

Title (en)

METHOD FOR HYDROLYSIS OF PELLETIZABLE BIOMASSES USING HYDROHALIC ACIDS

Title (de)

VERFAHREN ZUR HYDROLYSE VON PELLETIERFÄHIGEN BIOMASSEN MITTELS HALOGENWASSERSTOFFSÄUREN

Title (fr)

PROCÉDÉ D'HYDROLYSE DE BIOMASSES PELLETISABLES AU MOYEN D'ACIDES HALOGÉNOHYDRIQUES

Publication

**EP 2906727 A1 20150819 (DE)**

Application

**EP 13805738 A 20131011**

Priority

- DE 102012020166 A 20121013
- DE 2013000592 W 20131011

Abstract (en)

[origin: WO2014056484A1] The invention relates to the hydrolytic digestion of plant biomasses using hydrohalic acids, preferably hydrochloric acid. In the past, preferably wood-type biomasses were hydrolysed, since other types of biomasses, for example straw, can only be charged into the reactors in a much lower density and have a tendency to compact in the course of the method. The invention solves this problem by two modifications. Firstly, pelletizable biomasses are charged completely or in part in the form of pellets and a greatly increased filling density is thereby achieved. Secondly, the hydrolysis reactors are arranged at an incline, preferably between 30° and 60°, and compacting is prevented. For each pelletizable biomass, the economic efficiency of both modifications must be determined in practical experiments. It is possible that one of the two modifications can be dispensed with.

IPC 8 full level

**C13K 1/00** (2006.01); **B01J 19/28** (2006.01); **C13K 13/00** (2006.01)

CPC (source: EP US)

**B01J 19/24** (2013.01 - US); **C08H 6/00** (2013.01 - EP US); **C08H 8/00** (2013.01 - EP US); **C13K 1/00** (2013.01 - EP US); **C13K 1/02** (2013.01 - US); **C13K 13/00** (2013.01 - EP US); **B01J 2219/187** (2013.01 - US); **B01J 2219/24** (2013.01 - US)

Citation (search report)

See references of WO 2014056484A1

Citation (examination)

- WO 0078446 A2 20001228 - RM MATERIAIS REFRATARIOS LTDA [BR], et al
- WO 2006110902 A1 20061019 - DU PONT [US], et al
- JP 2012161275 A 20120830 - KITAGAWA IRON WORKS CO
- US 2009050134 A1 20090226 - FRIEND JULIE [US], et al
- US 4199371 A 19800422 - ARMANET JEAN-MICHEL [CH], et al
- DE 3539492 A1 19870514 - RIEHM THEODOR DR
- US 2010330633 A1 20101230 - WALTHER DAVID C [US], et al

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**WO 2014056484 A1 20140417; WO 2014056484 A4 20140619;** BR 112015008068 A2 20150922; CA 2887258 A1 20140417; CA 2887258 C 20170926; CL 2015000908 A1 20160205; CN 104903469 A 20150909; CN 104903469 B 20190322; DE 102012020166 A1 20140430; EA 028619 B1 20171229; EA 201590556 A1 20150730; EP 2906727 A1 20150819; JP 2015532202 A 20151109; KR 20150070223 A 20150624; MX 2015004555 A 20160108; MX 365332 B 20190529; MY 176029 A 20200722; PH 12015500775 A1 20150608; PH 12015500775 B1 20150608; US 10006098 B2 20180626; US 2015275320 A1 20151001; ZA 201503229 B 20161221

DOCDB simple family (application)

**DE 2013000592 W 20131011;** BR 112015008068 A 20131011; CA 2887258 A 20131011; CL 2015000908 A 20150410; CN 201380053541 A 20131011; DE 102012020166 A 20121013; EA 201590556 A 20131011; EP 13805738 A 20131011; JP 2015535989 A 20131011; KR 20157011868 A 20131011; MX 2015004555 A 20131011; MY PI2015000896 A 20131011; PH 12015500775 A 20150408; US 201314435180 A 20131011; ZA 201503229 A 20150511