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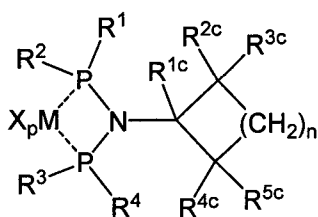
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Structure X

(57) Abstract: A metal complex comprising a metal compound complexed to a heteroatomic ligand, the metal complex having Structure (X), wherein R^1 , R^2 , R^3 , and R^4 are each independently an alkyl group, a cycloalkyl group, a substituted cycloalkyl group, an aromatic group, or a substituted aromatic group, R^{1c} , R^{2c} , R^{3c} , R^{4c} , and R^{5c} are each independently hydrogen or an alkyl group, and MX_p comprises a group IVB, VB, or VIB metal. A metal complex comprising a metal compound complexed to a diphosphino aminyl ligand comprising at least two diphosphino aminyl moieties and a linking group linking each aminyl nitrogen atom of the diphosphino aminyl moieties.