Title (en)
METHOD FOR IDENTIFYING LEAKS BY MEANS OF AN ACTUATOR

Title (de)
VERFAHREN ZUR LECKAGEERKENNUNG MITTELS EINES AKTUATORS

Title (fr)
PROCÉDÉ POUR LA RECONNAISSANCE D'UNE FUITE AU MOYEN D'UN ACTIONNEUR

Publication
EP 3652470 A1 20200520 (DE)

Application
EP 18755394 A 20180706

Priority
- DE 102017115484 A 20170711
- DE 2018100620 W 20180706

Abstract (en)
[origin: WO2019011375A1] The invention relates to a method for controlling an actuator (1), in which the actuator (1) has at least one drive unit (2) with an electric motor (3) and a control unit (4). The motor (3) has at least one stator (5) and one rotor (6) and rotation of the rotor (6) can be detected via a rotor position sensor (8), which is connected to the control unit (4). The actuator (1) has a displacement unit (9), drivable via the rotation of the rotor (6), for displacing a fluid. The displacement unit (9) has a certain geometric displacement volume per revolution of the rotor (6). The method comprises at least the following steps: a) generating a predetermined pressure at the displacement unit (9) by applying an electrical driving power to the motor (3); b) maintaining the predetermined pressure over a predetermined time interval; c) determining the rotation of the rotor (6) by the rotor position sensor (8) within the time interval and determining a leak volume flow.

IPC 8 full level
F16H 61/32 (2006.01); **F16D 25/10** (2006.01); **F16D 48/02** (2006.01); **F16H 61/00** (2006.01)

CPC (source: EP KR US)
F16D 29/005 (2013.01 - KR US); **F16D 48/066** (2013.01 - EP KR US); **F16H 61/0031** (2013.01 - EP KR US); **F16H 61/32** (2013.01 - EP KR US); F16D 29/005 (2013.01 - EP); F16D 2500/1026 (2013.01 - EP KR US); F16D 2500/3024 (2013.01 - EP KR US); F16D 2500/3067 (2013.01 - EP KR); F16D 2500/3166 (2013.01 - EP KR US); F16D 2500/5016 (2013.01 - EP KR US); F16D 2500/70217 (2013.01 - EP KR US); F16D 2500/70235 (2013.01 - EP KR US); F16D 2500/7041 (2013.01 - EP KR US)

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

DOCDB simple family (publication)
DE 102017115484 B3 20181122; CN 110869652 A 20200306; CN 110869652 B 20210806; DE 112018003533 A5 20200520; EP 3652470 A1 20200520; KR 102642342 B1 20240305; KR 20200023627 A 20200305; US 11111972 B2 20210907; US 2020158190 A1 20200521; WO 2019011375 A1 20190117

DOCDB simple family (application)
DE 102017115484 A 20170711; CN 201880042000 A 20180706; DE 112018003533 T 20180706; DE 2018100620 W 20180706; EP 18755394 A 20180706; KR 20207000392 A 20180706; US 201816630300 A 20180706