

Title (en)

LED bulb with heat removal device

Title (de)

LED-Lampe mit Wärmeabfuhrvorrichtung

Title (fr)

Ampoule DEL avec dispositif d'évacuation de la chaleur

Publication

**EP 2077415 B1 20111214 (EN)**

Application

**EP 08000087 A 20080104**

Priority

EP 08000087 A 20080104

Abstract (en)

[origin: EP2077415A1] A LED bulb includes a housing (20) having a base (10) mounted in an electrical socket; a heat removal device (30) mounted on a lower portion of the housing for surrounding the remaining portion of the housing; a bulb (40) formed of transparent material or being frosted, the bulb being mounted on a top edge of the heat removal device (30); a light source (60) (e.g., Hi-Power LED) mounted on the heat removal device and the housing; and a circuit board (50) received in the housing, the circuit board being electrically connected to the light source (60) and the base respectively. Heat generated by the LED is adapted to conduct away by the heat removal device. In one embodiment, the heat removal device includes an inverted, truncated cone having a corrugated surface. In another embodiment, the cone includes a plurality of longitudinal, spaced latches formed around, the latches having an opening.

IPC 8 full level

**F21K 99/00** (2010.01)

CPC (source: EP US)

**F21K 9/23** (2016.07 - EP US); **F21K 9/238** (2016.07 - EP US); **F21V 3/061** (2018.01 - EP); **F21V 23/006** (2013.01 - EP US); **F21V 29/507** (2015.01 - EP); **F21V 29/83** (2015.01 - EP); **F21Y 2115/10** (2016.07 - EP US)

Cited by

WO2011068431A1; EA019873B1; CN102032490A; EP2341277A4; EP2530373A3; RU2680720C1; CN103620301A; EP2699844A4; US8439527B2; US9182110B2; US8979337B2; WO2014193266A1; US9416953B2; WO2019212382A1; WO2012007403A1; WO2012020366A1

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