

Title (en)  
DOSING PUMP

Publication  
**EP 0354484 B1 19920108 (DE)**

Application  
**EP 89114391 A 19890803**

Priority  
DE 3827489 A 19880812

Abstract (en)  
[origin: US4990066A] A self-aspirating and self-venting metering pump comprises a pump chamber with a diaphragm valve for delivery to a metering point. In order to achieve a precise adjustment of the metering volume the diaphragm valve and the venting means are coupled to each other such that the venting means is open during a pressure stroke and closed during the suction stroke.

IPC 1-7  
**F04B 21/00; F04B 43/00**

IPC 8 full level  
**F04B 13/00** (2006.01); **F04B 7/00** (2006.01); **F04B 43/00** (2006.01); **F04B 43/02** (2006.01); **F04B 43/04** (2006.01); **F04B 53/06** (2006.01)

CPC (source: EP US)  
**F04B 7/0053** (2013.01 - EP US); **F04B 43/04** (2013.01 - EP US); **F04B 53/06** (2013.01 - EP US)

Cited by  
DE4219664A1; DE4219663A1; WO9413956A1

Designated contracting state (EPC)  
AT BE CH DE FR GB IT LI NL

DOCDB simple family (publication)  
**US 4990066 A 19910205**; AT E71434 T1 19920115; DE 3827489 C1 19891012; DE 58900696 D1 19920220; EP 0354484 A1 19900214; EP 0354484 B1 19920108; JP H02140470 A 19900530

DOCDB simple family (application)  
**US 39352789 A 19890811**; AT 89114391 T 19890803; DE 3827489 A 19880812; DE 58900696 T 19890803; EP 89114391 A 19890803; JP 20801589 A 19890814