

Title (en)

REACTOR AND PROCESS FOR REMOVAL OF CARBON MONOXIDE FROM HYDROGEN

Title (de)

REAKTOR UND VERFAHREN ZUR ENTFERNUNG VON KOHLENMONOXID AUS WASSERSTOFF

Title (fr)

CUVE DE REACTION ET PROCEDE PERMETTANT D'ELIMINER LE MONOXYDE DE CARBONE DANS L'HYDROGENE

Publication

EP 1144302 A1 20011017 (EN)

Application

EP 99956238 A 19991129

Priority

- GB 9903958 W 19991129
- GB 9826222 A 19981201

Abstract (en)

[origin: WO0032513A1] A reactor vessel (1) contains one or more selective oxidation stages and has counter-current cooling (5, 6, 7), each stage having an inlet for feedstock such as CO-contaminated hydrogen (2), an inlet for a second feedstock such as oxygen or air (8), gas mixing means (9a, 9b) and a catalytic reaction zone (4), preferably containing a metal support carrying a selective oxidation catalyst. A compact reformer with a very low pressure drop is suitable for producing hydrogen for fuel cell.

IPC 1-7

C01B 3/58; B01J 19/24; B01J 8/04

IPC 8 full level

C01B 3/32 (2006.01); **B01J 8/04** (2006.01); **B01J 19/00** (2006.01); **B01J 19/24** (2006.01); **C01B 3/38** (2006.01); **C01B 3/58** (2006.01);
C10K 3/04 (2006.01); **H01M 8/06** (2006.01); **H01M 8/10** (2006.01)

CPC (source: EP)

B01J 8/0407 (2013.01); **B01J 8/0496** (2013.01); **B01J 19/2485** (2013.01); **C01B 3/583** (2013.01); **B01J 2208/00194** (2013.01);
B01J 2208/00256 (2013.01); **B01J 2208/00849** (2013.01); **B01J 2219/182** (2013.01); **C01B 2203/044** (2013.01); **C01B 2203/047** (2013.01)

Citation (search report)

See references of WO 0032513A1

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 0032513 A1 20000608; CA 2352776 A1 20000608; EP 1144302 A1 20011017; GB 9826222 D0 19990120; JP 2002531247 A 20020924

DOCDB simple family (application)

GB 9903958 W 19991129; CA 2352776 A 19991129; EP 99956238 A 19991129; GB 9826222 A 19981201; JP 2000585163 A 19991129