

Title (en)
FUEL-CELL SYSTEMS OPERABLE IN MULTIPLE MODES FOR VARIABLE PROCESSING OF FEEDSTOCK MATERIALS AND ASSOCIATED DEVICES, SYSTEMS, AND METHODS

Title (de)
IN MEHREREN BETRIEBSARTEN BETREIBBARE BRENNSTOFFZELLENSYSTEME FÜR VARIABLE VERARBEITUNG VON AUSGANGSMATERIALIEN UND ZUGEHÖRIGE VORRICHTUNGEN, SYSTEME UND VERFAHREN

Title (fr)
SYSTÈMES DE PILE À COMBUSTIBLE FONCTIONNELS DANS DE MULTIPLES MODES POUR UN TRAITEMENT VARIABLE DE MATÉRIAUX DE CHARGE D'ALIMENTATION ET DISPOSITIFS, SYSTÈMES ET PROCÉDÉS ASSOCIÉS

Publication
EP 2954582 A4 20161221 (EN)

Application
EP 14748627 A 20140211

Priority
• US 201313764346 A 20130211
• US 2014015819 W 20140211

Abstract (en)
[origin: WO2014124444A2] Fuel cells for selectively reacting a feedstock material with or without generating electricity, and associated systems and methods are disclosed. A fuel cell system in accordance with a particular embodiment includes a first electrode positioned in a first region, a second electrode positioned in a second region, an ion-transport medium between the first and second regions, and an electrical circuit connected between the first and second electrodes. The system is operable in a first mode to react the feedstock material by a non-electricity-generating reaction to produce a product and in a second mode to react the feedstock material by an electricity-generating reaction to produce electricity. A controller receives an input (e.g., corresponding to a change in demand for electricity) and causes the system to switch between operating in the first mode and operating in the second mode in response to the input.

IPC 8 full level
H01M 8/04 (2006.01); **H01M 8/02** (2006.01)

CPC (source: EP)
C25B 1/02 (2013.01); **C25B 1/33** (2021.01); **C25B 15/02** (2013.01); **H01M 8/04955** (2013.01); **H01M 8/0656** (2013.01); **H01M 14/005** (2013.01); **H01M 2250/10** (2013.01); **Y02B 90/10** (2013.01); **Y02E 60/50** (2013.01)

Citation (search report)
• [L] US 2013101908 A1 20130425 - MCALISTER ROY EDWARD [US]
• [XAI] US 2004224193 A1 20041111 - MITLITSKY FRED [US], et al
• [X] US 2005112425 A1 20050526 - HSU MICHAEL S [US]
• See references of WO 2014124444A2

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2014124444 A2 20140814; WO 2014124444 A3 20150115; CA 2900651 A1 20140814; CN 105144450 A 20151209; EP 2954582 A2 20151216; EP 2954582 A4 20161221

DOCDB simple family (application)
US 2014015819 W 20140211; CA 2900651 A 20140211; CN 201480020998 A 20140211; EP 14748627 A 20140211