

Title (en)

METHOD FOR ASCERTAINING LEAKS OF A DISPLACEMENT PUMP

Title (de)

VERFAHREN ZUR FESTSTELLUNG VON LECKAGEN EINER VERDRÄNGERPUMPE

Title (fr)

PROCÉDÉ POUR IDENTIFIER DES FUITES SUR UNE POMPE VOLUMÉTRIQUE

Publication

EP 4229298 A1 20230823 (DE)

Application

EP 21786377 A 20210929

Priority

- DE 102020127285 A 20201016
- EP 2021076788 W 20210929

Abstract (en)

[origin: WO2022078758A1] The invention relates to a method for ascertaining leaks of a pump (10) comprising at least one displacement element (12) which displaces the medium to be pumped into a pressure line (20). The method has the steps of: a) blocking the pressure line (20), b) operating the pump (10) with a known speed of the displacement element (12), c) measuring the pressure in the pressure line (20), d) repeating steps b) and c) at different speeds, and e) recording the relationship between the measured pressure and the speed. The method is characterized in that the speed of the displacement element (12) is gradually increased from a minimum speed to a maximum speed in a controlled manner according to a program, the maximum speed being calculated on the basis of a measured pressure increase.

IPC 8 full level

F04B 49/06 (2006.01); **F04C 15/00** (2006.01); **F04C 18/16** (2006.01)

CPC (source: EP US)

F04B 49/065 (2013.01 - EP US); **F04B 49/20** (2013.01 - US); **F04C 2/16** (2013.01 - US); **F04C 14/28** (2013.01 - US);
F04C 15/0046 (2013.01 - EP); **F04C 18/16** (2013.01 - EP); **F04C 2270/18** (2013.01 - US); **F04C 2270/80** (2013.01 - EP);
F04C 2270/90 (2013.01 - EP)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

DE 102020127285 B3 20220120; CN 116420022 A 20230711; EP 4229298 A1 20230823; JP 2023544434 A 20231023;
JP 7510004 B2 20240702; TW 202221230 A 20220601; TW I782753 B 20221101; US 2023374987 A1 20231123; WO 2022078758 A1 20220421

DOCDB simple family (application)

DE 102020127285 A 20201016; CN 202180070591 A 20210929; EP 2021076788 W 20210929; EP 21786377 A 20210929;
JP 2023521846 A 20210929; TW 110138350 A 20211015; US 202118031466 A 20210929