

Title (en)  
HYDROGEN PRODUCTION BY WATER DISSOCIATION IN THE PRESENCE OF SNO USING THE SNO<sub>2</sub>/SNO COUPLE IN A SERIES OF THERMOCHEMICAL REACTIONS

Title (de)  
WASSERSTOFFHERSTELLUNG DURCH WASSERDISSOZIATION UNTER PRÄSENZ VON SNO MITHILFE DES PAARS SNO<sub>2</sub>/SNO IN EINER REIHE THERMOCHEMISCHER REAKTIONEN

Title (fr)  
PRODUCTION D'HYDROGENE PAR DISSOCIATION DE L'EAU EN PRESENCE DE SNO EN UTILISANT LE COUPLE SNO<sub>2</sub>/SNO DANS UNE SUITE DE REACTIONS THERMOCHIMIQUES

Publication  
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Application  
**EP 08762140 A 20080221**

Priority  
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• FR 0753533 A 20070227

Abstract (en)  
[origin: FR2913010A1] Preparing hydrogen comprises hydrolysis of solid SnO (tin (II) oxide) to produce hydrogen, where the produced hydrogen is stored, recovered and/or evaluated, and the implemented solid SnO is obtained by heat reducing of tin oxide (SnO<sub>2</sub>) into SnO in the conditions leading to SnO gas and cooling the produced SnO gas at a temperature of = 550[deg] C. Independent claims are included for: (1) a device adapted in the implementation of step of the process comprising hydrolysis reactor (3) fitted with a first inlet (5) adapted in introducing of solid SnO in the hydrolysis reactor as obtained from reducing and cooling steps, an a second inlet (7) connected to water supply unit, and an outlet for evacuating produced hydrogen, and units for recovering and/or evaluating of formed hydrogen in the outlet of the hydrolysis reactor; (2) a fuel cells comprising the device as hydrogen generator; and (3) an installation for the implementation of the process comprising the device (1) associated with a reactor for reducing SnO<sub>2</sub> into SnO equipped with a unit for supply related to an inlet for introducing SnO<sub>2</sub> and an outlet adapted for evacuating SnO gas, and unit for cooling of gas stream comprising SnO gas connected to the outlet of the reduction reactor, suitable for a conversion of SnO gas into SnO solid, a units for supplying SnO solid obtained from cooling unit (28) connected to the first inlet of the hydrolysis reactor.

IPC 8 full level  
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CPC (source: EP US)  
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