

Title (en)
LED light with cooling element

Title (de)
LED-Leuchte mit Kühlkörper

Title (fr)
Lampe à DEL dotée d'un corps de refroidissement

Publication
EP 2407713 B1 20140423 (DE)

Application
EP 11184454 A 20101029

Priority
• EP 10189368 A 20101029
• DE 102009051373 A 20091030

Abstract (en)
[origin: EP2320137A1] The cooling sink has a light emitting diode (LED) (2) and a sleeve part with a channel (6) for removal of heated air generated by an operation of the LED lamp. Another sleeve is arranged surrounding the former sleeve part. Another channel (10) is formed between the two sleeves to transport the air.

IPC 8 full level
F21V 29/00 (2006.01); **F21K 99/00** (2010.01)

CPC (source: EP US)
F21K 9/232 (2016.07 - EP US); **F21V 3/00** (2013.01 - EP US); **F21V 23/009** (2013.01 - EP); **F21V 29/83** (2015.01 - EP);
F21V 29/89 (2015.01 - EP); **F21Y 2115/10** (2016.07 - EP US)

Designated contracting state (EPC)
AL 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 RS SE SI SK SM TR

DOCDB simple family (publication)
EP 2320137 A1 20110511; EP 2320137 B1 20120620; DE 102009051373 A1 20110505; EP 2407713 A1 20120118; EP 2407713 B1 20140423;
EP 2487411 A1 20120815; EP 2487411 B1 20130828

DOCDB simple family (application)
EP 10189368 A 20101029; DE 102009051373 A 20091030; EP 11184454 A 20101029; EP 12167142 A 20101029