Title (en)

METHOD AND DEVICE FOR STARTING AN HYDRAULIC MEMBRANE PUMP AGAINST A LOAD

Publication

EP 0283026 B1 19930303 (DE)

Application

EP 88104287 A 19880317

Priority

DE 3708868 A 19870318

Abstract (en)

[origin: US4865528A] In a diaphragm pump, which is provided with at least one diaphragm (1), which separates a delivery chamber (4) from a pressure chamber (5) filled with an hydraulic fluid and is clmaped at its edge between the pump body (2) and a pump cover (3), and with an hydraulic diaphragm drive in the form of an oscillating displacement piston (6), which is displaceable in the pump body (2) between the pressure chamber (5) and a storage chamber (7) for the hydraulic fluid, a method as well as an arrangement for starting under load is provided. For this purpose on the pump drive side between the pressure chamber (5) and the storage chamber (7) a connection channel (20) is provided. This connection channel (20) during start-up of the pump leads the hydraulic fluid displaced by the displacement piston (6) in the pressure chamber (5) back into the storage chamber (7) and in the course of the further strokes of the displacement piston (6) is closable by a controlled closing device (A), so that the pressure in the pressure chamber (5) rises up to the level of the discharge pressure.

IPC 1-7

F04B 43/06

IPC 8 full level

F04B 49/00 (2006.01); F04B 43/06 (2006.01); F04B 43/067 (2006.01)

CPC (source: EP US)

F04B 43/067 (2013.01 - EP US)

Cited by

US5171129A; WO2019219122A1

Designated contracting state (EPC)

AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

**EP 0283026 A2 19880921; EP 0283026 A3 19890830; EP 0283026 B1 19930303**; AT E86363 T1 19930315; DE 3708868 A1 19881006; DE 3708868 C2 19900823; DE 3878706 D1 19930408; JP S63314384 A 19881222; US 4865528 A 19890912

DOCDB simple family (application)

**EP 88104287 Å 19880317**; ÅT 88104287 T 19880317; DE 3708868 A 19870318; DE 3878706 T 19880317; JP 6377188 A 19880318; US 17014988 A 19880318