

Title (en)

Passive dosing dispenser employing captive, internally-generated gas bubble to provide product isolation.

Title (de)

Passiver Dosierverteiler, bei dem eine intern erzeugte eingeschlossene Gasblase einen Produktabschluss bewirkt.

Title (fr)

Distributeur-doseur passif utilisant une bulle de gaz captive créée internement pour obtenir l'isolement du produit.

Publication

EP 0168075 A1 19860115 (EN)

Application

EP 85200853 A 19850529

Priority

US 61862284 A 19840608

Abstract (en)

The present invention is a passive dosing dispenser for containing a solution which is to be isolated from a body of liquid when the dispenser is at least partially immersed therein. The dispenser is adapted to have a dose of the solution issue from the dispenser in response to the level of the body of liquid being lowered from a first elevation to a second elevation, and to have liquid taken into the dispenser as the level of the body of liquid rises from the second elevation to the first elevation. The dispenser (10) has an internal reservoir (25) which contains the solution (21), and an inlet/discharge passageway (15) which, in use, provides fluid communication between the reservoir and the body of liquid (20). The inlet/discharge passageway has an intermediate, inverted, generally u-shaped section (22) in which a gas-lock (24) is formed to isolate the solution from the body of liquid. The dispenser contains a gas generating means for providing gas bubbles in the dispenser and passive means for directing at least a portion of the gas bubbles to the inverted, generally u-shaped section of the inlet/discharge passageway to establish a gas-lock thereacross.

IPC 1-7

E03D 9/03

IPC 8 full level

E03D 9/02 (2006.01); **E03D 9/03** (2006.01)

CPC (source: EP)

E03D 9/038 (2013.01); **E03D 2009/024** (2013.01)

Citation (search report)

- [AD] US 4208747 A 19800624 - DIRKSING ROBERT S [US]
- [AD] US 4171546 A 19791023 - DIRKSING ROBERT S [US]
- [AD] US 4216027 A 19800805 - WAGES DWIGHT E [US]

Cited by

EP0528073A1; US5774903A; EP0413373B1

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI NL

DOCDB simple family (publication)

EP 0168075 A1 19860115; CA 1287948 C 19910827; JP H0542531 B2 19930628; JP S6157726 A 19860324

DOCDB simple family (application)

EP 85200853 A 19850529; CA 483201 A 19850605; JP 12403285 A 19850607