

Title (en)
INTEGRATED PROCESS FOR HYDROCARBON SYNTHESIS

Title (de)
INTEGRIERTES VERFAHREN ZUR SYNTHESE VON KOHLENWASSERSTOFF

Title (fr)
PROCÉDÉ INTÉGRÉ DE SYNTHÈSE D'HYDROCARBURES

Publication
EP 1794083 A1 20070613 (EN)

Application
EP 05789543 A 20051004

Priority

- EP 2005054992 W 20051004
- EP 04256132 A 20041004
- EP 05789543 A 20051004

Abstract (en)
[origin: WO2006037782A1] A process for the preparation of syngas from a hydrocarbonaceous feedstock is described. It comprises the steps of: (i) splitting the hydrocarbonaceous feedstock into a first feedstock stream and a second feedstock stream; (ii) catalytically reforming the first feedstock stream in at least one reforming zone to produce a reforming product; (iii) oxidising the second feedstock stream in at least one partial oxidation zone to produce a partial oxidation product; (iv) mixing some or all of the reforming product and some or all of the partial oxidation product to produce a heating gas (syngas) in a mixing zone which is separated from the reforming zone and the partial oxidation zone; (v) heating the reforming zone(s) by means of the heating gas; and (vi) optionally separating carbon dioxide from the cooled heating gas to produce a carbon dioxide depleted syngas stream. The syngas can be used to produce hydrocarbonaceous products, e.g. by the Fischer Tropsch process. The invention provides an integrated process for the production of hydrocarbon products from a hydrocarbonaceous feedstock. Operation of the reforming step and the partial oxidation step in parallel as opposed to in series provides an effective means for balancing the energy characteristics of the two steps. The process of the invention also facilitates flexible operation in that the H₂/CO ratio can be readily tuned in a number of ways.

IPC 8 full level
C01B 3/34 (2006.01); **C01B 3/38** (2006.01)

CPC (source: EP)
C01B 3/36 (2013.01); **C01B 3/382** (2013.01); **C01B 3/384** (2013.01); **C10G 2/32** (2013.01); **C01B 2203/0227** (2013.01); **C01B 2203/0244** (2013.01); **C01B 2203/0255** (2013.01); **C01B 2203/0261** (2013.01); **C01B 2203/0475** (2013.01); **C01B 2203/062** (2013.01); **C01B 2203/0844** (2013.01); **C01B 2203/141** (2013.01); **C01B 2203/142** (2013.01); **C01B 2203/148** (2013.01); **C01B 2203/82** (2013.01); **Y02P 20/10** (2015.11)

Citation (search report)
See references of WO 2006037782A1

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

DOCDB simple family (publication)
WO 2006037782 A1 20060413; AU 2005291226 A1 20060413; AU 2005291226 B2 20090402; EA 200700773 A1 20070831; EP 1794083 A1 20070613; MY 158899 A 20161130

DOCDB simple family (application)
EP 2005054992 W 20051004; AU 2005291226 A 20051004; EA 200700773 A 20051004; EP 05789543 A 20051004; MY PI20054667 A 20051004