

Title (en)
Vehicular headlamp comprising a projection lens

Title (de)
Fahrzeugscheinwerfer mit einer Projektionslinse

Title (fr)
Phare de véhicule comprenant une lentille de projection

Publication
EP 2719941 A1 20140416 (EN)

Application
EP 13188294 A 20131011

Priority
JP 2012226737 A 20121012

Abstract (en)
A vehicular headlamp (1) includes a semiconductor light emitting element (15), and a projection lens (12) having an irradiation surface, configured to project light emitted from the semiconductor light emitting element (15) to the outside from the irradiation surface. Both an upper portion and lower portion of the irradiation surface of the projection lens (12) serve as a control surface configured to emit the light emitted from a focal point (F) upwards relative to a parallel light.

IPC 8 full level
F21S 8/10 (2006.01); **G02B 3/04** (2006.01); **F21W 107/10** (2018.01)

CPC (source: EP US)
F21S 41/143 (2017.12 - EP US); **F21S 41/151** (2017.12 - EP US); **F21S 41/255** (2017.12 - EP); **F21S 41/321** (2017.12 - EP); **F21S 41/663** (2017.12 - EP US); **F21Y 2103/10** (2016.07 - EP US); **F21Y 2115/10** (2016.07 - EP US)

Citation (applicant)
JP 2007213877 A 20070823 - KOITO MFG CO LTD

Citation (search report)
• [Y] JP 2011249056 A 20111208 - STANLEY ELECTRIC CO LTD
• [Y] JP 2007294202 A 20071108 - KOITO MFG CO LTD
• [I] FR 2603363 A1 19880304 - KOITO MFG CO LTD [JP]
• [Y] EP 2500628 A2 20120919 - STANLEY ELECTRIC CO LTD [JP]
• [A] EP 2101105 A1 20090916 - VALEO VISION [FR]
• [A] EP 2357399 A1 20110817 - KOITO MFG CO LTD [JP]
• [A] DE 102011109434 A1 20120606 - DAIMLER AG [DE]

Cited by
EP3306180A4; US2018106444A1; US10697603B2

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Designated extension state (EPC)
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DOCDB simple family (publication)
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DOCDB simple family (application)
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