

Title (en)  
AUTOTHERMAL METHOD COMPRISING PERIODIC FLOW REVERSAL

Title (de)  
AUTOTHERMES VERFAHREN MIT PERIODISCHER STRÖMUNGSUMKEHR

Title (fr)  
PROCEDE AUTOTHERMIQUE COMPRENANT UNE INVERSION D'ECOULEMENT PERIODIQUE

Publication  
**EP 1536882 A1 20050608 (DE)**

Application  
**EP 03757758 A 20030813**

Priority  
• DE 10239547 A 20020823  
• EP 0308981 W 20030813

Abstract (en)  
[origin: DE10239547A1] Process for autothermally carrying out endothermic high temperature reactions comprises continuously introducing a reaction mixture having a low temperature to the front end of the reactor during the production phase, heating to a temperature necessary for the required conversion, cooling and removing from the reactor. In a regeneration phase, a regeneration stream is introduced at low temperature to the rear end of the reactor and withdrawn at the front end. The total heat capacity of the regeneration stream over a regeneration period of 30-300 %, preferably 80-120 %, corresponds to the total heat capacity of the reaction mixture over the course of the production.

IPC 1-7  
**B01J 8/02**

IPC 8 full level  
**B01J 8/02** (2006.01); **B01J 8/04** (2006.01); **C01B 3/16** (2006.01); **C01B 3/38** (2006.01); **C01B 3/46** (2006.01)

CPC (source: EP)  
**B01J 8/0221** (2013.01); **B01J 8/0285** (2013.01); **B01J 8/0438** (2013.01); **B01J 8/0496** (2013.01); **C01B 3/16** (2013.01); **C01B 3/38** (2013.01); **C01B 3/46** (2013.01); **B01J 2208/00044** (2013.01); **B01J 2208/00309** (2013.01); **B01J 2208/00371** (2013.01); **B01J 2208/00398** (2013.01); **B01J 2208/00415** (2013.01); **B01J 2208/00504** (2013.01); **B01J 2208/00522** (2013.01); **B01J 2219/002** (2013.01); **B01J 2219/00243** (2013.01); **B01J 2219/182** (2013.01); **C01B 2203/0233** (2013.01); **C01B 2203/0283** (2013.01); **C01B 2203/0844** (2013.01); **Y02P 20/133** (2015.11)

Citation (search report)  
See references of WO 2004026456A1

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

DOCDB simple family (publication)  
**DE 10239547 A1 20040304**; EP 1536882 A1 20050608; WO 2004026456 A1 20040401

DOCDB simple family (application)  
**DE 10239547 A 20020823**; EP 0308981 W 20030813; EP 03757758 A 20030813