

Title (en)

COBALT-BASED CATALYSTS AND PROCESS FOR PRODUCING SYNTHESIS GAS

Title (de)

KOBALT-ENTHALTENDE KATALYSATOREN UND VERFAHREN ZUR HERSTELLUNG VON SYNTHESSEGAS

Title (fr)

CATALYSEURS A BASE DE COBALT ET PROCEDE DE PRODUCTION DE GAZ DE SYNTHESE

Publication

EP 1230146 A2 20020814 (EN)

Application

EP 00980414 A 20001115

Priority

- US 0031451 W 20001115
- US 16598199 P 19991117
- US 71260700 A 20001114

Abstract (en)

[origin: WO0136323A2] A process is disclosed for the catalytic partial oxidation of light hydrocarbons such as methane. The process involves the conversion of a hydrocarbon feedstock by contacting a feed stream comprising the hydrocarbon feedstock and an oxygen-containing gas with a catalyst in a reaction zone maintained at conversion-promoting conditions in a millisecond contact time reactor effective to produce an effluent stream containing primarily carbon monoxide and hydrogen. Certain preferred catalysts of the invention comprise cobalt metal and/or cobalt containing compound(s), a promoter, and a refractory support are capable of efficiently producing syngas at high selectivities for CO and H₂ products.

IPC 1-7

C01B 3/40; C01B 3/38; B01J 23/75; B01J 23/76; B01J 23/00

IPC 8 full level

B01J 23/00 (2006.01); **B01J 23/75** (2006.01); **B01J 23/76** (2006.01); **B01J 23/78** (2006.01); **B01J 23/83** (2006.01); **B01J 23/89** (2006.01); **C01B 3/38** (2006.01); **C01B 3/40** (2006.01)

CPC (source: EP)

B01J 23/002 (2013.01); **B01J 23/005** (2013.01); **B01J 23/75** (2013.01); **B01J 23/76** (2013.01); **B01J 23/78** (2013.01); **B01J 23/80** (2013.01); **B01J 23/83** (2013.01); **B01J 23/8913** (2013.01); **B01J 23/8933** (2013.01); **C01B 3/386** (2013.01); **C01B 3/40** (2013.01); **B01J 2523/00** (2013.01); **C01B 2203/0261** (2013.01); **C01B 2203/1023** (2013.01); **C01B 2203/1029** (2013.01); **C01B 2203/1052** (2013.01); **C01B 2203/1082** (2013.01); **C01B 2203/1094** (2013.01); **C01B 2203/1241** (2013.01); **Y02P 20/52** (2015.11)

C-Set (source: EP)

1. **B01J 2523/00** + **B01J 2523/3706** + **B01J 2523/48** + **B01J 2523/845**
2. **B01J 2523/00** + **B01J 2523/12** + **B01J 2523/31** + **B01J 2523/845** + **B01J 2523/847**
3. **B01J 2523/00** + **B01J 2523/31** + **B01J 2523/845**
4. **B01J 2523/00** + **B01J 2523/23** + **B01J 2523/845**
5. **B01J 2523/00** + **B01J 2523/27** + **B01J 2523/845**
6. **B01J 2523/00** + **B01J 2523/22** + **B01J 2523/845**
7. **B01J 2523/00** + **B01J 2523/22** + **B01J 2523/828** + **B01J 2523/845**
8. **B01J 2523/00** + **B01J 2523/31** + **B01J 2523/3706** + **B01J 2523/845**

Cited by

CN103464164A; CN103586028A; US9486785B2; US9616414B2

Designated contracting state (EPC)

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

DOCDB simple family (publication)

WO 0136323 A2 20010525; **WO 0136323 A3 20020214**; AU 1767901 A 20010530; CA 2392106 A1 20010525; EP 1230146 A2 20020814

DOCDB simple family (application)

US 0031451 W 20001115; AU 1767901 A 20001115; CA 2392106 A 20001115; EP 00980414 A 20001115