

Title (en)

PROCESS FOR AMMONIA SYNTHESIS AND PLANT FOR PREPARATION OF AMMONIA

Title (de)

VERFAHREN ZUR AMMONIAKSYNTHESE UND ANLAGE ZUR HERSTELLUNG VON AMMONIAK

Title (fr)

PROCÉDÉ DE SYNTHÈSE D'AMMONIAC ET INSTALLATION POUR PRÉPARATION D'AMMONIAC

Publication

**EP 4097051 A1 20221207 (DE)**

Application

**EP 21701683 A 20210113**

Priority

- DE 102020200905 A 20200127
- EP 2021050597 W 20210113

Abstract (en)

[origin: WO2021151672A1] The invention relates to a process for ammonia synthesis in a synthesis loop (1), a gas mixture containing nitrogen (N<sub>2</sub>), hydrogen (H<sub>2</sub>) and ammonia (NH<sub>3</sub>) being circulated in the synthesis loop (1) by means of a conveying device (2), nitrogen (N<sub>2</sub>) and hydrogen (H<sub>2</sub>) being at least partly converted to ammonia (NH<sub>3</sub>) in a converter (3) and the gas mixture being cooled off in a cooling device (4) such that the ammonia (NH<sub>3</sub>) is condensed out of the gas mixture. A process which avoids the disadvantages of adsorption drying and absorption is characterized in that hydrogen (H<sub>2</sub>) and nitrogen (N<sub>2</sub>) are introduced into the synthesis loop (1) in different sections.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2021151672A1

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DOCDB simple family (publication)

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