

**OLEFIN OLIGOMERIZATION CATALYSTS AND METHODS OF USING
SAME**

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 MXp 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.