

Title (en)  
Led lighting device with modular optical system

Title (de)  
LED-Beleuchtungsanordnung mit modularem optischem System

Title (fr)  
Dispositif d'éclairage à DEL avec système optique modulaire

Publication  
**EP 2865939 A1 20150429 (EN)**

Application  
**EP 14003569 A 20141020**

Priority  
IT MI20131756 A 20131022

Abstract (en)  
An LED lighting device with modular optical system, including at least one LED element (6) and at least one lighting module (5) that is associated with the LED element and is adapted to distribute a light beam emitted by the LED element according to a given photometric model; the lighting module includes a primary optical element (8) and a secondary optical element (9), which cooperates with the primary optical element in order to distribute the light beam. The primary and secondary optical elements are interchangeable in order to modify the photometric model.

IPC 8 full level  
**F21V 5/00** (2015.01); **F21V 7/00** (2006.01); **F21V 13/02** (2006.01); **F21V 13/04** (2006.01); **F21V 17/00** (2006.01); **F21Y 101/02** (2006.01)

CPC (source: CN EP US)  
**F21S 2/00** (2013.01 - CN); **F21V 5/008** (2013.01 - EP US); **F21V 7/0066** (2013.01 - EP); **F21V 7/0083** (2013.01 - EP); **F21V 7/0091** (2013.01 - EP); **F21V 13/02** (2013.01 - CN EP US); **F21V 13/04** (2013.01 - EP); **F21V 17/002** (2013.01 - EP); **F21V 17/10** (2013.01 - CN); **F21Y 2101/00** (2013.01 - CN); **F21Y 2105/10** (2016.07 - EP US); **F21Y 2115/10** (2016.07 - EP US)

Citation (applicant)  
WO 2013009197 A1 20130117 - DOROS TEODORA D A GLASS [PL], et al

Citation (search report)  
• [XYI] WO 2013009197 A1 20130117 - DOROS TEODORA D A GLASS [PL], et al  
• [YA] US 2013083525 A1 20130404 - KOO WON-HOE [KR], et al  
• [XI] WO 2013041381 A1 20130328 - OSRAM GMBH [DE], et al  
• [XI] WO 0024062 A1 20000427 - KONINKL PHILIPS ELECTRONICS NV [NL], et al  
• [X] US 2010014286 A1 20100121 - YONEDA KENJI [JP], et al  
• [XI] US 2010195330 A1 20100805 - SCHAEFER GARY EUGENE [CA], et al  
• [A] US 2013258667 A1 20131003 - RAY STEVEN HOWARD [US], et al  
• [A] US 2013265760 A1 20131010 - DEMUYNCK RANDOLPH CARY [US], et al

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US11125397B2; US10180248B2; EP3366987A1; JP2019220489A; WO2021099026A1; WO2023237811A1; US11662082B2; WO2020208292A1

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

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 2865939 A1 20150429; EP 2865939 B1 20180627**; CN 104712931 A 20150617; CN 104712931 B 20180323; ES 2683996 T3 20181001; IT MI20131756 A1 20150423

DOCDB simple family (application)  
**EP 14003569 A 20141020**; CN 201410858038 A 20141022; ES 14003569 T 20141020; IT MI20131756 A 20131022