

Title (en)  
HYDROGEN PRODUCTION METHOD

Title (de)  
VERFAHREN ZUR HERSTELLUNG VON WASSERSTOFF

Title (fr)  
PROCÉDÉ DE PRODUCTION D'HYDROGÈNE

Publication  
**EP 2077974 A2 20090715 (DE)**

Application  
**EP 07786444 A 20070731**

Priority  
• EP 2007006746 W 20070731  
• DE 102006045379 A 20060926

Abstract (en)  
[origin: CA2663238A1] Disclosed is a method for producing hydrocarbon-containing feedstocks. In said method, the starting material is autothermally turned into a crude gas containing H<sub>2</sub> and CO as main components as well as the components CO<sub>2</sub>, H<sub>2</sub>O, CH<sub>4</sub>, and traces of H<sub>2</sub>S, COS, CnHm, N<sub>2</sub>, and Ar by means of non-catalytic partial oxidation at 1200 to 1500°C and pressures of 15 to 100 barabs by adding oxygen-containing gas and steam, and the CO contained in the crude gas is then converted into CO<sub>2</sub> and additional H<sub>2</sub> by adding steam. In order to improve said method, the converted crude synthesis gas is directly, i.e. without undergoing a washing process to remove CO<sub>2</sub> and H<sub>2</sub>S, separated into highly pure H<sub>2</sub> and a gas mixture containing H<sub>2</sub>S, CO<sub>2</sub>, H<sub>2</sub>, CO, CH<sub>4</sub>, Ar, and N<sub>2</sub> in a pressure change-absorption process, the gas mixture is fed to a tail gas wash of a sulfur recovery process, the separated H<sub>2</sub>S is fed into the processing gas of the sulfur recovery process, and the waste gas of the tail gas wash is burned, said waste gas being mixed with the tail gas of the sulfur recovery process.

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