

Title (en)

METHOD FOR PRODUCING HIGHLY REACTIVE ISOBUTYLENE HOMO- OR COPOLYMERS USING BORON-CONTAINING CATALYST COMPLEXES

Title (de)

VERFAHREN ZUR HERSTELLUNG VON HOCHREAKTIVEN ISOBUTENHOMO- ODER -COPOLYMEREN MITTELS BORHALTIGER KATALYSATORKOMPLEXE

Title (fr)

PROCEDE POUR PRODUIRE DES HOMOPOLYMERES OU COPOLYMERES D'ISOBUTENE TRES REACTIFS AU MOYEN DE COMPLEXES CATALYTIQUES CONTENANT DU BORE

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Application

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Priority

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Abstract (en)

[origin: WO2007057404A1] The invention relates to the production of highly reactive isobutylene homo- or copolymers with M_n = 500 to 45,000 by polymerizing isobutylene in liquid phase in the presence of a dissolved, dispersed or supported boron-containing catalyst complex by using, as a catalyst complex, a Bronsted compound (I) $[H⁺]_{m+1}[R₁¹R₂²R₃³B-(A_m-₅-BR₆-₆-_n-R₄⁴)_(m+1)-L_x]$ (I), in which: $R₁¹$ to $R₆⁶$ represent aliphatic, heterocyclic or aromatic fluorine-containing hydrocarbon radicals, which are independent of one another and which each have 1 to 18 carbon atoms or silyl groups containing $C₁$ to $C₁₈$ hydrocarbon radicals; A represents a bridge member that, via its nitrogen atoms forms bonds which are covalent to the boron atoms; L represents neutral solvent molecules; n = 0 or 1; m = 0 or 1, and; x = 0.

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