

Title (en)

LED bulb with an enlarged irradiation range by arranging LED elements in three-dimension

Title (de)

LED-Lampe mit vergrößertem Strahlungsbereich durch eine Anordnung der LED-Elemente in drei Dimensionen

Title (fr)

Ampoule DEL avec portée de rayonnement agrandie en agencant les éléments DEL en trois dimensions

Publication

**EP 2077414 A1 20090708 (EN)**

Application

**EP 08000086 A 20080104**

Priority

EP 08000086 A 20080104

Abstract (en)

An LED light source includes a housing having a base adapted to mount in an electrical socket; a circuit board received in the housing; an electrical circuit assembly received in the housing, the electrical circuit assembly being electrically connected to both the circuit board and the base; an LED assembly mounted on the circuit board, the LED assembly including a plurality of LED elements electrically connected to the circuit board; and a bulb mounted on an open end of the housing for enclosing the circuit board, the electrical circuit assembly, and the LED assembly, wherein the LED elements are arranged in three-dimension so as to irradiate an enlarged range. The LED elements may be arranged and shaped as a tapered tower, a tree, or a semi-sphere.

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 US); **F21Y 2107/00** (2016.07 - EP US); **F21Y 2115/10** (2016.07 - EP US)

Citation (applicant)

- US 5688042 A 19971118 - MADADI ABOLFAZL [CA], et al
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Citation (search report)

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Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

**EP 2077414 A1 20090708**

DOCDB simple family (application)

**EP 08000086 A 20080104**