Title (en)

METHOD FOR PRODUCING ELASTOMERS

Title (de)

VERFAHREN ZUR HERSTELLUNG VON ELASTOMEREN

Title (fr)

PROCEDE DE PRODUCTION D'ELASTOMERES

Publication

EP 1042378 A1 20001011 (DE)

Application

EP 98962433 A 19981209

Priority

- DE 19757218 A 19971222
- EP 9808012 W 19981209

Abstract (en)

[origin: DE19757218A1] In the production of (un)saturated elastomers by (co)polymerization of 2-8 C alpha -olefins, open-chain, monocyclic and/or polycyclic 4-15 C dienes and/or styrene, using catalysts that can be activated by cocatalysts, the catalysts are metallocenes of subgroup III, IV, V or VI metals, including the lanthanides and actinides or pi -complex compounds. The process concerns the production of (un)saturated elastomers, which, in addition to the amorphous structure and a low glass transition temperature, Tg, have melt peak(s), including at least one peak maximum at a Tm above +40 deg C, as determined by differential scanning calorimetry (DSC). It involves (co)polymerization of monomers selected from 2-8 C alpha -olefins, open-chain, monocyclic and/or polycyclic 4-15 C dienes and styrene in bulk, solution, high temperature solution, slurry or gas phase in the presence of organometallic catalysts that can be activated by cocatalysts. The novelty is that the organometallic catalysts are metallocene compounds of formula (I) or pi -complex compounds and especially metallocene compounds of formula (II): CpI, CpII = carbanions with structure containing cyclopentadienyl; D = a donor atom; A = an acceptor atom; M = a sub-group III, IV, V or VI transition metal, including the lanthanides and actinides; X = an anion equivalent; n = 0-4, depending on the charge on M; pi I, pi II = charged or electrically neutral pi -systems

IPC 1-7

C08F 210/18; C08F 4/625

IPC 8 full level

C08F 4/625 (2006.01); **C08F 4/6392** (2006.01); **C08F 4/643** (2006.01); **C08F 12/04** (2006.01); **C08F 210/18** (2006.01); C08F 4/659 (2006.01)

CPC (source: EP KR)

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