

Title (en)
EMBEDDED-TYPE LIGHTING APPARATUS

Title (de)
EINGEBETTETE BELEUCHTUNGSVORRICHTUNG

Title (fr)
APPAREIL D'ÉCLAIRAGE DE TYPE ENCASTRÉ

Publication
EP 2840309 A4 20151209 (EN)

Application
EP 12874784 A 20120420

Priority
• KR 20120039647 A 20120417
• KR 2012003050 W 20120420

Abstract (en)
[origin: EP2840309A1] Disclosed herein is an embedded lighting apparatus that is embedded in a ceiling and is provided with a reflector. The embedded lighting apparatus includes: an embedded housing (110) installed in an installation depression of a ceiling; an LED module (120) coupled to the embedded housing; a connector (130) connecting the LED module to the embedded housing; a bracket (140) fastening the embedded housing installed in the installation depression of the ceiling to the bottom of the ceiling; and a reflector (200) having a conical structure that is open on upper and lower ends thereof. The reflector is removably coupled to the embedded housing such that an emitting surface of the LED module is disposed in the open upper end of the conical structure and light is emitted to the outside through the open lower end of the conical structure.

IPC 8 full level
F21V 21/04 (2006.01); **F21V 17/00** (2006.01)

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Citation (search report)
• [XYI] CA 2741071 A1 20110803 - CORDELIA LIGHTING INC [US]
• [XI] US 2010296272 A1 20101125 - ROOS SCOTT [US], et al
• [XI] WO 2009039491 A1 20090326 - COOPER TECHNOLOGIES CO [US], et al
• [Y] KR 200361633 Y1 20040914
• [Y] KR 20110008796 A 20110127 - LEE YI NAM [KR]
• [Y] US 2011222291 A1 20110915 - PENG CHUNGHANG [US]
• [Y] JP H08298017 A 19961112 - KOUSAI DENKI KOGYO KK
• [YA] US 2009231856 A1 20090917 - HOUSEHOLDER JOHN R [US], et al
• [A] WO 2009142776 A1 20091126 - RUUD LIGHTING INC [US], et al
• See references of WO 2013157682A1

Designated contracting state (EPC)
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DOCDB simple family (publication)
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