

Title (en)

Method and apparatus for ammonia synthesis at atmospheric pressure

Title (de)

Verfahren und Vorrichtung zur Ammoniaksynthese bei Atmosphärendruck

Title (fr)

Procédé et dispositif de synthèse d'ammoniac à pression atmosphérique

Publication

**EP 0972855 B1 20030122 (EN)**

Application

**EP 99600008 A 19990701**

Priority

GR 98100255 A 19980703

Abstract (en)

[origin: EP0972855A1] Prototype reactor and method for the ammonia synthesis at atmospheric pressure. This invention relates to the ammonia production from its elements (N<sub>2</sub> and H<sub>2</sub>) at atmospheric pressure. This was achieved in a solid state proton (H<+>) conducting cell - reactor. Hydrogen was flowing over the anode (6) and was converted into protons that were transported through the solid electrolyte (4) and reached the cathode (5)(Pd) over which nitrogen was passing. <IMAGE>

IPC 1-7

**C25B 1/00**

IPC 8 full level

**C25B 1/00** (2006.01)

CPC (source: EP)

**C25B 1/00** (2013.01)

Cited by

US9005422B2; US8398842B2; CN108350584A; US7811442B2; US2011120880A1; CN103154323A; NL2011188C2; AU2014290913B2; US2012234689A1; JP2016014176A; US10309020B2; KR101695622B1; WO2008097644A1; WO2015009155A1; WO2008079586A1; US10017866B2; EP3567134A1; KR101460988B1; WO03076687A3; WO2015103391A1; US7314544B2; US8075757B2; US8282809B2; KR20200078844A

Designated contracting state (EPC)

BE DE FR GB IT NL

DOCDB simple family (publication)

**EP 0972855 A1 20000119; EP 0972855 B1 20030122**; DE 69904990 D1 20030227; GR 1003196 B 19990901

DOCDB simple family (application)

**EP 99600008 A 19990701**; DE 69904990 T 19990701; GR 980100255 A 19980703