

Title (en)
LED Bulb

Title (de)
LED Glühbirne

Title (fr)
Ampoule à DEL

Publication
EP 2339223 A1 20110629 (EN)

Application
EP 09180550 A 20091223

Priority
EP 09180550 A 20091223

Abstract (en)
Illuminant device comprising a flexible substrate (10) and a plurality of LED-dies (20) being die-attached to the flexible substrate (10), wherein the flexible substrate (10) can be spatially bended in at least two directions (X,Y) in order to follow a shape of an inner surface of a light transmissive hollow body (30).

IPC 8 full level
F21K 99/00 (2010.01); **F21Y 101/02** (2006.01); **F21Y 105/00** (2006.01); **F21Y 111/00** (2006.01)

CPC (source: EP US)
F21K 9/232 (2016.07 - EP US); **F21V 3/0625** (2018.01 - EP); **F21Y 2105/10** (2016.07 - EP US); **F21Y 2105/12** (2016.07 - EP US); **F21Y 2107/00** (2016.07 - EP US); **F21Y 2107/10** (2016.07 - EP US); **F21Y 2107/90** (2016.07 - EP US); **F21Y 2115/10** (2016.07 - EP US)

Citation (applicant)
WO 2005090852 A2 20050929 - LIGHTING SCIENCE GROUP CORP [US], et al

Citation (search report)
• [XY] WO 2005090852 A2 20050929 - LIGHTING SCIENCE GROUP CORP [US], et al
• [X] US 2005174769 A1 20050811 - YONG GAO [CN], et al
• [X] US 2003031015 A1 20030213 - ISHIBASHI KAZUO [JP]
• [X] US 2006193130 A1 20060831 - ISHIBASHI KAZUO [JP]
• [X] US 2009026982 A1 20090129 - LEE GEORGE [US], et al
• [YA] DE 102006033894 A1 20070628 - PATENT TREUHAND GES FUER ELEKTRISCHE GLUEHLAMPEN MBH [DE]
• [YA] DE 102007044628 A1 20090402 - OSRAM GMBH [DE]
• [YA] US 2007291482 A1 20071220 - BAROKY TAJUL AROSH [MY], et al
• [YA] US 2007195544 A1 20070823 - GRAVES CHESTER JR [US]
• [YA] WO 2006062047 A1 20060615 - MATSUSHITA ELECTRIC IND CO LTD [JP], et al

Cited by
JP2014532294A; CN103032734A; CN104848056A; EP2824379A1; US9803848B2; US10436391B2; DE102012012853A1; DE102012020918A1; WO2016020782A1; WO2015169642A1; WO2015039999A1; US9970598B2; US10655794B2

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

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
EP 2339223 A1 20110629; EP 2339223 B1 20140514

DOCDB simple family (application)
EP 09180550 A 20091223