

CORRECTED VERSION

(19) World Intellectual Property
Organization
International Bureau



(10) International Publication Number
WO 2012/134716 A8

(43) International Publication Date
4 October 2012 (04.10.2012)

(51) International Patent Classification:
C08F 8/00 (2006.01) *B01J 31/12* (2006.01)
C08F 10/00 (2006.01) *C07F 7/00* (2006.01)

(74) Agents: **BELL, Catherine, L.** et al.; ExxonMobil Chemical Company, Law Technology, P.O. Box 2149, Baytown, TX 77522-2149 (US).

(21) International Application Number:
PCT/US2012/027677

(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, 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.

(22) International Filing Date:
5 March 2012 (05.03.2012)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
13/072,330 25 March 2011 (25.03.2011) US
11167043.6 23 May 2011 (23.05.2011) EP

(71) Applicant (*for all designated States except US*): **EXXON-MOBIL CHEMICAL PATENTS INC.** [US/US]; 5200 Bayway Drive, Baytown, TX 77520-2101 (US).

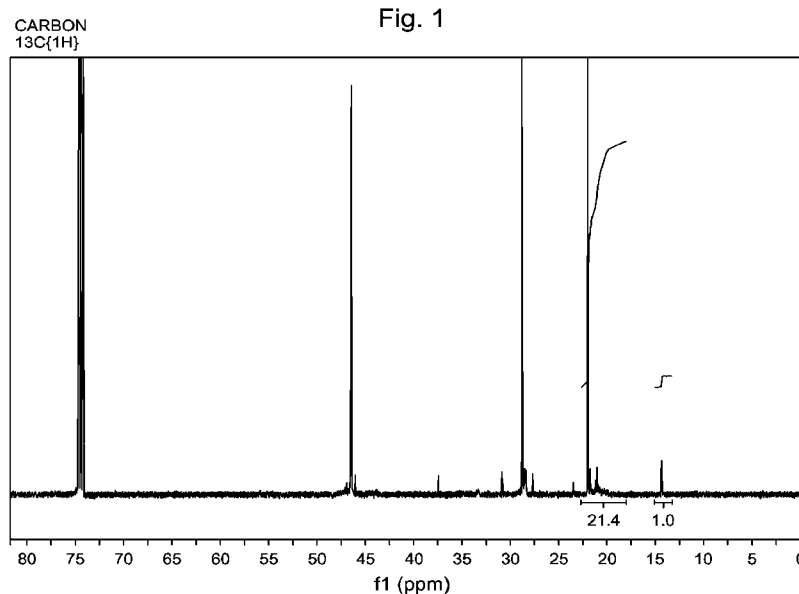
(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR,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

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **CROWTHER, Donna, J.** [US/US]; 2725 Moss Ct., Seabrook, TX 77586 (US). **LOVELL, Jacqueline, A.** [GB/US]; 3515 Broadmead Drive, Houston, TX 77025 (US). **BRANT, Patrick** [US/US]; 1038 Shorewood Drive, Seabrook, TX 77586 (US).

[Continued on next page]

(54) Title: BLOCK COPOLYMERS FROM SILYLATED VINYL TERMINATED MACROMERS



(57) Abstract: This invention relates to a process to functionalize polyolefins comprising contacting a metallocene catalyst with a difunctional diblock hydrosilane, and one or more vinyl terminated polyolefins. This invention further relates to the diblock hydrosilane-functionalized polyolefins produced thereby.

**Declarations under Rule 4.17:**

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:

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

(88) Date of publication of the international search report:
22 November 2012

(48) Date of publication of this corrected version:
3 October 2013

(15) Information about Correction:
see Notice of 3 October 2013