

Title (en)

A GASIFIER COMPRISING VERTICALLY SUCCESSIVE PROCESSING REGIONS

Title (de)

VERGASER MIT VERTIKAL SUKZESSIVEN VERARBEITUNGSBEREICHEN

Title (fr)

GAZÉIFICATEUR COMPORTANT DES RÉGIONS DE TRAITEMENT SE SUCCÉDANT VERTICALEMENT

Publication

EP 2029702 A4 20100825 (EN)

Application

EP 07784333 A 20070605

Priority

- US 2007070456 W 20070605
- CA 2006000881 W 20060605

Abstract (en)

[origin: US2007289216A1] The present invention provides a vertically oriented gasifier comprising vertically successive processing regions for conversion of carbonaceous feedstock into gas. The gasifier comprises of: one or more processing chambers with two or more vertically successive processing regions being distributed within said one or more processing chambers, within each one of which a respective process selected from the group consisting of drying, volatilization and carbon conversion is at least partially favoured, The processing regions are identified by temperature ranges respectively enabling each said respective process. One or more additive input elements are associated with the processing regions for inputting additives to promote each said at least partially favoured process therein. In addition, the gasifier comprises one or more material displacement control modules adapted to control a vertical movement of the feedstock through said processing regions to enhance each said at least partially favoured process, one or more feedstock inputs located near a first of said processing regions and one or more gas outputs and one or more residue outputs.

IPC 8 full level

C10J 3/20 (2006.01)

CPC (source: EP GB KR US)

C10B 53/02 (2013.01 - KR); **C10B 53/07** (2013.01 - KR); **C10J 3/20** (2013.01 - KR); **C10J 3/22** (2013.01 - EP US); **C10J 3/34** (2013.01 - EP US);
C10J 3/482 (2013.01 - EP US); **C10J 3/523** (2013.01 - EP US); **C10J 3/66** (2013.01 - GB); **C10J 3/723** (2013.01 - EP US);
C10L 3/08 (2013.01 - KR); **C10J 2200/15** (2013.01 - EP US); **C10J 2200/152** (2013.01 - EP US); **C10J 2300/0916** (2013.01 - EP US);
C10J 2300/092 (2013.01 - EP US); **C10J 2300/0923** (2013.01 - EP US); **C10J 2300/093** (2013.01 - EP US); **C10J 2300/0946** (2013.01 - EP US);
C10J 2300/0956 (2013.01 - EP US); **C10J 2300/0973** (2013.01 - EP US); **C10J 2300/1238** (2013.01 - EP US); **Y02E 50/10** (2013.01 - EP US);
Y02P 20/129 (2015.11 - EP US)

Citation (search report)

- [X] US 6112677 A 20000905 - KUNTSCHAR WALTER [DE], et al
- [X] NL 8200417 A 19830901 - TAB B V
- [X] DE 19916931 A1 20001012 - DEPONIE WIRTSCHAFT UMWELTSCHUT [DE]
- [XP] WO 2006128285 A1 20061207 - PLASCO ENERGY GROUP INC [CA], et al
- [XP] WO 2006128286 A1 20061207 - PLASCO ENERGY GROUP INC [CA], et al
- [X] US 3801469 A 19740402 - ESSENHIGH R
- [X] US 2001047614 A1 20011206 - SWANEPOEL JACOBUS [ZA], et al
- [X] WO 2005047435 A2 20050526 - DOGRU MURAT [GB], et al
- [E] WO 2009009891 A1 20090122 - PLASCO ENERGY GROUP INC [CA], et al

Citation (examination)

- EP 1696177 A1 20060830 - DRECHSLER DANIEL [DE], et al
- EP 0675324 A1 19951004 - BABCOCK ENTREPRISE [FR]
- See also references of WO 2007143673A1

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 2007289216 A1 20071220; AP 2008004698 A0 20081231; AU 2007256686 A1 20071213; EP 2029702 A1 20090304;
EP 2029702 A4 20100825; GB 0823454 D0 20090128; GB 2452218 A 20090225; JP 2009545636 A 20091224; KR 20090019891 A 20090225;
US 2011078952 A1 20110407; WO 2007143673 A1 20071213; WO 2007143673 A8 20080731; WO 2007143673 A8 20100121;
WO 2007143673 A9 20081030

DOCDB simple family (application)

US 75863307 A 20070605; AP 2008004698 A 20070105; AU 2007256686 A 20070605; EP 07784333 A 20070605; GB 0823454 A 20070605;
JP 2009514504 A 20070605; KR 20097000101 A 20090105; US 2007070456 W 20070605; US 96816410 A 20101214