when present is selected from R_1R_2Si, R_1R_2C, $(R_1R_2C)_2$, $(R_1R_2Si)_2$; wherein R_1 and R_2 are independently selected from hydrogen, branched or unbranched C_1 to C_{20} hydrocarbyl radicals, phenyl, and substituted phenyl, and when A is bridged, the catalyst represented can be in the racemic or meso form, and wherein said activator is selected from among Lewis acid activators and ionic activators, and obtaining thereby a polymer characterized by:

(a) M_n = 200-50,000;

(b) M_w = 200-80,000;

(c) MWD = 1 to 5;

(d) a pour point less than 10°C;

(e) a KV at 100°C = 1.5 to 5,000;

(h) a VI greater than or equal to 100;

(i) having no distinct melting point above 0°C;

(j) by having the ratio of the amount of any alpha-olefin monomer incorporated in said polymer to the amount of said any alpha-olefin in said feed being from 0.5 to 3; and

(k) a stereo-arrangement of each monomer that is (i) atactic; (ii) syndiotactic; or (iii) a combination of atactic and syndiotactic;

wherein said random polymer is characterized by a χ value (degree of randomness) ranging from 0.7 to 1.4; and

wherein said contacting further comprises contacting a promoter or co-activator selected from the group consisting of alkylaluminum compounds having the formula R_3Al and alkylboron compounds having the formula R_3B, where each R is independently selected from C_1 to C_{20} alkyl group or H.

33. The process of claim 32, wherein ethylene and/or propylene, if present in said feed, are present in the combined amount of less than 50 wt%, based on the combined weight of alpha-olefins in said feed.

34. The process of claim 32, wherein 1-octene and/or 1-decene, if present in said feed, are present in the amount of 66 wt% or less individually, based on the combined weight of alpha-olefins in said feed.

35. The process of claim 32, wherein 1-octene and/or 1-decene and/or 1-dodecene, if present in said feed, are present in the amount of less than 70 wt% individually, based on the combined weight of alpha-olefins in said feed.