TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1 ETAS ID: TM521111

Stylesheet Version v1.2

SEQUENCE:	2
EFFECTIVE DATE:	11/02/2018
NATURE OF CONVEYANCE:	NUNC PRO TUNC ASSIGNMENT
SUBMISSION TYPE:	NEW ASSIGNMENT

CONVEYING PARTY DATA

Name	Formerly	Execution Date	Entity Type
General Electric Company		04/05/2019	Corporation: NEW YORK

RECEIVING PARTY DATA

Name:	Al Alpine US Bidco Inc.
Street Address:	1209 Orange Street
City:	Wilmington
State/Country:	DELAWARE
Postal Code:	19801
Entity Type:	Corporation: DELAWARE

PROPERTY NUMBERS Total: 3

Property Type	Number	Word Mark
Registration Number:	2332327	SERIES FOUR
Registration Number:	4144164	MYPLANT
Registration Number:	5556448	JENBACHER

CORRESPONDENCE DATA

Fax Number: 3146127682

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

(314) 444-7600 Phone:

jgreenberg@lewisrice.com Email:

John B. Greenberg **Correspondent Name:** Address Line 1: 600 Washington Avenue

Address Line 2: **Suite 2500**

Address Line 4: Saint Louis, MISSOURI 63101

NAME OF SUBMITTER:	John B. Greenberg				
SIGNATURE:	/John B Greenberg/				
DATE SIGNED:	04/29/2019				

Total Attachments: 50

TRADEMARK REEL: 006631 FRAME: 0258

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NUNC PRO TUNC CORRECTIVE INTELLECTUAL PROPERTY ASSIGNMENT AGREEMENT

This NUNC PRO TUNC CORRECTIVE INTELLECTUAL PROPERTY ASSIGNMENT AGREEMENT ("Corrective Assignment"), executed as of the date of last signature herein and effective munc pro tunc as of November 2, 2018 ("Effective Date"), is by and between GENERAL ELECTRIC COMPANY, a New York corporation, with an office located at 1 River Road, Schenectady, New York 12345, United States of America ("Assignor") and AI ALPINE US BIDCO INC., a Delaware corporation (file number 6921086) whose registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, City of Wilmington, County of New Castle, US-19801 Delaware, United States of America ("Assignee").

WHEREAS, Assignor and Assignee, among others, are party to that certain Share Purchase Agreement, dated as of 25 June, 2018 ("Purchase Agreement");

WHEREAS, under the terms of the Purchase Agreement, Assignor agreed to deliver and transfer to Assignee all of their right, title and interest in, to and under: (i) the patents and patent applications set forth on Exhibit A hereto, including all reissues, divisionals, continuations, continuations in-part, extensions, renewals and reexaminations thereof ("Patents"); (ii) the trademark registrations and trademark applications set forth on Exhibit B hereto, including all renewals and extensions thereof ("Trademarks"); and (iii) the domain names set forth on Exhibit C hereto ("Domain Names"; the Patents, Trademarks and Domain Names, collectively, the "Assigned IP"), and to execute this Assignment;

WHEREAS, the Transferred Entities (as defined in the Purchase Agreement) possessed and exploited economic rights in the Assigned IP through the operation of the Business (as defined in the Purchase Agreement) prior to the Effective Date;

WHEREAS, under the terms of the Purchase Agreement, Assignee (Buyer 1, as defined under the Purchase Agreement) agreed to acquire the Assigned IP from Assignor; and

WHEREAS, Assignor and Assignee executed an Intellectual Property Assignment Agreement effective November 2, 2018, which (i) identified a different office address of Assignor, (ii) identified Assignee in-part as a limited liability company instead of a corporation, (iii) did not schedule the application number relating to Japanese patent application no. 2018-219240 (257091-JP-3), and (iv) did not include PCT/US18/66623 ("System and Method of Spark Plug Tagging and Identification") as Assigned IP. All such points are corrected herein.

NOW, THEREFORE, for good and valuable consideration, including the consideration reflected in the Purchase Agreement, the sufficiency and receipt of which is hereby acknowledged, Assignor and Assignee hereby agree in this Corrective Assignment as follows:

1. Assignor hereby assigns, transfers and conveys to Assignee its entire worldwide right, title and interest in, to and under the Assigned IP along with (i) all rights and privilege arising under applicable law with respect to Assignor's use of any of the Assigned IP; (ii) the goodwill of the business symbolized by each of the Trademarks, together with the goodwill of the business

relating to the goods or services in respect of which the Trademarks are registered or used; and (iii) all rights of action pertaining to the Assigned IP, including, without limitation, all rights in and to all causes of action (whether in law or in equity) with respect thereto, the right to sue, counterclaim, and recover for past, present and future infringement of the Assigned IP or any rights relating to the Assigned IP, the right to secure registration of the Assigned IP and of this Assignment, the right to initiate and prosecute other proceedings before all government and administrative bodies with respect to the Assigned IP, and the right to claim priority, file foreign counterparts, and any and all other proceeds of any of the foregoing, including, but not limited to, all income, royalties, damages and payments now or hereafter due or payable with respect thereto.

- 2. This Assignment is binding upon, and inures to the benefit of, the parties hereto and their respective legal representatives, successors and assigns. It is understood that any finding of invalidity of one assignment as effected hereby shall not affect the assignment of other Assigned IP. All questions concerning the construction, validity and interpretation of this Assignment and the performance of the obligations imposed by this Assignment shall be governed by, and construed in accordance with, the laws of the State of New York without regard to any choice of law or conflict of law provision or rule that would cause the application of the laws of any other jurisdiction.
- 3. Upon reasonable request by Assignee, Assignor will execute additional documents and take other actions as may be necessary or desirable to record or memorialize the assignments of the Assigned IP, and to vest in Assignee such right, title and interest in and to the Assigned IP as assigned and transferred to Assignee hereunder; provided that, as between the parties hereto, Assignee shall be responsible for the filing of such documents and other instruments that may be necessary or desirable to record or memorialize Assignee's right, title and interest in and to the Domain Names (including, without limitation, with any applicable domain name registrar). For the avoidance of doubt, transfer of any web sites using any of the Domain Names shall be pursuant to the terms of the Transition Services Agreement (as that term is defined in the Purchase Agreement).
- 4. Assignor hereby authorizes and requests the officials of the United States Patent and Trademark Office, and the corresponding entities or agencies in any applicable foreign jurisdiction, and the applicable domain name registrar, to record Assignee as assignee and owner of the entire right, title and interest in, to and under the Assigned IP.
- 5. No waiver, modification or change of any of the provisions of this Assignment shall be valid unless in writing and signed by the party against whom such claimed waiver, modification or change is sought to be enforced.
- 6. This Assignment may be executed in counterparts, each of which shall be deemed an original, but all of which together shall be deemed to be one and the same agreement. A signed copy of this Assignment delivered by facsimile, e-mail or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this Assignment.

IN WITNESS WHEREOF, the parties hereto, through their authorized representatives, have caused this Assignment to be duly executed and delivered as of the lastdated signature herein.

Executed at Atlanta Georgia (U.S. on this 5th day of April , 2019.

As Assignor:

GENERAL ELECTRIC COMPANY

By: Parl LANDORAFF

Title: Senior Intellegand Proporty Cousel, GEPONOr

[Signature Page to the Nunc Pro Tunc Corrective Intellectual Property Assignment Agreement]

IN WITNESS WHEREOF, the parties hereto, through their authorized representatives, have caused this Assignment to be duly executed and delivered as of the last-dated signature herein.

Executed at Boston, MA (USA) / 43 m, on this 5th day of 2019.

As Assignee:

AI ALPINE US BIDCO/INC

Name: Whichael TRistains

Title: 280

[Signature Page to the Nunc Pro Tunc Corrective Intellectual Property Assignment Agreement]

EXHIBIT A

PATENTS

The patents and patent applications listed below:

Title	Country	Filed Date	App. Number	Grant Date	Patent
					Number
SYSTEM AND METHOD	Australia	2014-09-30	2014240195	2017-12-07	2014240195
FOR CONTROL OF					
EXHAUST GAS					
RECIRCULATION EGR					
UTILIZING PROCESS					
TEMPERATURES					
METHODS AND SYSTEMS	Australia	2015-12-18	2015271937		
TO CHARACTERIZE NOISES					
SENSED BY A KNOCK					
SENSOR					
EXHAUST	Austria	2015-04-13	15163404.5	2018-02-28	2933449
AFTERTREATEMENT					
SYSTEM WITH CATALYTIC					
DEACTIVATION					
MONITORING					
SPARK PLUG ELECTRODE	Austria	2015-10-05	15188410.3	2018-07-04	3006163
GAP SETTING TOOL					
METHOD AND SYSTEM OF	Austria	2016-02-05	16154442.4	2018-04-18	3054134
DIAGNOSING A KNOCK					
SENSOR					
SYSTEM AND METHOD	Austria	2016-01-28	16153229.6	2017-12-06	3051104
FOR DETECTING					
OPERATING EVENTS OF AN					
ENGINE					
METHODS AND SYSTEMS	Austria	2015-12-21	15201539.2	2017-10-25	3040540
TO CHARACTERIZE NOISES					
SENSED BY A KNOCK					
SENSOR					
SYSTEMS AND METHODS	Austria	2015-12-10	15199342.5	2018-10-03	3032076
FOR MODEL BASED					
CONTROL OF CATALYTIC					
CONVERTER SYSTEMS					
SYSTEM AND METHOD	Austria	2016-04-13	16165045.2	2018-10-03	3081776
FOR INJECTION CONTROL					
OF UREA IN SELECTIVE					
CATALYST REDUCTION					
SYSTEM AND METHOD	Austria	2016-04-13	16165045.2	2018-10-03	3081776
FOR INJECTION CONTROL					

Title	Country	Filed Date	App. Number	Grant Date	Patent
	N.				Number
OF UREA IN SELECTIVE					
CATALYST REDUCTION					
ELECTROMAGNETIC	Brazil	2013-06-27	102013016638		
BRAKING SYSTEMS AND			-3		
METHODS					
Rich Burn Internal Combustion	Brazil	2014-02-05	102014002821		
Engine Catalyst Control			-8		
SYSTEM AND PROGRAM	Brazil	2014-12-10	102014030958		
PRODUCT FOR			-6		
CONTROLLING EXHAUST					
GAS TEMPERATURE OF					
ENGINE SYSTEM					
POWER GENERATION	Brazil	2014-11-10	102014028062		
SYSTEM AND METHOD			-6		
WITH FAULT RIDE					
THROUGH CAPABILITY					
ONBOARD CATALYST	Brazil	2014-11-17	102014028613		
HEALTH MONITORING			-6		
AND CONTROL SYSTEM					
ADAPTATION IN					
INTERNAL COMBUSTION					
ENGINES					
PISTON ASSEMBLY FOR A	Brazil	2015-06-05	102015013117		
RECIPROCATING ENGINE			-8		
PISTON ASSEMBLY FOR A	Brazil	2015-06-05	102015013120		
RECIPROCATING ENGINE			-8		
SYSTEM FOR	Brazil	2015-08-20	102015020090		
CONTROLLING DEPOSITS			-0		
ON CYLINDER LINER AND					
PISTON OF					
RECIPROCATING ENGINE					
PISTON ASSEMBLY FOR A	Brazil	2015-06-05	102015013118		
RECIPROCATING ENGINE			-6		
PISTON WITH REDUCED	Brazil	2015-01-13	10 2015		
TOP LAND HEIGHT AND			000764-7		
TIGHT TOP LAND PISTON					
PROFILE					
SYSTEMS AND METHODS	Brazil	2015-01-12	10 2015		
FOR CONTROLLING			000662-4		
EMISSIONS IN AN					
INTERNAL COMBUSTION					
ENGINE THROUGH THE					
CONTROL OF					
TEMPERATURE AT THE					

Title	Country	Filed Date	App. Number	Grant Date	Patent
	N'		1.1		Number
INLET OF AN AMMONIA					
SLIP CATALYST					
ASSEMBLY					
SYSTEMS AND METHODS	Brazil	2015-12-10	102015030853		
FOR MODEL BASED			-1		
CONTROL OF CATALYTIC					
CONVERTER SYSTEMS					
POWER GENERATION	Brazil	2015-12-10	102015030863		
SYSTEM AND METHOD			- 9		
WITH RESISTIVE BRAKING					
CAPABILITY					
SYSTEMS AND METHODS	Brazil	2016-02-25	102016004088		
FOR CONTROLLING			-4		
AFTERTREATMENT					
SYSTEMS					
SYSTEM AND METHOD	Brazil	2015-12-30	102015032948		
FOR LOCATING ENGINE			-2		
NOISE					
KNOCK SENSOR SYSTEMS	Brazil	2016-04-06	102016007574		
AND METHODS FOR			-2		
DETECTION OF					
COMPONENT CONDITIONS					
SENSOR FOR	Brazil	2015-12-22	102015032241		
DETERMINING ENGINE			-0		
CHARACTERISTICS					
METHOD AND SYSTEM TO	Brazil	2016-02-16	102016003195		
DETERMINE LOCATION OF			-8		
PEAK FIRING PRESSURE					
SYSTEM AND METHOD	Brazil	2016-01-06	102016000207		
FOR DETECTING			- 9		
RECIPROCATING DEVICE					
ABNORMALITIES					
UTILIZING STANDARD					
QUALITY CONTROL					
TECHNIQUES					
SYSTEM AND METHOD	Brazil	2016-02-01	102016002225		
FOR MODEL BASED AND			-8		
MAP BASED THROTTLE					
POSITION DERIVATION					
AND MONITORING					
INDUCTION GENERATOR	Brazil	2015-10-20	102015026557		
SYSTEM WITH A GRID-			-3		
LOSS RIDE-THROUGH					
CAPABILITY					

Title	Country	Filed Date	App. Number	Grant Date	Patent
Titte	Country	i neu Date	rpp. number	Grant Date	Number
SYSTEMS AND METHODS	Brazil	2016-02-26	102016004249		
TO DISTINGUISH ENGINE			-6		
KNOCK FROM PISTON					
SLAP					
METHODS AND SYSTEMS	Brazil	2016-02-05	102016002606		
TO DERIVE KNOCK			-7		
SENSOR CONDITIONS					
SYSTEM AND METHOD	Brazil	2016-01-28	102016001908		
FOR DETECTING			-7		
OPERATING EVENTS OF AN					
ENGINE					
PISTON ASSEMBLY FOR A	Brazil	2015-12-29	102015032852		
RECIPROCATING ENGINE			-4		
SYSTEMS AND METHODS	Brazil	2016-04-06	102016007569		
FOR ESTIMATING A TIME			-6		
OF AN ENGINE EVENT					
METHODS AND SYSTEMS	Brazil	2016-02-11	102016002862		
TO DERIVE ENGINE			-0		
COMPONENT HEALTH					
USING TOTAL HARMONIC					
DISTORTION IN A KNOCK					
SENSOR SIGNAL					
SYSTEM AND METHOD	Brazil	2016-03-18	102016005985		
FOR LOCATING AN ENGINE			-2		
EVENT					
MANIFOLD GASKET	Canada	2012-08-02	2784423		
ASSEMBLY					
Rich Burn Internal Combustion	Canada	2014-01-30	2841288		
Engine Catalyst Control					
LAMBDA VIRTUAL	Canada	2016-07-05	2994531		
SENSOR SYSTEMS AND					
METHODS FOR A					
COMBUSTION ENGINE					
SYSTEM AND METHOD	Canada	2014-10-02	2867223		
FOR CONTROL OF					
EXHAUST GAS					
RECIRCULATION EGR					
UTILIZING PROCESS					
TEMPERATURES					
SYSTEM AND PROGRAM	Canada	2014-11-27	2874484		
PRODUCT FOR					
CONTROLLING EXHAUST					
GAS TEMPERATURE OF					
ENGINE SYSTEM					

Title	Country	Filed Date	App. Number Grant D	ate Patent
			1.1	Number
POWER GENERATION	Canada	2014-11-06	2869806	
SYSTEM AND METHOD				
WITH FAULT RIDE				
THROUGH CAPABILITY				
ONBOARD CATALYST	Canada	2014-11-13	2870781	
HEALTH MONITORING				
AND CONTROL SYSTEM				
ADAPTATION IN				
INTERNAL COMBUSTION				
ENGINES				
POWER INTEGRATED	Canada	2015-02-12	2881669	
SYSTEM AND METHOD				
FOR DRILLING RIG AND				
OIL/GAS PRODUCTION				
EQUIPMENT				
CYLINDER HEAD	Canada	2016-05-26	2988569	
ACCELERATION				
MEASUREMENT FOR				
VALVE TRAIN				
DIAGNOSTICS SYSTEM				
AND METHOD				
SYSTEM AND METHOD	Canada	2015-08-06	2994691	
FOR ENGINE CONTROL				
SYSTEMS AND METHODS	Canada	2015-01-08	2877006	
FOR CONTROLLING				
EMISSIONS IN AN				
INTERNAL COMBUSTION				
ENGINE THROUGH THE				
CONTROL OF				
TEMPERATURE AT THE				
INLET OF AN AMMONIA				
SLIP CATALYST				
ASSEMBLY				
SYSTEMS AND METHODS	Canada	2016-02-18	2921267	
FOR CONTROLLING				
AFTERTREATMENT				
SYSTEMS				
KNOCK SENSOR SYSTEMS	Canada	2016-04-14	2927277	
AND METHODS FOR				
DETECTION OF				
COMPONENT CONDITIONS				
SENSOR FOR	Canada	2015-12-17	2915466	
DETERMINING ENGINE				
CHARACTERISTICS				

Title	Country	Filed Date	App. Number	Grant Date	Patent
					Number
METHOD AND SYSTEM TO	Canada	2016-02-11	2920486		
DETERMINE LOCATION OF					
PEAK FIRING PRESSURE					
SYSTEM AND METHOD	Canada	2015-12-30	2916466		
FOR DETECTING					
RECIPROCATING DEVICE					
ABNORMALITIES					
UTILIZING STANDARD					
QUALITY CONTROL					
TECHNIQUES					
SYSTEM AND METHOD	Canada	2016-06-28	2989640		
FOR DETECTION OF					
CHANGES TO					
COMPRESSION RATIO AND					
PEAK FIRING PRESSURE OF					
AN ENGINE					
SYSTEMS AND METHODS	Canada	2016-02-25	2921934		
TO DISTINGUISH ENGINE					
KNOCK FROM PISTON					
SLAP					
METHODS AND SYSTEMS	Canada	2016-01-28	2919242		
TO DERIVE KNOCK					
SENSOR CONDITIONS					
SYSTEM AND METHOD	Canada	2016-01-21	2918914		
FOR DETECTING					
OPERATING EVENTS OF AN					
ENGINE					
METHODS AND SYSTEMS	Canada	2015-12-18	2915789		
TO CHARACTERIZE NOISES					
SENSED BY A KNOCK					
SENSOR					
	Canada	2016-03-18	2981258		
SYSTEMS AND METHODS					
FOR CHARACTERIZING					
NOISES					
SYSTEMS AND METHODS	Canada	2016-03-24	2924930		
FOR ESTIMATING A TIME					
OF AN ENGINE EVENT					
METHODS AND SYSTEMS	Canada	2016-01-28	2919241		
TO DERIVE ENGINE					
COMPONENT HEALTH					
USING TOTAL HARMONIC					
DISTORTION IN A KNOCK					
SENSOR SIGNAL					

Title	Country	Filed Date	App. Number	Grant Date	Patent
					Number
SYSTEM AND METHOD	Canada	2016-03-10	2923277		
FOR LOCATING AN ENGINE					
EVENT					
SYSTEM AND METHOD	Canada	2016-03-30	2925371		
FOR INJECTION CONTROL					
OF UREA IN SELECTIVE					
CATALYST REDUCTION					
SYSTEM AND METHOD	Canada	2016-06-08	2989594		
FOR OXIDANT					
TEMPERATURE CONTROL					
DUAL FUEL SYSTEM FOR A	Canada	2016-06-23	2991405		
COMBUSTION ENGINE					
RECIPROCATING	Canada	2017-10-05	2981535		
COMPRESSOR FLOW					
SENSING					
JOINT-LESS CONTNUOUS	Canada	2017-11-30	2987167		
JOURNAL BEARINGS					
TURBINE EXHAUST	China	2010-08-27	201010272882	2014-11-19	20101027288
RECIRCULATION SYSTEM			.9		2.9
AND METHOD					
ELECTROMAGNETIC	China	2013-06-28	201310263947	2017-06-13	103516272
BRAKING SYSTEMS AND			.7		
METHODS					
VARIABLE THICKNESS	China	2013-06-20	201310246012	2018-06-12	103511112
COATING FOR CYLINDER			.8		
LINER					
SYSTEM AND METHOD OF	China	2016-09-16	201680079344		
EXHAUST GAS			.3		
RECIRCULATION	G1.				10100001
SYSTEM FOR COOLING	China	2014-03-04	201410075996	2018-09-18	104033231
POWER GENERATION			.2		
SYSTEM	G1 :	2012 00 00	00101001070	2017 10 02	102052062
MANIFOLD GASKET	China	2012-08-09	201210281970	2017-10-03	102953863
ASSEMBLY	C1 :	2014 02 07	.4		
Rich Burn Internal Combustion	China	2014-02-07	201410044952		
Engine Catalyst Control	C1 :	2014 11 21	.3		
EMISSIONS CONTROL IN	China	2014-11-21	201410674311		
DIESEL ENGINES	C1:	2014 10 10	.6	2019 05 20	104564272
SYSTEM AND METHOD	China	2014-10-10	201410532349	2018-05-29	104564373
FOR CONTROL OF			.X		
EXHAUST GAS					
RECIRCULATION EGR					
UTILIZING PROCESS					
TEMPERATURES	1		ĺ		

Title	Country	Filed Date	App. Number	Grant Date	Patent
			* 1		Number
SYSTEM AND PROGRAM	China	2014-12-11	201410766769		
PRODUCT FOR			.4		
CONTROLLING EXHAUST					
GAS TEMPERATURE OF					
ENGINE SYSTEM					
GASEOUS REDUCTANT	China	2014-10-24	201410573905		
INJECTION CONTROL			.8		
SYSTEM					
POWER GENERATION	China	2014-11-20	201410666181		
SYSTEM AND METHOD			.1		
WITH FAULT RIDE					
THROUGH CAPABILITY					
SYSTEM AND METHOD	China	2013-07-18	201310303270		
FOR POWER GENERATION			.5		
ONBOARD CATALYST	China	2014-11-19	201410663180		
HEALTH MONITORING			1.1		
AND CONTROL SYSTEM					
ADAPTATION IN					
INTERNAL COMBUSTION					
ENGINES					
Systems and Methods for	China	2014-09-26	201410501113		
Monitoring Catalyst			.X		
Deactivation and Controlling an					
Air/Fuel Ratio					
POWER INTEGRATED	China	2014-02-18	201410054131		
SYSTEM AND METHOD			.8		
FOR DRILLING RIG AND					
OIL/GAS PRODUCTION					
EQUIPMENT					
PISTON ASSEMBLY FOR A	China	2015-06-08	201510307846		
RECIPROCATING ENGINE			.4		
PISTON ASSEMBLY FOR A	China	2015-06-08	201510307887		
RECIPROCATING ENGINE			.3		
SYSTEM FOR	China	2015-08-21	201510516803		
CONTROLLING DEPOSITS			.7		
ON CYLINDER LINER AND					
PISTON OF					
RECIPROCATING ENGINE					
PISTON ASSEMBLY FOR A	China	2015-06-05	201510301908		
RECIPROCATING ENGINE			.0		
BASE-FRAME ASSEMBLY	China	2016-05-12	201610311144		
FOR A COMBUSTION			.8		
ENGINE					
PISTON WITH REDUCED	China	2015-01-14	201510017775		

Title	Country	Filed Date	App. Number	Grant Date	Patent
TOD LAND HEIGHT AND			4		Number
TOP LAND HEIGHT AND TIGHT TOP LAND PISTON			.4		
PROFILE					
	China	2015 01 14	201510017707		
SYSTEMS AND METHODS	Cnina	2015-01-14	201510017707		
FOR CONTROLLING EMISSIONS IN AN			.8		
INTERNAL COMBUSTION					
ENGINE THROUGH THE					
CONTROL OF					
TEMPERATURE AT THE					
INLET OF AN AMMONIA					
SLIP CATALYST					
ASSEMBLY					
CONDITION BASED	China	2016-03-04	201610123829		
ENGINE PARTS	Cillia	2010-03-04	.X		
MONITORING					
SYSTEM AND METHOD	China	2015-07-24	201510440604		
FOR IMPROVING	Cillia	2013-07-24	.2		
RESPONSE TIME OF A			.2		
BRAKING UNIT					
SYSTEMS AND METHODS	China	2015-12-11	201511036234		
FOR MODEL BASED	Cilina	2019 12 11	.2		
CONTROL OF CATALYTIC					
CONVERTER SYSTEMS					
DRILLING SYSTEM AND	China	2014-06-18	201410272958		
POWER SUPPLY METHOD			.6		
SPARK PLUG ELECTRODE	China	2015-10-08	201510643403		
GAP SETTING TOOL			.2		
POWER GENERATION	China	2015-12-11	201510912307		
SYSTEM AND METHOD			.3		
WITH RESISTIVE BRAKING					
CAPABILITY					
SYSTEMS AND METHODS	China	2016-03-02	201610116846		
FOR CONTROLLING			.0		
AFTERTREATMENT					
SYSTEMS					
SYSTEM AND METHOD	China	2015-12-31	201511036326		
FOR LOCATING ENGINE			.0		
NOISE					
KNOCK SENSOR SYSTEMS	China	2016-04-22	201610253130		
AND METHODS FOR			.5		
DETECTION OF					
COMPONENT CONDITIONS					
SENSOR FOR	China	2016-01-08	201610011336		

Title	Country	Filed Date	App. Number	Grant Date	Patent
					Number
DETERMINING ENGINE			.7		
CHARACTERISTICS					
METHOD AND SYSTEM TO	China	2016-02-19	201610092672		
DETERMINE LOCATION OF			.9		
PEAK FIRING PRESSURE					
SYSTEM AND METHOD	China	2016-01-07	201610223627		
FOR DETECTING			.2		
RECIPROCATING DEVICE					
ABNORMALITIES					
UTILIZING STANDARD					
QUALITY CONTROL					
TECHNIQUES					
SYSTEM AND METHOD	China	2016-02-04	201610078918		
FOR MODEL BASED AND			7		
MAP BASED THROTTLE					
POSITION DERIVATION					
AND MONITORING					
INDUCTION GENERATOR	China	2015-10-20	201510678495		
SYSTEM WITH A GRID-		2010 10 20	.8		
LOSS RIDE-THROUGH					
CAPABILITY					
SYSTEMS AND METHODS	China	2016-03-11	201610138320		
TO DISTINGUISH ENGINE		2010 05 11	.2		
KNOCK FROM PISTON			.2		
SLAP					
SYSTEM AND METHOD	China	2015-12-31	201511016005		
FOR REGULATING	Ciiiia	2013-12-31	.4		
EXHAUST GAS					
RECIRCULATION IN AN					
ENGINE					
METHODS AND SYSTEMS	China	2016-02-05	201610081794		
TO DERIVE KNOCK	Cinna	2010-02-03	.8		
SENSOR CONDITIONS			.0		
SYSTEM AND METHOD	China	2016-01-29	201610264664		
FOR DETECTING	Cillia	2010-01-29	1.8		
OPERATING EVENTS OF AN			.0		
ENGINE					
METHODS AND SYSTEMS	China	2015-12-31	201511014250		
TO CHARACTERIZE NOISES	Cillia	2013-12-31	1		
SENSED BY A KNOCK			. 1		
SENSOR					
KNOCK SENSOR NETWORK	China	2016-03-18	201680032117		
SYSTEMS AND METHODS	Cillia	2010-03-18	1.5		
FOR CHARACTERIZING	1				

Title	Country	Filed Date	App. Number	Grant Date	Patent
			1.1		Number
NOISES					
PISTON ASSEMBLY FOR A	China	2016-01-12	201610017155		
RECIPROCATING ENGINE			.5		
SYSTEMS AND METHODS	China	2016-04-07	201610212034		
FOR ESTIMATING A TIME			.6		
OF AN ENGINE EVENT					
METHODS AND SYSTEMS	China	2016-02-05	201610264663		
TO DERIVE ENGINE			.3		
COMPONENT HEALTH					
USING TOTAL HARMONIC					
DISTORTION IN A KNOCK					
SENSOR SIGNAL					
SYSTEM AND METHOD	China	2016-03-24	201610172512		
FOR LOCATING AN ENGINE			.5		
EVENT					
SYSTEM AND METHOD	China	2016-04-14	201610229670		
FOR INJECTION CONTROL			.X		
OF UREA IN SELECTIVE					
CATALYST REDUCTION					
SYSTEM AND METHOD	China	2015-08-10	201580082360		
FOR GENERATOR			.3		
BRAKING USING					
LAMINATED BRAKE					
COMPONENTS					
DUAL FUEL SYSTEM FOR A	China	2016-06-23	201680040832		
COMBUSTION ENGINE			.3		
SYSTEMS AND METHODS	China	2016-06-24	201680038696		
FOR DETECTION OF			.4		
ENGINE COMPONENT					
CONDITIONS VIA					
EXTERNAL SENSORS					
METHODS TO ADAPT AIR-	China	2016-09-16	201680079064		
FUEL A/F CONTROLS FOR			.2		
CATALYST AGING					
RECIPROCATING	China	2017-10-11	201710941548		
COMPRESSOR FLOW			.X		
SENSING					
JOINT-LESS CONTNUOUS	China	2017-12-15	201711360707		
JOURNAL BEARINGS			.3		
Optimized cylinder head	China				
exhaust port and water-cooled					
exhaust valve guide for					
maximum cooling of the guide					
SYSTEM AND METHOD	China	2018-09-18	201811087260		

Title	Country	Filed Date	App. Number	Grant Date	Patent
					Number
FOR COMPRESSOR			.1		
SCHEDULING	-	20000011	00==11511		
SYSTEM AND METHOD	European	2008-06-16	08771164.4		
FOR RECOVERING WASTE	Patent				
HEAT					
SPIRAL RECUPERATIVE	European	2010-11-16	10191410.9		
HEAT EXCHANGING	Patent				
SYSTEM					
SYSTEM AND METHOD	European	2011-06-09	11727078.5		
FOR GENERATING AND	Patent				
STORING TRANSIENT					
INTEGRATED ORGANIC					
RANKINE CYCLE ENERGY					
AUTO OPTIMIZING	European	2011-02-11	11706673.8		
CONTROL SYSTEM FOR	Patent				
ORGANIC RANKINE CYCLE					
PLANTS					
ELECTROMAGNETIC	European	2013-06-25	13173645.6		
BRAKING SYSTEMS AND	Patent				
METHODS					
INTEGRATION OF WASTE	European	2012-04-20	12164863.8		
HEAT FROM CHARGE AIR	Patent				
COOLING INTO A					
CASCADED ORGANIC					
RANKINE CYCLE SYSTEM					
Method of attachment of	European	2013-01-23	13152344.1		
precious metal electrodes to	Patent				
spark plugs					
METHOD OF PRODUCING	European	2013-01-23	13152345.8		
AN ELECTRODE SUPPORT	Patent				
USING BRAZING					
SYSTEM FOR COOLING	European	2014-02-25	14156576.2		
POWER GENERATION	Patent				
SYSTEM					
GAS DOSAGE CONTROL	European	2014-05-07	14167312.9		
FOR GAS ENGINE	Patent				
Rich Burn Internal Combustion	European	2014-02-04	14153733.2		
Engine Catalyst Control	Patent				
LAMBDA VIRTUAL	European	2016-07-05	16747652.2		
SENSOR SYSTEMS AND	Patent	2010 07 03	10717002.2		
METHODS FOR A					
COMBUSTION ENGINE					
SYSTEM AND METHOD	European	2014-10-07	14187998.1		
FOR CONTROL OF	Patent	2017-10-07	17101770.1		
FOR CONTROL OF	µ atent				

Title	Country	Filed Date	App. Number	Grant Date	Patent
	N'		1.1		Number
EXHAUST GAS					
RECIRCULATION EGR					
UTILIZING PROCESS					
TEMPERATURES					
SYSTEM AND PROGRAM	European	2014-12-10	14197241.4		
PRODUCT FOR	Patent				
CONTROLLING EXHAUST					
GAS TEMPERATURE OF					
ENGINE SYSTEM					
GASEOUS REDUCTANT	European	2014-10-17	14189312.3		
INJECTION CONTROL	Patent				
SYSTEM					
POWER GENERATION	European	2014-11-19	14193938.9		
SYSTEM AND METHOD	Patent				
WITH FAULT RIDE					
THROUGH CAPABILITY					
ONBOARD CATALYST	European	2014-11-17	14193523.9		
HEALTH MONITORING	Patent				
AND CONTROL SYSTEM					
ADAPTATION IN					
INTERNAL COMBUSTION					
ENGINES					
PISTON ASSEMBLY FOR A	European	2015-05-29	15169854.5		
RECIPROCATING ENGINE	Patent				
CYLINDER HEAD	European	2016-05-26	16732026.6		
ACCELERATION	Patent				
MEASUREMENT FOR					
VALVE TRAIN					
DIAGNOSTICS SYSTEM					
AND METHOD					
PISTON ASSEMBLY FOR A	European	2015-06-04	15170678.5		
RECIPROCATING ENGINE	Patent	2015 00 15	151010060		
SYSTEM FOR	European	2015-08-17	15181236.9		
CONTROLLING DEPOSITS	Patent				
ON CYLINDER LINER AND					
PISTON OF					
RECIPROCATING ENGINE		2015 00 06	15752266.4		
SYSTEM AND METHOD	European	2015-08-06	15753266.4		
FOR ENGINE CONTROL	Patent	2015 02 16	15150200 4		
EMISSION CONTROL IN	European	2015-03-16	15159209.4		
RICH BURN NATURAL GAS	Patent				
ENGINES PIGTONI A GGENTRI VI FOR A	F	2015 06 04	15170677.7		
PISTON ASSEMBLY FOR A	European	2015-06-04	15170677.7		
RECIPROCATING ENGINE	Patent				

Title	Country	Filed Date	App. Number	Grant Date	Patent
					Number
BASE-FRAME ASSEMBLY	European	2016-05-10	16169002.9		
FOR A COMBUSTION	Patent				
ENGINE	_				
PISTON WITH REDUCED	European	2015-01-13	15151029.4		
TOP LAND HEIGHT AND	Patent				
TIGHT TOP LAND PISTON					
PROFILE	T.	2016 00 16	1.67706464		
SYSTEMS AND METHODS	European	2016-09-16	16770646.4		
FOR IN-CYLINDER	Patent				
PRESSURE ESTIMATION USING PRESSURE WAVE					
MODELING					
CONDITION BASED	Europoon	2016-02-26	16157724.2		
ENGINE PARTS	European Patent	2010-02-20	1013/724.2		
MONITORING	atent				
SYSTEM AND METHOD	European	2015-07-22	15177889.1		
FOR IMPROVING	Patent	2013-07-22	13177667.1		
RESPONSE TIME OF A	atent				
BRAKING UNIT					
SYSTEMS AND METHODS	European	2015-12-10	15199342.5	2018-10-03	3032076
FOR MODEL BASED	Patent				
CONTROL OF CATALYTIC					
CONVERTER SYSTEMS					
EXHAUST	European	2015-04-13	15163404.5	2018-02-28	2933449
AFTERTREATEMENT	Patent				
SYSTEM WITH CATALYTIC					
DEACTIVATION					
MONITORING					
SYSTEMS AND METHODS	European	2016-10-20	16794786.0		
FOR DETECTING	Patent				
ANOMALIES AT IN-					
CYLINDER PRESSURE					
SENSORS	_				
SPARK PLUG ELECTRODE	European	2015-10-05	15188410.3	2018-07-04	3006163
GAP SETTING TOOL	Patent	2015 11 20	151050005		
POWER GENERATION	European	2015-11-30	15197002.7		
SYSTEM AND METHOD	Patent				
WITH RESISTIVE BRAKING					
CAPABILITY EXCITEME AND METHODS	F	2016 02 01	1.6159060.1		
SYSTEMS AND METHODS FOR CONTROLLING	European Patent	2016-03-01	16158069.1		
AFTERTREATMENT	Fatent				
SYSTEMS					
SYSTEM AND METHOD	Furonean	2015-12-17	15200682.1		
DISTEM AND METHOD	European	2013-12-17	13200082.1		

Title	Country	Filed Date	App. Number	Grant Date	Patent
	*		1 1		Number
FOR LOCATING ENGINE	Patent				
NOISE					
KNOCK SENSOR SYSTEMS	European	2016-04-19	16166053.5		
AND METHODS FOR	Patent				
DETECTION OF					
COMPONENT CONDITIONS					
SENSOR FOR	European	2016-01-05	16150239.8		
DETERMINING ENGINE	Patent				
CHARACTERISTICS					
METHOD AND SYSTEM TO	European	2016-02-17	16156064.4		
DETERMINE LOCATION OF	Patent				
PEAK FIRING PRESSURE					
SYSTEM AND METHOD	European	2016-01-05	16150238.0		
FOR DETECTING	Patent				
RECIPROCATING DEVICE					
ABNORMALITIES					
UTILIZING STANDARD					
QUALITY CONTROL					
TECHNIQUES					
SYSTEM AND METHOD	European	2016-02-02	16153942.4	2018-07-25	3054133
FOR MODEL BASED AND	Patent				
MAP BASED THROTTLE					
POSITION DERIVATION					
AND MONITORING					
INDUCTION GENERATOR	European	2015-10-16	15190243.4		
SYSTEM WITH A GRID-	Patent				
LOSS RIDE-THROUGH					
CAPABILITY					
SYSTEM AND METHOD OF	European	2015-11-27	15196878.1		
COOLING VALVE WITH	Patent				
MATERIAL IN CAVITY					
SYSTEM AND METHOD	European	2016-06-28	16739315.6		
FOR DETECTION OF	Patent				
CHANGES TO					
COMPRESSION RATIO AND					
PEAK FIRING PRESSURE OF					
AN ENGINE					
SYSTEMS AND METHODS	European	2016-03-08	16159267.0		
TO DISTINGUISH ENGINE	Patent				
KNOCK FROM PISTON					
SLAP					
SYSTEM AND METHOD	European	2015-12-22	15201874.3		
FOR REGULATING	Patent				
EXHAUST GAS					

Title	Country	Filed Date	App. Number	Grant Date	Patent
1					Number
RECIRCULATION IN AN					
ENGINE					
METHOD AND SYSTEM OF	European	2016-02-05	16154442.4	2018-04-18	3054134
DIAGNOSING A KNOCK	Patent				
SENSOR					
KNOCK SENSOR NETWORK	European	2016-03-18	16712169.8		
SYSTEMS AND METHODS	Patent				
FOR CHARACTERIZING					
NOISES					
PISTON ASSEMBLY FOR A	European	2016-01-05	16150208.3		
RECIPROCATING ENGINE	Patent				
SYSTEMS AND METHODS	European	2016-04-04	16163698.0		
FOR ESTIMATING A TIME	Patent				
OF AN ENGINE EVENT					
SYSTEM AND METHOD	European	2016-11-30	16816510.8		
FOR IMPROVED JOURNAL	Patent				
BEARING OPERATIONS					
METHODS AND SYSTEMS	European	2016-02-05	16154444.0		
TO DERIVE ENGINE	Patent				
COMPONENT HEALTH					
USING TOTAL HARMONIC					
DISTORTION IN A KNOCK					
SENSOR SIGNAL					
SYSTEM AND METHOD	European	2016-03-22	16161757.6		
FOR LOCATING AN ENGINE	Patent				
EVENT					
SYSTEM AND METHOD	European	2016-04-13	16165045.2	2018-10-03	3081776
FOR INJECTION CONTROL	Patent				
OF UREA IN SELECTIVE					
CATALYST REDUCTION					
SYSTEM AND METHOD	European	2016-06-08	16734080.1		
FOR OXIDANT	Patent				
TEMPERATURE CONTROL					
LAMINAR FLOW OF	European	2016-10-18	16791481.1		
PISTON COOLING JETS	Patent				
SYSTEM AND METHOD	European	2016-09-29	16781935.8		
FOR CAMSHAFT	Patent				
VIBRATION CONTROL					
SYSTEM AND METHOD	European	2015-08-10	15753817.4		
FOR GENERATOR	Patent				
BRAKING USING					
LAMINATED BRAKE					
COMPONENTS					
DUAL FUEL SYSTEM FOR A	European	2016-06-23	16735969.4		

Title	Country	Filed Date	App. Number	Grant Date	Patent
	N.		11		Number
COMBUSTION ENGINE	Patent				
AN ANNULAR RING	European	2016-09-16	16778524.5		
GROOVE OF A PISTON	Patent				
COATING OF A SYSTEM	European	2016-12-21	16831799.8		
AND AN ASSOCIATED	Patent				
METHOD THEREOF					
SYSTEM FOR COOLING	European	2016-03-31	16719585.8		
ENGINE INTAKE FLOW	Patent				
RECIPROCATING	European	2017-10-11	17195939.8		
COMPRESSOR FLOW	Patent				
SENSING					
JOINT-LESS CONTNUOUS	European	2017-12-07	17205970.1		
JOURNAL BEARINGS	Patent				
TWO-STAGE	European	2017-12-06	17205760.6		
RECIPROCATING	Patent				
COMPRESSOR					
OPTIMIZATION CONTROL					
SYSTEM					
SYSTEM AND METHOD	European	2018-08-10	18188516.1		
FOR PISTON RING	Patent				
PROGNOSTIC					
SYSTEM AND METHOD OF	European	2018-10-24	18202350.7		
VALVE WEAR DETECTION	Patent				
ORGANIC RANKINE CYCLE	Finland	2012-05-03	12166544.2	2016-04-13	2522828
SYSTEMS USING WASTE					
HEAT FROM CHARGE AIR					
COOLING					
Mixing chamber with spiral	Finland	2012-06-07	12171197.2	2016-08-10	2671630
channels					
CYLINDER LINER WITH	Finland	2015-03-30	20155221		
SLOTS					
VARIABLE THICKNESS	France	2013-06-20	13173010.3	2017-08-09	2677152
COATINGS FOR CYLINDER					
LINERS					
EMISSIONS CONTROL IN	France	2014-07-01	14175159.4	2017-12-13	2821609
STATIONARY RICH BURN					
ENGINES					
SYSTEMS AND METHODS	France	2015-01-13	15150923.9	2017-08-16	2894306
FOR CONTROLLING					
EMISSIONS IN AN					
INTERNAL COMBUSTION					
ENGINE THROUGH THE					
CONTROL OF					
TEMPERATURE AT THE					

Title	Country	Filed Date	App. Number	Grant Date	Patent
			1.1.		Number
INLET OF AN AMMONIA					
SLIP CATALYST					
ASSEMBLY					
EXHAUST	France	2015-04-15	15163722.0	2017-06-14	2933450
AFTERTREATMENT					
SYSTEM WITH AGING					
MONITORING OF AN					
AMMONIA SLIP CATALYST					
METHOD AND SYSTEM	France	2015-12-09	15198666.8	2017-08-16	3032057
FOR CONTROL OF					
EMISSIONS IN EXHAUST					
AFTERTREATMENT					
SYSTEM					
ORGANIC RANKINE CYCLE	Germany	2012-05-03	12166544.2	2016-04-13	60201201696
SYSTEMS USING WASTE	(Federal				0.5
HEAT FROM CHARGE AIR	Republic of)				
COOLING					
VARIABLE THICKNESS	Germany	2013-06-20	13173010.3	2017-08-09	60201302466
COATINGS FOR CYLINDER	(Federal				2.9
LINERS	Republic of)				
SYSTEMS AND METHODS	Germany				
FOR SPARK TIMING	(Federal				
RETARDATION	Republic of)				
Mixing chamber with spiral	Germany	2012-06-07	12171197.2	2016-08-10	2671630
channels	(Federal				
	Republic of)				
SYSTEM AND METHOD OF	Germany	2016-09-16	112016004875		
EXHAUST GAS	(Federal		.0		
RECIRCULATION	Republic of)				
MANIFOLD GASKET	Germany	2012-08-07	102012107220		
ASSEMBLY	(Federal		.5		
	Republic of)				
EMISSIONS CONTROL IN	Germany	2014-07-01	14175159.4	2017-12-13	60201401840
STATIONARY RICH BURN	(Federal				0.6
ENGINES	Republic of)				
SYSTEMS AND METHODS	Germany	2015-01-13	15150923.9	2017-08-16	60201500406
FOR CONTROLLING	(Federal				7.8
EMISSIONS IN AN	Republic of)				
INTERNAL COMBUSTION					
ENGINE THROUGH THE					
CONTROL OF					
TEMPERATURE AT THE					
INLET OF AN AMMONIA					
SLIP CATALYST					

Title	Country	Filed Date	App. Number	Grant Date	Patent
ASSEMBLY					Number
EXHAUST	Cormony	2015-04-15	15163722.0	2017-06-14	60201500306
AFTERTREATMENT	Germany (Federal	2013-04-13	13103722.0	2017-00-14	5.6
	1 \				3.0
SYSTEM WITH AGING	Republic of)				
MONITORING OF AN					
AMMONIA SLIP CATALYST	C	2015 04 07	102015105222		
CYLINDER LINER WITH	Germany	2015-04-07	102015105223		
SLOTS	(Federal		.7		
DDH LING CYCTEM AND	Republic of)	2015 06 19	102015100722		
DRILLING SYSTEM AND	Germany	2015-06-18	102015109723		
POWER SUPPLY METHOD	(Federal		.0		
EXILATION	Republic of)	2015 04 12	151624045	2010 02 20	60201500022
EXHAUST	Germany	2015-04-13	15163404.5	2018-02-28	60201500822
AFTERTREATEMENT	(Federal				8.1
SYSTEM WITH CATALYTIC	Republic of)				
DEACTIVATION					
MONITORING		2015 10 05	15100410.2	2010 07 04	60201501204
SPARK PLUG ELECTRODE	Germany	2015-10-05	15188410.3	2018-07-04	60201501294
GAP SETTING TOOL	(Federal				3.1
METHODG AND GMOTEMO	Republic of)	2016.06.00	112016002002		
METHODS AND SYSTEMS	Germany	2016-06-08	112016002802		
TO CONTROL EXHAUST	(Federal		.4		
GAS RECIRCULATION	Republic of)	2015 12 00	15100666	2017.00.16	60201400415
METHOD AND SYSTEM	Germany	2015-12-09	15198666.8	2017-08-16	60201400415
FOR CONTROL OF	(Federal				9.3
EMISSIONS IN EXHAUST	Republic of)				
AFTERTREATMENT					
SYSTEM AND METHOD	C	2016.05.04	112016002020		
SYSTEM AND METHOD	Germany	2016-05-04	112016002038		
FOR DETERMINING KNOCK	(Federal		.4		
MARGIN FOR MULTI-	Republic of)				
CYLINDER ENGINES METHOD AND SYSTEM OF	Company	2016-02-05	16154442.4	2018-04-18	60201600242
DIAGNOSING A KNOCK	Germany (Federal	2010-02-03	10134442.4	2010-04-10	2.5
SENSOR	I \				2.3
SYSTEM AND METHOD	Republic of)	2016-01-28	16153229.6	2017-12-06	60201600097
FOR DETECTING	Germany (Federal	2010-01-28	10133229.0	2017-12-06	7.3
OPERATING EVENTS OF AN	Republic of)				1.3
ENGINE	Kepublic of)				
METHODS AND SYSTEMS	Germany	2015-12-21	15201539.2	2017-10-25	60201500559
TO CHARACTERIZE NOISES	(Federal	2013-12-21	13201339.2	2017-10-23	6.9
SENSED BY A KNOCK	Republic of)				0.7
SENSOR	Copublic Of)				
SYSTEMS AND METHODS	Germany	2016-06-24	112016002938		
DISTEMS AND METHODS	Ocimany	2010-00-24	112010002938		

Title	Country	Filed Date	App. Number	Grant Date	Patent
EOD DETECTION OF	(F. 1. 1		1		Number
FOR DETECTION OF	(Federal		.1		
ENGINE COMPONENT	Republic of)				
CONDITIONS VIA					
EXTERNAL SENSORS		2016 00 16	110016005040		
METHODS TO ADAPT AIR-	Germany	2016-09-16	112016005242		
FUEL A/F CONTROLS FOR	(Federal		. 1		
CATALYST AGING	Republic of)	2016 00 16	112016005241		
METHODS TO ADAPT	Germany	2016-09-16	112016005241		
REDUCTANT INJECTION	(Federal		.3		
CONTROLS FOR CATALYST	Republic of)				
AGING					
SYSTEM AND METHOD	Germany	2018-07-03	102018116027		
FOR VALVE EVENT	(Federal		.5		
DETECTION AND	Republic of)				
CONTROL					
SYSTEM AND METHOD	Germany	2018-08-02	10 2018 118		
FOR DETECTING	(Federal		775.0		
	Republic of)				
ENGINE VIA MIDI					
Optimized cylinder head	Germany				
exhaust port and water-cooled	(Federal				
exhaust valve guide for	Republic of)				
maximum cooling of the guide					
SYSTEM AND METHOD	Germany	2018-09-17	102018122694		
FOR COMPRESSOR	(Federal		.2		
SCHEDULING	Republic of)				
PISTON ASSEMBLY WITH	Germany				
OFFSET TIGHT LAND	(Federal				
PROFILE	Republic of)				
SYSTEMS AND METHODS	Germany	2015-12-10	15199342.5	2018-10-03	60201501742
FOR MODEL BASED	(Federal				5.9
CONTROL OF CATALYTIC	Republic of)				
CONVERTER SYSTEMS					
SYSTEM AND METHOD	Germany	2016-04-13	16165045.2	2018-10-03	60201600614
FOR INJECTION CONTROL	(Federal				6.5
OF UREA IN SELECTIVE	Republic of)				
CATALYST REDUCTION					
SYSTEM AND METHOD	Germany	2016-04-13	16165045.2	2018-10-03	60201600614
FOR INJECTION CONTROL	(Federal				6.5
OF UREA IN SELECTIVE	Republic of)				
CATALYST REDUCTION					
SYSTEM AND METHOD	India	2007-12-24	3086/CHE/200		
FOR BALANCING LOAD IN			7		
POWER BLOCKS					

Title	Country	Filed Date	App. Number	Grant Date	Patent
rnie	Country	rneu Date	App. Number	Grant Date	Number
ELECTROMAGNETIC	India	2013-06-05	1686/DEL/201		i vumbei
BRAKING SYSTEMS AND	India	2013 00 03	3		
METHODS					
SYSTEM FOR COOLING	India	2014-02-28	1042/CHE/201		
POWER GENERATION	India	2011 02 20	4		
SYSTEM					
Rich Burn Internal Combustion	India	2014-02-03	485/CHE/2014		
Engine Catalyst Control		2011 02 03	103/ 6112/ 2011		
SYSTEM AND PROGRAM	India	2014-11-25	5910/CHE/201		
PRODUCT FOR	India	2011 11 25	4		
CONTROLLING EXHAUST					
GAS TEMPERATURE OF					
ENGINE SYSTEM					
POWER GENERATION	India	2014-11-11	5669/CHE/201		
SYSTEM AND METHOD			4		
WITH FAULT RIDE					
THROUGH CAPABILITY					
ONBOARD CATALYST	India	2014-11-11	5668/CHE/201		
HEALTH MONITORING			4		
AND CONTROL SYSTEM					
ADAPTATION IN					
INTERNAL COMBUSTION					
ENGINES					
PISTON ASSEMBLY FOR A	India	2015-06-05	2815/CHE/201		
RECIPROCATING ENGINE			5		
PISTON ASSEMBLY FOR A	India	2015-06-05	2816/CHE/201		
RECIPROCATING ENGINE			5		
SYSTEM FOR	India	2015-08-13	4220/CHE/201		
CONTROLLING DEPOSITS			5		
ON CYLINDER LINER AND					
PISTON OF					
RECIPROCATING ENGINE					
PISTON ASSEMBLY FOR A	India	2015-05-27	2656/CHE/201		
RECIPROCATING ENGINE			5		
PISTON WITH REDUCED	India	2015-01-05	82/CHE/2015		
TOP LAND HEIGHT AND					
TIGHT TOP LAND PISTON					
PROFILE					
SYSTEMS AND METHODS	India	2015-01-06	98/CHE/2015		
FOR CONTROLLING					
EMISSIONS IN AN					
INTERNAL COMBUSTION					
ENGINE THROUGH THE					
CONTROL OF					

Title	Country	Filed Date	App. Number	Grant Date	Patent
1					Number
TEMPERATURE AT THE					
INLET OF AN AMMONIA					
SLIP CATALYST					
ASSEMBLY					
SYSTEMS AND METHODS	India	2015-12-08	6545/CHE/201		
FOR MODEL BASED			5		
CONTROL OF CATALYTIC					
CONVERTER SYSTEMS					
SPARK PLUG ELECTRODE	India	2015-09-26	5141/CHE/201		
GAP SETTING TOOL			5		
POWER GENERATION	India	2015-12-11	6658/CHE/201		
SYSTEM AND METHOD			5		
WITH RESISTIVE BRAKING					
CAPABILITY					
SYSTEMS AND METHODS	India	2016-03-02	201644007271		
FOR CONTROLLING		2010 05 02	201011007271		
AFTERTREATMENT					
SYSTEMS					
SYSTEM AND METHOD	India	2015-12-23	6860/CHE/201		
FOR LOCATING ENGINE	liidia	2013-12-23	5		
NOISE					
KNOCK SENSOR SYSTEMS	India	2016-04-21	201644013824		
AND METHODS FOR	India	2010 01 21	201011013021		
DETECTION OF					
COMPONENT CONDITIONS					
SENSOR FOR	India	2015-12-30	7072/CHE/201		
DETERMINING ENGINE	India	2013 12 30	5		
CHARACTERISTICS					
METHOD AND SYSTEM TO	India	2016-02-17	201644005486		
DETERMINE LOCATION OF	India	2010 02 17	201011003100		
PEAK FIRING PRESSURE					
SYSTEM AND METHOD	India	2016-01-06	201644000441		
FOR DETECTING	liidia	2010-01-00	201044000441		
RECIPROCATING DEVICE					
ABNORMALITIES					
UTILIZING STANDARD					
QUALITY CONTROL					
TECHNIQUES					
SYSTEM AND METHOD	India	2016-02-04	201644003930		
FOR MODEL BASED AND	liidia	2010-02-04	2010 11003730		
MAP BASED THROTTLE					
POSITION DERIVATION					
AND MONITORING					
INDUCTION GENERATOR	India	2014-10-21	5251/CHE/201		
HADOCTION GENERATOR	muia	2014-10-21	52511CHE/201		

Title	Country	Filed Date	App. Number	Grant Date	Patent
					Number
SYSTEM WITH A GRID-			4		
LOSS RIDE-THROUGH					
CAPABILITY					
SYSTEMS AND METHODS	India	2016-03-09	201644008132		
TO DISTINGUISH ENGINE					
KNOCK FROM PISTON					
SLAP					
METHODS AND SYSTEMS	India	2016-02-04	201644003933		
TO DERIVE KNOCK					
SENSOR CONDITIONS					
SYSTEM AND METHOD	India	2016-01-25	201644002813		
FOR DETECTING					
OPERATING EVENTS OF AN					
ENGINE					
METHODS AND SYSTEMS	India	2015-12-23	6857/CHE/201		
TO CHARACTERIZE NOISES			5		
SENSED BY A KNOCK					
SENSOR					
PISTON ASSEMBLY FOR A	India	2016-01-06	201644000498		
RECIPROCATING ENGINE					
SYSTEM AND METHOD	India	2015-12-18	6773/CHE/201		
FOR IMPROVED JOURNAL			5		
BEARING OPERATIONS					
METHODS AND SYSTEMS	India	2016-02-12	201644004935		
TO DERIVE ENGINE					
COMPONENT HEALTH					
USING TOTAL HARMONIC					
DISTORTION IN A KNOCK					
SENSOR SIGNAL					
SYSTEM AND METHOD	India	2016-03-15	201644008944		
FOR LOCATING AN ENGINE					
EVENT					
COATING OF A JOURNAL	India	2015-12-22	6841/CHE/201		
BEARING SYSTEM AND AN			5		
ASSOCIATED METHOD					
THEREOF					
COATING OF A VALVE	India	2015-12-22	6842/CHE/201		
SYSTEM AND AN			5		
ASSOCIATED METHOD					
THEREOF					
JOINT-LESS CONTNUOUS	India	2016-12-16	201641042871		
JOURNAL BEARINGS					
AN ENGINE AND A	India	2017-02-10	201741004931		
METHOD OF OPERATING					
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Title	Country	Filed Date	App. Number	Grant Date	Patent
Title	Country	rneu Date	App. Number	Grant Date	Number
THE SAME					
SYSTEM AND METHOD	India	2017-08-18	201741029279		
FOR PISTON RING					
PROGNOSTIC					
SYSTEM AND METHOD	Israel	2015-12-15	243143		
FOR LOCATING ENGINE					
NOISE					
ORGANIC RANKINE CYCLE	Italy	2012-05-03	502016000063	2016-04-13	2522828
SYSTEMS USING WASTE			032		
HEAT FROM CHARGE AIR					
COOLING					
INTEGRATED REFORMER	Italy	2013-10-10	MI2013A0016	2016-01-12	1420385
AND WASTE HEAT			75		
RECOVERY SYSTEM FOR					
POWER GENERATION					
VARIABLE THICKNESS	Italy	2013-06-20	502017000126	2017-08-09	2677152
COATINGS FOR CYLINDER	litary	2013 00 20	501	2017 00 09	2077132
LINERS					
Mixing chamber with spiral	Italy	2012-06-07	502016000094	2016-08-10	2671630
channels	litary	2012 00 07	734	2010 00 10	2071030
EMISSIONS CONTROL IN	Italy	2014-07-01	502018000007	2017-12-13	2821609
STATIONARY RICH BURN	litary	20110701	795	2017 12 13	2021009
ENGINES			1755		
SYSTEMS AND METHODS	Italy	2015-01-13	502017000129	2017-08-16	2894306
FOR CONTROLLING	litary	2013 01 13	163	2017 00 10	209 1300
EMISSIONS IN AN			103		
INTERNAL COMBUSTION					
ENGINE THROUGH THE					
CONTROL OF					
TEMPERATURE AT THE					
INLET OF AN AMMONIA					
SLIP CATALYST					
ASSEMBLY					
EXHAUST	Italy	2015-04-15	502017000096	2017-06-14	2933450
AFTERTREATMENT	litary	2013 01 13	691	2017 00 11	2933130
SYSTEM WITH AGING					
MONITORING OF AN					
AMMONIA SLIP CATALYST					
SPARK PLUG ELECTRODE	Italy	2015-10-05	15188410.3	2018-07-04	3006163
GAP SETTING TOOL	litary	2013-10-03	13100410.3	2010-07-04	3000103
METHOD AND SYSTEM	Italy	2015-12-09	502017000128	2017-08-16	3032057
FOR CONTROL OF	litary	2013-12-09	532	2017-00-10	3032031
EMISSIONS IN EXHAUST			0.52		
AFTERTREATMENT					
ATTENTICATIVIENT	<u> </u>			<u> </u>	

Title	Country	Filed Date	App. Number	Grant Date	Patent
					Number
SYSTEM					
VARIABLE THICKNESS	Japan	2013-06-17	2013-126218	2017-10-27	6231781
COATINGS FOR CYLINDER					
LINERS					
GAS DOSAGE CONTROL	Japan	2014-04-23	2014-088709		
FOR GAS ENGINE					
EMISSIONS CONTROL IN	Japan	2014-11-17	2014-232291		
DIESEL ENGINES					
SYSTEM AND METHOD	Japan	2014-10-06	2014-205428		
FOR CONTROL OF					
EXHAUST GAS					
RECIRCULATION EGR					
UTILIZING PROCESS					
TEMPERATURES					
SYSTEM AND PROGRAM	Japan	2014-12-04	2014-245443		
PRODUCT FOR					
CONTROLLING EXHAUST					
GAS TEMPERATURE OF					
ENGINE SYSTEM					
GASEOUS REDUCTANT	Japan	2014-10-15	2014-210349		
INJECTION CONTROL					
SYSTEM					
POWER GENERATION	Japan	2014-11-17	2014-232292		
SYSTEM AND METHOD					
WITH FAULT RIDE					
THROUGH CAPABILITY					
ONBOARD CATALYST	Japan	2014-11-17	2014-232294		
HEALTH MONITORING					
AND CONTROL SYSTEM					
ADAPTATION IN					
INTERNAL COMBUSTION					
ENGINES					
Systems and Methods for	Japan	2014-09-17	2014-188374		
Monitoring Catalyst					
Deactivation and Controlling an					
Air/Fuel Ratio					
PISTON ASSEMBLY FOR A	Japan	2015-06-01	2015-111016		
RECIPROCATING ENGINE					
PISTON ASSEMBLY FOR A	Japan	2015-06-02	2015-111810		
RECIPROCATING ENGINE					
SYSTEM FOR	Japan	2015-08-14	2015-160008		
CONTROLLING DEPOSITS					
ON CYLINDER LINER AND					
PISTON OF					

Title	Country	Filed Date	App. Number	Grant Date	Patent
	Country	i neu pare	prop. rampe.	Grant Date	Number
RECIPROCATING ENGINE					
EMISSION CONTROL IN	Japan	2015-03-20	2015-057029		
RICH BURN NATURAL GAS	bapan	2010 00 20	2010 007029		
ENGINES					
PISTON ASSEMBLY FOR A	Japan	2015-06-02	2015-111811		
RECIPROCATING ENGINE	Japan	2013 00 02	2013 111011		
BASE-FRAME ASSEMBLY	Japan	2016-05-06	2016-092921		
FOR A COMBUSTION	Japan	2010-03-00	2010-072721		
ENGINE					
PISTON WITH REDUCED	Japan	2015-01-08	2015-001930		
TOP LAND HEIGHT AND	Japan	2013-01-08	2013-001730		
TIGHT TOP LAND PISTON					
PROFILE					
SYSTEMS AND METHODS	Japan	2015-01-09	2015-002718		
FOR CONTROLLING	Japan	2013-01-09	2013-002718		
EMISSIONS IN AN					
INTERNAL COMBUSTION					
ENGINE THROUGH THE					
CONTROL OF					
TEMPERATURE AT THE					
INLET OF AN AMMONIA					
SLIP CATALYST					
ASSEMBLY					
	Longo	2015-04-09	2015-079650		
EXHAUST AFTER	Japan	2013-04-09	2013-079630		
TREATMENT SYSTEM					
WITH CATALYTIC					
DEACTIVATION					
MONITORING	Т	2016 02 26	2016 025004		
CONDITION BASED	Japan	2016-02-26	2016-035004		
ENGINE PARTS					
MONITORING	т	2015 07 22	0015 144650		
SYSTEM AND METHOD	Japan	2015-07-22	2015-144650		
FOR IMPROVING					
RESPONSE TIME OF A					
BRAKING UNIT	-	2015 12 04	2015 225024		
SYSTEMS AND METHODS	Japan	2015-12-04	2015-237084		
FOR MODEL BASED					
CONTROL OF CATALYTIC					
CONVERTER SYSTEMS					
EXHAUST	Japan	2015-04-08	2015-078846		
AFTERTREATEMENT					
SYSTEM WITH CATALYTIC					
DEACTIVATION					
MONITORING					

Title	Country	Filed Date	App. Number	Grant Date	Patent
	W.		4.1		Number
SPARK PLUG ELECTRODE	Japan	2015-10-02	2015-196349		
GAP SETTING TOOL	1				
POWER GENERATION	Japan	2015-12-03	2015-236194		
SYSTEM AND METHOD					
WITH RESISTIVE BRAKING					
CAPABILITY					
SYSTEMS AND METHODS	Japan	2016-02-25	2016-033703		
FOR CONTROLLING	1				
AFTERTREATMENT					
SYSTEMS					
SYSTEM AND METHOD	Japan	2015-12-24	2015-250816		
FOR LOCATING ENGINE					
NOISE					
KNOCK SENSOR SYSTEMS	Japan	2016-04-15	2016-081598		
AND METHODS FOR	1				
DETECTION OF					
COMPONENT CONDITIONS					
SENSOR FOR	Japan	2015-12-25	2015-252726		
DETERMINING ENGINE					
CHARACTERISTICS					
METHOD AND SYSTEM TO	Japan	2016-02-12	2016-024304		
DETERMINE LOCATION OF					
PEAK FIRING PRESSURE					
SYSTEM AND METHOD	Japan	2015-12-29	2015-257553		
FOR DETECTING					
RECIPROCATING DEVICE					
ABNORMALITIES					
UTILIZING STANDARD					
QUALITY CONTROL					
TECHNIQUES					
SYSTEM AND METHOD	Japan	2016-01-28	2016-013886		
FOR MODEL BASED AND					
MAP BASED THROTTLE					
POSITION DERIVATION					
AND MONITORING					
INDUCTION GENERATOR	Japan	2015-10-15	2015-203318		
SYSTEM WITH A GRID-					
LOSS RIDE-THROUGH					
CAPABILITY	-	2016 02 -	0016011		
SYSTEMS AND METHODS	Japan	2016-03-04	2016-041659		
TO DISTINGUISH ENGINE					
KNOCK FROM PISTON					
SLAP	T	2016.02.02	0016.017500		
METHODS AND SYSTEMS	Japan	2016-02-02	2016-017592		

Title	Country	Filed Date	App. Number	Grant Date	Patent
					Number
TO DERIVE KNOCK					
SENSOR CONDITIONS					
SYSTEM AND METHOD	Japan	2016-01-22	2016-010206		
FOR DETECTING					
OPERATING EVENTS OF AN					
ENGINE					
METHODS AND SYSTEMS	Japan	2015-12-24	2015-250817		
TO CHARACTERIZE NOISES					
SENSED BY A KNOCK					
SENSOR					
KNOCK SENSOR NETWORK	Japan	2016-03-18	2017-551075		
SYSTEMS AND METHODS	^				
FOR CHARACTERIZING					
NOISES					
PISTON ASSEMBLY FOR A	Japan	2016-01-06	2016-000775		
RECIPROCATING ENGINE	1				
SYSTEMS AND METHODS	Japan	2016-03-31	2016-069870		
FOR ESTIMATING A TIME	1				
OF AN ENGINE EVENT					
METHODS AND SYSTEMS	Japan	2016-02-04	2016-019410		
TO DERIVE ENGINE	1				
COMPONENT HEALTH					
USING TOTAL HARMONIC					
DISTORTION IN A KNOCK					
SENSOR SIGNAL					
SYSTEM AND METHOD	Japan	2016-03-16	2016-051793		
FOR LOCATING AN ENGINE					
EVENT					
SYSTEM AND METHOD	Japan	2016-04-08	2016-077703		
FOR INJECTION CONTROL	o ap an		2010 077700		
OF UREA IN SELECTIVE					
CATALYST REDUCTION					
	Japan	2016-06-23	2017-567618		
COMBUSTION ENGINE	Japan	2010 00 23	2017 307010		
RECIPROCATING	Japan	2017-10-04	2017-193924		
COMPRESSOR FLOW	o ap an		2017 190921		
SENSING					
JOINT-LESS CONTNUOUS	Japan	2017-12-04	2017-232273		
JOURNAL BEARINGS	Japan	2017 12 01	2017 232273		
SYSTEMS AND METHODS	Japan	2018-11-22	2018-219240		
FOR SPARK TIMING	Japan	2010 11 22	2010 213210		
RETARDATION					
VARIABLE THICKNESS	Korea,	2013-06-19	102013007033		
COATINGS FOR CYLINDER	Republic of	2013 00-19	0		
CONTINUSTOR CILINDER	propublic of	1	I _C	<u> </u>	

Title	Country	Filed Date	App. Number	Grant Date	Patent
1	Country	I neu Date	ipp.::umsci		Number
LINERS	(KR)				
GAS DOSAGE CONTROL	Korea,	2014-05-07	2014-0054162	2016-07-07	10-1639203
FOR GAS ENGINE	Republic of				
	(KR)				
Rich Burn Internal Combustion	Korea,	2014-02-05	2014-0012897		
Engine Catalyst Control	Republic of				
	(KR)				
EMISSIONS CONTROL IN	Korea,	2014-11-17	10-2014-		
DIESEL ENGINES	Republic of		0160067		
	(KR)				
SYSTEM AND PROGRAM	Korea,	2014-12-10	102014017744		
PRODUCT FOR	Republic of		3		
CONTROLLING EXHAUST	(KR)				
GAS TEMPERATURE OF					
ENGINE SYSTEM					
GASEOUS REDUCTANT	Korea,	2014-10-16	102014013956		
INJECTION CONTROL	Republic of		7		
SYSTEM	(KR)				
POWER GENERATION	Korea,	2014-11-07	102014015420		
SYSTEM AND METHOD	Republic of		6		
WITH FAULT RIDE	(KR)				
THROUGH CAPABILITY	T.7	0014 11 10	100014016006		
ONBOARD CATALYST	Korea,	2014-11-18	102014016096		
HEALTH MONITORING	Republic of		9		
AND CONTROL SYSTEM	(KR)				
ADAPTATION IN INTERNAL COMBUSTION					
ENGINES ENGINES					
Systems and Methods for	Korea,	2014-09-19	102014012480		
Monitoring Catalyst	Republic of	2014-09-19	1		
Deactivation and Controlling an	(KR)				
Air/Fuel Ratio	(KIC)				
PISTON ASSEMBLY FOR A	Korea,	2015-06-04	10-2015-		
RECIPROCATING ENGINE	Republic of	2013 00 0 1	0079093		
	(KR)				
PISTON ASSEMBLY FOR A	Korea,	2015-06-03	10-		
RECIPROCATING ENGINE	Republic of		20150078435		
	(KR)				
SYSTEM FOR	Korea,	2015-08-11	10-2015-		
CONTROLLING DEPOSITS	Republic of		0112972		
ON CYLINDER LINER AND	(KR)				
PISTON OF					
RECIPROCATING ENGINE					
EMISSION CONTROL IN	Korea,	2015-03-26	102015004234		

Title	Country	Filed Date	App. Number	Grant Date	Patent
			FF		Number
RICH BURN NATURAL GAS	Republic of		7		
ENGINES	(KR)				
PISTON ASSEMBLY FOR A	Korea,	2015-06-05	10-2015-		
RECIPROCATING ENGINE	Republic of		0079686		
	(KR)				
BASE-FRAME ASSEMBLY	Korea,	2016-05-10	10-2016-		
FOR A COMBUSTION	Republic of		0056913		
ENGINE	(KR)				
PISTON WITH REDUCED	Korea,	2015-01-12	102015000401		
TOP LAND HEIGHT AND	Republic of		6		
TIGHT TOP LAND PISTON	(KR)				
PROFILE					
SYSTEMS AND METHODS	Korea,	2015-01-09	102015000332		
FOR CONTROLLING	Republic of		7		
EMISSIONS IN AN	(KR)				
INTERNAL COMBUSTION					
ENGINE THROUGH THE					
CONTROL OF					
TEMPERATURE AT THE					
INLET OF AN AMMONIA					
SLIP CATALYST					
ASSEMBLY					
EXHAUST AFTER	Korea,	2015-04-14	10-2015-		
TREATMENT SYSTEM	Republic of		0052329		
WITH CATALYTIC	(KR)				
DEACTIVATION					
MONITORING					
CONDITION BASED	Korea,	2016-03-03	102016002570		
ENGINE PARTS	Republic of		6		
MONITORING	(KR)				
SYSTEMS AND METHODS	Korea,	2015-12-11	102015017711		
FOR MODEL BASED	Republic of		1		
CONTROL OF CATALYTIC	(KR)				
CONVERTER SYSTEMS					
EXHAUST	Korea,	2015-04-15	10-2015-		
AFTERTREATEMENT	Republic of		0053242		
SYSTEM WITH CATALYTIC	(KR)				
DEACTIVATION					
MONITORING					
SPARK PLUG ELECTRODE	Korea,	2015-10-05	102015013961		
GAP SETTING TOOL	Republic of		5		
	(KR)				
POWER GENERATION	Korea,	2015-12-10	102015017597		
SYSTEM AND METHOD	Republic of		2		

Title	Country	Filed Date	App. Number	Grant Date	Patent
			T.F.		Number
WITH RESISTIVE BRAKING	(KR)				
CAPABILITY	,				
SYSTEMS AND METHODS	Korea,	2016-02-26	102016002365		
FOR CONTROLLING	Republic of		2		
AFTERTREATMENT	(KR)				
SYSTEMS					
SYSTEM AND METHOD	Korea,	2015-12-30	102015019001		
FOR LOCATING ENGINE	Republic of		8		
NOISE	(KR)				
KNOCK SENSOR SYSTEMS	Korea,	2016-04-15	102016004629		
AND METHODS FOR	Republic of	2010 01 15	8		
DETECTION OF	(KR)				
COMPONENT CONDITIONS					
SENSOR FOR	Korea,	2016-01-04	102016000023		
DETERMINING ENGINE	Republic of	2010-01-04	0		
CHARACTERISTICS	(KR)		O		
METHOD AND SYSTEM TO	Korea,	2016-02-15	102016001702		
DETERMINE LOCATION OF	Republic of	2010-02-13	102010001702		
PEAK FIRING PRESSURE	(KR)				
SYSTEM AND METHOD	Korea,	2016-01-05	2016-0000845		
FOR DETECTING	Republic of	2010-01-03	2010-0000843		
RECIPROCATING DEVICE	(KR)				
ABNORMALITIES	(KK)				
UTILIZING STANDARD					
QUALITY CONTROL					
TECHNIQUES					
SYSTEM AND METHOD	Korea,	2016-02-04	102016001440		
FOR MODEL BASED AND	Republic of	2010-02-04	8		
MAP BASED THROTTLE	(KR)		B		
POSITION DERIVATION	(KK)				
AND MONITORING					
INDUCTION GENERATOR	Korea,	2015-10-15	102015014389		
SYSTEM WITH A GRID-	Republic of	2013-10-13	102013014369		
LOSS RIDE-THROUGH	(KR)		3		
CAPABILITY					
SYSTEMS AND METHODS	Korea,	2016-03-07	102016002699		
TO DISTINGUISH ENGINE	Republic of	2010-03-07	l .		
KNOCK FROM PISTON	(KR)		4		
SLAP	(KK)				
	Vorce	2016-01-29	102016001158		
SYSTEM AND METHOD FOR DETECTING	Korea,	2010-01-29	102010001138		
l .	Republic of (KR)		1		
ENGINE METHODS AND SYSTEMS	Voras	2015 12 20	102015019074		
METHODS AND SYSTEMS	Korea,	2015-12-30	102015018974		

Title	Country	Filed Date	App. Number	Grant Date	Patent
	- 111 0		-		Number
TO CHARACTERIZE NOISES SENSED BY A KNOCK SENSOR	Republic of (KR)		5		
KNOCK SENSOR NETWORK SYSTEMS AND METHODS FOR CHARACTERIZING NOISES	Korea, Republic of (KR)	2016-03-18	102017703165		
PISTON ASSEMBLY FOR A RECIPROCATING ENGINE	Korea, Republic of (KR)	2016-01-05	10-2016- 0000871		
SYSTEMS AND METHODS FOR ESTIMATING A TIME OF AN ENGINE EVENT	Korea, Republic of (KR)	2016-03-30	102016003837 4		
METHODS AND SYSTEMS TO DERIVE ENGINE COMPONENT HEALTH USING TOTAL HARMONIC DISTORTION IN A KNOCK SENSOR SIGNAL	Korea, Republic of (KR)	2016-02-03	102016001334		
SYSTEM AND METHOD FOR LOCATING AN ENGINE EVENT	Korea, Republic of (KR)	2016-03-24	102016003540 1		
DUAL FUEL SYSTEM FOR A COMBUSTION ENGINE	Korea, Republic of (KR)	2016-06-23	102018700390 2		
RECIPROCATING COMPRESSOR FLOW SENSING	Korea, Republic of (KR)	2017-10-11	10- 2017- 0130176		
JOINT-LESS CONTNUOUS JOURNAL BEARINGS	Korea, Republic of (KR)	2017-12-14	102017017208 2		
ORGANIC RANKINE CYCLE SYSTEMS USING WASTE HEAT FROM CHARGE AIR COOLING	Netherlands	2012-05-03	12166544.2	2016-04-13	2522828
Mixing chamber with spiral channels	Norway	2012-06-07	12171197.2	2016-08-10	2671630
SYSTEM AND METHOD FOR OXIDANT TEMPERATURE CONTROL	Patent Cooperation Treaty	2016-06-08	PCT/US2016/0 36436		
METHOD AND SYSTEM FOR PORTABLE ENGINE HEALTH MONITORING	Patent Cooperation Treaty	2016-06-29	PCT/US16/039 927		
COATING OF A SYSTEM	Patent	2016-12-21	PCT/US2016/0		

Title	Country	Filed Date	App. Number	Grant Date	Patent
1		i neu Duce	* * pp : .u	gram Ducc	Number
AND AN ASSOCIATED	Cooperation		68002		
METHOD THEREOF	Treaty				
SYSTEM AND METHOD	Patent	2016-08-31	PCT/US2016/0		
FOR LOCATING AN ENGINE	Cooperation		49694		
EVENT	Treaty				
RECIPROCATING ENGINE	Patent	2018-01-11	PCT/US2018/0		
SYSTEM WITH	Cooperation		13250		
ELECTRICALLY DRIVEN	Treaty				
COMPRESSOR AND					
METHOD FOR OPERATING					
SAME					
REGENERATIVE THERMAL	Patent	2017-06-23	PCT/CN2017/		
OXIDIZER SYSTEM AND	Cooperation		089712		
METHOD FOR OPERATING	Treaty				
REGENERATIVE THERMAL					
OXIDIZER SYSTEM					
SYSTEM AND METHOD	Patent	2018-01-30	PCT/US18/015		
FOR INSTALLING SPARK	Cooperation		877		
PLUGS	Treaty				
SYSTEM AND METHOD OF	Patent	2018-12-20	PCT/US18/666		
SPARK PLUG TAGGING	Cooperation		23		
AND IDENTIFICATION	Treaty				
DRILLING SYSTEM AND	Russian	2015-06-17	2015123290		
POWER SUPPLY METHOD	Federation				
Mixing chamber with spiral	Spain	2012-06-07	12171197.2	2016-08-10	2671630
channels					
VARIABLE THICKNESS	Switzerland	2013-06-20	13173010.3	2017-08-09	2677152
COATINGS FOR CYLINDER					
LINERS		2015 01 12	15150000	2017 00 16	2004206
SYSTEMS AND METHODS	Switzerland	2015-01-13	15150923.9	2017-08-16	2894306
FOR CONTROLLING					
EMISSIONS IN AN					
INTERNAL COMBUSTION					
ENGINE THROUGH THE CONTROL OF					
TEMPERATURE AT THE					
INLET OF AN AMMONIA					
SLIP CATALYST					
ASSEMBLY					
METHOD AND SYSTEM	Switzerland	2015-12-09	15198666.8	2017-08-16	3032057
FOR CONTROL OF	Switzerianu	2013-12-09	13130000.0	2017-00-10	3032037
EMISSIONS IN EXHAUST					
AFTERTREATMENT					
SYSTEM					
DIDITAI	I	1			

Title	Country	Filed Date	App. Number	Grant Date	Patent
	a ^y		1.1		Number
EMISSIONS CONTROL IN	United	2014-07-01	14175159.4	2017-12-13	2821609
STATIONARY RICH BURN	Kingdom				
ENGINES					
EXHAUST	United	2015-04-15	15163722.0	2017-06-14	2933450
AFTERTREATMENT	Kingdom				
SYSTEM WITH AGING					
MONITORING OF AN					
AMMONIA SLIP CATALYST					
SPARK PLUG ELECTRODE	United	2015-10-05	15188410.3	2018-07-04	3006163
GAP SETTING TOOL	Kingdom				
SYSTEM AND METHOD	United	2006-12-13	11/609919	2009-09-29	7594399
FOR POWER GENERATION	States of				
IN RANKINE CYCLE	America				
ADAPTIVE MILLER CYCLE	United	2008-02-29	12/040225	2010-04-06	7690336
ENGINE	States of				
	America				
SYSTEM AND METHOD	United	2007-06-29	11/770895	2013-10-22	8561405
FOR RECOVERING WASTE	States of				
HEAT	America				
SYSTEM AND METHOD	United	2007-12-14	11/956457	2012-05-29	8186161
FOR CONTROLLING AN	States of				
EXPANSION SYSTEM	America				
TWO-PHASE EXPANSION	United	2008-11-20	12/274608	2011-08-02	7987676
SYSTEM AND METHOD	States of				
FOR ENERGY RECOVERY	America				
SYSTEM FOR CLOSED-	United	2008-11-14	12/270878	2011-08-09	7996142
LOOP CONTROL OF	States of				
COMBUSTION IN ENGINES	America				
TURBINE EXHAUST	United	2009-08-27	12/548526	2013-07-09	8479489
RECIRCULATION	States of				
	America				
SPIRAL RECUPERATIVE	United	2009-11-30	12/627059	2014-05-13	8721981
HEAT EXCHANGING	States of				
SYSTEM	America				
POWER GENERATION	United	2009-11-04	12/611988	2014-04-08	8692523
SYSTEM AND METHOD	States of				
WITH VOLTAGE FAULT	America				
RIDE-THROUGH					
CAPABILITY					
AUTO OPTIMIZING	United	2010-02-25	12/712954	2013-11-26	8590307
CONTROL SYSTEM FOR	States of				
ORGANIC RANKINE CYCLE	America				
PLANTS					
SYSTEM AND METHOD	United	2010-09-29	12/892973	2014-06-03	8739541

Filed Date	App. Number		Number
	1		
2010-06-18	12/818234	2014-08-26	8813498
2011-04-29	13/097101	2014-11-04	8875515
2012-06-28	13/536245	2016-08-09	9413217B2
2011-05-13	13/106929	2012-11-06	8302399
2011-04-20	13/090363	2014-02-18	8650879
2012-01-06	13/344679	2016-02-02	9249691B2
2012-10-24	13/658986	2017-07-18	9708973
2012-06-20	13/527699	2017-01-03	9534559
2012-01-24	13/357307	2013-07-16	8485857
2017-11-27	15/823303		
2012-11-29	13/688518	2016-02-23	9266074B2
2015-11-18	14/945322	2018-03-27	9926891
	2011-04-29 2012-06-28 2011-05-13 2011-04-20 2012-01-06 2012-10-24 2012-01-24 2012-01-24	2011-04-29 13/097101 2012-06-28 13/536245 2011-05-13 13/106929 2011-04-20 13/090363 2012-01-06 13/344679 2012-10-24 13/658986 2012-06-20 13/527699 2012-01-24 13/357307 2012-11-27 15/823303 2012-11-29 13/688518	2011-04-29 13/097101 2014-11-04 2012-06-28 13/536245 2016-08-09 2011-05-13 13/106929 2012-11-06 2011-04-20 13/090363 2014-02-18 2012-01-06 13/344679 2016-02-02 2012-10-24 13/658986 2017-07-18 2012-06-20 13/527699 2017-01-03 2012-01-24 13/357307 2013-07-16 2012-11-27 15/823303 2012-11-29 13/688518 2016-02-23 2015-11-18 14/945322 2018-03-27

Title	Country	Filed Date	App. Number	Grant Date	Patent
	N'		1.1		Number
METHOD OF PRODUCING	United	2012-01-24	13/357314	2014-12-16	8912713
AN ELECTRODE SUPPORT	States of				
USING BRAZING	America				
SYSTEM FOR COOLING	United	2013-03-04	13/783662	2014-12-30	8922033B2
POWER GENERATION	States of				
SYSTEM	America				
GAS DOSAGE CONTROL	United	2013-05-10	13/891807	2017-02-28	9581089
FOR GAS ENGINE	States of				
	America				
Rich Burn Internal Combustion	United	2013-02-06	13/760630	2014-11-18	8887490
Engine Catalyst Control	States of				
	America				
LAMBDA VIRTUAL	United	2015-08-11	14/823806	2017-08-01	9719445
SENSOR SYSTEMS AND	States of				
METHODS FOR A	America				
COMBUSTION ENGINE					
Emissions Control in Stationary	United	2013-07-02	13/933766	2015-06-16	9057301
Rich Burn Engines	States of				
	America				
SYSTEM AND METHOD	United	2013-10-11	14/052243	2016-08-23	9422877B2
FOR CONTROL OF	States of				
EXHAUST GAS	America				
RECIRCULATION EGR					
UTILIZING PROCESS					
TEMPERATURES					
SYSTEM AND PROGRAM	United	2013-12-11	14/102615	2017-12-26	9850841
PRODUCT FOR	States of				
CONTROLLING EXHAUST	America				
GAS TEMPERATURE OF					
ENGINE SYSTEM					
GASEOUS REDUCTANT	United	2013-10-24	14/062098	2016-01-26	9243534B2
INJECTION CONTROL	States of				
SYSTEM	America				
ONBOARD CATALYST	United	2013-11-19	14/083823	2016-09-06	9435246B2
HEALTH MONITORING	States of				
AND CONTROL SYSTEM	America				
ADAPTATION IN					
INTERNAL COMBUSTION					
ENGINES					
Systems and Methods for	United	2013-09-26	14/038014	2017-05-30	9664094
Monitoring Catalyst	States of				
Deactivation and Controlling an	America				
Air/Fuel Ratio					
SYSTEMS AND METHODS	United	2014-11-13	14/540536	2017-03-21	9601918

Title	Country	Filed Date	App. Number	Grant Date	Patent
[]					Number
FOR CONTROLLING	States of				
ACCELERATION OF A	America				
POWER GENERATOR					
POWER INTEGRATED	United	2015-02-05	14/614705	2018-07-10	10018044
SYSTEM AND METHOD	States of				
FOR DRILLING RIG AND	America				
OIL/GAS PRODUCTION					
EQUIPMENT					
PISTON ASSEMBLY FOR A	United	2014-06-06	14/298864	2016-10-18	9470179 B 2
RECIPROCATING ENGINE	States of				
	America				
CYLINDER HEAD	United	2015-06-22	14/745986	2018-04-03	9933334
ACCELERATION	States of				
MEASUREMENT FOR	America				
VALVE TRAIN					
DIAGNOSTICS SYSTEM					
AND METHOD					
PISTON ASSEMBLY FOR A	United	2014-06-06	14/298867	2015-12-01	9200589
RECIPROCATING ENGINE	States of				
	America				
SYSTEM FOR	United	2014-08-21	14/465564	2016-06-07	9359971B2
CONTROLLING DEPOSITS	States of				
ON CYLINDER LINER AND	America				
PISTON OF					
RECIPROCATING ENGINE	T 1	2015 00 06	1.5/5.40.605		
SYSTEM AND METHOD	United	2015-08-06	15/749627		
FOR ENGINE CONTROL	States of				
ENGGION CONTROL DI	America	2014 02 27	1.4/00/00/4	2015 10 06	01.407.60
EMISSION CONTROL IN	United	2014-03-27	14/226934	2015-10-06	9149768
RICH BURN NATURAL GAS	States of				
ENGINES	America	2014.06.06	14/2000	2016 05 10	0224920D2
PISTON ASSEMBLY FOR A	United	2014-06-06	14/298869	2016-05-10	9334830B2
RECIPROCATING ENGINE	States of				
DACE EDAME ACCEMBLY	America	2015 05 12	14/710257	2019 04 02	0022802
BASE-FRAME ASSEMBLY	United States of	2015-05-12	14/710257	2018-04-03	9932893
FOR A COMBUSTION	States of				
ENGINE DISTON WITH BEDLICED	America	2014 01 14	14/154460	2019 04 02	0022020
PISTON WITH REDUCED TOP LAND HEIGHT AND	United States of	2014-01-14	14/154462	2018-04-03	9932930
TIGHT TOP LAND PISTON	1				
PROFILE	America				
SYSTEMS AND METHODS	United	2014-01-14	14/154418	2015-06-16	9056279
FOR CONTROLLING	States of	201 4- 01-14	14/134418	2013-00-10	7U3U419
EMISSIONS IN AN	America				
EMISSIONS IN AIN	America		<u> </u>		

Title	Country	Filed Date	App. Number	Grant Date	Patent
			TT		Number
INTERNAL COMBUSTION					
ENGINE THROUGH THE					
CONTROL OF					
TEMPERATURE AT THE					
INLET OF AN AMMONIA					
SLIP CATALYST					
ASSEMBLY					
EXHAUST	United	2014-04-15	14/252849	2016-02-23	9267412B2
AFTERTREATMENT	States of				
SYSTEM WITH CATALYTIC	America				
DEACTIVATION					
MONITORING					
SYSTEMS AND METHODS	United	2015-04-07	14/680934	2017-05-23	9657678
FOR USING TRANSPORT	States of				
TIME TO ESTIMATE	America				
ENGINE					
AFTERTREATMENT					
SYSTEM					
CHARACTERISTICS	T T 1 1	2014 04 07	1.4/2.462.01	0015 11 04	0104005
CYLINDER LINER WITH	United	2014-04-07	14/246301	2015-11-24	9194327
SLOTS	States of				
CVCTEMC AND METHODS	America	2015 10 26	14/923009		
SYSTEMS AND METHODS FOR IN-CYLINDER	United States of	2015-10-26	14/923009		
PRESSURE ESTIMATION	America				
USING PRESSURE WAVE	America				
MODELING					
CONDITION BASED	United	2015-03-05	14/639704		
ENGINE PARTS	States of	2019 03 03	11,039701		
MONITORING	America				
SYSTEM AND METHOD	United	2014-07-24	14/339552	2016-08-02	9407187B2
FOR IMPROVING	States of				
RESPONSE TIME OF A	America				
BRAKING UNIT					
SYSTEMS AND METHODS	United	2014-12-12	14/569213	2017-03-28	9605579
FOR MODEL BASED	States of				
CONTROL OF CATALYTIC	America				
CONVERTER SYSTEMS					
DRILLING SYSTEM AND	United	2015-06-18	14/743444	2018-07-10	10017993
POWER SUPPLY METHOD	States of				
	America				
EXHAUST	United	2014-04-15	14/252890	2016-01-05	9228469B2
AFTERTREATEMENT	States of				
SYSTEM WITH CATALYTIC	America				

Title	Country	Filed Date	App. Number	Grant Date	Patent
			1		Number
DEACTIVATION					
MONITORING					
SYSTEMS AND METHODS	United	2015-10-26	14/923032	2017-03-07	9587552
FOR DETECTING	States of				
ANOMALIES AT IN-	America				
CYLINDER PRESSURE					
SENSORS					
SPARK PLUG ELECTRODE	United	2014-10-08	14/509727	2016-08-30	9431797B2
GAP SETTING TOOL	States of				
	America				
POWER GENERATION	United	2014-12-11	14/566749	2018-08-14	10050433
SYSTEM AND METHOD	States of				
WITH RESISTIVE BRAKING	America				
CAPABILITY					
SYSTEMS AND METHODS	United	2015-03-02	14/635816	2016-12-13	9517437B2
FOR CONTROLLING	States of				
AFTERTREATMENT	America				
SYSTEMS					
SYSTEM AND METHOD	United	2014-12-31	14/587434	2017-09-05	9752949
FOR LOCATING ENGINE	States of				
NOISE	America				
HUMAN MACHINE	United	2014-11-12	14/539539	2017-08-01	9719454
INTERFACE (HMI) GUIDED	States of				
MECHANICAL FUEL	America				
SYSTEM ADJUSTMENT					
KNOCK SENSOR SYSTEMS	United	2015-04-24	14/695335		
AND METHODS FOR	States of				
DETECTION OF	America				
COMPONENT CONDITIONS					
METHOD AND SYSTEM TO	United	2015-02-19	14/626585	2018-06-19	10001077
DETERMINE LOCATION OF	States of				
PEAK FIRING PRESSURE	America				
SYSTEM AND METHOD	United	2015-01-07	14/591192	2017-10-31	9803567
FOR DETECTING	States of				
RECIPROCATING DEVICE	America				
ABNORMALITIES					
UTILIZING STANDARD					
QUALITY CONTROL					
TECHNIQUES					
SYSTEM AND METHOD	United	2015-02-19	14/626511		
FOR ENGINE EMISSION	States of				
CONTROL HARNESS	America				
SYSTEM AND METHOD	United	2015-02-04	14/614237	2016-12-27	9528445B2
FOR MODEL BASED AND	States of				

Title	Country	Filed Date	App. Number	Grant Date	Patent
			1.		Number
MAP BASED THROTTLE	America				
POSITION DERIVATION					
AND MONITORING					
METHODS AND SYSTEMS	United	2015-06-22	14/745868	2018-01-09	9863344
TO CONTROL EXHAUST	States of				
GAS RECIRCULATION	America				
INDUCTION GENERATOR	United	2015-10-21	14/918950	2018-09-18	10079485
SYSTEM WITH A GRID-	States of				
LOSS RIDE-THROUGH	America				
CAPABILITY					
SILENCER FOR MID-BED	United	2014-11-26	14/554706	2016-05-24	9347358B1
AIR INJECTION MIXING	States of				
	America				
SYSTEM AND METHOD OF	United	2014-12-10	14/565827	2017-06-20	9683467
COOLING VALVE WITH	States of				
MATERIAL IN CAVITY	America				
METHOD AND SYSTEM	United	2014-12-12	14/568580	2016-07-26	9399965B2
FOR CONTROL OF	States of				
EMISSIONS IN EXHAUST	America				
AFTERTREATMENT					
SYSTEM					
SYSTEM AND METHOD	United	2015-07-02	14/790785		
FOR DETECTION OF	States of				
CHANGES TO	America				
COMPRESSION RATIO AND					
PEAK FIRING PRESSURE OF					
AN ENGINE					
SYSTEMS AND METHODS	United	2015-03-11	14/644526	2017-07-04	9695761
TO DISTINGUISH ENGINE	States of				
KNOCK FROM PISTON	America				
SLAP					
SYSTEM AND METHOD	United	2014-12-31	14/587407	2017-01-31	9556810
FOR REGULATING	States of				
EXHAUST GAS	America				
RECIRCULATION IN AN					
ENGINE					
ESTIMATION OF CYLINDER	United	2017-10-30	15/797555		
CONDITIONS USING A	States of				
KNOCK SENSOR	America				
SYSTEM AND METHOD	United	2015-05-06	14/705081	2017-10-10	9784231
FOR DETERMINING KNOCK	States of				
MARGIN FOR MULTI-	America				
CYLINDER ENGINES					
METHODS AND SYSTEMS	United	2015-02-09	14/617458	2018-02-27	9903778

Title	Country	Filed Date	App. Number	Grant Date	Patent
	N N		11		Number
TO DERIVE KNOCK	States of				
SENSOR CONDITIONS	America				
SYSTEM AND METHOD	United	2015-01-29	14/609416	2018-01-23	9874488
FOR DETECTING	States of				
OPERATING EVENTS OF AN	America				
ENGINE					
KNOCK SENSOR NETWORK	United	2015-04-01	14/676733		
SYSTEMS AND METHODS	States of				
FOR CHARACTERIZING	America				
NOISES					
PISTON ASSEMBLY FOR A	United	2015-01-12	14/595013	2017-12-19	9845765
RECIPROCATING ENGINE	States of				
	America				
SYSTEMS AND METHODS	United	2015-04-07	14/680863	2018-08-21	10054043
FOR ESTIMATING A TIME	States of				
OF AN ENGINE EVENT	America				
SYSTEM AND METHOD	United	2016-11-30	16/063386		
FOR IMPROVED JOURNAL	States of				
BEARING OPERATIONS	America				
METHODS AND SYSTEMS	United	2015-02-12	14/621028		
TO DERIVE ENGINE	States of				
COMPONENT HEALTH	America				
USING TOTAL HARMONIC					
DISTORTION IN A KNOCK					
SENSOR SIGNAL					
SYSTEM AND METHOD	United	2015-03-24	14/667275	2017-03-14	9593631
FOR LOCATING AN ENGINE	States of				
EVENT	America				
SYSTEM AND METHOD	United	2015-05-11	14/709370	2017-10-31	9803698
HAVING COUPLING WITH	States of				
LAYERED PORTION	America				
SYSTEM AND METHOD	United	2015-04-14	14/686350	2016-09-06	9435244B1
FOR INJECTION CONTROL	States of				
OF UREA IN SELECTIVE	America				
CATALYST REDUCTION					
CYLINDER HEAD COVER	United	2015-09-08	14/847904		
WITH INTEGRAL SLEEVE	States of				
	America				
SYSTEM AND METHOD	United	2015-08-06	14/820156	2018-02-20	9897021
FOR DETERMINING	States of				
LOCATION AND VALUE OF	America				
PEAK FIRING PRESSURE					
SYSTEM AND METHOD	United	2015-07-02	14/790714	2018-03-27	9926836
1				2010 03 27	

Title	Country	Filed Date	App. Number	Grant Date	Patent
	*				Number
TEMPERATURE CONTROL	America				
SYSTEM AND METHOD OF	United	2017-10-27	15/796124		
VALVE WEAR DETECTION	States of				
	America				
REAL TIME DETECTION	United	2015-12-21	14/977226		
AND DIAGNOSIS OF	States of				
CHANGE IN PEAK FIRING	America				
PRESSURE					
FUEL SYSTEM FOR A	United	2015-08-28	14/839066	2018-04-10	9938933
COMBUSTION ENGINE	States of				
	America				
LAMINAR FLOW OF	United	2015-10-20	14/918013	2018-03-27	9926829
PISTON COOLING JETS	States of				
	America				
SYSTEM AND METHOD	United	2015-10-13	14/882198	2017-11-07	9810105
FOR CAMSHAFT	States of				
VIBRATION CONTROL	America				
A SYSTEM AND METHOD	United	2015-08-07	14/821427	2017-01-03	9537301
FOR GENERATOR	States of				
BRAKING	America				
SYSTEM AND METHOD	United	2015-08-10	15/751167		
FOR GENERATOR	States of				
BRAKING USING	America				
LAMINATED BRAKE					
COMPONENTS					
DUAL FUEL SYSTEM FOR A	United	2015-07-10	14/796768	2017-08-29	9745903
COMBUSTION ENGINE	States of				
	America				
ENGINE CONTROLLER	United	2016-09-15	15/265865		
AND METHODS FOR	States of				
CONTROLLING EMISSION	America				
AND POWER GENERATION					
SYSTEM USING THE SAME					
METHOD AND ENGINE	United	2016-09-22	15/272474		
CONTROLLER FOR	States of				
DIAGNOSING WASTE GATE	America				
VALVE MALFUNCTION					
AND RELATED POWER					
GENERATION SYSTEM					
AN ANNULAR RING	United	2015-09-28	14/867231		
GROOVE OF A PISTON	States of				
	America				
SYSTEMS AND METHODS	United	2015-06-29	14/754128	2017-10-10	9784635
FOR DETECTION OF	States of				

Title	Country	Filed Date	App. Number	Grant Date	Patent
	-				Number
ENGINE COMPONENT	America				
CONDITIONS VIA					
EXTERNAL SENSORS					
METHOD AND SYSTEM	United	2015-06-29	14/754206		
FOR PORTABLE ENGINE	States of				
HEALTH MONITORING	America				
METHODS TO ADAPT AIR-	United	2015-11-16	14/942201	2018-02-13	9890723
FUEL (A/F) CONTROLS FOR	States of				
CATALYST AGING	America				
METHODS TO ADAPT	United	2015-11-16	14/942644	2018-06-19	10001046
REDUCTANT INJECTION	States of				
CONTROLS FOR CATALYST	America				
AGING					
SYSTEM AND METHOD	United	2015-08-19	14/830379	2018-01-16	9869257
FOR PREDICTING PEAK	States of				
PRESSURE VALUES USING	America				
KNOCK SENSOR					
SYSTEM AND METHOD	United	2017-07-12	15/648257		
FOR VALVE EVENT	States of				
DETECTION AND	America				
CONTROL					
COVER SYSTEM WITH	United	2015-08-05	14/818599	2017-05-30	9664284
GASKET SYSTEM	States of				
THEREFOR	America				
COATING OF A SYSTEM	United	2016-12-21	15/777673		
AND AN ASSOCIATED	States of				
METHOD THEREOF	America				
SYSTEM FOR MONITORING	United	2015-12-31	14/985899	2018-09-18	10077730
A PRECHAMBER OF AN	States of				
ENGINE	America				
SYSTEM FOR COOLING	United	2016-03-31	16/081467		
ENGINE INTAKE FLOW	States of				
	America				
SYSTEMS AND METHODS	United	2017-09-27	15/717914		
ADJUSTING FOR	States of				
AFTERTREATMENT	America				
SYSTEM CONDITION					
SYSTEMS AND METHODS	United	2017-09-27	15/717911		
ADJUSTING FOR	States of				
AFTERTREATMENT	America				
SYSTEM CONDITION AND					
CONTROL					
SYSTEM AND METHOD	United	2017-08-08	15/672286		
FOR DETECTING	States of				

Title	Country	Filed Date	App. Number	Grant Date	Patent
					Number
OPERATING EVENTS OF AN	America				
ENGINE VIA MIDI					
RECIPROCATING	United	2016-10-11	15/290746		
COMPRESSOR FLOW	States of				
SENSING	America				
KNOCK SENSOR SYSTEMS	United	2018-01-22	15/877363		
AND METHODS FOR	States of				
VALVE RECESSION	America				
CONDITIONS					
METHODS AND SYSTEMS	United	2018-06-25	16/017425		
FOR DIAGNOSING VALVE	States of				
DEFECTS IN	America				
RECIPROCATING					
COMPRESSORS					
TWO-STAGE	United	2017-01-17	15/397289		
RECIPROCATING	States of				
COMPRESSOR	America				
OPTIMIZATION CONTROL					
SYSTEM					
THERMALLY	United	2018-03-06	15/913585		
COMPENSATED BORE	States of				
GUIDE SYSTEMS AND	America				
METHODS					
SYSTEM FOR COOLING	United	2017-11-02	15/802375		
EXHAUST VALVE OF A	States of				
RECIPROCATING ENGINE	America				
SYSTEM AND METHOD	United	2017-09-18	15/707227		
FOR COMPRESSOR	States of				
SCHEDULING	America				
SYSTEM AND METHOD	United	2018-07-16	16/036019		
FOR PISTON RING	States of				
PROGNOSTIC	America				
EXHAUST	United	2018-04-12	15/951272		
AFTERTREATMENT	States of				
SYSTEM	America				
PISTON ASSEMBLY WITH	United	2017-12-06	15/833465		
OFFSET TIGHT LAND	States of				
PROFILE	America				
METHOD AND SYSTEM	United	2018-03-01	15/909673		
FOR GAS COMPRESSOR	States of				
CONTROL	America				

EXHIBIT B

TRADEMARKS

The trademark registrations and trademark applications listed below:

TRADEMARK	COUNTRY	OWNER	APP. NO.	APP. DATE	REG. NO.	REG. DATE
JENBACHER	WIPO	General Electric Company	1360306	29-Jun-17	1360306	29-Jun-17
JENBACHER	Belarus	General Electric Company	1360306	29-Jun-17	1360306	29-Jun-17
JENBACHER	Russian Federation	General Electric Company	1360306	29-Jun-17	1360306	29-Jun-17
JENBACHER	Kazakhstan	General Electric Company	1360306	29-Jun-17	1360306	29-Jun-17
JENBACHER	EUTM	General Electric Company	16218331	30-Dec-16	16218331	04-May-17
JENBACHER	United States of America	General Electric Company	87284158	29-Dec-16	5556448	04-Sep-18
MYPLANT	EUTM	General Electric Company	10026649	07-Jun-11	10026649	08-Nov-11
MYPLANT	United States of America	General Electric Company	85320114	13-May- 11	4144164	15-May-12
SERIES FOUR	EUTM	General Electric Company	2659225	18-Apr-02	2659225	10-Sep-03
SERIES FOUR	United States of America	General Electric Company	75672480	31-Mar- 99	2332327	21-Mar-00

EXHIBIT C

DOMAIN NAMES

The domain names listed below:

RECORDED: 04/29/2019

distributedpower.com
reciprocatingpower.com
reciprocatingpower.net
waukeshaengine.com
jenbacher.com
waukeshaengine.net
wedlink.net
jenbacher.net
information.jenbacher.com
epic.breezellp.com
reupwaukesha.com
myplant.com
myplant.io
training.jenbacher.com
training.jenbacher.com/app