

Title (en)
ILLUMINATING LAMP

Title (de)
BELEUCHTUNGSLAMPE

Title (fr)
LAMPE D'ÉCLAIRAGE

Publication
EP 2251594 A4 20120718 (EN)

Application
EP 09718275 A 20090220

Priority

- JP 2009000729 W 20090220
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- JP 2008327767 A 20081224

Abstract (en)
[origin: EP2251594A1] Thermal energy generated by a plurality of light emitting diodes is efficiently diffused to the outside. An illuminating lamp is provided with an attaching substrate (4) whereupon a protection cover (3), which has a plurality of planarly fixed projectors (2) each having a light emitting diode as a light source and transmits light, is fixed on one plate face (4a) so as to cover the projectors; a plurality of board-like cooling fins (5) which protrude from the other plate face (4b) of the attaching substrate and are fixed so as to dissipate heat generated by the projector; and a housing (6) which has a storing concave part (6a) and has the attaching substrate fixed thereon. The attaching substrate is formed such that a space (S) for taking the external air is formed between the attaching substrate and the inner circumferential wall (6d) of the housing. The board-like cooling fins protrude above the space so as to be cooled by the external air taken from the space. The housing is provided with a plurality of slits (63) which discharge the external air, which is taken from the space and warmed by heat discharged from the board-like cooling fins, to the external.

IPC 8 full level
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Citation (search report)

- [X] JP 2006294526 A 20061026 - ENEGATE KK
- [X] US 2006193139 A1 20060831 - SUN TSUNG-TING [TW], et al
- [A] US 2007230186 A1 20071004 - CHIEN CHEN-CHUN [TW]
- See also references of WO 2009110181A1

Cited by
EP2644990A3; US9194568B2

Designated contracting state (EPC)
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