

Title (en)
Projector with aerated shield

Title (de)
Scheinwerfer mit belüftetem Schirm

Title (fr)
Projecteur à occulteur aéré

Publication
EP 1031787 A1 20000830 (FR)

Application
EP 00400122 A 20000118

Priority
FR 9902344 A 19990225

Abstract (en)
In one form, the mask is in two parts. The front section (400) is a generally cylindrical hood, coaxially located on the optical axis (X) of a discharge lamp (150,152), and composed of a set of annular plates (420), mounted on 4 support bars (429) with separations (425) equal to their thicknesses, and a blind front end-plate. The cylindrical interior cavity admits the front skirt (310) of the mask's rear section (300) as far as an intermediate ring (427) of reduced internal diameter, where a spring washer (500) is interposed, allowing the two sections (300,400) to be assembled by bayonet action, pegs inside the cavity engaging cutouts (320,325) in the skirt. When thus assembled and passed over the lamp, the centre of emission (155) of the latter falls within the skirt rear, whose shape, in conjunction with the reflector's configuration, determines the light distribution. Forward emissions into the hood strike the interior edges of the component plates at an oblique angle and emerge from the interstices only after repeated reflections and attenuations. Several variants are described, including some with plates fixed in planes parallel to the optical axis.

Abstract (fr)
L'invention concerne un projecteur de véhicule automobile comportant une source lumineuse (150), un réflecteur (100) et un occulteur (300,400), caractérisé en ce que l'occulteur (300,400) comporte une série d'éléments (420) formant respectivement deux à deux des faces en vis à vis de manière à former entre elles des passages (425) à travers l'occulteur (300,400), ces passages (425) s'étendant selon des directions passant à distance de la source lumineuse. <IMAGE>

IPC 1-7
F21V 29/00; F21V 11/02

IPC 8 full level
F21S 8/10 (2006.01); **F21V 11/16** (2006.01); **F21V 15/06** (2006.01); **F21V 29/15** (2015.01)

CPC (source: EP US)
F21S 41/435 (2017.12 - EP US); **F21S 45/47** (2017.12 - EP US)

Citation (applicant)
FR 9602387 A 19960227

Citation (search report)
• [A] DE 29809619 U1 19980730 - HELLA KG HUECK & CO [DE]
• [A] US 1864418 A 19320621 - EHLERS GEORGE R
• [A] FR 2500116 A1 19820820 - SEIMA [FR]
• [A] GB 2308647 A 19970702 - KOITO MFG CO LTD [JP]

Cited by
EP1681510A1; FR2880940A1; DE10359181A1; DE10359181B4; DE102013004356A1

Designated contracting state (EPC)
DE ES GB IT

DOCDB simple family (publication)
EP 1031787 A1 20000830; FR 2790308 A1 20000901; FR 2790308 B1 20010518; JP 2000251507 A 20000914; US 2002191410 A1 20021219; US 6435704 B1 20020820; US 6619828 B2 20030916

DOCDB simple family (application)
EP 00400122 A 20000118; FR 9902344 A 19990225; JP 2000047239 A 20000224; US 13959002 A 20020502; US 51356000 A 20000225