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(54) Title: PROCATALYST COMPOSITION INCLUDING SILYL ESTER INTERNAL DONOR AND METHOD

(57) Abstract: The present disclosure provides silyl esters and silyl diol esters suitable as internal electron donors in procatalysts for polymer production. Disclosed are procatalyst compositions formed from a procatalyst precursor and an internal electron donor that is a silyl ester or a silyl diol ester. The procatalyst compositions can be used with a cocatalyst and optionally an external electron donor and/or an activity limiting agent to form a Ziegler-Natta catalyst composition. The present catalyst compositions exhibit high catalyst activity and form olefin-based polymers with broad molecular weight distribution, favorable flexural modulus, and high isotacticity.



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