

Title (en)

Optical module cooling device for automobile headlight

Title (de)

Vorrichtung zum Abkühlen eines optischen Moduls für einen Kraftfahrzeugscheinwerfer

Title (fr)

Dispositif de refroidissement d'un module optique pour projecteur automobile

Publication

EP 2199669 B1 20130424 (FR)

Application

EP 09178310 A 20091208

Priority

FR 0807166 A 20081218

Abstract (en)

[origin: EP2199669A1] The device has an optical module (2) equipped with a cooling unit (5) having a thermal exchange surface, where the optical module has an LED (3) i.e. power LED, that is thermally contacted with the cooling unit. A heat conductor (8) e.g. heat pipe, has an end (9) that is placed at a distance from the cooling unit, where the end is equipped with deflectors. A space between the deflectors constitutes an air flow guiding channel (11), where the channel is opened on a passage (7) defined between vanes (6).

IPC 8 full level

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CPC (source: EP US)

F21S 41/143 (2017.12 - EP US); **F21S 41/153** (2017.12 - EP US); **F21S 43/14** (2017.12 - EP US); **F21S 45/48** (2017.12 - EP US); **F21V 29/51** (2015.01 - EP US); **F21V 29/717** (2015.01 - EP US); **F21V 29/745** (2015.01 - EP US); **F21V 29/76** (2015.01 - EP US); **F21V 29/763** (2015.01 - EP US); **F21V 29/83** (2015.01 - EP US); **F28D 15/0275** (2013.01 - EP US); **F21S 45/43** (2017.12 - EP US); **F21V 29/67** (2015.01 - EP US); **F21V 29/85** (2015.01 - EP US); **F21Y 2115/10** (2016.07 - EP US)

Cited by

FR3085741A1; EP3104063A1; FR3037125A1; CN106247249A; US9927088B2; WO2020053068A1

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DOCDB simple family (publication)

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DOCDB simple family (application)

EP 09178310 A 20091208; FR 0807166 A 20081218; US 64024509 A 20091217