

Title (en)

A VENTILATION ARRANGEMENT AND METHOD FOR HIGH TEMPERATURE FUEL CELL SYSTEM

Title (de)

BELÜFTUNGSANORDNUNG UND VERFAHREN FÜR EIN HOCHTEMPERATUR-BRENNSTOFFZELLENSYSTEM

Title (fr)

DISPOSITION ET PROCÉDÉ DE VENTILATION POUR SYSTÈME DE PILES À COMBUSTIBLE À HAUTE TEMPÉRATURE

Publication

**EP 2751862 A1 20140709 (EN)**

Application

**EP 12756226 A 20120829**

Priority

- FI 20115906 A 20110915
- FI 2012050833 W 20120829

Abstract (en)

[origin: WO2013038051A1] The focus of the invention is a ventilation arrangement for high temperature fuel cell system, each fuel cell in the fuel cell system comprising an anode side (100), a cathode side (102), and an electrolyte (104) between the anode side and the cathode side, the fuel cell system comprising the fuel cells in fuel cell stacks (103), air feed-in piping (130) for feeding air to the fuel cell stacks (103), fuel feed piping (132) for feeding fuel to the fuel cell stacks (103) and the fuel cell system comprising potential sources (131) of leakage of explosive gas. The ventilation arrangement comprises means (138) for arranging an insulation space (136) containing the fuel cell stacks (103) and at least part of the fuel feed piping (132), means (146) for arranging at least outward ventilation flow of the insulation space (136), means (152) for generating a negative pressure with respect to the pressure inside the insulation space to facilitate a forced ventilation flow, piping arrangement (133) for providing a defined flow route for at least the outward portion of said ventilation flow and the ventilation arrangement comprises flow monitoring means (140) for monitoring ventilation flow and gas composition to form essential leakage information and means (146, 133) to alter said defined flow route to significantly increase the amount of heat removal from the insulation space caused by said ventilation flow.

IPC 8 full level

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Citation (search report)

See references of WO 2013038051A1

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