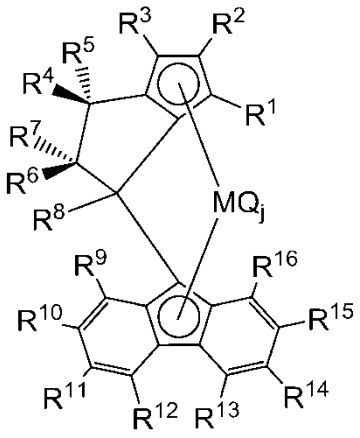
TRANSITION METAL COMPOUND, OLEFIN POLYMERIZATION CATALYST, AND OLEFIN POLYMER PRODUCTION PROCESS

ABSTRACT

[Object] To provide transition metal compounds with excellent catalytic activity which can afford olefin polymers such as propylene polymers that have high stereoregularity and high molecular weight and may be easily crystallized into a β-phase.

[Solution] The transition metal compound is represented by General Formula [I] or is an enantiomer thereof:



… [I]

[in Formula [I], R^1, R^3, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}, R^{12}, R^{13}, R^{14}, R^{15} and R^{16} are each independently a hydrogen atom, a hydrocarbon group, a hetero atom-containing hydrocarbon group, or a silicon-containing group; R^2 is a hydrocarbon group, a hetero atom-containing hydrocarbon group, or a silicon-containing group; R^4 is a hydrogen atom; any two substituents of the substituents R^1 to R^{16} except R^4 may be bonded to each other to form a ring; M is a Group IV transition metal; Q is a structure such as a halogen atom; and j is an integer of 1 to 4].

[No suitable drawing]