

25/11/02
2002072833



162162

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

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
3 January 2002 (03.01.2002)

PCT

(10) International Publication Number
WO 02/00666 A1

- (51) International Patent Classification⁷: C07F 5/02, (72) Inventor; and
C08F 10/00, 4/643 (75) Inventor/Applicant (for US only): RODRIGUEZ,
George [US/US]; 13827 Placid Brook Court, Houston,
TX 77059 (US).
- (21) International Application Number: PCT/US01/19392
- (22) International Filing Date: 18 June 2001 (18.06.2001) (74) Agents: RUNYAN, Charles, E. et al.; ExxonMobil Chem-
ical Company, P.O. Box 2149, Baytown, TX 77522-2149
(US).
- (25) Filing Language: English
- (26) Publication Language: English (81) Designated States (national): BR, CA, CN, JP, KR, MX,
SG, US.
- (30) Priority Data:
09/602,289 23 June 2000 (23.06.2000) US (84) Designated States (regional): European patent (AT, BE,
09/599,909 23 June 2000 (23.06.2000) US CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,
NL, PT, SE, TR).
- (63) Related by continuation (CON) or continuation-in-part
(CIP) to earlier applications:
US 09/602,289 (CON) — with international search report
Filed on 23 June 2000 (23.06.2000) — before the expiration of the time limit for amending the
US 09/599,909 (CON) claims and to be republished in the event of receipt of
Filed on 23 June 2000 (23.06.2000) amendments
- (71) Applicant (for all designated States except US): EXXON-
MOBIL CHEMICAL PATENTS INC. [US/US]; 5200
Bayway Drive, Baytown, TX 77520-5200 (US). For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

WO 02/00666 A1

(54) Title: SILOXY SUBSTITUTED COCATALYST ACTIVATORS FOR OLEFIN POLYMERIZATION

(57) Abstract: This description addresses ionic compositions of matter comprising cations [Ct]⁺ and anions [A]⁻, in which the anion comprises a central core Group-13 element bound to fluoroaryl ligands. At least one of the fluoroaryl ligands is substituted with a siloxy group represented by the symbols -SiOR₃, wherein R is a C₁-C₃₀ hydrocarbyl or hydrocarbylsilyl substituent. [Ct]⁺ may be selected from any cation capable of use with olefin polymerization catalysts and typically will be anilinium or ammonium trityl carbenium cations, Group-11 metal cations, silylium cations, the cations of the hydrated salts of Group-1 or -2 metals, and derivatives of the foregoing anilinium, ammonium, trityl carbenium, and silylium cations containing C₁-C₂₀ hydrocarbyl, hydrocarbylsilyl, or hydrocarbylamine substituents for one or more hydrogen atoms of the cations. The ionic compositions described can be used to activate olefin polymerization catalysts, and can be prepared to dissolve in aliphatic solvents. Syntheses and polymerization are illustrated.



ACTION