

Title (en)
SELF-REGULATING GAS GENERATOR AND METHOD

Title (de)
SELBSTREGULIERENDER GASGENERATOR UND VERFAHREN

Title (fr)
GÉNÉRATEUR DE GAZ AUTORÉGULATEUR ET PROCÉDÉ

Publication
EP 2844385 A1 20150311 (EN)

Application
EP 13723351 A 20130503

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Abstract (en)
[origin: WO2013166424A1] A self-regulating gas generator that, in response to gas demand, supplies and automatically adjusts the amount of gas (e.g., hydrogen or oxygen) catalytically generated in a chemical supply chamber from an appropriate chemical supply, such as a chemical solution, gas dissolved in liquid, or mixture. In some embodiments, the gas generator may employ a piston, rotating rod, or other element(s) to expose the chemical supply to the catalyst in controlled amounts. In another embodiment, the self-regulating gas generator uses bang-bang control, with the element(s) exposing a catalyst, contained within the chemical supply chamber, to the chemical supply in ON and OFF states according to a self-adjusting duty cycle, thereby generating and outputting the gas in an orientation-independent manner. The gas generator may be used to provide gas for various gas consuming devices, such as a fuel cell, torch, or oxygen respiratory devices.

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See references of WO 2013166424A1

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