

Title (en)
REFORMER SYSTEM AND REFORMING METHOD

Title (de)
REFORMERSYSTEM SOWIE VERFAHREN ZUR REFORMIERUNG

Title (fr)
SYSTEME REFORMEUR ET PROCEDE DE REFORMAGE

Publication
EP 1934135 A1 20080625 (DE)

Application
EP 06806190 A 20061011

Priority
• EP 2006009826 W 20061011
• US 24816205 A 20051013

Abstract (en)
[origin: WO2007042278A1] The invention relates to a reformer system comprising a reformer (14) for reacting a hydrocarbon-containing fuel (12) to a hydrogen-rich reformat gas (18). The inventive system is characterized by comprising a HC adsorber (20), mounted downstream of the reformer and adapted to adsorb hydrocarbons contained in the reformat gas (18) or to desorb previously adsorbed hydrocarbons to the reformat gas in a temperature-dependent manner. The reformer system is adapted to forward the reformat gas (18) to a consumer once it has passed the HC adsorber (20). The temporal progression of the adsorption/desorption behavior of the HC adsorber (20) is adapted to the temporal progression of the operating behavior of the consumer (26, 28, 30) during an operating phase of the reformer depending on the reformat gas temperature prevailing in the operating phase and/or depending on a temperature gradient of the reformat gas prevailing during the operating phase in such a manner that a substantial desorption of hydrocarbons from the HC adsorber (20) takes place only if the consumer (26, 28, 30) is in an operating state in which the desorbed hydrocarbons are processed by the consumer (26, 28, 30) in such a manner as to not substantially affect the hydrocarbon content of the gases emitted by the consumer (26, 28, 30) and/or the function of the consumer (26, 28, 30).

IPC 8 full level
C01B 3/34 (2006.01); **C01B 3/56** (2006.01)

CPC (source: EP US)
B01D 53/0454 (2013.01 - EP US); **C01B 3/34** (2013.01 - EP US); **C01B 3/56** (2013.01 - EP US); **B01D 2253/102** (2013.01 - EP US); **B01D 2253/108** (2013.01 - EP US); **B01D 2257/702** (2013.01 - EP US); **B01D 2258/012** (2013.01 - EP US); **B01D 2258/014** (2013.01 - EP US); **B01D 2258/016** (2013.01 - EP US); **B01D 2258/0208** (2013.01 - EP US); **B01D 2259/40001** (2013.01 - EP US); **B01D 2259/4566** (2013.01 - EP US); **C01B 2203/0227** (2013.01 - EP US); **C01B 2203/0283** (2013.01 - EP US); **C01B 2203/042** (2013.01 - EP US); **C01B 2203/048** (2013.01 - EP US); **C01B 2203/1604** (2013.01 - EP US)

Citation (search report)
See references of WO 2007042278A1

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 NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2007042278 A1 20070419; EP 1934135 A1 20080625; US 2007086934 A1 20070419

DOCDB simple family (application)
EP 2006009826 W 20061011; EP 06806190 A 20061011; US 24816205 A 20051013