

Title (en)  
DRIVING APPARATUS FOR LED

Title (de)  
LED-BETRIEBSGERÄT

Title (fr)  
APPAREIL DE COMMANDE DE DEL

Publication  
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Application  
**EP 11802418 A 20111221**

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Abstract (en)  
[origin: WO2012085118A1] In order to improve the efficiency in the operation of LED arrangements connected in series, an LED operating arrangement (1, 2, 3) is proposed, the LED arrangements (LED<sub>i</sub>, i = 1...n) each having a first connection and a second connection, and the series circuit of the LED arrangements being connected to a supply voltage (V<sub>N</sub>), a bypass arrangement (20<sub>i</sub>, i = a...n-1) being associated with each of a plurality of LED arrangements (LED<sub>i</sub>, i = 2...n) in such a way that a bypass connection of each bypass arrangement is connected to a connection of the LED arrangement, and furthermore each bypass arrangement has at least one gate (S, S<sub>2</sub>) and bypasses the associated LED arrangement (LED<sub>i</sub>, i = 2...n) in an operating state. The LED operating arrangement according to the invention is characterized in that a gate (S) of each bypass arrangement (20<sub>i</sub>, i = a...n-1) is connected to an associated current sensor (100a...n-1), which is designed to detect a current flow through an LED arrangement (LED<sub>i</sub>, i = 1...n-1) that is arranged adjacent to the LED arrangement (LED<sub>i</sub>, i = 2...n) that is associated with each bypass arrangement (20<sub>i</sub>, i = a...n-1), wherein each bypass arrangement is furthermore designed as a controllable resistor. The invention further relates to a method for operating a plurality of LED arrangements arranged in series.

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