

Title (en)  
CATALYTIC SYSTEM FOR CONVERTING LIQUID FUELS INTO SYNGAS

Title (de)  
KATALYSATORSYSTEM ZUR UMWANDLUNG VON FLÜSSIGBRENNSTOFFEN IN SYNGAS

Title (fr)  
SYSTÈME CATALYTIQUE PERMETTANT DE CONVERTIR LES COMBUSTIBLES LIQUIDES EN GAZ DE SYNTHÈSE

Publication  
**EP 2087072 A4 20110817 (EN)**

Application  
**EP 07861577 A 20071030**

Priority  
• US 2007022891 W 20071030  
• US 59282506 A 20061103

Abstract (en)  
[origin: US2007151154A1] The present invention is a method and a system for the gasification of a liquid fuel and includes providing a supply of a liquid fuel and an oxidant, atomizing the liquid fuel and mixing it with the oxidant, catalytically reacting the fuel oxidant mixture, providing an ignition source for initiating the catalytic reaction, positioning a heat exchanger in proximity with the catalytic bed, and producing steam which can be fed back into the system thereby eliminating the need for a vaporizer. A hydrocarbon fuel can be mixed with oxygen, as a constituent of air, preferably forming a fuel rich fuel air mixture that passes through a catalytic reactor having an ultra-short channel length metal monolith substrate.

IPC 8 full level  
**C01B 3/24** (2006.01); **C01B 3/38** (2006.01)

CPC (source: EP US)  
**B01F 23/2132** (2022.01 - EP US); **B01J 8/0214** (2013.01 - EP US); **B01J 8/0221** (2013.01 - EP US); **B01J 8/0278** (2013.01 - EP US); **B01J 8/0285** (2013.01 - EP US); **B01J 8/043** (2013.01 - EP US); **C01B 3/382** (2013.01 - EP US); **C01B 3/386** (2013.01 - EP US); **B01J 2208/00203** (2013.01 - EP US); **B01J 2208/0053** (2013.01 - EP US); **B01J 2208/00646** (2013.01 - EP US); **B01J 2208/00716** (2013.01 - EP US); **C01B 2203/0244** (2013.01 - EP US); **C01B 2203/0261** (2013.01 - EP US); **C01B 2203/0455** (2013.01 - EP US); **C01B 2203/0485** (2013.01 - EP US); **C01B 2203/0894** (2013.01 - EP US); **C01B 2203/1276** (2013.01 - EP US)

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Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**US 2007151154 A1 20070705**; CA 2667692 A1 20080515; CA 2667692 C 20150721; EP 2087072 A2 20090812; EP 2087072 A4 20110817; WO 2008057335 A2 20080515; WO 2008057335 A3 20080925

DOCDB simple family (application)  
**US 59282506 A 20061103**; CA 2667692 A 20071030; EP 07861577 A 20071030; US 2007022891 W 20071030