

Title (en)

An improved optical package and a torch having the optical package

Title (de)

Verbessertes optisches Paket und Stablampe mit dem optischen Paket

Title (fr)

Unité optique améliorée et torche dotée d'une telle unité

Publication

EP 2573452 B1 20161228 (EN)

Application

EP 12156444 A 20120222

Priority

CN 201120364535 U 20110926

Abstract (en)

[origin: EP2573452A2] An improved optical package is disclosed which includes a light source (2), an installation socket (1), a mirror (3) and a convex lens (4), wherein at least one part of the projection of the reflection surface of the mirror (3) on its axial section is in a parabolic shape, and the axes of the mirror (3) and the convex lens (4) share the same line. The installation socket (1) can move along the axial direction of the convex lens (4) and an installation depression (11) is set at the front end of the installation socket (1), wherein the light source (2) is configured in the installation depression (11), the emitting point of the light source (2) is on the axis of the convex lens (4) and the circumference of the installation depression (11) is formed to be a reflection surface capable of reflecting the light emitting from the bottom of the light source (2). Also disclosed is a torch applying the optical package above. The optical package effectively reduces light loss and can realize long-distance illumination. Moreover, a torch installed with the disclosed optical package can realize rapid shadow conversion and avoid moving the originally-set best luminous efficiency position due to extrusion of external forces effectively.

IPC 8 full level

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CPC (source: EP US)

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Citation (examination)

- WO 0214738 A1 20020221 - BRINKMANN CORP [US]
- GB 2346207 A 20000802 - KOITO MFG CO LTD [JP]
- EP 2290421 A1 20110302 - PHOENIX ELECTRIC CO LTD [JP]

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