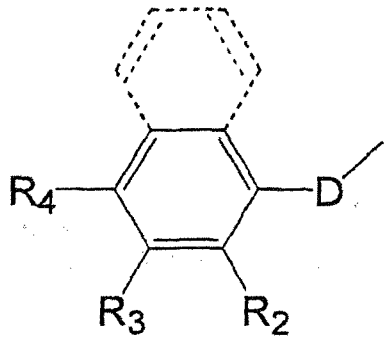


wherein dotted lines represent optional bonds;

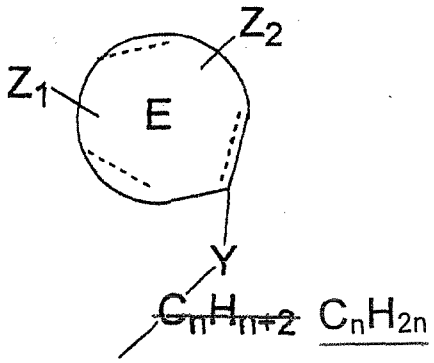
wherein D is selected from the group consisting of an aromatic moiety, an heterocyclic moiety and a cyclic moiety;

wherein R_2 is selected from the group consisting of hydrogen and (C_1-C_3) lower alkyl;

wherein R_3 and R_4 are independently selected from the group consisting of hydrogen, halogen, nitrile, -$COCH_3$, -SO_2CH_3, methyl, and halogenated methyl;

wherein at least one of R_3 and R_4 is not hydrogen.

[0015] In another embodiment, R has the following structure:



wherein n is an integer selected from 0 to 3;

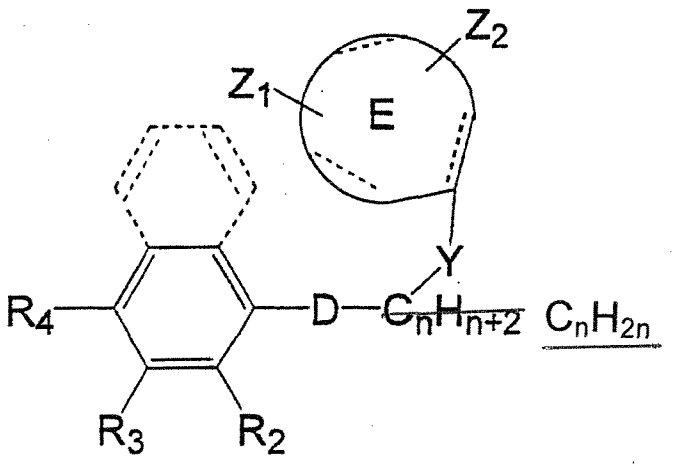
wherein dotted lines represent optional bonds;

wherein E is selected from the group consisting of an aromatic moiety and a heteroaryl moiety;

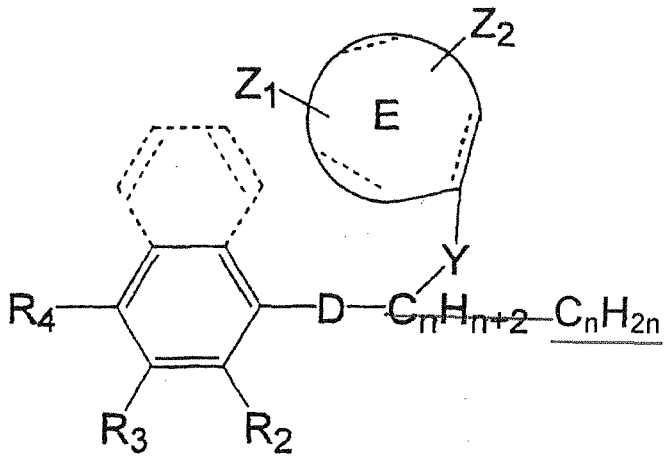
wherein Y is a spacing group having one to four atoms;

wherein Z_1 is a hydrocarbon moiety additionally having at least one carbonyl, sulfone, or sulfoxide group or a nitrogen atom separated from E by one to four intervening atoms, and said nitrogen atom being an amine, an amide, an N-oxide, sulfimide or a quaternary ammonium salt, Z_1,optionally, having other oxygen, sulphur, or nitrogen atoms;
wherein Z_2 is selected from the group consisting of hydrogen, fluorine, chlorine, bromine, iodine, cyano, nitro, trifluoromethyl, alkoxy, C_1-C_5 straight or branched alkyl, C_2-C_5 straight or branched alkenyl, and C_2-C_5 straight or branched alkynyl.

[0016] In another embodiment, the invention provides a compound having the following schematic molecular formula or a salt of thereof:



wherein n is an integer selected from 0 to 3;
wherein dotted lines represent optional bonds;
wherein D is selected from the group consisting of an aromatic moiety, an heterocyclic moiety and a cyclic moiety;
wherein E is selected from the group consisting of an aromatic moiety and a heteroaryl moiety;



wherein n is an integer selected from 0 to 3;

wherein dotted lines represent optional bonds;

wherein D is selected from the group consisting of an aromatic moiety, an heterocyclic moiety and a cyclic moiety;

wherein E is selected from the group consisting of an aromatic moiety and a heteroaryl moiety;

wherein R_2 is selected from the group consisting of hydrogen and lower (C_1-C_3) alkyl;

wherein R_3 and R_4 are independently selected from the group consisting of hydrogen, halogen, nitrile, $-COCH_3$, $-SO_2CH_3$, NO_2, OCH_3, SCH_3, methyl, and halogenated methyl; wherein at least one of R_3 and R_4 is not hydrogen;

wherein Y is a spacing group having one to four atoms;

wherein Z_1 is a hydrocarbon moiety additionally having at least a one carbonyl, sulfone or sulfoxide group or nitrogen atom directly linked or separated from E by one to four intervening atoms, and said nitrogen atom being an amine, an amide, an N-oxide, or a quaternary ammonium salt, Z_1,optionally, having other oxygen, sulphur, or nitrogen atoms;

wherein Z_2 is selected from the group consisting of hydrogen, fluorine, chlorine, bromine, iodine, cyano, nitro, trifluoromethyl, alkoxy, C_1-C_5 straight or