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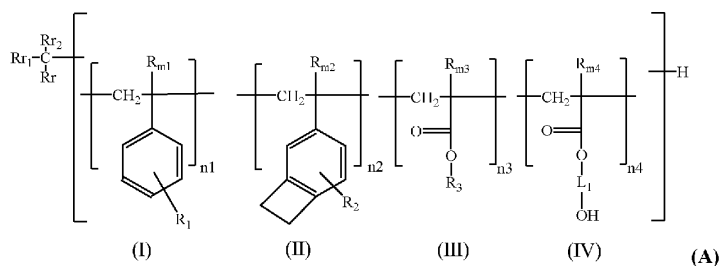
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(54) Title: DEVELOPMENT OF NOVEL NEUTRAL MATS CONTAINING HYDROXYL MONOMERS TO IMPROVE SIARC SUBSTRATE COMPATIBILITY FOR DIRECTED SELF-ASSEMBLY OF DIBLOCK COPOLYMERS



(57) Abstract: Described herein is a random polymer having structure (A), comprising, a styrenic repeat unit of structure (I), a 4-vinylbenzocyclobutene derived repeat unit of structure of structure (II), an alkyl acrylate or alkyl 2-methylenealkanoate derived repeat unit of structure (III), a hydroxy substituted acrylate or 2-methylenealkanoate derived repeat unit of structure (IV), and two end groups as shown in structure (A), one of which is H and the other is a methyl moiety substituted with Rr, Rr₁ and Rr₂. Also described is a composition comprising said random copolymer of structure (A) and an organic spin casting solvent and the process of using said composition in directed self-assembly processing.



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