

Title (en)  
DEVICE FOR DELIVERING AND/OR SPRAYING FLOWABLE MEDIA, ESPECIALLY FLUIDS

Title (de)  
VORRICHTUNG ZUM FÖRDERN UND/ODER ABSPRITZEN VON FLIESSFÄHIGEN MEDIEN, INSBESONDERE VON FLUIDEN

Title (fr)  
DISPOSITIF POUR REFOULER ET/OU PULVERISER DES SUBSTANCES COULANTES, NOTAMMENT DES FLUIDES

Publication  
**EP 1203152 A1 20020508 (DE)**

Application  
**EP 00956307 A 20000726**

Priority  
• DE 19937988 A 19990811  
• EP 0007210 W 20000726

Abstract (en)  
[origin: DE19937988A1] The invention relates to a device for delivering and/or spraying flowable media, especially fluids, which works according to the energy accumulation principle and which is configured as an electromagnetically driven reciprocating piston pump comprising at least one armature device (100) serving as a drive element. The armature device (100) has at least two armature elements (102, 103) and magnetically corresponding yoke elements (26, 32) are assigned to said armature elements (102, 103).

IPC 1-7  
**F02M 51/04; F02M 63/06; F04B 17/04**

IPC 8 full level  
**B05B 9/04** (2006.01); **F02M 51/00** (2006.01); **F02M 51/04** (2006.01); **F02M 51/06** (2006.01); **F02M 51/08** (2006.01); **F02M 57/02** (2006.01); **F02M 61/08** (2006.01); **F04B 17/04** (2006.01); **F16K 31/06** (2006.01); **H01F 7/16** (2006.01); **H02K 33/02** (2006.01)

CPC (source: EP US)  
**B05B 9/0413** (2013.01 - EP US); **F02M 51/04** (2013.01 - EP US); **F02M 57/027** (2013.01 - EP US); **F02M 61/08** (2013.01 - EP US); **F04B 17/046** (2013.01 - EP US); **H02K 33/02** (2013.01 - EP US)

Citation (search report)  
See references of WO 0112976A1

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**DE 19937988 A1 20010215**; AU 6829700 A 20010313; EP 1203152 A1 20020508; JP 2003507619 A 20030225; US 7093778 B1 20060822; WO 0112976 A1 20010222

DOCDB simple family (application)  
**DE 19937988 A 19990811**; AU 6829700 A 20000726; EP 0007210 W 20000726; EP 00956307 A 20000726; JP 2001517043 A 20000726; US 4924302 A 20020816