

Title (en)

DEVICE AND METHOD FOR CONTROLLING THE ELECTRICAL CURRENT OF AN ACTUATOR

Title (de)

EINRICHTUNG UND VERFAHREN ZUR STEUERUNG DES ELEKTRISCHEN STROMS EINES AKTUATORS

Title (fr)

DISPOSITIF ET PROCEDE PERMETTANT DE COMMANDER LE COURANT ELECTRIQUE D'UN ACTIONNEUR

Publication

EP 1664963 A1 20060607 (EN)

Application

EP 04750498 A 20040423

Priority

- US 2004012463 W 20040423
- US 43202903 A 20030923

Abstract (en)

[origin: WO2005036296A1] Systems and methods for providing a current control loop for an actuator. A typical system includes a current command controller (305) setting a command current, the current command controller being coupled to a drive circuit (125) used to drive the actuator and a sampling module (230) sampling a motor current of the actuator. The system also includes a summation module (310) calculating a current error based on the motor current, the current error being calculated by subtracting the motor current from the command current. The current error is used to compensate for an error in the motor current of the actuator. The sampling module can include a switch (252) and a capacitor (256) coupled in parallel with the resistor (254) when the switch is on, a charge on the capacitor being proportional to the voltage drop across the resistor. Methods for setting a maximum control current and for providing the current control loop are also illustrated.

IPC 1-7

G05F 1/565; **H02M 3/158**

IPC 8 full level

H02M 3/158 (2006.01); **H02M 7/5387** (2007.01); **G05F 1/565** (2006.01)

CPC (source: EP)

H02M 7/53873 (2013.01); **G05F 1/565** (2013.01); **H02M 1/0009** (2021.05); **H02M 3/1555** (2021.05)

Citation (search report)

See references of WO 2005036296A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

WO 2005036296 A1 20050421; CN 100592236 C 20100224; CN 1813227 A 20060802; EP 1664963 A1 20060607

DOCDB simple family (application)

US 2004012463 W 20040423; CN 200480017707 A 20040423; EP 04750498 A 20040423