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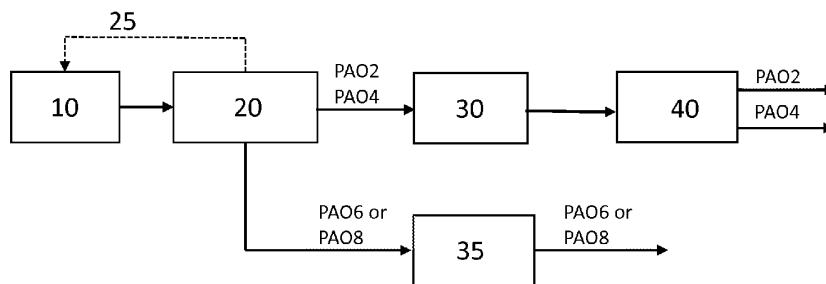
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(54) Title: PRODUCTION OF POLY-ALPHA-OLEFINS

Figure 1



(57) Abstract: Current invention describes a process for producing poly- α -olefins, the process comprises providing at least one α -olefin monomer and a catalyst, and letting the at least one α -olefin monomer react in the presence of the catalyst to form a mixture of poly- α -olefins (PAO). The obtained mixture of poly- α -olefins is fractionated to two PAO fractions wherein the two PAO fractions are a first fraction of PAO having a kinematic viscosity of 5 cSt or lower and a second fraction of PAO having a kinematic viscosity of more than 5 cSt. Optionally a recycle fraction is also obtained in the fractionation and at least a part of the recycle fraction comprising dimers of the α -olefins can be recycled back to the reaction step. The process further comprises a step where the obtained two PAO fractions are directly subjected to separate hydrogenation to obtain hydrogenated PAO fractions.



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