

Title (en)

Light module being capable of adjusting angle of illumination and utilizing phase-change thermal dissipation

Title (de)

Lichtmodul mit Fähigkeit zur Einstellung der Beleuchtungswinkels und zur Verwendung von Phasenwechsel-Wärmeableitung

Title (fr)

Module lumineux capable d'ajuster l'angle d'éclairage et d'utiliser la dissipation thermique à changement de phase

Publication

EP 2933549 B1 20161026 (EN)

Application

EP 14173106 A 20140619

Priority

TW 103206616 U 20140416

Abstract (en)

[origin: CN203823514U] A phase change light source module capable of changing angle comprises a luminous part and a heat dissipating part, wherein one side of the heat dissipating part is in thermocontact with the luminous part; the heat dissipating part is provided with a first cavity, a second cavity and two flexible flow tubes; the flexible flow tubes are connected between the first cavity and the second cavity in a flexible manner; the distance between the second cavity and the luminous part is greater than that of the first cavity and the luminous part; the first cavity is filled with a working solution. The working solution is vaporized from a liquid state into a gas state when absorbing heat emitted from the luminous part, and then the vaporized gaseous working solution flows into the second cavity through one of the two flexible flow tubes; the working solution in the second cavity is condensed from the gas state into the liquid state, and then the condensed liquid working solution flows back into the first cavity through the other flexible flow tube. Therefore, the phase change light source module has a good heat dissipation effect, and enlarges the irradiation area of the luminous part.

IPC 8 full level

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CPC (source: EP US)

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DOCDB simple family (publication)

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DOCDB simple family (application)

DE 202015100296 U 20150122; CN 201420191627 U 20140418; EP 14173106 A 20140619; ES 14173106 T 20140619; PT 14173106 T 20140619; TW 103206616 U 20140416