

Title (en)
LED LIGHTING APPARATUS

Title (de)
LED-BELEUCHTUNGSVORRICHTUNG

Title (fr)
APPAREIL D'ÉCLAIRAGE À LED

Publication
EP 2644978 A2 20131002 (EN)

Application
EP 11843076 A 20110823

Priority
• KR 20100118959 A 20101126
• KR 2011006207 W 20110823

Abstract (en)
The present invention relates to an LED lighting apparatus which has uniform illumination and increases heat-dissipation effects to improve stability. The LED lighting apparatus includes: a panel having a plate shape, wherein the panel has a first plane and a second plane disposed on the side opposite to that of the first plane; a light-emitting part disposed on the first plane of the panel and including a plurality of LED devices, wherein the light-emitting part has a light-emitting surface parallel to the first plane and inclined at a first angle such that the light-emitting surface forms an acute angle with the ground; and a reflective plate extending from the panel. The reflective plate includes a first portion extending at an incline so as to form a second angle with the ground that is smaller than the first angle, a second portion extending from the panel at an incline in a direction away from the ground, and a third portion connecting the first portion to the second portion.

IPC 8 full level
F21V 7/04 (2006.01); **F21V 29/00** (2015.01)

CPC (source: EP KR US)
F21S 8/086 (2013.01 - EP KR); **F21V 3/049** (2013.01 - KR); **F21V 3/062** (2018.01 - KR); **F21V 5/00** (2013.01 - KR); **F21V 7/0016** (2013.01 - EP KR); **F21V 7/005** (2013.01 - KR); **F21V 7/05** (2013.01 - EP KR); **F21V 7/09** (2013.01 - EP KR US); **F21V 13/04** (2013.01 - EP KR); **F21V 29/763** (2015.01 - EP KR); **F21V 3/049** (2013.01 - EP); **F21V 3/062** (2018.01 - EP); **F21V 5/00** (2013.01 - EP US); **F21V 7/005** (2013.01 - EP); **F21V 29/505** (2015.01 - EP); **F21Y 2115/10** (2016.07 - EP US)

Cited by
EP2886943A1; FR3015633A1; JP2017500697A

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)
EP 2644978 A2 20131002; **EP 2644978 A4 20150701**; **EP 2644978 B1 20191120**; KR 101072598 B1 20111011; WO 2012070749 A2 20120531; WO 2012070749 A3 20120719

DOCDB simple family (application)
EP 11843076 A 20110823; KR 20100118959 A 20101126; KR 2011006207 W 20110823