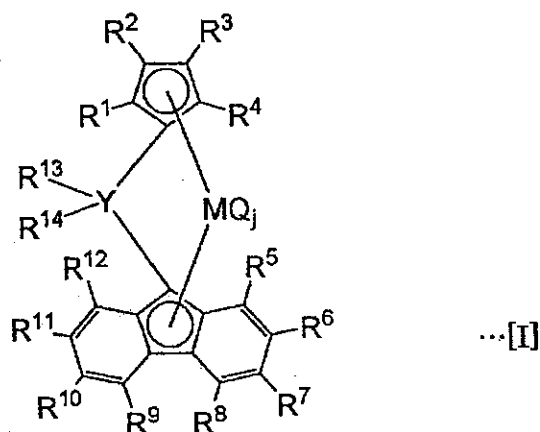


**TRANSITION METAL COMPOUND, OLEFIN POLYMERIZATION CATALYST,
AND PROCESS FOR PRODUCING OLEFIN POLYMER**

ABSTRACT

Provided is a transition metal compound novel and useful as a catalyst component for olefin polymerization, a catalyst for olefin polymerization containing the transition metal compound, and a process for producing an olefin polymer using the catalyst for polymerization. The transition metal is characterized by being represented by the following general formula [I]:



wherein, R^3 is hydrogen, R^2 is selected from a hydrocarbon group or a silicon-containing group, R^1 and R^4 are selected from a hydrocarbon group having 2 to 20 carbon atoms and a silicon-containing group, each of R^5 , R^6 , R^7 , R^8 , R^9 , R^{10} , R^{11} , R^{12} , R^{13} and R^{14} , which is selected from hydrogen, a hydrocarbon group and a silicon-containing group, may be same or different from each other, and adjacent groups from R^5 to R^{14} may be bonded to each other to form a ring. M is a Group 4 transition metal,

Y is a carbon atom, Q may be selected from halogen, a hydrocarbon group, an anionic ligand and a neutral ligand capable of coordinating with a lone electron pair, which may be selected in the same combination or different combination, and j is an integer of 1 to 4.