

Title (en)

A method and apparatus for preheating of a fuel cell micro-reformer

Title (de)

Methode und Vorrichtung zum Vorwärmen eines Mikroreformers für eine Brennstoffzelle

Title (fr)

Méthode et dispositif de préchauffage d'un microdispositif d'une pile à combustible

Publication

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Application

EP 02075183 A 20020117

Priority

US 78262101 A 20010213

Abstract (en)

[origin: EP1231184A2] An apparatus and method for a preheated micro-reformer system is disclosed comprising a reformer (42) and a micro-reformer (44) fluidly coupled to the reformer (42). The micro-reformer (44) being electrically preheatable. An apparatus comprising a micro-reformer (44) including a first zone (76) and a second zone (78), the first zone (76) being preheatable to a first temperature and the second zone (78) being preheatable to a second temperature, the second temperature being higher than the first temperature. A method of using a micro-reformer (44) that is electrically preheatable is disclosed comprising initiating an electrically preheatable micro-reformer (44). The micro-reformer (44) is preheated. The preheating can be accomplished by converting electrical energy (56) into thermal energy (66). A method of using a preheated micro-reformer (44) is disclosed comprising preheating a first zone (76), preheating a second zone (78) to a temperature higher than the first zone (76), vaporizing a fuel air mixture (60) in the first zone (76), and reforming the fuel air mixture (60) in the second zone (78).

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