

Title (en)

Longitudinal optical element and assembly for emitting light with optical element

Title (de)

Längliches optisches Element und Anordnung zur Lichtabgabe mit optischem Element

Title (fr)

Élément optique longitudinal et agencement d'émission de lumière avec un élément optique

Publication

EP 2518389 B1 20170104 (DE)

Application

EP 12165632 A 20120426

Priority

DE 102011017580 A 20110427

Abstract (en)

[origin: EP2518389A2] The elongated optical element (5) has a light-scattering characteristic and is formed in U-shaped cross section, where a center leg of U-shape has a concave curvature towards inside. The center leg is formed for connecting the both side legs with each other. The side legs of U-shape are inclined to one another such that the side legs at its ends have a smaller distance than in the area, in which the side legs run in the center leg of U-shape. An independent claim is included for a light output arrangement with a support element.

IPC 8 full level

F21S 8/00 (2006.01); **F21K 99/00** (2016.01); **F21V 3/02** (2006.01)

CPC (source: EP US)

F21V 3/02 (2013.01 - EP US); **F21V 5/00** (2013.01 - EP US); **F21V 29/506** (2015.01 - EP); **F21Y 2103/10** (2016.07 - EP US); **F21Y 2115/10** (2016.07 - EP US)

Citation (examination)

EP 2151899 A2 20100210 - ZUMTOBEL LIGHTING GMBH [AT]

Citation (opposition)

Opponent : TRILUX GmbH & Co. KG

- US 2012033420 A1 20120209 - KIM SUN WOONG [KR], et al
- US 2010265693 A1 20101021 - RYU SEUNG RYEOL [KR], et al
- WO 2012005008 A1 20120112 - ENPLAS CORP [JP], et al
- EP 2188567 B1 20120111 - ZUMTOBEL LIGHTING GMBH [AT]
- US 6676284 B1 20040113 - WYNNE WILLSON PETER DAVID [GB]
- US 2008030981 A1 20080207 - MRAKOVICH MATTHEW [US], et al
- DE 102010019456 A1 20111110 - ARMONIES ELEKTRONIK GMBH [DE]
- EP 2151873 A2 20100210 - CREE INC [US]
- DE 3729554 A1 19890316 - BALLA PETER ALEXANDER [CH]
- DE 102010041471 A1 20120329 - ZUMTOBEL LIGHTING GMBH [AT]
- US 2010220476 A1 20100902 - KUO CHENG-HSIUNG [TW], et al
- DE 102011017580 A 20110427

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DE102018133311A1

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 2518389 A2 20121031; **EP 2518389 A3 20140129**; **EP 2518389 B1 20170104**; **EP 2518389 B2 20200520**; DE 102011017580 A1 20121031; DE 102011017580 B4 20230406; DE 202012013269 U1 20151014; PL 2518389 T3 20170731

DOCDB simple family (application)

EP 12165632 A 20120426; DE 102011017580 A 20110427; DE 202012013269 U 20120426; PL 12165632 T 20120426