

Title (en)  
STATE DETECTION ON ECCENTRIC SCREW PUMPS

Title (de)  
ZUSTANDSERFASSUNG AN EXZENTERSCHNECKENPUMPEN

Title (fr)  
DÉTECTION D'ÉTAT SUR DES POMPES À VIS EXCENTRIQUE

Publication  
**EP 4143439 A1 20230308 (DE)**

Application  
**EP 21722421 A 20210427**

Priority  
• DE 102020111386 A 20200427  
• EP 2021060932 W 20210427

Abstract (en)  
[origin: WO2021219605A1] The invention relates to an eccentric screw pump having a stator (10) located in a pump housing; a rotor (20) located in the stator (20); a drive unit comprising a drive motor (40) and a drive shaft (30) which connects the drive motor to the rotor for transmitting a torque, wherein the rotor is guided in the stator so as to rotate about a rotating axle; and a state sensor (101) for detecting a state variable of the eccentric screw pump, wherein the state sensor is located on the rotor (20) or on the drive shaft (30) or is connected to the rotor or to the drive shaft by means of a signal line, and is spaced apart from the rotor or the drive shaft, for detecting a state variable on the rotor or on the drive shaft.

IPC 8 full level  
**F04C 2/107** (2006.01); **F04C 14/28** (2006.01)

CPC (source: EP US)  
**F04B 35/04** (2013.01 - US); **F04B 49/022** (2013.01 - US); **F04C 2/1071** (2013.01 - EP); **F04C 14/28** (2013.01 - EP US); **F04C 2240/803** (2013.01 - EP); **F04C 2240/81** (2013.01 - EP US); **F04C 2250/201** (2013.01 - EP); **F04C 2270/165** (2013.01 - EP); **F04C 2270/175** (2013.01 - EP); **F04C 2270/80** (2013.01 - EP)

Citation (search report)  
See references of WO 2021219605A1

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 102020111386 A1 20211028**; BR 112022020689 A2 20221129; CN 115443379 A 20221206; EP 4143439 A1 20230308; JP 2023523059 A 20230601; US 2023265846 A1 20230824; WO 2021219605 A1 20211104

DOCDB simple family (application)  
**DE 102020111386 A 20200427**; BR 112022020689 A 20210427; CN 202180030826 A 20210427; EP 2021060932 W 20210427; EP 21722421 A 20210427; JP 2022565658 A 20210427; US 202117921483 A 20210427