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(54) Title: INTEGRATED PROCESS TO PRODUCE ALDEHYDES FROM METHANOL

(57) Abstract: A process for preparing aldehydes from methanol includes introducing a feed stream comprising methanol and hydrogen gas into a reaction zone of a first reactor, converting the feed stream into an intermediate stream comprising C₂ to C₄ olefins in the reaction zone in the presence of a first catalyst, wherein the first catalyst is a microporous catalyst component, removing water and species C₄ and heavier from the intermediate stream to form a lights stream, and converting the lights stream into a product stream comprising propionaldehyde in the presence of a second catalyst and carbon monoxide in a second reactor. The propionaldehyde can further be converted to methyl methacrylate via oxidative esterification.



WO 2022/119706 A1