US 20050065018A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2005/0065018 A1**

Llinas et al. (43) **Pub. Date: Mar. 24, 2005**

(54) **PREPARATION AND USE OF HETEROGENEOUS CATALYST COMPONENTS FOR OLEFINS POLYMERIZATION**

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(21) Appl. No.: **10/863,591**

(22) Filed: **Jun. 7, 2004**

Related U.S. Application Data

(62) Division of application No. 09/300,302, filed on Apr. 27, 1999, now abandoned.

(30) **Foreign Application Priority Data**

Apr. 29, 1998 (EP) 98500106.4

Publication Classification

(51) **Int. Cl.**[7] **B01J 31/00**; C08F 4/44

(52) **U.S. Cl.** **502/152**; 502/117; 502/150; 502/102; 502/103; 526/127; 526/160; 526/943

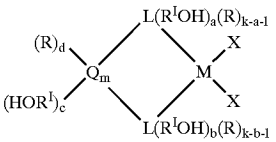
(57) **ABSTRACT**

Heterogeneous catalytic component obtainable by reacting a porous inorganic support with a metallocene compound characterized in that the metallocene compound is defined by the following general formulas:

I

$$(LR_k)_z[LR_{k-f}(R^IOH)_f]_xMX_y$$

II



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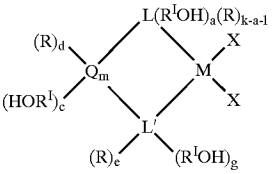
III



wherein:

L, equal to or different from each other, is selected from the group comprising: cyclopentadienyl, indenyl, tetrahydroindenyl, fluorenyl, octahydrofluorenyl or benzoindenyl; each R is independently selected from hydrogen, C_1-C_{20} alkyl, C_3-C_{20} cycloalkyl, C_6-C_{20} aryl, C_3-C_{20} alkenyl, C_7-C_{20} arylalkyl, C_7-C_{20} alkylaryl, C_8-$_{20}$ arylalkenyl, linear or branched, optionally substituted by 1 to 10 halogen atoms, or a group SiR^{II}_3; each R^I equal to or different from each other is a divalent aliphatic or aromatic hydrocarbon group containing from 1 to 20 carbon atoms, optionally containing from 1 to 5 heteroatoms of groups 14 to 16 of the periodic table of the elements and boron; each Q is independently selected from B, C, Si, Ge, Sn; M is a metal of group 3, 4 or 10 of the Periodic Table, Lanthanide or Actinide; each X is independently selected from: hydrogen, chlorine, bromine, OR^{II}, NR^{II}_2, C_1-C_{20} alkyl or C_6-C_{20} aryl; each R^{II} is independently selected from C_1-C_{20} alkyl , C_3-C_{20} cycloalkyl, C_6-C_{20} aryl, C_3-C_{20} alkenyl C_7-C_{20} arylalkyl, C_7-C_{20} arylalkenyl or alkylaryl, linear or branched; R^{II} is methyl, ethyl isopropyl; L' is N or O; when L is cyclopentadienyl k is equal to 5, when L is indenyl k is equal to 7, when L is fluorenyl or benzoindenyl k is equal to 9, when L is tetrahydroindenyl k is equal to 11 and when L is octahydrofluorenyl, k is equal to 17; z is equal to 0, 1 or 2; x is equal to 1, 2 or 3; y is equal to 1, 2 or 3; x+y+z is equal to the valence of M; m is an integer which can assume the values 1, 2, 3 or 4; a and b are integers whose value ranges from 0 to k-1; f is an integer whose value ranges from 1 to k; g is 0 or 1; c and e are equal to 0 or 1; a+b+c is at least 1; a+g+c is at least 1; d is equal to 0, 1 or 2; when Q is B, then c+d=1; when Q is C, Si, Ge or Sn, then c+d=2; when L' is N, then g+e=1; when L' is O, then g=0 and e=0.