

SLURRY PHASE POLYMERISATION PROCESS

ABSTRACT

5 Process for producing a multimodal polyethylene in at least two loop 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, one polymer being made in the presence of the other in either order, wherein the ratio of the average activity in the LMW reactor to the average activity in
10 the HMW reactor is from 0.25 and 1.5, where average activity in each reactor is defined as the rate of polyethylene produced in the reactor (kgPE/hr) / [ethylene concentration in the reactor (mol%) x residence time in the reactor (hours) x feed rate of catalyst into the reactor (g/hr)], residence time being defined as the mass of the polymer in the reactor (kg)/the output rate of polymer from the reactor (kg/hr), and the volumes of the two reactors differ by less
15 than 10%.

(No Suitable Figures)