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(54) **MANUFACTURING METHOD FOR ENHANCING ORDERED STRUCTURE OF BLOCK COPOLYMERS**

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See application file for complete search history.

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(57) **ABSTRACT**

The invention is related to a manufacturing method for enhancing an ordered structure of block copolymers, and more particularly to a thermal annealing process for block copolymers having conducting polymers and rod segments. The manufacturing method includes the following steps: (A) providing a block copolymer and a small molecule additive, wherein the block copolymer is formed of first monomers containing at least one aromatic ring and second monomers optionally containing at least one aromatic ring; and the small molecule additive is a aliphatic molecule, an aromatic molecule or a combination thereof; (B) blending the block copolymer and the small molecule additive to form a mixture; and (C) treating the mixture with a thermal annealing process to manufacture and facilitate the ordered structure of the block copolymers.

**11 Claims, 2 Drawing Sheets**