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(54) **Title:** VINYL ACETATE PRODUCTION PROCESS

(57) **Abstract:** Disclosed is a method for controlling a vinyl acetate production process. The method comprises reacting ethylene, acetic acid, and an oxygen-containing gas in the presence of a catalyst in a reactor to produce vinyl acetate, measuring the concentration of a component involved in or associated with the reaction and/or any of the subsequent steps by Raman spectroscopic analysis, and adjusting the conditions in the reactor or in any of the subsequent steps in response to the measured concentration of the component to achieve a proper control of the reaction or any of the subsequent steps.



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