

Title (en)
METHOD AND SYSTEM FOR PRODUCING A GAS COMPRISING NITROGEN (N2) AND HYDROGEN (H2) BY COMBUSTION OF HYDROGEN IN THE PRESENCE OF AIR

Title (de)
VERFAHREN UND SYSTEM ZUR HERSTELLUNG EINES GASES MIT STICKSTOFF (N2) UND WASSERSTOFF (H2) DURCH VERBRENNUNG VON WASSERSTOFF IN GEGENWART VON LUFT

Title (fr)
PROCÉDÉ ET SYSTÈME POUR PRODUIRE UN GAZ COMPRENANT DE L'AZOTE (N2) ET DE L'HYDROGÈNE (H2) PAR COMBUSTION D'HYDROGÈNE EN PRÉSENCE D'AIR

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Application
EP 22773849 A 20220325

Priority
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Abstract (en)
[origin: WO2022198328A1] The technology relates to a method and a system for producing a gas comprising nitrogen (N2) and hydrogen (H2) in a reaction chamber of length L of a reactor. The method comprises the injection of air and the injection of hydrogen into the reactor and the combustion of a portion of the injected hydrogen with the oxygen from the air in the reaction chamber, in the presence of a molar superstoichiometric excess of hydrogen relative to the oxygen from the air. The combustion is maintained by a flame produced by a flow of air having a velocity v1 resulting from the injection of air, surrounded by a flow of hydrogen having a velocity v2 resulting from the injection of hydrogen, with a velocity v2 which is greater than v1.

IPC 8 full level
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