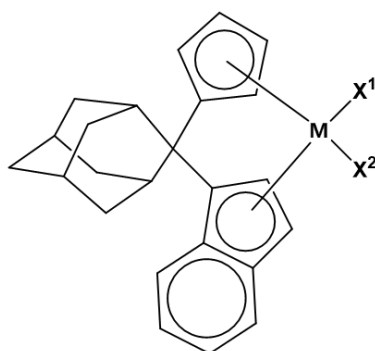


Abstract

A metallocene compound, a catalyst composition using the metallocene compound, an olefin polymerization method using the catalyst composition, and an ethylene-cycloolefin copolymer and a preparation method therefor. The metallocene compound has a structure as represented by formula (1), in which formula M is a tetravalent transition metal atom; X^1 and X^2 are each independently a halogen atom, an alkyl having 1 to 10 carbon atoms, an aryl having 6 to 12 carbon atoms or an N,N-dialkyl amino having 2 to 8 carbon atoms. The catalyst composition has the advantages of high catalytic activity, good copolymerization performance and a high molecular weight of an obtained polymer.



Formula (1)