

Title (en)

Improved open circuit oleodynamic system to actuate and control a concrete piston pump

Title (de)

Hydrodynamisches System mit offenem Kreislauf für eine Kolbenbetonpumpe.

Title (fr)

Système à circuit ouvert de distribution oleodynamique pour une pompe à béton.

Publication

**EP 1847710 A1 20071024 (EN)**

Application

**EP 06425273 A 20060420**

Priority

EP 06425273 A 20060420

Abstract (en)

An actuating oleodynamic system for pumps pumping viscous material, and in particular concrete, of the open-circuit and high-pressure type supplied by one or more hydraulic pumps, with direct, automatic-sequence driving system for the actuation of the hydraulic cylinders which displace the pistons in the liners of said pump and of the cylinders of a deviation valve through which said liners are alternately put in communication with a loading hopper and with a supply pipe. The system comprises a hydraulic valve assembly to control the displacement direction of said pistons, consisting of two hydraulic distributors, each actuated by a 5-way electrovalve to invert said direction between a pumping function and an intake function. The hydraulic circuit driving the hydraulic cylinders of the pump is symmetrical with respect to a plane transversal to the centreline of the two cylinders arranged side by side, in correspondence of which the hydraulic supply assembly is also arranged, resulting in a simple and quick switching of the supply from "shaft side" to "piston side" and viceversa.

IPC 8 full level

**F04B 9/117** (2006.01); **F04B 7/02** (2006.01); **F04B 15/02** (2006.01)

CPC (source: EP)

**F04B 7/0233** (2013.01); **F04B 7/0241** (2013.01); **F04B 9/1172** (2013.01); **F04B 9/1178** (2013.01); **F04B 15/023** (2013.01)

Citation (search report)

- [AD] EP 0167635 A1 19860115 - LIBRA SA [SM]
- [A] US 3994627 A 19761130 - CALZOLARI SERGIO
- [A] GB 1192657 A 19700520 - JAEGER MACHINE CO [US]

Designated contracting state (EPC)

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Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

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