

Title (en)
Actuator driving apparatus and method

Title (de)
Gerät und Verfahren zur Steuerung einer Stellvorrichtung

Title (fr)
Appareil et méthode de commande pour actionneur

Publication
EP 1441372 A3 20071024 (EN)

Application
EP 03029925 A 20031229

Priority
JP 2003017913 A 20030127

Abstract (en)
[origin: EP1441372A2] An actuator driving apparatus (10) comprising at least one processing circuit (12) including: a first switching device (32) placed between an exciting coil (14) of an actuator and a dc power source (16,18) and operated by a pulse-width modulated signal (S4) generated so as to correspond to an overexciting period (T2) and a holding period (T3) subsequent to the overexciting period (T2) in a drive period (T1); a reflux circuit (36) connected in parallel to the exciting coil (14) and including a fly-wheel diode (44) and a second switching device (42) connected in series to the fly-wheel diode (44); and a disconnection signal generator (38) sending a disconnection signal (S5) to the second switching device (42) for a predetermined period after the termination of the drive period (T1). The fly-wheel diode (44) is provided so that a current generated from one end of the exciting coil (14) toward the other end when turning off the first switching device (32) can be recirculated. The second switching device (42) is turned off by the disconnection signal (S5) to be generated with the termination of the drive period (T1) to interrupt the flow of current to the exciting coil (14).

IPC 8 full level
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CPC (source: EP KR)
H01F 7/06 (2013.01 - KR); **H01F 7/1811** (2013.01 - EP); **H01F 7/1844** (2013.01 - EP)

Citation (search report)

- [X] US 5915347 A 19990629 - YANAI AKIHIRO [JP], et al
- [X] JP 2001132866 A 20010518 - TOKIMEC INC
- [X] US 5557494 A 19960917 - ISHIKAWA MINORU [JP], et al
- [A] EP 0363938 A1 19900418 - ROY ELECTROTEX SPA [IT]

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