

Search history

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Search 2: FT=(heated and airlock and feeder) and IC=(F23G5/12) (Results 7)
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Search 4: FT=(heated and airlock and feeder) and IC=(C10B47/20) (Results 1)
Search 5: FT=(heated and airlock and feeder) and IC=(C10B57/00) (Results 6)
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Search 7: FT=(heated and airlock and feeder) and IC=(C10B57/18) (Results 2)
Search 8: FT=(heated and airlock and feeder) and IC=(C10B31/00) (Results 1)
Search 9: FT=(heated and airlock and feeder and extruder and technology) and IC=(C10G1/10) (Results 6)

1) Family number: 41802135 (US2008128259A)

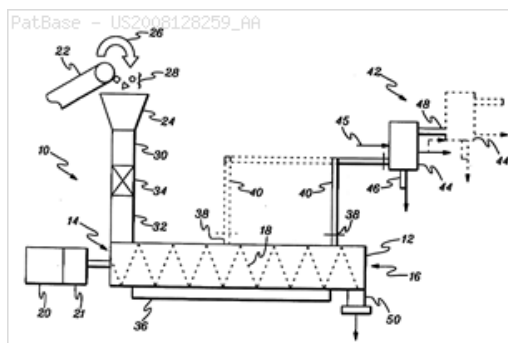
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Title:	METHODS AND APPARATUS FOR PYROLYZING MATERIAL																																																																
Priority:	US20060864529P 20061106 US20090236343P 20090824 US20100897434 20101004		US20070935760 20071106 GB20090016410 20090918 US20120404843 20120224		WO2007US83800 20071106 WO2010US46461 20100824																																																												
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Probable Assignee:	DUDEK AND KOSTEK SP Z O O																																																																
Assignee(s):(std):	KOSTEK JR STANISLAW ; KOSTEK SR STANISLAW ; KOSTEK STANISLAW ; KOSTEK STANISLAW JR ; KOSTEK STANISLAW SR ; KOSTER STANISLAW JR ; KOSTER STANISLAW SR ; DUDEK AND KOSTEK SP Z O O																																																																
Assignee(s):	DUDEK AND KOSTEK SPZOO																																																																
Inventor(s):(std):	KOSTEK STANISLAW ; KOSTEK SR STANISLAW ; KOSTEK JR STANISLAW ; KOSTER STANISLAW SR ; KOSTER STANISLAW JR ; KOSTEK STANISLAW SR ; KOSTEK STANISLAW JR																																																																
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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																																																																
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Abstract:

Methods and systems for substantially continuously treating comminuted material containing carbon and hydrogen, for example, used tires, are provided. The methods include the steps of introducing the tire material to an elongated chamber, transferring the tire material through the elongated chamber, heating the tire material to a temperature sufficient to pyrolyze the material to produce a gaseous stream; discharging the gaseous stream from the chamber, and cooling at least some of the gaseous stream to liquefy components of the stream. The transfer may be effected by a flexible, center-less screw conveyor to minimize material buildup in the vessel. The cooling of the gaseous stream may be practiced by reverse condensation. One or more re-usable fuel streams are provided by aspects of the invention.



2) Family number: 67916464 (US2017361268A)

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Title: CHAR SEPARATOR

Priority: US20160318178P 20160621 US20170477312 20170403 US20170628844 20170621
WO20171B53713 20170621 US20190263088 20190131 US20190691850 20191122

Family:

Publication number	Publication date	Application number	Application date
AU2017282172 AA	20190117	AU20170282172	20170621
BR112018076624 A2	20190402	BR20181176624	20170621
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CL2018003676 A1	20190405	CL20180003676	20181218
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DOP2018000286 A	20190228	DO20180000286	20181217
EP3472273 A1	20190424	EP20170814858	20170621
EP3472273 A4	20200129	EP20170814858	20170621
IL263806 A0	20190131	IL20170263806	20170621
IN201927002317 A	20190726	IN201927002317	20190118
JP2019529585 T2	20191017	JP20180566447T	20170621
KR20190010725 A	20190130	KR20197001860	20170621
MX2018015963 A1	20190610	MX20180015963	20170621
SG11201810958U A1	20190130	SG20181110958	20170621
US2017361268 AA	20171221	US20170477312	20170403
US2017362511 AA	20171221	US20170628844	20170621
US2019185760 AA	20190620	US20190263088	20190131
US2020102503 AA	20200402	US20190691850	20191122
US10544367 BB	20200128	US20170628844	20170621
WO17221180 A1	20171228	WO20171B53713	20170621
ZA2019000262 A	20191030	ZA20190000262	20190115

Probable Assignee: GOLDEN RENEWABLE ENERGY LLC

Assignee(s):(std): FOWLER DAVID ; GOLDEN RENEWABLE ENERGY ; GOLDEN RENEWABLE ENERGY LLC ; TENORE ANTHONY N ; OLUWASEUN OLUWADARE

Assignee(s): GOLDEN RENEWABLE LLC

Inventor(s):(std): CANOSA NICHOLAS ; TENORE ANTHONY N ; FOWLER DAVID ; ANTHONY N TENORE ; DAVID FOWLER ; OLUWADARE OLUWASEUN ; ANTHONY F TENORE ; TENORE F ANTHONY ; FOWLER DAVID W ; OLUWASEUN OLUWADARE ; TENORE ANTHONY F

Inventor(s): TENORE F

Agent(s): GRIFFITH HACK; ELAN IP INC; SILVA Y CIA; DEHNS; JAGTIANI AJAY A; MILES AND STOCKBRIDGE PC

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

International class (IPC 8-9): B01D3/08 B01D53/00 B01D53/02 B01D53/18 C08J11/12 C10B C10B47/44 C10B53/07 C10B7/10 C10G C10G1/02 C10G1/10 C10G5/02 C10G70/04 C10K1/02 (Advanced/Invention); C10B7/10 (Advanced/Non-invention); C10B (Subclass/Invention)

International class (IPC 1-7): C10G5/02 C10G70/04

CPC: C10B47/44 C10B53/07 C10G1/02 C10G1/10 C10G5/02 C10G70/046 C10G2300/1003 C10K1/02 Y02P20/143 B01D3/085 C10B7/10

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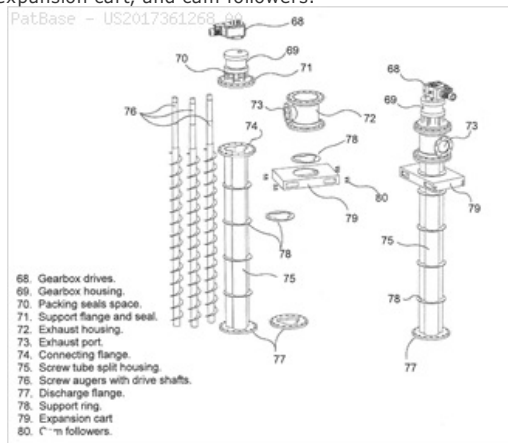
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DE202013007632 U, DE1769235 A1, CN202988144 U, CN105542830 A,

Forward Citations: EP3627050,

Abstract:

The present invention relates to an apparatus that is part of a reusable fuel processing unit that allows the absorption of char contained within vapor that is leaving the reactor including a gear box, gearbox housing, support flange and seal, exhaust housing, exhaust port, connecting flange, screw top split housing, vertical steal housing, three augers with drive shafts on each auger contained within the steel housing, discharge flange, support ring, expansion cart, and cam followers.



3) Family number: 67916581 (US2017361558A)

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Title: BAG PRESS FEEDER ASSEMBLY

Priority: US20160319768P 20160621 US20170479560 20170405 US20170628922 20170621
WO20171B53714 20170621

Family:

Publication number	Publication date	Application number	Application date
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DOP2018000288 A	20190228	DO20180000288	20181217
EP3472267 A1	20190424	EP20170814859	20170621
EP3472267 A4	20200304	EP20170814859	20170621
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Probable Assignee: GOLDEN RENEWABLE ENERGY LLC

Assignee(s):(std): FOWLER DAVID ; GOLDEN RENEWABLE ENERGY LLC ; OLUWASEUN OLUWADARE ; TENORE ANTHONY F

Assignee(s): GOLDEN RENEWABLE LLC

Inventor(s):(std): TENORE ANTHONY F ; CANOSA NICHOLAS ; OLUWASEUN OLUWADARE ; FOWLER DAVID ; ANTHONY F TENORE ; DAVID FOWLER ; OLUWADARE OLUWASEUN ; ANTHONY N TENORE ; ANTHONE F TENORE ; TENORE ANTHONY N

Agent(s): GRIFFITH HACK; ELAN IP INC; SILVA Y CIA; DEHNS; JAGTIANI AJAY 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 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

International class (IPC 8-9): B29B7/60 B29C48/285 B29C48/395 B30B11/24 B30B15/16 B65G53/48 C10G C10G1/10 C10G31/06 F04C2/16 F23G5/027 F23G7/12 F27D3/08 (Advanced/Invention); C10G (Subclass/Invention)

International class (IPC 1-7): C10G1/10 C10G31/06

CPC: C10G31/06 C10G2300/1003 C10G2300/4012 Y02P20/143 B01D5/00 B01D53/002 B30B11/241 B30B15/165 B65G33/18 B65G53/00 B65G53/14 B65G53/26 C10G1/10

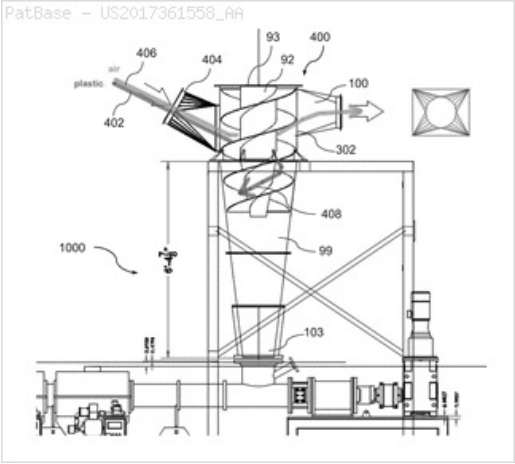
US class: 1/1 264/335

[Classification Explorer](#)

Cited documents: US9052109 BA, US6634508 BA, US6276286 BA, US6109902 A, US5732829 A, US5611268 A, US509433 A, US4842126 A, US4261225 A, US3981454 A, US3822866 A, US3600041 A, US2015314513 AA, US2015080624 AA, US2015023826 AA, US2014054815 AA, US2010202243 AA, US2009299110 AA, US2009039184 AA, US2008202983 AA, US2008105141 AA, US2008081935 AA, US2008038071 AA, US2005219943 AA, US2003098227 AA, KR20120103832 A, KR100686370 B1, DE202013009015 U,

Forward Citations: US10544367, US10436525, US10345048, US10233393, EP3627050,

Abstract:
A material handling apparatus is described comprising a material press body having an inlet and an outlet; a power source for generating an airstream into the inlet of the material press body and through the outlet of the material press body, wherein the airstream captures and feeds a supply material into the material press body; a plurality of press augers for capturing and manipulating the supply material into the material handling apparatus; and a drive system connected to drive and control the plurality of augers.



4) Family number: 68162856 (US2018010048A) © PatBase

Title: HEATED AIRLOCK FEEDER UNIT

Priority: US20160062319 20160708 WO2017IB53667 20170620

Family:

Publication number	Publication date	Application number	Application date
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Inventor(s):(std): TENORE ANTHONY N ; FOWLER DAVID ; CANOSA NICHOLAS ; OLUWASEUN OLUWADARE ; TENORE ANTHONY F ; DAVID FOWLER ; ANTHONY F TENORE ; OLUWADARE OLUWASEUN

Agent(s): GRIFFITH HACK; ELAN IP INC; SILVA Y CIA; DEHNS; JAGTIANI AJAY A; MILES AND STOCKBRIDGE PC

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

International class (IPC 8-9): B01J4/00 B65G53/48 C10B C10B13/00 C10B23/00 C10B31/08 C10B47/44 C10B53/07 C10G1/10 F23G5/44 F23G7/12 F23K5/00 F27D3/08 F27D3/14 (Advanced/Invention); C10B13/00 (Advanced/Non-invention); C10B (Subclass/Invention)

International class (IPC 1-7): C10G1/10

CPC: C10B47/44 C10B53/07 Y02P20/143 C10G1/10 C10G2300/30 C10G2300/4006 C10G2300/4012 C10B13/00 C10B23/00 C10B31/08

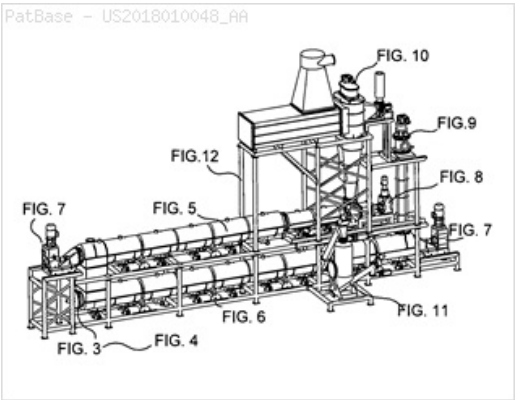
US class: 1/1 202/118

[Classification Explorer](#)

Cited documents: WO09129233 A2, WO08017953 A2, WO0105910 A1, US9868597 BB, US9795940 BB, US9630345 BB, US9624439 BB, US9275655 BB, US9220798 BB, US9045693 BB, US8877992 BB, US8809606 BB, US8801904 BB, US8574325 BB, US8548501 BB, US8518218 BB, US8372248 BA, US8304590 BB, US8200238 BB, US8003833 BB, US7906695 BB, US7771699 BB, US7692050 BB, US7476296 BB, US7311509 BB, US7301060 BB, US6758150 BB, US6634508 BA, US6455789 BA, US6387221 BA, US6298751 BA, US6221329 BA, US6126907 A, US6109902 A, US5762666 A, US5756871 A, US5732829 A, US5720232 A, US5611268 A, US5394937 A, US5205225 A, US5129995 A, US5078857 A, US4473478 A, US4437046 A, US4426018 A, US4261225 A, US4123332 A, US4025058 A, US3981454 A, US3907259 A, US3822866 A, US3797702 A, US3151784 A, US3129459 A, US2916121 A, US2616519 A, US2458068 A, US2018056262 AA, US2017361558 AA, US2017361329 AA, US2017283707 AA, US2017218278 AA, US2017036378 AA, US2015080624 AA, US2015064297 AA, US2015053542 AA, US2015023826 AA, US2014121426 AA, US2014054815 AA, US2013299333 AA, US2012261247 AA, US2012024687 AA, US2012024106 AA, US20111290057 AA, US2010200229 AA, US2010024696 AA, US2010008836 AA, US2008286557 AA, US2008202983 AA, US2008128259 AA, US2008105141 AA, US2007179326 AA, US2006211899 AA, US2004144698 AA, US2004003481 AA, US2003047437 AA, US2002048523 AA, KR20090117377 A, KR20030051913 A, KR100686370 B1, CN105542830 A,

Forward Citations: US2018010049, US10544367, EP3627050,

Abstract:
A Heated Airlock Feeder is disclosed. The Heated Airlock Feeder allows for the continuous feeding of solid, shredded plastic into a reactor tube surrounded by clamshell burner boxes. Inside of the reactor tube, two augers, one with right hand flights and one with left hand flights are welded to smooth augers to create two continuous augers that push solid plastic material, liquid plastic material and molten plastic material through two small holes. As the plastic is in its molten state while being forced through the two small holes, an airlock is formed preventing air form entering the system. As the solid, shredded plastic is fed into the system, an airlock is formed allowing for the continuous feeding of the system. The clamshell burner boxes allow for convection and radiant heat allowing for even, continuous heat.



5) Family number: 68162857 (US2018010049A) © PatBase

Title: SYSTEM AND PROCESS FOR CONVERTING WASTE PLASTIC INTO FUEL

Priority: US20160493445P 20160705 US20170641471 20170705 WO2017IB54058 20170705

Family:

Publication number	Publication date	Application number	Application date
AU2017293458 AA	20190103	AU20170293458	20170705
AU2017293458 BB	20200312	AU20170293458	20170705
BR112019000051 A2	20190402	BR20191100051	20170705
CA3029578 AA	20181228	CA20173029578	20170705
CL2018003876 A1	20190412	CL20180003876	20181228
CN109477010 A	20190315	CN201780041733	20170705
CO20190000790 A2	20190208	CO20190000790	20190128
CR20190052 A	20190503	CR20190000052	20170705
DOP2018000294 A	20190228	DO20180000294	20181221
EP3481923 A1	20190515	EP20170823741	20170705
EP3481923 A4	20191218	EP20170823741	20170705
IL264100 A0	20190131	IL20170264100	20170705
IN201927004072 A	20190802	IN201927004072	20190201
JP2019524920 T2	20190905	JP20180568343T	20170705
KR20190016129 A	20190215	KR20197003338	20170705

MX2018015964 A1	20190516	MX20180015964	20170705
SG11201811050P A1	20190130	SG20181111050	20170705
US2018010049 AA	20180111	US20170641471	20170705
WO18007964 A1	20180111	WO20171B54058	20170705
ZA201900638 A	20191030	ZA20190000638	20190130

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Assignee(s): GOLDEN RENEWABLE LLC

Inventor(s):(std): TENORE ANTHONY F ; CANOSA NICHOLAS ; OLUWASEUN OLUWADARE ; TENORE ANTHONY N ; FOWLER DAVID ; ANTHONY F TENORE ; OLUWADARE OLUWASEUN ; ANTHONY N TENORE ; DAVID FOWLER

Inventor(s): TENORE ANTHONY

Agent(s): GRIFFITH HACK; ELAN IP INC; SILVA Y CIA; DEHNS; ASAMURA PATENT OFFICE PC; JAGTIANI AJAY 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 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

International class (IPC 8-9): B01D53/00 B01J4/00 B01J6/00 B01J7/00 B01J8/00 C10B C10B31/08 C10B53/07 C10G1/02 C10G1/10 C10L C10L5/48 F23G5/027 F23G7/12 F27D15/02 F27D17/00 F27D3/00 F27D3/08 (Advanced/Invention); B01D53/00 B01J19/20 C10B47/44 C10B53/07 C10G1/02 C10G1/10 C10K1/02 C10K1/04 (Advanced/Non-invention); C10B (Subclass/Invention)

International class (IPC 1-7): C10L5/48

CPC: C10L5/48 C10L2290/145 C10L2290/148 C10L2290/543 B01D53/002 B01D2257/702 B01J19/20 B01J2219/00094 C10B47/44 C10B53/07 C10G1/02 C10G1/10 C10G2300/1003 C10G2400/02 C10G2400/04 C10K1/026 C10K1/04 Y02P20/133 Y02P20/143 C10B31/08 B01J4/007 B01J6/005 B01J7/00 B01J8/0045 B01J2204/007 B30B9/121

US class: 1/1 202/118

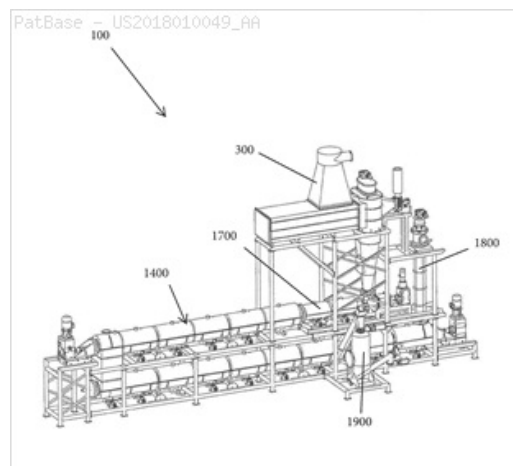
[Classification Explorer](#)

Cited documents: US9052109 BA, US9045693 BB, US836701 A, US8215477 BB, US7144558 BB, US6634508 BA, US6455789 BA, US6387221 BA, US6126907 A, US5756871 A, US5732829 A, US5611268 A, US5205225 A, US4500481 A, US4473478 A, US4437046 A, US4426018 A, US4261225 A, US4123332 A, US4025058 A, US3981454 A, US3907259 A, US3822866 A, US3797702 A, US3458321 A, US3455789 A, US2616519 A, US2458068 A, US2015080624 AA, US2015064297 AA, US2012261247 AA, US2010289175 AA, US2010200229 AA, US2010024696 AA, US2010008836 AA, US2008286557 AA, US2008202983 AA, US2008128259 AA, US2008105141 AA, US2008038071 AA, US2007179326 AA, US2006211899 AA, US2004003481 AA, US2003047437 AA, US10233393 BB, KR20030051913 A, KR20030005191 A, JP8334221, JP7505824 T2, JP62187791, JP61017879 B4, JP60063543 U1, JP2010500170 T2, JP2008155582, JP2001296009, JP2000017272, JP2000001677, DE202013007632 U, DE19724146 A1, CN202988144 U,

Forward Citations: EP3627050,

Abstract:

An apparatus is provided for processing reusable fuel comprising: a continuous material supply assembly; a heated airlock feeder configured to continuously receive and process the material supply received therein; a reactor configured to receive the processed material from the heated airlock feeder; and a vapor refining system configured to process vapor supplied by the reactor. The apparatus may comprise a char disposal system configured to eliminate char from the reactor. The apparatus may also comprise a thermal expansion system configured to allow thermal expansion of the reactor. A cooling system may be configured to receive processed fuel from the reactor.



6) Family number: 46544929 (EP2230290A2)

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Title: METHOD OF DEGRADATION OF PLASTICS AND APPARATUS THEREOF.

Priority: PL20080386877 20081223 EP20090180691 20091223

Family:	Publication number	Publication date	Application number	Application date
	EP2230290 A2	20100922	EP20090180691	20091223
	EP2230290 A3	20121226	EP20090180691	20091223
	PL211859 B1	20120731	PL20080386877	20081223
	PL386877 A1	20100705	PL20080386877	20081223

Probable Assignee: POSIADALO SLAWOMIRPOSIADALO SLAWOMIR

Assignee(s):(std): POSIADA ; POSIADALO SLAWOMIR ; POSIADALO SPOLKA JAWNA FA

Assignee(s): POSIADALO SLAWOMIRPOSIADALO SLAWOMIR ; FIRMA POSIADALO SPOLKA JAWNA ; FIRMA POSIADALO SPÓLKA JAWNA

Inventor(s):(std): POSIADALO SLAWOMIR ; POSIADATO STAWOMIR ; POSIADA

Agent(s): RUMPEL ALICJA

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

International class
(IPC 8-9): B03B9/06 B09B3/00 B29B17/04 C08J11/12 C10B53/07 C10B7/06 C10G1/00
C10G1/10 (Advanced/Invention);
B03B9/00 B09B3/00 B29B17/04 C08J11/00 (Core/Invention)

CPC: C10G2300/1003 B29B17/04 B29B17/02 B29B2017/0484 B29B2017/0496 C10B7/06 C10B53/07
C10G1/00 C10G1/10 Y02W30/625 Y02P20/143

European class: B29B17/04 C10B53/07 C10B7/06 C10G1/10 L29B17/04Z13 L29B17/04Z16

[Classification Explorer](#)

Cited documents: US4900401 A, US1887834 A, PL339821 O, PL339821 A1, PL314409 O, PL314409 A1, EP1647589 A2,

Forward Citations: US9725655, US10246643,

Abstract:
The method and apparatus of degradation of plastics, the method consisting in that not purified and not segregated raw-material - plastic waste - is being grinded, and the charge material received as a result of grinding, with continuous feeding is being introduced into the volume feeder (8), which then with continuous feeding doses the charge material on the conveyor (10) situated in the chamber (3) of the degradation machine (1), the conveyor (10) relocates plastic under the area of heating (6), and its speed is adjusted in such a way that plastic waste under degradation at any moment do not contact the heater surface and/or the assembly of heaters and/or the wall of the chamber (3) of the degradation machine (1). The relocated plastic is subjected to plasticization and changes its state of aggregation, and hydrocarbon particles contained in it change their state of aggregation into liquid, and next - gaseous one, and are then passed into the distillation column (2), and organic and inorganic impurities contained in the charge mass as well as coked plastic are being removed from the conveyor (10) into the waste tank (18).

