Title (en)

METHOD FOR PROCESSING PLANT REMAINS

Title (de)

VERFAHREN ZUR VERARBEITUNG VON PFLANZLICHEN RÜCKSTÄNDEN

Title (fr)

PROCÉDÉ DE TRANSFORMATION DE RÉSIDUS VÉGÉTAUX

Publication

EP 2809172 A1 20141210 (DE)

Application

EP 13705937 A 20130204

Priority

- EP 12153570 A 20120202
- EP 2013052137 W 20130204
- EP 13705937 A 20130204

Abstract (en)

[origin: EP2622967A1] The method comprises providing plant residue having a shell portion (90 wt.%), partially hydrolyzing constituents of the plant residue including carbohydrate, fat and/or protein, and separating liquid phase into dissolved components and solid phase. A suspension is provided for the hydrolysis of the plant residue in a solvent such as water (40 wt.%). The hydrolysis is performed at a temperature of 30-38[deg] C and performed with addition of enzymes, acid or base having a pH of 5.5 and inoculant microorganisms. The method further comprises washing, sterilizing and drying the solid phase. The method comprises providing plant residue having a shell portion (90 wt.%), partially hydrolyzing constituents of the plant residue including carbohydrate, fat and/or protein, and separating liquid phase into dissolved components and solid phase. A suspension is provided for the hydrolysis of the plant residue in a solvent such as water (40 wt.%). The hydrolysis is performed at a temperature of 30-38[deg] C and performed with addition of enzymes, acid or base having a pH of 5.5 and inoculant microorganisms. The method further comprises washing, sterilizing and drying the solid phase. The liquid phase is transferred as an energy-rich liquid for a biogas plant. An independent claim is included for a system for processing plant residue.

IPC 8 full level

A23G 1/00 (2006.01); **A23L 1/308** (2006.01); **A23L 2/52** (2006.01); **A23L 7/10** (2016.01); **A23L 7/104** (2016.01); **A23L 7/152** (2016.01); **A23L 25/00** (2016.01)

CPC (source: EP KR RU US)

A23L 2/52 (2013.01 - KR US); **A23L 7/107** (2016.08 - EP KR US); **A23L 7/115** (2016.08 - EP KR US); **A23L 7/152** (2016.08 - EP KR US); **A23L 25/30** (2016.08 - EP KR US); **A23L 25/40** (2016.08 - EP KR US); **A23L 33/21** (2016.08 - EP KR US); **A23L 33/22** (2016.08 - EP KR US); **C12M 21/04** (2013.01 - EP KR US); **C12M 45/06** (2013.01 - EP KR US); **C12P 5/023** (2013.01 - US); A23G 1/00 (2013.01 - RU); A23V 2002/00 (2013.01 - KR US); Y02E 50/30 (2013.01 - EP US)

Citation (examination)

- JP 2002361217 A 20021217 - KUBOTA KK
- DE 102007004135 A1 20080807 - DERTMANN VOLKMAR [DE]
- DE 102005055310 A1 20070524 - HAMM HUBERT [DE]
- DE 10021383 A1 20011108 - WEA WASTE ENERGY ACTION INTERN [IE]
- See also references of WO 2013113922A1

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)

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