

Title (en)  
FAULT DIAGNOSTICS IN HYDRAULIC MACHINES

Title (de)  
FEHLERDIAGNOSE IN HYDRAULISCHEN MASCHINEN

Title (fr)  
DIAGNOSTIC DE DÉFAUTS DANS DES MACHINES HYDRAULIQUES

Publication  
**EP 4311940 A1 20240131 (EN)**

Application  
**EP 22187973 A 20220729**

Priority  
EP 22187973 A 20220729

Abstract (en)  
A method of determining a state of an electronically commutated hydraulic machine (10), the machine (10) having a machine shaft (12) that is connected to a set of piston assemblies (18), each piston assembly (18) comprising a respective electromechanical actuator (56). The method comprises performing a diagnostic routine while the machine shaft (12) is stationary. The diagnostic routine comprises: operating each of the actuators (56) of the set of piston assemblies (18); detecting, for each actuator (56), a signal indicative of a response of the actuator (56) as the actuator (56) is operated; and analysing each of the detected actuator response signals to determine the state of the machine (10).

IPC 8 full level  
**F04B 51/00** (2006.01); **F04B 1/053** (2020.01)

CPC (source: EP)  
**F04B 1/053** (2013.01); **F04B 51/00** (2013.01)

Citation (applicant)  
WO 2021044148 A1 20210311 - ARTEMIS INTELLIGENT POWER LTD [GB]

Citation (search report)  
• [XA] EP 2386027 A2 20111116 - ARTEMIS INTELLIGENT POWER LTD [GB]  
• [AD] WO 2021044148 A1 20210311 - ARTEMIS INTELLIGENT POWER LTD [GB]  
• [A] CN 109270863 A 20190125 - SHANGHAI XINLI POWER EQUIPMENT INST  
• [A] CN 215813074 U 20220211 - RENERGY ELECTRIC TIANJIN LTD

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)  
**EP 4311940 A1 20240131**

DOCDB simple family (application)  
**EP 22187973 A 20220729**