



(51) International Patent Classification:

C08F 8/32 (2006.01) **C08G 81/02** (2006.01)
B01F 17/52 (2006.01) **G01N 33/00** (2006.01)
C08F 8/00 (2006.01) **G01N 33/48** (2006.01)
C08F 8/02 (2006.01) **B82B 3/00** (2006.01)

(21) International Application Number:

PCT/SG2009/000374

(22) International Filing Date:

12 October 2009 (12.10.2009)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/104,932 13 October 2008 (13.10.2008) 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, BR, BW, BY, BZ, CA, CH, CL, 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, PE, 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,

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(54) Title: AMPHIPHILIC POLYMERS AND NANOCRYSTALS COATED THEREWITH

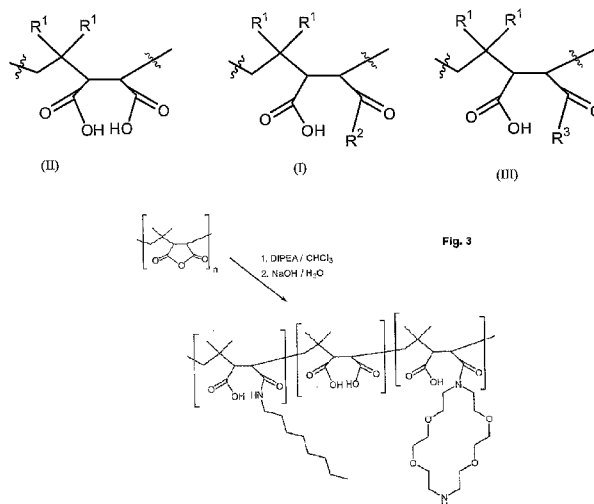


Fig. 3

(57) Abstract: The invention relates to an amphiphilic polymer (A) comprising repeat units of the general formulae (I), (II) and (III); or salts thereof, wherein the repeat unit of general formula (I) is comprised in the amphiphilic polymer with a number of m units, the repeat unit of general formula (II) is comprised in the amphiphilic polymer with a number of o units and repeat unit of general formula (III) is comprised in the amphiphilic polymer with a number of p units, wherein each of m, o and p is an independently selected integer from about 3 to about 400 and wherein the sum of m + o + p is selected in the range from about 10 to about 10000, R¹ in repeat units (I)-(III) is H or methyl, R² in repeat unit (II) is an aliphatic moiety with a main chain of about 3 to about 30 carbon atoms and 0 to about 3 heteroatoms selected from the group N, O, S, Se and Si, and, R³ in repeat unit (III) is one of (i) an alicyclic moiety with a main chain of about 5 to about 80 carbon atoms and 0 to about 30 heteroatoms selected from the group N, O, S, Se and Si, and, (ii) a moiety -Z-R⁴ wherein R⁴ is an alicyclic moiety with a main chain of about 5 to about 80 carbon atoms and 0 to about 30 heteroatoms selected from the group N, O, S, Se and Si, and Z is an aliphatic bridge of 1 to about 3 carbon atoms and 0 to about 2 heteroatoms selected from the group N, O, S, Se and Si, (iii) an aliphatic moiety with a main chain of about 3 to about 80 carbon atoms and 0 to about 30 heteroatoms selected from the group N, O, S, Se and Si, and a CEC group or an azido group.



ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, **Published:**

MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM,

TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,

ML, MR, NE, SN, TD, TG).

— *with international search report (Art. 21(3))*