

Title (en)
ELECTROLUMINESCENT MATERIALS AND THEIR USE

Title (de)
ELEKTROLUMINESZIERENDE MATERIALIEN UND DEREN VERWENDUNG

Title (fr)
MATERIAUX ELECTROLUMINESCENTS ET LEUR UTILISATION

Publication
EP 1977432 A1 20081008 (DE)

Application
EP 07702866 A 20070118

Priority
• EP 2007000429 W 20070118
• DE 102006003710 A 20060126

Abstract (en)
[origin: DE102006003710A1] Polymer containing at least 0.5 mol.% of an unit (III), is new. Polymer containing at least 0.5 mol.% of an unit of formula (III), is new. M : 2-40C- (hetero)aromatic or non-aromatic ring system, which is optionally substituted by one or more R 1>; either X 1>, X 2>bridge, that stretches with M cyclic system of B(R 1>), C(R 1>) 2, Si(R 1>) 2, Ge(R 1>) 2, C=O, C=S, C=Se, C=Te, C=NR 1>, C=C(R 1>) 2, O, S, S=O, SO 2, S(R 1>) 2, N(R 1>), P(R 1>), P(=O)R 1>, P(=S)R 1>, P=O, P=S, P=Se, P=Te, Se or Te; or X 1>X 2>optionally substituted double bond (-CR 1>=CR 1>) or triple bond; Y 1>-Y 3>X 1>; J : a connection to the polymer, such as a bond, unsaturated or substituted double bond (-CR 2>=CR 2>-), triple bond, an unsubstituted or (hetero)aromatic, or aromatic cyclic unit substituted with R 1>or -N-Ar; either R 1>N, F, Cl, Br, I, CN, NO 2, NH 2, Si(CH 3) 3, cyclic 1-40C- alkyl, -(thio)alkoxy, -amino (optionally substituted by one or more R 2>, where one or more non-adjacent CH 2group is optionally substituted by N-R 2>, O-CO-O, CO-O, CH=CH, R 2>C=CR 2>, Ctriple boundC, Si(R 2>) 2, Ge(R 2>) 2, Sn(R 2>) 2, C=O, C=S, C=Se, C=NR 2>, O, S or CONR 2>, and one or more H is optionally substituted by F, Cl, Br, I, CN or NO 2), 2-40C (hetero)aromatic ring system (optionally substituted by one or more R 2>) and/or 2-40C-(hetero)aryloxy (optionally substituted by one or more R 2>); or 2 or more R 1>mono or polycyclic aliphatic ring system; R 2>H, halo, NO 2, CN, NH 2, N(R 3>) 2or aliphatic, (hetero)aromatic 1-20C-hydrocarbon; either R 3>cyclic 1-10C-alkyl or alkoxy, or 2-24C-(hetero)aromatic ring system (optionally substituted by one or more R 2>); or 2R 3>mono- or poly- cyclic ring system; n, m, p : 0-2; and q : 1 to 10 6>. Where at least n or m is 1 or 2. Independent claims are included for: (1) a bifunctional monomer compound of formula (IV); (2) mixtures (blends) obtained form the polymer and at least another polymer, oligomer, dendritic and/or lower molecular substance; and (3) solutions and formulations obtained form the polymer or mixture in at least a solvent. A : a group that copolymerize C-C and/or C-N bonds. [Image]

IPC 8 full level
H01B 1/12 (2006.01)

CPC (source: EP KR US)
C07D 493/00 (2013.01 - KR); **C08G 61/12** (2013.01 - KR); **C08L 65/00** (2013.01 - KR); **C09K 11/06** (2013.01 - EP US); **G02B 6/138** (2013.01 - KR); **H10K 50/11** (2023.02 - EP US); **H10K 85/154** (2023.02 - EP US); **H10K 85/653** (2023.02 - EP US); **C09K 2211/145** (2013.01 - EP US); **C09K 2211/1466** (2013.01 - EP US); **C09K 2211/1491** (2013.01 - EP US); **Y02E 10/549** (2013.01 - EP)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
DE 102006003710 A1 20070802; CN 101375350 A 20090225; EP 1977432 A1 20081008; JP 2009524710 A 20090702; KR 20080091266 A 20081009; US 2009032776 A1 20090205; WO 2007085377 A2 20070802; WO 2007085377 A8 20090813

DOCDB simple family (application)
DE 102006003710 A 20060126; CN 200780003571 A 20070118; EP 07702866 A 20070118; EP 2007000429 W 20070118; JP 2008551700 A 20070118; KR 20087020937 A 20080826; US 16221907 A 20070118