DISPOSABLE FOAM ENHANCING ESPRESSO DRINK LID

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ABSTRACT
Applicant provides a disposable foam enhancing espresso drink lid which enhances the coffee and espresso drinking experience, and includes a curved dome having a drinking hole with a top and bottom in a top surface and a curved face, wherein said curved dome is formed out of said lid, a lip depression at the bottom of said curved face, wherein said lip depression is formed out of said lid, a nose depression separated from said lip depression by a support structure, wherein said nose depression and said support structure are formed out of said lid, a smell slit provided in said support structure, a rim encircling said curved dome, lip depression, nose depression, and support structure. In use a drinker's lips curve around said dome curved face and into said lip depression, and drinker's nose extends into said nose depression with nostrils in proximity to said smell slit. The lid may be formed from a contiguous plasticized material. The lid can include an annular mounting portion beneath and connected to said rim for sealingly engaging the lid of the beverage container having a circular edge with a bead thereon.
DISPOSABLE FOAM ENHANCING ESPRESSO DRINK LID

FIELD OF THE INVENTION

The present invention relates to disposable plasticized "to-go" cup lids. More particularly, the present invention relates to disposable plasticized "to-go" coffee or espresso cup lids.

BACKGROUND

Coffee and espresso drink imbibers frequently drink from either paper product based coffee cups with plasticized lids, or, for more pleasure, from un-lidded coffee mugs, frequently ceramic. Drinking from a mug provides an enhanced experience. The smell, foam, and ability to control the temperature, all combine to enhance the drinking experience. Drinking from a mug is an experience many times better than from a "to go" cup and lid.

Drinking from existing paper product "to-go" cups with plasticized lids does not give the same experience. Currently, enjoyability from drinking from a paper product “to-go” cup with plasticized lid is limited by several factors. Foam, with tight and tiny air bubbles and a creamy texture, is a differentiator (besides the quality of the raw materials and technique) to the fast food versions of coffee shops. The problem with the "to-go" cups is that the hole does not allow the foam to pass through. With the cup tilted, the hole is below the floating layer of foam. Plus, with existing “to-go” lids, the depression in the lid skims off the top layer of foam while drinking. Temperature is another factor. Most "to-go" coffee lids have a small hole forcing the consumer to ingest 100% coffee. With this design it is very difficult to slurp the hot liquid to cool it down. Smell is also a factor. Smell is a contributor to the overall sensory experience. Yet it is difficult to smell the coffee with existing “to-go” lids. Nose fit is another factor. Existing “to-go” lids have a top surface at the location where the drinker’s nose hits which forces the drinker to tilt their head back quite far to reach the last drop. This can be quite dangerous while driving a car. Upper lip fit is yet another factor. Existing “to-go” lid designs force the consumer to match their upper lip (shaped to a frown) to the rim of the lid (shaped to a smile).

Thus, there is a need for a disposable foam enhancing espresso lid usable with "to-go" cups for either coffee or coffee like drinks such as espresso that addresses these limiting factors, foam, temperature, smell, nose fit, and upper lip fit.

PRESENTLY KNOWN ART

The following represents a list of known related art:

<table>
<thead>
<tr>
<th>Reference:</th>
<th>Issued to:</th>
<th>Date of Issue/Publication:</th>
</tr>
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<tbody>
<tr>
<td>US Pat. 7,185,781</td>
<td>Pitts</td>
<td>Mar. 6, 2007</td>
</tr>
<tr>
<td>US Pat. 6,431,300</td>
<td>Walker</td>
<td>Aug. 13, 2002</td>
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<td>US Pat. 6,419,112</td>
<td>Bruce</td>
<td>Jul. 16, 2002</td>
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<td>US Pat. 5,533,731</td>
<td>Schuylar</td>
<td>Sep. 10, 1996</td>
</tr>
<tr>
<td>US Pat. 4,503,092</td>
<td>Sitko et al.</td>
<td>Mar. 12, 1985</td>
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SUMMARY AND ADVANTAGES

A disposable foam enhancing espresso drink lid which enhances the coffee and espresso drinking experience. The disposable foam enhancing espresso drink lid includes a curved dome having a drinking hole with a top and bottom in a top surface and a curved face, wherein said curved dome is formed out of said lid, a lip depression at the bottom of said curved face, wherein said lip depression is formed out of said lid, a nose depression separated from said lip depression by a support structure, wherein said nose depression and said support structure are formed out of said lid, a slit mouth provided in said support structure, and a rim encircling said curved dome, lip depression, nose depression, and support structure. In use, the consumer's lips curve around said dome curved face and into said lip depression, and the consumer's nose extends into said nose depression with nostrils in proximity to said slit mouth. The lid may be formed from a contiguous plasticized material. The lid can include an annular mounting portion beneath and connected to said rim for sealingly engaging the lid of the beverage container having a circular edge with a bead thereon.

Applicant's lid addresses the problem with foam by extending the horizontal oval hole into a vertical triangular slot. This allows enjoyment of the foam while drinking coffee. The foam remains available to the hole at all angles of tilting of the cup. The consumer can control the amount of foam and coffee with the positioning of the lips on the dome and hole. Moreover, because foam is mostly air, with the ability to control the amount of foam in the sip, the consumer will be able to control the temperature of the drink. The dome on Applicant's lid creates a top surface shaped to a frown like the upper lip making it easier to seal between the lid and lip.

Applicant's lid also enhances the drinking experience by making available to the user the smell of the coffee vapors by incorporating a slit positioned under the nose in the optimum location for proximity to the user's nostrils to allow a minimal amount of coffee vapors to escape and be smelled. In conjunction and to allow this optimum location, a depression in Applicant's lid provides a space for the nose allowing the consumer to fully tilt the cup with less tilting of the head.

The disposable foam enhancing espresso drink lid of the present invention presents numerous advantages, including: (1) addressing the limiting factors of foam, temperature, smell, nose fit, and upper lip fit; (2) ingesting more foam and leaving less foam after consuming the drink; (3)
reducing or eliminating occurrence of tongue burning; (4) providing a degree of temperature control; (5) allowing the experience of drinking coffee with the foam and smelling the aroma of the drink; (6) optimally placing a smell aperture in proximity to a drinker’s nostrils; and (7) providing a curved surface to which a drinker’s lip can seal, among others.

Additional advantages of the invention will be set forth in part in the description which follows, and in part will be obvious from the description, or may be learned by practice of the invention. The advantages of the invention may be realized and attained by means of the instrumentalities and combinations particularly pointed out in the appended claims. Further benefits and advantages of the embodiments of the invention will become apparent from consideration of the following detailed description given with reference to the accompanying drawings, which specify and show preferred embodiments of the present invention.

BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying drawings, which are incorporated into and constitute a part of this specification, illustrate one or more embodiments of the present invention and, together with the detailed description, serve to explain the principles and implementations of the invention.

FIG. 1 shows an embodiment of Applicant’s Disposable Foam Enhancing Espresso Drink Lid.

FIG. 2 shows a view of the lid of FIG. 1.

FIG. 3 shows another view of the lid of FIG. 1.

FIG. 4 shows another view of the lid of FIG. 1.

FIG. 5 shows another view of the lid of FIG. 1.

FIG. 6 shows a view of the lid of FIG. 1 in use.

FIG. 7 shows a A-A cross section view of the lid of FIG. 3.

REFERENCE NUMERALS IN DRAWINGS

10 Disposable Foam Enhancing Espresso Drink Lid
12 Dome
12a Dome Curved Face
12b Dome Top Surface
14 Drinking Hole
14a Drinking Hole Top
14b Drinking Hole Bottom
16 Nose Depression
18 Lip Depression
20 Smell Slit
22 Support Structure
24 Rim
26 Anunnular Mounting Portion
34 Nose
35 C Cup
36 L Lips
37 O Nostrils

DETAILED DESCRIPTION

Before beginning a detailed description of the subject invention, mention of the following is in order. When appropriate, like reference materials and characters are used to designate identical, corresponding, or similar components in differing figure drawings. The figure drawings associated with this disclosure typically are not drawn with dimensional accuracy to scale, i.e., such drawings have been drafted with a focus on clarity of viewing and understanding rather than dimensional accuracy.

In the interest of clarity, not all of the routine features of the implementations described herein are shown and described. It will, of course, be appreciated that in the development of any such actual implementation, numerous implementation-specific decisions must be made in order to achieve the developer’s specific goals, such as compliance with application and business-related constraints, and that these specific goals will vary from one implementation to another and from one developer to another. Moreover, it will be appreciated that such a development effort might be complex and time-consuming, but would nevertheless be a routine undertaking of engineering for those of ordinary skill in the art having the benefit of this disclosure.

As shown in FIGS. 1-7, Applicant provides a disposable foam enhancing espresso drink lid to enhance the coffee and espresso drinking experience. Applicant’s disposable foam enhancing espresso drink lid includes a curved dome having a drinking hole with a top and bottom in a top surface and a curved face, wherein said curved dome is formed out of said lid, a lip depression at the bottom of said curved face, wherein said lip depression is formed out of said lid, an nose depression separated from said lip depression by a support structure, and a consumer’s nose extends into said nose depression and connects to said rim for sealingly engaging a cup having a circular edge with a bead thereon (not shown).

The upper circumference of the dome fits the curvature of the upper lip. The user can adapt to the surface of the lid with less pressure and lip manipulation. Compared to the existing lids, Applicant’s lid does not skim off foam while drinking. The dome helps to funnel foam to the drinking hole and provides the proper angled surface for the hole to be effective at all tilting angles. It is possible that with the dome, the female user can drink with less damage to lipstick coverage.

The purpose of the dome is to create a funnel effect to channel the foam to the drinking hole and to present a curved surface to match with the drinker’s upper lip. The dome is in effect a portion of the surface of a sphere. The top surface of the dome is flush to the top surface of the rim of the lid. The top curved edge of the dome has a large radius bend to the downward sloping face. The dome is the same size for all sizes of lidos.

The drinking hole preferably an inverted isosceles triangular rectangle, is designed to present a wide opening to the foam at the top which reduces the restriction to flow of the foam, with a narrow opening to the liquid at the bottom for the dense coffee fluid resulting in more restriction to fluid flow. Preferably, all corners are rounded. Preferably, the drinking hole is offset from the outer edge of the lid by ½". The result is the ability to ingest a satisfying higher ratio of foam to coffee. The bottom of the inverted triangle is raised off the outer edge of the lid. This allows the consumer to tilt the cup and not be forced to drink liquid coffee. Foam can be sucked through the drinking hole without liquid.

The nose depression in the lid has been placed to receive the average consumer’s nose and place the com-
sumer's nostrils O in optimum proximity to the smell slit 20. The nose depression 16 is separated from the lip depression 18 by the support bar 22. The support bar 22 provides rigid support for the lid 10. The smell slit 20 is positioned on the side of the support bar 22 right beneath the average consumer's nostril's O allowing the consumer to smell the coffee. Preferably, the smell slit 20 is \( \frac{1}{2}\times \frac{1}{2}\) of an inch centered on the sloping surface of the support bar 22. The coffee aroma can be sensed if the user gently squeezes the cup to expel air from the cup and inhales through the nose N just before drinking.

In operation in one embodiment, with lid 10 mounted on a cup C, user drinks and placement of nose depression 16 and smell slit 20 on support structure 22 places smell slit in optimum proximity to user's nostrils O so smell of coffee drink can be enhanced, user's upper lip L curves around dome curved surface 12a and seals to drink with lip depression 18 providing an area where lip L can be inserted. Drinking hole 14 allows user to drink liquid through bottom narrow width 14b leaving the top 14a broader width for the foam.

Those skilled in the art will recognize that numerous modifications and changes may be made to the preferred embodiment without departing from the scope of the claimed invention. It will, of course, be understood that modifications of the invention, in its various aspects, will be apparent to those skilled in the art, some being apparent only after study, others being matters of routine mechanical, chemical and electronic design. No single feature, function or property of the preferred embodiment is essential. Other embodiments are possible, their specific designs depending upon the particular application. As such, the scope of the invention should not be limited by the particular embodiments herein described but should be defined only by the appended claims and equivalents thereof.

I claim:

1. A disposable foam enhancing espresso drink lid, comprising:
   - a curved dome having a drinking hole with a top and bottom in a top surface and a curved face, wherein said curved dome is formed out of said lid;
   - a lip depression at the bottom of said curved face, wherein said lip depression is formed out of said lid;
   - a nose depression separated from said lip depression by a support structure, wherein said nose depression and said support structure are formed out of said lid;
   - a smell slit provided in said support structure; and
   - a rim encircling said curved dome, lip depression, nose depression, and support structure; and
   - wherein a drinker's lips curve around said dome curved face and into said lip depression, and a drinker's nose extends into said nose depression with nostrils in proximity to said smell slit.

2. The lid of claim 1, wherein said lid is formed from a contiguous plasticized material.

3. The lid of claims 1 or 2, an annular mounting portion beneath and connected to said rim for sealingly engaging the lid of the beverage container having a circular edge with a bead thereon.

4. A disposable foam enhancing espresso drink lid, comprising:
   - a curved dome having a drinking hole with a top and bottom in a top surface and a curved face, wherein said curved dome is formed out of said lid;
   - a lip depression at the bottom of said curved face, wherein said lip depression is formed out of said lid;
   - a nose depression separated from said lip depression by a support structure, wherein said nose depression and said support structure are formed out of said lid;
   - a smell slit provided in said support structure; and
   - a rim encircling said curved dome, lip depression, nose depression, and support structure; and
   - an annular mounting portion beneath and connected to said rim for sealingly engaging the lid of the beverage container having a circular edge with a bead thereon; and
   - wherein a consumer's lips curve around said dome curved face and into said lip depression, and a consumer's nose extends into said nose depression with nostrils in proximity to said smell slit; and
   - wherein said lid is formed from a contiguous plasticized material.

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