

Title (en)  
OXIDATION PROCESS USING MICROCHANNEL TECHNOLOGY AND NOVEL CATALYST USEFUL IN SAME

Title (de)  
OXIDATIONSVERFAHREN UNTER ANWENDUNG VON MIKROKANALTECHNOLOGIE UND NEUER KATALYSATOR DAFÜR

Title (fr)  
PROCEDE D'OXYDATION REPOSANT SUR LA TECHNOLOGIE DES MICROCANAUUX ET NOUVEAU CATALYSEUR UTILE DANS LEDIT PROCEDE

Publication  
**EP 1628755 A2 20060301 (EN)**

Application  
**EP 04785469 A 20040408**

Priority  
• US 2004010611 W 20040408  
• US 44005303 A 20030516  
• US 44991303 A 20030530

Abstract (en)  
[origin: WO2004103549A2] A process is disclosed for converting a hydrocarbon reactant to CO and H<sub>2</sub>. The process comprises: (A) flowing a reactant composition comprising the hydrocarbon reactant and oxygen or a source of oxygen through a microchannel reactor in contact with a catalyst under reaction conditions to form the product. The product formed in step (A) may be converted to a product comprising CO<sub>2</sub> and H<sub>2</sub>O in a microchannel reactor. A catalyst is disclosed which comprises a composition represented by the formula M<1>a M<2>b M<3>c Ald Ox wherein: M<1> is Rh, Ni, Pd, Pt, Ru, Co or a mixture of two or more thereof; M<2> is Ce, Pr, Tb or a mixture of two or more thereof.

IPC 1-7  
**B01J 19/00**; C01B 3/38; B01J 23/63; B01J 23/58; B01J 23/89

IPC 8 full level  
**B01D 53/04** (2006.01); **B01J 19/00** (2006.01); **B01J 23/63** (2006.01); **B01J 37/02** (2006.01); **C01B 3/38** (2006.01)

CPC (source: EP)  
**B01J 19/0093** (2013.01); **B01J 23/63** (2013.01); **B01J 37/0225** (2013.01); **B01J 37/0244** (2013.01); **C01B 3/384** (2013.01); **C01B 3/386** (2013.01); B01J 2219/00835 (2013.01); B01J 2219/00862 (2013.01); C01B 2203/00 (2013.01); C01B 2203/0233 (2013.01); C01B 2203/0261 (2013.01); C01B 2203/0844 (2013.01); C01B 2203/0872 (2013.01); C01B 2203/0883 (2013.01); C01B 2203/0894 (2013.01); C01B 2203/1011 (2013.01); C01B 2203/1023 (2013.01); C01B 2203/1029 (2013.01); C01B 2203/1035 (2013.01); C01B 2203/1052 (2013.01); C01B 2203/1064 (2013.01); C01B 2203/1082 (2013.01); C01B 2203/1094 (2013.01); C01B 2203/1211 (2013.01); C01B 2203/1241 (2013.01); C01B 2203/1247 (2013.01); C01B 2203/141 (2013.01); C01B 2203/1633 (2013.01); C01B 2203/82 (2013.01); F28F 2260/02 (2013.01); Y02P 20/52 (2015.11)

Citation (search report)  
See references of WO 2004103549A2

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2004103549 A2 20041202**; **WO 2004103549 A3 20050915**; AU 2004241941 A1 20041202; AU 2004241941 B2 20100513; CA 2525256 A1 20041202; CA 2525256 C 20131210; EP 1628755 A2 20060301; RU 2005139412 A 20060627

DOCDB simple family (application)  
**US 2004010611 W 20040408**; AU 2004241941 A 20040408; CA 2525256 A 20040408; EP 04785469 A 20040408; RU 2005139412 A 20040408