

Search history

Search 1: IC=(C12P3/00) (Results 2063)
Search 2: 1 and (hydrogen or biohydrogen) (Results 1273)
Search 3: 2 and temperature (Results 754)
Search 4: 3 and (agitat* or stir*) (Results 413)
Search 5: 4 and pH (Results 379)
Search 6: 5 and anaerobic (Results 262)
Search 7: 6 and lime (Results 47)
Search 8: 7 and PD<20160607 (Results 43)
Search 9: STA=(hydrogen or biohydrogen) and IC=(C12P3/00) (Results 891)
Search 10: 8 and 9 (Results 16)
Search 11: 10 and rpm (Results 6)
Search 12: RF=(16148549) (Results 4)

Title: HYDROGEN PRODUCING MICROORGANISM USEFUL FOR ENERGY GENERATION FROM DIVERSE CARBOHYDRATES

Abstract: The disclosed invention relates to an isolated hydrogen gas producing microorganism, termed Enterobacter sp. SGT 06-1(TM).

Classifications:

International (IPC 8-9): C07H21/00 C12N1/00 C12N15/00

C12N15/01 C12N15/74 C12P3/00 (Advanced/Invention);

C07H21/00 C12N1/00 C12N15/00 C12N15/01 C12N15/74

C12P3/00 (Core/Invention)

CPC: C12R1/01 C12P3/00 Y02P20/128

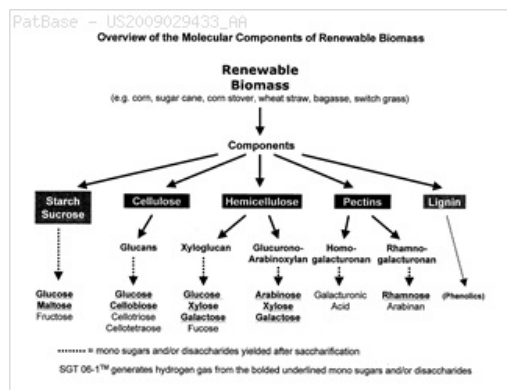
European: C12P3/00 C12R1/01

US: 435/168 435/168P 435/243 435/243S 435/440 435/440S

435/443 435/443S 435/444 435/444S 435/446 435/446S 435/448

435/448S 435/472 435/472S 435/473 435/473S 536/24.32

536/24.320S



Family:

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US2009029433 AA	20090129	US20070829599	20070727

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Probable Assignee: ELMAR SCHMID AND JAMES GIBSON

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Assignee(s): DR ELMAR SCHMID AND JAMES GIBSON

Inventor(s): (std): GIBSON JAMES WARNER ; SCHMID ELMAR

Agent(s): PATENTIQUE PLLC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: PROCESSING BIOMASS

Abstract: Methods and systems are described for processing cellulosic and lignocellulosic materials into useful intermediates and products, such as energy and fuels. For example, conveying systems and methods, such as highly efficient vibratory conveyors, are described for the processing of the cellulosic and lignocellulosic materials.

Classifications:

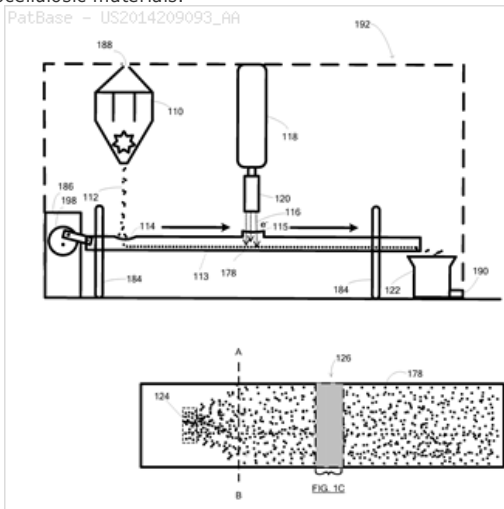
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International (IPC 1-7): C12P7/08 C12P7/10

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Family:

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US20180134274	20180918	AU20180233024	20180921		

Probable Assignee: XYLECO INC

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Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: METHODS FOR SELECTIVELY PRODUCING HYDROGEN AND METHANE FROM BIOMASS FEEDSTOCKS USING AN ANAEROBIC BIOLOGICAL SYSTEM

Abstract: The present invention provides a method for selective production of hydrogen and methane from a biomass feedstock in a reactor vessel maintained under anaerobic conditions by controlling moisture concentration in the reactor vessel. The method comprises the steps of introducing a biomass feedstock into the reactor vessel maintained under anaerobic conditions; introducing a bacterial inoculum into the reactor vessel to facilitate digestion of the biomass feedstock; setting a moisture concentration of the contents of the reactor vessel at a first moisture level; and collecting hydrogen gas from the reactor vessel. The method may further comprise maintaining the moisture concentration at a first moisture level or within a first moisture range. The method may additionally comprise increasing the moisture concentration of the contents of the reactor vessel to a second moisture concentration; and collecting methane gas from the reactor vessel. Switching between hydrogen and methane production is controlled by adjusting the moisture concentration of the contents of the reactor vessel.

Classifications:

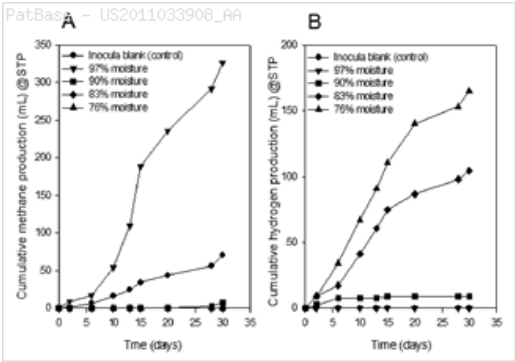
International (IPC 8-9): C02F3/00 C02F3/30 C12M1/107 C12P3/00 C12P5/02 (Advanced/Invention)

International (IPC 1-7): C12P3/00 C12P5/02

CPC: C12P3/00 C12M21/04 C12M41/34 C12P5/023 Y02E50/343

European: C12M21/04 C12M41/34 C12P3/00 C12P5/02B Y02E50/34B

US: 210/603 210/630 435/167 435/167P 435/168 435/168S 435/300.1 435/300.100S



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AR077702 AA	20110914	AR2010P102857	20100804
US2011033908 AA	20110210	US20090535503	20090804
US8246828 BB	20120821	US20090535503	20090804
WO11017292 A1	20110210	WO2010US44203	20100803

Priority:

US20090535503 20090804

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Assignee(s): (std): CHEONG DAE YEOL ; CLARK THOMAS R ; GEOSYNFUELS LLC

Assignee(s): GEOSYNFUELS INC

Inventor(s): (std): CHEONG DAE YEOL ; CLARK THOMAS R

Agent(s): GOODWIN PROCTER LLP,PATENT ADMINISTRATOR; GOODWIN PROCTER LLP PATENT ADMINISTRATOR; GOODWIN PROCTER LLP; STERN DOMBAL CHARLENE A ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW