

Title (en)  
Vehicle headlamp

Title (de)  
Scheinwerfer für ein Fahrzeug

Title (fr)  
Projecteur pour véhicules

Publication  
**EP 1459934 A3 20080220 (DE)**

Application  
**EP 04004763 A 20040302**

Priority  
DE 10311853 A 20030317

Abstract (en)  
[origin: EP1459934A2] The headlamp (1) for a vehicle comprises a semiconductor light source (4) which radiates infrared light, and is provided with a thermally joined cooling element (5) extending from the light source into or through the transparent lamp cover (3).

IPC 8 full level  
**B60Q 1/04** (2006.01); **F21S 8/10** (2006.01); **F21V 29/00** (2006.01); **F21W 101/10** (2006.01)

CPC (source: EP US)  
**F21S 41/13** (2017.12 - EP US); **F21S 45/10** (2017.12 - EP US); **F21S 45/48** (2017.12 - EP US); **F21V 29/773** (2015.01 - EP US); **F21V 29/80** (2015.01 - EP US); **F21S 45/33** (2017.12 - US); **F21S 45/43** (2017.12 - EP US); **F21V 7/0008** (2013.01 - EP US); **F21Y 2115/10** (2016.07 - EP US); **Y10S 362/80** (2013.01 - EP US)

Citation (search report)

- [A] EP 0416253 A2 19910313 - INOTEC GMBH GES FUER INNOVATIV [DE]
- [A] US 5174646 A 19921229 - SIMINOVITCH MICHAEL J [US], et al
- [A] US 1950918 A 19340313 - FORBES ROBERT A
- [A] DE 20002565 U1 20010628 - ZUMTOBEL STAFF GMBH [AT]
- [A] DE 29910417 U1 19990812 - SIDLER GMBH & CO [DE]

Cited by  
DE102006034353B4; DE102007016442A1; DE102008003915A1; DE102017209003A1; DE102007016439A1; DE102007016439B4; DE102006059904A1; DE102011119379A1; DE102006059904B4; EP2722579A1; DE102012219162A1; US10125943B2; US9611994B2; WO2013134804A1; US11603976B2

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL LT LV MK

DOCDB simple family (publication)  
**EP 1459934 A2 20040922; EP 1459934 A3 20080220**; DE 10311853 A1 20041007; DE 10311853 B4 20050324; JP 2004281407 A 20041007; JP 3859159 B2 20061220; US 2004202005 A1 20041014; US 7281823 B2 20071016

DOCDB simple family (application)  
**EP 04004763 A 20040302**; DE 10311853 A 20030317; JP 2004075861 A 20040317; US 80134904 A 20040316