

Title (en)  
COMPOUND

Title (de)  
VERBINDUNG

Title (fr)  
COMPOSÉ

Publication  
**EP 4263551 A1 20231025 (EN)**

Application  
**EP 21839461 A 20211215**

Priority  
• GB 202019810 A 20201215  
• EP 2021085841 W 20211215

Abstract (en)  
[origin: WO2022129137A1] A compound of formula (I): EAG – EDG – EAG (I) wherein EDG is an electron-donating group of formula (II) each EAG is independently an electron accepting group of formula (III) (II) (III) each X is independently O or S; each Y is independently O, S, Se, NR8 or C(R9)2 wherein R8 and R9 independently in each occurrence are selected from H or a substituent; Ar3 and Ar4 independently in each occurrence is a monocyclic or polycyclic aromatic or heteroaromatic group; R1 and R2 independently in each occurrence is a substituent; R3 - R6 are each independently H or a substituent; Z1 is a direct bond or Z1 together with the substituent R4 forms Ar1 wherein Ar1 is a monocyclic or polycyclic aromatic or heteroaromatic group; Z2 is a direct bond or Z2 together with the substituent R5 forms Ar2 wherein Ar2 is a monocyclic or polycyclic aromatic or heteroaromatic group; p is 0, 1, 2 or 3; q is 0, 1, 2 or 3; R10 in each occurrence is H or a substituent; ---- represents a linking position to EDG; and R7 in each occurrence is H or a substituent with the proviso that at least one R7 is CN. The compound of formula (I) may be used as an electron acceptor in a bulk heterojunction layer of an organic photoresponsive device.

IPC 8 full level  
**C07D 495/04** (2006.01); **C07D 495/22** (2006.01); **H10K 99/00** (2023.01)

CPC (source: EP GB)  
**C07D 495/04** (2013.01 - EP); **C07D 495/22** (2013.01 - EP GB); **H10K 85/00** (2023.02 - EP GB); **H10K 85/611** (2023.02 - EP); **H10K 85/653** (2023.02 - EP); **H10K 85/654** (2023.02 - EP); **H10K 85/655** (2023.02 - EP GB); **H10K 85/6576** (2023.02 - EP GB); **H10K 30/30** (2023.02 - EP GB); **H10K 39/30** (2023.02 - EP GB); **H10K 85/215** (2023.02 - EP); **Y02E 10/549** (2013.01 - EP GB)

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)  
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Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
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**EP 2021085841 W 20211215**; CN 202180076977 A 20211215; EP 21839461 A 20211215; GB 202019810 A 20201215; JP 2022562877 A 20211215; TW 110147035 A 20211215