

Title (en)

HEAT SINK HAVING VARIABLE THERMAL RESISTANCE

Title (de)

KÜHLKÖRPER MIT VARIABLEM THERMISCHEN WIDERSTAND

Title (fr)

DISSIPATEUR THERMIQUE À RÉSISTANCE THERMIQUE VARIABLE

Publication

EP 3542098 A1 20190925 (DE)

Application

EP 17794213 A 20171025

Priority

- AT 510432016 A 20161117
- AT 2017060287 W 20171025

Abstract (en)

[origin: WO2018090067A1] The invention relates to a motor vehicle headlight (100), comprising a headlight housing (102) and a cover plate (103) having at least one light source (104, 105) arranged in said motor vehicle headlight (100). In order to cool the at least one light source (104, 105), a heat sink device (200) is provided. Said heat sink device (200) comprises two heat sink elements (106, 107, 201, 202, 501, 502, 601, 602, 701, 702, 801, 802, 901, 902, 1001, 1002) that are separated from one another by an air gap (209) and that are arranged in such a way that a first heat sink element (106, 201, 501, 601, 701, 801, 901, 1001) is mounted inside the motor vehicle headlight (100), and a second heat sink element (107, 202, 502, 602, 702, 802, 902, 1002) is mounted outside the motor vehicle headlight (100). The heat sink device (200) is provided with a contacting device (210) that allows a heat exchange between the heat sink elements (106, 107, 201, 202, 501, 502, 601, 602, 701, 702, 801, 802, 901, 902, 1001, 1002) via said contacting device (210), whenever the temperature inside the motor vehicle headlight (100) is higher than the temperature in the area outside the motor vehicle headlight (100), and no heat exchange between the heat sink elements (106, 107, 201, 202, 501, 502, 601, 602, 701, 702, 801, 802, 901, 902, 1001, 1002) is possible whenever the temperature inside the motor vehicle headlight (100) is lower than the temperature in the area outside the motor vehicle headlight (100).

IPC 8 full level

F21S 45/48 (2018.01); **F21S 41/148** (2018.01)

CPC (source: AT EP KR US)

F21S 41/148 (2017.12 - KR); **F21S 41/28** (2017.12 - US); **F21S 41/657** (2017.12 - KR); **F21S 45/48** (2017.12 - EP KR US);
F28F 13/00 (2013.01 - EP KR); **F21S 41/148** (2017.12 - EP US); **F21S 41/657** (2017.12 - EP); **F28F 13/00** (2013.01 - AT);
F28F 2013/008 (2013.01 - EP KR US)

Citation (search report)

See references of WO 2018090067A1

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)

WO 2018090067 A1 20180524; AT 518977 A4 20180315; AT 518977 B1 20180315; CN 109964079 A 20190702; CN 109964079 B 20220111;
EP 3542098 A1 20190925; EP 3542098 B1 20211215; JP 2019536229 A 20191212; JP 6893982 B2 20210623; KR 102200885 B1 20210112;
KR 20190080913 A 20190708; US 10605429 B2 20200331; US 2020072435 A1 20200305

DOCDB simple family (application)

AT 2017060287 W 20171025; AT 510432016 A 20161117; CN 201780071188 A 20171025; EP 17794213 A 20171025;
JP 2019526290 A 20171025; KR 20197015600 A 20171025; US 201716461319 A 20171025