

Title (en)  
METHOD FOR PRODUCING MONODISPERSE GEL-TYPE ION EXCHANGERS

Title (de)  
VERFAHREN ZUR HERSTELLUNG VON MONODISPERSEN GELF RMIGEN IONE NAUSTAUSCHERN

Title (fr)  
PROCEDE POUR PRODUIRE DES ECHANGEURS D'IONS MONODISPERSES DE TYPE GEL

Publication  
**EP 1530596 A1 20050518 (DE)**

Application  
**EP 03793680 A 20030802**

Priority  
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Abstract (en)  
[origin: DE10237601A1] Production of monodisperse gel-type ion exchangers with a particle size of 5-500 µm comprises preparing an uncrosslinked monodisperse seed polymer dispersion with a particle size of 0.5-20 µm by radical polymerization of monoethylenically unsaturated monomers in a nonaqueous solvent, adding and polymerizing an activated styrene-containing monomer mixture, and functionalizing the resulting polymer. Production of monodisperse gel-type ion exchangers with a particle size of 5-500 µm comprises: (a) preparing an uncrosslinked monodisperse seed polymer dispersion with a particle size of 0.5-20 µm by radical polymerization of monoethylenically unsaturated monomers in a nonaqueous solvent; (b) adding, allowing it to soak into the seed polymer dispersion and polymerizing it at elevated temperature, this step being performed in one or more stages with addition of 2-50 wt.% of a crosslinker in the last stage; and (c) functionalizing the resulting polymer. An Independent claim is also included for monodisperse gel-type ion exchangers produced as above, where functionalization comprises sulfonation to produce cation exchangers or chloromethylation followed by hydrolysis or amination to produce anion exchangers.

IPC 1-7  
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IPC 8 full level  
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