

Title (en)  
LED BULB APPARATUS

Title (de)  
LED-GLÜHLAMPENVORRICHTUNG

Title (fr)  
APPAREIL D'AMPOULE À DEL

Publication  
**EP 3919806 A1 20211208 (EN)**

Application  
**EP 20178797 A 20200608**

Priority  
• US 202016893324 A 20200604  
• US 202016893339 A 20200604

Abstract (en)  
A LED bulb apparatus has a bulb shell (8801), a head cap (8802), a driver circuit (8803) and at least one light strip (8804) having multiple LED modules (8815) mounted on a substrate (8812). The bulb shell (8801) has a light passing shell (8805) and a bottom portion (8806). The head cap (8802) has a neck portion (8807), a first electrode (8808) and a second electrode (8809). The neck portion (8807) of the head cap (8802) is connected to the bottom portion (8806) of the bulb shell (8801) forming a container space (8811). A fluorescent layer (8816) covers the multiple LED modules (8815). The driving current is transmitted via at least one of the top end (8813) and the bottom end (8814) of the light strip (8804) to the LED modules (8815). The substrate (8812) has a light transmittance less than 50%.

IPC 8 full level  
**F21K 9/232** (2016.01); **F21K 9/235** (2016.01); **F21K 9/238** (2016.01); **F21K 9/90** (2016.01); **F21K 9/237** (2016.01); **F21V 31/00** (2006.01); **F21V 31/03** (2006.01); **F21Y 107/90** (2016.01); **F21Y 113/10** (2016.01); **F21Y 115/10** (2016.01)

CPC (source: EP)  
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Citation (applicant)  
US 8262947 B2 20120911 - LAREDO WALTER R [US]

Citation (search report)  
• [X] US 2020049315 A1 20200213 - WU CHENJUN [CN], et al  
• [X] US 2017227169 A1 20170810 - JIANG TAO [CN], et al  
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Designated contracting state (EPC)  
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DOCDB simple family (application)  
**EP 20178797 A 20200608**; AU 2020207798 A 20200721; CA 3089880 A 20200812; JP 2020148045 A 20200903; MX 2020008652 A 20200819