

Title (en)  
OPTICAL ELEMENT FOR MODIFYING THE DISTRIBUTION OF A LIGHT BEAM, FOR A MOTOR VEHICLE HEADLIGHT

Title (de)  
OPTISCHES ELEMENT ZUR MODIFIZIERUNG DER VERTEILUNG EINES LICHTSTRAHLS FÜR EINEN KRAFTFAHRZEUGSCHEINWERFER

Title (fr)  
ÉLÉMENT OPTIQUE DESTINÉ À MODIFIER LA RÉPARTITION D'UN FAISCEAU LUMINEUX, POUR PROJECTEUR DE VÉHICULE AUTOMOBILE

Publication  
**EP 3814679 A1 20210505 (FR)**

Application  
**EP 19742884 A 20190705**

Priority  
• FR 1856230 A 20180706  
• FR 2019051668 W 20190705

Abstract (en)  
[origin: WO2020008154A1] The invention relates to an optical element (1) comprising a resin body (2) having a functional surface (3) covered with a reflective coating capable of reflecting light beams, the reflective coating comprising a copper layer covering at least the functional surface (3), a nickel layer covering the copper layer and a chromium layer covering the nickel layer.

IPC 8 full level  
**F21S 41/37** (2018.01); **C25D 7/08** (2006.01); **G02B 5/08** (2006.01); **G02B 7/18** (2021.01)

CPC (source: EP KR US)  
**C25D 5/14** (2013.01 - EP KR US); **C25D 5/627** (2020.08 - EP KR US); **C25D 7/08** (2013.01 - EP KR US); **F21S 41/148** (2018.01 - KR); **F21S 41/255** (2018.01 - KR); **F21S 41/321** (2018.01 - KR); **F21S 41/322** (2018.01 - KR); **F21S 41/37** (2018.01 - US); **F21S 41/43** (2018.01 - KR); **F21S 41/675** (2018.01 - US); **F21V 7/28** (2018.02 - US); **G02B 5/0875** (2013.01 - EP KR US); **G02B 7/181** (2013.01 - EP KR); **F21S 41/148** (2018.01 - EP); **F21S 41/255** (2018.01 - EP); **F21S 41/321** (2018.01 - EP); **F21S 41/322** (2018.01 - EP); **F21S 41/43** (2018.01 - EP)

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 2020008154 A1 20200109**; CN 112424527 A 20210226; EP 3814679 A1 20210505; FR 3083624 A1 20200110; FR 3083624 B1 20210212; JP 2021530093 A 20211104; JP 7397866 B2 20231213; KR 20210027464 A 20210310; US 11487052 B2 20221101; US 2021285615 A1 20210916

DOCDB simple family (application)  
**FR 2019051668 W 20190705**; CN 201980045112 A 20190705; EP 19742884 A 20190705; FR 1856230 A 20180706; JP 2021522153 A 20190705; KR 20217003460 A 20190705; US 201917258044 A 20190705