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(54) **Title:** POLYMERIZATION PROCESS AND RAMAN ANALYSIS FOR OLEFIN-BASED POLYMERS

(57) **Abstract:** The invention provides a process for monitoring and/or adjusting a dispersion polymerization of an olefin-based polymer, the process comprising monitoring the concentration of the carbon-carbon unsaturations in the dispersion using Raman Spectroscopy. The invention also provides a process for polymerizing an olefin-based polymer, the process comprising polymerizing one or more monomer types, in the presence of at least one catalyst and at least one solvent, to form the polymer as a dispersed phase in the solvent; and monitoring the concentration of the carbon-carbon unsaturations in the dispersion using Raman Spectroscopy.



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