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(54) Title: SELF SEALING BAG IN BOX CAP ASSEMBLY

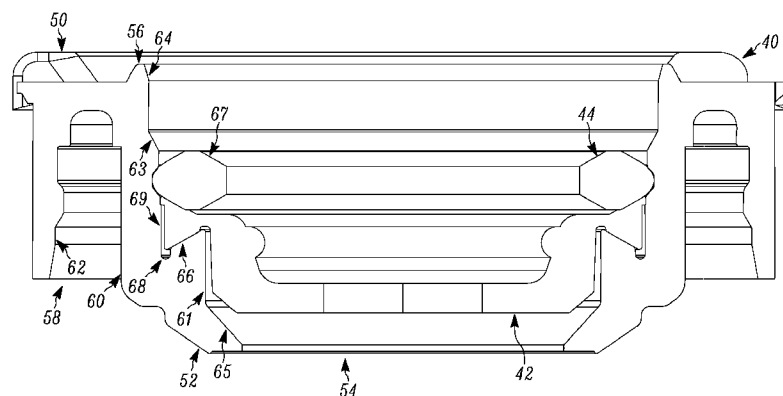


FIGURE 5

(57) **Abstract:** A cap assembly comprising a body, a sealing membrane and a retaining ring. The body includes a top surface, a bottom surface. A spout engagement channel is positioned on the bottom surface. An opening is provided through the body and includes a recessed circumferential channel and a membrane engaging flange positioned proximate the recessed circumferential channel. The sealing membrane covers the opening and includes a body engaging flange and a pierceable surface. The sealing membrane is positioned upon the membrane engaging flange so that the body engaging flange and the membrane engaging flange are in overlying engagement. The retaining ring includes a tab, a sealing membrane engagement surface and an inner wall structure opposite the sealing membrane engagement surface. The retaining ring is positioned with the sealing membrane engagement surface in overlying engagement with the sealing membrane. Extension of the tab into the recessed circumferential channel of the body releasably maintains said overlying engagement and biases the retaining ring against the membrane. The inner wall structure of the retaining ring extends radially inward beyond the membrane engaging flange of the sealing membrane, to in turn, protect the membrane.

A. CLASSIFICATION OF SUBJECT MATTER***B65D 33/38(2006.01)i, B65D 47/06(2006.01)i, B65D 47/08(2006.01)i, B65D 51/18(2006.01)i***

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

B65D 33/38; B65D 51/18; B65D 51/00; B65D 47/06; B67D 5/32; B65D 83/14

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: cap, spout, sealing membrane, retaining, hermetic, valve, valve opening, probe and similar terms

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2010-047814 A2 (SCHOLLE CORPORATION et al.) 29 April 2010	1-3, 5, 7-16
Y	See abstract, paragraphs [0029], [0033], claims 1-7 and figures 1-4.	4, 6
Y	US 2004-0129737 A1 (GREGOR JOHN, MCLENNAN ANDERSON et al.) 08 July 2004 See paragraph [0056] and figure 3.	4, 6
A	US 2010-0193516 A1 (LABEAN ROBERT J. et al.) 05 August 2010 See abstract, claims 1-20 and figures 1-10.	1-16
A	US 05934512A A (LAMPE; WILLIAM H. et al.) 10 August 1999 See abstract, column 4 lines 8-38 and figure 3.	1-16



Further documents are listed in the continuation of Box C.



See patent family annex.

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