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(54) Title: SINGLE REACTOR CHAIN SHUTTling REACTIONS FOR ETHYLENE/VINYLAENE MULTIBLOCK INTERPOLYMERS

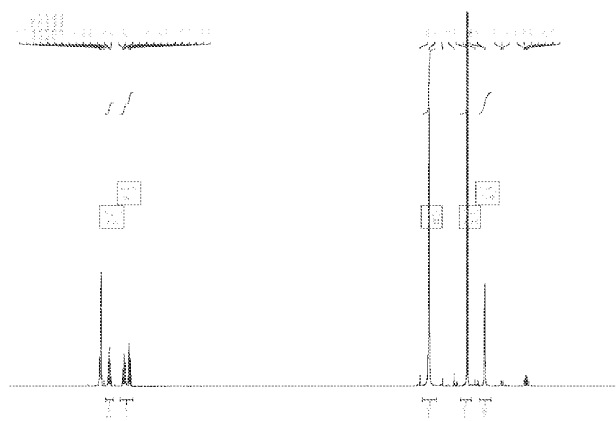


FIGURE 1



(A)



(B)

(57) Abstract: A process to form a composition comprising an ethylene/vinylarene multiblock interpolpolymer, said process comprising polymerizing, in a single reactor, a mixture comprising ethylene, a vinylarene, and optionally an alpha-olefin, in the presence of at least the following a)-c): a) a first metal complex selected from the following Formula (A), as described herein: b) a second metal complex selected from the following Formula (B), as described herein, and c) a chain shuttling agent selected from the following: a dialkyl zinc, a trialkyl aluminum, or a combination thereof. A composition comprising an ethylene/vinylarene multiblock interpolpolymer comprising at least one polymer structure selected from: -(AR)-(AP)-(AR)-(AP)- (Structure 1), or (AR)-(AP)-(AR)-(AP) (Structure 2); where each (AR) segment independently comprises, in polymerized form, ethylene, > 10 mol% of the vinylarene and optionally an alpha-olefin, and wherein each (AP) segment independently comprises, ethylene, optionally ≤ 10 mol% vinylarene and optionally the alpha-olefin.

[Continued on next page]

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