

Title (en)  
Bistable electromagnetic system for relay

Title (de)  
Bistabiles Elektromagnetsystem für ein Relais

Title (fr)  
Système électromagnétique bistable pour relais

Publication  
**EP 0836212 B1 20040324 (DE)**

Application  
**EP 97114392 A 19970820**

Priority  
DE 19641407 A 19961008

Abstract (en)  
[origin: US5864271A] A magnet system has a U-shaped core yoke whose yoke leg and core leg form a magnetic flux circuit together with an armature. A constriction section with reduced cross-section is provided at a location of the magnetic flux circuit, preferably at the core leg; a ferromagnetic bridge element with a flat permanent magnet is coupled to the magnetic flux circuit parallel thereto. Since the constriction section enters into saturation when the armature is attracted, the armature is held fast opposite a restoring spring. As a result of the inventive arrangement, a geometry for a magnetic circuit arrangement that is fast and inexpensive to manufacture is provided.

IPC 1-7  
**H01H 51/22**

IPC 8 full level  
**H01H 50/36** (2006.01); **H01H 51/22** (2006.01)

CPC (source: EP US)  
**H01H 51/22** (2013.01 - EP US)

Cited by  
CN102074418A; DE102005046238A1; EP2328165B1; EP2328165A1

Designated contracting state (EPC)  
AT CH DE ES FR GB IT LI

DOCDB simple family (publication)  
**US 5864271 A 19990126**; AT E262731 T1 20040415; DE 19641407 C1 19980115; DE 59711443 D1 20040429; EP 0836212 A2 19980415; EP 0836212 A3 20001108; EP 0836212 B1 20040324; ES 2216087 T3 20041016; JP 3949239 B2 20070725; JP H10125200 A 19980515

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**US 94736397 A 19971008**; AT 97114392 T 19970820; DE 19641407 A 19961008; DE 59711443 T 19970820; EP 97114392 A 19970820; ES 97114392 T 19970820; JP 27609297 A 19971008