

Title (en)
Voltage supply for Leds in lighting applications

Title (de)
Spannungsversorgung von LED's für Beleuchtungszwecke

Title (fr)
Alimentation en tension pour Leds dans le domaine de l' éclairage

Publication
EP 1185147 B1 20031217 (DE)

Application
EP 01106716 A 20010316

Priority
DE 10013216 A 20000317

Abstract (en)
[origin: DE10013216A1] The voltage supply has a constant current source with a transistor with control and output connections. A LED or LED arrangement is connected in series with an output connection. A control loop detects the voltage drop between the transistor output connections and/or between the output connection connected to the LED and the control connection and sets the supply voltage so the voltage drop corresponds to a value above the saturation voltage. The voltage supply has a constant current source (2) to which a supply voltage is applied and that contains a transistor (3) with a control connection and two output connections, whereby the light emitting diode (5) or LED arrangement is connected in series with a transistor output connection. A control loop (6) detects the voltage drop between the transistor output connections and/or between the output connection connected to the LED and the control connection and sets the supply voltage so that the voltage drop corresponds to a value above the transistor saturation voltage. Independent claims are also included for the following: an arrangement of light emitting diodes and a method of supplying voltage to a constant current source for at least one light emitting diode.

IPC 1-7
H05B 33/08

IPC 8 full level
H05B 44/00 (2022.01)

CPC (source: EP US)
H05B 45/20 (2020.01 - EP US); **H05B 45/37** (2020.01 - EP US)

Cited by
EP1503430A4; US7898188B2; US8421526B2; US7852016B2; WO2006097329A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
EP 1185147 A1 20020306; EP 1185147 B1 20031217; AT E256962 T1 20040115; DE 10013216 A1 20010920; DE 50101176 D1 20040129

DOCDB simple family (application)
EP 01106716 A 20010316; AT 01106716 T 20010316; DE 10013216 A 20000317; DE 50101176 T 20010316