

Title (en)
LED BULB LIGHT WITH HIGH LUMINOUS EFFICACY

Title (de)
LED-LAMPE MIT HOHER LICHTAUSBEUTE

Title (fr)
AMPOULE À DEL À HAUTE EFFICACITÉ LUMINEUSE

Publication
EP 3006814 A4 20170104 (EN)

Application
EP 14891350 A 20140504

Priority
CN 2014076700 W 20140504

Abstract (en)
[origin: EP3006814A1] Disclosed is an LED bulb light with high luminous efficacy, comprising a plurality of LED filaments (1), a stem (3), an LED driver (7), a standard interface (9) and a lampshade (10). The plurality of LED filaments and the stem are sealed by the lampshade, and the lampshade is filled with a heat dissipation material (11). Both ends of each LED filament are spot-welded to two stem electrodes (4) on the stem via two filament electrodes (2) of the LED filament, and the plurality of LED filaments are distributed around the stem inside the bulb light. The lower part of the stem is connected to an exhaust pipe (5). A lower end electrode of the stem is connected to the LED driver via an electrical connection wire (6), the LED driver is connected to the standard interface via a lead, and the standard interface is in communication with an external AC or DC power supply. Using a material with high heat dissipation performance and a stem material with high thermal conductivity, the LED filament with high luminous efficacy can have high luminous efficacy in operation at a lower temperature.

IPC 8 full level
F21S 2/00 (2016.01); **F21K 9/232** (2016.01); **F21V 19/00** (2006.01); **F21V 29/00** (2015.01); **F21V 3/04** (2006.01); **F21V 23/00** (2015.01); **F21Y 101/00** (2016.01); **F21Y 103/10** (2016.01); **F21Y 107/00** (2016.01); **F21Y 109/00** (2016.01); **F21Y 115/10** (2016.01)

CPC (source: EP US)
F21K 9/232 (2016.07 - EP US); **F21S 2/00** (2013.01 - EP US); **F21K 9/60** (2016.07 - EP US); **F21V 3/061** (2018.01 - EP US); **F21V 23/009** (2013.01 - EP); **F21V 29/503** (2015.01 - EP); **F21V 29/56** (2015.01 - EP); **F21Y 2103/10** (2016.07 - EP US); **F21Y 2107/00** (2016.07 - EP US); **F21Y 2109/00** (2016.07 - EP US); **F21Y 2115/10** (2016.07 - EP US)

Citation (search report)

- [I] US 2013058080 A1 20130307 - GE SHICHAO [CN], et al
- [I] WO 2013135153 A1 20130919 - ZHEJIANG LEDISON OPTOELECTRONICS CO LTD [CN] & EP 2827046 A1 20150121 - ZHEJIANG LEDISON OPTOELECTRONICS CO LTD [CN]
- [I] CN 203395690 U 20140115 - NINGBO ZHUOMING ELECTRONICS CO LTD
- [I] CN 103712106 A 20140409 - SICHUAN BONS OPTOELECTRONICS TECHNOLOGY CO LTD
- [A] JP 2013225587 A 20131031 - STANLEY ELECTRIC CO LTD
- See references of WO 2015168825A1

Cited by
RU188947U1; CN117174809A

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

DOCDB simple family (publication)
EP 3006814 A1 20160413; EP 3006814 A4 20170104; WO 2015168825 A1 20151112

DOCDB simple family (application)
EP 14891350 A 20140504; CN 2014076700 W 20140504