

Title (en)

LAMP WITH A PERIPHERALLY CLOSED HEATSINK

Title (de)

LEUCHTE MIT UMFANGSSEITIG GESCHLOSSENEM KÜHLKÖRPER

Title (fr)

LUMINAIRE AVEC DISSIPATEUR THERMIQUE FERMÉ SUR LA PÉRIPHÉRIE

Publication

EP 3911892 B1 20230913 (DE)

Application

EP 19835632 A 20191212

Priority

- DE 202019100275 U 20190118
- EP 2019084981 W 20191212

Abstract (en)

[origin: WO2020148037A1] The present invention relates to a lamp (100), in particular a streetlamp (100), comprising an illuminant (200), more particularly an LED, with a main light emission direction (210), a support (400) for carrying the illuminant (200), said support being provided on the backside of the illuminant (200) in respect of the main light emission direction (210), and a heatsink (300), which extends between the support (400) and the illuminant (200), wherein the heatsink (300) has a receiving side (310), the illuminant (200) being thermally coupled therewith, and also a heat conducting structure (330), which extends away from the receiving side (310) to the support (400) counter to the main light emission direction (210), and a side wall (320), which peripherally completely surrounds the heat conducting structure (330) laterally to the outside, wherein the side wall (320) has at least one inlet opening (325) and the receiving side (310) has at least one outlet opening (315), which are fluidly connected to one another by way of a cooling channel (KK) formed by the heat conducting structure (330) in order to dissipate heat transmitted from the illuminant (200) to the heat conducting structure (330) via the cooling channel (KK) by means of convection.

IPC 8 full level

F21V 29/83 (2015.01); **F21S 8/08** (2006.01); **F21V 7/00** (2006.01); **F21V 29/77** (2015.01); **F21W 131/103** (2006.01); **F21Y 115/10** (2016.01)

CPC (source: AT EP)

F21S 8/083 (2013.01 - EP); **F21S 8/088** (2013.01 - AT EP); **F21V 7/0008** (2013.01 - AT EP); **F21V 29/773** (2015.01 - AT EP); **F21V 29/83** (2015.01 - AT EP); **F21W 2131/103** (2013.01 - EP); **F21Y 2115/10** (2016.07 - EP)

Citation (examination)

US 2012281399 A1 20121108 - CROOKHAM JOE P [US], et al

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

DOCDB simple family (publication)

DE 202019100275 U1 20200423; AT 17406 U1 20220315; CN 112997037 A 20210618; EP 3911892 A1 20211124; EP 3911892 B1 20230913; WO 2020148037 A1 20200723

DOCDB simple family (application)

DE 202019100275 U 20190118; AT 500462019 U 20190327; CN 201980072583 A 20191212; EP 19835632 A 20191212; EP 2019084981 W 20191212