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LIQUID DISPENSING CUP FOR TODDLERS**Field of the Invention**

5 The present invention relates to improvements in liquid dispensing cups and, more particularly, to a cup and closure combination for use by a toddler during transition from a baby bottle with a nipple.

Background of the Invention

10 Liquid dispensing cups for use by toddlers are well known in the art. These cups, typically known as "sipper cups" in the baby care industry, are used for dispensing liquids, such as milk, juice or the like, to toddlers after or during transition by the toddler from a baby bottle with a nipple. Typically, known "sipper cups" include a generally cylindrical body of greater diameter than a baby bottle and, sometimes, at least one handle extending outwardly from the body of the cup. The external handle or handles of known "sipper cup" designs enable
15 handling of the cup by the small hands of a toddler. Moreover, known "sipper cups" for use by toddlers generally include a closure secured to

an upper portion of the cup to prevent spillage of liquid contained within the cup.

While presently available "sipper cup" designs are sized or provide external handles for grasping of the cup by the toddler, it will be appreciated that toddlers have a tendency to ignore the handles as they attempt to grasp the cylindrical body of the cup. Furthermore, the larger diameter of "sipper cups" compared to the smaller diameter of baby bottles makes handling of the cups awkward for the small hands of a toddler. Moreover, when the toddler does use the handles, the handles of known "sipper cup" designs move the toddler's hand away from the center of gravity of the cup, thus adding to handling difficulty in view of the toddler's reduced muscle development and motor skills.

While improvements have been made in the design of baby bottles to facilitate handling thereof, such as is disclosed in U.S. Patent No. 4,750,630 assigned to applicant herein, there exists a need for a "sipper cup" design which eases a toddler's transition from the baby bottle to an ordinary cup or glass.

Summary of the Invention

To these ends, the present invention is directed to a liquid dispensing cup for use by a toddler. The cup includes a central opening through the cup and a pair of tubular portions which are sized to be easily grasped by the toddler. The central opening through the cup, in connection with the tubular portions, provides a balanced feel to the



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cup when it is either partially or fully filled as the toddler's hands are positioned near the center of gravity of the cup. Thus, the liquid dispensing cup of the present invention overcomes many disadvantages currently associated with available "sipper cup" designs.

5 The liquid dispensing cup includes an integrally molded plastic cup having generally cylindrical upper and lower portions joined in fluid communication by a pair of tubular sections. The upper and lower portions and the pair of integral sections or handles define the central opening through the cup. The tubular sections, in connection
10 with the central opening, thus provide readily grippable handles on the cup for the toddler to grasp with one or both hands.

 A closure having an integrally molded spout in fluid communication with the interior of the cup is provided for sipping fluids contained within the cup. The closure is preferably a screw-type cap
15 which cooperates with a screw formation integrally molded in the upper portion of the cup to provide a fluid seal between the cup and the closure. In its preferred form, the closure is a "spill-proof" type closure to prevent spillage of liquids contained within the liquid dispensing cup.

Brief Description of the Drawings

20 These and other modifications and advantages will become even more readily apparent from the following detailed description of a preferred embodiment of the invention, and from the drawings in which:

Fig. 1 is a front elevational view of a liquid dispensing cup in accordance with the principles of the present invention with a portion thereof shown in cross-section for purposes of illustration; and,

Fig. 2 is a side view of Fig. 1 with a portion thereof shown in cross-section.

Detailed Description of the Invention

With reference to the drawings, and particularly Figs. 1 and 2, a liquid dispensing cup for use by a toddler is shown in accordance with the present invention. An integrally molded cup 10, preferably made of plastic, such as polyethylene or polycarbonate, and having generally cylindrical upper and lower portions 12 and 14, respectively, is provided to hold liquid for dispensing to the toddler as described in more detail below. As shown in the figures, the upper and lower portions 12 and 14 of the cup 10 are joined in fluid communication by a pair of integrally connected and longitudinally extending tubular sections or handles 16 and 18 disposed on either side of the longitudinal axis of the cup. In this way, liquid introduced into an opening defined by a peripheral lip 20 about upper portion 12 is free to travel through tubular portions 16 and 18 and fill the upper and lower portions 12 and 14 of the cup. In its preferred form, the cup 10 is designed to hold between about six and eight ounces of liquid while other forms of the cup may hold more or less liquid as desired.



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As shown most clearly in Fig. 1, the upper and lower portions 12 and 14, and the tubular portions 16 and 18, define a central opening 22 through the integrally molded cup 10. The central opening 22 is generally elongated, although this is not required, and is preferably located near the center of gravity of the cup to provide a balanced container when it is either partially or fully filled.

In accordance with the invention, the tubular portions 16 and 18 are sized to be easily grasped by a toddler during use of the liquid dispensing cup. Preferably, the tubular portions 16 and 18 have a smaller circumferential diameter near the midpoint of the central opening 22, shown generally as portions 24 and 26 in the figures, than the circumferential diameter of the tubular portions at their connections with the upper and lower portions 12 and 14. The tubular portions 16 and 18 of the liquid dispensing cup, in combination with the central opening 22, thus provide readily grippable handles near the center of gravity of the cup for the toddler to hold with one or both hands.

The liquid dispensing cup of the present invention further includes a closure 28 removably engageable with the upper portion 12. The closure 28 preferably includes an integrally molded spout 30 in fluid communication with the interior of the cup. In its preferred form, the cup includes a screw formation, shown generally at 32, integrally molded about the upper portion 12 of the cup at or below the peripheral lip 20. In this configuration, the closure 28 has a cooperating screw

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formation (not shown) integrally molded therein to provide a fluid seal between the cup 10 and the closure 28 when the closure is fully tightened about the upper portion 12. Those skilled in the art will appreciate that other structures are available for joining the cup 10 and closure 28 without departing from the scope and spirit of the present invention.

The closure 28 of the present invention is preferably a "spill-proof" type closure having the design details fully described in U. S. Patents 4,795,052 and 4,915,250, both of which patents are herewith fully incorporated herein by reference. It will be recognized that "spill-proof" closures of the type disclosed herein are particularly advantageous for use in combination with the cup 10 of the present invention as liquid contained within the cup is generally dispensed only upon a sucking action by the toddler user. When the liquid dispensing cup is in a horizontal position, such as if it were accidentally knocked on its side, or if the cup is violently shaken by the toddler, the spill-proof closure 28 will prevent liquid from exiting the cup through the spout 30.

In its preferred form, the closure 28 is non-vented, i.e., the closure includes one or more apertures through the spout 30 through which liquid is dispensed without having a second "venting" aperture through the closure. In this way, the elimination of a second "venting" aperture greatly improves the "spill-proof" capability of the closure. It

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will be appreciated that other types of closures, with or without spill-proof capability, are readily adaptable for use with the liquid dispensing cup of the present invention.

5 In view of the above description, it will be apparent that the present invention provides a novel liquid dispensing cup with integral handles for use by toddlers during the transition from a baby bottle with a nipple. Those skilled in the art will readily comprehend the various modifications to which the present invention is susceptible without departing from the spirit and scope of the present invention.

10 Therefore, applicant desires to be limited only by the scope of the following claims and equivalents thereof.

What is claimed is:

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1. A liquid dispensing cup for use by a toddler, comprising:
an integrally molded plastic cup having generally cylindrical
upper and lower portions, said upper and lower portions being joined in
fluid communication by a pair of integrally connected and longitudinally
5 extending tubular sections, said upper and lower portions and said pair
of tubular sections defining a central opening through said cup, said
tubular sections being sized to be easily grasped by a toddler during use
of said cup; and
a closure removably engageable with said upper portion
10 and having an integrally molded spout in fluid communication with the
interior of said cup for sipping fluid contained therein.

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2. The liquid dispensing cup of claim 1 wherein each of said tubular sections has a circumferential dimension of lesser extent proximate a midpoint of said central opening than at the connection of each of said tubular portions with said upper and lower portions.

3. The liquid dispensing cup of claim 1 wherein said closure is a screw-type cap and said upper portion includes a screw formation integrally molded therein for cooperation with said cap whereby a fluid seal is formed between said cup and said closure.

4. The liquid dispensing cup of claim 1 wherein said closure is a spill-proof type closure.

5. The liquid dispensing cup of claim 4 wherein said closure is non-vented.

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