A(1-D13) E(10-J2B3) H(4-E5, 4-F2E) N(2, 3, 3-G) BRPE 17 07 81 A41 E18 H04 12760 K/06 *FP --70-690 BRITISH PETROLEUM PLC ThO2, drying the mixt. and calcining at 300°C. A 1:1 mixt. 19.11.81-GB-034856 (+022174) (26.01.83) B01+23 BQ1: 29 06 of CO and H2 was passed over the catalyst at 325°C (GHSV C07c-01/04 Hydrocarbon prodn. from synthesis gas - using catalyst contg. gallium 2000). The conversion was 9% with 59% selectivity for hydrocarbons, including 27.3% Cl, 36.9% C, and 24.8% C.+. and/or indium oxide and other metal oxide (16pp367). (E) ISR: GB1520996 DS-921565 DS1002746 GB2053960 C83-012332 D/S: E(BE DE FR GB IT NL SE) Conversion of synthesis gas to hydrocarbons is carried out using a catalyst comprising (a) Ga and/or In oxide and (b) an oxide of at least one additional metal selected from Group (VIII) metals and the B-group elements of Groups (I)-(VII), including lanthanides and actinides. DETAILS Component (b) may be an oxide of Cu, Zn, Sc, Y, La, Ti, Zr, Hf, Cr, Mo, W, Mn, Re, Ru, Co, Rh, Ir, Ni, Pd, Pt, Ce, Tb, U and/or Th, esp. Ce, Th or U. The yield of aromatics can be increased by incorporating a crystalline aluminosilicate with a SiO2/Al2O3 ratio of more than 5:1 in the catalyst The reaction may be effected at 200-800 (pref. 300-600)°C

EXAMPLE

and 1-1000 (pref. 30-300) bar.

A catalyst was prepd. by mixing slurries of Ga2O3 and

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