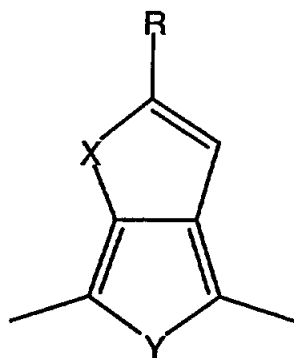


SELENIUM CONTAINING ELECTRICALLY CONDUCTIVE POLYMERS AND METHOD OF MAKING ELECTRICALLY CONDUCTIVE POLYMERS

ABSTRACT OF THE DISCLOSURE

Monomeric, oligomeric and polymeric electrically conductive compounds and methods of making the compounds having a repeating unit having formula P1, as follows:



5 where X is S or Se, Y is S or Se, wherein one or both of X and Y is Se, R is a substituent group capable of bonding to the ring structure. R may include hydrogen or isotopes thereof, hydroxyl, alkyl, including C₁ to C₂₀ primary, secondary or tertiary alkyl groups, arylalkyl, alkenyl, perfluoroalkyl, perfluororaryl, aryl, alkoxy, cycloalkyl, cycloalkenyl,
10 alkanoyl, alkylthio, aryloxy, alkylthioalkyl, alkynyl, alkylaryl, arylalkyl, amido, alkylsulfinyl, alkoxyalkyl, alkylsulfonyl, aryl, arylamino, diarylamino, alkylamino, dialkylamino, arylarylamino, arylthio, heteroaryl, arylsulfinyl, alkoxycarbonyl, arylsulfonyl, carboxyl, halogen, nitro, cyano, sulfonic acid, or alkyl or phenyl substituted with one or more
15 epoxy moieties. Electrical devices utilizing the electrically conductive polymers is also disclosed.

FIG.1