

Title (en)  
LIGHTING DEVICE WITH LED'S

Title (de)  
BELEUCHTUNGSVORRICHTUNG MIT LEUCHTDIODEN

Title (fr)  
DISPOSITIF D'ECLAIRAGE AVEC DEL

Publication  
**EP 2459924 B1 20180124 (DE)**

Application  
**EP 10728194 A 20100623**

Priority  
• DE 102009035516 A 20090731  
• EP 2010058918 W 20100623

Abstract (en)  
[origin: WO2011012381A1] The invention relates to a lighting device (1) having a tube (2) that is light-permeable at least in sections and a plurality of light diodes (LEDs) (4), wherein the LEDs (4) are arranged next to one another within the tube (2) and parallel to the longitudinal axis (L) of the tube. In addition, there is at least one separate optical means within the tube (2), such as a separate reflector (5) for each LED (4) and a cylindrical converging lens in order to obtain a specifiable lighting strength distribution on a target surface.

IPC 8 full level  
**F21K 99/00** (2016.01)

CPC (source: EP US)  
**F21K 9/69** (2016.07 - EP US); **F21Y 2103/10** (2016.07 - EP US); **F21Y 2115/10** (2016.07 - EP US)

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 SE SI SK SM TR

DOCDB simple family (publication)  
**WO 2011012381 A1 20110203**; CN 102472433 A 20120523; CN 102472433 B 20150506; DE 102009035516 A1 20110414; DE 102009035516 B4 20141016; EP 2459924 A1 20120606; EP 2459924 B1 20180124; US 2012127714 A1 20120524; US 8641233 B2 20140204

DOCDB simple family (application)  
**EP 2010058918 W 20100623**; CN 201080033205 A 20100623; DE 102009035516 A 20090731; EP 10728194 A 20100623; US 201013388292 A 20100623