

Title (en)
Lighting device

Title (de)
Beleuchtungsanordnung

Title (fr)
Dispositif d'éclairage

Publication
EP 2280213 A3 20130424 (EN)

Application
EP 10170978 A 20100727

Priority
• KR 20090068922 A 20090728
• KR 20100033032 A 20100410

Abstract (en)
[origin: EP2280213A2] Disclosed is a lighting device (1). In particular, the present invention relates to an LED surface lighting device having a plurality of LEDs arranged therein. The lighting device according to an embodiment of the present invention includes a case (100) comprising a bottom plate (110); a side wall (120) substantially vertically extending from both ends of the bottom plate (110); and a louver (130) inclined from both ends of the side wall with respect to a surface of the side wall; a light emitter (200) seated on the bottom plate (110); and a diffuser plate (300) being spaced apart from and in parallel with the light emitter (200) and having its both ends arranged at the both ends of the side wall (120).

IPC 8 full level
F21S 2/00 (2006.01); **F21S 8/04** (2006.01)

CPC (source: CN EP US)
F21S 2/00 (2013.01 - CN); **F21S 2/005** (2013.01 - EP US); **F21S 8/04** (2013.01 - EP US); **F21V 1/00** (2013.01 - CN); **F21V 5/08** (2013.01 - CN); **F21V 7/00** (2013.01 - CN); **F21V 15/02** (2013.01 - CN); **F21V 17/00** (2013.01 - CN); **F21V 17/10** (2013.01 - CN); **F21V 19/00** (2013.01 - CN); **F21V 29/70** (2015.01 - EP US); **F21V 29/74** (2015.01 - EP US); **F21V 17/104** (2013.01 - EP); **F21V 23/007** (2013.01 - EP); **F21V 23/026** (2013.01 - EP); **F21Y 2101/00** (2013.01 - CN); **F21Y 2105/10** (2016.07 - EP US); **F21Y 2113/13** (2016.07 - EP); **F21Y 2115/10** (2016.07 - EP US)

Citation (search report)
• [I] US 2006023450 A1 20060202 - CHUNG CASEY [US], et al
• [I] US 2002163803 A1 20021107 - TSAI TIEN-TZU [TW]
• [IA] WO 2008047335 A1 20080424 - NUALIGHT LTD [IE], et al
• [IA] CH 694024 A5 20040615 - AGABEKOV S A [CH]
• [I] EP 1460334 A1 20040922 - FEELUX CO LTD [KR]
• [A] US 2004042203 A1 20040304 - LADSTATTER GERALD [AT]
• [A] US 6558020 B1 20030506 - HOLZER WALTER [DE]

Cited by
DE102011080313A1; CN109958905A; CN109268700A; GR1010246B; CN103429955A; AT18041U1; EP2944869A1; EP2587118A1; CN114585855A; US8371727B2; US9121590B2; WO2012134894A1; WO2012110633A1; US11898742B2; US9127821B2; US9464766B2; WO2013060757A1; WO2013068920A3; WO2021043543A1; EP3222902B1

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

Designated extension state (EPC)
BA ME RS

DOCDB simple family (publication)
EP 2280213 A2 20110202; EP 2280213 A3 20130424; EP 2280213 B1 20160406; CN 101986004 A 20110316; CN 101986004 B 20141210; CN 104390191 A 20150304; CN 104390191 B 20170426; CN 104456189 A 20150325; CN 104456189 B 20181019; EP 3045798 A1 20160720; EP 3045798 B1 20171004; JP 2011029187 A 20110210; JP 2015018825 A 20150129; JP 2016085995 A 20160519; JP 5641804 B2 20141217; JP 5889377 B2 20160322; JP 6215373 B2 20171018; RU 2010131634 A 20120210; RU 2541124 C2 20150210

DOCDB simple family (application)
EP 10170978 A 20100727; CN 201010242715 A 20100728; CN 201410643256 A 20100728; CN 201410643311 A 20100728; EP 16153518 A 20100727; JP 2010169849 A 20100728; JP 2014218896 A 20141028; JP 2016026886 A 20160216; RU 2010131634 A 20100727