

Title (en)

METHOD FOR OPTIMIZING EFFICIENCY OF OPTICAL SEMICONDUCTOR DEVICES

Title (de)

VERFAHREN ZUR OPTIMIERUNG DER EFFIZIENZ VON OPTISCHEN HALBLEITERBAUELEMENTEN

Title (fr)

PROCÉDÉ D'OPTIMISATION DE L'EFFICACITÉ DE DISPOSITIFS SEMICONDUCTEURS OPTIQUES

Publication

**EP 3295769 A4 20181205 (EN)**

Application

**EP 15899527 A 20150727**

Priority

IB 2015001263 W 20150727

Abstract (en)

[origin: WO2017017482A1] The subject of the invention is a method for optimizing efficiency of optical semiconductor devices, allowing optical semiconductor devices such as light-emitting optical semiconductor devices, e.g. LEDs, and light-absorbing optical semiconductor devices converting light into electrical energy such as solar cells and solar panels to operate more optimally and with higher subsequent efficiency increase and longer lifetime than before, The essence of the solution is, if the voltage of the light-emitting optical semiconductor devices is interrupted with a short duty cycle, possibly of 1-5%, then they can cool down to a greater extent, and thereby their ambient temperature will be lower, and so their characteristic efficiency valid for all optical semiconductor devices resulting from the temperature reduction will increase. In one case the optical semiconductor devices are optical light emitting semiconductor devices, in given case high power LEDs. In other case the optical semiconductor devices are devices converting light energy into electric power, in given case solar cells or solar panels.

IPC 8 full level

**H05B 44/00** (2022.01); **H01L 31/02** (2006.01); **H01L 31/053** (2014.01)

CPC (source: EP US)

**H01L 31/02021** (2013.01 - EP US); **H01L 31/053** (2014.12 - EP); **Y02E 10/50** (2013.01 - EP)

Citation (search report)

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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