

Title (en)

Cooling element for a semiconductor light source of a motor vehicle lighting device

Title (de)

Kühlelement für eine Halbleiterlichtquelle einer Beleuchtungseinrichtung eines Kraftfahrzeugs

Title (fr)

Élément de refroidissement pour une source d'éclairage semi-conductrice d'un dispositif d'éclairage d'un véhicule automobile

Publication

EP 2275738 A3 20120523 (DE)

Application

EP 10002907 A 20100319

Priority

DE 102009033949 A 20090713

Abstract (en)

[origin: EP2275738A2] The element (32) has a cooling body (38) provided for delivering heat to environment, and a flange plate (36) for thermal coupling of a semiconductor light source and for fastening the element to a lighting device of a motor vehicle. A composite part is made from a cast part and an insertion part that is inserted into a casting mold during casting of the cast part, where the flange plate is provided as the cast part and the cooling body is provided as the insertion part. The cooling body is made from aluminum, copper or magnesium alloy. An independent claim is also included for a method for manufacturing a cooling element for a for semiconductor light source of a motor vehicle.

IPC 8 full level

F21S 8/12 (2006.01); **F21V 29/00** (2006.01)

CPC (source: EP US)

F21S 41/153 (2017.12 - EP US); **F21S 45/47** (2017.12 - EP US); **F21V 29/74** (2015.01 - EP); **F21V 29/75** (2015.01 - EP US); **F21V 29/763** (2015.01 - EP US); **F21V 29/80** (2015.01 - EP); **F21Y 2115/10** (2016.07 - EP US)

Citation (search report)

- [A] DE 102007024962 A1 20071206 - KOITO MFG CO LTD [JP]
- [A] EP 2039992 A1 20090325 - KOITO MFG CO LTD [JP]
- [A] DE 202004003793 U1 20040513 - HELLA KG HUECK & CO [DE]
- [A] US 2009059594 A1 20090305 - LIN MING-FENG [TW]

Cited by

CN103162207A; CN105371119A; CN111570774A; AT518543A4; AT518543B1; EP2730837A1; FR2998034A1

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 SM TR

Designated extension state (EPC)

AL BA ME RS

DOCDB simple family (publication)

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DOCDB simple family (application)

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