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(54) Title: INTEGRATED PROCESS FOR THE PRODUCTION OF VINYL ACETATE FROM ACETIC ACID VIA ETHYL ACETATE

(57) Abstract: This invention provides an integrated three step economical process for the production of vinyl acetate monomer (VAM) from acetic acid in the vapor phase. First, acetic acid is selectively hydrogenated over a hydrogenating catalyst composition to form ethyl acetate which is cracked to form ethylene and acetic acid in the second step and in a subsequent step so formed ethylene and acetic acid is reacted with molecular oxygen over a suitable catalyst to form VAM. In an embodiment of this invention reaction of acetic acid and hydrogen over platinum and copper supported on silica selectively produces ethyl acetate in a vapor phase at a temperature of about 250°C, which is cracked over a NAFION catalyst to form ethylene and acetic acid at a temperature of about 185°C, which is mixed with molecular oxygen and reacted over a palladium/gold/potassium catalyst supported on titania to form VAM at a temperature of about 150°C to 170°C.



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