

Title (en)  
POLARIZED ELECTROMAGNETIC RELAY.

Title (de)  
POLARISIERTES ELEKTROMAGNETISCHES RELAIS.

Title (fr)  
RELAIS ELECTROMAGNETIQUE POLARISE.

Publication  
**EP 0078324 A4 19851028 (DE)**

Application  
**EP 82901306 A 19820430**

Priority  
• JP 6560181 A 19810430  
• JP 6560281 A 19810430

Abstract (en)  
[origin: WO8203944A1] A polarized electromagnetic relay is composed of a yoke section having air gaps at four diagonal positions and an H-shaped armature block (7) having four armature portions which are positioned in the air gaps of the yoke section, respectively, and are arranged to enable a parallel movement. The yoke section is composed of two yoke units, each of which is composed of a first pole piece (1) approximately U-shaped, a permanent magnet (6) having the one pole positioned over the center of the lower surface of the first pole piece, and a second pole piece (5) which contacts the other pole of the permanent magnet (6) and forms air gaps between both ends thereof and both free ends of the first pole piece (1), respectively. In the polarized electromagnetic relay of the invention, the armature block is a lightweight moving element because it contains no permanent magnet and the magnetic flux path in the electromagnetic coil includes no permanent magnet with resultant high magnetic efficiency, so that the operational speed is high, the sensitivity is good and the mechanism operates with less impact.

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

IPC 8 full level  
**H01F 7/16** (2006.01); **H01H 51/22** (2006.01); **H01H 51/26** (2006.01); **H01F 7/122** (2006.01)

CPC (source: EP US)  
**H01F 7/1615** (2013.01 - EP US); **H01F 7/1646** (2013.01 - EP US); **H01H 51/2209** (2013.01 - EP US); **H01F 7/122** (2013.01 - EP US)

Citation (search report)  
• [Y] FR 1332740 A 19630719 - RECH ETUDES PROD  
• [Y] FR 1417292 A 19651112  
• [A] US 3087031 A 19630423 - SPINELLI FRANK P, et al  
• [A] US 3377519 A 19680409 - STONG KARL K  
• [A] DE 1037593 B 19580828 - SIEMENS AG  
• [A] FR 1603300 A 19710329  
• [AD] FR 2358006 A1 19780203 - MANUF FSE APP ELECTR [FR]

Cited by  
FR2875637A1; CN105531790A; US5959519A; EP0370452A3; EP0248272A3; US5877569A; EP0568028A1; EP0172080A1; FR2568056A1; US4609899A; EP0146421A1; FR2554960A1; US5949315A; DE3908319A1; EP0373271A1; EP0216160A3; WO9618203A1; WO2006032649A1; WO9733293A1; WO9633547A1

Designated contracting state (EPC)  
FR

DOCDB simple family (publication)  
**EP 0078324 A1 19830511; EP 0078324 A4 19851028; EP 0078324 B1 19870812**; AT 384497 B 19871125; AT A902482 A 19870415; CH 662671 A5 19871015; DE 3243266 C2 19860626; DE 3243266 T1 19830505; GB 2112212 A 19830713; GB 2112212 B 19851002; US 4509026 A 19850402; WO 8203944 A1 19821111

DOCDB simple family (application)  
**EP 82901306 A 19820430**; AT 902482 A 19820430; CH 765282 A 19820430; DE 3243266 T 19820430; GB 8237054 A 19820430; JP 8200147 W 19820430; US 45987382 A 19821229