

Title (en)
SYSTEMS AND PROCESSES OF OPERATING FUEL CELL SYSTEMS

Title (de)
SYSTEME UND VERFAHREN ZUM BETREIBEN VON BRENNSTOFFZELLENSYSTEMEN

Title (fr)
SYSTÈMES ET PROCESSUS D'EXPLOITATION DE SYSTÈMES DE PILES À COMBUSTIBLE

Publication
EP 2443690 A4 20131023 (EN)

Application
EP 10789995 A 20100614

Priority
• US 2010038492 W 20100614
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Abstract (en)
[origin: WO2010147885A1] Processes and systems for operating molten carbonate fuel cell systems are described herein. A process for operating a molten carbonate fuel cell system includes providing a hydrogen-containing stream comprising molecular hydrogen to an anode portion of a molten carbonate fuel cell; controlling a flow rate of the hydrogen-containing stream to the anode such that molecular hydrogen utilization in the anode is less than 50%; mixing anode exhaust comprising molecular hydrogen from the molten carbonate fuel cell with a hydrocarbon stream comprising hydrocarbons, contacting at least a portion of the mixture of anode exhaust and the hydrocarbon stream with a catalyst to produce a steam reforming feed; separating at least a portion of molecular hydrogen from the steam reforming feed; and providing at least a portion of the separated molecular hydrogen to the molten carbonate fuel cell anode.

IPC 8 full level
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CPC (source: EP KR)
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Citation (search report)
• [XP] WO 2009079462 A2 20090625 - BATTELE ENERGY ALLIANCE LLC [US]
• [XP] WO 2009079435 A1 20090625 - SHELL OIL CO [US], et al
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• [Y] US 6348278 B1 20020219 - LAPIERRE RENE B [US], et al
• See references of WO 2010147885A1

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