

Search history

Search 1: FT=(pulverize and (electric near (motor or engine)) and heating) (Results 238)
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Search 3: 2 and blade* (Results 77)
Search 4: 3 and chute* (Results 11)
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Search 6: 5 and hopper (Results 971)
Search 7: 6 and blade* (Results 422)
Search 8: 7 and (pressure near control) (Results 53)
Search 9: 8 and (temperature near control) (Results 35)

1) Family number: 29750624 (US2002110625A)

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Title: CONTINUOUS PACKAGING IN ENCLOSED CONDUITS

Abstract: The invention relates to a package having a first web defining a cavity and a second web bonded to the first web, wherein the second web includes microperforations at a location that is specific to minimize the escape of liquids from the cavity to the exterior of the package. In one particular embodiment, the first web defines a four sided cavity with walls and corresponding flaps attached to the walls that can be folded and bonded to the cavity walls. The second web is an overwrapping lidding web, wherein microperforations are provided on the web material so that the microperforations are aligned with a flap recess, which in turn is in communication with the interior of the tray cavity. In this manner, suitable gas exchange can occur with minimal to no escape of liquids from the tray cavity.

Classifications:

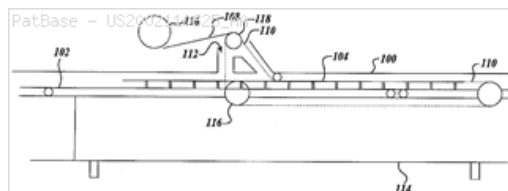
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Family:

Publication number	Publication date	Application number	Application date
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Probable Assignee: SAFEFRESH TECHNOLOGIES LLC

Assignee(s): (std): ATKINSON KEVAN J ; CASE READY SOLUTIONS LLC ; GARWOOD ANTHONY J ; GARWOOD ANTHONY J M ; STEPHENS ROBERT M ; SAFEFRESH TECHNOLOGIES LLC ; AGB LLC ; GARWOOD NICHOLAS J

Assignee(s): STONE MICHAEL ; TIMMERMAN SF LLC ; MILLER ANDREW W ; AMERICAN BEEF PROCESSING LLC ; ANTHONY J GARWOOD ; GARWOOD ANTHONY JM ; FEFRESH TECHNOLOGIES LLC SA

Inventor(s): (std): ANTHONY J ; ANTHONY J GARWOOD ; ANTHONY J M GARWOOD ; ANTHONY JM GARWOOD ; ATKINSON KEVAN J ; GARWOOD ANTHONY J ; GARWOOD ANTHONY J M ; STEPHENS ROBERT M ; GARWOOD NICHOLAS J

Inventor(s): GARWOOD ANTHONY ; GARWOOD ANTHONY JM ; KEVAN J ATKINSON ; ROBERT M STEPHENS

Agent(s): FREEHILLS PATENT AND TRADE MARK ATTORNEYS; FREEHILLS PATENT ATTORNEYS; FPA PATENT ATTORNEYS PTY LTD; HERBERT SMITH FREEHILLS; SMART AND BIGGAR; CHRISTENSEN OCONNOR JOHNSON KINDNESS PLLC; FOLEY AND LARDNER; CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC; FOLEY AND LARDNER LLP; CHRISTENSEN; JOHNSON KINDNESS PLLC

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

2) Family number: 61593550 (US2016029844A)

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Title: AUTOMATED FOOD PROCESSING SYSTEM AND METHOD

Abstract: A system for food preparation, including a system body, a **blade** actuator retained by the system body; a set of **blades**; a **blade** platform rotatably mounting the set of **blades**, the **blade** platform pivotally connected along a first edge to the system body and operable between an engaged position and a disengaged position; and a container platform defining a container receptacle, the container platform pivotally connected along a first edge to the system body and operable between a loading position and a processing position.

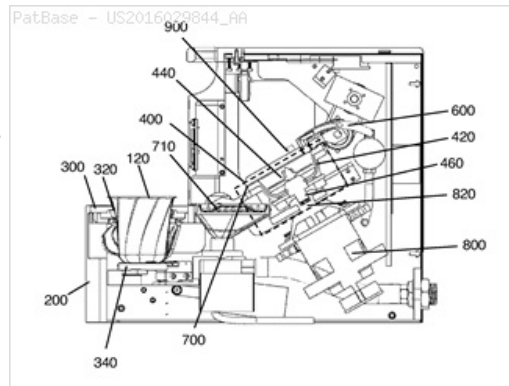
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US: 1/1 206/504 215/382 220/669 229/5.5 366/142 366/147 366/247 426/115 426/231 D11/143 D7/509 D7/545 D7/565 D9/425 D9/428 D9/429

Locarno class: 09/03



Family:

Publication number	Publication date	Application number	Application date
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Priority:

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Probable Assignee: NORTH AMERICAN ROBOTICS CORP

Assignee(s): (std): NORTH AMERICAN ROBOTICS CORP

Assignee(s): PINEDA ELVINE ; UDOMPHOL MATTHEW ; VU MY ; VENTURE LENDING AND LEASING VIII INC

Inventor(s): (std): PINEDA ELVINE ; UDOMPHOL MATTHEW ; VU MY

Agent(s): BORDEN LADNER GERVAIS LLP; COOPER JOHN; SHABBI S; FOLEY AND LARDNER LLP; JEFFREY; DIANA; KHAN SHABBI S; NIKHIL T; SCHOX JEFFREY; KHAN SHABBI S ET AL

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 DJ 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 JO JP KE KG KH KM KN KP KR KW KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY NZ 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

3) Family number: 67496925 (US2018188704A)

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Title: METHODS AND SYSTEMS FOR THE INDUSTRIAL INTERNET OF THINGS

Abstract: The system generally includes a crosspoint switch in the local data collection system having multiple inputs and multiple outputs including a first input connected to the first sensor and a second input connected to the second sensor. The multiple outputs include a first output and a second output configured to be switchable between a condition in which the first output is configured to switch between delivery of the first sensor signal and the second sensor signal and a condition in which there is simultaneous delivery of the first sensor signal from the first output and the second sensor signal from the second output. Each of multiple inputs is configured to be individually assigned to any of the multiple outputs. Unassigned outputs are configured to be switched off producing a high-impedance state. The local data collection system includes multiple multiplexing units and multiple data acquisition units receiving multiple data streams from multiple machines in the industrial environment. The local data collection system includes distributed complex programmable hardware device (CPLD) chips each dedicated to a data bus for logic control of the multiple multiplexing units and the multiple data acquisition units that receive the multiple data streams from the multiple machines in the industrial environment. The local data collection system is configured to manage data collection bands.

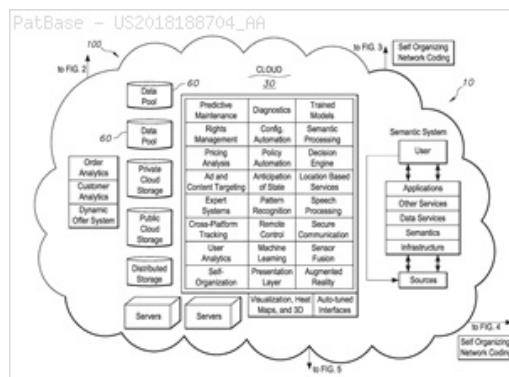
Classifications:

International (IPC 8-9): G01H1/00 G05B11/32 G05B13/02 G05B19/042 G05B19/418 G05B23/02 G06F15/18 G06F3/0488 G06K9/62 G06N3/02 G06N3/04 G06N3/08 G06N5/04 G06N7/00 G06N99/00 H04B17/309 H04B17/318 H04L1/00 H04L29/08 H04Q9/00 H04W4/38 H04W84/18 (Advanced/Invention)

CPC: Y02P80/114 H04W84/20 H04L67/125 G05B19/4185 G06N99/005 G05B2219/31156 G06N5/047 G05B2219/33333 G05B19/418 G05B2219/23253 G05B2219/23258 G05B2219/25255 G05B2219/25268 G05B23/0283 G05B2219/31282 G06F3/0488 H04L67/10 G06N3/02 H04W84/18 G06F15/18 H04W4/38 G05B11/32 G05B19/042 G06N3/0427 G06N3/08 G05B2219/24015 G01H1/00 G05B2219/25174 G05B19/0423 H04Q2209/40 H04Q2209/20 G01M13/045 G05B19/4183 H04L67/12 G05B19/0425 G01M13/028 H04Q9/00 G05B23/0264 G05B2219/45129 H04L67/1097 H04B17/318 H04L5/0064 H04L1/0002 G05B2219/32287 G05B19/41865 G06N7/005 G05B23/0291 G05B2219/37434 G05B19/41845 G05B23/0286 G05B23/0229 G05B2219/37351 G05B2219/37337 G05B23/024 G05B23/0221 G05B19/4184 G06N5/046 G05B2219/35001 H04B17/309 G05B13/028 G05B23/0289 G05B2219/45004 G05B19/41875 G05B2219/40115 G05B23/0297 G05B23/0294 G06K9/6263

Family:

Publication number	Publication date	Application number	Application date
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Priority:

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US20180973336	20180507				

Probable Assignee: STRONG FORCE IOT PORTFOLIO 2016 LLC

Assignee(s): (std): STRONG FORCE IOT PORTFOLIO 2016 LLC ; STRONGFORCE IOT PORTFOLIO 2016 LLC

Inventor(s): (std): CELLA CHARLES HOWARD ; DESAI MEHUL ; DUFFY JR GERALD WILLIAM ; MCGUCKIN JEFFREY P

Inventor(s): DUFFY JR

Agent(s): SCHALDENBRAND MICHAEL A ET AL

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 DJ 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 KH KM KN KP KR KW 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 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

4) Family number: 46628199 (US2011313113A)

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Title: POLYACRYLIC WATER-ABSORBENT RESIN POWDER AND METHOD FOR PRODUCING THE SAME

Abstract: A production method of the present invention is a polyacrylic water-absorbent resin powder production method including the steps of: producing an acrylic monomer solution in which gas is dissolved and/or dispersed; polymerizing the acrylic monomer solution in the absence of a surface active agent or in the presence of not more than 300 ppm of a surface active agent; during or after the step of polymerizing, fragmenting a hydrated gel crosslinked polymer obtained by polymerizing the acrylic monomer solution; and drying by **heat** the hydrated gel crosslinked polymer thus fragmented, the gas being dissolved and/or dispersed in the acrylic monomer solution by at least one of the methods (a) to (c): (a) applying pressure to the acrylic monomer solution and the gas; (b) creating swirling flows of the acrylic monomer solution and the gas; and (c) introducing the gas with the acrylic monomer solution via fine holes. Accordingly, the production method of the present invention makes it possible to efficiently produce a water-absorbent resin having an excellent water-absorption rate without deteriorating a liquid-

absorbent property of a sanitary product or the like.

Classifications:

International (IPC 8-9): A61F13/53 A61L15/24 A61L15/42 A61L15/48 A61L15/60 B01J20/26 B01J20/28 B01J20/30 B01J20/32 B29B9/06 B29C47/00 B29C47/38 C08C19/00 C08F2/00 C08F2/01 C08F2/04 C08F2/10 C08F2/16 C08F2/24 C08F2/30 C08F2/34 C08F2/40 C08F2/44 C08F20/00 C08F20/04 C08F20/06 C08F20/10 C08F22/02 C08F22/06 C08F22/16 C08F22/20 C08F22/20 C08F6/00 C08F6/04 C08F6/26 C08F8/00 C08J3/075 C08J3/12 C08J3/24 C08J9/12 C08J9/20 C08J9/30 C08J9/36 C08K3/00 C08K3/30 C08K3/36 C08K5/09 C08K5/098 C08L33/00 C08L33/02 C08L33/08 C08L79/02 (Advanced/Invention); B29B9/16 B29C47/30 B29C47/66 B29C47/92 C08F22/06 C08F22/10 C08F8/00 (Advanced/Non-invention); C08F2/04 C08F20/00 (Core/Invention)
CPC: C08C19/00 C08F20/10 C08F22/20 C08F2/34 C08F8/00 A61L15/24 C08F2/01 C08J9/20 C08J9/36 C08J2203/06 C08J2205/05 C08F2/10 C08F2/16 C08L33/02 C08F222/1013 C08J9/122 C08J2335/02 C08F20/00 C08J3/12 A61L15/48 A61L15/60 C08F20/06 C08J2333/08 C08J2333/10 B29B9/06 B29B2009/161 B29C47/0011 B29C47/30 B29C47/385 B29C47/667 B29C47/92 B29C2947/9259 B29C2947/92704 C08F220/06 C08F222/1006 C08J3/245 C08J2333/02 B01J20/26 C08F2/001 C08F2/24 C08F2/30 C08F6/00 C08F6/26 C08F2810/20 C08J3/24 C08J3/075 C08J2300/14 C08L33/00 Y10T428/2982 B01J20/267 C08F220/20 B01J20/3085 B01J20/3021 B01J20/28016 B01J20/28004 B01J20/3078 B01J20/3007 C08F6/008
European: C08F2/10 C08F2/16 C08F220/06 C08F6/00W C08J3/12 C08J9/20 M08F222/10B M08J203/06 M08J205/050 M08J333/02 M08J333/08 M08J333/10
US: 1/1 252/194 428/402 502/7 521/116 521/149 525/384 525/384P 526/318.41 526/318.410S

PatBase - US2011313113_AA

Patent Application Publication Dec. 22, 2011 Sheet 1 of 5 US 2011/0313113 A1

FIG. 1

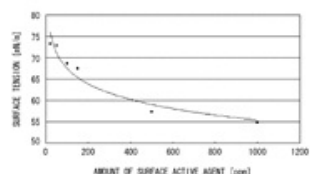
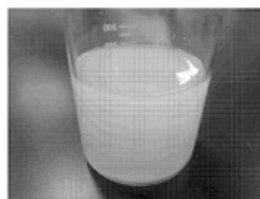


FIG. 2



Family:

Publication number	Publication date	Application number	Application date
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■ EP2518092 A4	20130522	EP20100839528	20101223
■ EP2518092 B1	20170315	EP20100839528	20101223
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■ EP2557095 A4	20140625	EP20110765979	20110407
■ EP2557095 B1	20161005	EP20110765979	20110407
■ EP2589613 A1	20130508	EP20110800917	20110629
■ EP2589613 A4	20140625	EP20110800917	20110629
■ EP2589613 B1	20150513	EP20110800917	20110629
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■ JP5676572 B1	20150225	JP20120509701T	20110407
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■ JP6013414 B2	20161025	JP20140166146	20140818
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■ KR101908142 B1	20181015	KR20127028678	20110407
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US8791210 BB	20140729	US20100201701	20100217
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Priority:

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EP20100743557	20100217	JP20110500511	20100217	JP20110500511T	20100217
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Probable Assignee: NIPPON SHOKUBAI CO LTD

Assignee(s): (std): FUJINO SHINICHI ; IKEUCHI HIROYUKI ; IRIE YOSHIO ; ISHIZAKI KUNIHICO ; NIPPON CATALYTIC CHEM IND ; NAKATSURU REIKO ; MACHIDA SAYAKA ; NOGI KOZO ; SAKAMOTO SHIGERU ; TAKAAI TOSHIHIRO ; TORII KAZUSHI ; SHIRAI YOKO ; TACHI KOJI ; WADA HIDENORI ; NIPPOM SHOKUBAI CO LTD

Assignee(s): NIPPOM SHOKUBAI CO ; NIPPON SHOKUBAI CO., LTD. ; NIPPON SHOKUBAI CO

Inventor(s): (std): KAZUSHI TORII ; NAKATSURU REIKO ; REIKO NAKATSURU ; TAKAAI TOSHIHIRO ; TORII KAZUSHI ; TOSHIHIRO TAKAAI ; YOSHIO IRIE ; WADA HIDENORI ; TORII ICHIIJI ; TACHI KOJI ; SHIRAI YOKO ; SHIGERU SAKAMOTO ; SAKAMOTO SHIGERU ; NOGI KOZO ; MACHIDA SAYAKA ; KUNIHICO ISHIZAKI ; KOZO NOGI ; ISHIZAKI KUNIHICO ; IRIE YOSHIO ; IKEUCHI HIROYUKI ; FUJINO SINICHI ; FUJINO SHINICHI

Agent(s): DR SCHOEN NEYMEYR AND PARTNER MBB; DR SCHOEN NEYMEYR U PARTNER PATENTANWAELTE MBB; MAI DOERR BESIER PATENTANWAELTE; TBK; SCHOEN CHRISTOPH; BITTNER THOMAS L; NEYMEYR ULRICH THEODOR PAUL; COPSEY TIMOTHY GRAHAM; HARAKENZO WORLD PATENT AND TRADEMARK; ROYLANCE ABRAMS BERDO AND GOODMAN LLP; CESARI AND MCKENNA LLP; DICKINSON WRIGHT PLLC; CASIMIR JONES SC; HATTA AND ASSOCIATES

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 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 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

5) Family number: 31368170 (US2002061723A)

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Title: RAISED ISLAND ABRASIVE AND PROCESS OF MANUFACTURE

Abstract: Abrasive sheet materials, abrasive sheet materials with island distributions of abrasive particles, processes for manufacture of abrasive sheet materials with minimized abrasive content, processes for attaching abrasive particles exclusively on the top surface of raised islands in monolayers, and processes for attaching raised island foundation structures to inexpensive flexible backing sheets are described. The process for manufacturing the abrasive sheeting provides an economical method for providing improved quality abrasive sheeting, while also allowing for greater control over the shape and distribution of abrasive islands on the sheet than is available from present processes of manufacture.

Classifications:

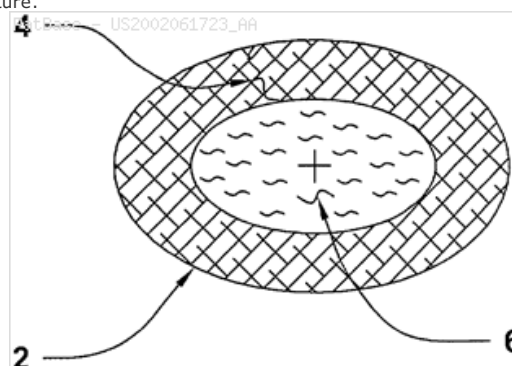
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International (IPC 1-7): B24B1/00 B24B5/00 B24B7/19 B24D11/00 B24D18/00 B24D3/00 C09K3/14

CPC: B24B1/00 B24B5/00 B24B7/00 B24B9/00 B24B37/00 B24B37/14 B24B45/00 B24D9/10 B24B37/042 B24B37/12 B24B37/245 B24B37/26 Y10T29/4998 Y10T29/49982 B24D2203/00 B24D18/00 B24D11/00 B24D11/001 C09K3/1436

European: B24B1/00 B24B37/00 B24B37/04B B24B37/12 B24B37/14 B24B37/24F B24B37/26 B24B45/00 B24B5/00 B24B7/00 B24B9/00 B24D11/00 B24D11/00B B24D18/00 B24D9/10 C09K3/14C

US: 264/11 264/12 264/13 264/15 29/527.1 29/527.2 451/178 451/259 451/259P 451/28 451/285 451/286 451/287 451/290 451/36 451/360



Family:

Publication number	Publication date	Application number	Application date
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Priority:

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Probable Assignee: KELTECH ENGINEERING INC

Assignee(s): (std): DUESCHER WAYNE O ; KELTECH ENGINEERING ; KELTECH ENGINEERING INC

Inventor(s): (std): DUESCHER WAYNE O

Inventor(s): DUESCHER WAYNE

Agent(s): TSURUTA JUNICHI; NISHIYAMA MASAYA; HIGUCHI SOTOJI; ISHIDA TAKASHI; MARK A LITMAN AND ASSOCIATES PA YORK BUSINESS CENTER; MARK A LITMAN AND ASSOCIATES PA; YORK BUSINESS CENTER

Designated states: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

6) Family number: 31767603 (US2005112634A)

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Title: HIGH DENSITY SEQUENCE DETECTION METHODS AND APPARATUS

Abstract: Methods for amplifying polynucleotides, e.g., by PCR, in a sample comprising polynucleotide targets present at very low concentration, comprising: (a) applying amplification reactants to the surface of a substrate comprising reaction spots, wherein the reactants comprise the sample and an amplification reagent; (b) forming a sealed reaction chamber, having a volume less than about 120 nanoliters, preferably less than about 20 nanoliters, over each of said reaction spots; and (c) thermal cycling the substrate and reactants. In one embodiment, the forming step comprises loading a sealing fluid, e.g., mineral oil, on the surface so as to cover the reaction spots. The present invention also provides microplates, comprising: (a) a substrate having at least about 10,000 reaction spots, each comprising a primer and a droplet of reagent having a volume less than about 120 nanoliters, preferably less than about 20 nanoliters; and (b) a sealing liquid isolating each of the spots.

Classifications:

International (IPC 8-9): B01J19/00 B01L11/00 B01L3/00 B01L3/02 B01L7/00 B01L9/00 B29C65/00 B29C65/02 B29C65/10 B32B1/08 B32B33/00 B32B37/00 B32B37/02 B65B3/04 B67C3/00 B81B1/00 C07H21/00 C12M1/00 C12M1/14 C12M1/22 C12M1/32 C12M1/34 C12M1/36 C12M1/38 C12M1/42 C12M3/00 C12N15/09 C12N15/10 C12P19/34 C12Q1/68 C40B30/00 C40B30/04 C40B30/10 C40B40/06 C40B60/12 G01J1/10 G01J1/42 G01J3/02 G01N1/10 G01N1/14 G01N15/06 G01N21/00 G01N21/03 G01N21/25 G01N21/63 G01N21/64 G01N31/00 G01N33/00 G01N33/48 G01N33/50 G01N33/68 G01N35/00 G01N35/02 G01N35/04 G01N37/00 G02B7/02 G06F15/16 G06F17/50 G06F19/00 G06F19/20 G06Q10/00 H01L27/146 H01L27/148 H04N5/217 H04N5/225 H04N5/357 H04N5/361 H04N5/367 H04N5/372 (Advanced/Invention);

B01L3/02 B01L7/00 B01L9/00 B01L99/00 C12Q1/68 G01N21/27 G01N35/00 G01N35/04 G01N35/10 (Advanced/Non-invention); B01L3/00 B01L3/02 B29C65/00 B29C65/02 B29C65/10 B32B1/00 B32B33/00 B32B37/00 B32B37/02 B67C3/00 C12M1/00 C12M1/14 C12M1/26 C12M1/34 C12M1/36 C12M3/00 C12N15/09 C12P19/00 C12Q1/68 C40B30/10 G01J3/00 G01N15/06 G01N21/00 G01N21/25 G01N21/63 G01N21/64 G01N35/00 G01N37/00 G06F15/16 G06F17/50 H01L27/148 H04N5/217 (Core/Invention); B01L7/00 (Core/Non-invention); B01L C12N G01N G06F (Subclass/Invention)

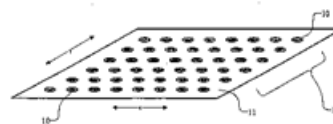
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PatBase - US2005112634_AA

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Figure 1



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Family:

Publication number	Publication date	Application number	Application date
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Probable Assignee: APPLIED BIOSYSTEMS LLC

Assignee(s): (std): BLASENHEIM BARRY ; LI ROBIN ; LU MIKE ; HARDING IAN ; KAO H PIN ; LIM GARY ; FAWCETT ADRIAN ; JONES BOB ; LIVAK KENNETH ; LIU TIMOTHY ; JONES ROBERT C ; HARDING IAN A ; LU MIKE Y ; LEHTO DENNIS A ; FOCARACCI JULIO P ; GUERRA ROBERT ; KAO H P ; HAYASHIBARA KATHLEEN C ; KARGER ACHIM ; LAIRD HYLAND FIONA C ; GUNSTREAM STEPHEN J ; KINNEY PATRICK D ; K LAU ALDRICH N ; CARRILLO ALBERT ; BODNER KEVIN ; BODEAU JOHN ; BAHATT DAR ; ERMAKOV SERGEY ; CARRILLO ALBERT L ; BLASENHEIM BARRY J ; BODEAU JOHN P ; BEARD NIGEL P ; APPLIED BIOSYSTEMS LLC ; AMIN YUSUF ; ANGELICA STEVE ; APLERA CORP ; APPLERA CORP ; APPLIED BIOSYSTEM LLC ; APPLIED BIOSYSTEMS ; LIFE TECHNOLOGIES CORP ; LIVAK KENNETH J ; STUDIOSTAMPA INC ; STAMP ARLENE ; REEVE VINCENT ; SANDELL DON ; PATEL JAYNISH ; WOUTENBERG TIMOTHY ; OLDHAM MARK ; REED MARK T ; SHANNON MARK ; OLDHAM MARK F ; RUFF DAVID ; SANDELL DONALD ; MACK JEROME A ; NGUYEN HOANG ; REEVE VINCENT M ; YAN TONY S ; WOUTENBERG TIM ; OSTADAN OMEAD ; PRATT MARK R ; STEVENS JUNKO F ; TOMANEY AUSTIN B ; YOUNG GREG ; TOMANEY AUSTIN ; STEVENS JUNCO F ; ULDHAM MARK ; WOUTENBERG TIMOTHY M ; SHANNON MARK E ; RUFF DAVID W

Assignee(s): BANK OF AMERICA NA AS COLLATERAL AGENT ; LIFE TECHNOLOGIES CARLSBAD CORP ; LIFE TECHNOLOGIES CORP CARLSBAD ; APPLIED BIOSYSTEMS INC ; BANK OF AMERICA NA COLLATERAL AGENT AS ; KAO H

Inventor(s): (std): AMIN YUSUF ; BAHATT DAR ; BLASENHEIM BARRY J ; BODEAU JOHN ; BODEAU JOHN P ; BODNER KEVIN ; CARRILLO ALBERT ; CARRILLO ALBERT L ; ERMAKOV SERGEY ; FAWCETT ADRIAN ; JONES ROBERT C ; KAO H P ; KAO H PIN ; LEHTO DENNIS A ; LI ROBIN ; LIM GARY ; LIU TIMOTHY ; LIVAK KENNETH ; LIVAK KENNETH J ; LU MIKE ; MACK JEROME A ; NGUYEN HOANG ; OLDHAM MARK ; PATEL JAYNISH ; REED MARK T ; REEVE VINCENT ; REEVE VINCENT M ; SANDELL DON ; SANDELL DONALD ; STAMP ARLENE ; WOUTENBERG TIM ; WOUTENBERG TIMOTHY ; WOUTENBERG TIMOTHY M ; YAN TONY S ; YOUNG GREG ; TOMANEY AUSTIN B ; STEVENS JUNKO F ; SHANNON MARK ; RUFF DAVID ; PRATT MARK R ; OSTADAN OMEAD ; OLDHAM MARK F ; LU MIKE Y ; LAIRD HYLAND FIONA C ; KARGER ACHIM ; HAYASHIBARA KATHLEEN C ; ANGELICA STEVE ; TOMANEY AUSTIN ; STEVENS JUNCO F ; FOCARACCI JULIO P ; GUERRA ROBERT ; HARDING IAN ; HARDING IAN A ; JONES BOB ; BEARD NIGEL P ; SHANNON MARK E ; RUFF DAVID W ; KINNEY PATRICK D ; K LAU ALDRICH N ; GUNSTREAM STEPHEN J ; SANDELL DONALD R ; JONES JONES C ; ERMAKOV SERGEY V ; BLASENHEIM BARRY ; CAMILLO ALBERT L

Inventor(s): CARRILLO ALBERT L REDWOOD CITY ; HAYASHIBARA KATHLEEN ; HARDING IAN A SAN MATEO ; FAWCETT

Agent(s):

ADRIAN PLEASANTON ; PRATT MARK ; OLDHAM MARK F LOS GATOS ; LU MIKE Y SAN JOSE ; LEHTO DENNIS ; LAIRD HYLAND FIONA ; BEARD NIGEL ; STEVENS JUNKO ; JONES ROBERT ; REED MARK ; OLDHAM MARK LOS GATOS ; KINNEY PATRICK ; KAO H ; K LAU ALDRICH ; GUNSTREAM STEPHEN ; TOMANEY AUSTIN SAN FRANCISCO ; YAN TONY ; MACK JEROME ; FOCARACCI JULIO WEBER BIRGIT DIPL BIOL DR RER NAT ; WOEHLEH CHRISTIAN ; CRAMPHORN CONRAD ET AL ; HARNESS DICKEY AND PIERCE PLC ; STEVE ANGELICA ; MILA KASAN PATENT DEPT APPLIED BIOSYSTEMS ; KILYK AND BOWERSOX PLLC ; INVITROGEN C O INTELLEVATE CORP ; LIFE TECHNOLOGIES C O INTELLEVATE CORP ; JEFFREY L ; JONES ROBB 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 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 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 VV VN YU ZA ZM ZW

7) Family number: 57419281 (US2014274658A)

PatBase

Title: POLYSILOCARB MATERIALS AND METHODS

Abstract: Silicon (Si) based materials and methods of making those materials. More specifically, methods and materials having silicon, oxygen and carbon that form filled and unfilled plastic materials and filled and unfilled ceramics.

Classifications:

International (IPC 8-9): A61K8/25 A61K8/89 A61Q3/02 B01D39/20 B01D53/22 B01D67/00 B01D71/04 B01J2/02 B01J2/04 B01J2/06 B24D3/00 B24D3/04 B24D3/28 B28B11/16 B28B11/24 B28B3/26 B82Y30/00 C01B31/18 C01B31/20 C01B31/30 C01B31/36 C01B32/40 C01B32/956 C01B32/977 C01B33/021 C01B33/037 C01B33/113 C04B33/135 C04B35/14 C04B35/515 C04B35/52 C04B35/524 C04B35/56 C04B35/565 C04B35/571 C04B35/589 C04B35/626 C04B35/63 C04B35/64 C04B35/65 C04B35/80 C07F7/08 C07F7/18 C08G77/00 C08G77/12 C08G77/20 C08G77/50 C08G85/00 C08J3/24 C08J5/00 C08K3/00 C08K3/34 C08K5/5425 C08K7/02 C08L25/00 C08L83/00 C08L83/04 C08L83/06 C08L83/14 C09B69/10 C09C1/00 C09C1/28 C09D101/18 C09D101/28 C09D105/00 C09D107/02 C09D11/00 C09D11/037 C09D11/14 C09D133/14 C09D163/00 C09D175/16 C09D183/04 C09D201/00 C09D5/18 C09D5/29 C09D5/32 C09D7/12 C09J1/00 C09J119/00 C09J183/04 C09K21/02 C09K21/14 C09K8/588 C09K8/66 C09K8/80 C1B33/021 C1B33/037 C23C16/32 C30B23/00 C30B23/02 C30B25/00 C30B25/02 C30B25/18 C30B25/20 C30B28/02 C30B29/06 C30B29/36 E21B10/46 E21B15/00 E21B17/00 E21B17/01 E21B33/06 E21B33/12 E21B43/01 E21B43/10 E21B43/12 E21B43/26 E21B43/267 F41H5/02 H01L21/02 H01L29/16 H01L29/66 (Advanced/Invention); C01B33/113 C08G77/00 C08G77/12 C30B29/36 F41H5/02 (Advanced/Non-invention)

CPC: C09K2208/00 E21B43/01 B01D53/228 B01D67/0067 B01D71/04 B01D2323/12 B01D2323/06 B01D2323/21 B01D2325/02 C04B2235/6586 B01D39/20 C09K8/66 C09D133/14 C09D163/00 C09D101/28 C09D101/18 C09D105/00 C09D11/00 A61K8/25 C09J119/006 C09D11/037 A61K2800/412 A61K2800/43 C09D183/04 C04B2235/408 C04B2235/5296 C04B2235/6567 B01D69/141 B01D71/024 Y10T428/131 B01D2256/16 C01B3/503 C04B35/589 C04B2235/5248 C04B2235/616 E21B17/00 E21B17/01 E21B17/085 E21B33/1208 C04B38/0022 C04B35/6264 C04B2235/40 E21B10/46 E21B43/10 E21B33/12 E21B15/00 E21B43/121 E21B33/06 C08J2383/07 C01P2004/51 C01P2004/62 C09C1/0081 C08J5/00 E21B43/26 E21B43/267 C09K8/588 C01B31/301 C23C16/325 C01P2002/30 C01P2006/32 C30B23/00 C30B23/025 C30B29/36 C30B29/06 H01L29/1608 H01L29/66068 H01L29/66893 H01L21/02381 H01L21/0262 F41H5/0414 C04B37/005 C04B37/045 C04B2235/95 C04B2235/9607 C04B2237/083 C04B2237/365 C04B2237/385 C01B33/113 B01J2/04 C08L83/00 B01J2/003 B01J2/06 C04B2235/76 C04B2235/766 C04B2235/767 C04B2235/9684 H01L21/02378 H01L21/02529 B01J2/18 C04B35/63 C04B2235/6021 B28B3/26 B28B11/16 B26D1/28 B26D7/26 B29B9/065 C04B35/565 C04B35/62695 H01L21/02167 H01L21/324 C01P2006/80 C04B2235/383 C04B2235/3834 C09C1/28 C09D5/32 C09D5/18 C09D175/16 C09K21/02 C09D5/29 C09D107/02 C01P2006/62 C01P2006/64 C01P2004/61 C01P2006/19 Y02P40/63 C30B25/02 C01B32/907 C08G18/6225 H01L29/745 A61K8/891 C01P2006/10 C08K3/34 C09D11/033 C09D11/108 C04B2235/3895 C23C16/401 C08J3/24 B24D3/04 B24D3/14 C04B2235/427 C08K3/013 C09D7/61 C09D7/68 C09D7/69 C08K5/56 C08K3/14 C09K8/80 C09D11/14 C07F7/0803 C07F7/0838 C07F7/1804 C01P2002/60 B82Y30/00 C08L83/06 C01B32/956 C04B35/56 C04B35/5603 C04B35/806 C04B2235/3418 C04B2235/44 C04B2235/48 C04B2235/483 C04B2235/528 C04B2235/5436 C04B2235/6581 C04B2235/72 C04B2235/721 C04B2235/727 C04B2235/785 C04B2235/96 C08G77/80 C04B35/515 C04B35/64 B01J2/20 C09D183/14 C09K8/805 C09C1/0021 C09C2200/10 C01P2002/02 C01P2004/20 C01P2004/80 C09C2200/301 C30B35/007 C30B23/02 C04B35/62222 C04B2235/5292 C04B2235/725 A61Q3/02 C01B31/36 C01B32/40 C01B32/50 C04B35/6267 C04B37/001 C04B2237/34 C04B2237/341 C04B2237/343 C04B33/1352 C04B35/571 C04B35/6269 C04B2235/3217 C04B2235/3463 C04B2235/3826 C04B2235/5427 C04B2235/5445 C04B2235/5481 C04B2235/77 C04B2235/94 C08G77/12 C08G77/50 C08L83/04 Y02P40/69 C08G77/20 C04B35/62802 C04B35/62807 C04B35/62821 C04B35/62826 C04B35/62894 C04B35/62897 C04B2235/401 C04B2235/402 C04B2235/404 C04B2235/405

US: 106/197.01 106/203.3 106/217.7 106/285 106/287.13 106/31.68 106/31.69 106/475 106/491 106/504 166/105 166/179 166/208 166/242.1 166/243 166/280.2 166/335 166/367 166/381 166/75.11 175/425 252/601 264/13 264/638 29/557 423/325 423/345 424/61 427/397.7 428/34.4 428/367 428/402 501/154 501/87 501/90 507/117 507/219 507/269 51/298 524/14 524/315 524/361 524/365 524/423 524/442 524/443 524/570 524/577 524/588 524/612 524/79 525/474 525/478 525/50 525/55 528/31 528/32 95/55 96/4

Family:

Publication number	Publication date	Application number	Application date
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PatBase - US2014274658_AA

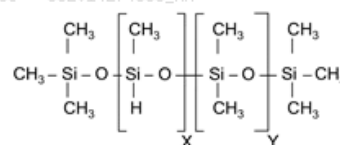


FIG. 1

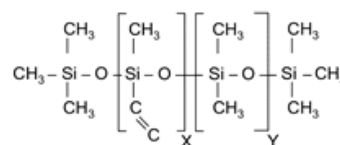


FIG. 2

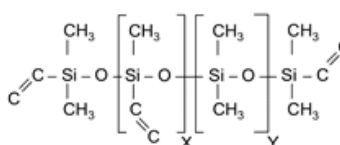


FIG. 3

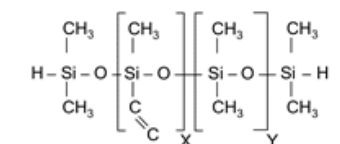


FIG. 4

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Priority:

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Probable Assignee: PALLIDUS INC

Assignee(s): (std): BRICCO BRUCE A ; DUKES DOUGLAS ; KEITH GEORGE ; HOPKINS ANDREW ; ELY JOHN ; DYK THOMAS ; HOPKINS ANDREW R ; DUKES DOUGLAS M ; DIWANJI ASHISH P ; MUELLER MICHAEL ; LAND MARK ; MELIOR TECHNOLOGY INC ; MELIOR INNOVATIONS INC ; MOELLER TIMOTHY ; LAND MARK S ; MOELLER TIM C ; MUELLER MICHAEL J ; MOLNAR MICHAEL ; MOELLER TIMOTHY C ; MELIOR TECH INC ; BENAC BRIAN ; BENAC BRIAN L ; PALLIDUS INC ; MELIOR INNOVATIONS ; SHERWOOD WALTER ; WILDING JR OLIVER ; SHERWOOD WALTER J

Assignee(s): WILDING OLIVER ; MELIOR INNOVEJSHNZ INK ; BRICCO BRICCO A ; SANDGREN GLENN ; LETTUCE BOX INC

Inventor(s): (std): ELY JOHN ; HOPKINS ANDREW ; HOPKINS ADREW R ; HOPKINS ANDREW ; HOPKINS ANDREW P ; HOPKINS ANDREW R ; KEITH GEORGE ; BENAC BRIAN ; BRICCO BRICCO A ; DIWANJI ASHISH P ; DUKES DOUGLAS ; DYK THOMAS ; MOELLER TIMOTHY ; MOELLER TIMOTHY C ; MOLNAR MICHAEL ; MUELLER MICHAEL ; SANDGREN GLEN ; SHERWOOD WALTER ; TAN YI ; WILDING JR OLIVER ; WILDING OLIVER ; SHERWOOD WALTER J ; SANDGREN GLENN ; MUELLER MICHAEL J ; MOELLER TIM C ; LAND MARK ; LAND MARK S ; DUKES DOUGLAS M ; BRICCO BRUCE A ; BENAC BRIAN L ; RINZLER CHARLES C ; LIAO WEN P ; LANDTISER RICHARD ; DUKES DOUGLAS L ; DIWANJI ASHISH ; BENING DAVID

Inventor(s): BRIAN BENAC ; DOUGLAS DUKES ; GEORGE KEITH ; OLIVER WILDING ; MICHAEL MUELLER ; ANDREW HOPKINS ; JOHN ELY ; LEND MARK S ; MARK LAND ; DIVANDZHI ASHISH P ; BENAK BRAJAN L ; WALTER SHERWOOD ; TIMOTHY MOELLER ; THOMAS DYK ; SENDGREN GLENN ; SHERVUD UOLTER DZH ; DYUKS DUGLAS M ; KHOPKINS ENDRYU R

Agent(s): SPRUSON AND FERGUSON; CASSAN MACLEAN; CASSAN MACLEAN IP AGENCY INC; BUNGARTZ CHRISTOPHERSEN PARTNERSCHAFT MBB PATENTANWALTE; BUNGARTZ CHRISTOPHERSEN PARTNERSCHAFT MBB PATENTANWALTE; ITOH SHIGERU; YURIDICHESKAYA GORODISSKIJ I PARTNERY OOO FA; STEPTOE AND JOHNSON LLP; GLEN P; BELVIS LAW LLC; BELVIS GLEN P ET AL; BELVIS GLEN P

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 DJ 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 JO JP KE KG KH KM KN KP KR KW 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

Abstract: A method and apparatus for separating lean meat and/or fat from lean meat-containing material, including combining a particulate material with fluid carbon dioxide. The material and fluid is introduced into a vessel and is separated into low density and high density fractions. The material from the low density fraction is removed via an outlet and has a higher percentage of fat than the material introduced into the vessel. The material from the high density fraction is removed via an outlet and has a higher percentage of lean meat than the material introduced into the vessel. The vessel can include a centrifuge bowl or an inclined vessel. Separation is achieved via gravity or the application of an artificial force field, such as centrifugal force, to separate particulates high in density from those low in density.

Classifications:

International (IPC 8-9): A22C17/00 A22C7/00 A23B4/03 A23B4/18

A23C17/00 A23L1/317 A23L13/00 A23L13/60 B02C23/20

C11B1/10 (Advanced/Invention);

A22C17/00 A22C7/00 A23B4/03 A23C17/00 A23L1/317 B02C23/18

C11B1/00 (Core/Invention)

CPC: A22C17/0026 A22C17/00 A23B4/033 A23B4/09 C10G2300/1011

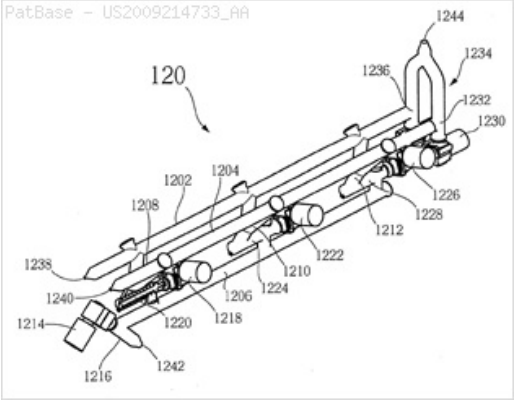
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European: A22C17/00 A23B4/033 A23B4/09 A23L1/31 C11B1/10C

C11C3/00B M10G300/10B Y02E50/13

US: 241/24.26 241/24.260S 426/332 426/417 426/417P 426/480

426/480P 426/480S 426/646 99/537 99/537S



Family:

Publication number	Publication date	Application number	Application date
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US2012231131 AA	20120913	US20120422740	20120316
US2013142928 AA	20130606	US20120493733	20120611
US2013177685 AA	20130711	US20120546836	20120711
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WO06113543 B1	20070308	WO2006US14261	20060413
WO08085715 A2	20080717	WO2007US88719	20071221
WO08085715 A3	20081009	WO2007US88719	20071221

Priority:

US20040561128P	20040409	US20040651128P	20040409	US20040868394	20040615
US20040004669	20041202	US20040639828P	20041228	US20050671238P	20050413
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US20060871413P	20061221	US20070520802	20071221	WO2007US88719	20071221
US20080911338	20081009	US20090720594	20090430	US20100520802	20100112
US20100697592	20100201	US20120422740	20120316	US20120452526	20120420
US20120493733	20120611	US20120546836	20120711	US20180960046	20180423

Probable Assignee: SAFEFRESH TECHNOLOGIES LLC

Assignee(s): (std): GARWOOD ANTHONY J M ; GARWOOD NICHOLAS JAMES ; SAFEFRESH TECHNOLOGIES LLC

Assignee(s): STONE MICHAEL ; TIMMERMAN SF LLC ; MILLER ANDREW W ; GARWOOD ANTHONY JM ; AMERICAN BEEF PROCESSING LLC ; GARWOOD ANTHONY J

Inventor(s): (std): GARWOOD ANTHONY J M ; GARWOOD NICHOLAS JAMES

Inventor(s): GARWOOD ANTHONY J ; GARWOOD ANTHONY JM

Agent(s): CHRISTENSEN OCONNOR JOHNSON KINDNESS PLLC; CHRISTENSEN O'CONNOR JOHNSON KINDNESS PLLC; CRUZ LAURA A

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 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 YU ZA ZM ZW

9) Family number: 60956126 (US2017104426A)

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Title: ELECTRICAL POWER GENERATION SYSTEMS AND METHODS REGARDING SAME

Abstract: A solid or liquid fuel to plasma to electricity power source that provides at least one of electrical and thermal power comprising (i) at least one reaction cell for the catalysis of atomic hydrogen to form hydrides, (ii) a chemical feed mixture comprising at least two components chosen from: a source of H₂O catalyst or H₂O catalyst; a source of atomic hydrogen or atomic hydrogen; reactants to form the source of H₂O catalyst or H₂O catalyst and a source of atomic hydrogen or atomic hydrogen; one or more reactants to initiate the catalysis of atomic hydrogen; and a material to cause the feed to be highly conductive, (iii) a fuel injection system such as a railgun shot injector, (iv) at least one set of electrodes that confine the fuel and an electrical power source that provides repetitive short bursts of low-voltage, high-current electrical energy to initiate rapid kinetics of the hydride reaction and an energy gain due to forming hydrides to form a brilliant-light emitting plasma, (v) a product recovery system such as at least one of an augmented plasma railgun recovery system and a gravity recovery system (vi) a fuel pelletizer or shot maker comprising a source of hydrogen and a source of H₂O, a dripper and a water bath to form fuel pellets or shot, and an agitator to feed shot into the injector, and (vii) a power converter capable of converting the high-power light output of the cell into electricity such as a concentrated solar power device comprising a plurality of ultraviolet (UV)

photoelectric cells or a plurality of photoelectric cells, and a UV window.

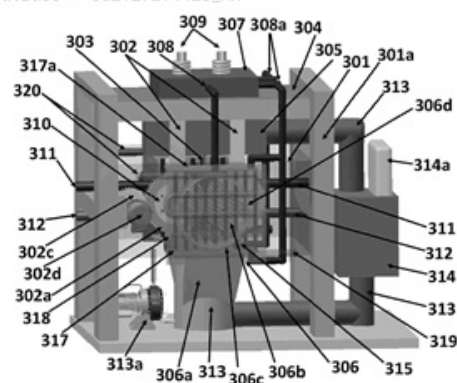
Classifications:

International (IPC 8-9): B22F9/08 C25B1/04 C25B13/04 G21B G21B1/15 G21B1/21 G21B3/00 G21G5/00 G21G7/00 H01L31/0304 H01L31/0725 H01L31/0735 H02N3/00 H02S10/10 H02S10/30 H02S10/40 H02S40/22 H02S40/32 H02S40/38 H02S40/42 H02S40/44 H05H1/24 H05H1/48 (Advanced/Invention); G21B (Subclass/Invention)

CPC: G21B1/15 Y02E30/16 Y02E30/18 H05H2240/00 H02S10/40 H02N3/00 H05H1/24 H01L31/0725 H01L31/0735 H02S40/32 H02S40/38 H02S40/22 H02S40/42 C25B1/04 C25B13/04 H05H2277/13 H05H1/46 H05H2001/466 Y02E60/366 Y02E70/10 Y02P20/129 Y02P20/134 B22F2009/0888 B22F2009/0896 H01L31/0547 H01L31/0549 H02S10/10 H02S40/425 H02S40/44 H02S10/30 Y02E10/52 Y02E10/544 Y02E10/60 H05H1/48 G21B3/00

US: 310/306

PatBase - US2017104426_AA



Family:

Publication number	Publication date	Application number	Application date
AU2015266760 AA	20151203	AU20150266760	20150529
AU2016260177 AA	20161117	AU20160260177	20160108
BR112016027844 A2	20170822	BR20161127844	20150529
BR112017024055 A2	20180724	BR20171124055	20160108
CA2948640 AA	20161109	CA20152948640	20150529
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CN107077893 A	20170818	CN201580040818	20150529
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HK1242041 A1	20180615	HK20180101182	20180125
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JP2018524557 T2	20180830	JP20170558527T	20160108
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KR20180016397 A	20180214	KR20177035406	20160108
MX2016015386 A1	20180126	MX20160015386	20150529
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TW201601444 A	20160101	TW20150117578	20150529
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US2017104426 AA	20170413	US20150314196	20150529
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WO16182605 A1	20161117	WO2016US12620	20160108
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Priority:

US20030469913	20030905	US20040494571	20040506	US20140004883P	20140529
US20140012193P	20140613	US20140016540P	20140624	US20140021699P	20140707
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US20150268963P	20151217	WO2016US12620	20160108	US20160572898	20160108

Probable Assignee: BRILLIANT LIGHT POWER INC

Assignee(s): (std): BLACKLIGHT POWER INC ; BRILLIANT LIGHT POWER INC ; MILLS RANDELL LEE

Assignee(s): MILLS RANDELL L

Inventor(s): (std): MILLS RANDELL L ; MILLS RANDELL LEE ; RANDELL L MILLS ; RANDELL LEE MILLS

Agent(s): SPRUSON AND FERGUSON; RIDOUT AND MAYBEE LLP; UEXKUELL AND STOLBERG; SANYOU INT INTELLECTUAL PROPERTY AGENCY HONG KONG LTD; ADOLF MARTUA PANGGABEAN MAROLITA SETIATI; MAROLITA SETIATI; SWEET MARK D

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

10) Family number: 57414072 (US2016030856A)

PatBase

Title: DISTILLATION REACTOR MODULE

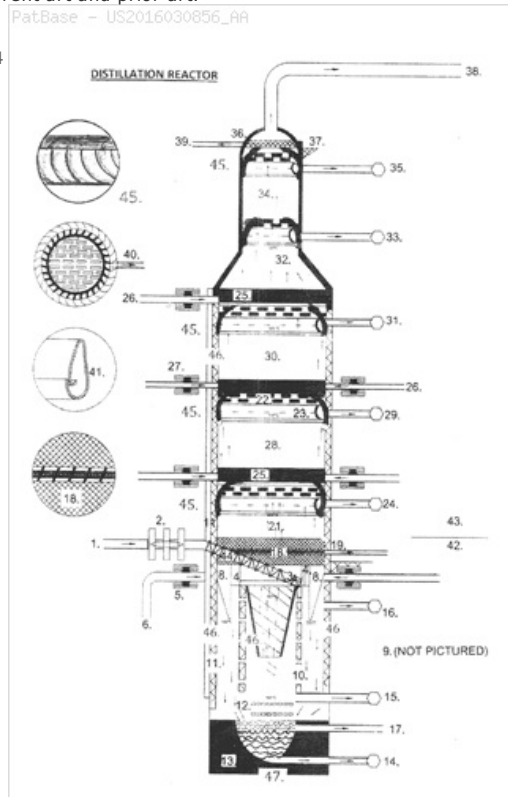
Abstract: The distillation reactor consists of a reactor apparatus with corresponding method of upstream distilling and purification of carbon based liquid or liquidized streams for use as fuels, lubricating oils and or gaseous energy and electricity production. The distillation reactor consolidates the atmospheric and vacuum distillation processes along with desalting, defueling, deasphalting, fractionation, thin/wiped film evaporation and Hydro finishing into an advanced high velocity, high volume single reactor system. Carbon based feed streams include either a single stream or preferably, a combined stream of liquefied coal slurries, crude oils, spent oils, Pyrolytic oils and or peat or other plant carbon derived liquids, vapors, mists or gases. The method further consists of controlling the mix ratio, flow velocity, sequential fractionation and filtration technology and processing atmospheres of the carbon feeds with the reactor apparatus. The combined apparatus and method allows for a refinery to consistently produce a finished barrel of oil well below traditional costs and at a higher efficiency than current art and prior art.

Classifications:

International (IPC 8-9): B01D3/00 B01D3/06 B01D3/10 B01D3/26 B01D3/32 B01D39/20 B01D53/48 B01D53/62 B01D59/04 B01J B01J19/24 B01J19/26 B01J2/00 B01J6/00 B01J8/24 B02C23/00 B03C1/00 B22F3/10 B22F9/00 B29B17/00 C01B17/027 C01B17/74 C02F1/00 C10B49/12 C10G1/00 C10G11/18 C10G33/00 C10G45/00 C10G57/00 C10G7/00 C10G7/06 C10G9/04 C10J3/72 C10L9/10 C22B13/00 C22B15/00 C22B21/00 C22B7/00 C22B9/00 F03G7/00 F27B17/00 G21C1/02 G21D5/00 H01M10/54 H01M8/00 H02K55/02 H02K7/09 (Advanced/Invention)

CPC: Y02E30/40 G21D1/00 B01J19/0093 B01J2219/00864 B01J2219/00867 B01J2219/00871 C01G21/02 C01B3/32 C01B13/02 C01B17/02 C01B2203/0205 C01B2203/0283 C01B2203/043 C01B2203/0445 C01B2203/0475 C10G1/02 C10G1/10 C10G31/08 C10G75/04 Y02P20/129 B09B5/00 Y02P30/446 Y02E30/30 B01D3/10 B01D3/006 B01D3/06 B01D39/2027 F03G7/00 B01D3/009 C10G7/06 G21C1/00 G21D5/00 C10G7/00 C10G57/00 C10G7/003 C10L9/10 C10J3/72 C10G1/00 C01B17/027 C01B17/74 B01J6/008 B01J2/00 B01J19/24 B01D53/48 B01D53/62 C22B9/00 F27B17/00 C02F1/00 C22B7/00 B29B17/00 B22F3/10 B22F9/00 C22B21/00 C22B15/00 C22B13/00 H01M8/00 H01M10/54 H02K55/02 H02K7/09 B02C23/00 B03C1/00 C10L2290/544 C10J2300/093 C10J2300/0946 B22F2009/001 C01B17/48 C10G11/18 C10G33/00 C10G45/00 Y02E20/16 Y02E20/18 Y02W10/33 Y02W10/37 Y02W30/84 C01B32/05 C01B32/20 C01B32/50 Y02P10/143

US: 196/46 202/232 209/213 210/251 241/301 241/65 266/160 310/90.5 422/129 422/170 422/187 422/198 422/255 423/522 423/567.1 429/49 505/163 505/166 60/698



Family:

Publication number	Publication date	Application number	Application date
CA2907677 AA	20150921	CA20142907677	20140318
EP2969180 A2	20160120	EP20140762668	20140318
EP2969180 A4	20161005	EP20140762668	20140318
IL242590 A0	20160131	IL20140242590	20140318
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US2016030856 AA	20160204	US20140776734	20140318
US2016032904 AA	20160204	US20140776736	20140318
US2016045841 AA	20160218	US20140776732	20140515
WO14146129 A2	20140918	WO2014US31118	20140318
WO14146129 A3	20150129	WO2014US31118	20140318
WO14153570 A2	20140925	WO2014US38290	20140515
WO14153570 A3	20150219	WO2014US38290	20140515
WO14153570 A9	20150806	WO2014US38290	20140515
WO14200605 A2	20141218	WO2014US31116	20140318
WO14200605 A3	20150326	WO2014US31116	20140318
WO14200605 A4	20150430	WO2014US31116	20140318
WO14200605 A9	20150205	WO2014US31116	20140318

Priority:

US20130800209P	20130315	US20130801170P	20130315	US20130801491P	20130315
US20140776734	20140318	US20140776736	20140318	WO2014US31118	20140318
WO2014US31116	20140318	US20140776732	20140515	WO2014US38290	20140515

Probable Assignee: TRANSTAR GROUP LLC

Assignee(s): (std): BRADLEY RANDALL ; KALPAN ALLEN ; KAPLAN ALLEN ; TRANSTAR GROUP LTD
Assignee(s): TRANSTAR GROUP LLC
Inventor(s): (std): BRADLEY RANDALL ; KAPLAN ALLEN ; KALPAN ALLEN
Agent(s): ADE AND CO INC; NELLIGAN OBRIEN PAYNE LLP; PERRONACE ANDREA; HERSHKOVITZ ABRAHAM ET AL; HERSHKOTIZ ABRAHAM ET AL
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

11) Family number: 42181941 (US2004032792A)

© PatBase

Title: PROCESSING APPARATUS AND METHOD FOR FLUID, AND DEAERATOR THEREWITH

Abstract: A processing apparatus for fluid with a simple structure, high productivity, ability of precise dispersion, emulsification and grinding, is provided. The apparatus of the present invention comprises at least two processing faces of a first face and a second face, both of which are arranged in a tight-closed passage, and positioned opposite to each other to constitute part of said passage, and a contact pressure applying mechanism for putting both faces 1, 2 into closed contact with each other, wherein the rotation of the second processing face 2 in respect of the first processing face 1 may cause dispersion or emulsification of the fluid to be processed between both processing faces 1, 2. The first and second processing faces 1, 2 are placed in closed contact with or adjacent to each other by means of said contact pressure applying mechanism, and the fluid to be processed is actuated by said rotation to pass between the first and second processing faces 1, 2, as it is forming fluid films between said processing faces 1, 2, so that said fluid will be emulsified or dispersed to a desired extent.

Classifications:

International (IPC 8-9): B01D19/00 B01F3/00 B01F7/00 B01F7/16 B02C19/10 B02C7/08 B02C7/12 B02C7/14 B02C7/175 B05B1/14 B05B1/26 B05B1/30 B05B1/34 B05B3/10 (Advanced/Invention); B02C7/00 B02C7/08 (Advanced/Non-invention); B01D19/00 B01F3/00 B01F7/00 B01F7/16 B02C19/00 B02C7/00 B05B1/14 B05B1/26 B05B3/02 (Core/Invention)

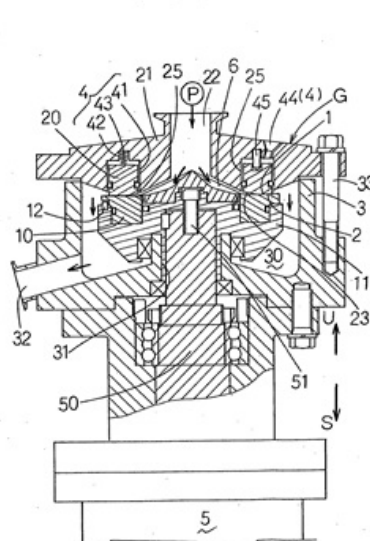
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CPC: B01F7/00758 B01F7/1625 B01F2215/0409 B01F2215/0431 B01F3/0807 B01F7/00783 B01F7/00791
European: B01F7/00G1 B01F7/00G1C B01F7/00G1D B01F7/16F L01F215/04D L01F215/04F2F

US: 239/222.11 239/222.110S 239/223 239/223P 239/461 239/464 239/469 239/479 239/484 239/533.1 239/650 239/680 239/687 241/184 241/251 241/257.1 241/38 241/67 241/73 241/84 366/263 366/263P

PatBase - US2004032792_AA

Patent Application Publication Feb. 19, 2004 Sheet 1 of 18 US 2004/0032792 A1

FIG 1



Family:

Publication number	Publication date	Application number	Application date
AT337085 E	20060915	AT20030254461T	20030716
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CN101612533 B	20130123	CN200910151381	20030716
CN1483515 A	20040324	CN20031078418	20030716
CN1483515 B	20100728	CN20031078418	20030716
DE60307741 D1	20061005	DE20036007741	20030716
DE60307741 D1	20061005	DE20036007741T	20030716
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EP1382380 A1	20040121	EP20030254461	20030716
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JP2004049957 A2	20040219	JP20020207533	20020716
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JP3955254 B2	20070808	JP20020340374	20021125
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US2004032792 AA	20040219	US20030619479	20030716
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Priority:

JP20020207533 20020716 JP20020321018 20021105 JP20020340374 20021125
US20030619479 20030716 US20060499755 20060807

Probable Assignee: M TECHNIQUE CO LTD

Assignee(s): (std): ENOMURA MASAKAZU ; M TECH CO LTD ; TECH K K M ; TECH COMPANY LTD M

Assignee(s): M TECHNIQUE CO LTD ; M TECHNIQUE COMPANY LTD ; M TECH K K ; M TECH KK ; M TECHNIQUE CO

Inventor(s): (std): MASAKAZU ENOMURA ; MASAKAZN ENOMURA ; ENOMURA SHINICHI ; ENOMURA MASAKAZU

Inventor(s): ENOMURA MASAKAZN

Agent(s): BIRCH STEWART KOLASCH AND BIRCH; BIRCH STEWART KOLASCH AND BIRCH LLP

Designated states: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

12) Family number: 47547452 (US2010286791A)

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Title: INTEGRATED SYSTEM FOR THE BALLISTIC AND NONBALLISTIC INFIXION AND RETRIEVAL OF IMPLANTS

Abstract: Provided are methods and apparatus for the use of magnetic traction to maintain the patency of a tubular anatomical structure, whether a vessel, duct, the trachea, bronchus, bile duct, ureter, vas deferens, fallopian tube, or portions of the digestive tract, as to constitute means for extraluminal stenting. An extraluminal stent consists of a perimedial or medial intravascular and an extravascular component. The intravascular component consists of ferromagnetic spherules implanted aeroballistically or stays implanted by means of a special hand tool, while the extravascular component consists of a pliant jacket or mantle that has magnets mounted about its outer surface. A catheter adapted for use as the barrel of a gas-operated implant insertion gun is so devised that it can be used independently to perform an angioplasty and thereafter have its free or extracorporeal end inserted into the airgun to initiate implantation of the intravascular component without the need for withdrawal and reinsertion through the introducer sheath. When the implants must be spaced too closely together to be controlled by hand, a positional control system is used to effect discharge automatically. Spherules that consist entirely of medication or that have a radiation emitting seed as the core can be implanted with the same apparatus. A glossary of terms follows the specification.

Classifications:

International (IPC 8-9): A61B17/28 A61B17/50 A61B18/04 A61F13/00
A61F2/04 A61F2/82 A61F2/95 A61M25/00 A61M31/00 A61M36/12
A61M37/00 (Advanced/Invention)

CPC: A61F2/95 A61M37/00 A61B17/12022 A61B17/00491 A61B17/0057

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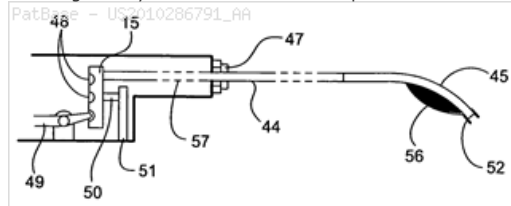
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A61B2018/1861 A61N7/00

European: A61B17/12P A61B17/12P5B1S A61B17/12P7Z K61B17/00N4 K61B17/00S14 K61B17/12P2 K61B17/22A K61B17/34J
K61B18/04 K61B18/18

US: 600/8 600/8S 602/43 602/43S 604/500 604/523 604/523S 604/524 604/524S 604/93.01 604/93.010S 606/205 606/205S
606/211 606/211S 606/27 606/27S 623/1.11 623/23.7 623/23.700P



Family:

Publication number	Publication date	Application number	Application date
US2010286791 AA	20101111	US20070986021	20071119
US2014163664 AA	20140612	US20130694835	20130109

Priority:

US20060860392P 20061121 US20070986021 20071119 US20130694835 20130109

Probable Assignee: GOLDSMITH DAVID S

Assignee(s): (std): GOLDSMITH DAVID S

Inventor(s): (std): GOLDSMITH DAVID S

Agent(s): DAVID S GOLDSMITH

13) Family number: 12572800 (US5322792A)

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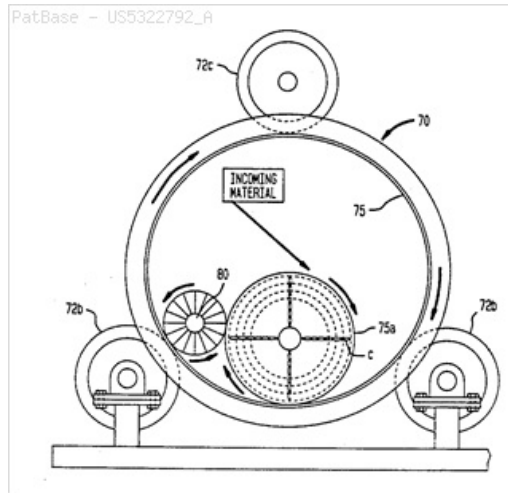
Title: PROCESS AND MACHINES FOR TRANSFORMING HOUSEHOLD WASTE

Abstract: An apparatus for transforming an input garbage mixture into separate fermented and non-fermented output products has a fermentation stage for depositing an input garbage mixture into non-compacted swathes to allow fermentation of the fermentable, organic waste materials therein, an input stage for loading the garbage mixture, and at least one grinder/separator stage having a grinder for grinding the garbage mixture into smaller particles and a separator with a screen of a selected mesh size for separating ground waste particles up to the selected mesh size as a fermented output product, and conveying the remainder of the particles to a reject output as a non-fermented output product. Fermentation of the input garbage mixture allows for organic maturation of the fermentable, organic waste materials in the mixture, as well as softening and rendering the fermented materials more susceptible to being broken up into small particles in the grinder/seperator stage. The input stage is equipped with a hopper, a pulsed air dryer, and a magnetic drum for picking off ferrous materials. In a preferred configuration, the grinder has three rotating axles in triangular arrangement carrying chains mounted in rows thereon with hardened tips on their free ends. Successive grinder/seperator stages are used to reduce the particles to the desired output size, with the separator of each subsequent stage having a progressively finer mesh size. A pulverizer/grinder stage pulverizes the reject output (mostly plastics) into smaller particles. The pulverized particles can be compressed and heat molded to form fence parts, paving blocks, road bedding materials, etc. A modified version of the grinder is used for shredding old tires into rubber particles that can be compression-molded into usable items. The invention includes the related processes and processed products.

Classifications:

International (IPC 8-9): B02C13/20 B02C13/28 B02C17/00 B02C23/14

B03B9/06 B09B3/00 C05F9/00 C05F9/02 C12M1/00 (Advanced/Invention)
International (IPC 1-7): C05F9/02 C05F9/04 C12M1/00 C12M1/02 C12M1/12
CPC: Y10S71/901 Y10S241/31 C12M45/04 Y02W30/521 Y02W30/523 Y02W30/526 Y02W30/625 B02C13/20 B02C13/28 B02C17/002 B02C23/14 B02C2013/2816 B03B9/06 B09B3/00 B29B17/0412 B29B2017/0488 B29L2030/00 C05F9/02 Y02A40/215
European: B02C13/20 B02C13/28 B02C17/00B B02C23/14 B03B9/06 B09B3/00 B29B17/04D C05F9/02 L02C13/28P L29B17/04Z14 L29L30/00
US: 241/193 241/DIG.31 435/290.3 435/290.4 435/311 435/316 71/9 71/901



Family:

Publication number	Publication date	Application number	Application date
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US5322792 A	19940621	US19920822443	19920117
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WO9418305 A1	19940818	WO1993US00347	19930212

Priority:

US19910687295 19910418 US19920822443 19920117 WO1993US00347 19930212
US19940263127 19940621

Probable Assignee: TUCKER HUGHES INC

Assignee(s): (std): GUY PEGUY ; PEGUY GUY ; SEURATEC SARL ; TUCKER HUGHES INC

Assignee(s): TUCKER HUGHES INC (EXCL LICENSEE) ; TUCKER HUGHES INC EXCL LICENSEE ; SEURATEC SARL 17 RUE DU PRADEAU 65140 RABASTENS DE ; SEURATEC S A R L

Inventor(s): (std): PEGUY GUY

Inventor(s): GUY PEGUY

Designated states: AT AU BB BE BF BG BJ BR CA CF CG CH CI CM DE DK ES FI FR GA GB GN GR HU IE IT JP KP KR LK LU MC MG ML MN MR MW NL NO NZ PL PT RO RU SD SE SN TD TG UA

14) Family number: 34083911 (US2007006528A)

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Title: METHOD AND APPARATUS FOR AUTOMATED, MODULAR, BIOMASS POWER GENERATION

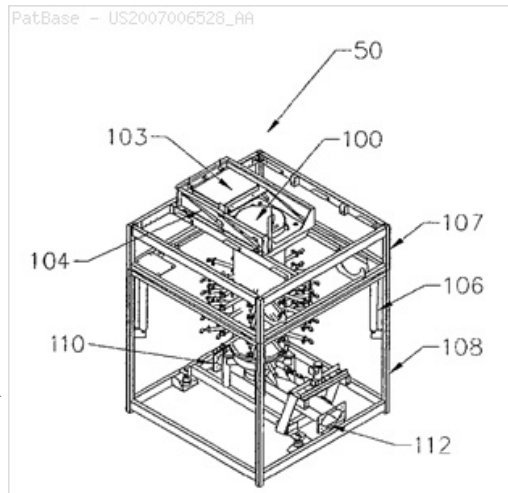
Abstract: Method and apparatus for generating a low tar, renewable fuel gas from biomass and using it in other energy conversion devices, many of which were designed for use with gaseous and liquid fossil fuels. An automated, downdraft gasifier incorporates extensive air injection into the char bed to maintain the conditions that promote the destruction of residual tars. The resulting fuel gas and entrained char and ash are cooled in a special **heat** exchanger, and then continuously cleaned in a filter prior to usage in standalone as well as networked power systems.

Classifications:

International (IPC 8-9): B01D29/00 B01D29/27 B01D46/00 B01D46/42 B01J7/00 C01B3/24 C01B3/36 C02F1/00 C10B51/00 C10B53/00 C10J1/207 C10J3/00 C10J3/20 C10J3/26 C10J3/30 C10J3/34 C10J3/40 C10J3/46 C10J3/66 C10J3/68 C10J3/72 C10K3/06 F02C3/28 F02C7/22 F02G1/055 H01M8/12 (Advanced/Invention); C01B3/02 H01M8/06 (Advanced/Non-invention); B01D29/00 C02F1/00 C10B51/00 C10J3/00 C10J3/46 F02C3/26 F02C7/22 F02G1/00 H01M8/12 (Core/Invention); C01B3/00 H01M8/06 (Core/Non-invention)

CPC: C10J3/66 B01D29/27 B01D46/0072 B01D46/0095 C10J3/20 C10J3/26 C10J3/30 C10J3/40 C10J3/723 C10J2200/09 C10J2300/0903 C10J2300/0916 C10J2300/092 C10J2300/0946 C10J2300/0956 C10J2200/152 B01D29/70

European: B01D29/27 B01D46/00R50 B01D46/00S60 C10J3/20 C10J3/26 C10J3/30 C10J3/40 C10J3/66 C10J3/72C M10J200/09 M10J300/09B M10J300/09D14 M10J300/09D2 M10J300/09D2B M10J300/09F2 Y02E20/18 Y02E50/12
US: 210/170.01 210/170.010P 423/650 48/197.00R 48/197.00RP 48/197R 48/202 48/210 48/61 48/87 48/87P 55/283 55/299 55/300 55/304 55/304S 95/20 95/278 95/278S 95/282 95/282P 96/397 96/421



Family:

Publication number	Publication date	Application number	Application date
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CA2833506 AA	20070104	CA20062833506	20060628
CA2833506 C	20160503	CA20062833506	20060628
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EP1896368 A4	20110126	EP20060785864	20060628
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JP5086253 B2	20121128	JP20080519575T	20060628
US2007006528 AA	20070111	US20060427231	20060628
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US2011120312 AA	20110526	US20100946696	20101115
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US7833320 BB	20101116	US20060427221	20060628
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US8574326 BB	20131105	US20110028090	20110215
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WO07002847 A3	20071004	WO2006US25417	20060628

Priority:

US20050694156P	20050628	AU20060263659	20060628	EP20060785864	20060628
CA20062833506	20060628	CA20062613427	20060628	US20060427221	20060628
US20060427231	20060628	WO2006US25414	20060628	US20100946696	20101115
AU20110200022	20110104	US20110028090	20110215	CA20132613427	20131128

Probable Assignee: COMMUNITY POWER CORP

Assignee(s): (std): BROWNE III KINGSBURY ; BROWNE KINGSBURY ; COMMUNITY POWER CORP ; WALKER MICHAEL ; DUNCAN DUSTIN ; FIELDS MICHAEL ; LILLEY ARTHUR ; DIEBOLD JAMES P ; WALT ROBB RAY ; STEELE JOHN ; SMITH TREVOR ; AFOGNAK NATIVE CORP

Assignee(s): ALLEGRO BIODIESEL CORP ; DATALASE LTD ; COMMUNITY POWER CORP ENGLEWOOD ; TRITON SYNTECH INVESTMENTS LLC ; DINWOODIE MERSERVEY FAMILY LIVING TRUST

Inventor(s): (std): BROWNE KINGSBURY ; BROWNE KINGSBURY III ; DIEBOLD JAMES P ; DUNCAN DUSTIN ; FIELDS MICHAEL ; LILLEY ARTHUR ; SMITH TREVOR ; STEELE JOHN ; RAY WALT ROBB ; MICHAEL WALKER ; MICHAEL FIELDS ; KINGSBURY BROWNE ; JOHN STEELE ; DUSTIN DUNCAN ; BROWNE III KINGSBURY ; ARTHUR LILLEY ; WALKER MICHAEL ; WALT ROBB R ; WALT ROBB RAY ; WALT ROBB

Inventor(s): TREVOR SMITH ; WALT ROBB RAY AURORA ; WALKER MICHAEL BROOMFIELD ; STEELE JOHN AURORA ; SMITH TREVOR LAKEWOOD ; LILLEY ARTHUR FINLEYVILLE ; ROBB RAY WALT ; FIELDS MICHAEL ARVADA ; JAMES P DIEBOLD ; DUNCAN DUSTIN LITTLETON ; DIEBOLD JAMES P LAKEWOOD ; DIEBOLD JAMES ; BROWNE KINGSBURY GOLDEN

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; MCCARTHY TETRAULT LLP; HERZOG FIESSER AND PARTNER PATENTANWALTE PARTG MBB; EVENS PAUL JONATHAN ET AL; EVENS PAUL JONATHAN; VEIGA MIKEL; TOWNSEND AND TOWNSEND AND CREW LLP; KILPATRICK TOWNSEND AND STOCKTON LLP; DAVIS WRIGHT TREMAINE LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR 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 MG MK ML MN MR MW MX 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 SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

15) Family number: 31058969 (US2004129376A)

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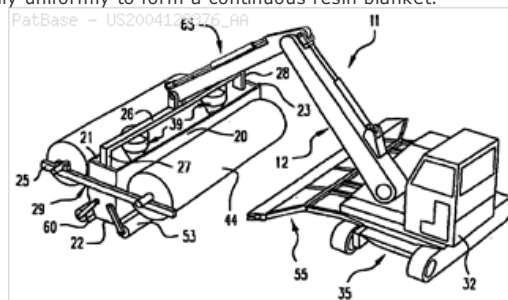
Title: STRUCTURE FORMING METHOD AND APPARATUS

Abstract: A method of forming a continuous composite structure includes the steps of mixing a solid particulate resin forming material with a liquid resin forming material supplied from nozzles (39) and applying the mixture to a porous blanket or blankets (44). The solid particulate material is liquefied with resin liquefying means (49) and reacted with the liquid resin forming material in an exothermic reaction. The blanket (44) is deposited along a preselected final surface with a pressing means (53) and part of the resin forming mixture is migrated through the blanket (44) substantially uniformly to form a continuous resin blanket.

Classifications:

International (ipc 8-9): B01F13/00 B01F9/00 B01F9/02 B01F9/06 B05C11/02 B29B11/14 B29B15/12 B29C33/00 B29C43/22 B29C44/00 B29C65/48 B29C67/00 B29C70/02 B29C70/18 B29C70/32 B29C70/38 B29C70/40 B29C70/50 B29D23/00 B32B21/12 B32B27/04 B32B37/02 B32B37/10 B32B37/12 B32B37/24 B32B5/08 B32B5/30 B32B7/10 E01C19/46 E01C23/03 E02B3/12 E02B5/02 E02D17/04 E02D17/08 E02D5/14 F16L1/032 F16L1/038 (Advanced/Invention); B01F13/00 B29C70/02 B32B37/20 E03F5/04 (Advanced/Non-invention); B01F9/00 B05C11/02 B29B11/14 B29B15/10 B29C43/22 B29C44/00 B29C70/00 B29C70/04 B32B21/00 B32B27/04 B32B37/02 B32B37/10 B32B37/12 B32B37/14 B32B7/10 E01C19/00 E01C23/00 E02B3/12 E02B5/00 E02D17/02 E02D17/06 E02D5/02 (Core/Invention); B01F13/00 E03F5/04 (Core/Non-invention)

International (ipc 1-7): B29C44/00 B29C67/14 B29C70/02 B29C70/86 B29D23/22 B32B21/12 B32B31/00 B32B31/06 B32B31/08 B32B31/12 B32B5/02 B32B5/08 B32B5/30 C09J1/00 C09J5/04 C09J7/02 E01C19/00 E01C23/03 E02B11/02 E02B3/12 E02B5/02 E02D17/08 E02D3/12 E02D5/14 F16L1/00
CPC: B32B37/20 B01F9/02 B01F2215/0049 B29C33/0016 B29K2105/0809 B32B2305/30 B32B2367/00 B32B2375/00 F16L1/032



B29L2023/22 F16L1/038 Y10T156/1729 Y10T156/17 Y10T156/1722 Y10T156/1727 B01F9/06 B01F9/0007 B01F13/0035
 B01F2009/0063 B29K2105/0845 B29K2105/0854 B29L2009/00 B32B39/00 B29C70/32 B29C70/388 B29C70/545 B32B2309/70
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European: B01F9/00F B01F9/02 B01F9/06 B29B11/14 B29B15/12B B29C33/00B2 B29C70/02A4 B29C70/02B B29C70/32
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Family:

Publication number	Publication date	Application number	Application date
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AT261817 E	20040415	AT19960933925T	19960927
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WO0125009 A1	20010412	WO2000US19248	20000713
WO02087878 A1	20021107	WO2002US12896	20020424
WO02087879 A1	20021107	WO2002US02916	20020204
WO03066331 A1	20030814	WO2002US35062	20021127
WO04007198 A1	20040122	WO2001US25740	20010813
WO9530541 A1	19951116	WO1995US05450	19950504
WO9530542 A1	19951116	WO1995US05452	19950504
WO9530543 A1	19951116	WO1995US05453	19950504
WO9634743 A1	19961107	WO1996US05132	19960415
WO9738858 A1	19971023	WO1996US15499	19960927

Priority:

US19880235205	19880823	US19890389960	19890807	CA19890608666	19890817
US19890417501	19891005	US19900521442	19900510	US19900572397	19900827
CA19912040666	19910417	US19910753344	19910830	US19920870927	19920420
CA19922074764	19920728	CA19932091975	19930318	US19940239540	19940509
US19940345565	19941125	WO1995US05450	19950504	WO1995US05453	19950504
WO1995US05452	19950504	US19960581970	19960102	WO1996US05132	19960415
US19960691934	19960805	US19960714086	19960909	WO1996US15499	19960927
US19980155830	19980928	WO1998US23034	19981030	CA19992348497	19990920
CA19992629316	19990920	WO1999US21675	19990920	WO1999US21675	19990930
WO2000US19248	20000713	CA20002385011	20000918	CA20002626835	20000918
WO2000US25535	20000918	WO2001US25740	20010426	US20010830327	20010426
US20010830369	20010426	WO2001US25740	20010813	WO2002US02916	20020204
WO2002US12896	20020424	WO2002US35062	20021127	US20030475863	20031023
US20030475864	20031023	US20040483549	20040109		

Probable Assignee: INNOVATIVE PROCESS CORP

Assignee(s): (std): LEROY PAYNE ; PAYNE LE ROY ; PAYNE LEROY

Assignee(s): INNOVATIVE PROCESS 1200 17TH STREET SUITE ; INNOVATIVE PROCESS CORP

Inventor(s): (std): LEROY PAYNE ; PAYNE LE ROY ; PAYNE LEROY

Agent(s): GOWLING LAFLEUR HENDERSON LLP

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

16) Family number: 230726 (US3227794A)

PatBase

Title: PROCESS AND APPARATUS FOR FLASH SPINNING OF FIBRILLATED PLEXIFILAMENTARY MATERIAL

Abstract: Tobacco smoke filters may be made from plexifilaments produced by flash-spinning a fibrillated plexifilamentary material. A synthetic, crystallizable organic polymer and a solvent therefor are supplied under pressure into a dissolution zone, and the polymer dissolved to form a solution having a temperature of at least the critical temperature of the solvent minus 45 DEG C. and a pressure above the two-liquid-phase pressure boundary for the solution, the concentration of polymer in the solution being 2 to 20 percent by weight. The solution is forwarded through a transfer zone, and the solution passed into a pressure reduction zone for p lowering the pressure of the solution to below the two-liquid-phase pressure boundary for the solution, a constant pressure being maintained in the transfer zone preceding the pressure reduction zone by keeping the **heat** balance in the transfer zone at the same level as in the dissolution zone and by regulating the rates of supply of polymer and solvent to the dissolution zone inversely in relation to the pressure in the transfer zone and in a fixed ratio to one another. The solution is discharged through a spinneret orifice of restricted size into a gaseous zone which is at atmospheric pressure and temperature. The polymer may be supplied to the dissolution zone as a molten stream. The polymer and solvent may be supplied to this zone as a slurry. The solvent may have a boiling point at least 25 DEG C. below the melting point of the polymer and dissolve less than 1 percent by weight of the polymer at that boiling point. The polymer may be a crystalline polyhydrocarbon such as polyethylene and the solvent may be trichlorofluoromethane. Specification 891,943 discloses similar plexifilamentary strands and a process for their preparation. ALSO: A process for flash-spinning a fibrillated plexifila-mentary material comprises

supplying under pressure into a dissolution zone a synthetic crystallizable organic polymer and a solvent therefor, dissolving the polymer to form a solution having a temperature of at least the critical temperature of the solvent minus 45 degrees centigrade and a pressure above the two-liquid-phase pressure boundary for the solution, the concentration of polymer in the solution being 2 to 20 percent by weight, forwarding the solution through a transfer zone, passing the solution into a pressure reduction zone for lowering the pressure of the solution to below the two-liquid-phase pressure boundary for the solution, maintaining a constant pressure in the transfer zone preceding the pressure reduction zone by keeping the **heat** balance in the transfer zone at the same level as in the dissolution zone and by regulating the rates of supply of polymer and solvent to the dissolution zone inversely in relation to the pressure in the transfer zone and in a fixed ratio to one another, and discharging the solution through a spinneret orifice of restricted size into a gaseous zone which is at atmospheric pressure and temperature. The polymer may be supplied to the dissolution zone as a molten stream. The polymer and solvent may be supplied to this zone as a slurry. The solvent may have a boiling point at least 25 degrees centigrade below the melting point of the polymer and dissolve less than 1 percent by weight of the polymer at that boiling point. The polymer may be a crystalline polyhydrocarbon such as polyethylene and the solvent may be trichlorofluoroamethane. Specification 891,943 discloses similar plexifilamentary strands and a process for their preparation. The product of the present invention may be used in paper manufacture.

Classifications:

International (IPC 8-9): D01D1/09 D01D5/04 D01D5/11

D01F6/04 (Advanced/Invention);

D01D1/00 D01D5/00 D01F6/04 (Core/Invention)

International (IPC 1-7): D01D1/08 D01D5/00 D01F6/00 D01F6/04

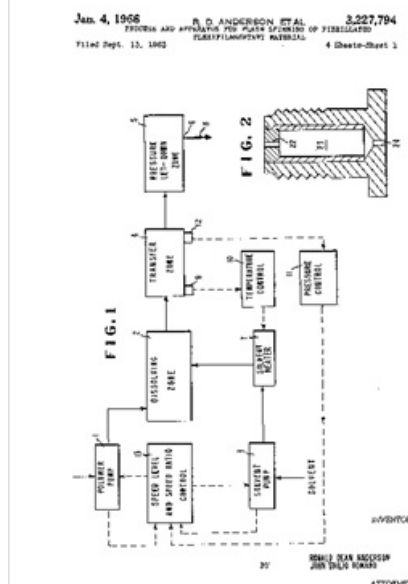
D01F6/64 D01F7/00 D01F7/02

CPC: Y10S264/47 D01D5/11 D01D1/09 D01D5/04 D01F6/04

European: D01D1/09 D01D5/04 D01D5/11 D01F6/04

US: 264/205 264/DIG.47 28/299 425/144 425/145 425/200 425/376.1

PatBase - US3227794_A



Family:

Publication number	Publication date	Application number	Application date
BE670104 A	19660117	BE19650670104	19650924
CH450618 A	19680131	CH19650013088	19650922
DE1435632 A1	19690213	DE1963P033049	19631123
DE1435632 B2	19761223	DE1963P033049	19631123
DE1435632 C3	19770811	DE1963P033049	19631123
FR1472989 A	19670317	FR19650032623	19650924
GB1061337 A	19670308	GB19650040476	19650922
NL144338 C	19741216	NL19630300881	19631122
NL300881 A	00000000	NL19630300881	19631122
US3227794 A	19660104	US19630308845	19630913

Priority:

US19620239674 19621123 US19630308845 19630913 CH19650013088 19650922
GB19650040476 19650922 BE19650670104 19650924 FR19650032623 19650924

Probable Assignee: DU PONT

Assignee(s): (std): DU PONT

Assignee(s): E I DU PONT DE NEMOURS AND CO ; E I DU PONT DE NEMOURS AND COMPANY ; EI DU PONT DE NEMOURS AND CO

Inventor(s): (std): ANDERSEN RONALD DEAN ; ANDERSON RONALD DEAN ; ROMANO JOHN EMILIO ; DEAN ANDERSON RONALD ; EMILIO ROMANO JOHN ; JOHN EMILIO ROMANO ; RONALD DEAN ANDERSON

17) Family number: 51299582 (WO11028233A2)

© PatBase

Title: SYSTEMS AND METHODS FOR SUSTAINABLE ECONOMIC DEVELOPMENT THROUGH INTEGRATED FULL SPECTRUM PRODUCTION OR RENEWABLE MATERIAL RESOURCES USING SOLAR THERMAL

Abstract: In one embodiment of the present invention, a system for providing a renewable source of material resources is provided comprising: a first source of renewable energy; first stream of materials from a first materials source; an electrolyzer coupled to the first source of renewable energy and the first stream of materials, wherein the electrolyzer is configured to produce a first material resource by electrolysis; a processor for further processing or use of the material resource to produce a second material resource, wherein the processor comprises a solar collector and where the solar collector is configured to provide

heat to the first materials resource for disassociation; and a material resource storage coupled to the electrolyzer for receiving the material resource from the electrolyzer or providing the material resource to the processor for further processing or use.

Classifications:

International (IPC 8-9): B05D1/12 B09B3/00 B32B1/02 B32B3/10 B32B37/00 C01B31/04 C25B1/00 C25B1/02 C25B1/04 C25B13/02 C25B15/00 C25B3/00 C25B9/00 C25B9/06 E21B43/22 E21B43/25 E21B43/34 F01B11/00 F01B23/10 F01N5/02 F02G5/04 F03D9/00 F03G F03G6/00 F03G7/00 F03G7/04 F03G7/05 F03G7/08 F17C11/00 F22B33/18 F24D11/00 F24H8/00 F24J2/00 F24J2/07 F24J2/12 F24J2/42 F24J3/08 F28D7/10 (Advanced/Invention); F03G (Subclass/Invention)

CPC: C02F1/46104 C02F2303/10 F03B13/1885 Y02E10/38 Y02E70/10 C01B3/22 C01B2203/0283 C01B3/34 C01B2203/0216 C01B2203/043 C01B2203/1241 C01B2203/84 C10L3/108 F02G5/04 F24D11/005 F24D2200/26 F24D2200/29 F24D2200/30 C25B9/00 Y02T10/166 C02F2001/46171 C25B9/08 C25B11/02 C25B11/03 Y02E60/366 H01M8/0656 H01M8/186 Y10T137/0391 C25B3/00 Y02W10/30 Y02W10/33 Y02W10/37 C25B15/02 C25B15/08 C25B1/04 C25B1/12 Y02P20/129 Y02E60/528 C01B2203/061 E21C50/00 Y02E10/34 Y02E10/46 C04B35/536 F02B43/08 Y02T10/32 F01N5/02 C25B1/00 C25B1/02 C25B9/06 C25B13/02 C25B15/00 F28D7/103 Y02E10/41 Y02T10/16 Y02B30/52 Y02E20/14 Y02E70/20 Y02P70/56 Y02P80/24 F03G7/05 Y02P20/124 Y02B10/22 Y02E10/44 C01B32/225 Y02P20/133 Y02P20/134 F24S10/40 F24S23/30 F24S20/20 F24S23/71

European: C25B1/00 C25B1/02 C25B13/02 C25B9/06 F24J2/07 R24J2/12 R28D7/10E Y02B10/20 Y02E10/34 Y02E10/41

PatBase - WO11028233_A2

WO 2011/028233

PCT/US2010/002269

1/22

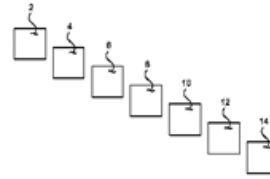


FIG. 1

SUBSTITUTE SHEET (RULE 26)

Family:

Publication number	Publication date	Application number	Application date
AU2010289904 AA	20110310	AU20100289904	20100816
CA2770510 AA	20110310	CA20102770510	20100816
EP2470787 A2	20120704	EP20100814156	20100816
EP2470787 A4	20140416	EP20100814156	20100816
IL217860 A0	20120329	IL20100217860	20100816
IL217860 A1	20160331	IL20100217860	20100816
WO11028233 A2	20110310	WO2010US02260	20100816
WO11028233 A3	20110623	WO2010US02260	20100816
WO11028400 A2	20110310	WO2010US45658	20100816
WO11028400 A3	20130502	WO2010US45658	20100816
WO11028401 A2	20110310	WO2010US45664	20100816
WO11028401 A3	20110616	WO2010US45664	20100816
WO11028402 A2	20110310	WO2010US45670	20100816
WO11028402 A3	20110616	WO2010US45670	20100816
WO11034677 A2	20110324	WO2010US45653	20100816
WO11034677 A3	20110512	WO2010US45653	20100816
WO11053341 A2	20110505	WO2010US02259	20100816
WO11053341 A3	20110623	WO2010US02259	20100816
WO11102851 A1	20110825	WO2010US45668	20100816
WO12047187 A2	20120412	WO2010US45629	20100816
WO12047187 A3	20130328	WO2010US45629	20100816
WO12047188 A1	20120412	WO2010US45669	20100816

Priority:

US20090153253P 20090217	US20090237476P 20090827	US20100304403P 20100213
AU20100216050 20100217	AU20100216051 20100217	AU20100216052 20100217
US20100707653 20100217	WO2010US24499 20100217	US20100707656 20100217
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Probable Assignee: MCALISTER TECHNOLOGIES LLC

Assignee(s): (std): MCALISTER ROY E ; MCALISTER TECHNOLOGIES LLC

Inventor(s): (std): MCALISTER ROY E

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; OYEN WIGGS GREEN AND MUTALA LLP; BEATTIE ALEX THOMAS STEWART; REINHOLD COHN AND PARTNERS; BETCHER SUSAN D ET AL; ARNETT STEPHEN E ET AL; ANCHELL SCOTT J 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 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 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

Title: CONTINUOUS VACUUM DEHYDRATOR

Abstract: (Claim 1) 1. In a dehydrator for drying liquid materials on a continuous basis, a rotatably mounted heating drum, a rotatably mounted cooling drum in parallel spaced relationship with said heating drum, a material conveying belt trained over said heating drum and said cooling drum, power actuated means operatively connected to drive said drums and said belt, a feeding roller disposed with its periphery in cooperating relationship with the outer side of the run of said belt moving from said cooling drum to said heating drum and at a substantial distance from said heating drum and rotatably mounted for applying material to be dried to said belt, a backup drum disposed to engage the inner side of said run of said belt in the region of said feeding roller for maintaining said belt in predetermined relationship with said feeding-roller, means to apply liquid material to the periphery of said feeding roller for application thereby to said belt, variable speed- power actuated driving mechanism operatively connected to turn said feeding roller at selected speed in a manner to move its feeding periphery in the direction of travel of said belt for applying material to said belt, control means to adjust the speed of rotation of said feeding roller, and adjusting means to adjust the clearance distance between said feeding roller and said belt, the arrangement being such that the thickness of the film of material applied to said belt may be regulated during operation of the dehydrator by adjusting the speed of rotation of said feed roller and the clearance between it and said belt.

Classifications:

International (IPC 8-9): F26B17/02 F26B5/04 (Advanced/Invention);
F26B17/00 F26B5/04 (Core/Invention)

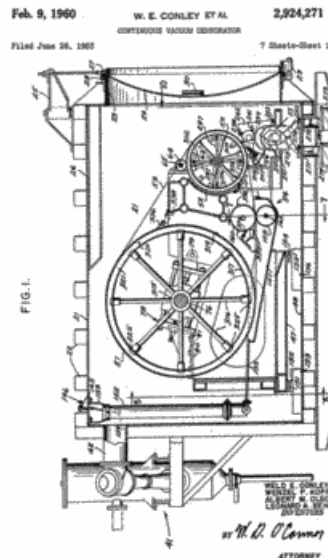
International (IPC 1-7): F26B19/00

CPC: Y10S159/23 F26B5/041 F26B17/023

European: F26B17/02B F26B5/04B

US: 159/12 159/43.1 159/7 159/DIG.23

PatBase - US2924271_A



Family:

Publication number	Publication date	Application number	Application date
US2924271 A	19600209	US19530364458	19530626

Priority:

US19530364458 19530626

Probable Assignee: CHAIN BELT CO

Assignee(s): (std): CHAIN BELT CO

Assignee(s): CHAIN BELT COMPANY

Inventor(s): (std): BEHN LEONARD A ; CONLEY WELD E ; OLSON ALBERT M ; KOPP WENZEL P

Title: BIO-DIESEL MANUFACTURE WITH A MICRO-REACTOR

Abstract: Methods and apparatus for producing bio-diesel from triglycerides and lower alcohols, desirably in the presence of liquid or supercritical CO₂, are provided. The apparatus are designed to enhance the miscibility of the triglycerides with lower alcohols.

Classifications:

International (IPC 8-9): B01F7/00 C10L1/02 C10L1/16

C10L1/18 (Advanced/Invention);

C10L1/10 (Core/Invention)

CPC: Y02W30/74 B01F13/0059 C11B13/00 C11C3/003 C10L1/19

B01F7/00875 B01J3/008 B01J19/0093 B01J2219/00006 B01J2219/00783

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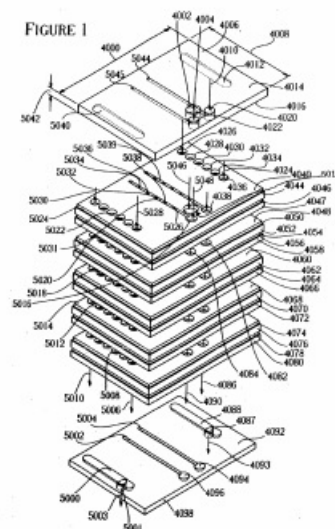
Y02P20/544 C10G2300/1011 C11C3/00 Y02P30/20

European: B01F13/00M B01F7/00H1B B01J19/00R B01J3/00S

C10L1/02D C10L1/19 C11B13/00 C11C3/00 C11C3/00B L01J219/00A2B

L01J219/00R14 L01J219/00R16 L01J219/00R2 L01J219/00R22D

M10G300/10B Y02E50/13



Publication number	Publication date	Application number	Application date
US2007214712 AA	20070920	US20060490861	20060721
US2009000184 AA	20090101	US20080125847	20080522
US2012060409 AA	20120315	US20100884114	20100916

US20060783963P	20060320	US20060786959P	20060329	US20060799515P	20060511
US20060490861	20060721	US20070931837P	20070525	US20070950249P	20070717
US20070953741P	20070803	US20070967658P	20070906	US20080125847	20080522
US20100884114	20100916				

20) Family number: 41669702 (US2010107493A)

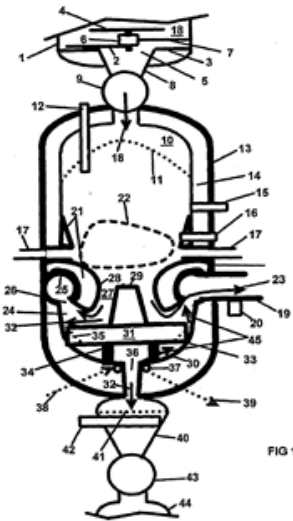
Abstract: A gasifier includes a gasifier shell, means for introducing fuel into the shell, and means for introducing oxygenate into the shell. The gasifier also includes means for discharging gas from the shell, which can be located below the means for introducing oxygenate. The gasifier can also include means for re-circulating gas prior to gas being discharged from the shell.

International (IPC 8-9): C10J3/30 F23G5/12 (Advanced/Invention); C10J3/02 (Core/Invention)

CPC: C10J3/26 C10J3/42 C10J2200/15 C10J2300/1823 F23G2201/40
F23G2209/261

European: C10J3/26 C10J3/42 M10J200/15 M10J300/18B4 R23G201/40
R23G209/261

US: 48/86.00RP 48/86R

**Family:**

Publication number	Publication date	Application number	Application date
US2010107493 AA	20100506	US20070442215	20070922
WO08039400 A1	20080403	WO2007US20555	20070922

Priority:

US20060846790P 20060922 US20060850944P 20061011 US20060875483P 20061218
 WO2007US20555 20070922 US20070442215 20070922

Probable Assignee: LEW HOLDINGS LLC**Assignee(s):** (std): LEW HOLDINGS LLC ; WEAVER LLOYD E**Inventor(s):** (std): WEAVER LLOYD E**Agent(s):** PATRICK R SCANLON PRETI FLAHERTY BELIVEAU AND PACHIOS LLP; SCANLON PATRICK R

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 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

21) Family number: 24049715 (US4015366A)

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Title: HIGHLY AUTOMATED AGRICULTURAL PRODUCTION SYSTEM

Abstract: The present invention provides a highly automated agricultural production system which comprises, as essential components: 1. A sensing subsystem comprising direct and indirect sensing means in an agricultural production area. The direct sensing means are generally ground or plant mounted. The indirect sensing means are remote from the area being sensed. The direct and indirect sensing means are adapted to jointly generate data on all important parameters in the homogeneous agricultural production area; 2. A data transmitting subsystem for forwarding data generated by the direct and indirect sensing means to computing means and for transmitting instructions from the computing means via interfacing means (controllers) to various devices (field effectors) in the agricultural area to perform various functions; 3. A computing subsystem linked by way of said data transmitting subsystem to said indirect and direct sensing means in a pattern of many feedback loops. The computing means is programmed to enable correlation of data received from the indirect and direct sensing means and to generate appropriate instructions to accomplish a substantive number of functions required for the operation of the automated agricultural production system of the present invention as will be later described in detail, including, but not limited to, the control of the following subsystems. 4. A fluid delivery subsystem which provides: Means for delivering water, chemicals in liquid or gaseous form, air, and the like to various parts of the agricultural production area; and Means for providing power to various peripheral devices which utilize the power of moving liquid and/or gases—for example, a water powered (hydromotor) platform. 5. A field operations subsystem which, in a highly preferred embodiment, comprises means to harvest agricultural products, convey the agricultural products, grade the agricultural products, store the agricultural products, and pack the agricultural products. In addition to the above means which are essentially concerned with presenting the agricultural products in a form amenable for marketing, additionally means are provided for plant care, e.g., pruning, thinning and the like. A field operations subsystem which accomplishes the functions of fruit harvesting, fruit conveying, fruit grading and fruit storage which, in a most preferred embodiment of the present invention, accomplishes the above functions utilizing fluid received from the fluid delivery subsystem of the present invention. It is also highly preferred that such fluid powered means be utilized in the agricultural system of the present invention for tree care, e.g., pruning of trees, thinning of trees and the like. The field operations can be accomplished, if desired, utilizing a vehicle which is powered by fluid, typically water, derived from the fluid delivery subsystem of the present invention by means of a water-to-mechanical torque converter (hereafter often called a hydromotor platform).

Classifications:**International (IPC 8-9):** A01D46/00 A01D46/24 A01G25/16 A01G3/04

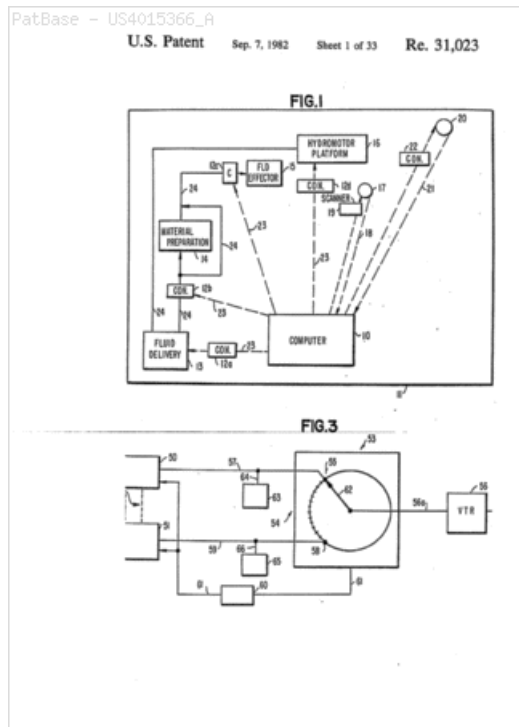
A01G7/00 A01M7/00 B07C5/342 (Advanced/Invention);

A01D46/00 A01G25/16 A01G3/00 A01G7/00 A01M7/00

B07C5/342 (Core/Invention)

International (IPC 1-7): A01D46/00 A01G13/00 A01G27/00**CPC:** Y10S47/06 A01D46/005 Y10T137/1963 Y10T137/402 Y10T137/7287

B07C5/342 A01D46/24 A01G3/04 A01G7/00 A01G25/16 A01M7/0089
European: A01D46/00B A01D46/24 A01G25/16 A01G3/04 A01G7/00
A01M7/00G B07C5/342
US: 137/236.1 137/386 137/79 138/111 180/305 193/25E 198/570
209/173 239/210 239/69 239/727 239/745 348/143 382/100 382/110
405/37 47/1.43 47/1R 47/2 47/DIG.6 56/237 56/328.1 700/14 700/283
700/30 700/67 700/90 702/2



Family:

Publication number	Publication date	Application number	Application date
US4015366 A	19770405	US19750567322	19750411
USRE31023 E	19820907	US19790016845	19790302

Priority:

US19750567322 19750411 US19790016845 19790302

Probable Assignee: ADVANCED DECISION HANDLING INC

Assignee(s): (std): ADVANCED DECISION HANDLING INC

Inventor(s): (std): HALL III ARTHUR D

22) Family number: 55001332 (US2013277319A)

© PatBase

Title: SLUDGE SCREW THICKENER WITH SCREEN ROTATION DURING CLEANING

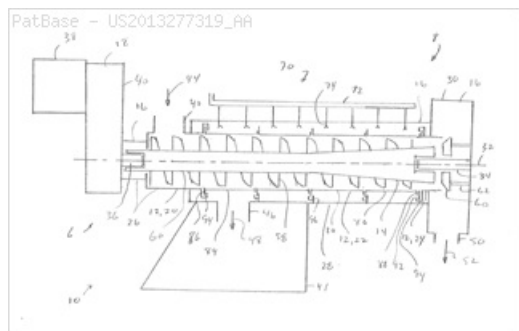
Abstract: A screw press has a cylindrical screening section mounted to a frame. The screening section is able to rotate but can be prevented from rotating. A sprayer system is operable to spray water on the screening section. In a cleaning process, the screening section is rotated while water is sprayed against it. Optionally, the power required to rotate the screen may be provided by an auger drive mechanism. The screening section may have openings sized to retain flocculated solids. The screw press may be used to thicken a sludge from a waste water treatment plant.

Classifications:

International (IPC 8-9): B01D29/35 B01D29/64 B01D53/04 B01D53/047 B01D53/58 B01D53/82 B01J20/02 B01J20/08 B01J20/10 B01J20/18 B01J20/28 B01J20/34 B30B9/12 B30B9/14 C01C1/12 C02F11/04 C02F11/12 C02F11/14 C02F3/28 C02F3/30 C23C16/455 (Advanced/Invention); B01D29/11 B01D29/23 B01D29/25 B01D29/35 B01D29/64 B01D29/68 B01D29/74 B01D33/11 B01D33/46 B01D33/50 B01D33/80 C02F1/24 C02F101/32 C02F11/12 C02F11/14 C02F3/12 C02F3/30 (Advanced/Non-invention)

CPC: C02F3/305 C02F11/123 C02F2101/32 C02F2209/08 C02F2209/10 C02F2301/10 C02F2301/106 C02F2303/02 C02F11/126 C02F3/1273 C02F11/14 B01D53/04 B01D53/0454 B01D53/0476 B01J20/08 B01J20/103 B01J20/18 B01J20/28052 B01J20/3408 B01J20/3491 C01C1/12 B01D2259/4006 B01D2253/104 B01D2253/106 B01D2253/108 B01D2253/1122 B01D2257/406 B01D2258/0216 B01J2220/42 C02F1/00 C02F1/24 C02F3/1268 C02F11/121 B01D29/35 B01D29/6476 B30B9/12 C02F3/28 C02F3/2853 C02F11/125 Y02W10/15 C02F11/04 C02F11/122 Y02W10/23

US: 1/1 210/195.3 210/359 210/391 210/402 210/409 210/416.1 210/601 210/605 210/608 210/609 210/631 210/770 210/780 210/791 422/168 423/237 95/14 95/95 96/143



Family:

Publication number	Publication date	Application number	Application date
CA2870947 AA	20141020	CA20132870947	20130418
CA2870952 AA	20141020	CA20132870952	20130419
CN104955547 A	20150930	CN201380059183	20131120
EP2838717 A1	20150225	EP20130779000	20130418
EP2838717 A4	20151230	EP20130779000	20130418

EP2838855 A1	20150225	EP20130777972	20130419
EP2838855 A4	20160217	EP20130777972	20130419
EP2922612 A1	20150930	EP20130802184	20131120
JP2016504180 T2	20160212	JP20150543147T	20131120
KR20150086256 A	20150727	KR20157012121	20131120
TW201437415 A	20141001	TW20130142389	20131120
TWI609984 B	20180101	TW20130142389	20131120
US2013277319 AA	20131024	US20130826410	20130314
US2014131272 AA	20140515	US20130832258	20130315
US2014161699 AA	20140612	US20130085744	20131120
US2015076059 AA	20150319	US20130395717	20130419
US2015076085 AA	20150319	US20130395599	20130418
US9211493 BB	20151215	US20130085744	20131120
US9540270 BB	20170110	US20130832258	20130315
US9561978 BB	20170207	US20130826410	20130314
WO13155630 A1	20131024	WO2013CA50297	20130418
WO13155631 A1	20131024	WO2013CA50301	20130419
WO14081880 A1	20140530	WO2013US71086	20131120

Priority:

US20120636000P	20120420	US20120725842P	20121113	US20120728542P	20121120
US20130826410	20130314	US20130832258	20130315	US20130395599	20130418
WO2013CA50297	20130418	CA20132870952	20130419	WO2013CA50301	20130419
US20130395717	20130419	US20130085744	20131120	WO2013US71086	20131120

Probable Assignee: ANAERGIA INC

Assignee(s): (std): ANAERGIA INC ; SAES PURE GAS INC

Assignee(s): THEODOULOU MICHAEL DAVID355 NUNN COURTMILTON01L9T 7M3CA ; ANAERGIA INC4210 SOUTH SERVICE ROADBURLINGTON01L7L 4X5CA ; JOSSE JUAN CARLOS

Inventor(s): (std): APPELEGARTH CHARLES ; APPELEGARTH CHARLES H ; JOSSE JUAN CARLOS ; LANDONI CRISTIAN ; RABELLINO LAWRENCE ; RABELLINO LAWRENCE A ; SUCCI MARCO ; THEODOULOU MICHAEL DAVID ; VOGT SARAH

Inventor(s): THEODOULOU MICHAEL DAVID355 NUNN COURTMILTON01L9T 7M3CA ; JOSSE JUAN CARLOSUS

Agent(s): BORDEN LADNER GERVAIS LLP; BSB INTELLECTUAL PROPERTY LAW; PISTOLESI ROBERTO; TIPS GROUP; PUNDSACK SCOTT R ET AL; HICKMAN PAUL L

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

23) Family number: 68878048 (US2018071949A)

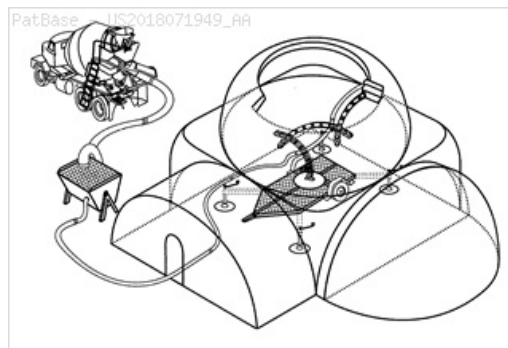
PatBase

Title: METHOD OF REINFORCED CEMENTITIOUS CONSTRUCTION BY HIGH SPEED EXTRUSION PRINTING AND APPARATUS FOR USING SAME

Abstract: The present invention relates to methods and apparatuses for an automated reinforced concrete construction system for onsite slip-form molding and casting a variety of cementitious mixes in a cast in place leave in place externally moldable flexible reinforced containment sleeve providing a wide variety of interchangeable full-scale molding configurations simultaneously optimizing a wide variety of cementitious mix curing characteristics, further having optional internal reinforcement net(s), for layer wise interlocking additive printed brick deposition providing improved slip-form mold casting of a wide variety of reinforced concrete structures; the present invention further includes a variety of operating platforms suitable for on and offsite construction as disclosed herein.

Classifications:

International (IPC 8-9): B28B1/00 B28B17/00 B33Y10/00 B33Y30/00 B33Y50/02 E01C19/48 E04B1/16 E04B1/35 (Advanced/Invention)
CPC: B28B1/001 E04B1/16 E04B1/3505 B33Y10/00 E04B1/32 B33Y50/02 B28B17/0081 E04B1/166 E04B2103/02 B33Y30/00 E04G21/04



Family:

Publication number	Publication date	Application number	Application date
US2018071949 AA	20180315	US20170732072	20170913
WO18052469 A2	20180322	WO2017US00055	20170913
WO18052469 A3	20180426	WO2017US00055	20170913

Priority:

US20160495514P	20160914	US20170732072	20170913
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Probable Assignee: GILES BRIAN

Assignee(s): (std): GILES BRAN ; GILES BRIAN ; GILES BRIAN C
Inventor(s): (std): GILES BRAN ; GILES BRIAN ; GILES BRIAN C
Agent(s): MCKINNEY JEFFREY A
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 DJ 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 JO JP KE KG KH KM KN KP KR KW 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 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

24) Family number: 59937770 (US2015209978A)

© PatBase

Title: RECYCLING MATERIALS IN VARIOUS ENVIRONMENTS INCLUDING REDUCED GRAVITY ENVIRONMENTS

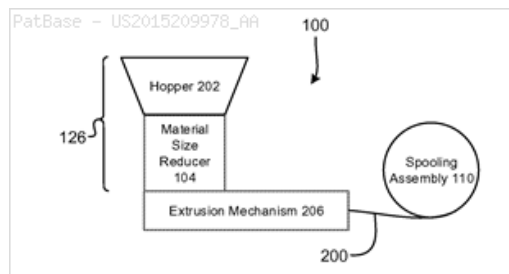
Abstract: Recycling devices for producing additive manufacturing filament from received materials including objects to be recycled, discarded objects, obsolete objects, and the like. A recycling device may include a material processing system an extrusion mechanism and a spooling assembly. The material processing system receives material, reduces the size of the received material via a material size reducer and actively pushes the material through at least a portion of the device. The extrusion mechanism produces filament from the material and the spooling assembly loads the filament onto a spool for later use. The spooling assembly may include detachable elements configured to interface with and supply filament to an additive manufacturing device. Depending on configuration, recycling devices may create filament from plastic, metal, in-situ material, or a combination thereof.

Classifications:

International (IPC 8-9): B29B17/00 B29B17/04 B29C67/00 B33Y40/00 B33Y70/00 C22B1/00 (Advanced/Invention); B33Y10/00 (Advanced/Non-invention)

CPC: B29B17/0026 C22B1/005 B33Y10/00 B33Y70/00 B29C47/1018 B29C47/92 B29C67/0096 B29C67/0055 B29C64/106 B29C64/357 B33Y40/00 Y02P10/212 Y02W30/62

US: 264/308 425/162 425/461



Family:

Publication number	Publication date	Application number	Application date
US2015209978 AA	20150730	US20150604743	20150125
US10052797 BB	20180821	US20150604743	20150125

Priority:

US20140931568P 20140125 US20150604743 20150125

Probable Assignee: MADE IN SPACE INC

Assignee(s): (std): MADE IN SPACE INC

Inventor(s): (std): SNYDER MICHAEL ; KEMMER AARON ; GONZALEZ EDDIE ; DUNN JASON

Agent(s): SANKS ESQ TERRY M; BEUSSE WOLTER SANKS AND MAIRE PLLC

25) Family number: 51299609 (US2011081586A)

© PatBase

Title: SYSTEMS AND METHODS FOR SUSTAINABLE ECONOMIC DEVELOPMENT THROUGH INTEGRATED FULL SPECTRUM PRODUCTION OF RENEWABLE ENERGY

Abstract: In one embodiment of the present invention, a method for providing an energy supply using a renewable energy source is provided comprising: providing a first source of renewable energy, wherein the first source of renewable energy is intermittent or does not provide a sufficient amount of energy; providing energy from the first source of renewable energy to an electrolyzer to produce an energy carrier through electrolysis; selectably reversing the electrolyzer for use as a fuel cell; and providing the energy carrier to the electrolyzer for the production of energy.

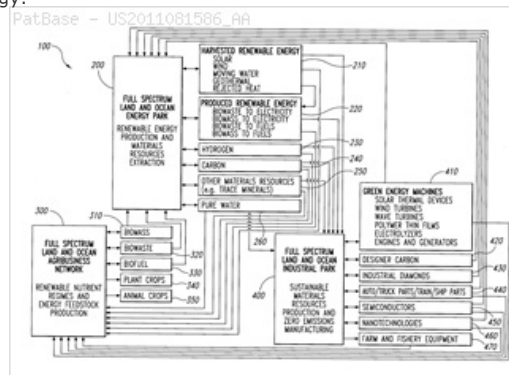
Classifications:

International (IPC 8-9): C25B1/00 C25B1/12 C25B11/03 C25B13/02 C25B15/02 C25B3/00 F03D9/00 H01M8/06 H01M8/18 H02J15/00 H02J3/38 (Advanced/Invention); H02J1/00 (Advanced/Non-invention)

CPC: H01M8/186 C25B1/00 C25B1/12 C25B3/00 C25B11/03 C25B13/02 C25B15/02 F03D9/007 H01M2250/407 H02J3/382 H02J3/383 H02J3/386 H02J15/00 H02J2001/004 Y02E10/563 Y02E10/72 Y02E10/763 Y02E60/366 Y02E60/528 Y02E60/563 Y02E70/10 Y02E70/20 Y02E70/30 Y02P20/133 Y02P20/134 Y02P80/21 Y02P80/23 Y02P80/158 Y02P90/50 F03D9/19

European: C25B11/03 C25B13/02 F03D9/00E H01M8/18C2 H02J15/00 T01M250/40F T02J1/00F Y02E10/72 Y02E60/52J Y02E70/10 Y02E70/20 Y02E70/30

US: 1/1 429/422 429/422P



Family:

Publication number	Publication date	Application number	Application date
US2011081586 AA	20110407	US20100857541	20100816

Priority:

US20090153253P 20090217 US20090237476P 20090827 US20100304403P 20100213
US20100707651 20100217 US20100707653 20100217 US20100707656 20100217
WO2010US24497 20100217 WO2010US24498 20100217 WO2010US24499 20100217
US20100857541 20100816 WO2010US45669 20100816

Probable Assignee: ADVANCED GREEN INNOVATIONS LLC

Assignee(s): (std): MCALISTER ROY E ; MCALISTER TECHNOLOGIES LLC

Assignee(s): ADVANCED GREEN INNOVATIONS LLC ; ADVANCED GREEN TECHNOLOGIES LLC

Inventor(s): (std): MCALISTER ROY E

Agent(s): PERKINS COIE LLP

26) Family number: 71680381 (WO18196970A1)

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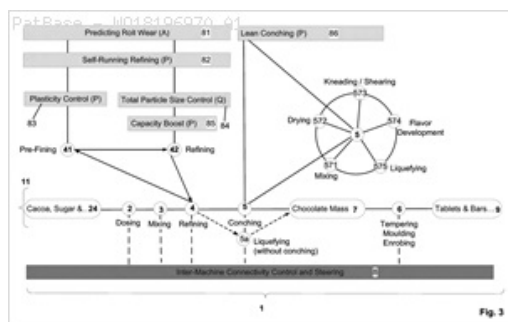
Title: SELF-OPTIMIZING, ADAPTIVE INDUSTRIAL CHOCOLATE PRODUCTION SYSTEM, AND CORRESPONDING METHOD THEREOF

Abstract: Proposed is a self-optimizing, adaptive industrial chocolate production system (1), and method thereof. The system comprising a chocolate mass processing line (11) with at least dosing means (2), one or more mixers (3), one or more refiners (4), one or more conches (5), and liquefying and tempering means (6). Appropriate inter-dependent operational parameters of the various devices (2/3/4/5/6) are measured by real-time measuring devices and transmitted to a controller device 12. The measured inter-dependent operational parameters are mutually optimized and dynamically adjusted providing an optimal operation at least in terms of the characteristics of the end chocolate mass 7 and/or throughputs of the chocolate production line 11 and/or other operation conditions as energy consumption.

Classifications:

International (IPC 8-9): A23G1/04 A23G1/10 A23G1/12 A23G1/16 (Advanced/Invention)

CPC: A23G1/045 A23G1/10 A23G1/12 A23G1/16



Family:

Publication number	Publication date	Application number	Application date
WO18196970 A1	20181101	WO2017EP59985	20170426

Priority:

WO2017EP59985 20170426

Probable Assignee: BUEHLER AG

Assignee(s): (std): BUEHLER AG

Inventor(s): (std): BARTHEL FRANK ; DINTHEER FABIAN ; EGLI DANIEL ; HOEHENER MANUEL ; KOLLER CORNELIA ; METZGER ARMIN ; NUESSELE TOBIAS ; SCHMIDT BERND

Agent(s): LEIMGRUBER FABIAN

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 DJ 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 KH KM KN KP KR KW 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 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 TT TZ UA UG US UZ VC VN ZA ZM ZW

27) Family number: 7793975 (DE3939213A1)

© PatBase

Title: Rotary tools in sausage-meat mincer - have mobility in both axial directions to prolong service life and protect prod. from excessive heating

Abstract: Meat and other sausage-filling components fed from a hopper (24) are chopped by a cutter (10) rotating relative to and above fixed apertured disc (18). Chopped meat etc enters an intermediate storage cavity, to be moved by an ejector (12) towards a valve-controlled outlet (4). The apertured disc and a backing support plate are resiliently movable in both axial directions, and for this purpose are mounted in a non-rotatable holder (52). A thermo-sensor (48) monitors the temp of processed material, and is linked with control means (49) by which a selected temp, indicated by a scale pointer can be maintained to secure optimum conditions. Mobile elements are controlled by a resilient ring or a spring. Storage cavity pressure is used to control engagement pressure of rotary cutter on apertured disc. ADVANTAGE - While cutter life is prolonged, meat is finally chopped without overheating. (13pp Dwg.No.1/5)

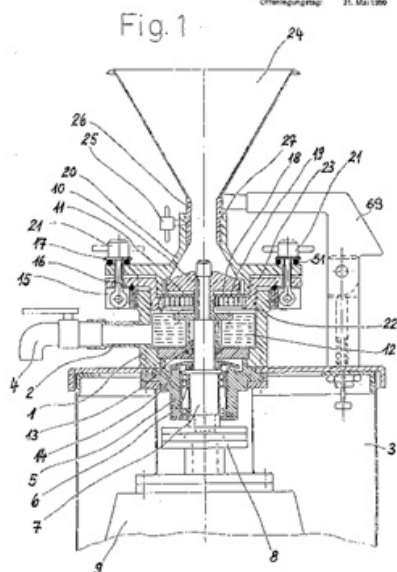
Classifications:

International (IPC 8-9): B02C18/30 B02C18/36 (Advanced/Invention); B02C18/00 (Core/Invention)

International (IPC 1-7): A22C11/00 A22C17/00 B02C18/30 B02C18/36 B02C18/38

CPC: B02C18/30 B02C18/36

European: B02C18/30 B02C18/36

**Family:**

Publication number	Publication date	Application number	Application date
DE3939213 A1	19900531	DE19893939213	19891128
DE3939213 C2	19910214	DE19893939213	19891128

Priority:

DE19883840309 19881130 DE19893939213 19891128

Probable Assignee:

NEUNER HANS

Assignee(s): (std):

NEUNER HANS

Assignee(s):

NEUNER HANS 8651 TREBGAST DE

Inventor(s): (std):

NEUNER HANS

Inventor(s):

NEUNER HANS 8651 TREBGAST DE

28) Family number: 2455638 (US4476674A)

© PatBase

Title: POWER GENERATING PLANT EMPLOYING A REHEAT PRESSURIZED FLUIDIZED BED COMBUSTOR SYSTEM

Abstract: A reheat pressurized fluidized bed combustor system for an electric power plant includes an HP turbine which drives a compressor. Compressed clean air is directed through a combustor bed **heat** exchanger where it is **heated** to 1500 DEG F. and then directed to the HP turbine inlet. After HP turbine expansion, the clean exhaust air is cooled to about 1100 DEG F. and partly directed to the combustor bed for reheating and for bed fluidization and combustor support and partly bypassed around the combustor bed. Coal is burned in the combustor bed to **heat** the combustor outlet gases to 1600 DEG F. which are directed to a cleanup system and then mixed with the bypass flow portion. The mixed flow is supplied to a low pressure turbine at a turbine inlet temperature of 1300 DEG F. at which alkali matter is solidified and then exhausted to one or more **heat** recovery devices.

Classifications:

International (IPC 8-9): F01K23/06 F01K23/10 F01K23/16 F02C1/04 F02C3/20 F02C3/26 F02C7/00 F02C9/00 F02C9/18 F02C9/52

F23C10/00 (Advanced/Invention);

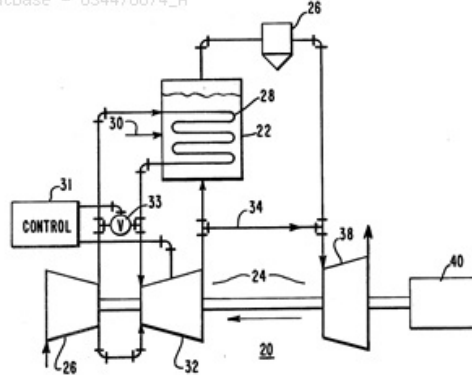
F01K23/00 F01K23/06 F01K23/10 F02C1/00 F02C3/20 F02C3/26

F02C9/00 F23C10/00 (Core/Invention)

International (IPC 1-7): F01D1/00 F01K23/10 F01K23/14 F02C1/04 F02C3/26 F02C6/18 F02C7/00 F02C9/00 F02C9/18 F02C9/52 F23B F23C11/02

CPC: Y02T50/671 F01K23/16 F01K23/062 F02C3/205 Y02E20/16**European:** F01K23/06B2 F01K23/16 F02C3/20F Y02E20/16**US:** 60/39.182 60/39.183 60/39.464

PatBase - US4476674_A

**Family:**

Publication number	Publication date	Application number	Application date
AR230513 A1	19840430	AR19830293296	19830609
CA1209812 A1	19860819	CA19830429384	19830601
FR2528493 A1	19831216	FR19830009703	19830610

FR2528493 B1	19870116	FR19830009703	19830610
IT1206749 A	19890503	IT19830021441	19830603
IT8321441 A0	19830603	IT19830021441	19830603
JP1511497 C3	19890809	JP19830102983	19830610
JP59003119 A2	19840109	JP19830102983	19830610
JP63060214 B4	19881122	JP19830102983	19830610
KR19840005190 A	19841105	KR19830002582	19830610
KR840005190 A	19841105	KR19830002582	19830610
KR920005849 B1	19920723	KR19830002582	19830610
MX158479 A	19890203	MX19830197573	19830607
US4476674 A	19841016	US19820387296	19820610

Priority:

US19820387296 19820610 CA19830429384 19830601

Probable Assignee: WESTINGHOUSE ELECTRIC CORP

Assignee(s): (std): WESTINGHOUSE ELECTRIC CO ; WESTINGHOUSE ELECTRIC CORP

Assignee(s): BERMAN PAUL A

Inventor(s): (std): BERMAN PAUL A ; BERMAN PAUL ALLAN ; PAUL A BERMAN ; POORU ARAN BAAMAN

Inventor(s): PAUL ALLAN BERMAN

Agent(s): OLDHAM AND CO

29) Family number: 21439454 (US2230188A)

© PatBase

Title: PROCESS OF AND APPARATUS FOR FORMING ARTICLES FROM PLASTIC MATERIAL

Abstract: 1. In the manufacture at blown hollow articles from organic plastic materials which are expansible by blowing and thereafter capable of being rigidmed, the process which comprises confining a body of plastic material in a hollow tubular chamber as a tubular body, aligning the tubular body of plastic material in said chamber and the chamber with a mold, inserting said chamber into the cavity of said mold, extruding a portion of said plastic material from said chamber in a direction substantially longitudinal thereof, withdrawing said chamber from the mold, blowing the extruded portion of plastic material into conformity with the confines of the cavity of said mold, thereby producing

Classifications:

International (IPC 8-9): B29C49/04 B65D1/02 (Advanced/Invention); B29C49/04 B65D1/02 (Core/Invention)

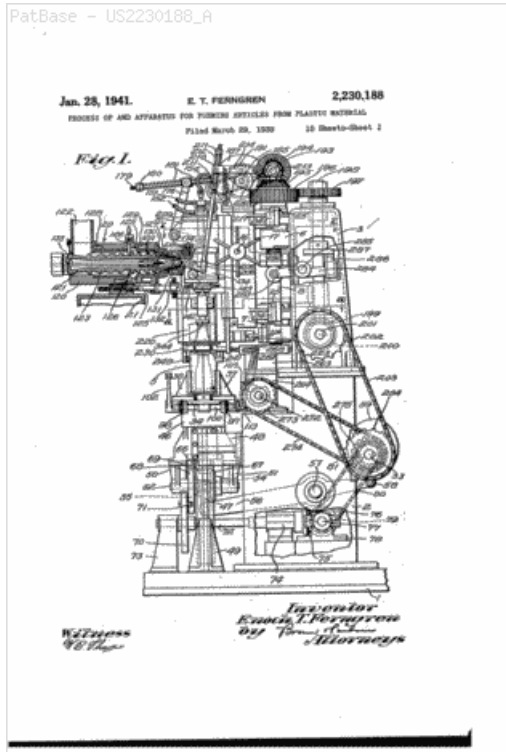
International (IPC 1-7): B29C17/07 B29F1/00 B29F3/02 B65D1/00 C03B9/14

CPC: B29C49/04 B65D1/023

European: B29C49/04 B65D1/02D1

US: 264/526 264/533 264/542 425/532 425/541 65/174 65/243 65/70

PatBase - US2230188_A



Family:

Publication number	Publication date	Application number	Application date
US2230188 A	19410128	US19380198646	19380329

Priority:

US19380198646 19380329

Probable Assignee:

PLAX CORP

Assignee(s): (std):

PLAX CORP

Inventor(s): (std):

FERNGREN ENOCH T

Title: Air system for dry material reduction mills and controls therefor

Abstract: 867,228. **Grinding** mills. WESTON, D. Aug. 27, 1957 [Sept. 10, 1956], No. 27021/57. Class 59 [Also in Group XXXV] A dry crushing or **grinding** mill has the air flows in the mill and its outlet duct separately controlled so that particles below a predetermined size are extracted from the mill and transported in a controlled fluidized mass. Further controls may be provided for the temperature and humidity of air in the system. Fig. 1 shows the elements of a **grinding** mill system to which these controls may be applied. A mill 11 driven by motor 12 is fed with material by belt conveyer 35 from bin 37; the conveying rate may be adjusted in accordance with the noise in the mill or the power delivered by motor 12. The mill product leaves by duct 13 and over-size material is then removed by classifier 14 for return to the mill by conveyer 33, the remainder passing to a cyclone collector 16. Air is then re-cycled by fan 18 partly to the mill outlet via duct 21, and partly to classifier 14, while some leaves the system via a Venturi scrubber 24. Fig. 2 shows air flow and humidity controls for a similar mill; a control unit 51 adjusts a proportion damper 32 to vary the air velocity in the mill so that a constant proportion of coarse product (measured by weigh-belt 33) to input (measured by weigh-belt 35) is obtained. A unit 54 controls a damper 31 and hence the carrying power of the air duct 13 to maintain a fixed pressure drop across cyclone collector 16. A unit 59 controls the humidity of air in the system; if this rises it opens outlet damper 27 so that more external air is admitted. If the humidity cannot be kept down in this way, a unit 55 senses the fall in temperature of the circulating air due to the influx of outside air and evaporation from input feed (normally the circulating air is 60-80 degrees above ambient **temperature**) and **controls** a burner 56 to maintain this temperature differential and thus acts as a further humidity control. Fig. 3 shows an embodiment suitable for dry climates where low humidity may cause a falling-off in the efficiency of cyclone dust extractor 16; a control unit 62 senses the ambient humidity (or it may use a photo cell and light source to measure the quantity of dust in the apparatus) and increases the air bleed-off at 23 when necessary. Alternatively it may inject water at 64. Fig. 3A (not shown) shows a modified apparatus in which **temperatures** and humidity are **controlled** independently, a proportion of the saturated air from a Venturi scrubber used in obtaining the "wetbulb" temperature being recycled to maintain the humidity. An "open" system (i.e. in which there is no re-cycling of air) is illustrated in Fig. 8 (not shown). Fig. 5 shows the damper control system of Fig. 2; signals from the weigh belts are fed to coils 96, 97 of a differential relay with contacts E, F in the circuits of two time-delay relays TDR1, 2. The contacts of the latter energize the two halves of split-field motor M which adjusts the damper 32. Specifications 632,532, 696,181, 727,925, 782,523, 783,113 and 788,924 are referred to.

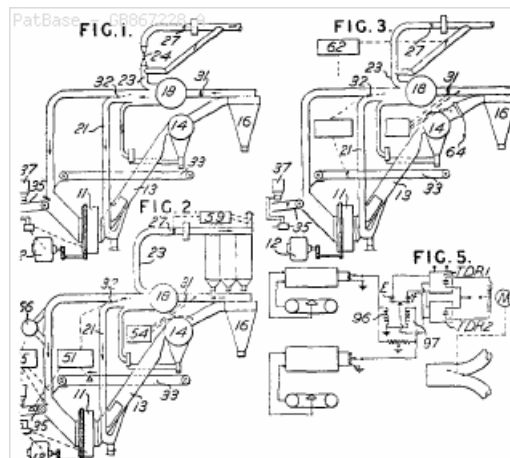
Classifications:

International (IPC 8-9): B02C25/00 (Advanced/Invention);
B02C25/00 (Core/Invention)

International (IPC 1-7): B02C25/00

CPC: B02C25/00

European: B02C25/00



Family:

Publication number	Publication date	Application number	Application date
GB867228 A	19610503	GB19570027021	19570827

Priority:

19560910

Probable Assignee:

WESTON DAVID

Assignee(s): (std):

WESTON DAVID

Assignee(s):

DAVID WESTON

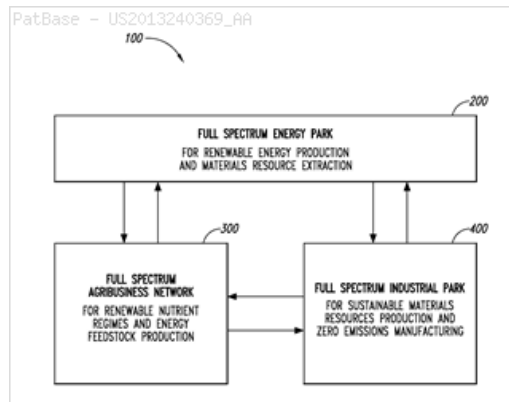
Title: SYSTEMS AND METHODS FOR SUSTAINABLE ECONOMIC DEVELOPMENT THROUGH INTEGRATED FULL SPECTRUM PRODUCTION OF RENEWABLE ENERGY

Abstract: In one embodiment of the present invention, a method for providing an energy supply using a renewable energy source is provided comprising: providing a first source of renewable energy, wherein the first source of renewable energy is intermittent or does not provide a sufficient amount of energy; providing energy from the first source of renewable energy to an electrolyzer to produce an energy carrier through electrolysis; selectively reversing the electrolyzer for use as a fuel cell; and providing the energy carrier to the electrolyzer for the production of energy.

Classifications:

International (IPC 8-9): H01M8/18 (Advanced/Invention)

CPC: H01M8/186 C25B1/00 C25B1/12 C25B3/00 C25B11/03 C25B13/02 C25B15/02 F03D9/007 H01M2250/407 H02J3/382 H02J3/383 H02J3/386 H02J15/00 H02J2001/004 Y02E10/563 Y02E10/72 Y02E10/763 Y02E60/366 Y02E60/528 Y02E60/563 Y02E70/10 Y02E70/20 Y02E70/30 Y02P20/133 Y02P20/134 F03D9/19 F03D9/25
US: 205/343



Family:

Publication number	Publication date	Application number	Application date
US2013240369 AA	20130919	US20130875605	20130502

Priority:

US20090153253P	20090217	US20090234476P	20090817	US20090237476P	20090827
US20100304403P	20100213	US20100707651	20100217	US20100707653	20100217
US20100707656	20100217	WO2010US24497	20100217	WO2010US24498	20100217
WO2010US24499	20100217	US20100857541	20100816	WO2010US45669	20100816
US20130875605	20130502				

Probable Assignee: ADVANCED GREEN INNOVATIONS LLC

Assignee(s): (std): MCALISTER TECHNOLOGIES LLC

Assignee(s): ADVANCED GREEN INNOVATIONS LLC ; ADVANCED GREEN TECHNOLOGIES LLC

Inventor(s): (std): MCALISTER ROY EDWARD

32) Family number: 3831911 (US3622520A)

PatBase

Title: REGENERATION OF A COKE-DEACTIVATED CATALYST COMPRISING A COMBINATION OF PLATINUM, RHENIUM, HALOGEN AND SULFUR WITH AN ALUMINA CARRIER MATERIAL

Abstract: A deactivated hydrocarbon conversion catalyst, which is a combination of a platinum group component, a rhenium component, a halogen component, and a sulfur component with a porous carrier material and which has been deactivated by deposition of carbonaceous material thereon during a previous contacting with a hydrocarbon charge stock at hydrocarbon conversion conditions, is regenerated by the sequential steps of: (1) stripping the sulfur therefrom by contacting with a first gaseous mixture comprising hydrogen, H₂O, and HCl; (2) purging hydrogen from contact with the catalyst with an inert gas stream; (3) burning carbon from the resulting catalyst at a relatively low temperature and a relatively high pressure with a substantially sulfur-free second gaseous mixture containing relatively small amounts of oxygen, H₂O, and HCl; (4) treating the resulting catalyst with the second gaseous mixture at a relatively high temperature and pressure; (5) purging oxygen from contact with the catalyst with an inert gas stream; and, (6) reducing the resulting catalyst by contacting with a substantially sulfurfree third gaseous mixture comprising hydrogen, H₂O, and HCl. Key feature of the regeneration method involves the use of both H₂O and HCl in the gaseous mixtures used in the four major steps thereof (i.e., steps (1), (3), (4), and (6)). Furthermore, in all of these steps the mole ratio of H₂O to HCl in the gas streams is maintained at a value selected from the range of about 20:1 to about 100:1.

Classifications:

International (IPC 8-9): B01J23/96 B01J27/32 B01J29/00 B01J38/44 B01J8/00 B65G33/30 C10G35/09 G01F11/00

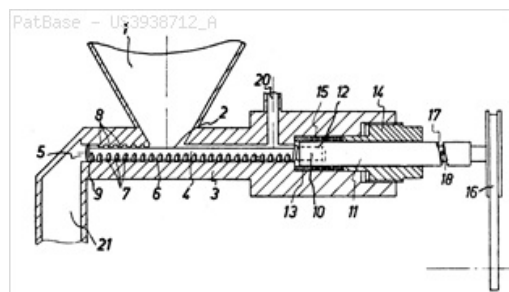
G01F13/00 (Advanced/Invention);
B01J23/90 B01J27/28 B01J29/00 B01J38/00 B01J8/00 B65G33/00 C10G35/00 G01F11/00 G01F13/00 (Core/Invention)

International (IPC 1-7): B01J11/00 B01J11/02 B01J11/08 B01J11/18 B01J23/96 B01J4/02 B65G33/08 B65G33/14 B65G33/30 B65G33/38 C10G11/20 C10G35/06 C10G35/08 G01F11/00 G01F13/00

CPC: B01J38/44 B01J29/90 Y10S417/90 Y10S502/517 C10G35/09 B01J23/96 B01J27/32 B01J8/002 B65G33/30

European: B01J23/96 B01J27/32 B01J29/90 B01J38/44 B01J8/00F2 B65G33/30 C10G35/09

US: 208/140 222/404 252/415 417/900 425/208 502/36 502/37 502/517



Family:

Publication number	Publication date	Application number	Application date
BE812703 A	19740923	BE19740142343	19740322
BR7017336 A0	19730111	BR19700217336	19700309
BR7402202 A0	19741119	BR19740002202	19740321
CA1003799 A1	19770118	CA19740194770	19740312
CA945537 A1	19740416	CA19700076696	19700306
DE2010827 A1	19700910	DE19702010827	19700307
DE2010827 C3	19730628	DE19702010827	19700307
DE2412304 A1	19741017	DE19742412304	19740314
ES377223 A1	19720601	ES19700377223	19700306
ES423561 A1	19760601	ES19740423561	19740223
FR2037720 A5	19701231	FR19700008063	19700306
FR2223677 A1	19741025	FR19730010851	19730326

FR2223677 B1	19760521	FR19730010851	19730326
GB1293632 A	19721018	GB19700011113	19700309
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GB1413279 A	19751112	GB19740013337	19740326
IT1007313 A	19761030	IT19740020361	19740208
IT1052112 A	19810620	IT19720048828	19720307
JP49129563 A2	19741211	JP19740032263	19740323
JP52008278 B4	19770308	JP19700019671	19700307
NL7401980 A	19740930	NL19740001980	19740213
US3622520 A	19711123	US19690844200	19690723
US3753926 A	19730821	US19710122149	19710308
US3935244 A	19760127	US19710139911	19710503
US3938712 A	19760217	US19740454799	19740326
US3998755 A	19761221	US19740466754	19740503

Priority:

US19690805380 19690307 US19698442000 19690723 US19690844200 19690723
US19710122149 19710308 US19710139911 19710503 FR19730010851 19730326
US19740466754 19740503

Probable Assignee: UNIVERSAL OIL PROD CO

Assignee(s): (std): UNIVERSAL OIL PRODUCTS CO ; UNIVERSAL OIL PROD CO ; CIE ; SOLVAY

Assignee(s): SOLVAY AND CIE ; DURIEUX TEDDY ; HAYES JOHN C ; SOLVAY ET CIE ; UNIVERSAL OIL PROD CO US ; UNIVERSAL OIL PRODUCTS COMPANY ; SOLVAY CIE ; UNIVERSAL OIL PRODUCTS ; SOLVAY ET CIE BE ; SOLVAY AND CIE BRUSSEL ; UOP A GENERAL PARTNERSHIP OF NY ; UOP DES PLAINES IL A NY GENERAL PARTNERSHIP ; UOP DES PLAINES IL A GENERAL PARTNERSHIP OF NY

Inventor(s): (std): HAYES J ; HAYES JOHN CHANDLER ; HAYES JOHN C ; DURIEUX TEDDY ; DURIEUX T

Inventor(s): DURIEUX TEDDY JEMEPPE S SAMBRE BELGIEN ; HAYES J US ; JOHN CHANDLER HAYES ; JOHN C HAYES

33) Family number: 22107918 (US2916215A)

© PatBase

Title: AIR SYSTEMS FOR DRY MATERIAL REDUCTION MILLS AND CONTROLS THEREFOR

Abstract: (Claim 1) 1, The method of controlling the operation of a dry material reduction mill of the rotating drum type wherein product is removed from the mill and transported by means of air circulated through the drum and an associated air circuit, which method comprises; supplying feed material to said mill at a rate which is varied automatically in a continuous manner to control the conditions of reduction within said mill in accordance with the product desired; maintaining the velocity factor of air passing through said drum at a substantially constant predetermined value; continuously maintaining the carrying power of air within the air circuit on the downstream side of the mill at a value which is at least high enough to transport all of the mill product of less than a prede-termined size-weight-surface area factor; and continuously maintaining the condition of the airstream within said air circuit compatible with the maintenance of efficient operating conditions within said mill drum and air circuit.

Classifications:

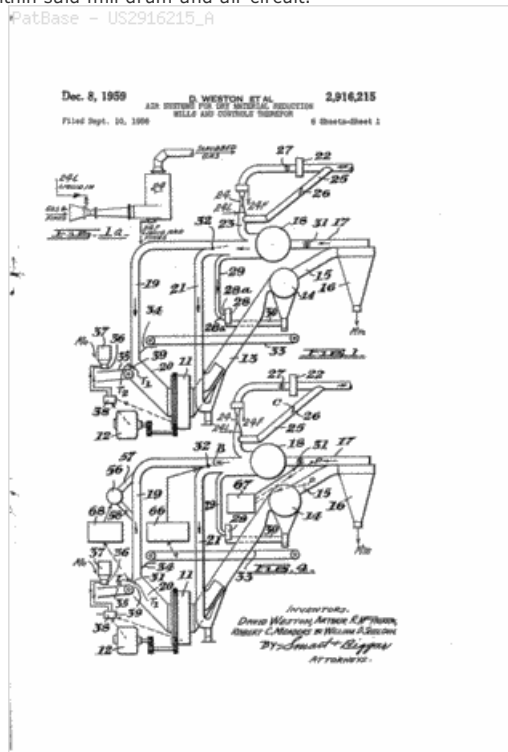
International (IPC 8-9): B02C17/18 B02C25/00 (Advanced/Invention);
B02C17/00 B02C25/00 (Core/Invention)

International (IPC 1-7): B02C17/18 B02C25/00

CPC: B02C17/18 B02C25/00

European: B02C17/18 B02C25/00

US: 241/19 241/23 241/34 241/52 241/54 241/60 241/68



Family:

Publication number	Publication date	Application number	Application date
DE1197734 B	19650729	DE1957W021850	19570907
US2916215 A	19591208	US19560608728	19560910

Priority:

US19560608728 19560910

Probable Assignee: LORRAINE ESCAUT SA

Assignee(s): (std): DAVID WESTON ; LORRAINE ESCAUT SA ; MACPHERSON ARTHUR R ; MEADERS ROBERT C ; SHELDON WILLIAM D

Assignee(s): LORRAINE ESCAUT SOC ; SOCIETE LORRAINE ESCAUT

Inventor(s): (std): WESTON DAVID ; SHELDON WILLIAM D ; MEADERS ROBERT C ; MACPHERSON ARTHUR ROLAND ; MACPHERSON ARTHUR R ; DAVID WESTON

34) Family number: 24054462 (US3137592A)

PatBase

Title: GELATINIZED STARCH PRODUCTS

Abstract: A mixture of starch raw material and starch swelling agent is worked in a confining chamber at 125 DEG C. to 250 DEG C. for 0.5 to 5 minutes at a pressure substantially above the autogenous vapour pressure of the mixture at the reaction temperature to form a hot fluid homogenised mass, and immediately thereafter transferred into a region of substantially lower temperature and pressure. The proportion of starch swelling agent is 22% to 67% by weight of starch raw material dry substance, and the working is sufficient to provide an adiabatic temperature rise of at least 50 DEG C. in the worked mass. In a further embodiment, 0.01% to 50% by weight of starch dry substance, of a starch modifying agent may be present in the mixture. The starch raw material may be any native starch, a dextrin or thin-boiling starch, or a starch derivative such as starch acetate and propionate and starch ethers e.g. hydroxyethyl, carboxymethyl and cyanoethyl starch. The starch swelling agent or plasticizer is preferably water, but may be e.g. formamide, ethylene diamine dimethyl sulphoxide, pyrrolidine, urea, piperazine, glycerol, ethylene glycol, sorbitol, propylene glycol, chloral hydrate, dimethyl formamide and mixtures or solutions thereof. The starch modifying agent may be a hydrolytic or oxidising agent e.g. hydrochloric, sulphuric phosphoric, acetic, oxalic, benzoic, and levulinic acids; sodium and calcium hypochlorite, potassium permanganate, potassium persulphate, sodium perborate, hydrogen peroxide, benzoyl peroxide and hypochlorous acid; or may be a starch-derivatizing reagent such as anhydrides of acetic, n-butyric, succinic, isatoic, quinolinic and phthalic acids; n-butyryl chloride, benzene sulphonyl chloride, phosphorus oxychloride, beta-propiolactone, phenylisocyanate, vinyl acetate, vinyl n-butyrate, ketene, monochloroacetic acid, alpha-bromopropionic acid, ethylene chlorohydrin, propylene chlorohydrin, glyceryl alpha-chlorohydrin, ethylene oxide, propylene oxide, 3-diethylamino -1, 2-epoxypropane, 3-dibutylamino 1, 2-epoxypropane, N-(2, 3-epoxypropyl)- piperidine, N,N-(2,3-epoxypropyl) methylaniline, cyclohexane oxide, styrene oxide, methyl chloride, ethyl chloride, beta-diethylamino ethyl chloride, betadimethylamino ethyl chloride, beta-methylamino isopropyl chloride, dimethyl sulphate, diethyl sulphate, triisopropyl borate, tributyl phosphate, tetraethyl orthosilicate, triethyl phosphite, ethylene imine, propylene imine, methacrylamide, acrolein, ethyl acrylate, methyl acrylate, n-butyl acrylate, epichlorohydrin, ethylene dibromide, and butadiene diepoxide. The mixture may also include a catalyst such as sodium and calcium hydroxides, potassium carbonate, sodium silicate, sodium aluminate, sulphuric acid, sodium chloride, or a tertiary amine or quaternary ammonium hydroxides. The hot fluid mass is preferably transferred to the zone of lower pressure through an orifice or die which shapes the mass into thin strands, filaments or ribbons. A suitable form of apparatus for carrying out the process is a conventional screw-type plastics extruder, through the barrel of which the mixture is forced while maintaining the required temperature and pressure. The pressure in the zone of lower pressure is preferably atmospheric and the temperature therein preferably no greater than that provided by the flashing of plasticizer from the extruded material. If water or other low-boiling plasticizer is used, sufficient is flashed off from the mixture in the lower pressure zone to provide a porous, friable solid which may be easily ground. If a high-boiling plasticizer is used, the extruded plastic material may be vacuum-dried or extracted with a solvent such as methanol or acetone. Preferably, the final product contains 10-15% by weight of plasticizer. The combination of intense shearing in the working zone, and elevated temperature and pressure accelerates the gelatinisation and also the reaction of the starch with the modifying agent when used. If the adiabatic rise in temperature is greater than required, the apparatus may be externally cooled. U.S.A. Specifications 2,516,633 and 2,516,634 are referred to.

Classifications:

International (IPC 8-9): C08B30/12 C08B30/16

C08B31/00 (Advanced/Invention);

C08B30/00 C08B31/00 (Core/Invention)

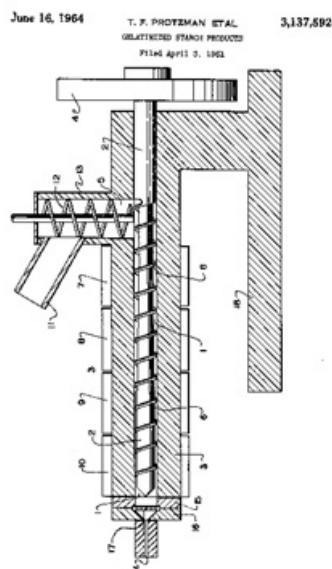
International (IPC 1-7): A23L1/195 C08B31/00 C08L3/00 C13L1/08

CPC: C08B30/12 C08B30/16 C08B31/00

European: 89K3 C08B30/12 C08B30/16 C08B31/00

US: 106/125.1 106/206.1 127/23 127/28 127/32 127/71 264/186 264/211 536/102

PatBase - US3137592_A



Family:

Publication number	Publication date	Application number	Application date
BE615950 A	00000000		00000000

DE1303005 B	00000000		00000000
FR1321699 A	19630322	FR19620892996	19620402
GB945207 A	19631223	GB19620012259	19620330
NL276742 A	00000000		00000000
US3137592 A	19640616	US19610100354	19610403
USRE26256 E	00000000		00000000

Priority:

US19610100354 19610403 FR19620892996 19620402

Probable Assignee: STALEY MFG CO A E

Assignee(s): (std): STALEY MFG CO A E

Assignee(s): A E STALEY MANUFACTURING CO ; A E STALEY MANUFACTURING COMPANY ; A E STALEY MFG CO

Inventor(s): (std): WAGONER JOHN A ; PROTZMAN THOMAS F

35) Family number: 15671477 (US6290383B)

© PatBase

Title: Apparatus mixing, filtering, reacting and drying materials

Abstract: The present invention is an apparatus for processing material having a chamber (100), a rotatably driven shaft (104) extending within the chamber to which is attached at least one element (110) which engages the material (102) in the chamber during rotation thereof and a drive mechanism (150, 170, 200 and 250) for rotating the driven shaft. The process includes (a) driving the driven shaft in one direction while the chamber contains the material in a liquid form while at least one of **heat** or a vacuum is applied to the chamber from a source 101 to reduce an amount of liquid present in the liquid material; (b) after step (a) driving the driven shaft while at least **heat** or vacuum is applied to the chamber to reduce an amount of liquid in the material in a first direction to cause the at least one element to engage the material through an angular rotation which lifts the material upward in the chamber while at least **heat** or vacuum is applied to the chamber to reduce an amount of liquid vehicle in the material in a second direction, opposite to the first direction, to cause the at least one element to engage the material through an angular rotation which lifts the material upward in the chamber; and after step (b), driving the driven shaft in one direction while at least **heat** or vacuum is applied to the chamber to reduce an amount of liquid to particularize the material.

Classifications:

International (IPC 8-9): B01F13/06 B01F15/00 (Advanced/Invention);

B01F7/00 B01F7/02 (Advanced/Non-invention);

B01F13/00 B01F15/00 (Core/Invention);

B01F7/00 B01F7/02 (Core/Non-invention)

International (IPC 1-7): B01F11/04 B01F15/06

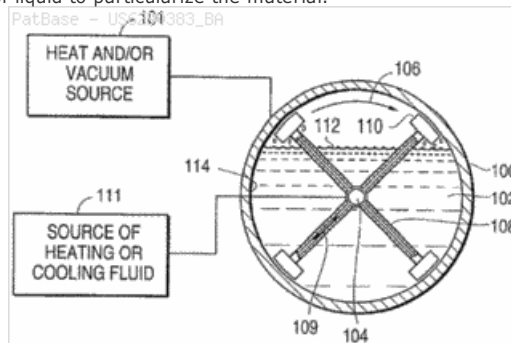
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L01F7/00Y2B L01F7/02

US: 366/132 366/139 366/144 366/145 366/147 366/149 366/276

366/278 366/309 366/313 366/325.4



Family:

Publication number	Publication date	Application number	Application date
US6290383 BA	20010918	US19980103817	19980624

Priority:

US19980103817 19980624

Probable Assignee:

PROCESSALL INC

Assignee(s): (std):

PROCESSALL INC

Inventor(s): (std):

SHOHET ALBERT J