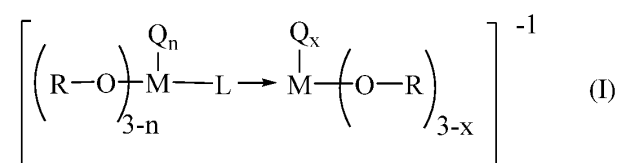


CLAIMS

1. A process of polymerizing olefins comprising contacting ethylene and a (C₃–C₄₀)alpha-olefin comonomer in the presence of a catalyst system to produce a polymer resin; the catalyst system comprising a procatalyst and a bimetallic activator complex wherein the bimetallic activator complex comprises an anion and a countercation, the anion having a structure according to formula (I):



where:

each M is independently aluminum, boron, or gallium;

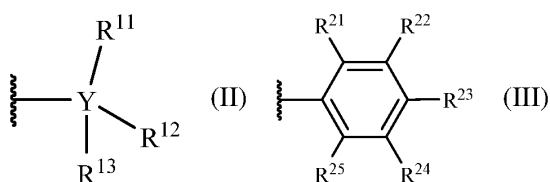
L is chosen from a species having at least two Lewis basic sites;

each Q is independently a monodentate ligand;

n is 0, 1, or 2, wherein when n is 0, Q of Q_n is not present;

x is 0, 1, or 2, wherein when x is 0, Q of Q_x is not present;

each R is independently selected from the group consisting of radicals having formula (II) and radicals having formula (III):



each Y is independently carbon or silicon;

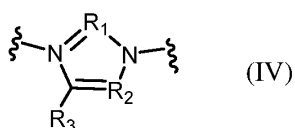
each R¹¹, R¹², R¹³, R²¹, R²², R²³, R²⁴, and R²⁵, is independently chosen from

(C₁–C₄₀)alkyl, (C₆–C₄₀)aryl, –H, –NR^N₂, –OR^C, –SR^C, or halogen, wherein when R is a radical according to formula (II), at least one of R¹¹, R¹², or R¹³ is perhalogenated (C₁–C₄₀)alkyl, perhalogenated (C₆–C₄₀)aryl, or –F; and when

-55-

R is a radical according to formula (III), at least one of R^{21} , R^{22} , R^{23} , R^{24} , and R^{25} is perhalogenated (C_1-C_{40}) alkyl, perhalogenated (C_6-C_{40}) aryl, or $-F$; optionally, when n is 0 or 1, two R groups in formula (I) are covalently connected; and each R^N or R^C is independently (C_1-C_{30}) hydrocarbyl or $-H$.

2. The process according to claim 1, wherein L is chosen from (C_1-C_{20}) heterohydrocarbon anion, $^-OC(O)R^L$, $^-S(O)_3R^L$, $^-P(O)_3R^L$, $^-NR^L_2$, $^-OR^L$, $^-SR^L$, or halide, wherein R^L is $-H$, (C_1-C_{30}) hydrocarbyl, halogen-substituted (C_1-C_{30}) hydrocarbyl.
3. The process according to claim 2, wherein L is $^-OC(O)R^L$ and R^L is $-C_6F_5$.
4. The process according to claim 2, wherein L is $^-OC(O)R^L$ and R^L is $-CH_3$.
5. The process according to claim 1, wherein when each M is aluminum, L is chosen from (C_1-C_{20}) heterohydrocarbon anion, $^-OC(O)R^L$, $^-S(O)_3R^L$, $^-P(O)_3R^L$, $^-NR^L_2$, $^-OR^L$, or $^-SR^L$, wherein R^L is $-H$, (C_1-C_{30}) hydrocarbyl or halogen-substituted (C_1-C_{30}) hydrocarbyl.
6. The process according to claims 1 or 2, wherein L is selected from radicals having the formula (IV):



where

each of R^1 and R^2 are independently selected from $-C(R^L)-$ or $-N-$, wherein R^L is $-H$, (C_1-C_{30}) hydrocarbyl, or halogen-substituted (C_1-C_{30}) hydrocarbyl, and R^3 is chosen from $-H$, (C_1-C_{30}) hydrocarbyl, or halogen-substituted (C_1-C_{30}) hydrocarbyl.

7. The process according to claim 6, wherein R_1 is $-C(C_{11}H_{23})-$, R_2 is $-C(H)-$, and R^3 is $-H$.

8. The process according to claims 1 or 2, wherein L is $-\text{OS}(\text{O})_2\text{CF}_3$.
9. The process according to any one of the preceding claims, wherein each R is a radical having the formula (II), wherein Y is carbon, R^{11} , R^{12} , and R^{13} are fluorine.
10. The process according to any one of the preceding claims, wherein the counteranion has a formal charge of +1.
11. The polymerization process according to any one of the preceding claims, wherein the counteranion is $^+\text{N}(\text{H})\text{R}^{\text{N}}_3$, where each R^{N} is chosen from $(\text{C}_1\text{--}\text{C}_{20})\text{alkyl}$ or $(\text{C}_6\text{--}\text{C}_{20})\text{aryl}$.
12. The polymerization process according to claim 11, wherein the counteranion is $^+\text{N}(\text{H})\text{R}^{\text{N}}_3$, where at least two R^{N} are chosen from $(\text{C}_{10}\text{--}\text{C}_{20})\text{alkyl}$.
13. The polymerization process according to claim 9, wherein the counteranion is $^+\text{C}(\text{C}_6\text{H}_5)_3$.
14. The polymerization process according to claim 9, wherein the counteranion is $^+\text{C}(\text{C}_6\text{H}_4\text{R}^{\text{C}})_3$, where R^{C} is $(\text{C}_1\text{--}\text{C}_{20})\text{alkyl}$.
15. The polymerization process according to any one of the preceding claims, wherein the bimetallic activator complex in a high-boiling-point fully saturated hydrocarbon solution having a concentration of 200 micromoles of bimetallic activator complex and 20 millimoles of water per liter of high-boiling-point fully saturated hydrocarbon has a percent dissipation factor of less than or equal to 0.1 as measured by the Hydrocarbon Conductivity Test.