

Title (en)
Lamp

Title (de)
Leuchte

Title (fr)
Lampe

Publication
EP 2204604 A1 20100707 (DE)

Application
EP 09015635 A 20091217

Priority
DE 102008063369 A 20081230

Abstract (en)
The fixture (10) has a circuit board (11) on which multiple LEDs (12a-12c) are mounted. A secondary optics (14) bundles the light emitted by the LEDs, and tertiary optics (16) is formed by a planar, translucent element having light-directing microstructures, where the microstructures are facets having concave surface. The shape of the surface is spherically curved or rotationally parabolic. The microstructures are provided on a face of the element toward the secondary optics.

Abstract (de)
Dargestellt und beschrieben ist u. a. eine Leuchte (10) zur Ausleuchtung von Gebäudeflächen, umfassend eine Platine (11), auf der mehrere LED's (12a, 12b, 12c) angeordnet sind, eine Sekundäroptik (14), die das von den LED's emittierte Licht bündelt und eine Tertiäroptik (16), wobei die Tertiäroptik von einem flächigen, transluzenten Element gebildet ist, welches lichtlenkende Mikrostrukturen aufweist.

IPC 8 full level
F21S 8/00 (2006.01); **F21V 5/00** (2006.01); **F21Y 101/00** (2016.01)

CPC (source: EP US)
F21V 5/002 (2013.01 - EP US); **F21V 5/007** (2013.01 - EP US); **F21V 5/008** (2013.01 - EP US); **F21V 13/04** (2013.01 - EP US); **F21V 17/002** (2013.01 - EP US); **F21W 2131/10** (2013.01 - EP US); **F21W 2131/107** (2013.01 - EP US); **F21Y 2105/10** (2016.07 - EP US); **F21Y 2115/10** (2016.07 - EP US)

Citation (search report)
• [X] WO 2008021082 A2 20080221 - RPC PHOTONICS INC [US]
• [X] WO 9736131 A1 19971002 - ALLIED SIGNAL INC [US]
• [I] DE 10142582 A1 20030403 - HUBER SIGNALBAU MUENCHEN [DE]

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NL2019706B1; EP2587128A1; EP4160085A1; EP3438524A1; DE102017122956A1; EP3671026A1; DE102018133386A1; US9500340B2; US9833133B2; US10070779B2; US10390690B2; US11092310B2; US11725799B2

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 2204604 A1 20100707; **EP 2204604 B1 20150211**; AU 2009251062 A1 20100715; CN 101806411 A 20100818; CN 101806411 B 20141126; DE 102008063369 A1 20100708; DE 102008063369 B4 20161215; ES 2535636 T3 20150513; SG 162712 A1 20100729; US 2010165623 A1 20100701; US 9494292 B2 20161115

DOCDB simple family (application)
EP 09015635 A 20091217; AU 2009251062 A 20091221; CN 200910262504 A 20091229; DE 102008063369 A 20081230; ES 09015635 T 20091217; SG 2009086000 A 20091222; US 63919809 A 20091216