

Title (en)

METHODS FOR SEQUESTERING CARBON DIOXIDE INTO ALCOHOLS VIA GASIFICATION AND FERMENTATION

Title (de)

VERFAHREN ZUR SEQUESTRIERUNG VON KOHLENSTOFFDIOXID ZU ALKOHOLEN MITTELS VERGASUNG UND FERMENTATION

Title (fr)

PROCÉDÉS DE SÉQUESTRATION DE DIOXYDE DE CARBONE DANS DES ALCOOLS PAR GAZÉIFICATION ET FERMENTATION

Publication

EP 2291493 A2 20110309 (EN)

Application

EP 09767101 A 20090619

Priority

- US 2009003685 W 20090619
- US 12935808 P 20080620
- US 12935908 P 20080620
- US 45604909 A 20090611

Abstract (en)

[origin: WO2009154788A2] The present invention is directed to improvements in gasification for use with synthesis gas fermentation. Further, the present invention is directed to improvements in gasification for the production of alcohols from a gaseous substrate containing at least one reducing gas containing at least one microorganism.

IPC 8 full level

C10J 3/66 (2006.01); **C10J 3/02** (2006.01); **C12P 7/08** (2006.01)

CPC (source: CN EP KR)

C10J 3/02 (2013.01 - CN EP KR); **C10J 3/66** (2013.01 - CN EP KR); **C10K 1/101** (2013.01 - CN EP); **C10K 3/003** (2013.01 - CN EP);
C10K 3/005 (2013.01 - CN EP); **C10L 3/00** (2013.01 - KR); **C12P 7/02** (2013.01 - CN EP); **C12P 7/065** (2013.01 - CN EP);
C12P 7/08 (2013.01 - CN EP KR); **C12P 7/16** (2013.01 - CN EP); **C10J 2300/092** (2013.01 - EP); **C10J 2300/093** (2013.01 - EP);
C10J 2300/0946 (2013.01 - EP); **C10J 2300/0959** (2013.01 - EP); **C10J 2300/0969** (2013.01 - EP); **C10J 2300/1665** (2013.01 - EP);
C10J 2300/1681 (2013.01 - EP); **Y02E 50/10** (2013.01 - EP); **Y02E 50/30** (2013.01 - EP)

Citation (search report)

See references of WO 2009154788A2

Designated contracting state (EPC)

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 SE SI SK TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

WO 2009154788 A2 20091223; WO 2009154788 A3 20100722; AU 2009260739 A1 20091223; AU 2009260739 B2 20150924;
BR PI0913850 A2 20161011; BR PI0913850 B1 20200121; CA 2728050 A1 20091223; CA 2728050 C 20170711; CL 2010001473 A1 20120113;
CN 102105569 A 20110622; CN 106867595 A 20170620; EP 2291493 A2 20110309; EP 4151705 A1 20230322; JP 2011524933 A 20110908;
JP 2015156873 A 20150903; JP 2019059946 A 20190418; JP 6605842 B2 20191113; JP 6783421 B2 20201111; KR 101624369 B1 20160525;
KR 20110019780 A 20110228; MX 2010014197 A 20110321

DOCDB simple family (application)

US 2009003685 W 20090619; AU 2009260739 A 20090619; BR PI0913850 A 20090619; CA 2728050 A 20090619; CL 2010001473 A 20101217;
CN 200980129163 A 20090619; CN 201610855238 A 20090619; EP 09767101 A 20090619; EP 22203964 A 20090619;
JP 2011514623 A 20090619; JP 2015105477 A 20150525; JP 2018226642 A 20181203; KR 20117001288 A 20090619;
MX 2010014197 A 20090619