Title (en)

Electric circuit and method for monitoring a temperature of a light emitting diode

Title (de)

Schaltung und Verfahren zum Überwachen der Temperatur einer Leuchtdiode

Title (fr)

Circuit et procédé pour surveiller la température d'une diode électroluminescente

Publication

EP 1701589 B1 20080827 (EN)

Application

EP 05005054 A 20050308

Priority

EP 05005054 A 20050308

Abstract (en)

[origin: EP1701589A1] The present invention discloses an electric circuit 1 and method for monitoring a temperature of a light emitting diode 2. The inventive electric circuit 1 for monitoring a temperature of a light emitting diode 2 in a constant-current mode comprises a driver circuit 3 for supplying a predefined constant-current to the light emitting diode 2 to run the light emitting diode 2 in said constant-current mode, a storage 4 for storing a general dependency between a forward voltage of the light emitting diode 2 in said constant-current mode and the temperature of the light emitting diode 2, a voltage sensor 5 for measuring the actual forward voltage of the light emitting diode 2 in said constant-current mode and a calculator 6 for calculating the actual temperature of the light emitting diode 2 by using the detected general dependency and the measured actual forward voltage.

IPC 8 full level

H05B 44/00 (2022.01)

CPC (source: EP US)

H05B 45/12 (2020.01 - EP); **H05B 45/22** (2020.01 - EP US); **H05B 45/56** (2020.01 - EP); H05B 45/38 (2020.01 - EP US)

Cited by

WO2008129453A1; JP2010525567A; CN110892323A; CN105844826A; DE102006033233A1; CN105701938A; AU2010204851B2; CN105701940A; JP2021124385A; US7822086B2; WO2013148055A1; WO2009017895A3; WO2010083171A3; US8258707B2; US9668306B2; US10485062B2; US11454867B2; US11809064B2; US8664865B2

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