

Title (en)

Motor vehicle headlamp projector having a mirror and a conjugated deflection element, and a method of manufacturing the same

Title (de)

Kraftfahrzeugprojektor mit Spiegel und konjugiertem Umlenkelement und Verfahren zur Herstellung desselben

Title (fr)

Projecteur de véhicule automobile à miroir et élément de déviation conjugués, et procédé de fabrication de ceux-ci

Publication

EP 1243846 B1 20091118 (FR)

Application

EP 02290714 A 20020321

Priority

FR 0103906 A 20010321

Abstract (en)

[origin: EP1243846A1] The headlamp has an incandescent or discharge light source (10) at the focal point of a mirror (20) shaped to a particular profile ($y=f_{20}(x)$). The reflected light is directed to a lens (30) which has a profiled ($y=f_{30}(x)$) inner surface (31) and a flat outer surface (32). The mirror produces a cut in upper illumination and the lens gives horizontal spreading. It is proposed that the lens should be circular in appearance. Independent claims are also included for the following: Use of headlight adjacent to elliptic type headlight. Method for manufacturing mirror and lens

IPC 8 full level

F21S 8/12 (2006.01); **F21V 7/00** (2006.01); **F21V 5/00** (2006.01); **F21V 7/04** (2006.01); **F21V 13/00** (2006.01); **F21V 13/04** (2006.01); **F21W 101/10** (2006.01); **F21Y 101/00** (2016.01)

CPC (source: EP US)

F21S 41/28 (2017.12 - EP US); **F21V 7/04** (2013.01 - EP US); **F21V 13/04** (2013.01 - EP US)

Citation (examination)

- FR 2763666 A1 19981127 - VALEO VISION [FR]
- US 5440456 A 19950808 - BERTLING JOHANNES [DE], et al
- US 5204820 A 19930420 - STROBEL JOSEPH R [DE], et al
- DONOHUE R.J. ET AL: "Computer synthesized filament images from reflectors and through lens element for lamp design and evaluation", APPLIED OPTICS, vol. 14, no. 10, October 1975 (1975-10-01), pages 2384 - 2390, XP007901136

Cited by

FR2856773A1; EP1491816A1; EP2009347A1; FR2866411A1; FR2890721A1; EP1762776A1; EP2169297A1; US7503679B2; EP1832805A1; FR2898402A1; EP1400748A1; FR2844867A1; EP1715246A1; FR2884898A1; US7980742B2; EP2019256A1; US7121705B2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

EP 1243846 A1 20020925; **EP 1243846 B1 20091118**; AT E449284 T1 20091215; DE 60234399 D1 20091231; ES 2334108 T3 20100305; FR 2822550 A1 20020927; FR 2822550 B1 20030516; JP 2002298623 A 20021011; US 2002186570 A1 20021212; US 7524095 B2 20090428

DOCDB simple family (application)

EP 02290714 A 20020321; AT 02290714 T 20020321; DE 60234399 T 20020321; ES 02290714 T 20020321; FR 0103906 A 20010321; JP 2002080463 A 20020322; US 10363102 A 20020320