

Title (en)

Front headlamp with a cooler device

Title (de)

Frontscheinwerfer mit einer Kühleinrichtung

Title (fr)

Phare avant doté d'un dispositif de refroidissement

Publication

EP 2278218 A3 20120523 (DE)

Application

EP 10002906 A 20100319

Priority

DE 102009033909 A 20090720

Abstract (en)

[origin: EP2278218A2] The headlight has a cooling device (50) comprising a thermal cooling element coupled with a heat source (20). A blower generates cooling airflow (40). The cooling element and a blower housing form one-piece structural cooling element-blower housing-units (52). The blower is formed as a radial blower or a diagonal blower with a blower wheel (60) that is rotatable in the blower housing. The cooling element-blower housing-units are formed as stators. The heat source is arranged on an outer wall of the cooling element-blower housing-units.

IPC 8 full level

F21V 29/02 (2006.01); **F21S 8/12** (2006.01)

CPC (source: EP US)

F21S 45/33 (2017.12 - EP US); **F21S 45/43** (2017.12 - EP US); **F21V 29/677** (2015.01 - US); **F21V 29/70** (2015.01 - US); **F21S 41/141** (2017.12 - EP US); **F21W 2102/20** (2017.12 - EP)

Citation (search report)

- [A] DE 102006037481 A1 20080221 - PORSCHE AG [DE], et al
- [A] DE 102007043961 A1 20090319 - AUTOMOTIVE LIGHTING REUTLINGEN [DE]
- [A] EP 2039992 A1 20090325 - KOITO MFG CO LTD [JP]

Cited by

CN107654959A; CN107631263A; EP2597358A3; FR3043171A1; CN102252301A; EP2597356A3

Designated contracting state (EPC)

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 SE SI SK SM TR

Designated extension state (EPC)

AL BA ME RS

DOCDB simple family (publication)

EP 2278218 A2 20110126; **EP 2278218 A3 20120523**; **EP 2278218 B1 20150218**; CN 101956965 A 20110126; CN 101956965 B 20131225; DE 102009033909 A1 20110127

DOCDB simple family (application)

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