

Title (en)

METHOD AND DEVICE FOR PRODUCING HYDROGEN FROM AMMONIA

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ERZEUGUNG VON WASSERSTOFF AUS AMMONIAK

Title (fr)

PROCÉDÉ ET DISPOSITIF DE PRODUCTION D'HYDROGÈNE À PARTIR D'AMMONIAC

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Application

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Abstract (en)

[origin: WO2023274572A1] The invention relates to a method and a device for producing a hydrogen product (6) from ammonia. An ammonia-containing feed material (1) is converted into a cracked gas (3), which contains hydrogen and nitrogen, using a burner-fired cracking furnace (S) with a catalytic support, said hydrogen product (6) being separated from the cracked gas, thereby obtaining a nitrogen-enriched remaining gas (7) which comprises combustible materials, wherein at least one part of the remaining gas (7) is combusted in order to fire the cracking furnace (S). The invention is characterized in that an oxygen-enriched material flow (8) is supplied from an oxygen source (E) and is used as an oxidizing agent immediately or after adding air (13) while combusting the remaining gas (7).

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