

Title (en)

USE OF TRIARYLAMINE DERIVATIVES AS HOLE-CONDUCTING MATERIALS IN ORGANIC SOLAR CELLS AND ORGANIC SOLAR CELLS CONTAINING SAID TRIARYLAMINE DERIVATIVES

Title (de)

VERWENDUNG VON TRIARYLAMIN-DERIVATEN ALS LOCHLEITENDE MATERIALIEN IN ORGANISCHEN SOLARZELLEN UND DIESE TRIARYLAMIN-DERIVATE ENTHALTENDE ORGANISCHE SOLARZELLEN

Title (fr)

UTILISATION DE DÉRIVÉS TRIARYLAMINES COMME MATÉRIAUX CONDUCTEURS DE TROUS DANS DES CELLULES SOLAIRES ORGANIQUES ET CELLULES SOLAIRES ORGANIQUES CONTENANT CES DÉRIVÉS TRIARYLAMINES

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Abstract (en)

[origin: WO2010094636A1] The present invention relates to the use of compounds of the general formula (I) as hole-conducting materials in organic solar cells, wherein A1, A2, A3 independently of each other mean divalent organic units, which can contain one, two, or three optionally substituted aromatic or heteroaromatic groups, wherein in the case of two or three aromatic or heteroaromatic groups, two of said groups are bonded to each other by means of a chemical bond and/or by means of a divalent alkyl group in each case, R1, R2, R3 independently of each other mean substituents R, OR, NR2, A3-OR, or A3-NR2, R is alkyl, aryl, or a monovalent organic group, which can contain one, two, or three optionally substituted aromatic or heteroaromatic groups, wherein in the case of two or three aromatic or heteroaromatic groups, two of said groups are bonded to each other by means of a chemical bond and/or by means of a divalent alkyl group or NR' group in each case, R' is alkyl, aryl, or a monovalent organic group, which can contain one, two, or three optionally substituted aromatic or heteroaromatic groups, wherein in the case of two or three aromatic or heteroaromatic groups, two of said groups are bonded to each other by means of a chemical bond and/or by means of a divalent alkyl group in each case, and n independently for each occurrence in formula (I) is a value 0, 1, 2, or 3, with the stipulation that the sum of the individual values n is at least 2, and at least two of the groups R1, R2, and R3 mean substituents OR and/or NR2. The present invention further relates to organic solar cells that contain said compounds.

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