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(54) Title: BRANCHED POLYAMINES FOR DELIVERY OF BIOLOGICALLY ACTIVE MATERIALS

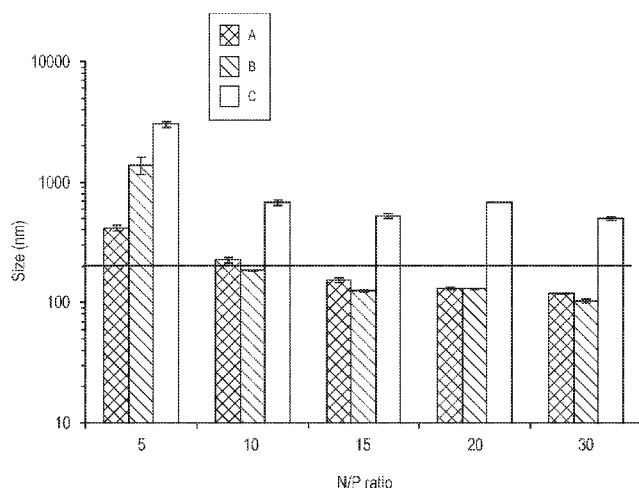
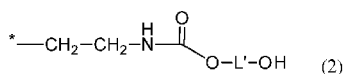


FIG. 1

(57) Abstract: A branched polyamine comprises about 45 to about 70 backbone tertiary amine groups, about 90 to about 140 backbone secondary amine groups, a positive number  $n'$  greater than 0 of backbone terminating primary amine groups, and a positive number  $q$  greater than 0 of backbone terminating carbamate groups of formula (2):  $\text{—CH}_2\text{—CH}_2\text{—N—}$  is  $\text{^O—L'—O—H}$  (2), wherein  $(n'+q)$  is a number equal to about 45 to about 70, the starred bond of formula (2) is linked to a backbone nitrogen of the branched polyamine,  $L'$  is a divalent radical comprising 3 to 30 carbons, and  $q/(n'+q) \times 100\%$  equals about 9% to about 47%.





**(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, 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, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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