200205932 7

27 SEP 2002

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
18 October 2001 (18.10.2001)

PCT

(10) International Publication Number
WO 01/77191 A1

(51) International Patent Classification[7]: C08F 10/02, 4/69, 2/34

(21) International Application Number: PCT/GB01/01411

(22) International Filing Date: 29 March 2001 (29.03.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
00430015.8 6 April 2000 (06.04.2000) EP

(71) Applicant *(for all designated States except US)*: **BP CHEMICALS LIMITED** [GB/GB]; Britannic House, 1 Finsbury Circus, London EC2M 7BA (GB).

(71) Applicant *(for FR only)*: **BP CHEMICALS S.N.C.** [FR/FR]; 8, rue des Gemeaux, Cergy Saint Christophe, F-95866 Cergy Pontoise Cedex (FR).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **KUHLBURGER, Jean-Jacques** [FR/MY]; 3 Jelutong Villas, Lorong Jelutong, Mamansara Heights, Kuala Lumpur (MY). **ROWLEY, Kenneth, John** [GB/GB]; 25 Croxon Rise, Oswestry, Shropshire SY11 2YQ (GB).

(74) Agent: **PREECE, Michael**; BP International Limited, Patents & Agreements, Chertsey Road, Sunbury on Thames, Middlesex TW16 7LN (GB).

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

**Declarations under Rule 4.17:**
— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designationsAE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG)*
— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations*
— *of inventorship (Rule 4.17(iv)) for US only*

**Published:**
— *with international search report*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

*162162*

WO 01/77191 A1

(54) Title: PROCESS FOR THE GAS PHASE POLYMERISATION OF OLEFINS

(57) Abstract: The present invention relates to a process for preparing high density polyethylene in the gas phase comprising contacting ethylene or a mixture comprising ethylene and one or more alpha-olefins with a chromium oxide catalyst supported on a granular or microspherical refractory oxide in a fluidised bed reactor in the presence of oxigen. The present invention further relates to a process for controlling the density of high density polyethylene prepared in the gas phase comprising contacting ethylene or a mixture comprising ethylene and one or more alpha-olefins with a chromium oxide catalyst supported on a granular or microspherical refractory oxide in a fluidised bed reactor in the presence of oxigen.

*ACTION*