

Title (en)

A method for controlling the landing velocity of an armature of an electromagnetic actuator by controlling the current with a look-up table

Title (de)

Verfahren zur Regelung der Ankerauftreffgeschwindigkeit an einem elektromagnetischen Aktuator durch eine kennfeldgestützte Regelung der Bestromung

Title (fr)

Procédé de régulation pour la vitesse d'arrivée de l'armature d'un actionneur électromagnétique par réglage du courant avec un tableau de consultation

Publication

EP 1050891 A3 20011128 (DE)

Application

EP 00107446 A 20000406

Priority

DE 19920181 A 19990503

Abstract (en)

[origin: EP1050891A2] To control the current flowing in at least one electromagnet, to regulate a low impact speed of an armature on a pole face, method involves detecting the armature path (s) and the time curve of the armature velocity (v). These values are compared with performance characteristics stored in the controller for the relationship between speed and path to determine reference values f controlling the current in the electromagnet. The actual current value is compared with the reference current value and the difference is used to control the current is supplied to the electromagnet.

IPC 1-7

H01F 7/18; **F01L 9/04**

IPC 8 full level

F01L 9/20 (2021.01); **F02D 13/02** (2006.01); **F16K 31/06** (2006.01); **H01F 7/16** (2006.01); **H01F 7/18** (2006.01)

CPC (source: EP US)

F01L 9/20 (2021.01 - EP US); **H01F 7/1844** (2013.01 - EP US); **H01F 2007/1855** (2013.01 - EP US); **H01F 2007/1894** (2013.01 - EP US)

Citation (search report)

- [A] DE 19544207 A1 19970605 - UNIV DRESDEN TECH [DE]
- [A] DE 29703587 U1 19980625 - FEV MOTORENTECH GMBH & CO KG [DE]

Cited by

EP1227225A1; EP1335123A3; WO2013107544A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

EP 1050891 A2 20001108; **EP 1050891 A3 20011128**; **EP 1050891 B1 20040630**; AT E270461 T1 20040715; DE 19920181 A1 20001109; DE 50006927 D1 20040805; JP 2001023818 A 20010126; US 6373678 B1 20020416

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