper in a high tack connection and the label (2) is affixed to the container (1) in a low tack connection such that upon removal of the wrapper the label (2) is at least partially ruptured along the at least one line of weakness (3) and is completely removed from the container (1).

2. A wrapped container according to claim 1, wherein the low tack connection between the label (2) and the container (1) is formed by a low tack adhesive.

3. A wrapped container according to any one of the preceding claims, wherein the high tack connection between the label (2) and the wrapper is formed by a high tack adhesive.

4. A wrapped container according to any one of the preceding claims, wherein the at least one line of weakness (3) extends from an edge (20) of the label (2) and wherein the at least one line of weakness (3) forms an acute angle (α) with that edge (20) of the label (2).

5. A wrapped container according to claim 4, wherein high tack adhesive spots (4) for affixing the elongated label (2) to the wrapper are arranged between the lines of weakness (3).

6. A wrapped container according to claim 5, wherein low tack adhesive spots (5) for affixing the elongated label (2) to the container are arranged on the side of the label (2) facing the container (1) such that at least one line of weakness is arranged between a high tack adhesive spot (4) and a low tack adhesive spot (5) .

7. A wrapped container according to any one of the preceding claims, wherein the at least one line of weakness (3) is a pre-perforated line.

8. A wrapped container according to any one of the preceding claims, which is a pack of cigarettes (1).

9. A wrapped container according to claim 8, wherein the label (2) is a tax stamp.

10. A method for packaging consumer goods in a wrapped container, the method comprising the steps of:

    - applying a low tack adhesive to a label (2) on that side of the label (2) that faces the container (1), the label (2) having at least one line of weakness (3),
    - glueing the label (2) to a surface of the container (1)
    - applying a high tack adhesive to that side of the label (2) that faces the wrapper
    - wrapping the wrapper around the container (1) and glueing the label (2) to the wrapper.

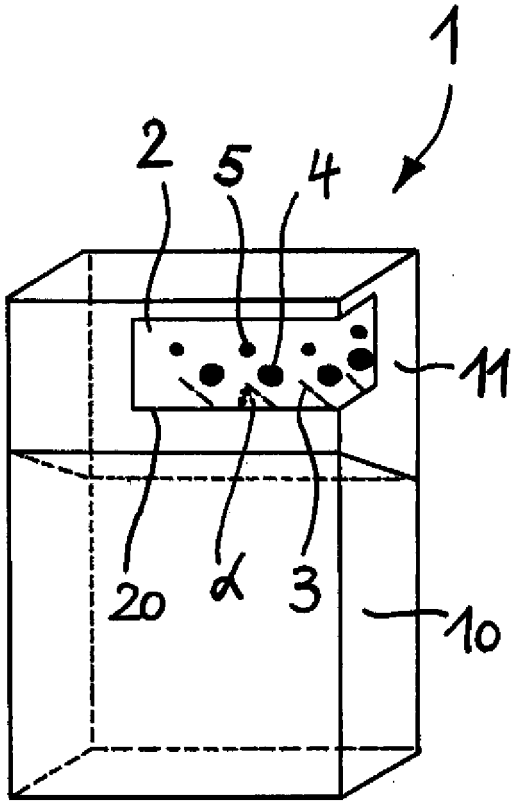

Fig. 1

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Application Number
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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
The Hague	3 December 2007	Jagusiak, Antony

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