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- (54) **Title:** HETEROATOM-BRIDGED BIS-PHENYL-PHENOXY CATALYSTS AND ETHYLENE COPOLYMERS WITH IMPROVED FEATURES

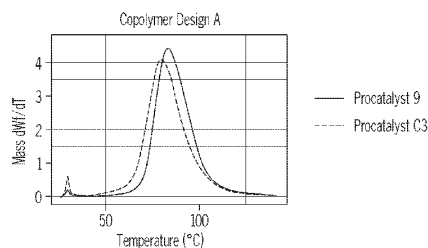
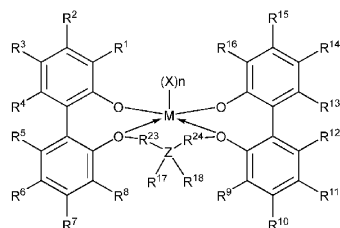


FIG. 1A



(57) **Abstract:** Embodiments are directed to a catalyst system comprising a metal-ligand complex having the following structure: where R^{17} and R^{18} are independently (C_5 - C_{40})hydrocarbyl. Embodiments are also directed to an ethylene-based polymer comprising the polymerized reaction product of ethylene monomer and 1-butene comonomer, wherein the ethylene-based polymer has a density from 0.854 g/cm^3 to 0.875 g/cm^3 , a melt index I_2 from 0.1 to 30 dg/min, a melt flow ratio (I_{10}/I_2) from 5 to 15, a molecular weight distribution (MWD) from 1.5 to 5, and an HCC (high comonomer content) value of less than 1.4 wt%.

[Continued on next page]

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