

Title (en)
FRONT-LIGHTING SYSTEM FOR VEHICLE HEADLAMP

Title (de)
FRONTBELEUCHTUNGSSYSTEM FÜR KFZ-SCHWEINWERFER

Title (fr)
SYSTÈME D'ÉCLAIRAGE AVANT POUR PHARE DE VÉHICULE

Publication
EP 3848626 B1 20230308 (EN)

Application
EP 20150752 A 20200108

Priority
EP 20150752 A 20200108

Abstract (en)
[origin: EP3848626A1] The present invention relates to the field of automotive front-lighting, and particularly to a front-lighting system for a vehicle. The front-lighting system comprises a light source (10) and an integrated lens (20). The integrated lens (20) comprises a light entrance surface (21, 21'), a light exit surface (23, 23'), and a light guiding portion (22) sandwiched between the light entrance surface (21, 21') and the light exit surface (23, 23'). The light source (10) is configured to emit a first light beam and a second light beam onto the light entrance surface (21, 21'). The light guiding portion (22) is configured to receive the first light beam and the second light beam from the light entrance surface (21, 21'), and guide them towards the light exit surface (23, 23'), where the first light beam and the second light beam are both redirected out from the integrated lens (20). The light guiding portion (22) comprises at least a first notch (221) and a second notch (222) opposite to the first notch (221), wherein, while being guided, the first light beam undergoes an at least partial reflection successively by the first notch (221) and the second notch (222), and the second light beam undergoes a refraction by the second notch (222).

IPC 8 full level
F21S 41/143 (2018.01); **F21S 41/151** (2018.01); **F21S 41/20** (2018.01); **F21S 41/24** (2018.01); **F21S 41/25** (2018.01); **F21S 41/265** (2018.01); **F21S 41/27** (2018.01); **F21S 41/32** (2018.01); **F21S 41/365** (2018.01); **F21S 41/663** (2018.01)

CPC (source: EP)
F21S 41/143 (2017.12); **F21S 41/151** (2017.12); **F21S 41/27** (2017.12); **F21S 41/322** (2017.12); **F21S 41/365** (2017.12); **F21S 41/663** (2017.12); **F21S 41/25** (2017.12)

Cited by
FR3144252A1; FR3144249A1; WO2023164023A1; WO2024133408A1; WO2024133261A1

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

DOCDB simple family (publication)
EP 3848626 A1 20210714; EP 3848626 B1 20230308

DOCDB simple family (application)
EP 20150752 A 20200108