



- (51) **International Patent Classification:**
C08F 10/02 (2006.01) *C08F 4/658* (2006.01)
- (21) **International Application Number:**
PCT/EP2011/073367
- (22) **International Filing Date:**
20 December 2011 (20.12.2011)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
MI2010A002332 20 December 2010 (20.12.2010) IT
- (71) **Applicant** (*for all designated States except US*):
POLIMERI EUROPA S.P.A. [IT/IT]; Piazza Boldrini 1,
I-20097 San Donato Milanese - Milano (IT).
- (72) **Inventors; and**
- (75) **Inventors/Applicants** (*for US only*): **MASI, Francesco**
[IT/IT]; Via Galvani 7/0, I-26866 Sant'Angelo Lodigiano-
Lodi (IT). **MENCONI, Francesco** [IT/IT]; Via Giusti 72,
I-55060 Massa Macinaia (IT). **CONTI, Giuseppe** [IT/IT];
Via Fratelli Beretta 6, I-25080 Padenghe Sul Garda (IT).
POLESELLO, Mario [IT/IT]; Via Darsena 19, I-44100
Ferrara (IT). **ZANELATO, Alberto** [IT/IT]; Via G.
Deledda 2d, I-46033 Castel d'Ario Mantova (IT).
- (74) **Agent:** **MAIWALD PATENTANWALTS GMBH**; Elis-
enstr. 3 / Elisenhof, 80335 Munich (DE).

- (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.
- (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).

Published:

- *with international search report (Art. 21(3))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

(54) **Title:** CATALYST PRECURSOR AND CATALYST FOR THE HIGH-TEMPERATURE (CO)POLYMERIZATION OF ALPHA-OLEFINS

(57) **Abstract:** A precursor for the formation of catalysts for the (co)polymerization of α -olefins, comprising titanium, magnesium, at least one metal selected from hafnium and zirconium, aluminum and chlorine, obtained with a process comprising treatment with a siloxane compound. Said solid precursor, used in combination with a suitable co-catalyst in high-temperature (co)polymerization processes of α -olefins, shows an improved productivity, a high incorporation of co-monomers in the copolymerization of ethylene and an increased thermal stability with respect to the systems so far in use.

