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(54) Title: GAS-PHASE POLYMERIZATION PROCESS HAVING MULTIPLE FLOW REGIMES

(57) Abstract: The present invention relates to an improvement for gas phase olefin polymerization process under two or more different flow regimes. The process involves adding a mixed electron donor system to a reactor having two or more different flow regimes, wherein the mixed electron donor system comprises at least one selectivity control agent and at least one activity limiting agent. The invention is particularly well suited for reactor systems which include a regime characterized by having a low-velocity or high-solid holdup, which have been reported to have operational problems such as particle agglomeration and formation of polymer "chunks".



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