

Title (en)

REVERSE BATTERY PROTECTING DEVICE FOR THE ON-BOARD ELECTRIC NETWORK OF A VEHICLE

Title (de)

SCHUTZVORRICHTUNG GEGEN FALSCHPOLUNG IM ELEKTRISCHEN BORDNETZ EINES FAHRZEUGES

Title (fr)

DISPOSITIF PROTECTEUR CONTRE DES ERREURS DE POLARISATION DANS LE RESEAU ELECTRIQUE DE BORD D'UN VEHICULE

Publication

EP 0954894 A1 19991110 (DE)

Application

EP 98906883 A 19980122

Priority

- DE 19702116 A 19970122
- EP 9800337 W 19980122

Abstract (en)

[origin: DE19702116A1] A protecting device has a disconnecting contact (13) connected to the load current line (2) and actuated by an electromagnetic system (9). A shunt circuit leads from the side of the disconnecting contact (13) opposite to the battery to an earth line (3), via a diode polarised in the blocking direction. The earth line (3) crosses or extends through the ferromagnetic circuit of the electromagnetic system (9). When the battery terminals are connected to reverse poles, a high short-circuit current flows through the diode (23) and induces an excitation in the ferromagnetic circuit (11, 12) of the magnetic system (9), lifting the armature (12) and opening the disconnecting contact (13).

IPC 1-7

H02H 11/00; H01H 83/08

IPC 8 full level

H01H 83/08 (2006.01); **H01H 83/20** (2006.01); **H02H 11/00** (2006.01); **H01H 35/14** (2006.01); **H01H 47/16** (2006.01); **H01H 50/44** (2006.01)

CPC (source: EP KR)

H01H 83/08 (2013.01 - EP); **H02H 11/00** (2013.01 - KR); **H02H 11/002** (2013.01 - EP); **H02J 1/122** (2020.01 - EP); **H01H 35/14** (2013.01 - EP); **H01H 47/16** (2013.01 - EP); **H01H 50/44** (2013.01 - EP)

Citation (search report)

See references of WO 9833255A1

Cited by

CN108183187A

Designated contracting state (EPC)

DE ES FR GB IT

DOCDB simple family (publication)

DE 19702116 A1 19980723; DE 19702116 C2 19990218; BR 9807500 A 20000321; EP 0954894 A1 19991110; JP 2001508639 A 20010626; KR 20000070383 A 20001125; WO 9833255 A1 19980730

DOCDB simple family (application)

DE 19702116 A 19970122; BR 9807500 A 19980122; EP 9800337 W 19980122; EP 98906883 A 19980122; JP 53158398 A 19980122; KR 19997006616 A 19990722