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(54) Title: IMPROVED PROCESS TO PREPARE CATALYST FROM *IN-SITU* FORMED ALUMOXANE

(57) Abstract: The present disclosure relates to processes for forming alumoxanes and catalyst systems thereof for olefin polymerization. In at least one embodiment, a process includes forming a solution by, in an aliphatic hydrocarbon having a boiling point of less than about 70 degrees Celsius, introducing at least one hydrocarbyl aluminum with at least one non-hydrolytic oxygen-containing compound and a support material. The molar ratio of aluminum to non-hydrolytic oxygen in the solution is greater than or equal to 1.5, and the combining is conducted at a temperature of less than about 70 degrees Celsius. The process includes distilling the solution at a pressure of greater than about 0.5 atm to form a supported alumoxane precursor. The process further includes heating the supported alumoxane precursor to a temperature greater than the boiling point of the aliphatic hydrocarbon fluid and less than about 160 degrees Celsius to form a supported alumoxane.



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