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(54) Title: SELF LIMITING CATALYST COMPOSITION FOR ETHYLENE POLYMERIZATION

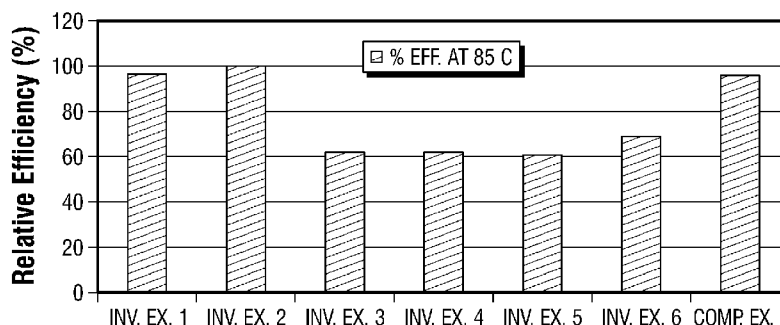


FIG. 1

(57) Abstract: A process for polymerizing ethylene to produce an ethylene -based polymer including contacting ethylene with a Ziegler-Natta procatalyst, an alkylaluminum cocatalyst and a self limiting agent selected from the group of aliphatic, cycloaliphatic, substituted cycloaliphatic or aromatic esters, anhydrides and amides such that the self limiting agent reduces polymerization rates to no greater than 40% of the polymerization rate in the absence of the self limiting agent at temperatures equal to or greater than 120 °C is provided.