

Title (en)

HEAT TRANSFER SYSTEM FOR A LIGHTING MODULE OF A MOTOR VEHICLE

Title (de)

WÄRMEÜBERTRAGUNGSSYSTEM FÜR EIN BELEUCHTUNGSMODUL EINES KRAFTFAHRZEUGS

Title (fr)

SYSTÈME DE TRANSFERT DE CHALEUR POUR UN MODULE D'ÉCLAIRAGE D'UN VÉHICULE À MOTEUR

Publication

EP 3671024 A1 20200624 (EN)

Application

EP 18382989 A 20181221

Priority

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Abstract (en)

The present invention relates to a lighting module for an automotive vehicle. The lighting module comprises a light source (10) for producing a light beam. Additionally, the lighting module includes a heat exchange system (100) for transferring heat away from the light source (10). The heat exchange system (100) is provided with a heat sink plate (11) and a plurality of heat transfer airfoils. The plurality of heat transfer airfoils forms two parts with: a plurality of non-anodized heat transfer airfoils (14) and a pair of anodized heat transfer airfoils (12). The airfoils are provided such that the pair of anodized heat transfer airfoils (12) is at peripheral portion encompassing the plurality of non-anodized airfoils (14) of the heat exchange system (100). The plurality of non-anodized airfoils (14) and pair of anodized heat transfer airfoils (12) are thermally connected to the heat sink plate (11) and transfer the heat away from the system.

IPC 8 full level

F21S 45/47 (2018.01)

CPC (source: EP)

F21S 45/47 (2017.12)

Citation (applicant)

- KR 20160000832 U 20160310
- US 2008175008 A1 20080724 - HU TSENG-HSIANG [TW], et al

Citation (search report)

- [A] EP 2762771 A2 20140806 - LG INNOTEK CO LTD [KR]
- [A] US 2011068687 A1 20110324 - TAKAHASI KENZI [JP], et al
- [A] EP 3168526 A1 20170517 - TOYOTA MOTOR CO LTD [JP], et al
- [A] US 2016084460 A1 20160324 - KOLSTEE TODD [US], et al

Designated contracting state (EPC)

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