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(54) **Title:** FLUORINATED CORE-SHELL-POLYMERS AND PROCESS FOR PREPARING SAME

(57) **Abstract:** Disclosed is a process for preparing fluorinated core-shell polymer particles in which the core is a non-fluorinated polymer and the shell is derived from at least 50% by weight of fluorinated monomers, by 1) synthesizing a core polymer latex by aqueous emulsion polymerization of non-fluorinated monomers forming the core polymer, 2) adding the shell-forming fluorinated monomers or mixtures of at least 50% by weight of fluorinated monomers with non-fluorinated monomers to the core polymer latex of step 1) and allowing for at least one hour of equilibration time in which essentially no polymerization of the shell monomers occurs, 3) reacting the shell-forming monomers in the mixture from step 2) to form the core-shell polymer particles, wherein the process steps 1) to 3) are carried out under mechanical stirring in the absence of surfactants, emulsifiers, emulsifying monomers and mixtures thereof.



WO 2010/139732 A1