

Title (en)

METERING SYSTEM AND METERING PUMP THEREFOR

Title (de)

DOSIERANLAGE SOWIE DOSIERPUMPE HIERFÜR

Title (fr)

INSTALLATION DE DOSAGE AINSI QUE POMPE DE DOSAGE ASSOCIÉE

Publication

EP 2877745 B1 20161012 (DE)

Application

EP 13742212 A 20130725

Priority

- DE 102012106848 A 20120727
- EP 2013065756 W 20130725

Abstract (en)

[origin: WO2014016388A1] The present invention relates to a metering system for metering a fluid metered medium, with a suction line that is filled with a metered medium at fluid pressure p_s , and a pressure line that is filled with the metered medium at fluid pressure p_d , wherein the suction line is connected to the pressure line via a metering member constructed as a metering pump, with which metered medium can be conveyed from the suction line into the pressure line, wherein the metering pump has a delivery chamber, the volume of which can be varied with the assistance of a movable displacement element in such a manner that the delivery chamber has a minimum volume V_{min} in a first position of the displacement element and a maximum volume V_{max} in a second position of the displacement element, wherein the delivery chamber is connected via a pressure valve to the pressure line and via a suction valve to the suction line, such that, by means of an oscillating movement of the displacement element, metered medium can alternately be drawn out of the suction line via the suction valve into the delivery chamber and metered medium can be discharged from the delivery chamber via the pressure valve into the pressure line. In order to provide a metering system and a metering pump adapted thereto which has a high efficiency, no leakage flow and is easy to construct, according to the invention the formula (I) is provided where $\kappa = 1.5$.

IPC 8 full level

F04B 13/00 (2006.01); **F04B 15/06** (2006.01); **F04B 53/06** (2006.01)

CPC (source: EP US)

F04B 13/00 (2013.01 - EP US); **F04B 15/02** (2013.01 - EP US); **F04B 53/06** (2013.01 - EP US)

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2014016388 A1 20140130; DE 102012106848 A1 20140130; DK 2877745 T3 20161212; EP 2877745 A1 20150603;
EP 2877745 B1 20161012; ES 2607838 T3 20170404; HR P20161489 T1 20161216; HU E030145 T2 20170428; JP 2015522761 A 20150806;
JP 6339072 B2 20180606; PL 2877745 T3 20170531; PT 2877745 T 20161230; RS 55478 B1 20170428; SI 2877745 T1 20161230;
US 2015159639 A1 20150611; US 9328722 B2 20160503

DOCDB simple family (application)

EP 2013065756 W 20130725; DE 102012106848 A 20120727; DK 13742212 T 20130725; EP 13742212 A 20130725; ES 13742212 T 20130725;
HR P20161489 T 20161111; HU E13742212 A 20130725; JP 2015523554 A 20130725; PL 13742212 T 20130725; PT 13742212 T 20130725;
RS P20160967 A 20130725; SI 201330391 A 20130725; US 201314412695 A 20130725