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(54) Title: FISCHER-TROPSCH PROCESSES AND CATALYSTS WITH PROMOTERS (57) Abstract A process is disclosed for producing hydrocarbons. The process involves contacting a feed stream comprising hydrogen and carbon monoxide with a catalyst in a reaction zone maintained at conversion-promoting conditions effective to produce an effluent stream comprising hydrocarbons. In accordance with this invention, the catalyst used in the process includes at least cobalt, rhenium, and a promoter selected from the group including boron, phosphorus, potassium, manganese, and vanadium. The catalyst may also comprise a support material selected from the group including silica, titania, titania/alumina, zirconia, alumina, aluminum fluoride, and fluorided aluminas.		