

Title (en)

PYROTECHNIC PROCESS FOR PROVIDING VERY HIGHLY PURE HYDROGEN AND ASSOCIATED DEVICE

Title (de)

PYROTECHNISCHES VERFAHREN ZUR BEREITSTELLUNG VON HOCHREINEM WASSERSTOFF UND ZUGEHÖRIGE VORRICHTUNG

Title (fr)

PROCEDE PYROTECHNIQUE DE MISE A DISPOSITION D'HYDROGENE DE TRES GRANDE PURETE ET DISPOSITIF ASSOCIE.

Publication

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Application

**EP 13818261 A 20131209**

Priority

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Abstract (en)

[origin: WO2014091127A1] The subject matter of the present invention is a pyrotechnic process for providing very highly pure hydrogen (G) and also a device (100) suitable for implementing said process. Said process comprises: the combustion of at least one solid pyrotechnic charge which generates hydrogen-containing gas (4a, 4b, 4c, 4d) for the production of a hot hydrogen-containing gas (G1) under pressure, containing at least 70% by volume of hydrogen; and the purification of at least one part of said hydrogen-containing gas (G1) under pressure, by passage through a metallic membrane for separating the hydrogen (9) maintained at a temperature above 250°C, advantageously between 300 and 600°C, so as to obtain, at the outlet of said membrane (9), a hydrogen-containing gas (G) containing at least 99.99% by volume of hydrogen.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2014091127A1

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