

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

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Application  
**EP 05005054 A 20050308**

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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  
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**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  
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