

Title (en)  
Dosing pump

Title (de)  
Dosierpumpe

Title (fr)  
Pompe doseuse

Publication  
**EP 2194270 A3 20110921 (DE)**

Application  
**EP 09013985 A 20091107**

Priority  
DE 202008016674 U 20081205

Abstract (en)  
[origin: EP2194270A2] The pump (22) has a membrane (49) driven by an eccentric cam (36) of a crankshaft (30), which forms a wall of a pump chamber (52) and executes suction and pumping movements during operation. A connecting cable (40) is connected with a valve (26) controlled by a turning position of the crankshaft. The valve controls connection to a storage tank (68) for dosed liquid i.e. urea solution. Another connecting cable (60) is connected with another valve (28) controlling connection to a consumer (82). An electric engine is formed as a bi-directional electronically commutated engine. The electronically commutated engine is formed as an external rotor engine.

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

CPC (source: EP US)  
**F04B 7/00** (2013.01 - EP); **F04B 7/0053** (2013.01 - EP); **F04B 13/00** (2013.01 - EP US); **F04B 43/04** (2013.01 - EP US)

Citation (search report)  
• [A] DE 102004054238 A1 20060511 - BOSCH GMBH ROBERT [DE]  
• [A] WO 2006040086 A1 20060420 - ORANGE GMBH [DE], et al  
• [A] DE 102005060127 A1 20070621 - DAIMLER CHRYSLER AG [DE]  
• [A] DE 3827489 C1 19891012  
• [A] WO 02081918 A1 20021017 - KNF FLODOS AG [CH], et al  
• [A] EP 1413045 B1 20080723 - EBM PAPST ST GEORGEN GMBH & CO [DE]

Cited by  
US10584694B2; US9453507B2

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)  
AL BA RS

DOCDB simple family (publication)  
**DE 202009016915 U1 20100429**; EP 2194270 A2 20100609; EP 2194270 A3 20110921; EP 2194270 B1 20130612

DOCDB simple family (application)  
**DE 202009016915 U 20091204**; EP 09013985 A 20091107