

Title (en)

PHOSPHORUS RECOVERY FROM HYDROTHERMAL TREATMENT OF BIOMASS

Title (de)

PHOSPHORRÜCKGEWINNUNG AUS DER HYDROTHERMISCHEN BEHANDLUNG VON BIOMASSE

Title (fr)

RÉCUPÉRATION DE PHOSPHORE À PARTIR D'UN TRAITEMENT HYDROTHERMAL D'UNE BIOMASSE

Publication

EP 2651858 A4 20170614 (EN)

Application

EP 11847984 A 20111130

Priority

- US 201113285691 A 20111031
- US 42245510 P 20101213
- US 2011062608 W 20111130

Abstract (en)

[origin: WO2012082377A1] Biomass based feeds are processed under hydrothermal treatment conditions to produce a hydrocarbon liquid product and a solids portion. The solids portion can contain a portion of the phosphorus from the biomass feed. The amount of phosphorus in the solids portion can be increased for some biomass feeds by adding a multivalent metal to the feed. The phosphorus from the solids portion can be recycled for further use, such as for growth of additional biomass.

IPC 8 full level

C07C 1/00 (2006.01)

CPC (source: EP)

C10G 1/065 (2013.01); **C10G 1/08** (2013.01); **C10G 1/083** (2013.01); **C10G 2300/1014** (2013.01); **C10G 2300/202** (2013.01);
C10G 2300/301 (2013.01); **C10G 2300/4081** (2013.01); **Y02P 30/20** (2015.11)

Citation (search report)

- [XII] SHUPING Z ET AL: "Production and characterization of bio-oil from hydrothermal liquefaction of microalgae Dunaliella tertiolecta cake", ENERGY, ELSEVIER, AMSTERDAM, NL, vol. 35, no. 12, 1 December 2010 (2010-12-01), pages 5406 - 5411, XP027536889, ISSN: 0360-5442, [retrieved on 20100814]
- See references of WO 2012082377A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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CA 2821241 A1 20120621; CA 2821241 C 20170822; CN 103261123 A 20130821; CN 103261123 B 20150715; EP 2651858 A1 20131023;
EP 2651858 A4 20170614; JP 2014511254 A 20140515; JP 5694559 B2 20150401; MY 160306 A 20170228; RU 2013129237 A 20150120;
RU 2557061 C2 20150720; SG 190876 A1 20130731; ZA 201304335 B 20140326

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RU 2013129237 A 20111130; SG 2013040068 A 20111130; ZA 201304335 A 20130612