

Title (en)
ROTARY CYLINDER ROTARY SLIDE POSITIVE-DISPLACEMENT PUMP

Title (de)
DREHZYLINDERDREHSCHIEBERVERDRÄNGERPUMPE

Title (fr)
POMPE VOLUMÉTRIQUE À TIROIR ROTATIF ET CYLINDRE ROTATIF

Publication
EP 2179182 A1 20100428 (DE)

Application
EP 08773885 A 20080705

Priority
• EP 2008005512 W 20080705
• DE 102007034051 A 20070720

Abstract (en)
[origin: WO2009012877A1] The rotary cylinder rotary slide positive-displacement pump described here makes it possible for three of four chamber walls to co-rotate during the pumping process. Said three chamber walls thus move together with the pump fluid through the working chamber. The result of this and the design of the pump lead to a favourable energetic and volumetric efficiency. The reduced friction reduces the energy requirement for the pumping work. The inner walls, which are smooth and solid on all sides, of the working chambers allow the pump fluid to be conveyed in a gentle manner. This technology provides fewer wear surfaces for abrasive substances. The pumping volume per rotation is greater than the volume of the pump chamber. The pump is of compact design. It is self-priming and capable of dry running. It reaches high pressures which can be kept constant. In contrast to many conventional pump types, no drive shaft leads through the pump chamber. The sum of the properties of this pump technology and the favourable conditions for further technical embodiments make this product suitable as a process pump in industrial applications.

IPC 8 full level
F04C 2/332 (2006.01); **F01C 21/08** (2006.01); **F01C 21/10** (2006.01); **F04C 15/00** (2006.01)

CPC (source: EP)
F01C 21/0827 (2013.01); **F01C 21/104** (2013.01); **F04C 2/332** (2013.01); **F04C 15/0069** (2013.01); **F04C 2/348** (2013.01)

Citation (search report)
See references of WO 2009012877A1

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 MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
DE 102007034051 A1 20090122; DE 202008017328 U1 20090716; EP 2179182 A1 20100428; EP 2179182 B1 20130227; WO 2009012877 A1 20090129

DOCDB simple family (application)
DE 102007034051 A 20070720; DE 202008017328 U 20080705; EP 08773885 A 20080705; EP 2008005512 W 20080705