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(54) CUP CONTAINER HAVING AN INTEGRATED SLEEVE

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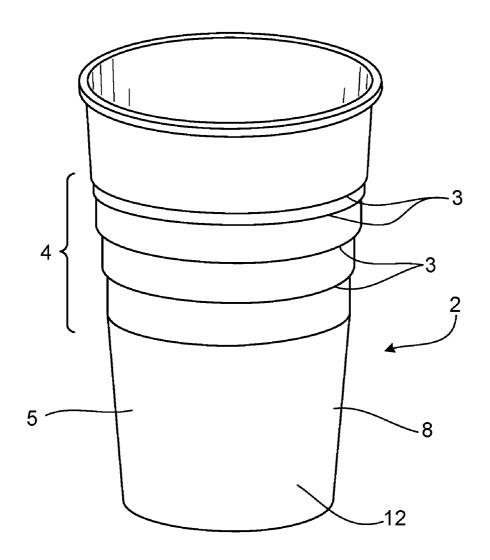
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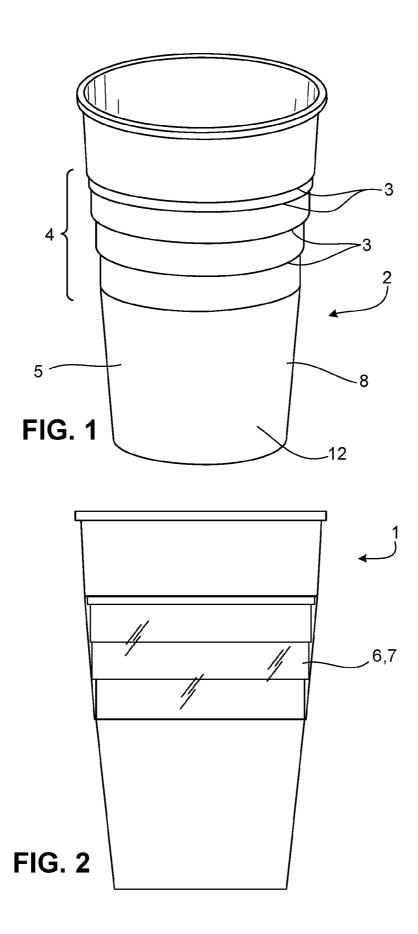
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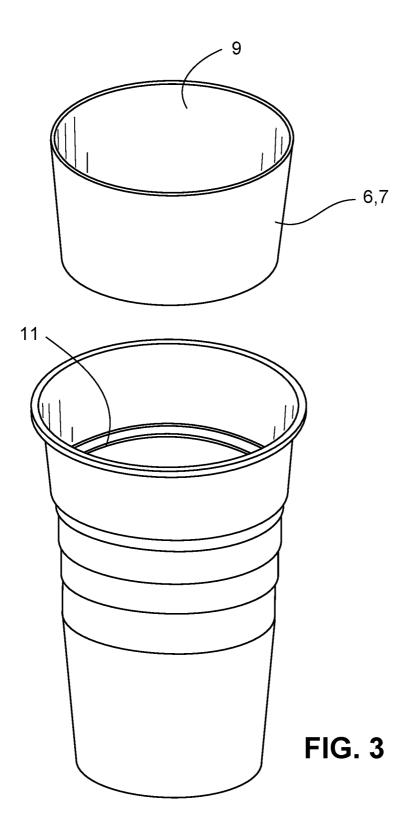
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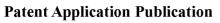
(57) ABSTRACT

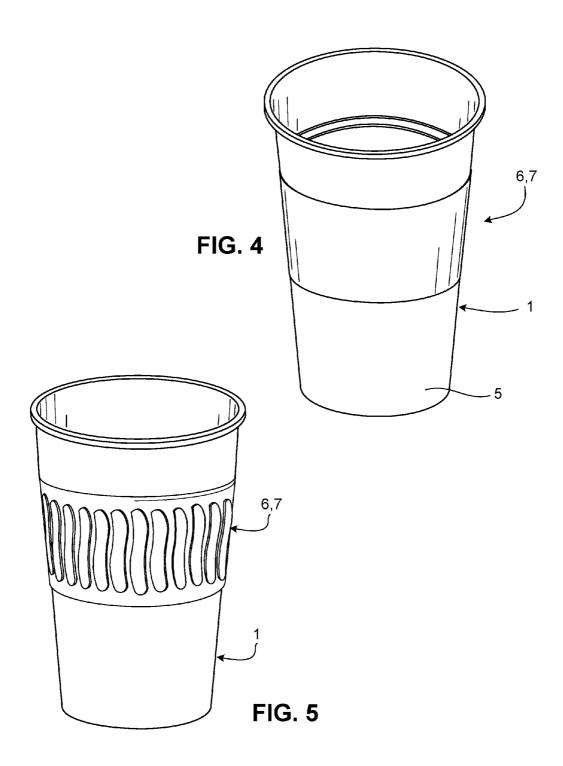
The present invention provides a container cup having a substantially frustoconical shape and comprising a side wall and a bottom wall, the container cup is characterized in that said side wall has an annular region which comprises at least one or more stiffening grooves, and an outer annular member arranged externally onto said cup wall and at said at least one or more grooves.

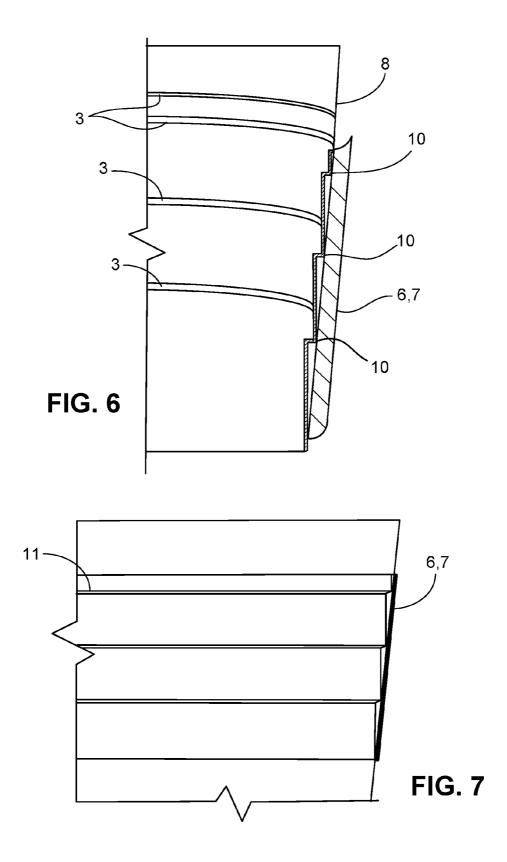












CUP CONTAINER HAVING AN INTEGRATED SLEEVE

DISCLOSURE

[0001] The present invention relates to a cup-type container and, more precisely, to a cup type container for the take-away and consumption of a beverage, preferably a hot beverage.

PRIOR ART

[0002] It is already well known to date, the use of cups for the take-away and the consumption of beverages in take-away retail shops such as "fast food" and the like, and wherein they are made of plastic or a paper material, such as cardboard or the like.

[0003] Typically, these types of cups have a frustoconical shape to allow the stacking thereof when they are placed into the relevant dispenser at the selling point. Further, on the wall of the cup can be formed ribs or grooves for the stiffening and, if appropriate, to allow a facilitated stacking thereof.

[0004] In the case of hot drinks, some technical solutions are provided to increase the degree of thermal insulation of such cups.

[0005] According to a first technical solution, the cup is a double walled cup and wherein a certain space between the two walls it is provided, in order to increase the degree of thermal insulation of the outer wall of the cup. This solution though effective, has the disadvantage consisting of the use of more material than a conventional paper cup given the existence of a double wall, therefore its higher cost compared to a conventional single walled cup.

[0006] According to a second alternative technical solution there is provided the implementation of an outer sleeve that is made to slide on the surface of the cup wall up to its locking by interference of the latter. The sleeve when inserted generates a region for gripping and an effective thermal insulation for the user. Also this second solution, albeit effective has the disadvantage to provide for the use of additional material compared to a conventional cup and, therefore, its higher cost compared to a conventional cup. In addition, there is the disadvantage of storing such sleeves, which must be preassembled in advance and be inserted onto the cup wall from the staff at the selling point. Even for this latter aspect, there is involved an higher operating cost for the store.

BRIEF DESCRIPTION OF THE INVENTION

[0007] The present invention aims to solve the above mentioned disadvantages by providing an improved cup which provides a cover and heat insulation member which is integrally arranged onto an annular region of the wall of the cup. [0008] According to a first aspect of the present invention, there is provided a frusto-conical shaped cup comprising a single wall, said wall having an annular region that comprises at least one or more stiffening grooves, and an annular member arranged externally onto the wall of the cup and at said at least one or more grooves.

[0009] According to a second aspect of the present invention, it is provided a frusto-conical shaped cup comprising a single wall, said wall having an annular region that comprises at least one or more stiffening grooves, and an outer sleeve, and wherein the coupling between said outer sleeve and said wall at said annular region having at least one or more grooves creates a region with an improved thermal insulation when compared to the surrounding regions of the wall cup.

[0010] According to a third aspect of the present invention, it is provided a frusto-conical shaped cup comprising a single wall, said wall having an annular region which comprises at least one or more stiffening grooves, and an outer sleeve, and wherein the coupling between said outer sleeve and said wall at said at least one or more grooves is achieved by fixed connection of the first to the second.

[0011] According to a fourth aspect of the present invention, it is provided a frusto-conical shaped cup comprising a single wall, said wall having an annular region that comprises at least one or more stiffening grooves, and an outer sleeve member, and wherein as a result of the coupling between said member and said annular outer wall at said at least one or more grooves, there are generated one or more confined spaces between said annular sleeve member and said wall.

[0012] According to a fifth aspect of the present invention, it is provided a frusto-conical shaped cup comprising a single wall, said wall having an annular region that comprises at least one or more stiffening grooves, and an outer sleeve member, and wherein at least one groove provides support for the inner stacking of a second identical cup.

[0013] Thus, the present invention provides an improved cup substantially as described and claimed in the appended claims.

DETAILED DESCRIPTION OF THE INVENTION

[0014] A detailed description of preferred embodiments of an improved cup according to the present invention will now be given, by way of a non limiting example, and with reference to the appended drawings, wherein:

[0015] FIG. 1 is a front perspective view of an improved cup according to the present invention;

[0016] FIG. 2 is an elevational view of the cup of FIG. 1;

[0017] FIG. 3 is a perspective and exploded view of a cup and the annular member according to the present invention;

[0018] FIG. 4 is a perspective view of an improved cup assembled according to the present invention;

[0019] FIG. 5 is a perspective view of an alternative embodiment of the improved cup assembled according to the present invention;

[0020] FIG. 6 is a perspective view in a partial longitudinal section of the improved cup according to the present invention; and

[0021] FIG. 7 is a partial longitudinal sectional view of the improved cup according to the present invention.

[0022] Referring now to FIGS. 1 and 2 there is illustrated therein a cup according to the present invention.

[0023] As can be seen in the figures, there is provided a substantially frustoconical shaped cup having at its wall a region defined by a plurality of annular grooves arranged parallel one with respect to each other.

[0024] As will be better illustrated hereinafter, according to the present invention, the grooves have a substantially stepped shape (or saw-tooth or zig-zag). The arrangement of the annular region which includes the grooves annularly distributed thereon is such that an annular stepped surface is generated at the outside of the wall of the cup. Structurally speaking, this kind of surface improves the mechanical strength of the wall of the cup.

[0025] Conveniently and according to the needs of the market, the body of the cup can be made with a plastic material or a paper material such as it is already known to the state of the art.

[0026] With reference now to FIG. 3, according to the present invention there is provided a structural member consists of an additional sleeve adapted to be positioned onto the outer surface of the cup and at the annular region which includes the plurality of annular grooves (better illustrated hereinafter).

[0027] As evident in FIG. 4, the sleeve is inserted up to interference-fitting onto the outer surface of the cup wall, and at the annular region comprising the annular grooves. Once assembled the sleeve onto the outer surface of the cup, the former covers the plurality of annular grooves, thereby generating a surface which shows continuity with respect to the outer surface of the wall of the cup.

[0028] With particular reference now to FIG. 5, it is shown therein an alternative embodiment of the improved cup of the present invention, wherein the outer sleeve member shows an embossed or in relief surface. According to this arrangement, it is possible to generate a textured surface on the cup that allows to improve the mechanical features of the latter and allows to increase the thermal insulation features for the user. [0029] Here, it is necessary to point out that according to the two alternative embodiments above described, the sleeve can be conveniently made with paper material as already known to the state of the art, but according to the needs of the market it can alternatively be realized also with other suitable materials for this use.

[0030] With reference now to FIGS. 6 and 7 it is shown therein in detail the mounting and the fixing of the outer sleeve onto the cup wall according to the present invention. As can be seen in the figures, the coupling between the sleeve and the surface of the cup is achieved by interference of the first onto the latter up to contacting the inner surface of the sleeve at the end tip of each groove. More precisely, the arrangement is such that the mounting of the sleeve onto the multiplicity of grooves creates a region with improved thermal insulation when compared to the surrounding regions of the cup because of the confined spaces which are created between the sleeve and the plurality of grooves.

[0031] Furthermore, according to the present and preferred embodiment, the grooves have a stepped shape (i.e., saw tooth or zig-zag). This allows to generate inside the wall surface of the cup at least one stacking step for a respective another cup when the latter is inserted in the stacked condition into the first cup.

[0032] The present invention has a number of advantages.
[0033] According to a first advantageous aspect there is provided a cup which has integrally provided thereon a cover member and a heat insulation member arranged at an annular region of the outer cup wall, thereby eliminating the inconvenience of the assembly of two separated members at the beverage selling point, and the consequent saving of time and inventory costs.

[0034] According to a second advantageous aspect of the present invention, there is provided a frusto-conical shaped cup having a single wall, and wherein the wall of the cup comprises an annular region for the structural stiffening thereof, and an annular thermal insulation member arranged integrally and externally onto the wall of the cup, thereby the thermal insulation being greatly improved when compared to

the cups of the prior art, the thermal insulation improvement being as a result of the coupling between said outer annular member and said annular region of the wall having structural stiffening by generating one or more confined spaces between said annular member and said wall.

[0035] According to a third aspect of the present invention, there is provided a cup wherein the coupling between said outer annular member and said wall at said at least one or more grooves is achieved by attachment of the former onto the latter, thereby making it integral all in a single body with a considerable saving of material when compared to the double walled cup of the prior art.

[0036] According to a fourth aspect of the present invention, it is provided a frusto-conical shaped cup comprising a single wall having structural stiffening grooves which also provide a respective stacking step for the stacking of a respective cup when the latter it is inserted in the former for the use thereof at the selling points.

1. A container cup having a substantially frustoconical shape comprising a side wall and a bottom wall,

wherein the side wall has an annular region which comprises at least one stiffening grooves, and an outer annular member arranged externally onto said cup wall and at said at least one or more grooves, wherein there is an interference fitting of the outer annular member onto an outer surface of the side wall and the annular region comprising said at least one groove, said annular member generating a surface which shows continuity with respect to the outer surface of the side wall.

- 2. The container cup according to claim 1, wherein the coupling between said outer annular member and said wall at said at least one groove creates a region having a greater thermal insulation compared to the surrounding regions of the cup or side wall.
- 3. Container cup according to claim 1, wherein the coupling between said outer annular member and said cup wall at said at least one groove is achieved by attachment of the former onto the latter.
- **4.** container cup according to claim **1**, wherein the coupling between said outer annular member and said cup wall at said at least one or more grooves generates one or more confined spaces defined between said annular member and said wall.
- 5. Container cup according to claim 1, wherein at least one groove provides a support for the stacking of a respective second similar cup.
- **6**. Container cup according to claim **1**, wherein said cup is made of a plastic material.
- 7. Container cup according to claim 1, wherein said cup is made of a paper material.
- 8. Container cup according to claim 1, wherein said outer annular member is made of a paper material or the like and is sleeve like.
- 9. Container cup according to claim 2 wherein the coupling between said outer annular member and said cup wall at said at least one groove is achieved by attachment of the former onto the latter.
- 10. Container cup according to claim 5 wherein said cup is made of a paper material.

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