

Title (en)

PREPARATION OF CORE-SHELL POLYMER PARTICLES CONTAINING VOIDS

Title (de)

HERSTELLUNG VON KERN-SCHALE POLYMERTeilchen WELCHE HOHLRÄUME ENTHALTEN

Title (fr)

PREPARATION DE PARTICULES POLYMERES DE NANOENCAPSULATION CONTENANT DES CREUX

Publication

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Application

EP 00922681 A 20000428

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Abstract (en)

[origin: WO0068304A1] The invention relates to a process for making core-shell polymer particles containing voids which comprises first emulsion polymerization of a core from a core monomer system comprised of at least one unsaturated monomer containing acid functionality optionally in the presence of seed latex, then encapsulating said core with a hard shell by emulsion polymerizing a shell monomer system containing at least a vinyl aromatic or/and unsaturated carboxylic ester in the presence of said core, and finally swelling at elevated temperature the resultant core-shell polymer particles with volatile base, shell monomers, a radical inhibitor and a non-ionic surfactant followed by polymerization of shell monomers charged at swelling stage to produce an aqueous dispersion of particles which, when dried contain a microvoid which causes opacity in compositions. The core-shell particles produced by the process described above are used in opaque and glossy coatings.

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