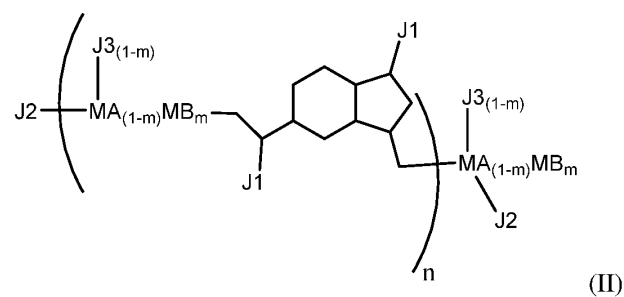
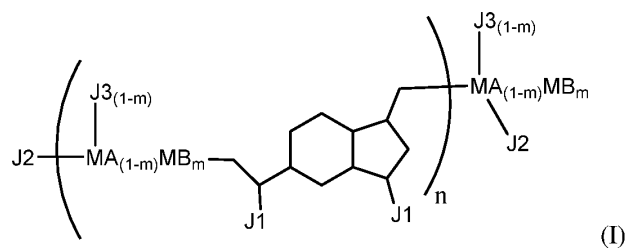


What is claimed is:

1. A composition having the formula (I) or (II):



wherein:

each MA is Al, B, or Ga;

each MB is Zn or Mg;

m is a number from 0 to 1;

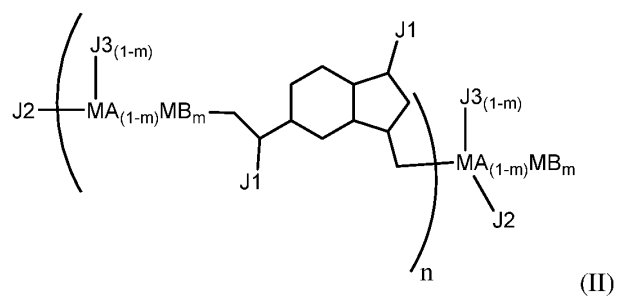
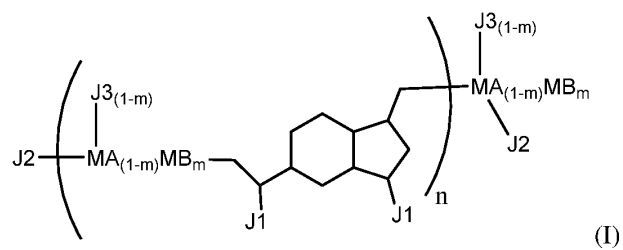
n is a number from 1 to 100; and

each J1, J2, and J3 is hydrogen or a C₁₋₂₀ alkyl group, and

wherein J1, J2, and J3 may be the same or different, or mixtures thereof.

2. The composition of claim 1, wherein each J1, J2, and J3 is selected from the group consisting of methyl, ethyl, n-propyl, n-butyl, isobutyl, n-hexyl, isohexyl, n-octyl, isooctyl, and isomers thereof.

3. A process for preparing the composition having the formula (I) or (II):



wherein:

each MA is Al, B, or Ga;

each MB is Zn or Mg;

m is a number from 0 to 1;

n is a number from 1 to 100; and

each J1, J2, and J3 is hydrogen or a C₁₋₂₀ alkyl group, and

wherein J1, J2, and J3 may be the same or different, or mixtures thereof,

the process comprising: (a) combining 1,2,4-trivinylcyclohexane, an organometallic compound, a co-catalyst, a solvent, and a first catalyst precursor, and (b) obtaining a final solution comprising the composition having the formula (I) or (II).

4. The process of claim 3, wherein the organometallic compound comprises a trivalent metal, a divalent metal, or a mixture of a trivalent metal and a divalent metal.

5. The process of claim 3, wherein each J1, J2, and J3 is selected from the group consisting of methyl, ethyl, n-propyl, n-butyl, isobutyl, n-hexyl, isohexyl, n-octyl, isooctyl, and isomers thereof.
6. A polymerization process for preparing a polymer composition comprising:
 - contacting at least one olefin monomer with a catalyst composition;
 - wherein
 - the catalyst composition comprises the reaction product of a catalyst precursor, a co-catalyst, and the composition of claim 1 or 2.
7. A polymerization process for preparing a polymer composition, the process comprising:
 - contacting at least one olefin monomer with a catalyst composition;
 - wherein the catalyst composition comprises the reaction product of a second catalyst precursor, a co-catalyst, and the composition prepared according to the process of claim 3, and
 - wherein the second catalyst precursor is the same compound as the first catalyst precursor.
8. A polymer composition obtained by the polymerization process of claim 6 or 7.
9. A catalyst composition comprising the reaction product of at least one catalyst precursor, at least one co-catalyst, and the composition of claim 1 or 2.
10. A process for preparing a telechelic functional polymer comprising performing functional group conversion reactions at carbon-metal bonds of the composition of claim 1 or 2.