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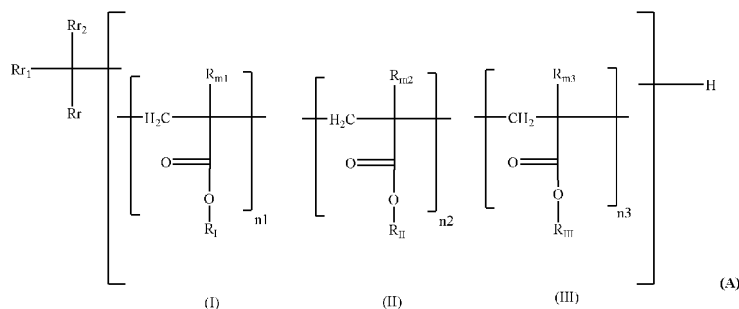
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(54) Title: DEVELOPMENT OF NOVEL HYDROPHILIC PINNING MAT



(57) Abstract: The invention relates to a random copolymers which comprise a repeat unit of structure (I) and at least one other type of repeat unit of structure (A), structure (A) comprising: an alkyl bearing repeat units of structure (I), Formula (I), a trialkylsilyloxy bearing repeat units of structure (II), Formula (II), at least one type of crosslinking repeat units of structure (III), Formula (III), and compositions comprising this random copolymer and other compositions which comprise a random copolymer which has a repeat unit of structure (I), Formula (I) and at least one other repeat unit derived from an alkyl 2- methylenealkanoate or a or an alkyl methacrylate, wherein said alkyloxy moiety is substituted with a crosslinking functionality selected from a trialkylsilyloxy, an oxirane, a trialkyloxysilyl, and an anthracene which are free of a thermal acid generator, photoacid generator, thermal radical generator, or photo-radical generator and the process of producing hydrophilic MAT coatings from these compositions for use in directed self-assembly processing.



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