

Title (en)

Electromagnetic contactor with energy balanced closing system

Title (de)

Elektromagnetisches Schütz mit energetisch ausbalancierter Schliessfunktion

Title (fr)

Contacteur électromagnétique à système de fermeture équilibré en énergie

Publication

EP 0279592 B1 19971112 (EN)

Application

EP 88301162 A 19880212

Priority

US 1642587 A 19870219

Abstract (en)

[origin: EP0279592A2] An electromagnetic contactor or motor controller (10) in which an energy efficient bounceless contact closing operation is utilized. The energy supplied to the armature (40) of the electromagnetic closing coil (31) is such that the armature attains a predetermined velocity during its closing operation which predetermined velocity is approximately sufficient to allow the armature to move to its final fixed closed disposition where the air gap (58) between it and a permanent magnet (86) is reduced to zero at a velocity of approximately zero. One field of use is in the motor starters. An advantage lies in the fact that the present system reduces the required contact closing energy to a minimal amount.

IPC 1-7

H01H 50/30

IPC 8 full level

H01H 50/00 (2006.01); **H01H 47/00** (2006.01); **H01H 50/18** (2006.01); **H01H 50/30** (2006.01)

CPC (source: EP)

H01H 50/18 (2013.01); **H01H 50/305** (2013.01); **H01F 2007/1894** (2013.01)

Cited by

CN106935438A; CN112071682A; EP0505194A1; EP0694944A1; EP2521154A1; CN102768909A; US9928982B2; US9711309B2; US8976502B2; WO2013137971A1; WO2015123539A1

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EP 0279592 A2 19880824; **EP 0279592 A3 19891011**; **EP 0279592 B1 19971112**; AU 1128688 A 19880825; AU 608282 B2 19910328; BR 8800662 A 19881004; CA 1292761 C 19911203; DE 3856066 D1 19971218; DE 3856066 T2 19980507; JP 2665925 B2 19971022; JP S63289737 A 19881128; MX 167495 B 19930325

DOCDB simple family (application)

EP 88301162 A 19880212; AU 1128688 A 19880204; BR 8800662 A 19880218; CA 558315 A 19880205; DE 3856066 T 19880212; JP 3736488 A 19880219; MX 1046488 A 19880218