

Title (en)
LED road lamp holder structure

Title (de)
LED-Straßenlamphenhalterungsstruktur

Title (fr)
Structure de support de lampe à DEL

Publication
EP 2228598 A1 20100915 (EN)

Application
EP 09003489 A 20090310

Priority
EP 09003489 A 20090310

Abstract (en)
A road lamp holder structure includes a lamp guard (1), an LED unit (2) installed at the bottom of the lamp guard (1), and a heat dissipating device (3) installed in lamp guard (1) and having a base (30), a vapor chamber (31) and two heat dissipating elements (32) attached to the LED unit (2). The vapor chamber (31) includes a heated section (310) attached onto the base (30), two heat transmitting sections (311) bent and extended upward from both sides of the heated section (310) respectively, a condensing section (312) bent and extended laterally from each of the two heat transmitting sections (311), two heat dissipating elements (32) having a heated base (320), and heat dissipating fins (321) disposed on the heated base (320). The two heated bases (320) are attached onto external sides of the two heat transmitting sections (311) of the vapor chamber (31) respectively, and the two condensing sections (312) of the vapor chamber (31) are attached to the internal periphery of the top of the lamp guard (1).

IPC 8 full level
F21V 29/00 (2006.01); **F21S 8/08** (2006.01)

CPC (source: EP US)
F21V 15/01 (2013.01 - EP); **F21V 29/51** (2015.01 - EP US); **F21V 29/713** (2015.01 - EP); **F21V 29/767** (2015.01 - EP); **F21V 29/83** (2015.01 - EP); **F21W 2131/103** (2013.01 - EP); **F21Y 2105/10** (2016.07 - EP US); **F21Y 2115/10** (2016.07 - EP US)

Citation (applicant)
• US 2007230185 A1 20071004 - SHUY GEOFFREY W [HK]
• US 2008192478 A1 20080814 - CHEN JEN-SHYAN [TW]

Citation (search report)
• [A] US 2007230185 A1 20071004 - SHUY GEOFFREY W [HK]
• [A] US 2008192478 A1 20080814 - CHEN JEN-SHYAN [TW]
• [A] US 2008144319 A1 20080619 - CHANG CHANG-SHEN [TW], et al

Cited by
CN102900986A; CN102213406A; EP4008953A1; CN102128424A; EP2581657A1; US11873982B2; WO2021228590A1; KR101524127B1; EP4150281B1

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 MK MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
EP 2228598 A1 20100915; EP 2228598 B1 20110622; AT E514036 T1 20110715

DOCDB simple family (application)
EP 09003489 A 20090310; AT 09003489 T 20090310