

Title (en)  
OPTICAL LENS FOR A VEHICLE LAMP AND OPTICAL LENS ASSEMBLY HAVING THE SAME

Title (de)  
OPTISCHE LINSE FÜR EIN FAHRZEUG UND OPTISCHE LINSENANORDNUNG DAMIT

Title (fr)  
LENTILLE OPTIQUE POUR UN VEHICULE ET ENSEMBLE LENTILLE OPTIQUE LA COMPRENANT

Publication  
**EP 4386256 A1 20240619 (EN)**

Application  
**EP 22213229 A 20221213**

Priority  
EP 22213229 A 20221213

Abstract (en)  
An optical lens (3) includes a front lens part (31) and a rear lens part (32) disposed rearward of the front lens portion (31). The rear lens part (32) has a rear end (33), a light entry portion (34) concaved from the rear end (33), and a reflective portion (35) extending from the rear end (33) and surrounding the light entry portion (34). The reflective portion (35) has two first reflective surfaces (351) disposed on the light entry portion (34), two second reflective surfaces (352) disposed at the light entry portion (34), and third reflective surfaces (353) each disposed between one of the first reflective surfaces (351) and one of the second reflective surfaces (352). The first, second, and third reflective surfaces (351, 352, 353) together form a discontinuous stepped surface around the light entry portion (34).

IPC 8 full level  
**F21S 41/143** (2018.01); **F21S 41/20** (2018.01); **F21S 41/26** (2018.01); **F21S 41/265** (2018.01); **F21S 41/27** (2018.01); **F21S 41/32** (2018.01)

CPC (source: EP)  
**F21S 41/143** (2018.01); **F21S 41/265** (2018.01); **F21S 41/27** (2018.01); **F21S 41/322** (2018.01)

Citation (applicant)  
• TW I697642 B 20200701 - T Y C BROTHER INDUSTRIAL CO LTD [TW]  
• US 10781998 B1 20200922 - SHIH MING-CHIH [TW]

Citation (search report)  
• [XYI] EP 2713095 A2 20140402 - CORETRONIC CORP [TW]  
• [XYI] DE 19728354 A1 19990107 - SIDLER GMBH & CO [DE]  
• [XYI] DE 102015119718 A1 20160525 - FORD GLOBAL TECH LLC [US]  
• [XYI] EP 2543926 A2 20130109 - AUTOMOTIVE LIGHTING REUTLINGEN [DE]  
• [XYI] US 2010177526 A1 20100715 - FUTAMI TAKASHI [JP]  
• [Y] EP 3839593 A1 20210623 - TYC BROTHER IND CO LTD [TW]  
• [A] EP 3540295 A1 20190918 - TYC BROTHER IND CO LTD [TW]  
• [A] WO 2020064978 A1 20200402 - VALEO VISION [FR]

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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA

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