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(54) Title: SLURRY PHASE POLYMERISATION PROCESS

(57) Abstract: Process for producing a multimodal polyethylene in at least two reactors connected in series, in which 20-80wt% of a high molecular weight (HMW) polymer is made in suspension in a first reactor and 20-80wt% of a low molecular weight (LMW) polymer is made in suspension in a second reactor in the presence of the HMW polymer, wherein the solids concentration in the second LMW reactor, defined as the mass of polymer divided by the total mass of slurry, is at least 35wt%, most preferably between 45wt% and 60wt%, and/or the ratio of solids concentration in the first reactor to that in the second reactor is maintained at less than 1.0, preferably between 0.6 and 0.8, and further wherein the volume of the second reactor is at least 10%, preferably at least 30% and more preferably at least 50% greater than the volume of the first reactor.

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