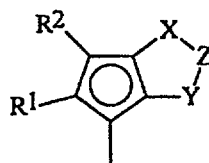




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(54) Title: METALLOCENES, LIGANDS AND OLEFIN POLYMERIZATION



(57) Abstract

A class of metallocene compounds is disclosed having the following general formula (I): $R_n(Cp)(A)ML_p$ wherein R_n is a structural bridge; Cp is a heterocyclic cyclopentadienyl group of formula (II) wherein R^1 and R^2 are hydrogen or hydrocarbon groups; M is a transition metal of group 3, 4, 5 or 6 or to the lanthanides or the actinides in the Periodic Table or the Elements (new IUPAC version); L is a monoanionic ligand; Z is NR^3 or O; X and Y are selected from $(CR^4)_n$, BR^4_2 , PR^4 , SiR^4_2 or GeR^4_2 ; and substituents R^4 are hydrogen atoms or hydrocarbon radicals, with the proviso that both X and Y cannot be carbon atoms at the same time; A is a group selected from substituted or unsubstituted cyclopentadienyls, which may carry one or more condensed cycles, $=NR^5$, $-O-$, $-S-$ and $=PR^5$ groups, R^5 being defined as substituents R^1 and R^2 , and groups corresponding to formula (II); p is an integer from 0 to 3. These metallocene compounds are useful as catalyst components for the polymerization of olefins.