

Title (en)
Progressive cavity pump

Title (de)
Exzentrerschneckenpumpe

Title (fr)
Pompe à cavités progressives

Publication
EP 1559913 B1 20131106 (FR)

Application
EP 05290100 A 20050117

Priority
FR 0400927 A 20040130

Abstract (en)
[origin: EP1559913A1] The pump has cavities (4) formed between a helical rotor (2) and a helical stator (3). A hydraulic regulation system (7) is installed in the rotor for ensuring internal recirculation of fluid pumped between the cavities under conditions to ensure distribution of pressures along the pump, stabilization of the temperatures, control of leakage rate, and compensation of the volumes of compressed gas. An independent claim is also included for an application of progressing cavities pump for pumping of compressible multiphase mixture and pumping of viscous fluid.

IPC 8 full level
F04C 2/08 (2006.01); **F04C 2/107** (2006.01); **F04C 13/00** (2006.01)

CPC (source: EP US)
F04C 2/086 (2013.01 - EP US); **F04C 2/1073** (2013.01 - EP US); **F04C 2/1075** (2013.01 - EP US); **F04C 13/001** (2013.01 - EP US); **F04C 13/007** (2013.01 - EP US); **F04C 2/084** (2013.01 - EP US); **F04C 2210/24** (2013.01 - EP US)

Cited by
FR3010153A1; US8613608B2; US8496456B2; US8388327B2; US8556603B2; WO2009035337A1; DE102014012887A1; US9631619B2

Designated contracting state (EPC)
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DOCDB simple family (publication)
EP 1559913 A1 20050803; EP 1559913 B1 20131106; BR PI0500316 A 20050920; BR PI0500316 B1 20180306; CA 2494444 A1 20050730; CA 2494444 C 20120221; CN 1654823 A 20050817; CN 1654823 B 20110817; FR 2865781 A1 20050805; FR 2865781 B1 20060609; US 2005169779 A1 20050804; US 7413416 B2 20080819

DOCDB simple family (application)
EP 05290100 A 20050117; BR PI0500316 A 20050128; CA 2494444 A 20050119; CN 200510005053 A 20050131; FR 0400927 A 20040130; US 4425705 A 20050128