

Title (en)
MAINTAINING LED LUMINOUS INTENSITY

Title (de)
ERHALT DER LED LEUCHTINTENSITÄT

Title (fr)
MAINTIEN DE L'INTENSITE LUMINEUSE DE DIODES ELECTROLUMINESCENTES (LED)

Publication
EP 1075706 A4 20010718 (EN)

Application
EP 98918770 A 19980427

Priority
US 9808432 W 19980427

Abstract (en)
[origin: CA2328439A1] A circuit for maintaining the luminous intensity of a light emitting diode (LED) (12) comprising at least one light emitting diode (LED) (12) for producing a luminous intensity; a sensor (22, 24) for sensing a condition proportional to the luminous intensity of the LED (12) and for producing a luminous intensity signal; a power supply (16) electrically connected to the LED (12) for supplying pulses of electrical energy to the LED (12); and wherein the power supply (16) includes a switching device responsive to the luminous intensity signal for adjusting the electrical energy supplied by the pulses per unit of time to adjust the average of the current passing through the LED (12) to maintain the luminous intensity of the LED (12) at a predetermined level. In one instance, the sensor (22) includes means for sensing changes in the operating temperature of the LED (12). In a second instance, the sensor (24) includes means (28) for sensing changes in luminous output of the LED (12). The electrical energy supplied by the pulses per unit of time are adjusted by anyone of (1) varying the frequency, (2) varying the width of the pulses, (3) a combination of frequency and width, or (4) adjusting the phase of the pulses within an a.c. sinusoidal wave form.

IPC 1-7
H01J 40/14; H05B 33/08; H05B 39/04; G06K 11/08; G03B 7/08

IPC 8 full level
G03B 7/08 (2006.01); **H01J 40/14** (2006.01); **H05B 39/04** (2006.01); **H05B 44/00** (2022.01)

CPC (source: EP)
Y02B 20/00 (2013.01)

Citation (search report)

- [XA] US 4843283 A 19890627 - CHEN JACK Y C [TW]
- [A] EP 0572009 A1 19931201 - SPACELABS MEDICAL INC [US]
- [A] US 4117499 A 19780926 - STRAUSS KARL-PETER
- See references of WO 9956303A1

Designated contracting state (EPC)
DE ES FR GB IT

DOCDB simple family (publication)
CA 2328439 A1 19991104; EP 1075706 A1 20010214; EP 1075706 A4 20010718

DOCDB simple family (application)
CA 2328439 A 19980427; EP 98918770 A 19980427