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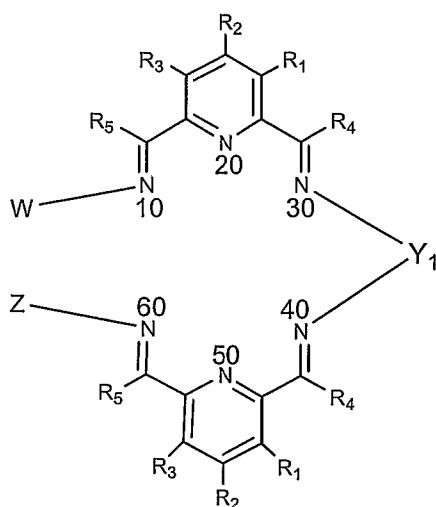
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(54) Title: HEXADENTATE LIGAND AND CATALYTIC COMPLEX THEREWITH



I

(57) Abstract: A hexadentate ligand for polymerization of olefins including chemical structure(I) is provided: R₁, R₂, and R₃ of chemical structure (I) are each independently hydrogen, hydrocarbyl, substituted hydrocarbyl, or an inert functional group; R₄ and R₅ are each independently hydrogen, hydrocarbyl, an inert functional group, or substituted hydrocarbyl; Y₁ is a structural bridge; and W, Y₁, and Z are independently hydrogen, hydrocarbyl, an inert functional group, or substituted hydrocarbyl having from about 0 to about 30 carbon atoms. In another embodiment of chemical structure I, W, Y₁, and Z are selected to produce chemical structure (II): R₆, R₇, R₈, R₉, and R₁₀ of chemical structure (II) are each independently hydrogen, hydrocarbyl, an inert functional group, or substituted hydrocarbyl; R_A, R_B, R_C, and R_D are each independently hydrogen, fluorine, an inert functional group, a primary carbon group, a secondary carbon group, or a tertiary carbon group; Y₂ is a structural bridge between two halves of the structure, and more particularly may be a bond, a hydrocarbyl group comprising from about 0 to about 20 carbon atoms, methylene (CH₂), ethylene (C₂H₄), or an inert functional group; and any two of R_A, R₆, R₇, R_B, R_C, R₈, R₉, R₁₀, and R_D, or any portion of Y₂, vicinal to one another, taken together may form a ring.



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