

Title (en)

Single-piece heat sink for optical modules of a lighting and/or signalling device for an automobile

Title (de)

Monoblock-Wärmeableiter für optische Module einer Beleuchtungs- und/oder Signalisierungsvorrichtung für Kraftfahrzeuge

Title (fr)

Dissipateur de chaleur monobloc pour modules optiques d'un dispositif d'éclairage et/ou de signalisation de véhicule automobile

Publication

**EP 2187121 B1 20141203 (FR)**

Application

**EP 09174857 A 20091103**

Priority

FR 0806325 A 20081112

Abstract (en)

[origin: EP2187121A1] The sink has fins (6,7) comprising bases (14) for carrying light sources (2) i.e. electroluminescent diodes, of optical modules (1), where the fins (7) are junction fins i.e. side fins, constituting a junction body between the bases. The light sources of the optical modules are associated to an optical system (4). The junction fins are oriented in orthogonal plane to an emergence direction (D) of the light out of the optical modules. Operation power of the light sources is higher than 2 watt.

IPC 8 full level

**F21V 29/00** (2006.01); **F21S 8/10** (2006.01); **F21W 101/10** (2006.01); **F21Y 101/02** (2006.01)

CPC (source: EP US)

**F21S 41/147** (2017.12 - EP US); **F21S 41/148** (2017.12 - EP US); **F21S 41/151** (2017.12 - EP US); **F21S 45/47** (2017.12 - EP US); **F21S 45/49** (2017.12 - EP); **F21V 29/763** (2015.01 - EP); **F21V 29/773** (2015.01 - EP); **F21W 2102/30** (2017.12 - EP); **F21Y 2115/10** (2016.07 - EP US)

Cited by

US2018142861A1; EP3809040A1; CN112241098A; EP2644990A3; FR3119665A1; FR3004787A1; CN105121945A; CN109812770A; CN114178812A; ITPI201110062A1; EP2533282A3; US10337690B2; US9194568B2; US9857047B2; WO2012126739A1; WO2013037408A1; WO2014170484A1; DE102016105530A1; US10317038B2; WO2016168165A1; US10830429B2; US11028999B2; US11781739B2

Designated contracting state (EPC)

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DOCDB simple family (publication)

**EP 2187121 A1 20100519**; **EP 2187121 B1 20141203**; FR 2938316 A1 20100514; FR 2938316 B1 20130913; JP 2010118344 A 20100527; JP 5596328 B2 20140924

DOCDB simple family (application)

**EP 09174857 A 20091103**; FR 0806325 A 20081112; JP 2009256837 A 20091110