

Title (en)

METHOD FOR THE HOMOGENEOUS CATALYTIC PRODUCTION OF HIGHLY BRANCHED AMORPHOUS POLYOLEFINS

Title (de)

VERFAHREN ZUR HOMOGENKATALYTISCHEN HERSTELLUNG VON HOCHVERZWEIGTEN AMORPHEN POLYOLEFINEN

Title (fr)

PROCEDE DE PRODUCTION PAR CATALYSE HOMOGENE DE POLYOLEFINES AMORPHES FORTEMENT RAMIFIEES

Publication

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Application

EP 00983173 A 20001127

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Abstract (en)

[origin: WO0144317A1] The invention relates to a method for the homogeneous catalytic production, starting from ethene, of highly branched amorphous polyolefins which have an elastomeric characteristic profile. In a first step of said method a) ethene is oligomerized in the presence of a transition metal compound of general formula (I), whereby R<1> and R<2> represent C4 to C16 heteroaryl or C6 to C16 aryl with hydrogen substituents in both vicinal or ortho positions in relation to the binding site between the aryl or heteroaryl and N<a> or N and is optionally oligomerized in the presence of a co-catalyst in an inert solvent. In a further step b), a transition metal compound of general formula (II) is added to the oligomerization mixture produced according to step a) and the reaction is continued in the presence of ethene. In a subsequent step c), the polymer product obtained is isolated.

[origin: WO0144317A1] The invention relates to a method for the homogeneous catalytic production, starting from ethene, of highly branched amorphous polyolefins which have an elastomeric characteristic profile. In a first step of said method a) ethene is oligomerized in the presence of a transition metal compound of general formula (I), whereby R<1> and R<2> represent C4 to C16 heteroaryl or C6 to C16 aryl with hydrogen substituents in both vicinal or ortho positions in relation to the binding site between the aryl or heteroaryl and N<a> or N and is optionally oligomerized in the presence of a co-catalyst in an inert solvent. In a further step b), a transition metal compound of general formula (II) is added to the oligomerization mixture produced according to step a) and the reaction is continued in the presence of ethene. In a subsequent step c), the polymer product obtained is isolated.

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