

Title (en)

Method and device for diagnosing an actuator and actuator comprising such a device

Title (de)

Diagnoseverfahren und -vorrichtung eines Aktuators, und mit einer solchen Vorrichtung ausgestattetes Aktuator

Title (fr)

Procédé et dispositif de diagnostic d'un actionneur, et actionneur comportant un tel dispositif

Publication

**EP 2503575 A1 20120926 (FR)**

Application

**EP 12354013 A 20120305**

Priority

FR 1100863 A 20110322

Abstract (en)

The method involves controlling a power supply of actuator (2) by a diagnostic device (3) and a power supply of the coil by a control device. An electric characteristic of an electric signal supplying the actuator is monitored at level of the diagnostic device. Diagnostic of the actuator is deduced using the result of the monitoring step. Temporal analysis of variations of the electric characteristic of the signal is performed. Control units (32, 36) of power supply of the actuator are activated. A control unit of power supply of the coil is activated. Independent claims are also included for the following: (1) a diagnostic device of the power supply of a coil of an actuator (2) a computer program comprising computer program code unit to perform a method for diagnosing an actuator when the program is executed on a computer.

Abstract (fr)

Le procédé de diagnostic d'un actionneur (2 ; 2') comprenant une bobine (211, 212) et un dispositif (22 ; 22') de commande d'alimentation de la bobine, comprenant les étapes suivantes : - Commande d'une alimentation de l'actionneur grâce à un dispositif (3) de diagnostic, - Commande d'une alimentation de la bobine grâce au dispositif de commande, - Surveillance, au niveau du dispositif de diagnostic, d'une caractéristique électrique d'un signal électrique, notamment du signal électrique alimentant l'actionneur, et - Déduction d'un diagnostic de l'actionneur en utilisant un résultat de l'étape de surveillance. Le dispositif et l'actionneur mettent en oeuvre le procédé.

IPC 8 full level

**H01H 11/00** (2006.01)

CPC (source: EP US)

**H01H 11/0062** (2013.01 - EP US); **H01H 47/002** (2013.01 - EP US); **H01H 47/06** (2013.01 - EP US); **H01H 2300/052** (2013.01 - EP US)

Citation (applicant)

- DE 3920693 A1 19910110 - BOSCH GMBH ROBERT [DE]
- US 2009139505 A1 20090604 - NAITO TATSUYA [JP], et al
- JP 2009174599 A 20090806 - RINNAI KK

Citation (search report)

- [X] FR 2731838 A1 19960920 - SCHNEIDER ELECTRIC SA [FR]
- [X] DE 19636975 A1 19980319 - TURCK WERNER KG [DE]
- [X] US 2010060469 A1 20100311 - HETZMANNSEDER ENGELBERT [US], et al
- [X] WO 9824106 A1 19980604 - MOTOROLA INC [US]
- [X] EP 0944100 A1 19990922 - TOYODA AUTOMATIC LOOM WORKS [JP]
- [A] EP 2028676 A2 20090225 - ROCKWELL AUTOMATION TECH INC [US]

Cited by

FR3026847A1; EP3029477A1; BE1026349B1; US11495425B2; WO2019234211A1

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)

**EP 2503575 A1 20120926; EP 2503575 B1 20191023**; CN 102692582 A 20120926; CN 102692582 B 20170524; ES 2756775 T3 20200427; FR 2973155 A1 20120928; FR 2973155 B1 20170210; RU 2012110819 A 20130927; RU 2594648 C2 20160820; US 2012242358 A1 20120927; US 9196434 B2 20151124

DOCDB simple family (application)

**EP 12354013 A 20120305**; CN 201210077548 A 20120322; ES 12354013 T 20120305; FR 1100863 A 20110322; RU 2012110819 A 20120321; US 201213414322 A 20120307