

Title (en)

Lighting module for headlights of an automobile

Title (de)

Beleuchtungsmodul für Kraftfahrzeugscheinwerfer

Title (fr)

Module d'éclairage pour projecteur de véhicule automobile

Publication

EP 2390562 A2 20111130 (FR)

Application

EP 11168091 A 20110530

Priority

FR 1002279 A 20100531

Abstract (en)

The module (M) has a reflector (R1) creating spot light via deflection of rays emitted by a photoemissive emitter (1). A lens (L) is arranged such that a profile of the lens is identical to that of a stigmatic reference lens in an intersection point of a control curve (A) with an orthogonal plane, and infinity in a direction through the intersection of the orthogonal plane and a plane of the curve, where the material of the lenses have same refractive index. The reflector and the lens are arranged to form cutoff beam after refraction of the rays deflected by the reflector via the lens.

Abstract (fr)

Module d'éclairage comprenant : - un émetteur (1) de lumière plan, - un réflecteur (R1) déterminé de manière à créer dans un plan comprenant l'émetteur (1), une tache lumineuse (S) limitée par une courbe de contrôle (A) contenue dans le plan comprenant le premier émetteur et constituant le bord avant ou arrière de la tache ; - une lentille (L) déterminée et agencée avec le réflecteur de manière à former le premier faisceau à coupure.

IPC 8 full level

F21S 8/12 (2006.01); **F21S 8/10** (2006.01); **F21V 5/00** (2006.01); **F21V 7/00** (2006.01); **F21V 7/04** (2006.01)

CPC (source: EP US)

F21S 41/148 (2017.12 - EP US); **F21S 41/155** (2017.12 - US); **F21S 41/26** (2017.12 - EP US); **F21S 41/32** (2017.12 - EP US); **F21S 41/36** (2017.12 - EP US); **F21S 41/663** (2017.12 - EP US); **F21V 7/04** (2013.01 - EP US); **F21S 41/365** (2017.12 - EP US)

Citation (applicant)

- FR 2860280 A1 20050401 - KOITO MFG CO LTD [JP]
- US 7387416 B2 20080617 - TSUKAMOTO MICHIO [JP], et al

Cited by

WO2018114506A1; EP3527875A1; CN110073141A; FR3134871A1; EP2607778A1; FR2984456A1; EP3517830A1; FR3077365A1; WO2019158319A1; US11137126B2; WO2023203095A1

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)

EP 2390562 A2 20111130; **EP 2390562 A3 20141203**; **EP 2390562 B1 20210818**; FR 2960497 A1 20111202; FR 2960497 B1 20120713; JP 2011253814 A 20111215; JP 6062619 B2 20170118; US 2011292669 A1 20111201; US 8651716 B2 20140218

DOCDB simple family (application)

EP 11168091 A 20110530; FR 1002279 A 20100531; JP 2011122952 A 20110531; US 201113117591 A 20110527