

Title (en)
Bistable magnetic locking device

Title (de)
Bistabile Magnetverriegelung

Title (fr)
Dispositif de verrouillage magnétique bistable

Publication
EP 0877133 A2 19981111 (DE)

Application
EP 98250152 A 19980505

Priority
DE 29708796 U 19970507

Abstract (en)
The device has a movable magnet armature (5). At the head this forms part of a mechanical lock. The armature (5) is surrounded by at least one electrically excitable magnetic coil (2,3) which causes the displacement of the armature (5) and moves it to an extended end position i.e. the locking position, and a retracted end position i.e. the release position. Spring biased stops (8) are brought radially into engagement with the armature (5). The stops (8) mechanically hold the armature (5) in the respective end position. Spaced apart recesses may be provided in the outer circumference of the armature (5), in which the stops (8) engage. The axial distance from the recesses and the outer cladding of the armature corresponds to the position of the armature in the end position.

Abstract (de)
Die Erfindung betrifft eine bistabile Magnetverriegelung, bestehend aus einem verschiebbaren Magnetanker (5), der kopfseitig einen Teil einer mechanischen Verriegelung bildet und der von wenigstens einer elektrisch erregbaren Magnetspule (2,3) umgeben ist, die die Verschiebung bewirkt, und zwar in eine ausgefahrene Endposition (Verriegelungsposition) und in eine zurückgezogene Endposition (Freigabeposition). Dabei sind mit dem Magnetanker (5) federbelastete Arretierungen (8) radial in Eingriff bringbar, die den Magnetanker mechanisch in der jeweiligen Endposition halten. <IMAGE>

IPC 1-7
E05B 47/06; H01F 7/124; H01F 7/16

IPC 8 full level
E05B 47/00 (2006.01); **E05B 47/06** (2006.01); **H01F 7/124** (2006.01); **E05B 15/00** (2006.01)

CPC (source: EP)
E05B 47/00 (2013.01); **E05B 47/0623** (2013.01); **E05B 47/063** (2013.01); **H01F 7/124** (2013.01); **E05B 15/006** (2013.01); **E05B 47/0004** (2013.01); **E05B 2047/0007** (2013.01)

Cited by
US2019221348A1; DE102014216274A1; EP3726099A1; CN111828627A; US11402019B2; WO2010010037A1; WO2018046901A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
DE 29708796 U1 19970717; EP 0877133 A2 19981111; EP 0877133 A3 19990901

DOCDB simple family (application)
DE 29708796 U 19970507; EP 98250152 A 19980505