

Title (en)

DMD LIGHTING MODULE HAVING A DMD CHIP HELD IN A CLAMPING MANNER

Title (de)

DMD-LICHTMODUL MIT EINEM KLEMMEND GEHALTENEN DMD-CHIP

Title (fr)

MODULE D'ÉCLAIRAGE DMD MUNI D'UNE PUCE DMD MAINTENUE PAR SERRAGE

Publication

EP 3788297 A1 20210310 (DE)

Application

EP 19723707 A 20190502

Priority

- DE 102018110587 A 20180503
- EP 2019061194 W 20190502

Abstract (en)

[origin: WO2019211356A1] The invention relates to a lighting module (16; 160) for a motor vehicle headlamp (10), having a printed circuit board (26) which bears a DMD chip (22) that has a front side (224) bearing micromirrors (222) and a rear side, and having a central carrier element (28) and a cooling element assembly 30. The lighting module (16; 160) is distinguished in that: the central carrier element (28) has a carrier element window (286); the printed circuit board (26) is arranged such that the front side (224) of the DMD chip (22) covers the carrier element window (286), wherein the micromirrors (222) are arranged to be visible through an opening in the carrier element window (286); the printed circuit board (26) has a printed circuit board window (264); and the cooling element assembly (30) has a cooling stamp (302) which is supported in a spring-loaded manner through the printed circuit board window (264) on the rear side (226) of the DMD chip (22).

IPC 8 full level

F21S 41/39 (2018.01); **F21S 45/47** (2018.01); **F21S 45/49** (2018.01)

CPC (source: EP)

F21S 41/39 (2018.01); **F21S 45/47** (2018.01); **F21S 45/49** (2018.01)

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 2019211356 A1 20191107; CN 112752923 A 20210504; CN 112752923 B 20221202; DE 102018110587 A1 20191107;
EP 3788297 A1 20210310; EP 3788297 B1 20240320

DOCDB simple family (application)

EP 2019061194 W 20190502; CN 201980029094 A 20190502; DE 102018110587 A 20180503; EP 19723707 A 20190502