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(54) Title: FISCHER-TROPSCH PROCESSES AND CATALYSTS USING ALUMINUM BORATE SUPPORTS

(57) Abstract: A process is disclosed for the hydrogenation of carbon monoxide. The process involves contacting a feed stream comprising hydrogen and carbon monoxide with a catalyst system in a reaction zone maintained at conversion-promoting conditions effective to produce an effluent stream, preferably comprising hydrocarbons. In accordance with this invention the catalyst system used in the process includes at least one catalytic material for Fischer-Tropsch reactions (e.g., iron, cobalt, nickel and/or ruthenium), preferably comprising cobalt, and a support comprising aluminum borate. The catalyst system can be prepared by impregnating alumina with a boron-containing composition to form an aluminum borate support and applying a Fischer-Tropsch catalytically active material to the aluminum borate to form a supported catalyst system.



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