

ABSTRACT

An olefin polymerization catalyst comprising the following components (A) and (B):

Component (A): an ion-exchange layered silicate
5 having an acid site of at most -8.2 pKa, the amount of the acid site is equivalent to at least 0.05 mmol/g of 2,6-dimethylpyridine consumed for neutralization; and

Component (B): a compound of a transition metal belonging to Group 3 to Group 12 of the Periodic Table.