polymer having high melting point and high molecular weight has been demanded.

Citation List

Patent Literature

[0008]

PTL 1: JPA 1992-069394

PTL 2: JPA 2000-212194

PTL 3: JPA 2004-189666

PTL 4: JPA 2004-189667

PTL 5: JPA 2001-526730

PTL 6: JPA 2007-302853

Non Patent Literature

[0009]

NPL 1: Angew. Chem. Int. Ed. Engl., 24, 507 (1985)

NPL 2: J. Am. Chem. Soc., 1988, 110, 6255

Summary ~~of Invention~~

Technical Problem

[0010]

It is an object of the ~~present invention~~embodiments disclosed herein to provide a method for producing an olefin polymer having high melting point and high molecular weight through polymerization of an olefin such as propylene, the method being effective and giving a high productivity in industrial production processes.

Solution to Problem

[0011]

The inventors have conducted intensive studies to achieve the object and found that use of a catalyst for olefin polymerization, which contains a bridged metallocene compound having a specific structure, enables the object to be achieved, thereby accomplishing the present ~~invention~~disclosure.

[0012]

In particular, the present ~~invention~~ disclosure relates to the following [1] to [12].

[1] ~~A~~ In a first aspect, there is provided a method for producing an olefin polymer, the method ~~including~~ comprising polymerizing at least one olefin selected from olefins having two or more carbon atoms in the presence of a catalyst for olefin polymerization, wherein

the catalyst for olefin polymerization ~~contains~~comprises

(A) a bridged metallocene compound represented by Formula [1] and

(B) at least one compound selected from

(b-1) an organoaluminum oxy-compound,

(b-2) a compound which reacts with the bridged metallocene compound (A) to form an ion pair, and

(b-3) an organoaluminum compound:

[0013]