

Title (en)  
METHOD FOR HEATING AND PARTIAL OXIDATION OF A STEAM/NATURAL GAS MIXTURE AFTER A PRIMARY REFORMER

Title (de)  
VERFAHREN ZUR AUFHEIZUNG UND PARTIELLEN OXIDATION EINES DAMPF-/ERDGASGEMISCHES HINTER EINEM PRIMÄRREFORMER

Title (fr)  
PROCEDE DE CHAUFFAGE ET D'OXYDATION PARTIELLE D'UN MELANGE VAPEUR/GAZ NATUREL APRES UN REFORMEUR PRIMAIRE

Publication  
**EP 1879832 A1 20080123 (DE)**

Application  
**EP 06706982 A 20060216**

Priority

- EP 2006001380 W 20060216
- DE 102005021500 A 20050510

Abstract (en)  
[origin: WO2006119812A1] The invention concerns a method and a system for the heating and the partial oxidation of a pre-reformed steam/natural gas mixture for an  $\text{NH}_3$ -synthesis gas, said mixture not having been separately pre-heated and energy being added to the gas stream (raw synthesis gas) in the direction of flow after a primary reformer, rust formation being avoided as far as possible and it also being possible to add variable quantities of, for example,  $\text{N}_2$  and  $\text{O}_2$  or mixtures thereof. This is achieved according to the method in that the energy is added directly after the primary reformer via at least one pore burner positioned in the gas discharge line of the primary reformer.

IPC 8 full level  
**C01B 3/02** (2006.01); **C01B 3/36** (2006.01); **C01B 3/38** (2006.01)

CPC (source: EP US)  
**B01J 8/062** (2013.01 - EP US); **B01J 8/065** (2013.01 - EP US); **C01B 3/025** (2013.01 - EP US); **C01B 3/363** (2013.01 - EP US); **C01B 3/382** (2013.01 - EP US); **C01B 2203/0233** (2013.01 - EP US); **C01B 2203/0255** (2013.01 - EP US); **C01B 2203/0283** (2013.01 - EP US); **C01B 2203/068** (2013.01 - EP US); **C01B 2203/0816** (2013.01 - EP US); **C01B 2203/0822** (2013.01 - EP US); **C01B 2203/142** (2013.01 - EP US); **Y02P 20/10** (2015.11 - EP US); **Y02P 20/129** (2015.11 - EP US)

Citation (search report)  
See references of WO 2006119812A1

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)  
**DE 102005021500 A1 20061116**; CN 101184688 A 20080521; EP 1879832 A1 20080123; JP 2008540310 A 20081120; RU 2007145485 A 20090620; RU 2394766 C2 20100720; US 2008290322 A1 20081127; US 7837974 B2 20101123; WO 2006119812 A1 20061116

DOCDB simple family (application)  
**DE 102005021500 A 20050510**; CN 200680015821 A 20060216; EP 06706982 A 20060216; EP 2006001380 W 20060216; JP 2008510422 A 20060216; RU 2007145485 A 20060216; US 92019206 A 20060216