

Title (en)

STEP-BY-STEP ALKYLATION OF POLYMERIC AMINES

Title (de)

STUFENWEISE ALKYlierung von Polymeren AMINEN

Title (fr)

ALKYLATION GRADUELLE D'AMINES POLYMERIQUES

Publication

**EP 1175254 A1 20020130 (DE)**

Application

**EP 00938622 A 20000502**

Priority

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- EP 0003914 W 20000502

Abstract (en)

[origin: WO0066254A1] The invention relates to the following: a method for step-by-step alkylation of primary polymeric amines by step-by-step deprotonation with a metallo-organic base and subsequent reaction with an alkyl halide; a method for modifying the inventive tertiary polymeric amines with other functional groups; polymers with secondary/tertiary amino groups and with quarternary ammonium groups; polymers with secondary/tertiary amino groups and other functional groups, especially cation exchanger groupings; membranes consisting of the above polymers, these membranes being un-cross-linked, ionically cross-linked or covalently cross-linked; a method for producing acid-base-blends/acid-base-blend membranes consisting of the inventive basic polymers with polymers containing sulphonic acid, phosphonic acid or carboxyl groups; inventive acid-base blends/acid-base blend membranes, whereby said blendsblend membranes can be also covalently cross-linked; the use of the inventive ion exchanger polymers as membranes in membrane processes, for example in polymer electrolyte membrane fuel cells, direct methanol fuel cells, in redox batteries and in electrodialysis; the use of the inventive hydrophilic polymers as membranes in dialysis and reverse osmosis, nanofiltration, diffusion dialysis, gas permeation, pervaporation and perstraction.

IPC 1-7

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IPC 8 full level

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