

Title (en)  
Electrical circuit for an LED signal lamp with a switching threshold for switching between a daylight operation mode and a nighttime operation mode

Title (de)  
Elektrische Schaltung für LED Signallampen mit einer Schaltschwelle zum Umschalten zwischen Tages- und Nachtbetrieb

Title (fr)  
Circuit électrique pour des lampes de signalisation avec diodes électroluminescentes ayant un seuil pour changer entre un mode de fonctionnement de jour et un mode de fonctionnement de nuit

Publication  
**EP 1787886 A1 20070523 (EN)**

Application  
**EP 05292461 A 20051118**

Priority  
EP 05292461 A 20051118

Abstract (en)  
An electrical circuit (1, 21) for operating a signal lamp (5), with a signal lamp (5) comprising at least one light emitting diode (D3, D4, D5, D6), with a voltage input (V1) for supplying the electrical circuit (1, 21) with AC voltage, and with a diode (D1) connected in series with the voltage input (V1), is characterized in that the electrical circuit (1, 21) comprises a first subcircuit (11) connecting the cathode (4) of the diode (D1) with the signal lamp (5), that the electrical circuit (1, 21) comprises a second subcircuit (12a, 12b) providing a low resistance current path (R6, R7, Q1) in parallel to the signal lamp (5), as compared to the signal lamp (5), when the AC voltage is below a first critical level, that the electrical current (1; 21) comprises a third subcircuit (13) disabling the low resistance current path (R6, R7, Q1) in parallel to the signal lamp (5), as compared to the signal lamp (5), when the AC voltage is above the first critical level, and that the electrical circuit (1, 21) comprises a fourth subcircuit (14) providing a low resistance connection (M1, R3, R4) from cathode (4) of the diode (D1) to the signal lamp (5), as compared to the first subcircuit (11), when the AC voltage is above a second critical level (scl). The inventive electrical circuit allows an adaptation of the luminous intensity by varying the AC input voltage.

IPC 8 full level  
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Citation (search report)

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