

Title (en)

TWO CYLINDER PUMP FOR VISCOUS MATERIALS, PARTICULARLY A CONCRETE PUMP WITH A CONNECTING ELEMENT PIVOTING IN FRONT OF A TWO ORIFICE PLATE BESIDE THE CYLINDERS

Publication

EP 0057288 B1 19840808 (DE)

Application

EP 81110733 A 19811223

Priority

DE 3103321 A 19810131

Abstract (en)

[origin: ES8302214A1] A two-cylinder pump for heavy flowable materials, such as concrete, comprising a shutter mechanism which is pivotable across an apertured face plate, the shutter mechanism being sealed against the face plate by means of a cutting ring which is axially movable relatively to the shutter mechanism and is supported thereon with its rear side engaging a rectangular-section flexible rubber ring, whereby the cutting ring is urged resiliently against the face plate, means for locating the cutting ring, along a portion of its length, on the shutter mechanism, a seating for the flexible ring on the cutting ring which includes an annular extension which partly overlaps the longer cross-sectional side of the flexible ring in the axial direction, a seating for the flexible ring on the shutter mechanism which includes an annular extension which partly overlaps the longer cross-sectional side of the flexible ring in the axial direction, said annular extensions partly overlapping the ring from opposite sides thereof so that a part of the surface of the ring is left free between the annular extensions, and stops on the cutting ring and the shutter mechanism which limit the extent to which the cutting ring is inserted in said means for locating the cutting ring on the shutter mechanism.

IPC 1-7

F04B 7/00; **F04B 15/02**

IPC 8 full level

F04B 7/00 (2006.01); **F04B 15/02** (2006.01)

CPC (source: EP KR US)

F04B 7/0092 (2013.01 - EP US); **F04B 15/02** (2013.01 - KR); **Y10S 417/90** (2013.01 - EP US)

Cited by

WO2010081695A1; DE102018132476A1; US5302094A; DE102009005318B3; CN102282370A; RU2477813C1; US7832269B2; WO2006089772A1; WO2020035591A1; WO9001117A1; WO2014206698A1; US9046086B2

Designated contracting state (EPC)

AT BE CH FR GB IT LI NL SE

DOCDB simple family (publication)

EP 0057288 A1 19820811; **EP 0057288 B1 19840808**; AR 226945 A1 19820831; AT E8923 T1 19840815; AU 553485 B2 19860717; AU 7970082 A 19820812; BR 8200501 A 19821207; CA 1180946 A 19850115; CS 231990 B2 19850116; CS 51082 A2 19840116; DD 201819 A5 19830810; DE 3103321 A1 19820812; DE 3103321 C2 19870507; DE 3153268 C2 19880128; ES 508758 A0 19830101; ES 8302214 A1 19830101; GR 76388 B 19840806; HU 183790 B 19840528; JP H0323754 B2 19910329; JP S57146068 A 19820909; KR 830009390 A 19831221; KR 880000931 B1 19880531; MX 156254 A 19880729; PL 138540 B1 19861031; PL 234875 A1 19820802; SU 1160942 A3 19850607; US 4465441 A 19840814; US RE32657 E 19880426; YU 310081 A 19850630; YU 43251 B 19890630; ZA 82428 B 19830126

DOCDB simple family (application)

EP 81110733 A 19811223; AR 28804682 A 19820106; AT 81110733 T 19811223; AU 7970082 A 19820121; BR 8200501 A 19820129; CA 394550 A 19820120; CS 51082 A 19820125; DD 23697382 A 19820126; DE 3103321 A 19810131; DE 3153268 A 19810131; ES 508758 A 19820115; GR 820167061 A 19820120; HU 19982 A 19820125; JP 1342282 A 19820201; KR 820000393 A 19820130; MX 19122182 A 19820201; PL 23487582 A 19820129; SU 3376000 A 19820120; US 34129882 A 19820121; US 89667986 A 19860814; YU 310081 A 19811228; ZA 82428 A 19820122