

Title (en)

Vehicle's headlamp with a multifunctional actuating unit

Title (de)

Kraftfahrzeugscheinwerfer mit einer mehrfunktionalen 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

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DOCDB simple family (publication)

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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