

Title (en)
LED lighting device

Title (de)
LED-Beleuchtungsanordnung

Title (fr)
Dispositif d'éclairage à DEL

Publication
EP 2392851 A1 20111207 (EN)

Application
EP 10192414 A 20101124

Priority
TW 99210507 U 20100603

Abstract (en)
An LED lighting device has a cap (10), a circuit board assembly (20) and a bulb envelope (30). The circuit board assembly (20) is electrically mounted on the cap (10) and has multiple circuit boards (21,22) intersecting each other to form a light frame with a crisscross section, and has multiple LEDs (23) mounted on the circuit boards. The circuit board assembly (20) may further have a top circuit board (26) mounted on one end of the light frame. The top circuit board (26) also has multiple LEDs (23a) mounted thereon. Since the circuit boards intersect each other to constitute the light frame, the light frame provides a large surface area for mounting a large number of LEDs. Therefore, the LED lighting device is able to provide a wide angle illumination with enhanced lighting intensity.

IPC 8 full level
F21K 99/00 (2010.01)

CPC (source: EP US)
F21K 9/232 (2016.07 - EP US); **F21V 3/00** (2013.01 - EP); **F21V 3/02** (2013.01 - EP US); **F21Y 2107/00** (2016.07 - EP US); **F21Y 2115/10** (2016.07 - EP US)

Citation (search report)

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- [XY] US 2009135595 A1 20090528 - CHEN TAIMING [US]
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Citation (examination)

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- GB 2401672 A 20041117 - LUMISPHERE PRODUCTS LTD [GB]

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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

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DOCDB simple family (application)
EP 10192414 A 20101124; JP 2011000310 U 20110124; TW 99210507 U 20100603