

Title (en)

LED lamp with infinitely adjustable emission angle

Title (de)

LED-Lampe mit stufenlos einstellbarem Abstrahlwinkel

Title (fr)

Lampe à DEL dotée d'un angle de rayonnement réglable en continu

Publication

**EP 2314912 B1 20130410 (DE)**

Application

**EP 10006873 A 20100702**

Priority

DE 102009050395 A 20091022

Abstract (en)

[origin: EP2314912A1] The bulb has a lens plate (4) provided with multiple fresnel lens. The lens plate is guided in a distance to a carrier plate (8) using vertical guidance units (7). The lens plate is arranged in a retaining ring (1), where an outer contour of the retainer ring intervenes into a guide winding of a guiding ring (2). The retaining ring with the lens plate is secured against rotation motion of the guiding ring by the guidance units, during rotation of the guiding ring. The retaining ring is moved on the carrier plate or moved away from the carrier plate depending upon a rotation direction.

IPC 8 full level

**F21K 99/00** (2010.01); **F21V 14/06** (2006.01); **F21V 19/02** (2006.01)

CPC (source: EP US)

**F21K 9/233** (2016.07 - EP US); **F21K 9/65** (2016.07 - EP US); **F21L 4/02** (2013.01 - EP); **F21V 5/007** (2013.01 - EP US); **F21V 5/008** (2013.01 - EP US); **F21V 14/06** (2013.01 - EP); **F21V 14/065** (2013.01 - EP); **F21V 21/35** (2013.01 - EP); **F21V 29/70** (2015.01 - US); **F21V 5/04** (2013.01 - EP US); **F21V 29/767** (2015.01 - US); **F21V 29/773** (2015.01 - EP); **F21Y 2115/10** (2016.07 - EP US)

Cited by

CN103527951A; CN103649632A; CN104235631A; CN103574338A; CN103968283A; US9303846B2; USD959729S; USD970073S; US10914434B2; WO2014193560A1; WO2013009197A1; WO2013083299A1; USD955033S; USD972755S; EP2876364A1; USD957722S

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 SE SI SK SM TR

DOCDB simple family (publication)

**EP 2314912 A1 20110427**; **EP 2314912 B1 20130410**; DE 102009050395 A1 20110428

DOCDB simple family (application)

**EP 10006873 A 20100702**; DE 102009050395 A 20091022