

Title (en)

AMMONIA PRODUCTION PROCESS

Title (de)

VERFAHREN ZUR HERSTELLUNG VON AMMONIAK

Title (fr)

PROCÉDÉ DE PRODUCTION D'AMMONIAC

Publication

EP 4093701 A1 20221130 (EN)

Application

EP 21701877 A 20210125

Priority

- GB 202001017 A 20200124
- EP 2021051630 W 20210125

Abstract (en)

[origin: WO2021148677A1] In accordance with the purpose of the invention, as embodied and broadly described herein, the invention is broadly drawn to energy-efficient ammonia production from air and water. A process for ammonia production from air and water that uses hydrogen gas in (i) a reaction with oxygen of air to prepare nitrogen gas and water to be fed to the ammonia synthesis reactor, and (ii) in performing electrocatalytic ammonia synthesis in an electrochemical cell using H₂.

IPC 8 full level

C01C 1/04 (2006.01); **C25B 1/01** (2021.01); **C25B 1/27** (2021.01); **C25B 11/051** (2021.01); **C25B 15/08** (2006.01); **H01M 4/86** (2006.01); **H01M 8/04119** (2016.01); **H01M 8/04828** (2016.01); **H01M 8/0656** (2016.01)

CPC (source: EP)

C01C 1/04 (2013.01); **C25B 1/27** (2021.01); **C25B 15/087** (2021.01); **H01M 4/86** (2013.01); **H01M 8/04126** (2013.01); **H01M 8/04843** (2013.01); **H01M 8/0656** (2013.01); **Y02E 60/50** (2013.01)

Citation (search report)

See references of WO 2021148677A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

WO 2021148677 A1 20210729; EP 4093701 A1 20221130; GB 202001017 D0 20200311

DOCDB simple family (application)

EP 2021051630 W 20210125; EP 21701877 A 20210125; GB 202001017 A 20200124