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(54) Title: METALLOCENE CATALYST COMPOUNDS FOR PRODUCING POLYOLEFINS

(57) Abstract: In some embodiments, a compound is represented by Formula (I) wherein; each of R¹, R², R³, R⁴, R⁵, R⁶, R⁷, R⁸, R⁹, and R¹⁰ is independently hydrogen, substituted or unsubstituted hydrocarbyl, a substituted or unsubstituted heteroatom, or a substituted or unsubstituted heteroatom-containing group, or one or more of R¹ and R², R² and R³, R³ and R⁴, R⁵ and R⁶, R⁷ and R⁸, R⁸ and R⁹, or R⁹ and R¹⁰ are joined to form a substituted or unsubstituted completely saturated ring or a substituted or unsubstituted aromatic ring; each of R¹¹, R¹³, R¹⁵, and R¹⁷ is independently hydrogen or substituted or unsubstituted hydrocarbyl. Each of R¹², R¹⁴, R¹⁶, and R¹⁸, if present, is independently hydrogen or substituted or unsubstituted hydrocarbyl. The 5-membered metallocyclic ring of Formula (I) can optionally have one or two carbon-carbon double bonds such that two or more of R¹², R¹⁴, R¹⁶, or R¹⁸ are not present.

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