

Title (en)
NOVEL THIOPHENE-BASED DYE AND PREPARATION THEREOF

Title (de)
NEUER FARBSTOFF AUF THIOPHENBASIS UND HERSTELLUNG DAVON

Title (fr)
NOUVEAU COLORANT À BASE DE THIOPHÈNE ET SA PRÉPARATION

Publication
EP 2209773 A2 20100728 (EN)

Application
EP 08839120 A 20081015

Priority

- KR 2008006056 W 20081015
- KR 20070103629 A 20071015
- KR 20070137908 A 20071226
- KR 20080038731 A 20080425
- KR 20080062482 A 20080630

Abstract (en)
[origin: WO2009051390A2] The present invention relates to a thiophene-based dye and a preparation thereof, and more particularly, to dye compounds, which are used for a dye-sensitized solar cell (DSSC), and provides better molar extinction coefficient, JSc (short-circuit photocurrent density) and photoelectric conversion efficiency than a conventional dye to enhance efficiency of a solar cell.

IPC 8 full level
C07D 333/26 (2006.01); **C09B 49/00** (2006.01); **C09B 49/06** (2006.01)

CPC (source: EP KR)
C07D 333/24 (2013.01 - EP); **C07D 333/26** (2013.01 - KR); **C07D 409/04** (2013.01 - EP); **C07D 409/10** (2013.01 - EP); **C07D 409/14** (2013.01 - EP); **C07D 495/04** (2013.01 - EP); **C07D 495/14** (2013.01 - EP); **C09B 11/12** (2013.01 - EP); **C09B 23/0058** (2013.01 - EP); **C09B 23/105** (2013.01 - EP); **C09B 49/00** (2013.01 - KR); **C09B 49/06** (2013.01 - KR); **C09B 57/00** (2013.01 - EP); **H10K 85/113** (2023.02 - EP); **H01G 9/2031** (2013.01 - EP); **H01G 9/2059** (2013.01 - EP); **Y02E 10/542** (2013.01 - EP); **Y02E 10/549** (2013.01 - EP)

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 MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
WO 2009051390 A2 20090423; **WO 2009051390 A3 20090716**; CN 101821250 A 20100901; CN 101821250 B 20140326; CN 103254658 A 20130821; CN 103254658 B 20150311; CN 103254659 A 20130821; CN 103254659 B 20151118; EP 2209773 A2 20100728; EP 2209773 A4 20110622; EP 2471784 A1 20120704; EP 2471784 B1 20150708; EP 2471785 A1 20120704; EP 2471785 B1 20170419; JP 2011500882 A 20110106; JP 2014065913 A 20140417; JP 5886812 B2 20160316; KR 101330601 B1 20131118; KR 101352024 B1 20140122; KR 20090038377 A 20090420; KR 20130082489 A 20130719; TW 200927840 A 20090701; TW 201520278 A 20150601; TW I491677 B 20150711; TW I545160 B 20160811

DOCDB simple family (application)
KR 2008006056 W 20081015; CN 200880111572 A 20081015; CN 201310055735 A 20081015; CN 201310055776 A 20081015; EP 08839120 A 20081015; EP 12161958 A 20081015; EP 12161959 A 20081015; JP 2010528816 A 20081015; JP 2013235685 A 20131114; KR 20080100967 A 20081015; KR 20130076409 A 20130701; TW 104105386 A 20081014; TW 97139341 A 20081014