

Title (en)  
Bistable-polarised electromagnet.

Title (de)  
Bistabiler polarisierter Elektromagnet.

Title (fr)  
Electro-aimant polarisé bi-stable.

Publication  
**EP 0272164 A2 19880622 (FR)**

Application  
**EP 87402356 A 19871021**

Priority  
FR 8616071 A 19861119

Abstract (en)  
[origin: US4782315A] A bistable polarized electromagnet is provided having a mobile armature with a permanent magnet and pole pieces which cooperate with a fixed yoke through two pairs of air gaps for each of which one is variable whereas the other is substantially constant. This electromagnet may further have asymmetric or symmetric forms of revolution for easy replacement of the excitation coil.

Abstract (fr)  
Electro-aimant polarisé bi-stable comprenant une armature mobile (2) comportant un aimant permanent (3) et des pièces polaires (7) respectivement (6), qui coopèrent avec une culasse fixe (13, 25) grâce à deux paires d'entrefer (8) respectivement (22), pour chacune desquelles l'une est variable, tandis que l'autre est sensiblement constant. Cet electro-aimant qui peut prendre des formes asymétriques ou symétriques de révolution permet notamment d'effectuer des remplacements aisés de la bobine d'excitation (14).

IPC 1-7  
**H01F 7/16; H01H 51/22**

IPC 8 full level  
**H01F 7/16** (2006.01); **H01F 7/08** (2006.01); **H01H 51/22** (2006.01); **H01F 7/122** (2006.01)

CPC (source: EP US)  
**H01F 7/1646** (2013.01 - EP US); **H01H 51/2209** (2013.01 - EP US); **H01F 2007/1669** (2013.01 - EP US); **H01H 2051/2218** (2013.01 - EP US)

Cited by  
GB2221798A; US4978935A

Designated contracting state (EPC)  
AT DE SE

DOCDB simple family (publication)

**US 4782315 A 19881101**; AT E85147 T1 19930215; CH 675500 A5 19900928; DE 3783887 D1 19930311; DE 3783887 T2 19930527;  
EP 0272164 A2 19880622; EP 0272164 A3 19880727; EP 0272164 B1 19930127; FR 2606927 A1 19880520; FR 2606927 B1 19910913;  
GB 2197754 A 19880525; GB 2197754 B 19910703; GB 8725418 D0 19871202; IT 1222989 B 19900912; IT 8722411 A0 19871026;  
JP H0797531 B2 19951018; JP S63141305 A 19880613

DOCDB simple family (application)

**US 12171987 A 19871117**; AT 87402356 T 19871021; CH 434387 A 19871106; DE 3783887 T 19871021; EP 87402356 A 19871021;  
FR 8616071 A 19861119; GB 8725418 A 19871029; IT 2241187 A 19871026; JP 29308687 A 19871119