

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
23 February 2023 (23.02.2023)



(10) International Publication Number
WO 2023/021016 A3

(51) International Patent Classification:

C08F 220/14 (2006.01) G03F 7/00 (2006.01)
C08F 8/00 (2006.01) B82Y 40/00 (2011.01)
C09D 4/06 (2006.01) H01L 21/027 (2006.01)
C09D 143/04 (2006.01)

(21) International Application Number:

PCT/EP2022/072817

(22) International Filing Date:

16 August 2022 (16.08.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/234,301 18 August 2021 (18.08.2021) US

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(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ,
CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,

HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE,
KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU,
LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA,
NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO,
RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS,
ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ,
UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ,
TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV,
MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
KM, ML, MR, NE, SN, TD, TG).

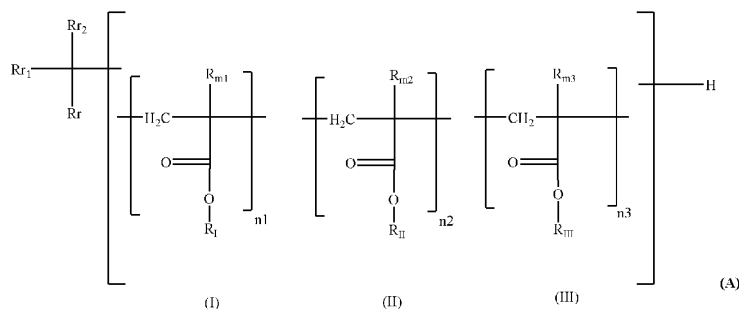
Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments (Rule 48.2(h))

(88) Date of publication of the international search report:

13 April 2023 (13.04.2023)

(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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