

Title (en)

PEROVSKITE PHOTOELECTRONIC DEVICE WITH DEFECT PASSIVATION

Title (de)

FOTOELEKTRONISCHE PEROWSKIT-VORRICHTUNG MIT DEFEKTPASSIVIERUNG

Title (fr)

DISPOSITIF PHOTOÉLECTRONIQUE EN PÉROVSKITE À PASSIVATION DE DÉFAUTS

Publication

EP 3931878 A1 20220105 (EN)

Application

EP 20766113 A 20200228

Priority

- SE 1950272 A 20190301
- SE 2020050225 W 20200228

Abstract (en)

[origin: WO2020180230A1] The present invention relates to optoelectronic devices based on a perovskite material comprising organic passivation agents for reducing unwanted recombination effects and to a method of producing such. In particular the invention relates to PeLED with exceptional high EQE up to 21.6%.

IPC 8 full level

H01L 29/167 (2006.01); **C01G 23/04** (2006.01); **H01L 31/0288** (2006.01)

CPC (source: EP SE)

C01G 23/04 (2013.01 - SE); **H01L 29/167** (2013.01 - SE); **H01L 31/0288** (2013.01 - SE); **H10K 30/10** (2023.02 - EP SE); **H10K 50/11** (2023.02 - EP); **H10K 85/50** (2023.02 - EP); **H10K 30/50** (2023.02 - EP SE); **Y02E 10/549** (2013.01 - EP)

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 2020180230 A1 20200910; CN 114072923 A 20220218; EP 3931878 A1 20220105; EP 3931878 A4 20230301; SE 1950272 A1 20200902; SE 543632 C2 20210427

DOCDB simple family (application)

SE 2020050225 W 20200228; CN 202080032884 A 20200228; EP 20766113 A 20200228; SE 1950272 A 20190301