

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT6093101

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| SUBMISSION TYPE: | NEW ASSIGNMENT |
| NATURE OF CONVEYANCE: | ASSIGNMENT |
| CONVEYING PARTY DATA | |
| Name | Execution Date |
| GENERAL ELECTRIC COMPANY | 11/02/2018 |
| RECEIVING PARTY DATA | |
| Name: | AI ALPINE US BIDCO LLC |
| Street Address: | CORPORATE TRUST CENTER |
| Internal Address: | 1209 ORANGE STREET |
| City: | WILMINGTON |
| State/Country: | DELAWARE |
| Postal Code: | 19801 |
| PROPERTY NUMBERS Total: 8 | |
| Property Type | Number |
| PCT Number: | US2016036436 |
| PCT Number: | US2016039927 |
| PCT Number: | US2016068002 |
| PCT Number: | US2016049694 |
| PCT Number: | US2018013250 |
| PCT Number: | CN2017089712 |
| PCT Number: | US2018015877 |
| PCT Number: | US2018066623 |
| CORRESPONDENCE DATA | |
| Fax Number: | (281)970-4503 |
| <i>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.</i> | |
| Phone: | 2819704545 |
| Email: | docket@fyiplaw.com, swanson@fyiplaw.com, howell@fyiplaw.com |
| Correspondent Name: | FLETCHER YODER C/O INNIO |
| Address Line 1: | P.O. BOX 692289 |
| Address Line 4: | HOUSTON, TEXAS 77269-2289 |
| ATTORNEY DOCKET NUMBER: | INIO:0001PCT |
| NAME OF SUBMITTER: | TAIT R. SWANSON |

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|---------------------|------------------------------------|
| SIGNATURE: | /Tait R. Swanson, Reg. No. 48,226/ |
| DATE SIGNED: | 05/06/2020 |

Total Attachments: 50

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INTELLECTUAL PROPERTY ASSIGNMENT AGREEMENT

This INTELLECTUAL PROPERTY ASSIGNMENT AGREEMENT ("Assignment"), effective as of November 2, 2018 ("Effective Date"), is by and between GENERAL ELECTRIC COMPANY, a New York corporation, with an office located at 41 Farnsworth Street, Boston, Massachusetts 02210, United States of America (the "Assignor") and AI ALPINE US BIDCO LLC, 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");

[REDACTED]; the Patents, [REDACTED], collectively, the "Assigned IP"), and to execute this Assignment; and

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.

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 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) [REDACTED] 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; [REDACTED]
[REDACTED]
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, [REDACTED]
[REDACTED], 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 Effective Date.

As Assignor:

GENERAL ELECTRIC COMPANY

By: 

Name: SARA AGULLO SAMARANCH

Title: Senior Managing Director

As Assignee:

AI ALPINE US BIDCO LLC

By: _____

Name:

Title:

[Signature Page to the Intellectual Property Assignment Agreement]

As Assignee:

AI ALPINE US BIDDING INC

By: 

Name:

Michael J. Ristagno

Title:

[Signature Page to the Intellectual Property Assignment Agreement]

#4848-3743-4476

EXHIBIT A**PATENTS**

The patents and patent applications listed below:

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

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| SYSTEM AND METHOD FOR INJECTION CONTROL OF UREA IN SELECTIVE CATALYST REDUCTION | Austria | 2016-04-13 | 16165045.2 | 2018-10-03 | 3081776 |
| ELECTROMAGNETIC BRAKING SYSTEMS AND METHODS | Brazil | 2013-06-27 | 102013016638-3 | | |
| Rich Burn Internal Combustion Engine Catalyst Control | Brazil | 2014-02-05 | 102014002821-8 | | |
| SYSTEM AND PROGRAM PRODUCT FOR CONTROLLING EXHAUST GAS TEMPERATURE OF ENGINE SYSTEM | Brazil | 2014-12-10 | 102014030958-6 | | |
| POWER GENERATION SYSTEM AND METHOD WITH FAULT RIDE THROUGH CAPABILITY | Brazil | 2014-11-10 | 102014028062-6 | | |
| ONBOARD CATALYST HEALTH MONITORING AND CONTROL SYSTEM ADAPTATION IN INTERNAL COMBUSTION ENGINES | Brazil | 2014-11-17 | 102014028613-6 | | |
| PISTON ASSEMBLY FOR A RECIPROCATING ENGINE | Brazil | 2015-06-05 | 102015013117-8 | | |
| PISTON ASSEMBLY FOR A RECIPROCATING ENGINE | Brazil | 2015-06-05 | 102015013120-8 | | |
| SYSTEM FOR CONTROLLING DEPOSITS ON CYLINDER LINER AND PISTON OF RECIPROCATING ENGINE | Brazil | 2015-08-20 | 102015020090-0 | | |
| PISTON ASSEMBLY FOR A RECIPROCATING ENGINE | Brazil | 2015-06-05 | 102015013118-6 | | |
| PISTON WITH REDUCED TOP LAND HEIGHT AND TIGHT TOP LAND PISTON PROFILE | Brazil | 2015-01-13 | 10 2015 000764-7 | | |

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| SYSTEMS AND METHODS FOR CONTROLLING EMISSIONS IN AN INTERNAL COMBUSTION ENGINE THROUGH THE CONTROL OF TEMPERATURE AT THE INLET OF AN AMMONIA SLIP CATALYST ASSEMBLY | Brazil | 2015-01-12 | 10 2015 000662-4 | | |
| SYSTEMS AND METHODS FOR MODEL BASED CONTROL OF CATALYTIC CONVERTER SYSTEMS | Brazil | 2015-12-10 | 102015030853-1 | | |
| POWER GENERATION SYSTEM AND METHOD WITH RESISTIVE BRAKING CAPABILITY | Brazil | 2015-12-10 | 102015030863-9 | | |
| SYSTEMS AND METHODS FOR CONTROLLING AFTERTREATMENT SYSTEMS | Brazil | 2016-02-25 | 102016004088-4 | | |
| SYSTEM AND METHOD FOR LOCATING ENGINE NOISE | Brazil | 2015-12-30 | 102015032948-2 | | |
| KNOCK SENSOR SYSTEMS AND METHODS FOR DETECTION OF COMPONENT CONDITIONS | Brazil | 2016-04-06 | 102016007574-2 | | |
| SENSOR FOR DETERMINING ENGINE CHARACTERISTICS | Brazil | 2015-12-22 | 102015032241-0 | | |
| METHOD AND SYSTEM TO DETERMINE LOCATION OF PEAK FIRING PRESSURE | Brazil | 2016-02-16 | 102016003195-8 | | |
| SYSTEM AND METHOD FOR DETECTING RECIPROCATING DEVICE ABNORMALITIES UTILIZING STANDARD QUALITY CONTROL TECHNIQUES | Brazil | 2016-01-06 | 102016000207-9 | | |

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| SYSTEM AND METHOD FOR MODEL BASED AND MAP BASED THROTTLE POSITION DERIVATION AND MONITORING | Brazil | 2016-02-01 | 102016002225-8 | | |
| INDUCTION GENERATOR SYSTEM WITH A GRID-LOSS RIDE-THROUGH CAPABILITY | Brazil | 2015-10-20 | 102015026557-3 | | |
| SYSTEMS AND METHODS TO DISTINGUISH ENGINE KNOCK FROM PISTON SLAP | Brazil | 2016-02-26 | 102016004249-6 | | |
| METHODS AND SYSTEMS TO DERIVE KNOCK SENSOR CONDITIONS | Brazil | 2016-02-05 | 102016002606-7 | | |
| SYSTEM AND METHOD FOR DETECTING OPERATING EVENTS OF AN ENGINE | Brazil | 2016-01-28 | 102016001908-7 | | |
| PISTON ASSEMBLY FOR A RECIPROCATING ENGINE | Brazil | 2015-12-29 | 102015032852-4 | | |
| SYSTEMS AND METHODS FOR ESTIMATING A TIME OF AN ENGINE EVENT | Brazil | 2016-04-06 | 102016007569-6 | | |
| METHODS AND SYSTEMS TO DERIVE ENGINE COMPONENT HEALTH USING TOTAL HARMONIC DISTORTION IN A KNOCK SENSOR SIGNAL | Brazil | 2016-02-11 | 102016002862-0 | | |
| SYSTEM AND METHOD FOR LOCATING AN ENGINE EVENT | Brazil | 2016-03-18 | 102016005985-2 | | |
| MANIFOLD GASKET ASSEMBLY | Canada | 2012-08-02 | 2784423 | | |
| Rich Burn Internal Combustion Engine Catalyst Control | Canada | 2014-01-30 | 2841288 | | |
| LAMBDA VIRTUAL SENSOR SYSTEMS AND METHODS FOR A COMBUSTION ENGINE | Canada | 2016-07-05 | 2994531 | | |

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| SYSTEM AND METHOD FOR CONTROL OF EXHAUST GAS RECIRCULATION EGR UTILIZING PROCESS TEMPERATURES | Canada | 2014-10-02 | 2867223 | | |
| SYSTEM AND PROGRAM PRODUCT FOR CONTROLLING EXHAUST GAS TEMPERATURE OF ENGINE SYSTEM | Canada | 2014-11-27 | 2874484 | | |
| POWER GENERATION SYSTEM AND METHOD WITH FAULT RIDE THROUGH CAPABILITY | Canada | 2014-11-06 | 2869806 | | |
| ONBOARD CATALYST HEALTH MONITORING AND CONTROL SYSTEM ADAPTATION IN INTERNAL COMBUSTION ENGINES | Canada | 2014-11-13 | 2870781 | | |
| POWER INTEGRATED SYSTEM AND METHOD FOR DRILLING RIG AND OIL/GAS PRODUCTION EQUIPMENT | Canada | 2015-02-12 | 2881669 | | |
| CYLINDER HEAD ACCELERATION MEASUREMENT FOR VALVE TRAIN DIAGNOSTICS SYSTEM AND METHOD | Canada | 2016-05-26 | 2988569 | | |
| SYSTEM AND METHOD FOR ENGINE CONTROL | Canada | 2015-08-06 | 2994691 | | |
| SYSTEMS AND METHODS FOR CONTROLLING EMISSIONS IN AN INTERNAL COMBUSTION ENGINE THROUGH THE CONTROL OF TEMPERATURE AT THE INLET OF AN AMMONIA SLIP CATALYST ASSEMBLY | Canada | 2015-01-08 | 2877006 | | |

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| SYSTEMS AND METHODS FOR CONTROLLING AFTERTREATMENT SYSTEMS | Canada | 2016-02-18 | 2921267 | | |
| KNOCK SENSOR SYSTEMS AND METHODS FOR DETECTION OF COMPONENT CONDITIONS | Canada | 2016-04-14 | 2927277 | | |
| SENSOR FOR DETERMINING ENGINE CHARACTERISTICS | Canada | 2015-12-17 | 2915466 | | |
| METHOD AND SYSTEM TO DETERMINE LOCATION OF PEAK FIRING PRESSURE | Canada | 2016-02-11 | 2920486 | | |
| SYSTEM AND METHOD FOR DETECTING RECIPROCATING DEVICE ABNORMALITIES UTILIZING STANDARD QUALITY CONTROL TECHNIQUES | Canada | 2015-12-30 | 2916466 | | |
| SYSTEM AND METHOD FOR DETECTION OF CHANGES TO COMPRESSION RATIO AND PEAK FIRING PRESSURE OF AN ENGINE | Canada | 2016-06-28 | 2989640 | | |
| SYSTEMS AND METHODS TO DISTINGUISH ENGINE KNOCK FROM PISTON SLAP | Canada | 2016-02-25 | 2921934 | | |
| METHODS AND SYSTEMS TO DERIVE KNOCK SENSOR CONDITIONS | Canada | 2016-01-28 | 2919242 | | |
| SYSTEM AND METHOD FOR DETECTING OPERATING EVENTS OF AN ENGINE | Canada | 2016-01-21 | 2918914 | | |
| METHODS AND SYSTEMS TO CHARACTERIZE NOISES SENSED BY A KNOCK SENSOR | Canada | 2015-12-18 | 2915789 | | |
| KNOCK SENSOR NETWORK SYSTEMS AND METHODS FOR CHARACTERIZING NOISES | Canada | 2016-03-18 | 2981258 | | |

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| SYSTEMS AND METHODS FOR ESTIMATING A TIME OF AN ENGINE EVENT | Canada | 2016-03-24 | 2924930 | | |
| METHODS AND SYSTEMS TO DERIVE ENGINE COMPONENT HEALTH USING TOTAL HARMONIC DISTORTION IN A KNOCK SENSOR SIGNAL | Canada | 2016-01-28 | 2919241 | | |
| SYSTEM AND METHOD FOR LOCATING AN ENGINE EVENT | Canada | 2016-03-10 | 2923277 | | |
| SYSTEM AND METHOD FOR INJECTION CONTROL OF UREA IN SELECTIVE CATALYST REDUCTION | Canada | 2016-03-30 | 2925371 | | |
| SYSTEM AND METHOD FOR OXIDANT TEMPERATURE CONTROL | Canada | 2016-06-08 | 2989594 | | |
| DUAL FUEL SYSTEM FOR A COMBUSTION ENGINE | Canada | 2016-06-23 | 2991405 | | |
| RECIPROCATING COMPRESSOR FLOW SENSING | Canada | 2017-10-05 | 2981535 | | |
| JOINT-LESS CONTINUOUS JOURNAL BEARINGS | Canada | 2017-11-30 | 2987167 | | |
| TURBINE EXHAUST RECIRCULATION SYSTEM AND METHOD | China | 2010-08-27 | 201010272882.9 | 2014-11-19 | 201010272882.9 |
| ELECTROMAGNETIC BRAKING SYSTEMS AND METHODS | China | 2013-06-28 | 201310263947.7 | 2017-06-13 | 103516272 |
| VARIABLE THICKNESS COATING FOR CYLINDER LINER | China | 2013-06-20 | 201310246012.8 | 2018-06-12 | 103511112 |
| SYSTEM AND METHOD OF EXHAUST GAS RECIRCULATION | China | 2016-09-16 | 201680079344.3 | | |
| SYSTEM FOR COOLING POWER GENERATION SYSTEM | China | 2014-03-04 | 201410075996.2 | 2018-09-18 | 104033231 |
| MANIFOLD GASKET ASSEMBLY | China | 2012-08-09 | 201210281970.4 | 2017-10-03 | 102953863 |
| Rich Burn Internal Combustion Engine Catalyst Control | China | 2014-02-07 | 201410044952.3 | | |

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| EMISSIONS CONTROL IN DIESEL ENGINES | China | 2014-11-21 | 201410674311.6 | | |
| SYSTEM AND METHOD FOR CONTROL OF EXHAUST GAS RECIRCULATION EGR UTILIZING PROCESS TEMPERATURES | China | 2014-10-10 | 201410532349.X | 2018-05-29 | 104564373 |
| SYSTEM AND PROGRAM PRODUCT FOR CONTROLLING EXHAUST GAS TEMPERATURE OF ENGINE SYSTEM | China | 2014-12-11 | 201410766769.4 | | |
| GASEOUS REDUCTANT INJECTION CONTROL SYSTEM | China | 2014-10-24 | 201410573905.8 | | |
| POWER GENERATION SYSTEM AND METHOD WITH FAULT RIDE THROUGH CAPABILITY | China | 2014-11-20 | 201410666181.1 | | |
| SYSTEM AND METHOD FOR POWER GENERATION | China | 2013-07-18 | 201310303270.5 | | |
| ONBOARD CATALYST HEALTH MONITORING AND CONTROL SYSTEM ADAPTATION IN INTERNAL COMBUSTION ENGINES | China | 2014-11-19 | 201410663180.1 | | |
| Systems and Methods for Monitoring Catalyst Deactivation and Controlling an Air/Fuel Ratio | China | 2014-09-26 | 201410501113.X | | |
| POWER INTEGRATED SYSTEM AND METHOD FOR DRILLING RIG AND OIL/GAS PRODUCTION EQUIPMENT | China | 2014-02-18 | 201410054131.8 | | |
| PISTON ASSEMBLY FOR A RECIPROCATING ENGINE | China | 2015-06-08 | 201510307846.4 | | |
| PISTON ASSEMBLY FOR A RECIPROCATING ENGINE | China | 2015-06-08 | 201510307887.3 | | |
| SYSTEM FOR CONTROLLING DEPOSITS ON CYLINDER LINER AND PISTON OF RECIPROCATING ENGINE | China | 2015-08-21 | 201510516803.7 | | |

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| PISTON ASSEMBLY FOR A RECIPROCATING ENGINE | China | 2015-06-05 | 201510301908.0 | | |
| BASE-FRAME ASSEMBLY FOR A COMBUSTION ENGINE | China | 2016-05-12 | 201610311144.8 | | |
| PISTON WITH REDUCED TOP LAND HEIGHT AND TIGHT TOP LAND PISTON PROFILE | China | 2015-01-14 | 201510017775.4 | | |
| SYSTEMS AND METHODS FOR CONTROLLING EMISSIONS IN AN INTERNAL COMBUSTION ENGINE THROUGH THE CONTROL OF TEMPERATURE AT THE INLET OF AN AMMONIA SLIP CATALYST ASSEMBLY | China | 2015-01-14 | 201510017707.8 | | |
| CONDITION BASED ENGINE PARTS MONITORING | China | 2016-03-04 | 201610123829.X | | |
| SYSTEM AND METHOD FOR IMPROVING RESPONSE TIME OF A BRAKING UNIT | China | 2015-07-24 | 201510440604.2 | | |
| SYSTEMS AND METHODS FOR MODEL BASED CONTROL OF CATALYTIC CONVERTER SYSTEMS | China | 2015-12-11 | 201511036234.2 | | |
| DRILLING SYSTEM AND POWER SUPPLY METHOD | China | 2014-06-18 | 201410272958.6 | | |
| SPARK PLUG ELECTRODE GAP SETTING TOOL | China | 2015-10-08 | 201510643403.2 | | |
| POWER GENERATION SYSTEM AND METHOD WITH RESISTIVE BRAKING CAPABILITY | China | 2015-12-11 | 201510912307.3 | | |
| SYSTEMS AND METHODS FOR CONTROLLING AFTERTREATMENT SYSTEMS | China | 2016-03-02 | 201610116846.0 | | |
| SYSTEM AND METHOD FOR LOCATING ENGINE NOISE | China | 2015-12-31 | 201511036326.0 | | |

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| KNOCK SENSOR SYSTEMS AND METHODS FOR DETECTION OF COMPONENT CONDITIONS | China | 2016-04-22 | 201610253130.5 | | |
| SENSOR FOR DETERMINING ENGINE CHARACTERISTICS | China | 2016-01-08 | 201610011336.7 | | |
| METHOD AND SYSTEM TO DETERMINE LOCATION OF PEAK FIRING PRESSURE | China | 2016-02-19 | 201610092672.9 | | |
| SYSTEM AND METHOD FOR DETECTING RECIPROCATING DEVICE ABNORMALITIES UTILIZING STANDARD QUALITY CONTROL TECHNIQUES | China | 2016-01-07 | 201610223627.2 | | |
| SYSTEM AND METHOD FOR MODEL BASED AND MAP BASED THROTTLE POSITION DERIVATION AND MONITORING | China | 2016-02-04 | 201610078918.7 | | |
| INDUCTION GENERATOR SYSTEM WITH A GRID-LOSS RIDE-THROUGH CAPABILITY | China | 2015-10-20 | 201510678495.8 | | |
| SYSTEMS AND METHODS TO DISTINGUISH ENGINE KNOCK FROM PISTON SLAP | China | 2016-03-11 | 201610138320.2 | | |
| SYSTEM AND METHOD FOR REGULATING EXHAUST GAS RECIRCULATION IN AN ENGINE | China | 2015-12-31 | 201511016005.4 | | |
| METHODS AND SYSTEMS TO DERIVE KNOCK SENSOR CONDITIONS | China | 2016-02-05 | 201610081794.8 | | |
| SYSTEM AND METHOD FOR DETECTING OPERATING EVENTS OF AN ENGINE | China | 2016-01-29 | 201610264664.8 | | |
| METHODS AND SYSTEMS TO CHARACTERIZE NOISES SENSED BY A KNOCK SENSOR | China | 2015-12-31 | 201511014250.1 | | |

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| KNOCK SENSOR NETWORK SYSTEMS AND METHODS FOR CHARACTERIZING NOISES | China | 2016-03-18 | 201680032117.5 | | |
| PISTON ASSEMBLY FOR A RECIPROCATING ENGINE | China | 2016-01-12 | 201610017155.5 | | |
| SYSTEMS AND METHODS FOR ESTIMATING A TIME OF AN ENGINE EVENT | China | 2016-04-07 | 201610212034.6 | | |
| METHODS AND SYSTEMS TO DERIVE ENGINE COMPONENT HEALTH USING TOTAL HARMONIC DISTORTION IN A KNOCK SENSOR SIGNAL | China | 2016-02-05 | 201610264663.3 | | |
| SYSTEM AND METHOD FOR LOCATING AN ENGINE EVENT | China | 2016-03-24 | 201610172512.5 | | |
| SYSTEM AND METHOD FOR INJECTION CONTROL OF UREA IN SELECTIVE CATALYST REDUCTION | China | 2016-04-14 | 201610229670.X | | |
| SYSTEM AND METHOD FOR GENERATOR BRAKING USING LAMINATED BRAKE COMPONENTS | China | 2015-08-10 | 201580082360.3 | | |
| DUAL FUEL SYSTEM FOR A COMBUSTION ENGINE | China | 2016-06-23 | 201680040832.3 | | |
| SYSTEMS AND METHODS FOR DETECTION OF ENGINE COMPONENT CONDITIONS VIA EXTERNAL SENSORS | China | 2016-06-24 | 201680038696.4 | | |
| METHODS TO ADAPT AIR-FUEL A/F CONTROLS FOR CATALYST AGING | China | 2016-09-16 | 201680079064.2 | | |
| RECIPROCATING COMPRESSOR FLOW SENSING | China | 2017-10-11 | 201710941548.X | | |
| JOINT-LESS CONTINUOUS JOURNAL BEARINGS | China | 2017-12-15 | 201711360707.3 | | |
| Optimized cylinder head exhaust port and water-cooled exhaust valve guide for maximum cooling of the guide | China | | | | |

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| SYSTEM AND METHOD FOR COMPRESSOR SCHEDULING | China | 2018-09-18 | 201811087260.1 | | |
| SYSTEM AND METHOD FOR RECOVERING WASTE HEAT | European Patent | 2008-06-16 | 08771164.4 | | |
| SPIRAL RECUPERATIVE HEAT EXCHANGING SYSTEM | European Patent | 2010-11-16 | 10191410.9 | | |
| SYSTEM AND METHOD FOR GENERATING AND STORING TRANSIENT INTEGRATED ORGANIC RANKINE CYCLE ENERGY | European Patent | 2011-06-09 | 11727078.5 | | |
| AUTO OPTIMIZING CONTROL SYSTEM FOR ORGANIC RANKINE CYCLE PLANTS | European Patent | 2011-02-11 | 11706673.8 | | |
| ELECTROMAGNETIC BRAKING SYSTEMS AND METHODS | European Patent | 2013-06-25 | 13173645.6 | | |
| INTEGRATION OF WASTE HEAT FROM CHARGE AIR COOLING INTO A CASCADED ORGANIC RANKINE CYCLE SYSTEM | European Patent | 2012-04-20 | 12164863.8 | | |
| Method of attachment of precious metal electrodes to spark plugs | European Patent | 2013-01-23 | 13152344.1 | | |
| METHOD OF PRODUCING AN ELECTRODE SUPPORT USING BRAZING | European Patent | 2013-01-23 | 13152345.8 | | |
| SYSTEM FOR COOLING POWER GENERATION SYSTEM | European Patent | 2014-02-25 | 14156576.2 | | |
| GAS DOSAGE CONTROL FOR GAS ENGINE | European Patent | 2014-05-07 | 14167312.9 | | |
| Rich Burn Internal Combustion Engine Catalyst Control | European Patent | 2014-02-04 | 14153733.2 | | |
| LAMBDA VIRTUAL SENSOR SYSTEMS AND METHODS FOR A COMBUSTION ENGINE | European Patent | 2016-07-05 | 16747652.2 | | |

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| SYSTEM AND METHOD FOR CONTROL OF EXHAUST GAS RECIRCULATION EGR UTILIZING PROCESS TEMPERATURES | European Patent | 2014-10-07 | 14187998.1 | | |
| SYSTEM AND PROGRAM PRODUCT FOR CONTROLLING EXHAUST GAS TEMPERATURE OF ENGINE SYSTEM | European Patent | 2014-12-10 | 14197241.4 | | |
| GASEOUS REDUCTANT INJECTION CONTROL SYSTEM | European Patent | 2014-10-17 | 14189312.3 | | |
| POWER GENERATION SYSTEM AND METHOD WITH FAULT RIDE THROUGH CAPABILITY | European Patent | 2014-11-19 | 14193938.9 | | |
| ONBOARD CATALYST HEALTH MONITORING AND CONTROL SYSTEM ADAPTATION IN INTERNAL COMBUSTION ENGINES | European Patent | 2014-11-17 | 14193523.9 | | |
| PISTON ASSEMBLY FOR A RECIPROCATING ENGINE | European Patent | 2015-05-29 | 15169854.5 | | |
| CYLINDER HEAD ACCELERATION MEASUREMENT FOR VALVE TRAIN DIAGNOSTICS SYSTEM AND METHOD | European Patent | 2016-05-26 | 16732026.6 | | |
| PISTON ASSEMBLY FOR A RECIPROCATING ENGINE | European Patent | 2015-06-04 | 15170678.5 | | |
| SYSTEM FOR CONTROLLING DEPOSITS ON CYLINDER LINER AND PISTON OF RECIPROCATING ENGINE | European Patent | 2015-08-17 | 15181236.9 | | |
| SYSTEM AND METHOD FOR ENGINE CONTROL | European Patent | 2015-08-06 | 15753266.4 | | |
| EMISSION CONTROL IN RICH BURN NATURAL GAS ENGINES | European Patent | 2015-03-16 | 15159209.4 | | |
| PISTON ASSEMBLY FOR A RECIPROCATING ENGINE | European Patent | 2015-06-04 | 15170677.7 | | |

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| BASE-FRAME ASSEMBLY FOR A COMBUSTION ENGINE | European Patent | 2016-05-10 | 16169002.9 | | |
| PISTON WITH REDUCED TOP LAND HEIGHT AND TIGHT TOP LAND PISTON PROFILE | European Patent | 2015-01-13 | 15151029.4 | | |
| SYSTEMS AND METHODS FOR IN-CYLINDER PRESSURE ESTIMATION USING PRESSURE WAVE MODELING | European Patent | 2016-09-16 | 16770646.4 | | |
| CONDITION BASED ENGINE PARTS MONITORING | European Patent | 2016-02-26 | 16157724.2 | | |
| SYSTEM AND METHOD FOR IMPROVING RESPONSE TIME OF A BRAKING UNIT | European Patent | 2015-07-22 | 15177889.1 | | |
| SYSTEMS AND METHODS FOR MODEL BASED CONTROL OF CATALYTIC CONVERTER SYSTEMS | European Patent | 2015-12-10 | 15199342.5 | 2018-10-03 | 3032076 |
| EXHAUST AFTERTREATMENT SYSTEM WITH CATALYTIC DEACTIVATION MONITORING | European Patent | 2015-04-13 | 15163404.5 | 2018-02-28 | 2933449 |
| SYSTEMS AND METHODS FOR DETECTING ANOMALIES AT IN- CYLINDER PRESSURE SENSORS | European Patent | 2016-10-20 | 16794786.0 | | |
| SPARK PLUG ELECTRODE GAP SETTING TOOL | European Patent | 2015-10-05 | 15188410.3 | 2018-07-04 | 3006163 |
| POWER GENERATION SYSTEM AND METHOD WITH RESISTIVE BRAKING CAPABILITY | European Patent | 2015-11-30 | 15197002.7 | | |
| SYSTEMS AND METHODS FOR CONTROLLING AFTERTREATMENT SYSTEMS | European Patent | 2016-03-01 | 16158069.1 | | |
| SYSTEM AND METHOD FOR LOCATING ENGINE NOISE | European Patent | 2015-12-17 | 15200682.1 | | |

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

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| METHOD AND SYSTEM OF DIAGNOSING A KNOCK SENSOR | European Patent | 2016-02-05 | 16154442.4 | 2018-04-18 | 3054134 |
| KNOCK SENSOR NETWORK SYSTEMS AND METHODS FOR CHARACTERIZING NOISES | European Patent | 2016-03-18 | 16712169.8 | | |
| PISTON ASSEMBLY FOR A RECIPROCATING ENGINE | European Patent | 2016-01-05 | 16150208.3 | | |
| SYSTEMS AND METHODS FOR ESTIMATING A TIME OF AN ENGINE EVENT | European Patent | 2016-04-04 | 16163698.0 | | |
| SYSTEM AND METHOD FOR IMPROVED JOURNAL BEARING OPERATIONS | European Patent | 2016-11-30 | 16816510.8 | | |
| METHODS AND SYSTEMS TO DERIVE ENGINE COMPONENT HEALTH USING TOTAL HARMONIC DISTORTION IN A KNOCK SENSOR SIGNAL | European Patent | 2016-02-05 | 16154444.0 | | |
| SYSTEM AND METHOD FOR LOCATING AN ENGINE EVENT | European Patent | 2016-03-22 | 16161757.6 | | |
| SYSTEM AND METHOD FOR INJECTION CONTROL OF UREA IN SELECTIVE CATALYST REDUCTION | European Patent | 2016-04-13 | 16165045.2 | 2018-10-03 | 3081776 |
| SYSTEM AND METHOD FOR OXIDANT TEMPERATURE CONTROL | European Patent | 2016-06-08 | 16734080.1 | | |
| LAMINAR FLOW OF PISTON COOLING JETS | European Patent | 2016-10-18 | 16791481.1 | | |
| SYSTEM AND METHOD FOR CAMSHAFT VIBRATION CONTROL | European Patent | 2016-09-29 | 16781935.8 | | |
| SYSTEM AND METHOD FOR GENERATOR BRAKING USING LAMINATED BRAKE COMPONENTS | European Patent | 2015-08-10 | 15753817.4 | | |
| DUAL FUEL SYSTEM FOR A COMBUSTION ENGINE | European Patent | 2016-06-23 | 16735969.4 | | |
| AN ANNULAR RING GROOVE OF A PISTON | European Patent | 2016-09-16 | 16778524.5 | | |

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

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

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| EXHAUST AFTERTREATMENT SYSTEM WITH AGING MONITORING OF AN AMMONIA SLIP CATALYST | Germany (Federal Republic of) | 2015-04-15 | 15163722.0 | 2017-06-14 | 60201500306 5.6 |
| CYLINDER LINER WITH SLOTS | Germany (Federal Republic of) | 2015-04-07 | 102015105223 .7 | | |
| DRILLING SYSTEM AND POWER SUPPLY METHOD | Germany (Federal Republic of) | 2015-06-18 | 102015109723 .0 | | |
| EXHAUST AFTERTREATMENT SYSTEM WITH CATALYTIC DEACTIVATION MONITORING | Germany (Federal Republic of) | 2015-04-13 | 15163404.5 | 2018-02-28 | 60201500822 8.1 |
| SPARK PLUG ELECTRODE GAP SETTING TOOL | Germany (Federal Republic of) | 2015-10-05 | 15188410.3 | 2018-07-04 | 60201501294 3.1 |
| METHODS AND SYSTEMS TO CONTROL EXHAUST GAS RECIRCULATION | Germany (Federal Republic of) | 2016-06-08 | 112016002802 .4 | | |
| METHOD AND SYSTEM FOR CONTROL OF EMISSIONS IN EXHAUST AFTERTREATMENT SYSTEM | Germany (Federal Republic of) | 2015-12-09 | 15198666.8 | 2017-08-16 | 60201400415 9.3 |
| SYSTEM AND METHOD FOR DETERMINING KNOCK MARGIN FOR MULTI- CYLINDER ENGINES | Germany (Federal Republic of) | 2016-05-04 | 112016002038 .4 | | |
| METHOD AND SYSTEM OF DIAGNOSING A KNOCK SENSOR | Germany (Federal Republic of) | 2016-02-05 | 16154442.4 | 2018-04-18 | 60201600242 2.5 |
| SYSTEM AND METHOD FOR DETECTING OPERATING EVENTS OF AN ENGINE | Germany (Federal Republic of) | 2016-01-28 | 16153229.6 | 2017-12-06 | 60201600097 7.3 |
| METHODS AND SYSTEMS TO CHARACTERIZE NOISES SENSED BY A KNOCK SENSOR | Germany (Federal Republic of) | 2015-12-21 | 15201539.2 | 2017-10-25 | 60201500559 6.9 |

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| SYSTEMS AND METHODS FOR DETECTION OF ENGINE COMPONENT CONDITIONS VIA EXTERNAL SENSORS | Germany (Federal Republic of) | 2016-06-24 | 112016002938.1 | | |
| METHODS TO ADAPT AIR-FUEL A/F CONTROLS FOR CATALYST AGING | Germany (Federal Republic of) | 2016-09-16 | 112016005242.1 | | |
| METHODS TO ADAPT REDUCTANT INJECTION CONTROLS FOR CATALYST AGING | Germany (Federal Republic of) | 2016-09-16 | 112016005241.3 | | |
| SYSTEM AND METHOD FOR VALVE EVENT DETECTION AND CONTROL | Germany (Federal Republic of) | 2018-07-03 | 102018116027.5 | | |
| SYSTEM AND METHOD FOR DETECTING OPERATING EVENTS OF AN ENGINE VIA MIDI | Germany (Federal Republic of) | 2018-08-02 | 10 2018 118 775.0 | | |
| Optimized cylinder head exhaust port and water-cooled exhaust valve guide for maximum cooling of the guide | Germany (Federal Republic of) | | | | |
| SYSTEM AND METHOD FOR COMPRESSOR SCHEDULING | Germany (Federal Republic of) | 2018-09-17 | 102018122694.2 | | |
| PISTON ASSEMBLY WITH OFFSET TIGHT LAND PROFILE | Germany (Federal Republic of) | | | | |
| SYSTEMS AND METHODS FOR MODEL BASED CONTROL OF CATALYTIC CONVERTER SYSTEMS | Germany (Federal Republic of) | 2015-12-10 | 15199342.5 | 2018-10-03 | 60201501742 5.9 |
| SYSTEM AND METHOD FOR INJECTION CONTROL OF UREA IN SELECTIVE CATALYST REDUCTION | Germany (Federal Republic of) | 2016-04-13 | 16165045.2 | 2018-10-03 | 60201600614 6.5 |
| SYSTEM AND METHOD FOR INJECTION CONTROL OF UREA IN SELECTIVE CATALYST REDUCTION | Germany (Federal Republic of) | 2016-04-13 | 16165045.2 | 2018-10-03 | 60201600614 6.5 |
| SYSTEM AND METHOD FOR BALANCING LOAD IN POWER BLOCKS | India | 2007-12-24 | 3086/CHE/2007 | | |

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| ELECTROMAGNETIC BRAKING SYSTEMS AND METHODS | India | 2013-06-05 | 1686/DEL/201 3 | | |
| SYSTEM FOR COOLING POWER GENERATION SYSTEM | India | 2014-02-28 | 1042/CHE/201 4 | | |
| Rich Burn Internal Combustion Engine Catalyst Control | India | 2014-02-03 | 485/CHE/2014 | | |
| SYSTEM AND PROGRAM PRODUCT FOR CONTROLLING EXHAUST GAS TEMPERATURE OF ENGINE SYSTEM | India | 2014-11-25 | 5910/CHE/201 4 | | |
| POWER GENERATION SYSTEM AND METHOD WITH FAULT RIDE THROUGH CAPABILITY | India | 2014-11-11 | 5669/CHE/201 4 | | |
| ONBOARD CATALYST HEALTH MONITORING AND CONTROL SYSTEM ADAPTATION IN INTERNAL COMBUSTION ENGINES | India | 2014-11-11 | 5668/CHE/201 4 | | |
| PISTON ASSEMBLY FOR A RECIPROCATING ENGINE | India | 2015-06-05 | 2815/CHE/201 5 | | |
| PISTON ASSEMBLY FOR A RECIPROCATING ENGINE | India | 2015-06-05 | 2816/CHE/201 5 | | |
| SYSTEM FOR CONTROLLING DEPOSITS ON CYLINDER LINER AND PISTON OF RECIPROCATING ENGINE | India | 2015-08-13 | 4220/CHE/201 5 | | |
| PISTON ASSEMBLY FOR A RECIPROCATING ENGINE | India | 2015-05-27 | 2656/CHE/201 5 | | |
| PISTON WITH REDUCED TOP LAND HEIGHT AND TIGHT TOP LAND PISTON PROFILE | India | 2015-01-05 | 82/CHE/2015 | | |

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| SYSTEMS AND METHODS FOR CONTROLLING EMISSIONS IN AN INTERNAL COMBUSTION ENGINE THROUGH THE CONTROL OF TEMPERATURE AT THE INLET OF AN AMMONIA SLIP CATALYST ASSEMBLY | India | 2015-01-06 | 98/CHE/2015 | | |
| SYSTEMS AND METHODS FOR MODEL BASED CONTROL OF CATALYTIC CONVERTER SYSTEMS | India | 2015-12-08 | 6545/CHE/2015 | | |
| SPARK PLUG ELECTRODE GAP SETTING TOOL | India | 2015-09-26 | 5141/CHE/2015 | | |
| POWER GENERATION SYSTEM AND METHOD WITH RESISTIVE BRAKING CAPABILITY | India | 2015-12-11 | 6658/CHE/2015 | | |
| SYSTEMS AND METHODS FOR CONTROLLING AFTERTREATMENT SYSTEMS | India | 2016-03-02 | 201644007271 | | |
| SYSTEM AND METHOD FOR LOCATING ENGINE NOISE | India | 2015-12-23 | 6860/CHE/2015 | | |
| KNOCK SENSOR SYSTEMS AND METHODS FOR DETECTION OF COMPONENT CONDITIONS | India | 2016-04-21 | 201644013824 | | |
| SENSOR FOR DETERMINING ENGINE CHARACTERISTICS | India | 2015-12-30 | 7072/CHE/2015 | | |
| METHOD AND SYSTEM TO DETERMINE LOCATION OF PEAK FIRING PRESSURE | India | 2016-02-17 | 201644005486 | | |
| SYSTEM AND METHOD FOR DETECTING RECIPROCATING DEVICE ABNORMALITIES UTILIZING STANDARD QUALITY CONTROL TECHNIQUES | India | 2016-01-06 | 201644000441 | | |

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| SYSTEM AND METHOD FOR MODEL BASED AND MAP BASED THROTTLE POSITION DERIVATION AND MONITORING | India | 2016-02-04 | 201644003930 | | |
| INDUCTION GENERATOR SYSTEM WITH A GRID-LOSS RIDE-THROUGH CAPABILITY | India | 2014-10-21 | 5251/CHE/2014 | | |
| SYSTEMS AND METHODS TO DISTINGUISH ENGINE KNOCK FROM PISTON SLAP | India | 2016-03-09 | 201644008132 | | |
| METHODS AND SYSTEMS TO DERIVE KNOCK SENSOR CONDITIONS | India | 2016-02-04 | 201644003933 | | |
| SYSTEM AND METHOD FOR DETECTING OPERATING EVENTS OF AN ENGINE | India | 2016-01-25 | 201644002813 | | |
| METHODS AND SYSTEMS TO CHARACTERIZE NOISES SENSED BY A KNOCK SENSOR | India | 2015-12-23 | 6857/CHE/2015 | | |
| PISTON ASSEMBLY FOR A RECIPROCATING ENGINE | India | 2016-01-06 | 201644000498 | | |
| SYSTEM AND METHOD FOR IMPROVED JOURNAL BEARING OPERATIONS | India | 2015-12-18 | 6773/CHE/2015 | | |
| METHODS AND SYSTEMS TO DERIVE ENGINE COMPONENT HEALTH USING TOTAL HARMONIC DISTORTION IN A KNOCK SENSOR SIGNAL | India | 2016-02-12 | 201644004935 | | |
| SYSTEM AND METHOD FOR LOCATING AN ENGINE EVENT | India | 2016-03-15 | 201644008944 | | |
| COATING OF A JOURNAL BEARING SYSTEM AND AN ASSOCIATED METHOD THEREOF | India | 2015-12-22 | 6841/CHE/2015 | | |
| COATING OF A VALVE SYSTEM AND AN ASSOCIATED METHOD THEREOF | India | 2015-12-22 | 6842/CHE/2015 | | |

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| JOINT-LESS CONTINUOUS JOURNAL BEARINGS | India | 2016-12-16 | 201641042871 | | |
| AN ENGINE AND A METHOD OF OPERATING THE SAME | India | 2017-02-10 | 201741004931 | | |
| SYSTEM AND METHOD FOR PISTON RING PROGNOSTIC | India | 2017-08-18 | 201741029279 | | |
| SYSTEM AND METHOD FOR LOCATING ENGINE NOISE | Israel | 2015-12-15 | 243143 | | |
| ORGANIC RANKINE CYCLE SYSTEMS USING WASTE HEAT FROM CHARGE AIR COOLING | Italy | 2012-05-03 | 502016000063032 | 2016-04-13 | 2522828 |
| INTEGRATED REFORMER AND WASTE HEAT RECOVERY SYSTEM FOR POWER GENERATION | Italy | 2013-10-10 | MI2013A001675 | 2016-01-12 | 1420385 |
| VARIABLE THICKNESS COATINGS FOR CYLINDER LINERS | Italy | 2013-06-20 | 502017000126501 | 2017-08-09 | 2677152 |
| Mixing chamber with spiral channels | Italy | 2012-06-07 | 502016000094734 | 2016-08-10 | 2671630 |
| EMISSIONS CONTROL IN STATIONARY RICH BURN ENGINES | Italy | 2014-07-01 | 502018000007795 | 2017-12-13 | 2821609 |
| SYSTEMS AND METHODS FOR CONTROLLING EMISSIONS IN AN INTERNAL COMBUSTION ENGINE THROUGH THE CONTROL OF TEMPERATURE AT THE INLET OF AN AMMONIA SLIP CATALYST ASSEMBLY | Italy | 2015-01-13 | 502017000129163 | 2017-08-16 | 2894306 |
| EXHAUST AFTERTREATMENT SYSTEM WITH AGING MONITORING OF AN AMMONIA SLIP CATALYST | Italy | 2015-04-15 | 502017000096691 | 2017-06-14 | 2933450 |
| SPARK PLUG ELECTRODE GAP SETTING TOOL | Italy | 2015-10-05 | 15188410.3 | 2018-07-04 | 3006163 |

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| METHOD AND SYSTEM FOR CONTROL OF EMISSIONS IN EXHAUST AFTERTREATMENT SYSTEM | Italy | 2015-12-09 | 502017000128 532 | 2017-08-16 | 3032057 |
| VARIABLE THICKNESS COATINGS FOR CYLINDER LINERS | Japan | 2013-06-17 | 2013-126218 | 2017-10-27 | 6231781 |
| SYSTEMS AND METHODS FOR SPARK TIMING RETARDATION | Japan | | | | |
| GAS DOSAGE CONTROL FOR GAS ENGINE | Japan | 2014-04-23 | 2014-088709 | | |
| EMISSIONS CONTROL IN DIESEL ENGINES | Japan | 2014-11-17 | 2014-232291 | | |
| SYSTEM AND METHOD FOR CONTROL OF EXHAUST GAS RECIRCULATION EGR UTILIZING PROCESS TEMPERATURES | Japan | 2014-10-06 | 2014-205428 | | |
| SYSTEM AND PROGRAM PRODUCT FOR CONTROLLING EXHAUST GAS TEMPERATURE OF ENGINE SYSTEM | Japan | 2014-12-04 | 2014-245443 | | |
| GASEOUS REDUCTANT INJECTION CONTROL SYSTEM | Japan | 2014-10-15 | 2014-210349 | | |
| POWER GENERATION SYSTEM AND METHOD WITH FAULT RIDE THROUGH CAPABILITY | Japan | 2014-11-17 | 2014-232292 | | |
| ONBOARD CATALYST HEALTH MONITORING AND CONTROL SYSTEM ADAPTATION IN INTERNAL COMBUSTION ENGINES | Japan | 2014-11-17 | 2014-232294 | | |
| Systems and Methods for Monitoring Catalyst Deactivation and Controlling an Air/Fuel Ratio | Japan | 2014-09-17 | 2014-188374 | | |
| PISTON ASSEMBLY FOR A RECIPROCATING ENGINE | Japan | 2015-06-01 | 2015-111016 | | |

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| PISTON ASSEMBLY FOR A RECIPROCATING ENGINE | Japan | 2015-06-02 | 2015-111810 | | |
| SYSTEM FOR CONTROLLING DEPOSITS ON CYLINDER LINER AND PISTON OF RECIPROCATING ENGINE | Japan | 2015-08-14 | 2015-160008 | | |
| EMISSION CONTROL IN RICH BURN NATURAL GAS ENGINES | Japan | 2015-03-20 | 2015-057029 | | |
| PISTON ASSEMBLY FOR A RECIPROCATING ENGINE | Japan | 2015-06-02 | 2015-111811 | | |
| BASE-FRAME ASSEMBLY FOR A COMBUSTION ENGINE | Japan | 2016-05-06 | 2016-092921 | | |
| PISTON WITH REDUCED TOP LAND HEIGHT AND TIGHT TOP LAND PISTON PROFILE | Japan | 2015-01-08 | 2015-001930 | | |
| SYSTEMS AND METHODS FOR CONTROLLING EMISSIONS IN AN INTERNAL COMBUSTION ENGINE THROUGH THE CONTROL OF TEMPERATURE AT THE INLET OF AN AMMONIA SLIP CATALYST ASSEMBLY | Japan | 2015-01-09 | 2015-002718 | | |
| EXHAUST AFTER TREATMENT SYSTEM WITH CATALYTIC DEACTIVATION MONITORING | Japan | 2015-04-09 | 2015-079650 | | |
| CONDITION BASED ENGINE PARTS MONITORING | Japan | 2016-02-26 | 2016-035004 | | |
| SYSTEM AND METHOD FOR IMPROVING RESPONSE TIME OF A BRAKING UNIT | Japan | 2015-07-22 | 2015-144650 | | |
| SYSTEMS AND METHODS FOR MODEL BASED CONTROL OF CATALYTIC CONVERTER SYSTEMS | Japan | 2015-12-04 | 2015-237084 | | |

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| EXHAUST AFTERTREATMENT SYSTEM WITH CATALYTIC DEACTIVATION MONITORING | Japan | 2015-04-08 | 2015-078846 | | |
| SPARK PLUG ELECTRODE GAP SETTING TOOL | Japan | 2015-10-02 | 2015-196349 | | |
| POWER GENERATION SYSTEM AND METHOD WITH RESISTIVE BRAKING CAPABILITY | Japan | 2015-12-03 | 2015-236194 | | |
| SYSTEMS AND METHODS FOR CONTROLLING AFTERTREATMENT SYSTEMS | Japan | 2016-02-25 | 2016-033703 | | |
| SYSTEM AND METHOD FOR LOCATING ENGINE NOISE | Japan | 2015-12-24 | 2015-250816 | | |
| KNOCK SENSOR SYSTEMS AND METHODS FOR DETECTION OF COMPONENT CONDITIONS | Japan | 2016-04-15 | 2016-081598 | | |
| SENSOR FOR DETERMINING ENGINE CHARACTERISTICS | Japan | 2015-12-25 | 2015-252726 | | |
| METHOD AND SYSTEM TO DETERMINE LOCATION OF PEAK FIRING PRESSURE | Japan | 2016-02-12 | 2016-024304 | | |
| SYSTEM AND METHOD FOR DETECTING RECIPROCATING DEVICE ABNORMALITIES UTILIZING STANDARD QUALITY CONTROL TECHNIQUES | Japan | 2015-12-29 | 2015-257553 | | |
| SYSTEM AND METHOD FOR MODEL BASED AND MAP BASED THROTTLE POSITION DERIVATION AND MONITORING | Japan | 2016-01-28 | 2016-013886 | | |
| INDUCTION GENERATOR SYSTEM WITH A GRID- LOSS RIDE-THROUGH CAPABILITY | Japan | 2015-10-15 | 2015-203318 | | |

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| SYSTEMS AND METHODS TO DISTINGUISH ENGINE KNOCK FROM PISTON SLAP | Japan | 2016-03-04 | 2016-041659 | | |
| METHODS AND SYSTEMS TO DERIVE KNOCK SENSOR CONDITIONS | Japan | 2016-02-02 | 2016-017592 | | |
| SYSTEM AND METHOD FOR DETECTING OPERATING EVENTS OF AN ENGINE | Japan | 2016-01-22 | 2016-010206 | | |
| METHODS AND SYSTEMS TO CHARACTERIZE NOISES SENSED BY A KNOCK SENSOR | Japan | 2015-12-24 | 2015-250817 | | |
| KNOCK SENSOR NETWORK SYSTEMS AND METHODS FOR CHARACTERIZING NOISES | Japan | 2016-03-18 | 2017-551075 | | |
| PISTON ASSEMBLY FOR A RECIPROCATING ENGINE | Japan | 2016-01-06 | 2016-000775 | | |
| SYSTEMS AND METHODS FOR ESTIMATING A TIME OF AN ENGINE EVENT | Japan | 2016-03-31 | 2016-069870 | | |
| METHODS AND SYSTEMS TO DERIVE ENGINE COMPONENT HEALTH USING TOTAL HARMONIC DISTORTION IN A KNOCK SENSOR SIGNAL | Japan | 2016-02-04 | 2016-019410 | | |
| SYSTEM AND METHOD FOR LOCATING AN ENGINE EVENT | Japan | 2016-03-16 | 2016-051793 | | |
| SYSTEM AND METHOD FOR INJECTION CONTROL OF UREA IN SELECTIVE CATALYST REDUCTION | Japan | 2016-04-08 | 2016-077703 | | |
| DUAL FUEL SYSTEM FOR A COMBUSTION ENGINE | Japan | 2016-06-23 | 2017-567618 | | |
| RECIPROCATING COMPRESSOR FLOW SENSING | Japan | 2017-10-04 | 2017-193924 | | |
| JOINT-LESS CONTINUOUS JOURNAL BEARINGS | Japan | 2017-12-04 | 2017-232273 | | |

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| VARIABLE THICKNESS COATINGS FOR CYLINDER LINERS | Korea, Republic of (KR) | 2013-06-19 | 1020130070330 | | |
| GAS DOSAGE CONTROL FOR GAS ENGINE | Korea, Republic of (KR) | 2014-05-07 | 2014-0054162 | 2016-07-07 | 10-1639203 |
| Rich Burn Internal Combustion Engine Catalyst Control | Korea, Republic of (KR) | 2014-02-05 | 2014-0012897 | | |
| EMISSIONS CONTROL IN DIESEL ENGINES | Korea, Republic of (KR) | 2014-11-17 | 10-2014-0160067 | | |
| SYSTEM AND PROGRAM PRODUCT FOR CONTROLLING EXHAUST GAS TEMPERATURE OF ENGINE SYSTEM | Korea, Republic of (KR) | 2014-12-10 | 1020140177443 | | |
| GASEOUS REDUCTANT INJECTION CONTROL SYSTEM | Korea, Republic of (KR) | 2014-10-16 | 1020140139567 | | |
| POWER GENERATION SYSTEM AND METHOD WITH FAULT RIDE THROUGH CAPABILITY | Korea, Republic of (KR) | 2014-11-07 | 1020140154206 | | |
| ONBOARD CATALYST HEALTH MONITORING AND CONTROL SYSTEM ADAPTATION IN INTERNAL COMBUSTION ENGINES | Korea, Republic of (KR) | 2014-11-18 | 1020140160969 | | |
| Systems and Methods for Monitoring Catalyst Deactivation and Controlling an Air/Fuel Ratio | Korea, Republic of (KR) | 2014-09-19 | 1020140124801 | | |
| PISTON ASSEMBLY FOR A RECIPROCATING ENGINE | Korea, Republic of (KR) | 2015-06-04 | 10-2015-0079093 | | |
| PISTON ASSEMBLY FOR A RECIPROCATING ENGINE | Korea, Republic of (KR) | 2015-06-03 | 10-20150078435 | | |
| SYSTEM FOR CONTROLLING DEPOSITS ON CYLINDER LINER AND PISTON OF RECIPROCATING ENGINE | Korea, Republic of (KR) | 2015-08-11 | 10-2015-0112972 | | |

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| EMISSION CONTROL IN RICH BURN NATURAL GAS ENGINES | Korea, Republic of (KR) | 2015-03-26 | 1020150042347 | | |
| PISTON ASSEMBLY FOR A RECIPROCATING ENGINE | Korea, Republic of (KR) | 2015-06-05 | 10-2015-0079686 | | |
| BASE-FRAME ASSEMBLY FOR A COMBUSTION ENGINE | Korea, Republic of (KR) | 2016-05-10 | 10-2016-0056913 | | |
| PISTON WITH REDUCED TOP LAND HEIGHT AND TIGHT TOP LAND PISTON PROFILE | Korea, Republic of (KR) | 2015-01-12 | 1020150004016 | | |
| SYSTEMS AND METHODS FOR CONTROLLING EMISSIONS IN AN INTERNAL COMBUSTION ENGINE THROUGH THE CONTROL OF TEMPERATURE AT THE INLET OF AN AMMONIA SLIP CATALYST ASSEMBLY | Korea, Republic of (KR) | 2015-01-09 | 1020150003327 | | |
| EXHAUST AFTER TREATMENT SYSTEM WITH CATALYTIC DEACTIVATION MONITORING | Korea, Republic of (KR) | 2015-04-14 | 10-2015-0052329 | | |
| CONDITION BASED ENGINE PARTS MONITORING | Korea, Republic of (KR) | 2016-03-03 | 1020160025706 | | |
| SYSTEMS AND METHODS FOR MODEL BASED CONTROL OF CATALYTIC CONVERTER SYSTEMS | Korea, Republic of (KR) | 2015-12-11 | 1020150177111 | | |
| EXHAUST AFTERTREATMENT SYSTEM WITH CATALYTIC DEACTIVATION MONITORING | Korea, Republic of (KR) | 2015-04-15 | 10-2015-0053242 | | |
| SPARK PLUG ELECTRODE GAP SETTING TOOL | Korea, Republic of (KR) | 2015-10-05 | 1020150139615 | | |

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| POWER GENERATION SYSTEM AND METHOD WITH RESISTIVE BRAKING CAPABILITY | Korea, Republic of (KR) | 2015-12-10 | 1020150175972 | | |
| SYSTEMS AND METHODS FOR CONTROLLING AFTERTREATMENT SYSTEMS | Korea, Republic of (KR) | 2016-02-26 | 1020160023652 | | |
| SYSTEM AND METHOD FOR LOCATING ENGINE NOISE | Korea, Republic of (KR) | 2015-12-30 | 1020150190018 | | |
| KNOCK SENSOR SYSTEMS AND METHODS FOR DETECTION OF COMPONENT CONDITIONS | Korea, Republic of (KR) | 2016-04-15 | 1020160046298 | | |
| SENSOR FOR DETERMINING ENGINE CHARACTERISTICS | Korea, Republic of (KR) | 2016-01-04 | 1020160000230 | | |
| METHOD AND SYSTEM TO DETERMINE LOCATION OF PEAK FIRING PRESSURE | Korea, Republic of (KR) | 2016-02-15 | 1020160017022 | | |
| SYSTEM AND METHOD FOR DETECTING RECIPROCATING DEVICE ABNORMALITIES UTILIZING STANDARD QUALITY CONTROL TECHNIQUES | Korea, Republic of (KR) | 2016-01-05 | 2016-0000845 | | |
| SYSTEM AND METHOD FOR MODEL BASED AND MAP BASED THROTTLE POSITION DERIVATION AND MONITORING | Korea, Republic of (KR) | 2016-02-04 | 1020160014408 | | |
| INDUCTION GENERATOR SYSTEM WITH A GRID-LOSS RIDE-THROUGH CAPABILITY | Korea, Republic of (KR) | 2015-10-15 | 1020150143895 | | |
| SYSTEMS AND METHODS TO DISTINGUISH ENGINE KNOCK FROM PISTON SLAP | Korea, Republic of (KR) | 2016-03-07 | 1020160026994 | | |
| SYSTEM AND METHOD FOR DETECTING OPERATING EVENTS OF AN ENGINE | Korea, Republic of (KR) | 2016-01-29 | 1020160011581 | | |

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| METHODS AND SYSTEMS TO CHARACTERIZE NOISES SENSED BY A KNOCK SENSOR | Korea, Republic of (KR) | 2015-12-30 | 1020150189745 | | |
| KNOCK SENSOR NETWORK SYSTEMS AND METHODS FOR CHARACTERIZING NOISES | Korea, Republic of (KR) | 2016-03-18 | 1020177031651 | | |
| 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 | 1020160038374 | | |
| METHODS AND SYSTEMS TO DERIVE ENGINE COMPONENT HEALTH USING TOTAL HARMONIC DISTORTION IN A KNOCK SENSOR SIGNAL | Korea, Republic of (KR) | 2016-02-03 | 1020160013349 | | |
| SYSTEM AND METHOD FOR LOCATING AN ENGINE EVENT | Korea, Republic of (KR) | 2016-03-24 | 1020160035401 | | |
| DUAL FUEL SYSTEM FOR A COMBUSTION ENGINE | Korea, Republic of (KR) | 2016-06-23 | 1020187003902 | | |
| RECIPROCATING COMPRESSOR FLOW SENSING | Korea, Republic of (KR) | 2017-10-11 | 10- 2017-0130176 | | |
| JOINT-LESS CONTINUOUS JOURNAL BEARINGS | Korea, Republic of (KR) | 2017-12-14 | 1020170172082 | | |
| 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/US2016/036436 | | |
| METHOD AND SYSTEM FOR PORTABLE ENGINE HEALTH MONITORING | Patent Cooperation Treaty | 2016-06-29 | PCT/US16/039927 | | |

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| COATING OF A SYSTEM AND AN ASSOCIATED METHOD THEREOF | Patent Cooperation Treaty | 2016-12-21 | PCT/US2016/068002 | | |
| SYSTEM AND METHOD FOR LOCATING AN ENGINE EVENT | Patent Cooperation Treaty | 2016-08-31 | PCT/US2016/049694 | | |
| RECIPROCATING ENGINE SYSTEM WITH ELECTRICALLY DRIVEN COMPRESSOR AND METHOD FOR OPERATING SAME | Patent Cooperation Treaty | 2018-01-11 | PCT/US2018/013250 | | |
| REGENERATIVE THERMAL OXIDIZER SYSTEM AND METHOD FOR OPERATING REGENERATIVE THERMAL OXIDIZER SYSTEM | Patent Cooperation Treaty | 2017-06-23 | PCT/CN2017/089712 | | |
| SYSTEM AND METHOD FOR INSTALLING SPARK PLUGS | Patent Cooperation Treaty | 2018-01-30 | PCT/US18/015877 | | |
| DRILLING SYSTEM AND POWER SUPPLY METHOD | Russian Federation | 2015-06-17 | 2015123290 | | |
| Mixing chamber with spiral channels | Spain | 2012-06-07 | 12171197.2 | 2016-08-10 | 2671630 |
| VARIABLE THICKNESS COATINGS FOR CYLINDER LINERS | Switzerland | 2013-06-20 | 13173010.3 | 2017-08-09 | 2677152 |
| SYSTEMS AND METHODS FOR CONTROLLING EMISSIONS IN AN INTERNAL COMBUSTION ENGINE THROUGH THE CONTROL OF TEMPERATURE AT THE INLET OF AN AMMONIA SLIP CATALYST ASSEMBLY | Switzerland | 2015-01-13 | 15150923.9 | 2017-08-16 | 2894306 |
| METHOD AND SYSTEM FOR CONTROL OF EMISSIONS IN EXHAUST AFTERTREATMENT SYSTEM | Switzerland | 2015-12-09 | 15198666.8 | 2017-08-16 | 3032057 |
| EMISSIONS CONTROL IN STATIONARY RICH BURN ENGINES | United Kingdom | 2014-07-01 | 14175159.4 | 2017-12-13 | 2821609 |

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| EXHAUST AFTERTREATMENT SYSTEM WITH AGING MONITORING OF AN AMMONIA SLIP CATALYST | United Kingdom | 2015-04-15 | 15163722.0 | 2017-06-14 | 2933450 |
| SPARK PLUG ELECTRODE GAP SETTING TOOL | United Kingdom | 2015-10-05 | 15188410.3 | 2018-07-04 | 3006163 |
| SYSTEM AND METHOD FOR POWER GENERATION IN RANKINE CYCLE | United States of America | 2006-12-13 | 11/609919 | 2009-09-29 | 7594399 |
| ADAPTIVE MILLER CYCLE ENGINE | United States of America | 2008-02-29 | 12/040225 | 2010-04-06 | 7690336 |
| SYSTEM AND METHOD FOR RECOVERING WASTE HEAT | United States of America | 2007-06-29 | 11/770895 | 2013-10-22 | 8561405 |
| SYSTEM AND METHOD FOR CONTROLLING AN EXPANSION SYSTEM | United States of America | 2007-12-14 | 11/956457 | 2012-05-29 | 8186161 |
| TWO-PHASE EXPANSION SYSTEM AND METHOD FOR ENERGY RECOVERY | United States of America | 2008-11-20 | 12/274608 | 2011-08-02 | 7987676 |
| SYSTEM FOR CLOSED- LOOP CONTROL OF COMBUSTION IN ENGINES | United States of America | 2008-11-14 | 12/270878 | 2011-08-09 | 7996142 |
| TURBINE EXHAUST RECIRCULATION | United States of America | 2009-08-27 | 12/548526 | 2013-07-09 | 8479489 |
| SPIRAL RECUPERATIVE HEAT EXCHANGING SYSTEM | United States of America | 2009-11-30 | 12/627059 | 2014-05-13 | 8721981 |
| POWER GENERATION SYSTEM AND METHOD WITH VOLTAGE FAULT RIDE-THROUGH CAPABILITY | United States of America | 2009-11-04 | 12/611988 | 2014-04-08 | 8692523 |
| AUTO OPTIMIZING CONTROL SYSTEM FOR ORGANIC RANKINE CYCLE PLANTS | United States of America | 2010-02-25 | 12/712954 | 2013-11-26 | 8590307 |
| SYSTEM AND METHOD FOR COOLING AN EXPANDER | United States of America | 2010-09-29 | 12/892973 | 2014-06-03 | 8739541 |
| TURBINE INLET CONDITION CONTROLLED ORGANIC RANKINE CYCLE | United States of America | 2010-06-18 | 12/818234 | 2014-08-26 | 8813498 |

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| INTEGRATED GENERATOR COOLING SYSTEM | United States of America | 2011-04-29 | 13/097101 | 2014-11-04 | 8875515 |
| ELECTROMAGNETIC BRAKING SYSTEMS AND METHODS | United States of America | 2012-06-28 | 13/536245 | 2016-08-09 | 9413217B2 |
| ORGANIC RANKINE CYCLE SYSTEMS USING WASTE HEAT FROM CHARGE AIR COOLING | United States of America | 2011-05-13 | 13/106929 | 2012-11-06 | 8302399 |
| INTEGRATION OF WASTE HEAT FROM CHARGE AIR COOLING INTO A CASCADED ORGANIC RANKINE CYCLE SYSTEM | United States of America | 2011-04-20 | 13/090363 | 2014-02-18 | 8650879 |
| SYSTEMS AND METHODS FOR COLD STARTUP OF RANKINE CYCLE DEVICES | United States of America | 2012-01-06 | 13/344679 | 2016-02-02 | 9249691B2 |
| INTEGRATED REFORMER AND WASTE HEAT RECOVERY SYSTEM FOR POWER GENERATION | United States of America | 2012-10-24 | 13/658986 | 2017-07-18 | 9708973 |
| VARIABLE THICKNESS COATINGS FOR CYLINDER LINERS | United States of America | 2012-06-20 | 13/527699 | 2017-01-03 | 9534559 |
| METHOD OF PRODUCING A SPARK GAP FOR AN ELECTRODE SUPPORT USING SACRIFICIAL MATERIAL | United States of America | 2012-01-24 | 13/357307 | 2013-07-16 | 8485857 |
| SYSTEMS AND METHODS FOR SPARK TIMING RETARDATION | United States of America | 2017-11-27 | 15/823303 | | |
| MIXING DEVICE HAVING A PLURALITY OF MIXING CHANNELS | United States of America | 2012-11-29 | 13/688518 | 2016-02-23 | 9266074B2 |
| SYSTEM AND METHOD OF EXHAUST GAS RECIRCULATION | United States of America | 2015-11-18 | 14/945322 | 2018-03-27 | 9926891 |
| METHOD OF PRODUCING AN ELECTRODE SUPPORT USING BRAZING | United States of America | 2012-01-24 | 13/357314 | 2014-12-16 | 8912713 |
| SYSTEM FOR COOLING POWER GENERATION SYSTEM | United States of America | 2013-03-04 | 13/783662 | 2014-12-30 | 8922033B2 |

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| GAS DOSAGE CONTROL FOR GAS ENGINE | United States of America | 2013-05-10 | 13/891807 | 2017-02-28 | 9581089 |
| Rich Burn Internal Combustion Engine Catalyst Control | United States of America | 2013-02-06 | 13/760630 | 2014-11-18 | 8887490 |
| LAMBDA VIRTUAL SENSOR SYSTEMS AND METHODS FOR A COMBUSTION ENGINE | United States of America | 2015-08-11 | 14/823806 | 2017-08-01 | 9719445 |
| Emissions Control in Stationary Rich Burn Engines | United States of America | 2013-07-02 | 13/933766 | 2015-06-16 | 9057301 |
| SYSTEM AND METHOD FOR CONTROL OF EXHAUST GAS RECIRCULATION EGR UTILIZING PROCESS TEMPERATURES | United States of America | 2013-10-11 | 14/052243 | 2016-08-23 | 9422877B2 |
| SYSTEM AND PROGRAM PRODUCT FOR CONTROLLING EXHAUST GAS TEMPERATURE OF ENGINE SYSTEM | United States of America | 2013-12-11 | 14/102615 | 2017-12-26 | 9850841 |
| GASEOUS REDUCTANT INJECTION CONTROL SYSTEM | United States of America | 2013-10-24 | 14/062098 | 2016-01-26 | 9243534B2 |
| ONBOARD CATALYST HEALTH MONITORING AND CONTROL SYSTEM ADAPTATION IN INTERNAL COMBUSTION ENGINES | United States of America | 2013-11-19 | 14/083823 | 2016-09-06 | 9435246B2 |
| Systems and Methods for Monitoring Catalyst Deactivation and Controlling an Air/Fuel Ratio | United States of America | 2013-09-26 | 14/038014 | 2017-05-30 | 9664094 |
| SYSTEMS AND METHODS FOR CONTROLLING ACCELERATION OF A POWER GENERATOR | United States of America | 2014-11-13 | 14/540536 | 2017-03-21 | 9601918 |
| POWER INTEGRATED SYSTEM AND METHOD FOR DRILLING RIG AND OIL/GAS PRODUCTION EQUIPMENT | United States of America | 2015-02-05 | 14/614705 | 2018-07-10 | 10018044 |

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| PISTON ASSEMBLY FOR A RECIPROCATING ENGINE | United States of America | 2014-06-06 | 14/298864 | 2016-10-18 | 9470179B2 |
| CYLINDER HEAD ACCELERATION MEASUREMENT FOR VALVE TRAIN DIAGNOSTICS SYSTEM AND METHOD | United States of America | 2015-06-22 | 14/745986 | 2018-04-03 | 9933334 |
| PISTON ASSEMBLY FOR A RECIPROCATING ENGINE | United States of America | 2014-06-06 | 14/298867 | 2015-12-01 | 9200589 |
| SYSTEM FOR CONTROLLING DEPOSITS ON CYLINDER LINER AND PISTON OF RECIPROCATING ENGINE | United States of America | 2014-08-21 | 14/465564 | 2016-06-07 | 9359971B2 |
| SYSTEM AND METHOD FOR ENGINE CONTROL | United States of America | 2015-08-06 | 15/749627 | | |
| EMISSION CONTROL IN RICH BURN NATURAL GAS ENGINES | United States of America | 2014-03-27 | 14/226934 | 2015-10-06 | 9149768 |
| PISTON ASSEMBLY FOR A RECIPROCATING ENGINE | United States of America | 2014-06-06 | 14/298869 | 2016-05-10 | 9334830B2 |
| BASE-FRAME ASSEMBLY FOR A COMBUSTION ENGINE | United States of America | 2015-05-12 | 14/710257 | 2018-04-03 | 9932893 |
| PISTON WITH REDUCED TOP LAND HEIGHT AND TIGHT TOP LAND PISTON PROFILE | United States of America | 2014-01-14 | 14/154462 | 2018-04-03 | 9932930 |
| SYSTEMS AND METHODS FOR CONTROLLING EMISSIONS IN AN INTERNAL COMBUSTION ENGINE THROUGH THE CONTROL OF TEMPERATURE AT THE INLET OF AN AMMONIA SLIP CATALYST ASSEMBLY | United States of America | 2014-01-14 | 14/154418 | 2015-06-16 | 9056279 |

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| EXHAUST AFTERTREATMENT SYSTEM WITH CATALYTIC DEACTIVATION MONITORING | United States of America | 2014-04-15 | 14/252849 | 2016-02-23 | 9267412B2 |
| SYSTEMS AND METHODS FOR USING TRANSPORT TIME TO ESTIMATE ENGINE AFTERTREATMENT SYSTEM CHARACTERISTICS | United States of America | 2015-04-07 | 14/680934 | 2017-05-23 | 9657678 |
| CYLINDER LINER WITH SLOTS | United States of America | 2014-04-07 | 14/246301 | 2015-11-24 | 9194327 |
| SYSTEMS AND METHODS FOR IN-CYLINDER PRESSURE ESTIMATION USING PRESSURE WAVE MODELING | United States of America | 2015-10-26 | 14/923009 | | |
| CONDITION BASED ENGINE PARTS MONITORING | United States of America | 2015-03-05 | 14/639704 | | |
| SYSTEM AND METHOD FOR IMPROVING RESPONSE TIME OF A BRAKING UNIT | United States of America | 2014-07-24 | 14/339552 | 2016-08-02 | 9407187B2 |
| SYSTEMS AND METHODS FOR MODEL BASED CONTROL OF CATALYTIC CONVERTER SYSTEMS | United States of America | 2014-12-12 | 14/569213 | 2017-03-28 | 9605579 |
| DRILLING SYSTEM AND POWER SUPPLY METHOD | United States of America | 2015-06-18 | 14/743444 | 2018-07-10 | 10017993 |
| EXHAUST AFTERTREATMENT SYSTEM WITH CATALYTIC DEACTIVATION MONITORING | United States of America | 2014-04-15 | 14/252890 | 2016-01-05 | 9228469B2 |
| SYSTEMS AND METHODS FOR DETECTING ANOMALIES AT IN- CYLINDER PRESSURE SENSORS | United States of America | 2015-10-26 | 14/923032 | 2017-03-07 | 9587552 |

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| SPARK PLUG ELECTRODE GAP SETTING TOOL | United States of America | 2014-10-08 | 14/509727 | 2016-08-30 | 9431797B2 |
| POWER GENERATION SYSTEM AND METHOD WITH RESISTIVE BRAKING CAPABILITY | United States of America | 2014-12-11 | 14/566749 | 2018-08-14 | 10050433 |
| SYSTEMS AND METHODS FOR CONTROLLING AFTERTREATMENT SYSTEMS | United States of America | 2015-03-02 | 14/635816 | 2016-12-13 | 9517437B2 |
| SYSTEM AND METHOD FOR LOCATING ENGINE NOISE | United States of America | 2014-12-31 | 14/587434 | 2017-09-05 | 9752949 |
| HUMAN MACHINE INTERFACE (HMI) GUIDED MECHANICAL FUEL SYSTEM ADJUSTMENT | United States of America | 2014-11-12 | 14/539539 | 2017-08-01 | 9719454 |
| KNOCK SENSOR SYSTEMS AND METHODS FOR DETECTION OF COMPONENT CONDITIONS | United States of America | 2015-04-24 | 14/695335 | | |
| METHOD AND SYSTEM TO DETERMINE LOCATION OF PEAK FIRING PRESSURE | United States of America | 2015-02-19 | 14/626585 | 2018-06-19 | 10001077 |
| SYSTEM AND METHOD FOR DETECTING RECIPROCATING DEVICE ABNORMALITIES UTILIZING STANDARD QUALITY CONTROL TECHNIQUES | United States of America | 2015-01-07 | 14/591192 | 2017-10-31 | 9803567 |
| SYSTEM AND METHOD FOR ENGINE EMISSION CONTROL HARNESS | United States of America | 2015-02-19 | 14/626511 | | |
| SYSTEM AND METHOD FOR MODEL BASED AND MAP BASED THROTTLE POSITION DERIVATION AND MONITORING | United States of America | 2015-02-04 | 14/614237 | 2016-12-27 | 9528445B2 |
| METHODS AND SYSTEMS TO CONTROL EXHAUST GAS RECIRCULATION | United States of America | 2015-06-22 | 14/745868 | 2018-01-09 | 9863344 |

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| INDUCTION GENERATOR SYSTEM WITH A GRID-LOSS RIDE-THROUGH CAPABILITY | United States of America | 2015-10-21 | 14/918950 | 2018-09-18 | 10079485 |
| SILENCER FOR MID-BED AIR INJECTION MIXING | United States of America | 2014-11-26 | 14/554706 | 2016-05-24 | 9347358B1 |
| SYSTEM AND METHOD OF COOLING VALVE WITH MATERIAL IN CAVITY | United States of America | 2014-12-10 | 14/565827 | 2017-06-20 | 9683467 |
| METHOD AND SYSTEM FOR CONTROL OF EMISSIONS IN EXHAUST AFTERTREATMENT SYSTEM | United States of America | 2014-12-12 | 14/568580 | 2016-07-26 | 9399965B2 |
| SYSTEM AND METHOD FOR DETECTION OF CHANGES TO COMPRESSION RATIO AND PEAK FIRING PRESSURE OF AN ENGINE | United States of America | 2015-07-02 | 14/790785 | | |
| SYSTEMS AND METHODS TO DISTINGUISH ENGINE KNOCK FROM PISTON SLAP | United States of America | 2015-03-11 | 14/644526 | 2017-07-04 | 9695761 |
| SYSTEM AND METHOD FOR REGULATING EXHAUST GAS RECIRCULATION IN AN ENGINE | United States of America | 2014-12-31 | 14/587407 | 2017-01-31 | 9556810 |
| ESTIMATION OF CYLINDER CONDITIONS USING A KNOCK SENSOR | United States of America | 2017-10-30 | 15/797555 | | |
| SYSTEM AND METHOD FOR DETERMINING KNOCK MARGIN FOR MULTI-CYLINDER ENGINES | United States of America | 2015-05-06 | 14/705081 | 2017-10-10 | 9784231 |
| METHODS AND SYSTEMS TO DERIVE KNOCK SENSOR CONDITIONS | United States of America | 2015-02-09 | 14/617458 | 2018-02-27 | 9903778 |
| SYSTEM AND METHOD FOR DETECTING OPERATING EVENTS OF AN ENGINE | United States of America | 2015-01-29 | 14/609416 | 2018-01-23 | 9874488 |

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| KNOCK SENSOR NETWORK SYSTEMS AND METHODS FOR CHARACTERIZING NOISES | United States of America | 2015-04-01 | 14/676733 | | |
| PISTON ASSEMBLY FOR A RECIPROCATING ENGINE | United States of America | 2015-01-12 | 14/595013 | 2017-12-19 | 9845765 |
| SYSTEMS AND METHODS FOR ESTIMATING A TIME OF AN ENGINE EVENT | United States of America | 2015-04-07 | 14/680863 | 2018-08-21 | 10054043 |
| SYSTEM AND METHOD FOR IMPROVED JOURNAL BEARING OPERATIONS | United States of America | 2016-11-30 | 16/063386 | | |
| METHODS AND SYSTEMS TO DERIVE ENGINE COMPONENT HEALTH USING TOTAL HARMONIC DISTORTION IN A KNOCK SENSOR SIGNAL | United States of America | 2015-02-12 | 14/621028 | | |
| SYSTEM AND METHOD FOR LOCATING AN ENGINE EVENT | United States of America | 2015-03-24 | 14/667275 | 2017-03-14 | 9593631 |
| SYSTEM AND METHOD HAVING COUPLING WITH LAYERED PORTION | United States of America | 2015-05-11 | 14/709370 | 2017-10-31 | 9803698 |
| SYSTEM AND METHOD FOR INJECTION CONTROL OF UREA IN SELECTIVE CATALYST REDUCTION | United States of America | 2015-04-14 | 14/686350 | 2016-09-06 | 9435244B1 |
| CYLINDER HEAD COVER WITH INTEGRAL SLEEVE | United States of America | 2015-09-08 | 14/847904 | | |
| SYSTEM AND METHOD FOR DETERMINING LOCATION AND VALUE OF PEAK FIRING PRESSURE | United States of America | 2015-08-06 | 14/820156 | 2018-02-20 | 9897021 |
| SYSTEM AND METHOD FOR OXIDANT TEMPERATURE CONTROL | United States of America | 2015-07-02 | 14/790714 | 2018-03-27 | 9926836 |
| SYSTEM AND METHOD OF VALVE WEAR DETECTION | United States of America | 2017-10-27 | 15/796124 | | |
| REAL TIME DETECTION AND DIAGNOSIS OF CHANGE IN PEAK FIRING PRESSURE | United States of America | 2015-12-21 | 14/977226 | | |

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| FUEL SYSTEM FOR A COMBUSTION ENGINE | United States of America | 2015-08-28 | 14/839066 | 2018-04-10 | 9938933 |
| LAMINAR FLOW OF PISTON COOLING JETS | United States of America | 2015-10-20 | 14/918013 | 2018-03-27 | 9926829 |
| SYSTEM AND METHOD FOR CAMSHAFT VIBRATION CONTROL | United States of America | 2015-10-13 | 14/882198 | 2017-11-07 | 9810105 |
| A SYSTEM AND METHOD FOR GENERATOR BRAKING | United States of America | 2015-08-07 | 14/821427 | 2017-01-03 | 9537301 |
| SYSTEM AND METHOD FOR GENERATOR BRAKING USING LAMINATED BRAKE COMPONENTS | United States of America | 2015-08-10 | 15/751167 | | |
| DUAL FUEL SYSTEM FOR A COMBUSTION ENGINE | United States of America | 2015-07-10 | 14/796768 | 2017-08-29 | 9745903 |
| ENGINE CONTROLLER AND METHODS FOR CONTROLLING EMISSION AND POWER GENERATION SYSTEM USING THE SAME | United States of America | 2016-09-15 | 15/265865 | | |
| METHOD AND ENGINE CONTROLLER FOR DIAGNOSING WASTE GATE VALVE MALFUNCTION AND RELATED POWER GENERATION SYSTEM | United States of America | 2016-09-22 | 15/272474 | | |
| AN ANNULAR RING GROOVE OF A PISTON | United States of America | 2015-09-28 | 14/867231 | | |
| SYSTEMS AND METHODS FOR DETECTION OF ENGINE COMPONENT CONDITIONS VIA EXTERNAL SENSORS | United States of America | 2015-06-29 | 14/754128 | 2017-10-10 | 9784635 |
| METHOD AND SYSTEM FOR PORTABLE ENGINE HEALTH MONITORING | United States of America | 2015-06-29 | 14/754206 | | |
| METHODS TO ADAPT AIR-FUEL (A/F) CONTROLS FOR CATALYST AGING | United States of America | 2015-11-16 | 14/942201 | 2018-02-13 | 9890723 |

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| METHODS TO ADAPT REDUCTANT INJECTION CONTROLS FOR CATALYST AGING | United States of America | 2015-11-16 | 14/942644 | 2018-06-19 | 10001046 |
| SYSTEM AND METHOD FOR PREDICTING PEAK PRESSURE VALUES USING KNOCK SENSOR | United States of America | 2015-08-19 | 14/830379 | 2018-01-16 | 9869257 |
| SYSTEM AND METHOD FOR VALVE EVENT DETECTION AND CONTROL | United States of America | 2017-07-12 | 15/648257 | | |
| COVER SYSTEM WITH GASKET SYSTEM THEREFOR | United States of America | 2015-08-05 | 14/818599 | 2017-05-30 | 9664284 |
| COATING OF A SYSTEM AND AN ASSOCIATED METHOD THEREOF | United States of America | 2016-12-21 | 15/777673 | | |
| SYSTEM FOR MONITORING A PRECHAMBER OF AN ENGINE | United States of America | 2015-12-31 | 14/985899 | 2018-09-18 | 10077730 |
| SYSTEM FOR COOLING ENGINE INTAKE FLOW | United States of America | 2016-03-31 | 16/081467 | | |
| SYSTEMS AND METHODS ADJUSTING FOR AFTERTREATMENT SYSTEM CONDITION | United States of America | 2017-09-27 | 15/717914 | | |
| SYSTEMS AND METHODS ADJUSTING FOR AFTERTREATMENT SYSTEM CONDITION AND CONTROL | United States of America | 2017-09-27 | 15/717911 | | |
| SYSTEM AND METHOD FOR DETECTING OPERATING EVENTS OF AN ENGINE VIA MIDI | United States of America | 2017-08-08 | 15/672286 | | |
| RECIPROCATING COMPRESSOR FLOW SENSING | United States of America | 2016-10-11 | 15/290746 | | |
| KNOCK SENSOR SYSTEMS AND METHODS FOR VALVE RECESSION CONDITIONS | United States of America | 2018-01-22 | 15/877363 | | |

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| METHODS AND SYSTEMS FOR DIAGNOSING VALVE DEFECTS IN RECIPROCATING COMPRESSORS | United States of America | 2018-06-25 | 16/017425 | | |
| TWO-STAGE RECIPROCATING COMPRESSOR OPTIMIZATION CONTROL SYSTEM | United States of America | 2017-01-17 | 15/397289 | | |
| THERMALLY COMPENSATED BORE GUIDE SYSTEMS AND METHODS | United States of America | 2018-03-06 | 15/913585 | | |
| SYSTEM FOR COOLING EXHAUST VALVE OF A RECIPROCATING ENGINE | United States of America | 2017-11-02 | 15/802375 | | |
| SYSTEM AND METHOD FOR COMPRESSOR SCHEDULING | United States of America | 2017-09-18 | 15/707227 | | |
| SYSTEM AND METHOD FOR PISTON RING PROGNOSTIC | United States of America | 2018-07-16 | 16/036019 | | |
| EXHAUST AFTERTREATMENT SYSTEM | United States of America | 2018-04-12 | 15/951272 | | |
| PISTON ASSEMBLY WITH OFFSET TIGHT LAND PROFILE | United States of America | 2017-12-06 | 15/833465 | | |
| METHOD AND SYSTEM FOR GAS COMPRESSOR CONTROL | United States of America | 2018-03-01 | 15/909673 | | |

EXHIBIT B

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