

Title (en)  
LIGHTING DEVICE AND HEADLIGHT

Title (de)  
BELEUCHTUNGSVORRICHTUNG UND SCHEINWERFER

Title (fr)  
DISPOSITIF D'ÉCLAIRAGE ET PROJECTEUR

Publication  
**EP 2856022 B1 20170531 (DE)**

Application  
**EP 13730797 A 20130603**

Priority  
• DE 102012104779 A 20120601  
• DE 2013100197 W 20130603

Abstract (en)  
[origin: WO2013178222A1] The application relates to a lighting device (1), comprising a housing (2), a planar arrangement of lamps (5) that are arranged in the housing (2), and a board device (3) which is accommodated in the housing (2), wherein a housing rear wall is formed with the board device (3), the board device (3) comprises a circuit board (4) on which an electrical circuit assigned to the lamps (5) is arranged, and the board device (3) has a cooling body device (10) for a passive cooling formed with pin-type cooling elements (12). The application further relates to a headlight.

IPC 8 full level  
**F21V 29/80** (2015.01); **F21W 131/406** (2006.01); **F21Y 105/00** (2016.01); **F21Y 115/10** (2016.01)

CPC (source: CN EP US)  
**F21V 1/06** (2013.01 - US); **F21V 7/16** (2013.01 - US); **F21V 7/18** (2013.01 - US); **F21V 29/60** (2015.01 - EP US); **F21V 29/70** (2015.01 - EP US); **F21V 29/80** (2015.01 - EP US); **F21V 29/81** (2015.01 - EP US); **F21W 2131/406** (2013.01 - CN EP US); **F21Y 2101/00** (2013.01 - CN); **F21Y 2105/10** (2016.07 - CN); **F21Y 2105/16** (2016.07 - EP US); **F21Y 2115/10** (2016.07 - CN EP US)

Citation (examination)  
US 2011156587 A1 20110630 - WU CHUN-WEI [CN]

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

DOCDB simple family (publication)  
**WO 2013178222 A1 20131205**; CN 104428590 A 20150318; DE 102012104779 A1 20131205; DE 202013105424 U1 20131205; EP 2856022 A1 20150408; EP 2856022 B1 20170531; US 10571111 B2 20200225; US 10767847 B2 20200908; US 10865972 B2 20201215; US 2015146404 A1 20150528; US 2018363892 A1 20181220; US 2020096188 A1 20200326

DOCDB simple family (application)  
**DE 2013100197 W 20130603**; CN 201380030935 A 20130603; DE 102012104779 A 20120601; DE 202013105424 U 20130603; EP 13730797 A 20130603; US 201314405052 A 20130603; US 201816114854 A 20180828; US 201916695811 A 20191126