

Title (en)

MN4+-ACTIVATED LUMINESCENCE MATERIAL AS CONVERSION LUMINESCENT MATERIAL FOR LED SOLID STATE LIGHT SOURCES

Title (de)

MN4+-AKTIVIERTES LUMINESZENZMATERIAL ALS KONVERSIONSLEUCHTSTOFF FÜR LED-FESTKÖRPERLICHTQUELLEN

Title (fr)

MATÉRIAU LUMINESCENT ACTIVÉ PAR MN4+ SERVANT DE SUBSTANCE LUMINESCENTE DE CONVERSION POUR DES SOURCES DE LUMIÈRE À SEMI-CONDUCTEURS À DEL

Publication

**EP 3538624 A1 20190918 (DE)**

Application

**EP 17780427 A 20171009**

Priority

- EP 16193525 A 20161012
- EP 2017075579 W 20171009

Abstract (en)

[origin: WO2018069195A1] The invention relates to Mn4+-activated luminescence materials, to a method for the production thereof, and to the use thereof as luminescent materials or conversion luminescent materials in light sources. The invention further relates to an emissions-converting material containing the luminescent material according to the invention and to a light source that contains the luminescent material or the emissions-converting material according to the invention. The invention further relates to light sources, in particular LEDs, and lighting units, which contain a primary light source and the luminescence material or the emissions-converting material according to the invention. The Mn4+-activated luminescence materials according to the invention are particularly suitable for generating warm white light in LEDs.

IPC 8 full level

**C09K 11/74** (2006.01)

CPC (source: EP KR US)

**C09K 11/7435** (2013.01 - EP KR US); **H01L 33/32** (2013.01 - KR US); **H01L 33/502** (2013.01 - KR US); **Y02B 20/00** (2013.01 - EP KR)

Citation (search report)

See references of WO 2018069195A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**WO 2018069195 A1 20180419**; CN 109996856 A 20190709; EP 3538624 A1 20190918; JP 2019533629 A 20191121; KR 20190068580 A 20190618; TW 201821593 A 20180616; US 2020194625 A1 20200618

DOCDB simple family (application)

**EP 2017075579 W 20171009**; CN 201780073358 A 20171009; EP 17780427 A 20171009; JP 2019520145 A 20171009; KR 20197013412 A 20171009; TW 106134645 A 20171011; US 201716341105 A 20171009