

Title (en)

Vehicle's headlamp with a multifunctional actuating unit

Title (de)

Kraftfahrzeugscheinwerfer mit einer multifunktionalen Antrieb-Einheit

Title (fr)

Dispositif projecteur avec bloc actionneur multifonctions pour véhicule automobile

Publication

EP 1591313 B2 20120613 (FR)

Application

EP 05290872 A 20050419

Priority

FR 0404473 A 20040427

Abstract (en)

[origin: EP1591313A1] The device has a case (119) movable in rotation with respect to a fixed frame (120) along an axis approximately vertical and perpendicular to an optical axis, by a stepper motor (112). The case has two compartments (121, 122) to receive and maintain a DC motor (110) and the stepper motor of an actuator block, respectively. The case has two maintenance units to position and maintain a rod forming support of a pivoting shutter. The actuator block has two actuators having respective motors. An independent claim is also included for a motor vehicle equipped with a headlight device.

IPC 8 full level

B60Q 1/14 (2006.01); **B60Q 1/12** (2006.01); **F21V 14/08** (2006.01); **F21W 107/10** (2018.01)

CPC (source: EP US)

F21S 41/689 (2017.12 - EP US)

Citation (opposition)

Opponent :

- DE 10123618 A1 20011206 - KOITO MFG CO LTD [JP]
- DE 10210874 A1 20030925 - AUTOMOTIVE LIGHTING REUTLINGEN [DE]
- DE 19856716 C1 20000413 - HELLA KG HUECK & CO [DE]
- DE 4311669 A1 19941013 - BOSCH GMBH ROBERT [DE]
- DE 10021040 A1 20011031 - HELLA KG HUECK & CO [DE]
- US 6550944 B2 20030422 - KUSAGAYA MASAHIRO [JP]
- US 6568837 B2 20030527 - DENLEY RONALD S [US]
- DE 3743137 A1 19880630 - KOITO MFG CO LTD [JP]
- DE 4335286 A1 19940428 - KOITO MFG CO LTD [JP]
- DE 4017856 A1 19911205 - BAYERISCHE MOTOREN WERKE AG [DE]
- DE 19950189 A1 20010531 - BUHLER MOTOR GMBH [DE]
- DE 10122800 A1 20021114 - HELLA KG HUECK & CO [DE]

Cited by

EP1920972A3; DE102007008646B4; EP1854665A1; EP2597358A3; DE102007008646A1; DE102007050348A1; US7690825B2; EP1920972A2; EP2374659A2; US8770811B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1591313 A1 20051102; EP 1591313 B1 20061115; EP 1591313 B2 20120613; AT E345236 T1 20061215; CN 1689868 A 20051102; CN 1689868 B 20110209; DE 602005000253 D1 20061228; DE 602005000253 T2 20070614; DE 602005000253 T3 20121011; ES 2275262 T3 20070601; ES 2275262 T5 20120821; FR 2869388 A1 20051028; FR 2869388 B1 20060901; PL 1591313 T3 20070430; PL 1591313 T5 20121130; US 2005237759 A1 20051027; US 7452116 B2 20081118

DOCDB simple family (application)

EP 05290872 A 20050419; AT 05290872 T 20050419; CN 200510078323 A 20050427; DE 602005000253 T 20050419; ES 05290872 T 20050419; FR 0404473 A 20040427; PL 05290872 T 20050419; US 11484505 A 20050426