

Title (en)

METHOD FOR ELECTROCHEMICALLY COMBINING HYDROGEN AND OXYGEN AS AN ELECTROLYSIS GAS WITH AT LEAST ONE COMBUSTIBLE GAS KNOWN PER SE AS A CARRIER GAS TO FORM A COMBINED GAS AND ASSEMBLY FOR PERFORMING SAID METHOD

Title (de)

VERFAHREN UND ANORDNUNG ZUR DURCHFÜHRUNG DES VERFAHRENS ZUM ELEKTROCHEMISCHEN VERBINDEN VON WASSERSTOFF UND DER SAUERSTOFF ALS ELEKTROLYSEGAS MIT ZUMINDEST EINEM AN SICH BEKANNTEN BRENN GAS ALS TRÄGER GAS ZU EINEM VERBUNDENEN GAS

Title (fr)

VERFAHREN UND ANORDNUNG ZUR DURCHFÜHRUNG DES VERFAHRENS ZUM ELEKTROCHEMISCHEN VERBINDEN VON WASSERSTOFF UND DER SAUERSTOFF ALS ELEKTROLYSEGAS MIT ZUMINDEST EINEM AN SICH BEKANNTEN BRENN GAS ALS TRÄGER GAS ZU EINEM VERBUNDENEN GAS

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Abstract (en)

[origin: WO2015131880A1] The invention relates to a method for electrochemically combining hydrogen and oxygen with a combustible gas as a carrier gas to form a stable combination gas and TO an assembly for performing said method, the hydrogen and the oxygen being influenced in such a way that an important disadvantage in the prior art, namely the risk of explosion during storage, is significantly reduced and long-term storage is enabled. In addition, simple and additionally efficient operation of said method should be achieved and thus the disadvantages of said prior art should be avoided. The invention relates to a method for electrochemically combining hydrogen and oxygen as an electrolysis gas (3) with at least one combustible gas (4) known per se as a carrier gas (4) to form a combined gas (5), characterized in that, in a reaction chamber (1), the electrolysis gas (3) flows through an electrolyte solution (2) located in the reaction chamber and the at least one combustible gas (4) known per se as a carrier gas (4) is conducted into the space above the electrolyte solution (2), the electrochemical combination of the gases occurring after the electrolysis gas (3) has exited the electrolyte solution (2), and that the combined gas (5) is then led away as a combination gas (5).

IPC 8 full level

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