

Title (en)  
Lighting unit, LED module and method

Title (de)  
Beleuchtungseinheit, LED- Modul und Verfahren

Title (fr)  
Unité d'éclairage, module DEL et procédé

Publication  
**EP 2143989 B1 20110518 (DE)**

Application  
**EP 09165351 A 20090713**

Priority  
DE 202008009589 U 20080711

Abstract (en)  
[origin: EP2143989A1] The unit has an LED module (4) arranged at an outer side of a housing. A printed circuit board (1) with a printed circuit board carrier is provided for supplying current to the LED module. A head element (12) e.g. casing element, and another head element are connected with contact elements (15) by an opening (11) of the housing, where the head elements manufacture connections for the LED module at a front side of the housing. The head element exhibits a head with a lower side that lies at a front side of the carrier of the LED module.

IPC 8 full level  
**F21S 4/00** (2006.01); **F21V 21/35** (2006.01)

CPC (source: EP US)  
**F21S 4/28** (2016.01 - EP); **F21V 19/0055** (2013.01 - EP); **F21V 23/06** (2013.01 - EP US); **F21K 9/00** (2013.01 - EP US); **F21Y 2115/10** (2016.07 - EP US)

Cited by  
EP3348896A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

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**EP 2143989 A1 20100113; EP 2143989 B1 20110518**; AT E510166 T1 20110615; DE 202008009589 U1 20090813

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