

Title (en)

DIPYRRIN BASED MATERIALS FOR PHOTOVOLTAICS

Title (de)

AUF DIPYRRIN BASIERENDES MATERIAL FÜR FOTOVOLTAIK

Title (fr)

MATÉRIAUX À BASE DE DIPYRRINE POUR PHOTOVOLTAÏQUE

Publication

EP 2850670 A2 20150325 (EN)

Application

EP 13802466 A 20130515

Priority

- US 201261647360 P 20120515
- US 201213564953 A 20120802
- US 2013041079 W 20130515

Abstract (en)

[origin: WO2014025435A2] The present disclosure generally relates to organic photosensitive optoelectronic devices comprising at least one boron dipyrin compound. In addition, the present disclosure relates to methods of making organic photosensitive optoelectronic devices comprising at least one boron dipyrin compound. The present disclosure also generally relates to chromophoric compounds that combine strong absorption of light at visible wavelengths with the ability to undergo symmetry-breaking intramolecular charge transfer (ICT), and their use for the generation of free carriers in organic photovoltaic cells (OPVs) and electric-field-stabilized geminate polaron pairs. The present disclosure also relates to the synthesis of such compounds, methods of manufacture, and applications in photovoltaic systems and organic lasers.

IPC 8 full level

H01L 51/46 (2006.01)

CPC (source: EP KR)

B82Y 10/00 (2013.01 - EP); **C07F 5/02** (2013.01 - KR); **H10K 85/322** (2023.02 - EP KR); **H10K 85/361** (2023.02 - EP);
H10K 30/30 (2023.02 - EP KR); **H10K 85/211** (2023.02 - EP); **Y02E 10/549** (2013.01 - EP); **Y02P 70/50** (2015.11 - 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 2014025435 A2 20140213; **WO 2014025435 A3 20140612**; **WO 2014025435 A9 20140403**; AU 2013300142 A1 20141204;
CA 2873468 A1 20140213; EP 2850670 A2 20150325; IL 235713 A0 20150129; KR 20150020297 A 20150225; TW 201408677 A 20140301;
TW I622593 B 20180501

DOCDB simple family (application)

US 2013041079 W 20130515; AU 2013300142 A 20130515; CA 2873468 A 20130515; EP 13802466 A 20130515; IL 23571314 A 20141113;
KR 20147034571 A 20130515; TW 102117319 A 20130515