

Title (en)  
DISSOCIATION OF MOLECULAR WATER INTO MOLECULAR HYDROGEN

Title (de)  
DISSOZIATION VON MOLEKULAREM WASSER ZU MOLEKULAREM WASSERSTOFF

Title (fr)  
DISSOCIATION DE L'EAU MOLECULAIRE EN HYDROGENE MOLECULAIRE

Publication  
**EP 1765745 A4 20090603 (EN)**

Application  
**EP 04777427 A 20040630**

Priority  

- US 2004021267 W 20040630
- US 48408403 P 20030630
- US 63270803 A 20030801
- US 81959104 A 20040406

Abstract (en)  
[origin: WO2005005009A2] Water molecules, preferably in the form of steam or water vapor, are introduced into a radiant energy transfer reactor. The radiant energy is absorbed by the molecules which dissociate into their constituent molecular elements of hydrogen and oxygen. To prevent recombining of the constituent molecular elements, the hydrogen and oxygen are separated from each other. Various devices may be employed to effect this separation. Once separated, the molecular components are prevented from recombining with each other or with other elements by using standard separation techniques normally employed for separating dissimilar gaseous species.

IPC 8 full level  
**C07C 1/00** (2006.01); **B01J 19/08** (2006.01); **B01J 19/12** (2006.01); **B01J 19/24** (2006.01); **B01J 19/26** (2006.01); **C01B 3/04** (2006.01); **C01B 13/02** (2006.01); **C01B 21/30** (2006.01); **F02M 25/12** (2006.01)

CPC (source: EP)  
**B01J 19/088** (2013.01); **B01J 19/126** (2013.01); **B01J 19/127** (2013.01); **B01J 19/129** (2013.01); **B01J 19/2475** (2013.01); **B01J 19/26** (2013.01); **C01B 3/042** (2013.01); **C01B 13/0207** (2013.01); **C01B 21/30** (2013.01); **F02M 25/12** (2013.01); **B01J 2219/0877** (2013.01); **B01J 2219/0883** (2013.01); **B01J 2219/0892** (2013.01); **B01J 2219/0894** (2013.01); **C01B 2203/0861** (2013.01); **Y02E 60/36** (2013.01); **Y02P 20/129** (2015.11); **Y02T 10/12** (2013.01)

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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 PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2005005009 A2 20050120; WO 2005005009 A3 20050512; CA 2572434 A1 20050120; EP 1765745 A2 20070328; EP 1765745 A4 20090603**

DOCDB simple family (application)  
**US 2004021267 W 20040630; CA 2572434 A 20040630; EP 04777427 A 20040630**