

Title (en)
Drinking cup and cover with flow control elements

Title (de)
Trinkbecher und Deckel mit Strömungsregulierenden Elementen

Title (fr)
Gobelet et couvercle à éléments régulateurs de débit

Publication
EP 0838184 A1 19980429 (EN)

Application
EP 97308376 A 19971022

Priority
• US 2980796 P 19961031
• US 2977996 P 19961025
• US 79138097 A 19970130

Abstract (en)
A drinking cup (10) having a body portion (12) and a removably attached cover (14) including an offset drinking spout (28) and an offset vent aperture (32). The drinking spout (28) and the vent aperture (32) are each surrounded by wall members (34,38) which depend generally away from an interior surface of the cover (14). An air inlet flow control valve (40) is coupled to the wall member (34) surrounding the vent aperture (32) while a liquid outlet flow control valve (42) is coupled to the wall member (38) surrounding the spout (28). Each flow control valve (40,42) includes a domed elastomeric member (48,50) containing a slit (49,51) allowing for passage of a selected fluid therethrough. The domed portions (48,50) are each surrounded by a generally circular isolating channel (60,62), and outside of each isolating channel is a perimetral portion (52) for connecting the flow control valve (40,42) to the depending wall (34,38) portion of the cover (14). Fluids passing through the slits (49,51) achieve substantially only a one-way passage as the domed curvature substantially prevents any backflow. Vacuum must be applied on the convex side of the domed portion (48,50) for sufficient elastomeric displacement to allow a fluid to pass through the slit. In the absence of such a vacuum, the sides of the slit (49,51) are maintained in contiguous contact thereby preventing any transfer of liquid or air across the respective flow control valve (40,42). Coupling means are provided for coupling the flow control valves (40,42) together, and may include handle portions (44,46) integrally attached to the perimetral portion and including joining means (54,56) for joining the handle portions (44,46) together. <IMAGE>

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Citation (search report)
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