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(54) Title: FUEL CELL SYSTEM

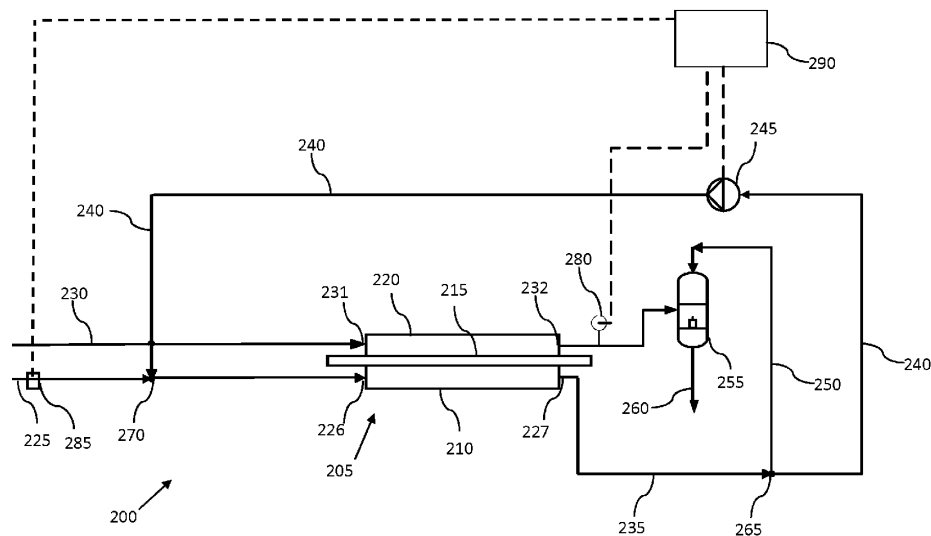


Fig. 2

(57) Abstract: A fuel cell system (200, 300) and a method for operating the fuel cell system (200, 300). The fuel cell system (200, 300) comprising an anode inlet (226) and an anode outlet (227); means for heating the stack (205); an anode off gas recirculation loop (240) configured to provide a gas flow path to recirculate anode off gas from the anode outlet (227) to the anode inlet (226); and a controller (290). The method comprising, at start-up of the fuel cell system (200, 300): heating the stack (205) to a first threshold temperature; providing an unreformed hydrocarbon fuel to the anode inlet (226) at a first fuel flow rate from a fuel supply (225) when but not before the stack (205) is above the first threshold temperature; recirculating anode off gas from the anode outlet (227) to the anode inlet (226) while providing unreformed fuel to the anode inlet (226); and drawing a current from the fuel cell system (200, 300) while recirculating the anode off gas.

[Continued on next page]

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