

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
26 March 2009 (26.03.2009)

PCT

(10) International Publication Number
WO 2009/038544 A1

(51) International Patent Classification:

C08F 2/02 (2006.01) *C08F 2/08* (2006.01)
C08F 2/10 (2006.01) *C08F 22/06* (2006.01)

(21) International Application Number:

PCT/SG2008/000356

(22) International Filing Date:

19 September 2008 (19.09.2008)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/973,619 19 September 2007 (19.09.2007) US

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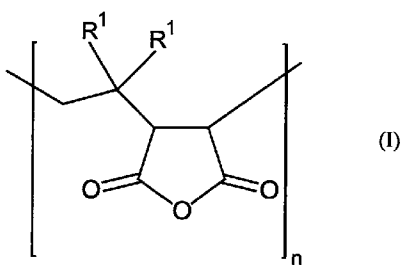
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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

[Continued on next page]

(54) Title: AMPHIPHILIC POLYMER AND PROCESSES OF FORMING THE SAME



(57) Abstract: Disclosed are an amphiphilic polymer, its synthesis and uses thereof. The polymer has a hydrocarbon backbone with -COOH side groups. It further has first aliphatic moieties with a main chain of about 3 to about 20 carbon atoms and 0 to about 3 heteroatoms, and second aliphatic moieties that have a main chain of about 3 to about 80 carbon atoms and about 2 to about 40 heteroatoms. The second aliphatic moieties have a copolymerisable group. In the synthesis a maleic anhydride polymer of formula (I) where n is an integer from about 10 to about 10000 and R1 is H or methyl, is reacted with a monofunctional compound with an alkyl chain of about 3 to about 20 carbon atoms and 0 to about 2 heteroatoms, and with an at least bifunctional compound with an alkyl chain of about 3 to about 80 carbon atoms and 0 to about 40 heteroatoms. The functional group of the monofunctional compound and one functional group of the at least bifunctional compound can form a linkage with an anhydride. Another functional group of the at least bifunctional compound, which is not allowed to react with the maleic anhydride polymer, is copolymerisable.

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FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL,
NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG,
CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report*