ABSTRACT

HETEROATOMIC REGIOREGULAR POLY(3-SUBSTITUTEDTHIOPHENES) IN ELECTROLUMINESCENT DEVICES

Regioregular polythiophenes having heteroatoms in the substituents can be used in hole injection layer and hole transport layers for electroluminescent devices. Copolymers and organic oxidants can be used. Homopolymers can be used. Metallic impurities can be removed. The heteroatom can be oxygen and can be substituted at the 3-position. Advantages include versatility, synthetic control, and good thermal stability. Different device designs can be used.

Figure 1