

Title (en)
ELECTROMAGNETIC RELAY WITH INDIFFERENT WORKING POSITION

Publication
EP 0061382 B1 19850904 (FR)

Application
EP 82400419 A 19820309

Priority
FR 8105659 A 19810320

Abstract (en)
[origin: EP0061382A1] 1. An electromagnetic relay comprising a relay housing (100) constituted by a relay basis (102) and a relay cap (101), in which is placed at least one switch (1) supplied with two electrical contacts (24, 25) each disposed on a respective support (4, 5), and a movable reed (6) connected to a third contact (7), each switch (1) being disposed in a switch housing constituted by a switch basis (2) and a switch cap (3) made of non-magnetic material, said reed (6) being able to pivot from the first to the second contact or vice-versa under the action of an outside magnetic field created by a permanent magnet and a control coil (15) placed above the switch cap (3), each switch housing being associated to a magnet (4), said coil (15) being supplied with a magnetic circuit having a first portion (16) passing through the coil, characterized in that said magnetic circuit comprises a second portion of U-shape with three branches, a first branch (107) connected to one end of the first portion (16), a second branch prolonging the first branch (107) and a third branch (109) prolonging the second branch (108) and being fixed below said switch basis (2), the latter being of a material which conducts the magnetic field for ensuring the closing of the outer magnetic field, said second U-shaped portion making on the one hand integral each switch housing (19), the permanent magnet (14) associated to it and the coil (15), and ensuring on the other hand the closing of the outer magnetic field so as to reduce the control power of the switch (1), the second U-shaped portion of the magnetic circuit bearing by its second branch (108) on the relay basis (102), whereas the first branch (107) comes into contact with a rim (111) made by the basis of the relay (102) in the vicinity of an output contact (104) passing through said relay basis (102).

IPC 1-7
H01H 51/28

IPC 8 full level
H01H 51/28 (2006.01)

CPC (source: EP)
H01H 51/284 (2013.01)

Cited by
US4644308A

Designated contracting state (EPC)
BE DE GB

DOCDB simple family (publication)
EP 0061382 A1 19820929; EP 0061382 B1 19850904; DE 3265953 D1 19851010; FR 2502392 A1 19820924; FR 2502392 B1 19840323

DOCDB simple family (application)
EP 82400419 A 19820309; DE 3265953 T 19820309; FR 8105659 A 19810320