

Title (en)

Main-standby filament switch for AC driven two-filament lamps in traffic signalling devices.

Title (de)

Haupt/Nebenfadenumschalter für wechselstromgespeiste Doppelfadenlampen in Verkehrssignalanlagen.

Title (fr)

Commutateur filament principal-filament de secours pour lampes à double filament alimentées en courant alternatif dans des installations de signalisation du trafic.

Publication

EP 0432624 B1 19940302 (DE)

Application

EP 90123330 A 19901205

Priority

DE 3941328 A 19891214

Abstract (en)

[origin: EP0432624A1] AC switches (TRH, TRN) are connected in both the main and standby filament circuit of a signalling lamp (L). As long as the main filament (HF) is switched on and is intact, the main filament AC switch (TRH) is switched through via input diodes, connected in reverse-parallel, of an optocoupler (U1). When current is flowing through the input diodes, the photo-transistor of this optocoupler controls a switch (S1) which is used, in this switching state, to switch off the input diode of an electro-optical AC switch (U2). If the main filament (HF) burns out and the switch (S1) is driven into the other position, the electro-optically controlled AC switch (U2) is switched through and, for its part, switches the standby filament AC switch (TRN) through. The feedback report on the operating state of the signal lamp to the control mechanism takes place via the optocoupler (U3). The main/standby filament switch is constructed using only a few, proven electronic components. It is used especially in railway signalling lights. <IMAGE>

IPC 1-7

H05B 39/10; **B61L 5/18**

IPC 8 full level

B61L 5/18 (2006.01); **H05B 39/10** (2006.01)

CPC (source: EP)

H05B 39/10 (2013.01)

Cited by

CN114202904A; EP0586734A1; RU2493605C1; GB2411034B

Designated contracting state (EPC)

AT CH DE DK ES FR GB IT LI LU NL

DOCDB simple family (publication)

EP 0432624 A1 19910619; **EP 0432624 B1 19940302**; AT E102427 T1 19940315; DE 3941328 A1 19910620; DE 59004777 D1 19940407; DK 0432624 T3 19940613; ES 2051443 T3 19940616; FI 906154 A0 19901213; FI 906154 A 19910615; FI 97676 B 19961015; FI 97676 C 19970127

DOCDB simple family (application)

EP 90123330 A 19901205; AT 90123330 T 19901205; DE 3941328 A 19891214; DE 59004777 T 19901205; DK 90123330 T 19901205; ES 90123330 T 19901205; FI 906154 A 19901213