

Title (en)

Electrical device for controlling a valve with wear condition diagnosis

Title (de)

Elektrische Einrichtung für die Ansteuerung eines Ventils mit einer Verschleisszustandserkennung

Title (fr)

Dispositif électrique pour la commande d'une vanne avec diagnostic d'état d'usure

Publication

EP 1365159 B1 20070627 (DE)

Application

EP 03101417 A 20030520

Priority

DE 10222890 A 20020523

Abstract (en)

[origin: EP1365159A2] The device has an electronic unit (5) that receives the electrical drive signal (4) and a reaction signal (6) following a drive pulse and determines the time interval between the signals to determine the switching delay as a measure of the state of wear of a switching mechanism (2). The reaction signal is determined with a pressure sensor integrated into the multi-way valve and electrically connected to the electronic unit. Independent claims are also included for the following: (a) a pneumatic multi-way valve with an inventive electrical device (b) a pneumatic valve unit with several multi-way valves (c) and a method of driving a multi-way valve with an electrical drive signal.

IPC 8 full level

F15B 19/00 (2006.01); **F15B 13/04** (2006.01); **F16K 37/00** (2006.01)

CPC (source: EP)

F15B 13/0402 (2013.01); **F15B 19/005** (2013.01)

Cited by

CN103063420A; CN101749296A; CN102099608A; CN106931001A; CN108026948A; US2019049032A1; US10767779B2; US8271141B2; WO2017045701A1; WO2009151955A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1365159 A2 20031126; **EP 1365159 A3 20050525**; **EP 1365159 B1 20070627**; AT E365872 T1 20070715; DE 10222890 A1 20031211; DE 10222890 B4 20040617; DE 50307545 D1 20070809

DOCDB simple family (application)

EP 03101417 A 20030520; AT 03101417 T 20030520; DE 10222890 A 20020523; DE 50307545 T 20030520