

Title (en)

LED LIGHTING DEVICE

Title (de)

LED-BELEUCHTUNGSVORRICHTUNG

Title (fr)

DISPOSITIF D'ÉCLAIRAGE À DIODES ÉLECTROLUMINESCENTES

Publication

EP 2781831 A4 20150422 (EN)

Application

EP 12850634 A 20121107

Priority

- KR 20110118364 A 20111114
- KR 20120002034 A 20120106
- KR 2012009309 W 20121107

Abstract (en)

[origin: EP2781831A1] An LED lighting apparatus is disclosed. The LED lighting apparatus in accordance with an aspect of the present invention includes: a first cover having ventilation holes formed therein; a thermal base having an opening formed on one side thereof and being coupled with the first cover on the other side thereof and having an airflow path for connecting the ventilation holes with the opening formed on an inside thereof and configured to guide flow of air being flowed into the airflow path; LED packages disposed on an outside of the thermal base and configured to dissipate heat by the air flowing through the airflow path; an electric connector being coupled to the first cover and electrically connected with the LED packages; and a second cover covering the LED packages, and the thermal base has a reflective surface formed thereon for reflecting and diffusing at least some of light generated by the LED packages.

IPC 8 full level

F21V 29/00 (2015.01); **F21K 99/00** (2010.01); **F21V 17/00** (2006.01); **F21Y 111/00** (2006.01)

CPC (source: EP KR US)

F21V 17/00 (2013.01 - KR); **F21V 29/00** (2013.01 - KR); **F21V 29/83** (2015.01 - EP US); **F21K 9/23** (2016.07 - EP US);
F21V 29/506 (2015.01 - EP); **F21Y 2107/30** (2016.07 - EP US); **F21Y 2115/10** (2016.07 - EP US)

Citation (search report)

- [XY] US 2011089830 A1 20110421 - PICKARD PAUL KENNETH [US], et al
- [X] US 2010314985 A1 20101216 - PREMYSLER PHILIP [US]
- [XI] WO 2011112005 A2 20110915 - SOLARKOR COMPANY LTD [KR], et al
- [X] CN 201496804 U 20100602 - TONG HUANG
- [X] JP 2004296245 A 20041021 - MATSUSHITA ELECTRIC WORKS LTD
- [Y] US 2010207502 A1 20100819 - CAO DENSEN [US], et al
- [Y] KR 20110089737 A 20110809 - ZAONZI CO LTD [KR]
- [Y] WO 2011105030 A1 20110901 - TOSHIBA LIGHTING & TECHNOLOGY [JP], et al
- [A] US 2011193463 A1 20110811 - DANIEL MUESSLI [CH]
- See references of WO 2013073792A1

Cited by

WO2017005785A1

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 2781831 A1 20140924; EP 2781831 A4 20150422; AU 2012337592 A1 20140501; CA 2852827 A1 20130523; KR 101318432 B1 20131016;
KR 20130054096 A 20130524; MX 2014005825 A 20140604; WO 2013073792 A1 20130523

DOCDB simple family (application)

EP 12850634 A 20121107; AU 2012337592 A 20121107; CA 2852827 A 20121107; KR 20120002034 A 20120106; KR 2012009309 W 20121107;
MX 2014005825 A 20121107