

Title (en)

DEVICE FOR DISSIPATING HEAT FROM A HEAT SOURCE, AND USE OF SAID DEVICE

Title (de)

VORRICHTUNG ZUM ABLEITEN VON WÄRME VON EINER WÄRMEQUELLE UND VERWENDUNG DIESER VORRICHTUNG

Title (fr)

DISPOSITIF DE DISSIPATION DE CHALEUR PROVENANT D'UNE SOURCE DE CHALEUR ET UTILISATION DUDIT DISPOSITIF

Publication

EP 3728944 A1 20201028 (DE)

Application

EP 18814630 A 20181212

Priority

- EP 17207887 A 20171218
- EP 2018084473 W 20181212

Abstract (en)

[origin: WO2019121197A1] The subject matter of the present invention is a device for dissipating heat from a heat source. Said device comprises a heat pipe, a heat inputting element and a heat outputting element, also called a heat sink, wherein the heat sink consists substantially of a thermally conductive thermoplastic composition with an in-plane thermal conductivity of from 1 to 50 W/(m*K), preferably of from 2 to 30 W/(m*K), and preferably of from 4 to 20 W/(m*K). Here, the quotient of the external diameter to the wall thickness of the heat pipe is preferably from 10:1 to 4:1. The subject matter of the present invention is also a light which comprises the device according to the invention.

IPC 8 full level

F21V 29/51 (2015.01); **F21S 45/47** (2018.01); **F21V 29/74** (2015.01); **F21V 29/85** (2015.01); **F21V 29/87** (2015.01); **F28D 15/00** (2006.01); **F21Y 115/10** (2016.01)

CPC (source: EP KR US)

F21K 9/00 (2013.01 - KR); **F21S 45/47** (2018.01 - EP KR); **F21S 45/48** (2018.01 - US); **F21V 29/51** (2015.01 - EP KR US); **F21V 29/74** (2015.01 - EP KR); **F21V 29/78** (2013.01 - US); **F21V 29/85** (2013.01 - EP); **F21V 29/87** (2015.01 - EP KR US); **F28D 15/00** (2013.01 - KR); **F28D 15/02** (2013.01 - US); **F28D 15/0233** (2013.01 - EP); **F28F 1/26** (2013.01 - EP); **F28F 21/06** (2013.01 - EP); **F21K 9/00** (2013.01 - EP US); **F21Y 2115/10** (2016.08 - EP KR US)

Citation (examination)

- DE 102012102959 A1 20131010 - SMA SOLAR TECHNOLOGY AG [DE]
- DE 102013216325 A1 20150219 - UNIV DRESDEN TECH [DE]
- See also references of WO 2019121197A1

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 3499119 A1 20190619; CN 111465804 A 20200728; CN 111465804 B 20230404; EP 3728944 A1 20201028; JP 2021507466 A 20210222; KR 20200096634 A 20200812; US 11085629 B2 20210810; US 2021172593 A1 20210610; WO 2019121197 A1 20190627

DOCDB simple family (application)

EP 17207887 A 20171218; CN 201880079738 A 20181212; EP 18814630 A 20181212; EP 2018084473 W 20181212; JP 2020533244 A 20181212; KR 20207020458 A 20181212; US 201816769806 A 20181212