



(51) International Patent Classification:

A61K 8/91 (2006.01) C08F 251/02 (2006.01)
C02F 1/56 (2006.01) C08F 291/00 (2006.01)
C08F 251/00 (2006.01) C08F 2/38 (2006.01)

(21) International Application Number:

PCT/EP2012/071741

(22) International Filing Date:

2 November 2012 (02.11.2012)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/555,699 4 November 2011 (04.11.2011) US
61/555,714 4 November 2011 (04.11.2011) US
12154675.8 9 February 2012 (09.02.2012) EP

(71) Applicant: **AKZO NOBEL CHEMICALS INTERNATIONAL B.V.** [NL/NL]; Stationsstraat 77, NL-3811 MH Amersfoort (NL).

(72) Inventors: **RODRIGUES, Klin Aloysius**; 109 Grayson Road, Signal Mountain, Tennessee 37377 (US).
STANDISH, Michael L.; 56 N. Crest Road, Chattanooga, Tennessee 37404 (US).

(74) Agent: **DE VRIES, Adriaan Jacobus**; Akzo Nobel N.V., Legal, IP & Compliance, P.O. Box 9300, NL-6800 SB Arnhem (NL).

(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, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, 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.

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

Published:

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

(54) Title: HYBRID DENDRITE COPOLYMERS, COMPOSITIONS THEREOF AND METHODS FOR PRODUCING THE SAME

(57) Abstract: Hybrid dendrite copolymer compositions include a hybrid dendrite copolymer including at least one ethylenically unsaturated first monomer, at least one second ethylenically unsaturated second monomer and a naturally derived hydroxyl containing chain transfer agent as an end group. The at least one first and second ethylenically unsaturated monomers are on separate side chains of the naturally derived hydroxyl containing chain transfer agent. Methods of preparing a hybrid dendrite copolymer are also included.

