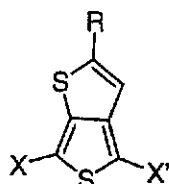


ABSTRACT OF THE DISCLOSURE

SUBSTITUTED THIENOTHIOPHENE MONOMERS AND CONDUCTING POLYMERS

Thienothiophenes compositions comprising a C₃₋₈ secondary or tertiary alkyl group are disclosed. The thienothiophenes may be represented by the formula:



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where R is C₃₋₈ secondary or tertiary alkyl, e.g., isopropyl, *tert*-butyl, *tert*-pentyl, isopentyl, and 2-ethylhexyl, X and X' are independently selected from the group consisting of H, halogen atoms (e.g., F, Cl, Br, and I), MgCl, MgBr, MgI, Sn(R')₃, (where R' is C₁₋₆ alkyl or
10 -OC₁₋₆ alkyl), boronic acid, boronic ester, -CH=CHR'' (where R'' is H or C₁₋₆ alkyl), -OC₁₋₆ alkyl, -COOC₁₋₆ alkyl, -S-COR''', -COR''' (where R''' is H or C₁₋₆ alkyl), -C≡CH, and polymerizable aromatic rings such as phenyl, naphthalene, pyrrole, dithiophene, thienothiophene, thiophene and so forth.

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