

Title (en)

CHROMIUM-BASED CATALYSTS AND PROCESSES FOR CONVERTING HYDROCARBONS TO SYNTHESIS GAS

Title (de)

CHROM-ENTHALTENDE KATALYSATOREN UND VERFAHREN ZUR KONVERTIERUNG VON KOHLENWASSERSTOFFEN ZU SYNTHESSEGAS

Title (fr)

CATALYSEUR A BASE DE CHROME ET PROCEDES DE CONVERSION D'HYDROCARBURES EN GAZ DE SYNTHESE

Publication

EP 1257497 A2 20021120 (EN)

Application

EP 01910791 A 20010216

Priority

- US 0104976 W 20010216
- US 18342300 P 20000218
- US 70370100 A 20001101

Abstract (en)

[origin: WO0160740A2] Processes for the catalytic conversion of hydrocarbons to carbon monoxide and hydrogen employing new chromium-based catalysts are disclosed. One highly active and selective catalyst system, providing greater than 95 % CH₄ conversion, and 97-98 % selectivity to CO and H₂, is a chromium-containing catalyst consisting of a CoCr₂O₄ cubic spinel precursor dispersed in a chromium oxide matrix. Some other preferred catalysts compositions comprise nickel-chromium containing and rare earth-chromium containing compounds.

IPC 1-7

C01B 3/40; **C01B 3/38**; **B01J 23/26**; **B01J 23/68**

IPC 8 full level

B01J 23/10 (2006.01); **B01J 23/26** (2006.01); **B01J 23/68** (2006.01); **B01J 23/86** (2006.01); **B01J 37/32** (2006.01); **C01B 3/38** (2006.01); **C01B 3/40** (2006.01)

CPC (source: EP)

B01J 23/10 (2013.01); **B01J 23/26** (2013.01); **B01J 23/34** (2013.01); **B01J 23/685** (2013.01); **B01J 23/86** (2013.01); **B01J 23/864** (2013.01); **B01J 23/866** (2013.01); **B01J 37/033** (2013.01); **B01J 37/32** (2013.01); **C01B 3/386** (2013.01); **C01B 3/40** (2013.01); **C01B 2203/0261** (2013.01); **C01B 2203/1023** (2013.01); **C01B 2203/1029** (2013.01); **C01B 2203/1041** (2013.01); **C01B 2203/1052** (2013.01); **C01B 2203/1064** (2013.01); **C01B 2203/1076** (2013.01); **C01B 2203/1082** (2013.01); **C01B 2203/1094** (2013.01); **C01B 2203/1241** (2013.01); **Y02P 20/52** (2015.11)

Citation (search report)

See references of WO 0160740A2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 0160740 A2 20010823; **WO 0160740 A3 20020207**; AU 3836001 A 20010827; CA 2400046 A1 20010823; EP 1257497 A2 20021120

DOCDB simple family (application)

US 0104976 W 20010216; AU 3836001 A 20010216; CA 2400046 A 20010216; EP 01910791 A 20010216