CONTAINER FOR CONSUMER ARTICLES WITH A SPACER CONTAINING A CUT-OUT

The present invention relates to a container for consumer articles, the container comprising a box portion and a spacer which is mounted within the box portion.

It is known to package consumer articles in containers formed from folded laminar blanks. Elongate smoking articles, such as cigarettes, cigarillos and cigars, are commonly sold in rigid box shaped containers, such as hinged lid containers having a box portion and a lid connected to the box about a hinge line extending across the rear wall of the container. In use, the lid is pivoted about the hinge line to open the pack and so gain access to the smoking articles held in the box.

In some cases, it may be desirable to provide containers that are larger in size than the volume occupied by the consumer articles within the container. This may result in there being empty space within the container so that the consumer articles are more likely to be displaced or shaken within the container during transport.

In order to overcome this problem, GB 2 259 687 discloses a cigarette package comprising a shaped spacer element which is inserted into the cigarette pack to take up the space difference between the foil bundle and the box enclosure. However, as a result of the presence of the shaped spacer it is more difficult for the consumer to access the cigarettes within the cigarette pack.

It would be desirable to provide an improved spacer-containing container for consumer articles that allows easy access to consumer articles despite the presence of the spacer.

This goal can be achieved by the present invention. According to a first aspect of the invention, a container for consumer articles is provided, the container comprising a box portion wherein the box portion comprises a box front wall, a box rear wall, a box bottom wall and two box side walls extending between the box front wall and the box rear wall and a spacer wherein the spacer is mounted within the box portion, the spacer is mounted essentially perpendicular to the box bottom wall, the spacer is partially projecting out at the upper end of the box front wall and the spacer comprises at least one spacer wall, the at least one spacer wall has at least one spacer cut-out and the at least one spacer cut-out is located at the upper end of the at least one spacer wall. The container further comprises an inner frame with an inner frame cut-out, wherein the inner frame is provided at the inner side of the box front wall and is partially projecting out at the upper end of the box front wall and wherein the spacer is a separate element that is mounted in the container.

The spacer cut-out at the upper end of the at least one spacer wall is located in an area projecting out at the upper end of the box front wall. For that reason this spacer cut-out will facilitate the consumer the access to the consumer articles within the container.

spacers are made from cardboard or paper or plastic. The spacer can have a base weight of at least 120 grams per square meter, preferably 130 to 250 grams per square meter and more preferably 160 to 230 grams per square meter. The base weight of the spacer is determined according to ASTM D646 - 13 (in conjunction with ASTM D685 – 12).

According to a second aspect of the invention, a method for preparing the container for consumer articles as defined in the first aspect is provided, by carrying, not necessarily in the described order, the steps of:

(a) providing a main blank for forming a box portion,

(b) forming from the main blank the box portion comprising a box front wall , a box rear wall, a box bottom wall and two box side walls extending between the box front wall and the box rear wall,

(c) providing a spacer blank for forming a spacer with at least one cut-out,

(d) forming the spacer with the at least one spacer cut-out from the spacer blank,

(e) introducing the spacer with the at least one spacer cut-out into the box portion of the container such that the spacer is mounted within the box portion, is mounted essentially perpendicular to the box bottom wall, and the spacer with the at least one spacer cut-out is partially projecting out at the upper end of the box front wall,

(f) providing an inner frame blank for forming an inner frame with a cut-out,

(g) forming the inner frame from the inner frame blank, and

(h) mounting the inner frame at the inner side of the box front wall such that the inner frame is partially projecting out at the upper end of the box front wall (14), wherein the spacer is a separate element that is mounted in the container.

Preferably, the method for preparing the container may be complemented by a step of introducing consumer articles at an appropriate time into the container. This can be at the end of the method after the spacer has been inserted into the container. It can, however, also be done while carrying out the above-described method for preparing the container. For example, for cigarettes as the consumer articles, the cigarettes might be placed onto a spacer blank. The spacer is then formed around the cigarettes and the resulting bundle introduced into the container. For that purpose, the cigarettes can be wrapped into an inner liner and then placed onto the spacer blank.

The length, width and depth of containers according to the invention may be such that, in the closed position, the resultant overall dimensions of the container are similar to the dimensions of a typical disposable hinge-lid pack of twenty cigarettes.

Preferably, containers according to the invention have a height of between about 60 millimeter and about 150 millimeter, more preferably a height of between about 70 millimeter and about 125 millimeter, wherein the height is measured from the top wall to the bottom wall of the container.

CLAIMS

1. A container for consumer articles, the container comprising:

a box portion, wherein the box portion comprises a box front wall, a box rear wall, a box bottom wall and two box side walls extending between the box front wall and the box rear wall, and

a spacer, wherein:

the spacer is mounted within the box portion,

the spacer is mounted essentially perpendicular to the box bottom wall,

the spacer is partially projecting out at the upper end of the box front wall, and

the spacer comprises at least one spacer wall,

the at least one spacer wall has at least one spacer cut-out, and

the at least one spacer cut-out is located at the upper end of the at least one spacer wall,

the container, further comprising an inner frame with an inner frame cut-out, wherein

the inner frame is provided at the inner side of the box front wall and is partially projecting out at the upper end of the box front wall, and

wherein the spacer is a separate element that is mounted in the container.

2. The container according to claim 1 wherein at least a first portion of the spacer is bent to yield a circular, ellipsoid, oval, semi-circular, semi-ellipsoid or semi-oval or U-shaped cross-section of the first portion of the spacer.

3. The container according to claim 1 or claim 2 wherein at least a second portion of the spacer is folded to provide a number of spacer walls yielding a U-shaped, V-shaped, triangular, rectangular or trapezoid cross-section of the second portion of the spacer.

4. The container according to any one of the preceding claims wherein the spacer comprises

one spacer wall formed to create a circular, ellipsoid, oval, semi-circular, semi-ellipsoid, semi-oval or U-shaped cross-section of the spacer, or

two spacer walls formed to create a V-shaped cross-section of the spacer, or

three spacer walls formed to create a U-shaped or triangular cross-section of the spacer, or

four spacer walls formed to create a rectangular or trapezoid cross-section of the spacer.

5. The container according to claim 4 wherein the spacer has

one spacer wall with two spacer cut-outs on opposing sides of the spacer or one spacer cut-out or three spacer cut-outs, or

two spacer walls with one spacer cut-out or two spacer cut-outs, or

three spacer walls with one, two or three spacer cut-outs, or

four spacer walls with two spacer cut-outs on opposing sides of the spacer or four spacer cut-outs on opposing sides of the spacer or three spacer cut-outs.

6. The container according to any one of the preceding claims wherein the at least one spacer cut-out has the form of a triangle, a rectangle, a semi-circle, a semi-ellipse, a semi-oval or is U-shaped or V-shaped.

7. The container according to any one of the preceding claims wherein the cross-sectional area of the spacer is about 10 percent to about 60 percent, preferably about 20 percent to about 50 percent, more preferably about 25 percent to about 45 percent of the cross-sectional area of the box portion.

8. The container according to any one of the preceding claims

wherein the outer depth of the spacer corresponds to the inner depth of the box portion or

wherein the outer width of the spacer corresponds to the inner width of the box portion or

wherein the outer depth of the spacer corresponds to the inner depth of the box portion and the outer width of the spacer corresponds to the inner width of the box portion.

9. The container according to any of the preceding claims wherein the consumer articles are smoking articles, preferably cigars, cigarillos or cigarettes, more preferably cigarettes.

10. The container according to any of the preceding claims

wherein the consumer articles are located within the box portion but not within the spacer or

wherein the consumer articles are located within the spacer but not within the volume between the walls of the box portion and the spacer.

11. A container according to any one of the preceding claims wherein the container further comprises a lid portion comprising a lid front wall, a lid rear wall and two lid side walls extending between the lid front wall and the lid rear wall.

12. A container according to any one of the preceding claims wherein the height of the spacer corresponds to the inner height of the box portion.

13. A method for preparing a container for consumer articles according to any of the preceding claims, comprising the steps of:

(a) providing a main blank for forming a box portion,

(b) forming from the main blank the box portion comprising a box front wall, a box rear wall, a box bottom wall and two box side walls extending between the box front wall and the box rear wall,

(c) providing a spacer blank for forming a spacer with at least one cut-out,

(d) forming the spacer with the at least one spacer cut-out from the spacer blank,

(e) introducing the spacer with the at least one spacer cut-out into the box portion of the container such that the spacer is mounted within the box portion, is mounted essentially perpendicular to the box bottom wall, and the spacer with the at least one spacer cut-out is partially projecting out at the upper end of the box front wall,

(f) providing an inner frame blank for forming an inner frame with a cut-out,

(g) forming the inner frame from the inner frame blank, and

(h) mounting the inner frame at the inner side of the box front wall such that the inner frame is partially projecting out at the upper end of the box front wall,

wherein the spacer is a separate element that is mounted in the container.

14. The method of claim 13 further comprising the step of introducing consumer articles at an appropriate time into the container.