

PatBase - Search results 01 July 2017

Search query (1): PN=(US7361303 OR US20140013657 OR US20100143209 OR CN10416355 OR CN103361090 OR WO2014184290 OR US5589599 OR US5084140 OR US3843457 OR US20110048916)

Results: 9

16-001916

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Search history

Search PN=(US7361303 OR US20140013657 OR US20100143209 OR CN10416355 OR CN103361090 OR WO2014184290 OR US5589599 OR
1: US5084140 OR US3843457 OR US20110048916) (Results 9)

Title: MICROWAVE PYROLYSIS OF WASTES

Abstract: Source: US3843457A (Claim 1) 1. A process for recovering vaporizable organic compounds from solid waste containing organic materials which comprises the following steps: passing a gaseous stream through a microwave discharge zone; the pressure of the gaseous stream in said zone being from about 0.1 mm. of mercury to below about atmospheric pressure; the temperature of said zone being between about ambient temperature and less than about 200° C.; passing comminuted solid waste containing organic materials through said zone; and subjecting the gaseous stream and the comminuted wastes in said zone to microwave discharge to ionize the gases in the stream and form vaporizable high reactive fragments of the organic materials which become entrained in the flowing gaseous stream, wherein interactions occur between the ionized gases and reactive fragments.

Classifications:

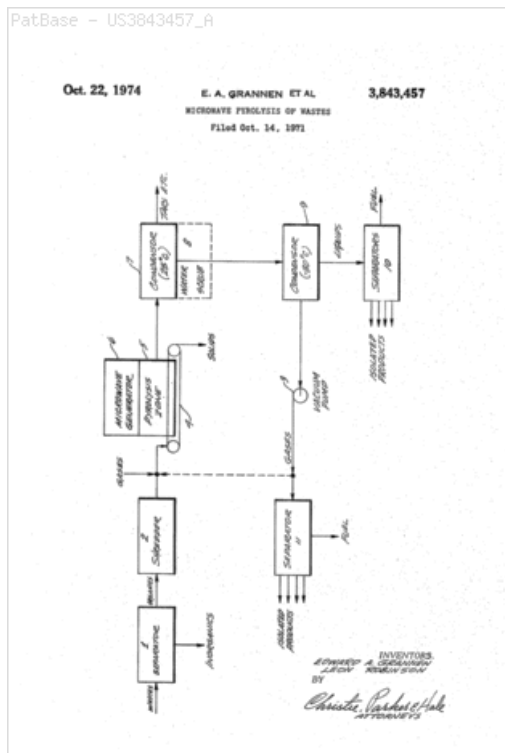
International (IPC 8-9): B09B3/00 C10B19/00 C10B53/00 C10J1/207 C10L5/46 (Advanced/Invention)

International (IPC 1-7): C10B49/00 C10B53/00

CPC: B09B3/00 C10B19/00 C10B53/00 C10J1/207 C10L5/46 C10L9/083 Y02E50/10 Y02E50/15 Y02E50/30

European: B09B3/00 C10B19/00 C10B53/00 C10J1/207 C10L5/46 C10L9/08B Y02E50/10 Y02E50/15 Y02E50/30

US: 201/19 201/2.5 201/25 201/35 201/37 201/8



Family:

Publication number	Publication date	Application number	Application date
US3843457 A	19741022	US19710189228	19711014

Priority:

US19710189228 19711014

Probable Assignee:

OCCIDENTAL PETROLEUM CORP

Assignee(s): (std):

OCCIDENTAL PETROLEUM CORP

Assignee(s):

OCCIDENTAL PETROLEUM CORP US

Inventor(s): (std):

GRANNEN E ; ROBINSON L

Inventor(s):

ROBINSON L US ; GRANNEN E US

Title: DESTRUCTION OF MACROMOLECULAR WASTE

Abstract: Source: US5084140A The macromolecular waste (which is not itself susceptible to microwave heating and may be, for example, plastics or polychlorinated biphenyl) is mixed (B) with pulverulent carbonaceous material, which comprises elemental carbon or is degradable by microwave irradiation to elemental carbon (such as waste tire material). The mix is subjected to microwave irradiation (C) in an inert atmosphere to cause pyrolysis of the plastics. Preferably part of the resulting solids is recycled to the microwave zone (C).

Classifications:

International (IPC 8-9): B01J19/12 B09B3/00 B29B17/00 C08J11/06 C10B19/00 C10B51/00 C10B53/00 C10B53/07

F23G5/027 (Advanced/Invention);

B09B3/00 B29B17/00 B29K105/26 C10B51/00 (Advanced/Non-invention);

B01J19/12 B09B3/00 B29B17/00 C08J11/00 C10B19/00 C10B51/00

C10B53/00 C10B53/07 F23G5/027 (Core/Invention);

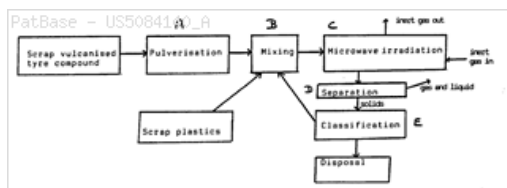
B02C B09B C10B E04F (Subclass/Invention)

International (IPC 1-7): B01J19/08 B02C B09B3/00 B29B17/00 B29K105/26 C08J11/06 C10B1/04 C10B19/00 C10B23/00 C10B53/00 C10J3/82 E04F F23G5/00 F23G5/027 F23G7/00 F23G7/12

CPC: Y02P20/143 C10B53/00 C10B19/00 B01J19/126 C10B53/07

European: B01J19/12D6 C10B19/00 C10B53/00 C10B53/07

US: 201/19 201/21 201/25 201/31 201/40 202/105 202/120 202/124 202/99 204/158.21 423/DIG.2

**Family:**

Publication number	Publication date	Application number	Application date
AT129739 E	19951115	AT19910913997T	19910726
AT97154 E	19931115	AT19880904249T	19880513
AU199183045 A1	19920302	AU19910083045	19910726
AU658575 B2	19950427	AU19910083045	19910726
BRPI9106714 A	19930629	BR1991PI06714	19910726
CA2087526 AA	19930118	CA19912087526	19910726
DE3885620 D1	19931216	DE19883885620	19880513
DE3885620 T2	19940303	DE19883885620T	19880513
DE69114293 D1	19951207	DE19916014293	19910726
DE69114293 T2	19960530	DE19916014293T	19910726
DK0541641 T3	19960520	DK19910913997T	19910726
EP0393030 A1	19901024	EP19880904249	19880513
EP0393030 B1	19931110	EP19880904249	19880513
EP0541641 A1	19930519	EP19910913997	19910726
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ES2079674 T3	19960116	ES19910913997T	19910726
FI930324 A	19930126	FI19930000324	19930126
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GB2256435 A1	19921209	GB19910008769	19910424
GB2256435 B2	19950405	GB19910008769	19910424
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GB8726396 A0	19871216	GB19870026396	19871111
GB9108769 A0	19910612	GB19910008769	19910424
GR3018367 T3	19960331	GR19950403495T	19951212
HU67123 A2	19950228	HU19930000146	19910726
HU9300146 A0	19930628	HU19930000146	19910726
IE71642 B	19970226	IE19910002638	19910726
IE912638 A1	19920129	IE19910002638	19910726
JP2503773 T2	19901108	JP19880503937T	19880513
JP2843347 B2	19990106	JP19880503937T	19880513
JP7502286 T2	19950309	JP19910513442T	19910726
MX9201924 A1	19921101	MX19920001924	19920424
NO930264 A	19930126	NO19930000264	19930126
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OA9860 A	19940815	OA19930060334	19930127
PL168160 B1	19960131	PL19910294365	19910726
PL294365 A1	19921130	PL19910294365	19910726
RU2080994 C1	19970610	SU19930004738	19910726
RU93004738 A	19970327	RU19930004738	19930114
US5084140 A	19920128	US19900558706	19900727
US5387321 A	19950207	US19920826020	19920127
WO8808871 A1	19881117	WO1988GB00378	19880513
WO9202598 A1	19920220	WO1991GB01275	19910726
ZA9105920 A	19930629	ZA19910005920	19910729

Priority:

EP19880904249 19880513	GB19870011257 19870513	GB19870026396 19871111
GB19910000876 19910424	WO1988GB00378 19880513	US19920826020 19920127
US19890335210 19890515	WO1991GB01275 19910726	GB19910008769 19910424
US19900558706 19900727		

Probable Assignee: HOLLAND K M

Assignee(s): (std): HOLLAND K M ; HOLLAND KENNET MICHAEL ; HOLLAND KENNETH M ; HOLLAND KENNETH MICHAEL ; KENNET MAJKL KHOLLAND

Assignee(s): KENNETH MICHAEL HOLLAND ; KENNET MAJKL KHOLLAND[GB] ; HOLLAND KENNETH MICHAEL GB ; HOLLAND KENNETH MICHAEL ROMFORD ESSEX GB ; HOORANDO KENESU MAIKERU

Inventor(s): (std): HOLLAND KENNET MICHAEL ; HOLLAND KENNETH M ; HOLLAND KENNETH MICHAEL ; KENNET MAJKL KHOLLAND ; KENNETH MICHAEL HOLLAND

Inventor(s): KENNET MAJKL KHOLLAND[GB] ; HOLLAND KENNETH MICHAEL GB ; HOLLAND KENNETH MICHAEL
ROMFORD ESSEX GB ; HOORANDO KENESU MAIKERU

Agent(s): HALFORDS IP; SMART AND BIGGAR

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 IT JP KP KR LI LK LU
MC MG ML MR MW NL NO PL RO SD SE SN SU TD TG US

Title: PYROLYTIC CONVERSION OF ORGANIC FEEDSTOCK AND WASTE

Abstract: Source: US5589599A A self-sustaining system and process for converting organic waste feedstreams into usable solid and gas end products includes a plurality of interconnected retorts, an apparatus for flash pyrolyzing the feedstream to form intermediate gas and solid products, a means for introducing a water spray to refine and cool the intermediate products, a means for separating the gas product from the solid product and a means for regenerating, and thereby further refining, the solid product. In a self-sustaining process, wastes which would otherwise be landfilled are converted to an activated carbon product and a combustible gas mixture of hydrogen, carbon monoxide, and lower hydrocarbons.

Classifications:**International (IPC 8-9):** C01B31/08 C10B47/44 C10B53/00

C10B53/02 C10B7/10 (Advanced/Invention);

C01B31/00 C10B47/00 C10B53/00 C10B7/00 (Core/Invention)

International (IPC 1-7): B01F3/02 C02F11/10 C10B53/00 C10G9/04**CPC:** C10B7/10 C01B31/08 C10B47/44 C10B53/00 C10B53/02

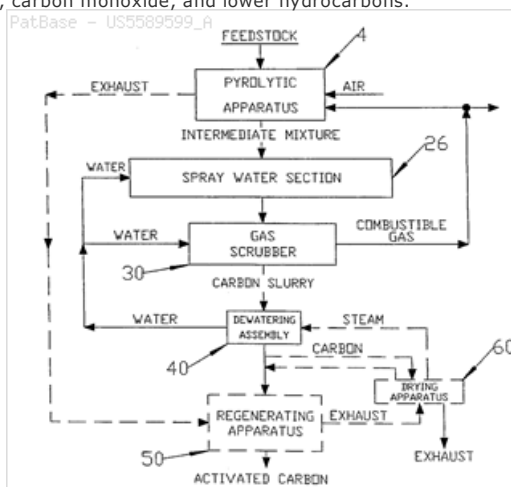
Y02E50/14 Y02P20/129

European: C01B31/08 C10B47/44 C10B53/00 C10B53/02

C10B7/10 Y02E50/14

US: 202/100 202/106 202/84 202/99 208/13 208/130 210/769

210/770 48/102A 48/105 48/108 48/187 48/189.2 48/90 585/240

**Family:**

Publication number	Publication date	Application number	Application date
AT184906 E	19991015	AT19950922941T	19950601
AU199527653 A1	19960104	AU19950027653	19950601
AU699600 B2	19981210	AU19950027653	19950601
CA2192350 AA	19961206	CA19952192350	19950601
CA2192350 C	20090602	CA19952192350	19950601
DE69512407 D1	19991028	DE19956012407	19950601
EP0764196 A1	19970326	EP19950922941	19950601
EP0764196 B1	19990922	EP19950922941	19950601
NZ288429 A	19981223	NZ19950288429	19950601
US5589599 A	19961231	US19940255326	19940607
US6039774 A	20000321	US19960774185	19961226
WO9533804 A1	19951214	WO1995US06992	19950601

Priority:

US19940255326 19940607 US19960774185 19961226 WO1995US06992 19950601

Probable Assignee: MCMULLEN DILLON G**Assignee(s):** (std): DILLON G MCMULLEN ; FREDERICK G MCMULLEN ; MCMULLEN DILLON G ; MCMULLEN FREDERICK G ; MCMULLEN ROGER B ; ROGER B MCMULLEN**Inventor(s):** (std): DILLON G MCMULLEN ; FREDERICK G MCMULLEN ; MCMULLEN DILLON G ; MCMULLEN FREDERICK G ; MCMULLEN ROGER B ; ROGER B MCMULLEN**Agent(s):** DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; SMART AND BIGGAR**Designated states:** AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK ES FI FR GA GB GN GR HU IE IT JP KP KR KZ LI LK LU LV MC MG ML MN MR MW NE NL NO NZ PL PT RO RU SD SE SK SN TD TG UA UZ VN

Title: MEDICAL WASTE TREATMENT UNIT

Abstract: Source: US2004054240A There is provided an apparatus (2) for the reduction of organic waste (4) in which the apparatus (2) comprises a conveyor (32, 40, 128) to move the waste (4) within the apparatus (2). There is also provided a first chamber (10) comprising weighing means to determine a weight of the waste and purging means to purge the apparatus of oxygen. A second chamber (12) comprises reduction means to treat, sterilize and reduce the waste for a first period of time and a third chamber comprises cooling means to cool the reduced and sterilized waste for a second period of time. There is also provided sealing means (18, 34, 36) to seal each of the first (10), second (12) and third (14) chambers from the other chambers and from exterior of the apparatus when in use.

Classifications:

International (IPC 8-9): A61L11/00 A62D3/10 B01J19/08 B09B3/00 B29B17/00 B61L2/00 H05B6/00 H05B6/64 H05B6/72 H05B6/80 (Advanced/Invention);

A61L2/00 B02C21/00 B09B3/00 (Advanced/Non-invention);
A61L11/00 A62D3/00 B09B3/00 B29B17/00 (Core/Invention);
A61L2/00 B02C21/00 (Core/Non-invention)

International (IPC 1-7): A61L11/00 B09B3/00 C07C1/00

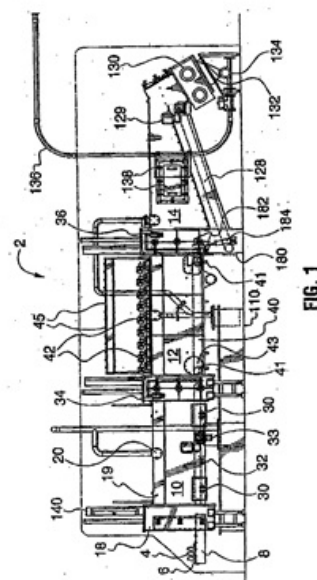
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European: A61L11/00 B09B3/00 B09B3/00M

US: 219/678 219/690 219/702 219/708 422/184.1 422/186.04 422/22 585/240 585/240P 588/226 588/317 588/317S

PatBase - US2004054240_AA

Patent Application Publication Mar. 18, 2004 Sheet 1 of 10 US 2004/0054240 A1



Family:

Publication number	Publication date	Application number	Application date
AT328674 E	20060615	AT20010973903T	20010921
AU2001293565 AA	20020402	AU20010293565	20010921
AU200193565 A5	20020402	AU20010093565	20010921
BRPI0114224 A	20030729	BR2001PI14224	20010921
BRPI0114224 B1	20140722	BR2001PI14224	20010921
CA2320455 AA	20020322	CA20002320455	20000922
CA2422928 AA	20030320	CA20012422928	20010921
CA2422928 C	20090630	CA20012422928	20010921
CA2659510 AA	20020328	CA20012659510	20010921
CA2659510 C	20110830	CA20012659510	20010921
CN1230259 C	20051207	CN20018019297	20010921
CN1476357 A	20040218	CN20018019297	20010921
CN1768974 A	20060510	CN200510116316	20010921
CN1768974 B	20101103	CN200510116316	20010921
DE60120434 D1	20060720	DE20016020434	20010921
EP1318875 A1	20030618	EP20010973903	20010921
EP1318875 B1	20060607	EP20010973903	20010921
EP1700610 A2	20060913	EP20060007816	20010921
EP1700610 A3	20140514	EP20060007816	20010921
HK1063443 A1	20060811	HK20040106207	20040818
HK1063443 A3	20041231	HK20040106207	20040818
IN00444DN2003 A	20090327	IN2003DN00444	20030326
US2004054240 AA	20040318	US20030381186	20030819
US7361303 BB	20080422	US20010381186	20010921
WO0224354 A1	20020328	WO2001CA01346	20010921

Priority:

CA20002320455 20000922 CA20012422928 20010921 CA20012659510 20010921
EP20010973903 20010921 WO2001CA01346 20010921

Probable Assignee: ENVIRONMENTAL WASTE INT INC

Assignee(s): (std): ENVIRONMENTAL WASTE INT I ; ENVIRONMENTAL WASTE INT INC ; ENVIRONMENTAL WASTE INTERNAC I ; ENVIRONMENTAL WASTE INTERNAC INC ; ENVIRONMENTAL WASTE INTERNAT I ; ENVIRONMENTAL WASTE INTERNAT INC ; EWMC INT INC ; EWMC INTERNAT INC ; KANTOR STEVEN L ; GRIFFIN MICHAEL ; RUGINETS ROMAN ; NORTON DOUGLAS

Assignee(s): ENVIRONMENTAL WASTE INT ; EWMC INTERNATIONAL INC ; ENVIRONMENTAL WASTE INTERNATIONAL INC ; ENVIRONMENTAL WASTE INTERNACIONAL INC

Inventor(s): (std): KANTOR L ; KANTOR S L ; KANTOR STEVEN L ; M GRIFFIN ; MICHAEL GRIFFIN ; NORTON DOUGLAS ; R

RUGINETS ; ROMAN GRIFFIN MICHAEL KANTOR S ; ROMAN RUGINETS ; RUGINETS R ; RUGINETS ROMAN ; RUGINETS S L KANTOR M GRIFFIN ; DOUGLAS NORTON ; GRIFFIN M ; GRIFFIN MICHAEL ; SL KANTOR

Inventor(s): SL KANTOR M GRIFFIN R RUGINETS ; STEVEN L KANTOR ; STEVEN LESLIE KANTOR ; GRIFFIN MICHAEL KANTOR STEVEN L ; GRIFFIN MICHAEL KANTOR STEVEN L NORTON DOUGLAS RUG ; S L KANTOR ; S L KANTOR M GRIFFIN R RUGINETS

Agent(s): RIDOUT AND MAYBEE LLP; DIMOCK STRATTON LLP; GOSNALL TOBY

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 PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

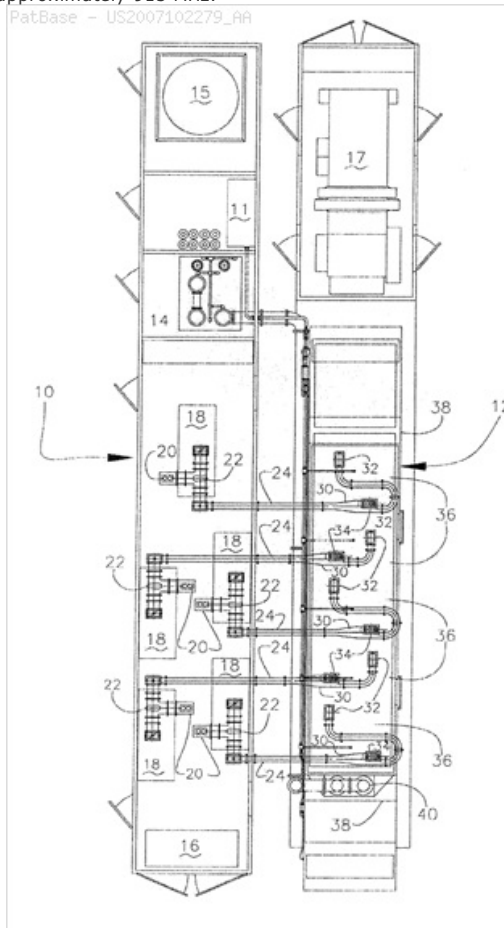
Title: METHOD AND APPARATUS FOR MICROWAVE REDUCTION OF ORGANIC COMPOUNDS

Abstract: Source: US2007102279A The invention described herein generally pertains to utilization of high power density microwave energy to reduce organic compounds to carbon and their constituents, primarily in a gaseous state. The process includes, but is not limited to, scrap tires, plastics, asphalt roofing shingles, computer waste, medical waste, municipal solid waste, construction waste, shale oil, and PCB/PAH/HCB-laden materials. The process includes the steps of feeding organic material into a microwave applicator and exposing the material to microwave energy fed from at least two linear polarized sources in non-parallel alignment to each other, and collecting the material. The at least two sources of microwave energy are from a bifurcated waveguide assembly, whose outputs are perpendicular to each other and fed through waveguide of proper impedance, such that the microwave sources are physically and electrically 90 degrees out of phase to each other. The microwave frequency is between 894 and 1000 MHz, preferably approximately 915 MHz.

Classifications:

International (IPC 8-9): A61L11/00 A62D3/178 B01J19/08 B01J19/12 B09B3/00 C01B31/02 C07C1/00 C07F1/00 C07F3/00 C08J11/00 C08J11/10 C10B19/00 C10B53/00 C10B53/06 C10B53/07 C10G1/00 C10G1/04 C10G1/10 F01D15/10 H05B6/78 H05B6/80 (Advanced/Invention); A61L11/00 A62D3/00 B01J19/08 B09B3/00 C07F1/00 C07F3/00 C08J11/00 C10B53/00 C10B53/07 H05B6/78 H05B6/80 (Core/Invention)
CPC: Y02W30/58 Y02W30/702 A61L11/00 B09B3/0075 C08J11/00 H05B6/80 H05B6/78 A62D3/178 A62D2101/20 A62D2101/22 B01J19/126 B01J2219/00063 B01J2219/0009 B01J2219/00108 B01J2219/00162 B01J2219/1215 B01J2219/1227 B01J2219/123 B01J2219/1233 B01J2219/1239 B01J2219/126 B01J2219/1269 B01J2219/1293 B03B9/061 B09B3/00 B09B3/0083 C08J3/28 C08J11/10 C10B7/06 C10B19/00 C10B53/00 C10B53/06 C10B53/07 C10G1/00 C10G1/10 H05B6/806 Y02E50/32 Y02P20/143
European: A61L11/00 A62D3/178 B01J19/12D6 B03B9/06D B09B3/00 B09B3/00M B09B3/00T C08J11/00 C08J11/10 C08J3/28 C10B19/00 C10B53/00 C10B53/06 C10B53/07 C10B7/06 C10G1/00 C10G1/10 H05B6/78 H05B6/80 H05B6/80L K62D101/20 K62D101/22 L01J219/00B2B4 L01J219/00B2D4B L01J219/00B2D6B L01J219/00B4 L01J219/12D6B2B L01J219/12D6B4A2 L01J219/12D6B4A4 L01J219/12D6B4A4B L01J219/12D6B4H L01J219/12D6D2F L01J219/12D6D6 L01J219/12D6H2B T05B206/68 T05B206/74 Y02E50/32
US: 201/19 201/19S 201/3 201/3P 201/8 201/8S 202/96 202/96S 204/157.15 204/157.4 204/157.6 204/157.600P 208/390 208/402 290/52 422/186 422/186.01 422/186S 423/445R 585/240 585/241 588/310

PatBase - US2007102279_AA

**Family:**

Publication number	Publication date	Application number	Application date
GB200701939 A0	20070314	GB20070001939	20070201
GB2435039 A1	20070815	GB20070001939	20070201
GB2435039 B2	20100908	GB20070001939	20070201
US2007102279 AA	20070510	US20070670041	20070201
US2011048916 AA	20110303	US20100731492	20100325
US2013056987 AA	20130307	US20120616104	20120914
US7927465 BB	20110419	US20070670041	20070201
US8268133 BB	20120918	US20100731492	20100325
US8562793 BB	20131022	US20120616104	20120914
WO07117754 A2	20071018	WO2007US61440	20070201
WO07117754 A3	20080117	WO2007US61440	20070201

Priority:

US20060766644P 20060202 US20060825002P 20060908 US20120616104 20120914
 US20100731492 20100325 US20070670041 20070201

Probable Assignee: NOVAK JOHN F**Assignee(s):** (std): NOVAK JOHN F ; NOVAK JOHN FREDERICK**Assignee(s):** JOHN FREDERICK NOVAK**Inventor(s):** (std): NOVAK JOHN F ; NOVAK JOHN FREDERICK**Inventor(s):** JOHN FREDERICK NOVAK ; NOVAK JOHN**Agent(s):** BUCKINGHAM DOOLITTLE AND BURROUGHS LLP; HAHN LOESER AND PARKS 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 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 MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

Title: MICROWAVE INDUCED DESTRUCTION OF IMPURITIES FROM BIOGAS AND NITROGEN OXIDES FROM ENGINE EXHAUST

Abstract: Source: US2008197013A Granulated Activated Carbon (GAC) is used to remove hydrogen sulfide (H₂S) from the biogas produced in an anaerobic digester. The cleaned biogas is then combusted in a reciprocating engine. The exhaust of the engine is passed through a heat exchanger and then through GAC in an adsorber to adsorb nitrogen oxides (NO_x) and any sulfur oxides (SO_x). The GACs containing NO_x, H₂S, and SO_x, are transported to a microwave reactor, mixed, and exposed to microwave energy. The H₂S and NO_x are desorbed from the GAC and chemically combined to produce nitrogen, carbon dioxide, sulfur and water. Unreacted nitrogen oxides or hydrogen sulfide are transported to a second reactor containing carbon media to be reacted by a further microwave process. Sulfur is removed with a filter as a solid and the remaining inert components are vented to the atmosphere. The GAC is regenerated and reused to remove additional H₂S and NO_x.

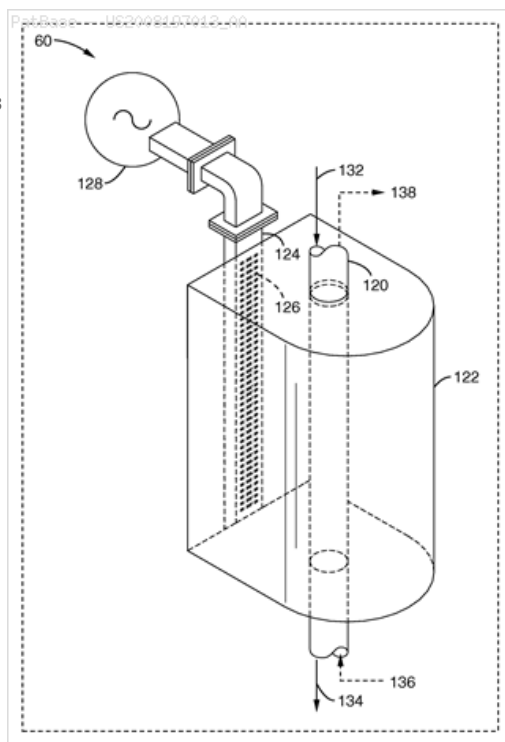
Classifications:

International (IPC 8-9): A62D3/178 B01D53/04 B01D53/34 B01D53/52 B01D53/56 B01D53/73 B01D53/92 B01J19/12 C01B17/04 (Advanced/Invention); A62D3/00 B01D53/04 B01D53/34 B01D53/48 B01D53/56 B01D53/73 B01D53/92 B01J19/12 C01B17/00 (Core/Invention)

CPC: Y10S502/514 C12M47/18 B01D53/007 B01D53/04 B01D2253/102 B01D2257/302 B01D2257/304 B01D2258/05 B01D2259/806 Y02C20/20 Y02P20/59

European: B01D53/00R B01D53/04 L01D253/102 L01D257/302 L01D257/304 L01D258/05 L01D259/806 Y02C20/20

US: 204/157.15 204/157.150P 204/157.3 204/157.43 204/157.46 204/157.49 422/168 422/168S 422/170 422/170S 422/171 422/171P 422/178 422/178S 422/186 422/186S 423/212 423/235 423/573.1 502/20 502/416 502/439 502/514 502/56



Family:

Publication number	Publication date	Application number	Application date
US2008197013 AA	20080821	US20080013870	20080114
US2010143209 AA	20100610	US20090621259	20091118
US7641874 BB	20100105	US20080013870	20080114

Priority:

US20070884985P 20070115 US20080013870 20080114 US20090621259 20091118

Probable Assignee: C MICRO SYSTEMS INC

Assignee(s): (std): CHA CORP

Assignee(s): CHE CORP ; C MICRO SYSTEMS INC

Inventor(s): (std): CHA CHANG YUL

Agent(s): JOHN P OBANION OBANION AND RITCHEY LLP; JOHN P

Title: SYSTEM AND PROCESS FOR THERMOCHEMICAL TREATMENT OF MATTER CONTAINING ORGANIC COMPOUNDS

Abstract: Source: US2014013657A The present document describes a system and a process for the thermochemical treatment a matter containing organic compounds such as biomass in the form of animals droppings. The system and process may be used for the production of useful energetic products such as biochar, bio-oil and gases from non-condensed vapors.

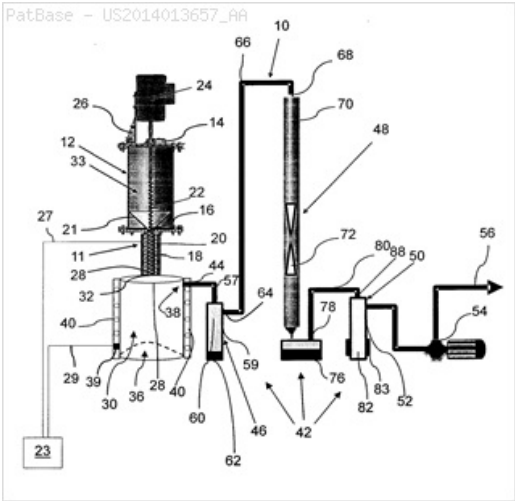
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CPC: B01J19/24 C10L1/1802 C10B47/44 C10B53/02 C10C5/00 C10G1/02 C10G2300/1018 C10J3/007 C10J2300/0916 C10J2300/0956 C10L1/02 C10L5/42 C10L5/447 C10L9/083 Y02E50/10 Y02E50/14 Y02E50/15 Y02E50/30 Y02E50/32 Y02P20/145 Y02P30/20

European: C10B47/44 C10B53/02 C10C5/00 C10J3/00F C10L9/08B M10J300/09D2 M10J300/09F2

US: 422/119 422/187 44/307



Family:

Publication number	Publication date	Application number	Application date
CA2830968 AA	20130923	CA20122830968	20120323
CA2830968 C	20160426	CA20122830968	20120323
US2014013657 AA	20140116	US20120006773	20120323
US9486774 BB	20161108	US20120006773	20120323
WO12126096 A1	20120927	WO2012CA00260	20120323

Priority:

US20110466746P 20110323 US20120006773 20120323 WO2012CA00260 20120323

Probable Assignee: INST DE RECH ET DE DEV EN AGROENVIRONNEMENT INC IRDA

Assignee(s): (std): GODBOUT STEPHANE ; LAROCHE JEAN PIERRE ; INST RECH ET DE DEV EN AGROENVIRONNEMENT INC IRDA ; SOLOMATNIKOVA OLGA ; QUEBEC CENTRE RECH IND ; PELLETIER FREDERIC ; VERMA MAUSAM ; CENTRE DE RECH IND DU QUEBEC CRIQ ; CT DE RECH IND DU QUEBEC CRIQ ; INST DE RECH ET DE DEV EN AGROENVIRONNEMENT INC IRDA ; ZEGAN DAN

Assignee(s): DE RECHERCHE ET DE DEVELOPPEMENT EN AGROENVIRONNEMENT INC IRDA INST ; CENTRE DE RECHERCHE INDUSTRIELLE DU QUEBEC ; CENTRE DE RECHERCHE INDUSTRIELLE DU QUEBEC CRIQ ; INSTITUT DE RECHERCHE ET DE DEVELOPPEMENT EN AGROENVIRONNEMENT INC IRDA ; DE RECHERCHE ET DE DEVELOPPEMENT EN AGROENVIRONNEMENT INC IRDA INST

Inventor(s): (std): GODBOUT STEPHANE ; LAROCHE JEAN PIERRE ; PELLETIER FREDERIC ; SOLOMATNIKOVA OLGA ; VERMA MAUSAM ; ZEGAN DAN

Agent(s): BENOIT AND COTE INC; BENOIT AND COTE ASSOCIES INC

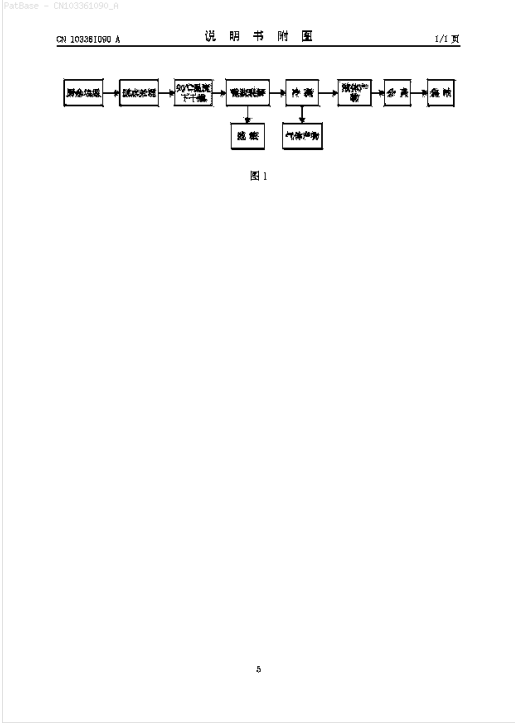
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Title: METHOD FOR PREPARATION OF TAR BY MICROWAVE PYROLYSIS OF KITCHEN GARBAGE

Abstract: Source: CN103361090A The invention discloses a method for preparation of tar by microwave pyrolysis of kitchen garbage. The specific process comprises: firstly subjecting the kitchen garbage to a dehydration treatment, then drying it for 5h at 90DEG C; putting the dried kitchen garbage into a microwave pyrolysis reactor, then placing the reactor into a microwave pyrolysis furnace, and performing microwave pyrolysis under a nitrogen atmosphere; making the pyrolysis gas pass through a first-stage condensing device, collecting the condensation product; and separating the upper tar after the liquid product undergoes layering. The method has no need of grinding the kitchen garbage and adding a microwave absorbent, the operation is simple and convenient, the kitchen garbage reduction effect is good, the generated solid residue and non-condensable gas are both available resources, and there exists no secondary pollution. Thus, the method opens up a new approach for harmless, reducing and resourceful treatment of the kitchen garbage.

Classifications:

International (IPC 8-9): C10B53/00 C10B57/00
C10B57/10 (Advanced/Invention)



Family:

Publication number	Publication date	Application number	Application date
CN103361090 A	20131023	CN201310302837	20130718

Priority:

CN201310302837 20130718

Probable Assignee: UNIV SOUTH CHINA TECH

Assignee(s): (std): SOUTH CHINA UNIV OF TECHNOLOGY ; UNIV SOUTH CHINA TECH

Inventor(s): (std): LI SHUANGSHUANG ; LIU HAILI ; MA XIAOXI ; XU QING

Title: A METHOD AND A SYSTEM FOR PROCESSING PLASTIC WASTE

Abstract: Source: US2016122654A A method for processing of plastic and/or rubber waste to generate energetic gas comprising aliphatic hydrocarbons C1-C4, carbon oxide and hydrogen, wherein the waste may comprise halogens, sulphur, nitrogen and oxygen and may be contaminated by substances of inorganic origin comprising ceramic and metallic materials, the method comprising processing the waste in a pyrolysis process, wherein a powdered waste material is fed to a microwave drum reactor (102), where it is heated by microwaves while being moved through the reactor (102), the method comprising: conducting the pyrolysis reaction inside the reactor (102) at a temperature of 800-950 degrees centigrade to obtain end products comprising gases, dust and a porous char of a large surface area having absorptive properties; separating the char from the other pyrolysis products by deposition; directing a portion, preferably a quarter, of the obtained char to a filter (105); directing the dust and gases to a gas cooling apparatus (103) comprising at least two synchronized screw conveyors, wherein the gases are cooled to a temperature of 120-160 degrees centigrade and wherein the dust and the condensate are directed to the filter (105) filled with the char; and feeding back the mixture of char, condensate and dust from the filter (105) to the microwave reactor (102).

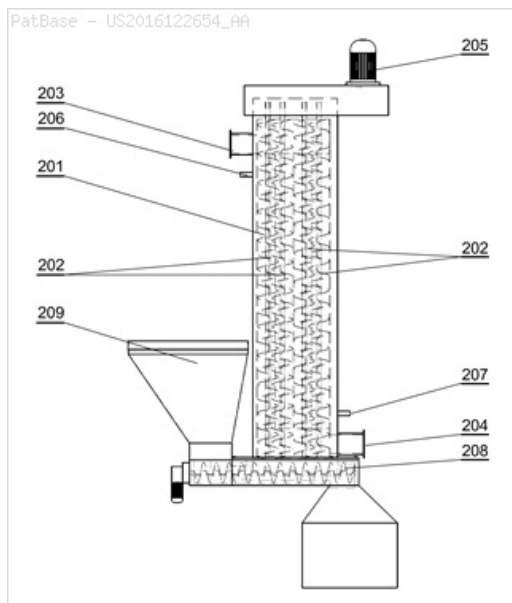
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C09C1/48 (Advanced/Non-invention)

CPC: C09C1/482 C10K1/003 C10K1/04 Y02P20/143 C10B37/00 C10B27/06 C10B53/07 C10B19/00

US: 201/4 202/118



Family:

Publication number	Publication date	Application number	Application date
CA2914665 AA	20151207	CA20142914665	20140515
EP2997110 A1	20160323	EP20140731161	20140515
MX2015015852 A1	20160629	MX20150015852	20140515
PL224515 B1	20170131	PL20130403916	20130516
PL403916 A1	20141124	PL20130403916	20130516
US2016122654 AA	20160505	US20140891361	20140515
WO14184290 A1	20141120	WO2014EP59939	20140515

Priority:

PL20130403916 20130516 WO2014EP59939 20140515

Probable Assignee: PROMETEUS SP Z OO

Assignee(s): (std): BARCZYK ROBERT ; PAROSA RYSZARD ; RYSZARD PAROSA

Assignee(s): PROMETEUS SP Z OO ; PROMETEUS SP ZOO ; ROBERT BARCZYK

Inventor(s): (std): BARCZYK ROBERT ; PAROSA RYSZARD ; RYSZARD PAROSA

Inventor(s): PROMETEUS SP Z OO ; ROBERT BARCZYK

Agent(s): INTEGRAL IP; EUPATENTPL; PAWLOWSKI ADAM

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