

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5781045

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
GENERAL ELECTRIC COMPANY	10/02/2019

RECEIVING PARTY DATA

Name:	Air Products and Chemicals, Inc.
Street Address:	7201 Hamilton Blvd.
Internal Address:	Patent Dept.
City:	Allentown
State/Country:	PENNSYLVANIA
Postal Code:	18195-1501

PROPERTY NUMBERS Total: 128

Property Type	Number
Patent Number:	9005319
Patent Number:	9003796
Patent Number:	9004265
Patent Number:	9011557
Patent Number:	9011559
Patent Number:	9017435
Patent Number:	9022723
Patent Number:	9022302
Patent Number:	9027322
Patent Number:	9028569
Patent Number:	9028568
Patent Number:	9034273
Patent Number:	9033259
Patent Number:	9045705
Patent Number:	9057030
Patent Number:	9074152
Patent Number:	9079199
Patent Number:	9080768
Patent Number:	9085738

PATENT

Property Type	Number
Patent Number:	9085472
Patent Number:	9096807
Patent Number:	9096803
Patent Number:	9102882
Patent Number:	9109173
Patent Number:	9109731
Patent Number:	9108869
Patent Number:	9109171
Patent Number:	9114933
Patent Number:	9115320
Patent Number:	9122280
Patent Number:	9127219
Patent Number:	9127222
Patent Number:	9139788
Patent Number:	9138670
Patent Number:	9138708
Patent Number:	9145524
Patent Number:	9146169
Patent Number:	9150804
Patent Number:	9150801
Patent Number:	9156631
Patent Number:	9163827
Patent Number:	9170174
Patent Number:	9181046
Patent Number:	9200221
Patent Number:	9200223
Patent Number:	9200803
Patent Number:	9200224
Patent Number:	9206806
Patent Number:	9217112
Patent Number:	9222040
Patent Number:	9228740
Patent Number:	9228744
Patent Number:	9260673
Patent Number:	9267831
Patent Number:	9267085
Patent Number:	9266688
Patent Number:	9278326

Property Type	Number
Patent Number:	9279584
Patent Number:	9290708
Patent Number:	9296964
Patent Number:	9296965
Patent Number:	9303221
Patent Number:	9302220
Patent Number:	9321975
Patent Number:	9328631
Patent Number:	9328301
Patent Number:	9328426
Patent Number:	9359558
Patent Number:	9365784
Patent Number:	9381446
Patent Number:	9387997
Patent Number:	9399587
Patent Number:	9404055
Patent Number:	9404054
Patent Number:	9410097
Patent Number:	9416328
Patent Number:	9422488
Patent Number:	9429273
Patent Number:	9427697
Patent Number:	9427698
Patent Number:	9440182
Patent Number:	9453171
Patent Number:	9458398
Patent Number:	9464610
Patent Number:	9464244
Patent Number:	9481838
Patent Number:	9488371
Patent Number:	9528056
Patent Number:	9533899
Patent Number:	9533382
Patent Number:	9545604
Patent Number:	9556390
Patent Number:	9575479
Patent Number:	9604182
Patent Number:	9624441

Property Type	Number
Patent Number:	9637696
Patent Number:	9644158
Patent Number:	9657242
Patent Number:	9656205
Patent Number:	9683184
Patent Number:	9688927
Patent Number:	9702628
Patent Number:	9702372
Patent Number:	9739539
Patent Number:	9758736
Patent Number:	9784121
Patent Number:	9803151
Patent Number:	9822969
Patent Number:	9822966
Patent Number:	9874142
Patent Number:	9879191
Patent Number:	9909217
Patent Number:	9919261
Patent Number:	9919263
Patent Number:	9926939
Patent Number:	9956520
Patent Number:	9957888
Patent Number:	9970424
Patent Number:	9988983
Patent Number:	10005679
Patent Number:	10018416
Patent Number:	10131857
Patent Number:	10131856
Patent Number:	10221067
Patent Number:	10234210
Patent Number:	10287522
Patent Number:	10287520
Patent Number:	10302300

CORRESPONDENCE DATA

Fax Number: (610)481-7083

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.

Phone: 610-481-8761

Email: patentm@airproducts.com
Correspondent Name: ROBIN M. WESTON
Address Line 1: 7201 HAMILTON BLVD.
Address Line 2: PATENT DEPT.
Address Line 4: ALLENTOWN, PENNSYLVANIA 18195-1501

ATTORNEY DOCKET NUMBER: GE LIST 5 6 AND 7

NAME OF SUBMITTER: AMY CARR-TREXLER

SIGNATURE: /Amy Carr-Trexler/

DATE SIGNED: 10/22/2019

Total Attachments: 120

source=GE Assignment#page1.tif
source=GE Assignment#page2.tif
source=GE Assignment#page3.tif
source=GE Assignment#page4.tif
source=GE Assignment#page5.tif
source=GE Assignment#page6.tif
source=GE Assignment#page7.tif
source=GE Assignment#page8.tif
source=GE Assignment#page9.tif
source=GE Assignment#page10.tif
source=GE Assignment#page11.tif
source=GE Assignment#page12.tif
source=GE Assignment#page13.tif
source=GE Assignment#page14.tif
source=GE Assignment#page15.tif
source=GE Assignment#page16.tif
source=GE Assignment#page17.tif
source=GE Assignment#page18.tif
source=GE Assignment#page19.tif
source=GE Assignment#page20.tif
source=GE Assignment#page21.tif
source=GE Assignment#page22.tif
source=GE Assignment#page23.tif
source=GE Assignment#page24.tif
source=GE Assignment#page25.tif
source=GE Assignment#page26.tif
source=GE Assignment#page27.tif
source=GE Assignment#page28.tif
source=GE Assignment#page29.tif
source=GE Assignment#page30.tif
source=GE Assignment#page31.tif
source=GE Assignment#page32.tif
source=GE Assignment#page33.tif
source=GE Assignment#page34.tif
source=GE Assignment#page35.tif
source=GE Assignment#page36.tif

source=GE Assignment#page37.tif
source=GE Assignment#page38.tif
source=GE Assignment#page39.tif
source=GE Assignment#page40.tif
source=GE Assignment#page41.tif
source=GE Assignment#page42.tif
source=GE Assignment#page43.tif
source=GE Assignment#page44.tif
source=GE Assignment#page45.tif
source=GE Assignment#page46.tif
source=GE Assignment#page47.tif
source=GE Assignment#page48.tif
source=GE Assignment#page49.tif
source=GE Assignment#page50.tif
source=GE Assignment#page51.tif
source=GE Assignment#page52.tif
source=GE Assignment#page53.tif
source=GE Assignment#page54.tif
source=GE Assignment#page55.tif
source=GE Assignment#page56.tif
source=GE Assignment#page57.tif
source=GE Assignment#page58.tif
source=GE Assignment#page59.tif
source=GE Assignment#page60.tif
source=GE Assignment#page61.tif
source=GE Assignment#page62.tif
source=GE Assignment#page63.tif
source=GE Assignment#page64.tif
source=GE Assignment#page65.tif
source=GE Assignment#page66.tif
source=GE Assignment#page67.tif
source=GE Assignment#page68.tif
source=GE Assignment#page69.tif
source=GE Assignment#page70.tif
source=GE Assignment#page71.tif
source=GE Assignment#page72.tif
source=GE Assignment#page73.tif
source=GE Assignment#page74.tif
source=GE Assignment#page75.tif
source=GE Assignment#page76.tif
source=GE Assignment#page77.tif
source=GE Assignment#page78.tif
source=GE Assignment#page79.tif
source=GE Assignment#page80.tif
source=GE Assignment#page81.tif
source=GE Assignment#page82.tif
source=GE Assignment#page83.tif
source=GE Assignment#page84.tif

source=GE Assignment#page85.tif
source=GE Assignment#page86.tif
source=GE Assignment#page87.tif
source=GE Assignment#page88.tif
source=GE Assignment#page89.tif
source=GE Assignment#page90.tif
source=GE Assignment#page91.tif
source=GE Assignment#page92.tif
source=GE Assignment#page93.tif
source=GE Assignment#page94.tif
source=GE Assignment#page95.tif
source=GE Assignment#page96.tif
source=GE Assignment#page97.tif
source=GE Assignment#page98.tif
source=GE Assignment#page99.tif
source=GE Assignment#page100.tif
source=GE Assignment#page101.tif
source=GE Assignment#page102.tif
source=GE Assignment#page103.tif
source=GE Assignment#page104.tif
source=GE Assignment#page105.tif
source=GE Assignment#page106.tif
source=GE Assignment#page107.tif
source=GE Assignment#page108.tif
source=GE Assignment#page109.tif
source=GE Assignment#page110.tif
source=GE Assignment#page111.tif
source=GE Assignment#page112.tif
source=GE Assignment#page113.tif
source=GE Assignment#page114.tif
source=GE Assignment#page115.tif
source=GE Assignment#page116.tif
source=GE Assignment#page117.tif
source=GE Assignment#page118.tif
source=GE Assignment#page119.tif
source=GE Assignment#page120.tif

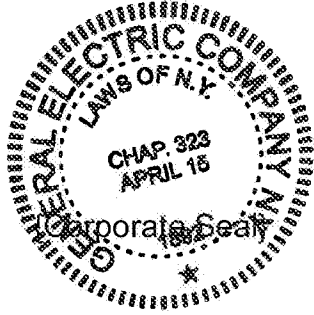
ASSIGNMENT

For value received, **GENERAL ELECTRIC COMPANY**, a corporation of the state of New York ("**GE**"), having an office at One River Road, Schenectady, NY 12345 hereby sells, assigns, and transfers to **AIR PRODUCTS AND CHEMICALS, INC.**, a corporation of the state of Delaware ("**AIR PRODUCTS**"), having an office at 7201 Hamilton Boulevard, Allentown, Pennsylvania 18195-1501, the entire worldwide right, title, and interest in the patents and patent applications listed on Schedule A, in and to all Letters Patents, in any and all countries, which may be issued upon said applications, in and to any divisional, continuation, continuation-in-part, provisional, utility model or reissue applications based thereon, in and to any reexamination certificates issued thereon, and in the inventions or improvements disclosed in such patent and patent applications. Such entire worldwide right, title, and interest shall include the right to sue for infringement occurring prior to the date of this Assignment. **GE** hereby also assigns and conveys to said **AIR PRODUCTS**, all rights accruing by virtue of the Paris Convention for the Protection of Industrial Property (Art. 4) or Patent Cooperation Treaty (PCT), including the right to apply for and to have patents issued in its own name.

GE hereby authorizes and requests the Commissioner of Patents and Trademarks of the United States and the Officials of the Patent Offices of all other countries to issue the Letters Patent of their respective countries to said **AIR PRODUCTS**, as assignee of the entire right, title, and interest in and to the same.

GE hereby promises and agrees to execute all papers and perform all acts necessary to secure to and vest in said **AIR PRODUCTS**, its successors and assigns, the rights conveyed as herein set forth. This agreement shall be effective on the latest execution date of the parties.

[Signature page follows]



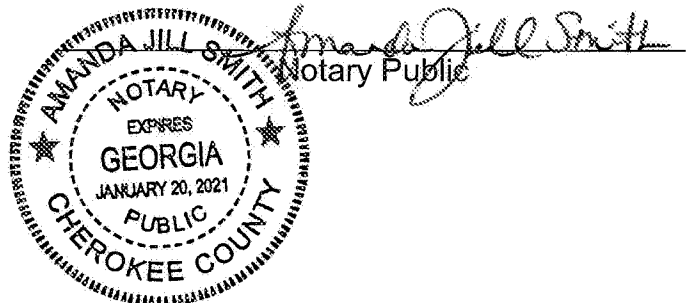
GENERAL ELECTRIC COMPANY

Signature: [Handwritten Signature]
Typed Name: FRANK LANDGRAFF
Title: Senior Intellectual Property Counsel, GE Power
Date: October 2, 2019

State of Georgia
County of Cobb

On this 2nd day of October, 2019, Frank Landgraff, personally appeared before me, and stated under penalty of perjury that he is the Senior Intellectual Property Counsel, GE Power, of **GENERAL ELECTRIC COMPANY** the corporation described in the above instrument; that the seal affixed to said instrument is the corporate seal of such corporation, that such corporation is authorized to make such assignments as appears above, and that he executed this assignment on behalf of such corporation by authorization of its board of directors.

My Commission Expires:
January 20, 2021



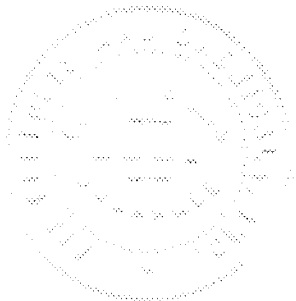
ACCEPTANCE OF ASSIGNMENT

AIR PRODUCTS AND CHEMICALS, INC. hereby acknowledges and accepts the above assignment upon the terms and conditions set forth and referenced herein.

AIR PRODUCTS AND CHEMICALS, INC.

Signature: [Handwritten Signature]
Typed Name: John J. Armstrong, III
Title: Associate General Counsel – Commercial and Intellectual Property
Date: October 8, 2019

{Corporate Seal}



Schedule A

158061-US-1	US	Priority	09/810053	16	2001-03-16	6439137	2002-08-27	2021-03-16	Granted	ANCHORING EXPANSION GAP ASSEMBLY REACTOR AND SOLIDS SETTLER FOR GREY WATER TREATMENT - Reactor and Solids Settler REACTOR AND SOLIDS SETTLER FOR GREY WATER TREATMENT INJECTION FOR MINIMIZING WASTE WATER PROTECTED, REPLACEABL E INSERT FOR A GASIFIER PROTECTED, REPLACEABL E INSERT FOR A GASIFIER generator of the refractory material protecting the exchangeable embedded PROTECTED, REPLACEABL E INSERT FOR A GASIFIER Valipat SA	1159.41
158063-CN-4	China	Designated PCT	02815471.1	26	2002-06-26	12815471.1	2008-06-25	2022-06-26	Granted	CCPIT Patent and Trademark Law Office	1159.41
158063-IT-15	Italy	Designated EP	02742305.2	26	2002-06-26	1417016	2010-06-09	2022-06-26	Granted	GEE POWER	741.58
158063-US-1	US	Priority	09/930035	15	2001-08-15	6607671	2003-08-19	2023-08-19	Granted	GEE POWER	741.58
158064-US-1	US	Priority	09/949779	10	2001-09-10	6656387	2003-12-02	2023-12-02	Granted	GEE POWER	741.58
158073-AU-9	Australia	Designated PCT	200321606	16	2003-01-16	200321606	2007-11-29	2024-07-07	Granted	Davies Collison Cave	865.36
158073-CA-6	Canada	Designated PCT	2473421	16	2003-01-16	2473421	2011-08-09	2023-01-16	Granted	GEE POWER	348.93
158073-CN-11	China	Designated PCT	03802553.1	16	2003-01-16	1304535	2007-03-14	2023-01-16	Granted	CCPIT Patent and Trademark Law Office	1159.41
158073-DE-18	Germany	Designated EP	03731975.3	16	2003-01-16	1468062	2014-07-23	2023-01-16	Granted	Valipat SA	1809.69

PATENT

REEL: 050798 FRAME: 0670

158073-GB-19	UK	Designated EP	03731975.3	2003-01-16	1468062.20	2004-10-20	1468062.23	2014-07-23	2023-01-16	Granted	PROTECTED, REPLACEABL E INSERT FOR A GASIFIER	Valipat SA	2020-01-16	652.46
158073-IN-14	India	Designated PCT	1854/CHE/2004.08-2004.19	2004-08-19	255790	2024-08-19	2013-03-22	2013-03-22	2024-08-19	Granted	PROTECTED, REPLACEABL E INSERT FOR A GASIFIER	De Penning	2020-01-16	638
158073-IT-20	Italy	Designated EP	03731975.3	2003-01-16	1468062.20	2004-10-20	1468062.23	2014-07-23	2023-01-16	Granted	PROTECTED, REPLACEABL E INSERT FOR A GASIFIER	Valipat SA	2020-01-16	741.58
158073-KR-10	Korea	Designated PCT	10-2004-7011068	2003-01-16	200400992.63	2004-11-26	2010-09-01	2010-09-01	2024-07-16	Granted	PROTECTED, REPLACEABL E INSERT FOR A GASIFIER	GEE POWER	2020-09-01	808.13
158073-PL-15	Poland	Designated PCT	P370304	2003-01-16	370304	2005-05-16	2009-12-31	2009-12-31	2023-01-16	Granted	PROTECTED, REPLACEABL E INSERT FOR A GASIFIER	Patpol Ltd	2020-01-16	480.5
158073-US-1	US	Priority	10/345617	2003-01-16	200301405.58A1	2003-07-31	2006-11-28	2006-11-28	2024-10-01	Granted	REFRACTORY PROTECTED REPLACEABL E INSERT FOR A GASIFIER	Cantor Colburn		
158073-US-17	US	Divisional	11/538529	2006-10-04	200701510.85A1	2007-07-05	2011-04-12	2011-04-12	2025-05-04	Granted	PROTECTED REPLACEABL E INSERT FOR A GASIFIER	GEE POWER	2022-10-12	7403
158361-CN-7	China	Secondary	99812218.1	1999-09-01			ZL99812218.1	2003-12-17	2019-09-01	Granted	method for integrated gasification	Patent and Trademark Law Office		
158361-IN-9	India	Secondary	01/376/KO	1999-09-01			203862	2007-03-16	2019-09-01	Granted	method for integrated gasification	URQUHAR LORD		
158361-IT-21	Italy	Designated EP	99944034.0	1999-09-01			1115813	2005-04-06	2019-09-01	Granted	method for integrated gasification	URQUHAR LORD		
158361-JP-10	Japan	Secondary	2000-570265	1999-09-01	JP2002-52465	2002-08-06	2013-05-02	2013-05-02	2019-09-01	Granted	method for integrated gasification	GEE POWER		

PATENT

REEL: 050798 FRAME: 0671

158361-KR-11	Korea	2001- Secondary 7003362	1999-09-01	570316	2006-04-05	2019-09-01	Granted	method for integrated gasification	URQUHAR T-DYKES LORD
158361-PL-14	Poland	Secondary P-346662	1999-09-01	194785	2006-12-20	2019-09-01	Granted	method for integrated gasification	PolSERVICE
158364-US-1	US	Priority 09/019875	1998-02-06	6149889	2000-11-21	2018-02-06	Granted	GASIFICATIO N PLANT FOR DIRECT REDUCTION REACTORS	Nixon & Vanderhye Biggar (Edmonton , CA) (Use Patent and Trademark Law Office
158367-CA-4	Canada	Designated PCT 2338980	1999-07-27	2338980	2010-04-27	2019-07-27	Granted	solvent deasphalting and	ARNOLD WHITE URQUHAR T-DYKES LORD
158367-CN-5	China	Designated 99810542. PCT 2	1999-07-27	1163572	2004-08-25	2019-07-27	Granted	solvent deasphalting and	Ruger Barthelt Abel
158367-DE-10	Germany	Designated 99937506. EP 6	1999-07-27	69920489. 5	2004-09-22	2019-07-27	Granted	solvent deasphalting and	ARNOLD WHITE URQUHAR T-DYKES LORD
158367-IN-6	India	Designated 01/196/KO PCT L	1999-07-27	236182	2009-10-07	2019-07-27	Granted	solvent deasphalting and	ARNOLD WHITE URQUHAR T-DYKES LORD
158367-IT-12	Italy	Designated 99937506. EP 6	1999-07-27	1114126	2004-09-22	2019-07-27	Granted	solvent deasphalting and	ARNOLD WHITE URQUHAR T-DYKES LORD
158371-CN-6	China	Designated 98807311. PCT 0	1998-06-05	ZL9880731 1	2004-03-31	2018-06-05	Granted	WATER FLASH AND VAPOR RECOVERY SYSTEM	CCPIT Patent and Trademark Law Office
158378-CN-4	China	Designated 00815601. PCT 8	2000-09-22	00815601. 8	2005-03-09	2020-09-22	Granted	Reinforced Thermocouple Protection	Patent and Trademark Law Office
158378-JP-6	Japan	Designated 2001-530543 PCT	2000-09-22	5331282	2013-08-02	2020-09-22	Granted	Reinforced Thermocouple Protection	GEE POWER POWER
158378-US-1	US	Secondary 09/679842	2000-10-05	6536950	2003-03-25	2020-12-01	Granted	REINFORCED THERMOCO PLE PROTECTION TUBE HYDROGEN FROM HYDROPROC ESSING	GEE POWER GEE POWER Cantor Colburn LLP
158380-US-1	US	Priority 09/946186	2001-09-05	7004985	2006-02-28	2028-09-19	Granted		

546.42

PATENT

REEL: 050798 FRAME: 0672

158427-US-1	US	Priority	09/139917	1998-08-26	2000-05-16	2018-08-26	Granted	GAS EXPANDER LOCATED IMMEDIATELY UPSTREAM OF GEE COMBUSTION POWER
158452-US-1	US	Priority	09/092324	1998-06-05	2001-01-16	2021-01-16	Granted	ACID GAS SOLVENT FILTRATION SYSTEM PRESSURE GASIFIER FEED INJECTOR COOLING WATER FOR MEASURING TEMPERATURE INSIDE REACTORS
158453-US-1	US	Secondary Completion	09/092595	1998-06-05	2000-12-19	2018-06-05	Granted	URQUHAR T-DYKES LORD
158454-EP-2	EP	Designated PCT	98953778	1998-10-20	2007-06-13	2018-10-20	Published	FOR MEASURING TEMPERATURE INSIDE REACTORS
158454-US-1	US	Priority	09/175809	1998-10-20	2000-04-25	2018-10-20	Granted	FOR MEASURING TEMPERATURE INSIDE REACTORS ACIDIC GASES IN A GASIFICATION POWER SYSTEM WITH PRODUCTION FOLLOWING USING LIQUID FOLLOWING USING LIQUID FOLLOWING USING LIQUID FOLLOWING USING LIQUID FOLLOWING USING LIQUID
158455-US-1	US	Priority	09/150846	1998-09-10	2000-07-18	2018-09-10	Granted	RUGER BARTHEL ABEL
158456-AU-4	Australia	Secondary	199902579	1999-02-03	2002-03-14	2019-02-03	Granted	FERGUSON PIE LTD.
158456-CA-5	Canada	Secondary	2319552	1999-02-03	2004-04-20	2019-02-03	Granted	EDMONTON CA) (USE PATENT AND TRADEMARK LAW OFFICE
158456-CN-6	China	Secondary	99802706	1999-02-03	2003-10-15	2019-02-03	Granted	RUGER BARTHEL ABEL
158456-DE-12	Germany	Designated EP	99905691	1999-02-03	2010-12-08	2019-02-03	Granted	

PATENT

REEL: 050798 FRAME: 0674

158456-EP-3	EP	99905691. Secondary 4	1999-02-03	2010-12-08	2019-02-03	1053392	Granted	FOLLOWING freightpartners IP Law Firm USING LIQUID O2
158456-GB-13	UK	99905691. Designated EP 4	1999-02-03	2010-12-08	2019-02-03	1053392	Granted	FOLLOWING URQUHAR USING LIQUID T-DYKES O2
158456-IN-7	India	99905691. Designated EP 4	1999-02-03	2009-02-02	2019-02-03	228335	Granted	FOLLOWING KANALYSIS CONSULTANTS (P) Ltd USING LIQUID O2
158456-IT-14	Italy	99905691. Designated EP 4	1999-02-03	2010-12-08	2019-02-03	1053392	Granted	FOLLOWING URQUHAR USING LIQUID T-DYKES O2
158456-JP-8	Japan	99905691. Designated EP 4	1999-02-03	2003-08-01	2023-08-01	3457949	Granted	FOLLOWING Dobashi Patent Office USING LIQUID O2
158456-NL-15	Netherlands	99905691. Designated EP 4	1999-02-03	2010-12-08	2019-02-03	1053392	Granted	FOLLOWING URQUHAR USING LIQUID T-DYKES O2
158456-US-1	US	99905691. Designated EP 4	1999-02-03	2000-10-24	2019-02-02	6134916	Granted	OPERATION OF A CRYOGENIC AIR SEPARATION UNIT AND AN INTEGRATED GASIFIER COMBINED CYCLE POWER GEE POWER CRYOGENIC AIR SEPARATION WITH INTEGRATED GASIFIER POWER GEE POWER
158456-US-2	US	99905691. Designated PCT 09/786774	1999-02-03	2002-02-12	2019-02-03	6345517	Granted	CRYOGENIC AIR SEPARATION WITH INTEGRATED GASIFIER POWER GEE POWER
158461-US-1	US	99905691. Designated PCT 09/786774	1999-11-12	2003-10-21	2019-11-12	6635094	Granted	CRYOGENIC AIR SEPARATION WITH INTEGRATED GASIFIER POWER GEE POWER
158462-US-1	US	99905691. Designated PCT 09/786788	2001-03-09	2003-09-23	2021-03-09	6623537	Granted	CRYOGENIC AIR SEPARATION WITH INTEGRATED GASIFIER POWER GEE POWER
158466-US-1	US	99905691. Designated PCT 09/470016	1999-12-22	2003-09-02	2019-12-22	6613125	Granted	CRYOGENIC AIR SEPARATION WITH INTEGRATED GASIFIER POWER GEE POWER

PATENT

REEL: 050798 FRAME: 0675

158467-CA-10	Canada	Designated PCT	2346808	2010-07-20	2020-01-11	2020-01-11	2346808	2010-07-20	2020-01-11	Granted	solvent deasphalting, gasification, and hydrotreating solvent	# Smart & Biggar (Edmonton, CA) (Use S&B)
158467-CN-11	China	Designated PCT	00802533.9	2005-02-18	2020-01-11	2020-01-11	00802533.9	2005-02-18	2020-01-11	Granted	deasphalting, gasification, and hydrotreating solvent	CCPIT Patent and Trademark Law Office
158467-IN-12	India	Designated PCT	0203304	2007-03-09	2020-01-11	2020-01-11	203304	2007-03-09	2020-01-11	Granted	deasphalting, gasification, and hydrotreating solvent	L.S. DAVAR AND CO
158467-IT-7	Italy	Designated EP	1151061	2003-11-26	2020-01-11	2020-01-11	1151061	2003-11-26	2020-01-11	Granted	deasphalting, gasification, and hydrotreating solvent	GEE POWER
158467-US-1	US	Priority	6409912	2002-06-25	2020-01-11	2020-01-11	6409912	2002-06-25	2020-01-11	Granted	GASIFICATIO N, AND HYDROTREAT	GEE POWER
158470-DE-6	Germany	Designated EP	60031228.3	2006-10-11	2020-12-01	2020-12-01	60031228.3	2006-10-11	2020-12-01	Granted	Zero Water Blowdown from Oil Gasification	Ruger Barthel Abel
158470-IT-8	Italy	Designated EP	1108686	2006-10-11	2020-12-01	2020-12-01	1108686	2006-10-11	2020-12-01	Granted	Zero Water Blowdown from Oil Gasification	URQUHAR T-DYKES LORD
158470-JP-3	Japan	Secondary	4498594	2010-04-23	2020-12-07	2020-12-07	4498594	2010-04-23	2020-12-07	Granted	Zero Water Blowdown from Oil Gasification	GEE POWER
158470-US-1	US	Priority	6610112	2003-08-26	2019-12-07	2019-12-07	6610112	2003-08-26	2019-12-07	Granted	OIL GASIFICATIO RECYCLE AND ACID GAS REMOVAL USING RECYCLE AND ACID GAS	GEE POWER
158471-CN-5	China	Designated PCT	00808992.2	2007-06-20	2020-05-12	2020-05-12	00808992.2	2007-06-20	2020-05-12	Granted	RECYCLE AND ACID GAS REMOVAL USING RECYCLE AND ACID GAS	CCPIT Patent and Trademark Law Office
158471-US-1	US	Priority	6416568	2002-07-09	2020-05-12	2020-05-12	6416568	2002-07-09	2020-05-12	Granted	RECYCLE AND ACID GAS REMOVAL USING A	GEE POWER

PATENT

REEL: 050798 FRAME: 0676

158473-DE-6	Germany	Designated EP 8	99103123. 17	1999-02-17	0937944	2003-05-28	2019-02-17	Granted	VANADIUM RECOVERY POWER	GEE	
158473-GB-9	UK	Designated EP 8	99103123. 17	1999-02-17	0937944	2003-05-28	2019-02-17	Granted	VANADIUM RECOVERY POWER	GEE	
158473-IT-10	Italy	Designated EP 8	99103123. 17	1999-02-17	0937944	2003-05-28	2019-02-17	Granted	VANADIUM RECOVERY POWER	GEE	
158473-JP-15	Japan	HEI-11-Secondary 39734	1999-02-18	1999-02-18	3477102	2003-09-26	2019-02-18	Granted	VANADIUM RECOVERY POWER	GEE	
158473-NL-12	Netherlands	Designated EP 8	99103123. 17	1999-02-17	0937944	2003-05-28	2019-02-17	Granted	VANADIUM RECOVERY POWER	NETHERLANDS	
158473-US-1	US	Secondary 09/251447	1999-02-17	1999-02-17	6148745	2000-11-21	2019-02-17	Granted	VANADIUM-CONTAINING POWER FOR THE COMBUSTION OF	GEE	
158473-US-2	US	Divisional 09/703879	2000-11-02	2000-11-02	6422160	2002-07-23	2019-08-21	Granted	VANADIUM-CONTAINING POWER ZED	GEE	
162652-CN-12	China	Designated PCT 556.4	200609-11	2008-12-03	200680044 556.4	2013-03-06	2026-09-11	Granted	INORGANIC MEMBRANES FOR GAS AND APPARATUS FOR HYDROGEN SEPARATION OF CARBON DIOXIDE	Liu Shen Associates 11	2020-09-11 873.19
162652-CN-7	China	Designated PCT 584.6	200609-11	2008-12-03	200680044 584.6	2011-04-13	2026-09-11	Granted	INORGANIC MEMBRANES FOR GAS AND APPARATUS FOR HYDROGEN SEPARATION OF CARBON DIOXIDE	Liu Shen Associates 11	2020-09-11 873.19
162652-US-16	US	Continuation-in-part 12/107148	2008-04-22	2008-09-04	7896949	2011-03-01	2027-02-27	Granted	INORGANIC MEMBRANES FOR GAS AND APPARATUS FOR HYDROGEN SEPARATION OF CARBON DIOXIDE	GEE	2022-09-01 7403
162652-US-2	US	Secondary 11/263165	2005-10-31	2007-03-29	7396382	2008-07-08	2029-07-04	Granted	INORGANIC MEMBRANES FOR GAS AND APPARATUS FOR HYDROGEN SEPARATION OF CARBON DIOXIDE	GEE	2020-01-08 7403
163631-RU-4	Russia	Secondary 3	200812841	2006-12-11	2426768	2011-08-20	2026-12-11	Granted	INTEGRATED GASIFICATION AND AIR POLLUTION CONTROL SYSTEM FOR USE WITH AN INTEGRATED GASIFICATION AND AIR POLLUTION CONTROL SYSTEM	Goroditsky & Partners 11	2019-12-11 189
165491-AU-2	Australia	Secondary 5	201020187	2010-05-10	201020187 5	2016-04-21	2030-05-10	Granted	INTEGRATED GASIFICATION AND AIR POLLUTION CONTROL SYSTEM FOR USE WITH AN INTEGRATED GASIFICATION AND AIR POLLUTION CONTROL SYSTEM	Phillips Ormonde & Fitzpatrick 10	2020-05-10 382.44

PATENT

REEL: 050798 FRAME: 0677

165491-AU-6	Australia	Divisional	201620204 7	2016-04-01	201620204 7	2017-06-08	2030-05-10	Granted	Phillips Ormonde & Fitzpatrick	2020-05-10	382.44
165491-CN-3	China	Secondary	201010193 731.4	2010-05-20	101892878 A	2010-11-24	2030-05-20	Granted	China Patent Agent H.K.	2020-05-20	586.98
165491-PL-4	Poland	Secondary	391197	2010-05-11		2013-09-24	2030-05-11	Granted	Polservice	2020-05-11	290.48
165491-US-1	US	Priority	12/470538	2009-05-22	0293918	2010-11-25	2032-01-15	Granted	Armstrong Teasdale LLP	2020-10-16	3603
165491-US-5	US	Divisional	13/833088	2013-03-15	201301921 90A1	2013-08-01	2029-08-25	Granted	Armstrong Teasdale LLP	2022-11-12	3603
165494-CA-3	Canada	Designated PCT	2757257	2010-03-09	2757257	2010-10-07		Granted	Craig Wilson and Company inc.	2020-03-09	195.18
165494-DE-5	Germany	Designated PCT	112010001 543	2010-03-09	112010001 543	2012-08-30		Published	Ruger Barthel Abel	2020-03-09	537.05
165494-JP-6	Japan	Designated PCT	2012-503464	2010-03-09	201252286 6	2012-09-27	2030-03-09	Granted	GEE POWER	2019-10-09	130.12

PATENT

REEL: 050798 FRAME: 0678

165494-KR-7	Korea	Designated PCT	102012004 982A	2012-01-13	10-1687045	2016-12-09	2030-03-09	Granted	METHOD AND APPARATUS TO RECYCLE TAIL GAS	FirstLaw P.C.	2019-12-09	351.86
165494-PL-8	Poland	Designated PCT			219450	2014-09-25	2030-03-09	Granted	METHOD AND APPARATUS TO RECYCLE TAIL GAS	PolSERVICE	2020-03-09	290.48
165494-US-1	US	Priority	12/417763	2010-10-07	8551199	2013-10-08	2030-12-23	Granted	METHOD AND APPARATUS TO RECYCLE TAIL GAS	Armstrong Teasdale LLP	2021-04-08	3603
165519-AU-2	Australia	Secondary	201120032 5	2011-01-25	201120032 5	2016-06-16	2031-01-25	Granted	AND APPARATUS FOR DILUENT NITROGEN SATURATION	Phillips Ormonde & Fitzpatrick	2020-01-25	209.97
165519-CA-3	Canada	Secondary	2727835	2011-01-13	2727835	2018-03-20	2031-01-13	Granted	AND APPARATUS FOR DILUENT NITROGEN SATURATION	Craig Wilson and Company inc.	2020-01-13	156.75
165519-CN-4	China	Secondary	201110037 463.1	2011-01-26	201110037 463.1	2015-02-25	2031-01-26	Granted	AND APPARATUS FOR DILUENT NITROGEN SATURATION	China Patent Agent H.K. Ltd.	2020-01-26	586.98
165519-US-1	US	Priority	12/695422	2010-01-28	8671694	2014-03-18	2033-01-18	Granted	AND APPARATUS FOR DILUENT NITROGEN SATURATION AND SYSTEM	Armstrong Teasdale LLP	2021-09-18	3603
165521-AU-2	Australia	Secondary	201020253 2	2010-06-17	201020253 2	2016-12-22	2030-06-17	Granted	AND SYSTEM FOR SEPARATING CARBON DIOXIDE	Phillips Ormonde & Fitzpatrick	2020-06-17	382.44
165521-CA-3	Canada	Secondary	2706267	2010-06-03	2706267	2017-11-07	2030-06-03	Granted	AND SYSTEM FOR SEPARATING CARBON DIOXIDE	Craig Wilson and Company inc.	2020-06-03	195.18
165521-CN-4	China	Secondary	201010211 544.4	2010-06-17	201010211 544.4	2014-12-31	2030-06-17	Granted	AND SYSTEM FOR SEPARATING CARBON DIOXIDE	China Patent Agent H.K. Ltd.	2020-06-17	586.98

PATENT

REEL: 050798 FRAME: 0679

165521-PL-5	Poland	Secondary	P-391521	2010-06-15		2014-09-23	2030-06-15	Granted	219631	201020246	2016-08-04	2030-06-11	2020-06-15	Polservice	290.48
165522-AU-2	Australia	Secondary	5	201020246	2010-06-11	2016-08-04	2030-06-11	Granted	201020246	5	2016-08-04	2030-06-11	2020-06-11	Phillips Ormonde & Fitzpatrick	382.44
165522-CN-3	China	Secondary	450.0	201010213	2010-06-13	101928604	2010-12-29							China Patent Agent H.K. Ltd.	
165522-CN-9	China	Divisional	050.7	201610213	2016-04-07	105861063	2016-08-17	Published						China Patent Agent H.K. Ltd.	
165522-KR-5	Korea	Secondary	7210	102010005	2010-06-16	102010135	2010-12-27	Granted	101646269	01	2016-08-01	2030-06-16	2020-08-01	FirstLaw P.C.	238.1
165522-PL-6	Poland	Secondary	P-391549	2010-06-17		2016-12-30	2030-06-17	Granted	224230		2016-12-30	2030-06-17	2020-06-17	Polservice	290.48
165522-US-1	US	Priority	12/486228	2009-06-17	0324156	2010-12-23		Granted	8241404		2012-08-14	2030-09-24	2020-02-14	Armstrong Teasdale LLP	3603
165522-US-8	US	Divisional	13/541284	2012-07-03	US-2012-0267578	2012-10-25		Granted	8480790		2013-07-09	2029-07-01	2021-01-09	Armstrong Teasdale LLP	3603

PATENT

REEL: 050798 FRAME: 0680

165524-CN-3	China	Designated PCT	2010080065	2010-12-16	102782096 A	2012-11-14	102782096	2016-11-09	2030-12-16	Granted	METHOD FOR COOLING SYNGAS PRODUCED FROM A	China Patent Agent H.K. Ltd.	2019-12-16	586.98
165524-IN-5	India	Designated PCT	5872/DEL NP/2012	2013-12-06	5872DELN P2012					Published	METHOD FOR COOLING SYNGAS PRODUCED FROM A	KAnalysis Consultant s (P) Ltd		
165524-KR-6	Korea	Designated PCT	102012701	2010-12-16	102012112 515A	2012-10-11	10-1737661	2017-05-12	2030-01-05	Granted	METHOD FOR COOLING SYNGAS PRODUCED FROM A	FirstLaw P.C.	2020-05-12	351.86
165524-US-1	US	Priority	12/652659	2010-01-05	201101623 81A1	2011-07-07	8769964	2014-07-08	2032-12-20	Granted	METHOD FOR COOLING SYNGAS PRODUCED FROM A	Armstrong Teasdale LLP	2022-01-08	3603
166351-CN-6	China	Divisional	201510045	2006-04-11	104711038 17	2015-06-17	104711038	2017-10-24	2026-04-11	Granted	Injector for Gasification and Related Method	Liu Shen Associates	2020-04-11	873.19
166351-DE-8	Germany	Designated EP	06749778	2007-10-15	1874898 09	2008-01-09	602006055 007.3	2018-03-28	2027-10-15	Granted	Method for Gasification and Related Method	RWS Group Ltd	2020-04-11	1207.46
166351-NL-7	Netherlands	Designated EP	06749778	2007-10-15	1874898 09	2008-01-09	1874898	2018-03-28	2027-10-15	Granted	Injector for Gasification and Related Method	RWS Group Ltd	2020-04-11	1025.65
166351-US-1	US	Priority	11/107811	2005-04-18	0231646 19	2006-10-19	7416404	2008-08-26	2026-08-23	Granted	INJECTOR FOR GASIFICATION AND RELATED	Nixon & Vanderhye	2020-02-26	7403
184692-US-1	US	Priority	12/153058	2008-05-13	0285738 19	2009-11-19	7655213	2010-02-02	2030-02-02	Granted	OXIDATION OF SULFUR WITH CARBON DIOXIDE AND SYSTEMS FOR ADVANCED GASIFIER	Nixon & Vanderhye	2021-08-02	7403
185698-US-1	US	Priority	11/356266	2006-02-16	0186473 16	2007-08-16	774663	2010-06-29	2028-09-29	Granted	INJECTOR FOR GASIFICATION AND RELATED	Armstrong Teasdale LLP	2021-12-29	7403

185703-US-1	US	Priority	11/290650	2005-11-30	200701190-99A1	2007-05-31	8142528	2012-03-27	2029-03-24	Granted	AND SYSTEMS OF REDUCING VISCOSITY OF GASIFICATIO	Armstrong Teasdale LLP	2023-09-27	7403
185703-US-2	US	Divisional	13/399336	2012-02-17	201201448-40A1	2012-06-14	8647403	2014-02-11	2026-01-03	Granted	AND SYSTEMS OF REDUCING VISCOSITY OF GASIFICATIO	Armstrong Teasdale LLP	2021-08-11	3603
185709-CA-3	Canada	Designated PCT	2715493	2009-01-22			2715493	2016-11-01	2029-01-22	Granted	AND SYSTEMS FOR INTEGRATED BOILER FEED	Craig Wilson and Company inc.	2020-01-22	195.18
185709-CN-4	China	Designated PCT	200980106-369.8	2009-01-22	102186956-A	2011-09-14	200980106-369.8	2015-02-04	2029-01-22	Granted	AND SYSTEMS FOR INTEGRATED BOILER FEED	China Patent Agent H.K.	2020-01-22	586.98
185709-DE-5	Germany	Designated PCT	112009000-341.9	2009-01-22	112009000-341	2010-12-30			2029-01-22	Published	AND SYSTEMS FOR INTEGRATED BOILER FEED	Ruger Barthelt Abel	2020-01-22	707.49
185709-KR-6	Korea	Designated PCT	102010702-0739	2009-01-22	102010123-874A	2010-11-25	10-1584382	2016-01-05	2029-01-22	Granted	AND SYSTEMS FOR INTEGRATED BOILER FEED	FirstLaw P.C.	2020-01-05	389.78
185709-US-1	US	Priority	12/034974	2008-02-21	200902111-55A1	2009-08-27	8673034	2014-03-18	2029-06-15	Granted	AND SYSTEMS FOR INTEGRATED BOILER FEED	Armstrong Teasdale LLP	2021-09-18	3603
187177-AU-3	Australia	Secondary	200734515-8	2007-12-20	WO08/091-464	2008-07-31	200734515-8	2013-03-25	2027-12-20	Granted	AND APPARATUS TO FACILITATE COOLING	Davies Collison Cave	2019-12-20	382.44

PATENT

REEL: 050798 FRAME: 0682

187177-CN-4	China	Designated PCT	200780050	2007-12-20	WO08/091 464	2008-07-31	200780050 145.0	2013-12-04	2027-12-20	Granted	AND APPARATUS TO FACILITATE COOLING SYNGAS	Liu Shen Associates	2019-12-20	873.19
187177-JP-5	Japan	Secondary	2009-546388	2007-12-20	201051683 7	2010-05-20	5579444	2014-07-18	2027-12-20	Granted	AND APPARATUS TO FACILITATE COOLING	GEE POWER	2020-07-18	357.19
187177-US-1	US	Priority	11/624956	2007-01-19	0175770	2008-07-24	7749290	2010-07-06	2030-03-04	Granted	AND APPARATUS TO FACILITATE COOLING	Armstrong Teasdale LLP	2022-01-06	7403
189493-CN-2	China	Secondary	200610064 068.1	2006-12-15	101029596 05	2007-09-05	200610064 068.1	2011-01-26	2026-12-15	Granted	AND SYSTEMS FOR PARTIAL MODERATOR BYPASS	China Patent Agent H.K. Ltd.	2019-12-15	873.19
189493-EP-3	EP	Secondary	06126115. 2	2006-12-14	1798276	2007-06-20	1798276			Published	AND SYSTEMS FOR PARTIAL MODERATOR BYPASS	freightpartners IP Law Firm	2019-12-14	1792.64
189493-JP-4	Japan	Secondary	2006-337978	2006-12-15			5137392	2012-11-22	2026-12-15	Granted	AND SYSTEMS FOR PARTIAL MODERATOR BYPASS	GEE POWER	2019-11-22	313.52
189493-US-1	US	Priority	11/304471	2005-12-15	200701371 03A1	2007-06-21	7621973	2009-11-24	2030-06-24	Granted	AND SYSTEMS FOR PARTIAL MODERATOR BYPASS	Armstrong Teasdale LLP	2021-05-24	7403
189493-US-5	US	Divisional	12/606427	2009-10-27	201000432 88A1	2010-02-25	8038747	2011-10-18	2025-12-15	Granted	AND SYSTEMS FOR PARTIAL MODERATOR BYPASS	Armstrong Teasdale LLP	2023-04-18	7403
189493-US-6	US	Divisional	13/217470	2011-08-25	201103056 09A1	2011-12-15	8398729	2013-03-19	2025-12-15	Granted	AND SYSTEMS FOR PARTIAL MODERATOR BYPASS	Armstrong Teasdale LLP	2020-09-19	3603

PATENT

REEL: 050798 FRAME: 0683

189592-US-1	US	Priority	11/379889	2006-04-24	0246575	2007-10-25	7506822	2009-03-24	2027-04-27	Dropped	METHODS OF USE AND REFRACTORY MATERIAL	GEE POWER	2020-09-24	7403
191821-AU-3	Australia	Secondary	200822330	2008-02-06	2008/1092	2008-09-12	200822330	2012-05-17	2028-02-06	Granted	METHODS OF MAKING AND REFRACTORY MATERIAL	Phillips Ormonde & Fitzpatrick	2020-02-06	382.44
191821-CA-4	Canada	Secondary	2679382	2008-02-06	2008/1092	2008-09-12	2679382	2013-11-12	2028-02-06	Granted	METHODS OF MAKING AND REFRACTORY MATERIAL	Craig Wilson and Company inc.	2020-02-06	195.18
191821-CN-5	China	Designated PCT	200880007	2008-02-06	101626995	2010-01-13	200880007	2014-02-19	2028-02-06	Granted	METHODS OF MAKING AND REFRACTORY MATERIAL	China Patent Agent H.K. Ltd.	2020-02-06	873.19
191821-GB-8	UK	Designated EP	08729125	2008-02-06	2121539	2009-11-25	2121539	2014-08-13	2028-02-06	Granted	METHODS OF MAKING AND REFRACTORY MATERIAL	Valipat SA	2020-02-06	327.73
191821-IT-9	Italy	Designated EP	08729125	2008-02-06	2121539	2009-11-25	2121539	2014-08-13	2028-02-06	Granted	METHODS OF MAKING AND REFRACTORY MATERIAL	Valipat SA	2020-02-06	605.23
191821-JP-7	Japan	Secondary	552783	2009-02-06	201052014	2010-06-10	5503297	2014-03-20	2028-02-06	Granted	METHODS OF MAKING AND REFRACTORY MATERIAL	GEE POWER	2020-03-20	429.97
191821-US-1	US	Priority	11/683260	2007-03-07	0216603	2008-09-11	8105683	2012-01-31	2027-05-08	Granted	METHODS OF MAKING AND REFRACTORY MATERIAL	GEE POWER	2023-07-31	7403
195152-US-1	US	Priority	12/349213	2009-01-06	0172819	2010-07-08	8048311	2011-11-01	2030-12-25	Granted	SYSTEMS FOR ZERO DISCHARGE WATER	Armstrong Teasdale LLP	2023-05-01	7403

PATENT

REEL: 050798 FRAME: 0684

195813-US-1	US	Priority	11/462867	2006-08-07	0028765	2008-02-07	7739875	2010-06-22	2031-05-07	Granted	POWER SYSTEMS AND METHOD FOR USE AND APPARATUS FOR FABRICATING A FISCHER-TROPSCH METHOD AND SYSTEM FOR TREATING FISCHER-TROPSCH REACTOR TAIL GAS METHOD AND SYSTEM FOR TREATING FISCHER-TROPSCH REACTOR TAIL GAS	2021-12-22	7403
199733-AU-2	Australia	Secondary	201123929	2011-10-24			201123929	2016-11-24	2031-10-24	Granted	PHILLIPS ORMONDE & FITZPATRICK	2019-10-24	209.97
199733-CN-3	China	Secondary	201110356	2011-10-27	102559270	2012-07-11	201110356	2015-02-11	2031-10-27	Granted	CHINA PATENT AGENT H.K. LTD.	2019-10-27	300.76
199733-US-1	US	Priority	12/913000	2010-10-27	0103190	2012-05-03	8419829	2013-04-16	2031-09-08	Granted	ARMSTRONG TEASDALE LLP	2020-10-16	3603
199755-US-1	US	Priority	11/855457	2007-09-14	200900743	2009-03-19	7499605	2009-03-03	2027-09-14	Granted	GEE POWER	2020-09-03	7403
199755-US-2	US	Continuation n-in-part	12/395788	2009-03-02	200901691	2009-07-02	7574075	2009-08-11	2027-09-14	Granted	GEE POWER	2021-02-11	7403
204034-US-1	US	Priority	11/621816	2007-01-10	0166278	2008-07-10	8163047	2012-04-24	2031-07-24	Granted	ARMSTRONG TEASDALE LLP	2019-10-24	3603
204077-AU-2	Australia	Secondary	201020446	2010-07-27			201020446	2016-06-02	2030-07-27	Granted	PHILLIPS ORMONDE & FITZPATRICK	2020-07-27	382.44
204077-CA-3	Canada	Secondary	2710732	2010-07-22			2710732	2017-10-10	2030-07-22	Granted	CRAIG WILSON AND COMPANY INC.	2020-07-22	195.18

PATENT

REEL: 050798 FRAME: 0685

204077-CN-4	China	Secondary	2010/10260 572.5	2010-08-11	101993731 A	2011-03-30	2014-12-31	2030-08-11	Granted	APPARATUS TO PRODUCE SYNTHETIC GAS	China Patent Agent H.K. Ltd.	2020-08-11	586.98
204077-IN-5	India	Secondary	1750/DEL/2010 2010	2010-07-27	1750DEL2 010	2013-09-27		2030-07-27	Published	APPARATUS TO PRODUCE SYNTHETIC GAS	KAnalysis Consultants (P) Ltd		
204077-US-1	US	Priority	12/538949	2009-08-11	201100360 11A1	2011-02-17	2014-04-01	2031-08-03	Granted	APPARATUS TO PRODUCE SYNTHETIC GAS	Armstrong Teasdale LLP	2021-10-01	3603
204078-US-3	US	Continuation	14/158305	2014-01-17	201401576 66	2014-06-12	2016-04-05	2031-05-01	Granted	FOR REMOVING HEAT FROM INJECTION DEVICES AND METHOD OF ASSEMBLING AND	Armstrong Teasdale LLP	2019-10-05	1603
206021-US-1	US	Priority	11/470679	2006-09-07	0060521	2008-03-13	2011-10-18	2032-10-13	Granted	APPARATUS FOR REDUCING EMISSIONS IN AN INTEGRATED FOR REDUCING COOLING WATER AND POWER CONSUMPTIO	Armstrong Teasdale LLP	2023-04-18	7403
206606-CN-4	China	Secondary	2010/10003 819.5	2010-01-06	101793174 A	2010-08-04	2014-09-10	2030-01-06	Granted	GASIFICATIO N SYSTEMS AND	China Patent Agent H.K. Ltd.	2020-01-06	586.98
206606-US-1	US	Priority	12/349366	2009-01-06	0170285	2010-07-08	2012-05-29	2033-03-24	Granted	FOR REDUCING COOLING WATER AND POWER CONSUMPTIO N IN GASIFICATIO N SYSTEMS AND	Armstrong Teasdale LLP	2019-11-29	3603

PATENT

REEL: 050798 FRAME: 0686

206607-AU-2	Australia	Secondary	8	200920085	2009-03-04	200920085	2014-05-24	2029-03-04	Granted	AND SYSTEMS FOR REACTOR LOW	Davies Collison Cave	2020-03-04	382.44
206607-CA-3	Canada	Secondary	2659482	2009-03-19	2017-03-07	2029-03-19	2017-03-07	2029-03-19	Granted	AND SYSTEMS FOR REACTOR LOW	Craig Wilson and Company inc.	2020-03-19	195.18
206607-CN-4	China	Secondary	219.2	200910130	2009-03-24	101544528	2014-11-05	2029-03-24	Granted	AND SYSTEMS FOR REACTOR LOW	China Patent Agent H.K. Ltd.	2020-03-24	586.98
206607-IN-5	India	Secondary	009	467/DEL/2	2009-03-09	311784	2019-04-29	2029-03-09	Granted	AND SYSTEMS FOR REACTOR LOW	KAnalysis Consultant s (P) Ltd	2020-03-09	399
206607-US-1	US	Priority	12/054190	2008-03-24	2009-09-24	7879297	2011-02-01	2028-03-24	Granted	AND SYSTEMS FOR REACTOR LOW	Armstrong Teasdale LLP	2022-08-01	7403
206607-ZA-6	South Africa	Secondary	5	2009/0167	2009-03-09	2009/0167	2010-02-24	2029-03-09	Granted	AND SYSTEMS FOR REACTOR LOW	Adams & Adams	2020-03-09	24.17
206611-AU-3	Australia	Secondary	3	200834704	2008-11-17	200834704	2014-01-02	2028-11-17	Granted	APPARATUS TO FACILITATE SUBSTITUTE NATURAL GAS	Davies Collison Cave	2019-11-17	382.44
206611-CA-4	Canada	Secondary	2711251	2008-11-17	2016-08-02	2711251	2016-08-02	2028-11-17	Granted	APPARATUS TO FACILITATE SUBSTITUTE NATURAL GAS	Craig Wilson and Company inc.	2019-11-17	195.18

PATENT

REEL: 050798 FRAME: 0687

206611-CN-5	China	Designated PCT	200880124	2008-11-17	101910381 A	2010-12-08	ZL200880124661.8	2014-03-12	2028-11-17	Granted	APPARATUS TO FACILITATE SUBSTITUTIONAL NATURAL GAS	China Patent Agent H.K. Ltd.	2019-11-17	586.98
206611-KR-6	Korea	Designated PCT	102010701	2008-11-17	102010100 946A	2010-09-15	10-1497750	2015-02-24	2028-11-17	Granted	APPARATUS TO FACILITATE SUBSTITUTIONAL NATURAL GAS	FirstLaw P.C.	2020-02-24	446.66
206611-PL-7	Poland	Secondary	P-392791	2008-11-17						Application	APPARATUS TO FACILITATE SUBSTITUTIONAL NATURAL GAS	Poliservice		
206613-US-1	US	Priority	11/970184	2008-01-07	0173079	2009-07-09	8528343	2013-09-10	2031-03-06	Granted	APPARATUS TO FACILITATE SUBSTITUTIONAL NATURAL GAS	Armstrong Teasdale LLP	2021-03-10	3603
206613-US-1	US	Priority	12/178444	2008-07-23	0018115	2010-01-28	8398730	2013-03-19	2030-12-31	Granted	APPARATUS TO FACILITATE SUBSTITUTIONAL NATURAL GAS	Armstrong Teasdale LLP	2020-09-19	3603
206613-US-2	US	Secondary	13/801551	2013-03-13	201400264 84A1	2014-01-30	9150804	2015-10-06	2029-08-15	Granted	APPARATUS TO FACILITATE SUBSTITUTIONAL NATURAL GAS	Armstrong Teasdale LLP	2023-04-06	3603
206616-CN-4	China	Divisional	201710119	2008-11-17	107090318 25	2017-08-25			2028-11-17	Published	Sour Methanation for CO2	Patent Agent H.K. Ltd.		
206872-AU-2	Australia	Secondary	200724019	2007-12-07			200724019 5	2013-07-15	2027-12-07	Granted	METHOD FOR ELIMINATING PROCESS GAS LEAK IN A SOLIDS DELIVERY SYSTEM	Davies Collison Cave	2019-12-07	382.44

PATENT

REEL: 050798 FRAME: 0688

206872-CN-3	China	Secondary	200710198 890.1	2007-12-12	101205019 A	2008-06-25	2016-08-17	2027-12-12	Granted	METHOD FOR ELIMINATING PROCESS GAS LEAK IN A SOLIDS DELIVERY SYSTEM	China Patent Agent H.K. Ltd.	2019-12-12	873.19
206872-DE-6	Germany	Designated EP	07122769 8	2007-12-10	1932787	2008-06-18	2018-06-20	2027-12-10	Granted	METHOD FOR ELIMINATING PROCESS GAS LEAK IN A SOLIDS DELIVERY SYSTEM	RWS Group Ltd	2019-12-10	866.57
206872-JP-5	Japan	Secondary	2007-320263	2007-12-12	200815611 8	2008-07-10	2014-02-07	2027-12-12	Granted	METHOD FOR ELIMINATING PROCESS GAS LEAK IN A SOLIDS DELIVERY SYSTEM	GEE POWER	2020-02-07	328.08
206872-US-1	US	Priority	11/611399	2006-12-15			2013-07-30	2030-06-18	Granted	TEMPERATURE SOLIDS REMOVAL SYSTEM FOR GASIFICATION AND SYSTEMS FOR GAS TURBINE SYNGAS WARM-UP METHOD FOR LOW EMISSIONS COMBUSTION FUEL PROCESSOR S AND METHODS FOR USING	GEE POWER	2021-01-30	3603
213362-US-1	US	Priority	11/938564	2007-11-12	0120290	2009-05-14	2011-03-01	2030-06-09	Granted	SYSTEM FOR GASIFICATION AND SYSTEMS FOR GAS TURBINE SYNGAS WARM-UP METHOD FOR LOW EMISSIONS COMBUSTION FUEL PROCESSOR S AND METHODS FOR USING	GEE POWER	2022-09-01	7403
213624-US-1	US	Priority	11/625990	2007-01-23	0115962	2010-05-13	2011-01-04	2033-11-11	Granted	SYSTEMS FOR GAS TURBINE SYNGAS WARM-UP METHOD FOR LOW EMISSIONS COMBUSTION FUEL PROCESSOR S AND METHODS FOR USING	Armstrong Teasdale LLP	2022-07-04	7403
216374-US-4	US	Divisional	13/048989	2011-03-16	201101623 42A1	2011-07-07	2012-06-05	2026-12-14	Granted	SYSTEMS FOR GAS TURBINE SYNGAS WARM-UP METHOD FOR LOW EMISSIONS COMBUSTION FUEL PROCESSOR S AND METHODS FOR USING	GEE POWER	2019-12-05	3603
217323-US-1	US	Priority	11/609124	2006-12-11			2010-08-24	2032-01-04	Granted	SYSTEMS FOR GAS TURBINE SYNGAS WARM-UP METHOD FOR LOW EMISSIONS COMBUSTION FUEL PROCESSOR S AND METHODS FOR USING	GEE POWER	2022-02-24	7403

PATENT

REEL: 050798 FRAME: 0689

217375-CN-3	China	Secondary	200810095 639.7	2008-11-05	2012-11-07	2028-04-25	Granted	SYSTEM FOR GAS HUMIDIFICATI ON CONTROL AND SYSTEMS FOR GAS MOISTURIZAT ION AND SYSTEMS FOR GAS MOISTURIZAT ION AND SYSTEMS FOR GAS MOISTURIZAT ION AND SYSTEMS FOR GAS MOISTURIZAT ION AND MOISTURIZAT ION INJECTOR COOLING APPARATUS AND METHOD OF INJECTOR COOLING APPARATUS AND METHOD OF METHODS FOR TREATING TRANSIENT PROCESS METHODS FOR TREATING TRANSIENT PROCESS METHODS FOR TREATING TRANSIENT PROCESS	China Patent Agent H.K. 2020-04-25	873.19
217375-DE-4	Germany	Secondary	102008021 118.4	2008-11-06			Published		Ruger Barthelt 2020-04-28	866.57
217375-JP-5	Japan	Secondary	2008-11-26 11926	2008-04-23	2013-05-10	2028-04-23	Granted		GEE POWER 2020-05-10	342.64
217375-US-1	US	Priority	11743016 01	2008-11-06	2010-09-07	2027-09-17	Granted		Armstrong Teasdale LLP 2022-03-07	7403
220411-CN-3	China	Designated PCT	200880107 657.0	2010-08-11	2013-04-03	2028-07-08	Granted		China Patent Agent H.K. 2020-07-08	873.19
220411-US-1	US	Priority	11854970 13	2009-03-19	2012-04-10	2032-11-13	Granted		Armstrong Teasdale LLP 2019-10-10	3603
220571-AU-3	Australia	Designated PCT	200832507 1	2008-09-02	2013-12-24	2028-09-02	Granted		Phillips Ormonde & Fitzpatrick 2020-09-02	382.44
220571-CA-4	Canada	Designated PCT	2704398 02	2008-09-02	2017-04-11	2028-09-02	Granted		Craig Wilson and Company inc. 2020-09-02	195.18
220571-CN-5	China	Designated PCT	200880115 719.2	2009-05-14	2013-12-18	2028-09-02	Granted		China Patent Agent H.K. 2020-09-02	873.19

PATENT

REEL: 050798 FRAME: 0690

220571-JP-7	Japan	Designated PCT	2010-533133	2008-09-02	2011-01-27	2015-02-27	2028-09-02	Granted	5703025	2018-04-30	2010-05-04	2028-06-17	2020-02-27	GEE POWER	2020-02-27	178.64
220571-KR-8	Korea	Designated PCT	1020107009994	2008-09-02	2010-08-13	2015-05-11	2028-09-02	Granted	10-1520984	2018-04-30	2010-05-04	2028-06-17	2020-05-11	FirstLaw P.C.	2020-05-11	408.74
220571-PL-9	Poland	Designated PCT	P-391380	2008-09-02	2009-05-14	2018-04-30	2028-09-02	Granted	PAT.228520	2018-04-30	2010-05-04	2028-06-17	2020-09-02	Polservice	2020-09-02	332.52
220571-US-1	US	Priority	11/938076	2007-11-09	2009-05-14	2010-05-04	2028-06-17	Granted	7708801	2010-05-04	2010-05-04	2028-06-17	2021-11-04	Armstrong Teasdale LLP	2021-11-04	7403
220573-AU-3	Australia	Secondary	2008282706	2008-06-12	2009-02-05	2013-10-31	2028-06-12	Granted	2008282706	2013-10-31	2013-10-31	2028-06-12	2020-06-12	Davies Collison Cave	2020-06-12	382.44
220573-AU-7	Australia	Divisional	2013206438	2013-06-20	2009-02-05	2016-09-29	2028-06-12	Granted	2013206438	2016-09-29	2016-09-29	2028-06-12	2020-06-12	Davies Collison Cave	2020-06-12	382.44
220573-CA-4	Canada	Secondary	2694184	2008-06-12	2009-02-05	2016-06-07	2028-06-12	Granted	2694184	2016-06-07	2016-06-07	2028-06-12	2020-06-12	Craig Wilson and Company inc. China Patent Agent H.K. Ltd.	2020-06-12	195.18
220573-CN-5	China	Designated PCT	200880110394.9	2008-06-12	2010-08-18	2015-03-11	2028-06-12	Granted	200880110394.9	2015-03-11	2015-03-11	2028-06-12	2020-06-12	China Patent Agent H.K. Ltd.	2020-06-12	873.19
220573-IN-6	India	Secondary	360/DELN P/2010	2008-06-12	2009-02-05	2016-09-23	2028-06-12	Granted	275833	2016-09-23	2016-09-23	2028-06-12	2020-06-12	KAnalysis Consultant s (P) Ltd	2020-06-12	399
220573-US-1	US	Priority	11/831639	2007-07-31	2009-02-05	2013-11-26	2030-01-16	Granted	8591631	2013-11-26	2013-11-26	2030-01-16	2021-05-26	Armstrong Teasdale LLP	2021-05-26	3603

PATENT

REEL: 050798 FRAME: 0691

220661-IN-7	India	Secondary P/2010	508/DELN	2008-07-02								COOLERS AND METHODS FOR ASSEMBLING COOLER AND COOLING TUBE FOR USE IN A SYNGAS COOLERS AND METHODS FOR ASSEMBLING ENVIRONMENT TEMPERATURE SENSING SYSTEM AND POWER FOR COOLING AND SCRUBBING A FLOW OF SYNGAS AND Ltd. Chamber with Hula Hoop Exit Manifold FOR COOLING AND SCRUBBING A FLOW OF SYNGAS AND FOR COOLING AND SCRUBBING A FLOW OF SYNGAS AND FOR COOLING AND SCRUBBING A FLOW OF SYNGAS AND MODULAR TIP INJECTION DEVICES AND METHOD OF ASSEMBLING SAME	Application	2019-12-05	2019-12-05	3603
220661-US-1	US	Priority	11/835158	2007-08-07	200900381	2009-02-12	55A1	8191617	2012-06-05	2030-05-11	2030-05-11	8191617	8191617	2012-06-05	2030-05-11	3603
220661-US-2	US	Continuation-in-part	11/899043	2007-08-31	200900416	2009-02-12	42A1	8240366	2012-08-14	2028-04-18	2028-04-18	8240366	8240366	2012-08-14	2028-04-18	3603
221494-US-1	US	Priority	11/857487	2007-09-19				7912334	2011-03-22	2028-02-12	2028-02-12	7912334	7912334	2011-03-22	2028-02-12	7403
223075-CN-3	China	Designated PCT	200980105	2009-01-16	101945978	2011-01-12	A			2029-01-16	2029-01-16					
223075-CN-5	China	Divisional	201610273	2009-01-16	105925315	2016-09-07				2029-01-16	2029-01-16					
223075-DE-4	Germany	Secondary	200900028	2009-01-16	112009000	2011-01-20	287									707.49
223075-US-1	US	Priority	12/030677	2008-02-13	0199474	2009-08-13		7846226	2010-12-07	2030-07-14	2030-07-14	7846226	7846226	2010-12-07	2030-07-14	7403
224710-CN-2	China	Secondary	201110238	2011-08-11	102374027	2012-03-14	A	102374027	2016-06-15	2031-08-11	2031-08-11	102374027	102374027	2016-06-15	2031-08-11	586.98

224710-US-1	US	Priority	12/854629	2010-08-11	20120036775A1	2012-02-16	8721747	2014-05-13	2033-02-14	Granted	METHOD OF ASSEMBLING THE SAME AND SYSTEMS FOR MONITORING AND SYSTEMS FOR MONITORING AND SYSTEMS FOR MONITORING AND INJECTOR ASSEMBLY AND METHODS OF ASSEMBLING THE SAME INJECTOR ASSEMBLY AND METHODS OF ASSEMBLING THE SAME INJECTOR ASSEMBLY AND METHODS OF ASSEMBLING THE SAME INJECTOR ASSEMBLY AND APPARATUS FOR ASSEMBLING INJECTION DEVICES SUPPLY SYSTEM AND METHOD FOR SUPPLYING SOLIDS	2021-11-13	3603
224738-CN-2	China	Secondary	201110238761.7	2011-08-11	102374032A	2012-03-14	201110238761.7	2015-08-12	2031-08-11	Granted	METHOD OF ASSEMBLING THE SAME AND SYSTEMS FOR MONITORING AND SYSTEMS FOR MONITORING AND SYSTEMS FOR MONITORING AND INJECTOR ASSEMBLY AND METHODS OF ASSEMBLING THE SAME INJECTOR ASSEMBLY AND METHODS OF ASSEMBLING THE SAME INJECTOR ASSEMBLY AND APPARATUS FOR ASSEMBLING INJECTION DEVICES SUPPLY SYSTEM AND METHOD FOR SUPPLYING SOLIDS	2020-08-11	586.98
224738-US-1	US	Priority	12/854738	2010-08-11	20120036823A1	2012-02-16	8869598	2014-10-28	2033-08-13	Granted	METHOD OF ASSEMBLING THE SAME AND SYSTEMS FOR MONITORING AND SYSTEMS FOR MONITORING AND SYSTEMS FOR MONITORING AND INJECTOR ASSEMBLY AND METHODS OF ASSEMBLING THE SAME INJECTOR ASSEMBLY AND METHODS OF ASSEMBLING THE SAME INJECTOR ASSEMBLY AND APPARATUS FOR ASSEMBLING INJECTION DEVICES SUPPLY SYSTEM AND METHOD FOR SUPPLYING SOLIDS	2022-04-28	3603
224738-US-3	US	Divisional	14/496683	2014-09-25	20150008670A1	2015-01-08	9170174	2015-10-27	2030-08-11	Granted	METHOD OF ASSEMBLING THE SAME INJECTOR ASSEMBLY AND METHODS OF ASSEMBLING THE SAME INJECTOR ASSEMBLY AND APPARATUS FOR ASSEMBLING INJECTION DEVICES SUPPLY SYSTEM AND METHOD FOR SUPPLYING SOLIDS	2023-04-27	3603
224748-CN-2	China	Secondary	201110238782.9	2011-08-11	102374031A	2012-03-14	102374031	2016-08-17	2031-08-11	Granted	METHODS OF ASSEMBLING THE SAME INJECTOR ASSEMBLY AND METHODS OF ASSEMBLING THE SAME INJECTOR ASSEMBLY AND METHODS OF ASSEMBLING THE SAME INJECTOR ASSEMBLY AND APPARATUS FOR ASSEMBLING INJECTION DEVICES SUPPLY SYSTEM AND METHOD FOR SUPPLYING SOLIDS	2020-08-11	586.98
224748-US-1	US	Priority	12/854736	2010-08-11	20120037732A1	2012-02-16	8662408	2014-03-04	2032-09-20	Granted	METHODS OF ASSEMBLING THE SAME INJECTOR ASSEMBLY AND METHODS OF ASSEMBLING THE SAME INJECTOR ASSEMBLY AND APPARATUS FOR ASSEMBLING INJECTION DEVICES SUPPLY SYSTEM AND METHOD FOR SUPPLYING SOLIDS	2021-09-04	3603
224748-US-3	US	Continuation	14/155726	2014-01-15	20140124604	2014-05-08	9228740	2016-01-05	2030-09-17	Granted	METHODS OF ASSEMBLING THE SAME INJECTOR ASSEMBLY AND METHODS OF ASSEMBLING THE SAME INJECTOR ASSEMBLY AND APPARATUS FOR ASSEMBLING INJECTION DEVICES SUPPLY SYSTEM AND METHOD FOR SUPPLYING SOLIDS	2023-07-05	3603
224750-US-1	US	Priority	12/854688	2010-08-11	20120036776A1	2012-02-16	8828109	2014-09-09	2033-02-08	Granted	ASSEMBLING INJECTION DEVICES SUPPLY SYSTEM AND METHOD FOR SUPPLYING SOLIDS	2022-03-09	3603
224762-BR-4	Brazil	Secondary	102014005558-4	2014-03-11	102014005558	2015-05-05				Published	METHOD FOR SUPPLYING SOLIDS	2020-03-11	100

PATENT

224762-CN-2	China	Secondary	201410094 437.6	2014-03-14	104062987 24	2018-10-23	2034-03-13	Granted	SUPPLY SYSTEM AND METHOD FOR SUPPLYING SOLIDS	China Patent Agent H.K. Ltd.	2020-03-14	300.76
224762-IN-3	India	Secondary	1287/CHE/ 2014	2014-03-12			2034-03-12	Application	SUPPLY SYSTEM AND METHOD FOR SUPPLYING SOLIDS	KAnalysis Consultant s (P) Ltd		
224762-US-1	US	Priority	13/834004	2013-03-15	201402709 93A1	2017-05-02	2033-11-04	Granted	SUPPLY SYSTEM AND METHOD FOR SUPPLYING SOLIDS	Armstrong Teasdale LLP	2020-11-02	1603
224905-CA-2	Canada	Secondary	2697857	2010-03-25				Application	AND MODUS OPERANDI TO USE BIOMASS IN ENTRAINED FLOW	Craig Wilson and Company inc.	2020-03-25	287.43
224905-EP-1	EP	Priority	09157210. 7	2009-04-02	2236587		2010-10-06	Dropped	AND MODUS OPERANDI TO USE BIOMASS IN ENTRAINED FLOW	Ruger Barthelt Abel	2020-04-02	1905.74
225029-US-1	US	Priority	12/433293	2009-04-30	0278702	8052935	2011-11-08	Granted	METHOD FOR REMOVING SULFUR FROM GAS STREAM	GEE POWER	2023-05-08	7403
225108-US-1	US	Priority	11/964100	2007-12-26	0165575	7849754	2010-12-14	Granted	METHOD AND SYSTEM FOR SAMPLING SYNGAS	Armstrong Teasdale LLP	2022-06-14	7403
225553-US-1	US	Priority	11/835912	2007-08-08		7824100	2010-11-02	Granted	MEASUREMENT DEVICE THAT ESTIMATES AND COMPENSATES	GEE POWER	2022-05-02	7403

PATENT

REEL: 050798 FRAME: 0694

225752-US-1	US	Priority	12/030698	13	2008-02-13	0202403	13	2009-08-13	8197564	12	2012-06-12	2034-06-09	Granted	APPARATUS FOR COOLING SYNGAS WITHIN A REACTOR AND SYSTEMS FOR MIXING REACTOR AND SYSTEMS FOR MIXING REACTOR	Armstrong Teasdale LLP Phillips Ormonde & Fitzpatrick Craig Wilson and Company inc. China Patent Agent H.K. Ltd. Patent Agent H.K.	2019-12-12	3603
225764-AU-3	Australia	Designated PCT	200924163	4	2009-03-06	200924163	4	2014-07-17	200924163	06	2014-07-17	2029-03-06	Granted	APPARATUS FOR COOLING SYNGAS WITHIN A REACTOR AND SYSTEMS FOR MIXING REACTOR	China Patent Agent H.K. Ltd.	2020-03-06	382.44
225764-CA-4	Canada	Designated PCT	2722218	6	2009-03-06	2722218	6	2016-08-02	2722218	02	2016-08-02	2029-03-06	Granted	APPARATUS FOR COOLING SYNGAS WITHIN A REACTOR AND SYSTEMS FOR MIXING REACTOR	China Patent Agent H.K. Ltd.	2020-03-06	195.18
225764-CN-5	China	Designated PCT	200980116	06	2009-03-06	102015972	A	2011-04-13	102015972	13	2011-04-13	2029-03-06	Dropped	APPARATUS FOR COOLING SYNGAS WITHIN A REACTOR AND SYSTEMS FOR MIXING REACTOR	China Patent Agent H.K. Ltd.	2020-03-06	503.54
225764-CN-9	China	Divisional	201510203	06	2009-03-06	201510203	06	2015-08-19	104845676	19	2015-08-19	2029-03-06	Dropped	APPARATUS FOR COOLING SYNGAS WITHIN A REACTOR AND SYSTEMS FOR MIXING REACTOR	China Patent Agent H.K. Ltd.	2020-03-06	503.54
225764-KR-6	Korea	Designated PCT	102010702	06	2009-03-06	102011014	143A	2011-02-10	102011014	14	2015-07-14	2029-03-06	Granted	APPARATUS FOR COOLING SYNGAS WITHIN A REACTOR AND SYSTEMS FOR MIXING REACTOR	FirstLaw P.C.	2020-07-14	503.54
225764-PL-7	Poland	Designated PCT	P-392881	06	2009-03-06	215146	21	2013-02-21	215146	21	2013-02-21	2029-03-06	Granted	APPARATUS FOR COOLING SYNGAS WITHIN A REACTOR AND SYSTEMS FOR MIXING REACTOR	Polservice GE Precision Healthcare LLC	2020-03-06	304.12
225764-RU-8	Russia	Designated PCT	201014237	4	2009-03-06	2520440	25	2014-04-25	2520440	25	2014-04-25	2029-03-06	Granted	APPARATUS FOR COOLING SYNGAS WITHIN A REACTOR AND SYSTEMS FOR MIXING REACTOR	Precision Healthcare LLC	2020-03-06	148
225764-US-1	US	Priority	12/112281	30	2008-04-30	0272821	05	2009-11-05	8434700	07	2013-05-07	2029-10-04	Granted	APPARATUS FOR COOLING SYNGAS WITHIN A REACTOR AND SYSTEMS FOR MIXING REACTOR	Armstrong Teasdale LLP China Patent Agent H.K. Ltd.	2020-11-07	3603
225812-CN-3	China	Designated PCT	200880112	06	2008-06-06	200880112	19	2009-02-19	200880112	19	2013-06-19	2028-06-06	Granted	APPARATUS FOR COOLING SYNGAS WITHIN A REACTOR AND SYSTEMS FOR MIXING REACTOR	China Patent Agent H.K. Ltd.	2020-06-06	873.19
225812-US-1	US	Priority	11/839324	15	2007-08-15	0047193	19	2009-02-19	8236071	07	2012-08-07	2031-10-23	Granted	APPARATUS FOR COOLING SYNGAS WITHIN A REACTOR AND SYSTEMS FOR MIXING REACTOR	Armstrong Teasdale LLP China Patent Agent H.K. Ltd.	2020-02-07	3603

PATENT

REEL: 050798 FRAME: 0695

226234-US-1	US	Priority	11/854080	2007-09-12	0064587	2009-03-12	8506660	2013-08-13	2029-09-17	Granted	FOR USE WITH GASIFIERS AND METHODS OF ASSEMBLING	Armstrong Teasdale LLP	2021-02-13	3603
226468-US-1	US	Priority	12272310	2008-11-17	0123467	2010-05-20	8269509	2012-09-18	2030-10-20	Granted	METHOD FOR MEASURING THICKNESS OF A REFRACTORY WALL OF A GASIFIER USING ELECTROMA	GEE POWER	2020-03-18	3603
226658-AU-3	Australia	Designated PCT	200834699	2008-12-08			200834699	2014-09-18	2028-12-08	Granted	cooled roof and throat for a radiant syngas cooler	Davies Collison Cave	2019-12-08	382.44
226658-CN-4	China	Designated PCT	200880124	2008-12-08	101939610	2011-01-05	200880124	2012-07-11	2028-12-08	Granted	SYSTEMS FOR CONTROLLING	China Patent Agent H.K. Ltd.	2019-12-08	586.98
226658-KR-5	Korea	Designated PCT	102010701	2008-12-08	102010095	2010-08-27	10-1591113	2016-01-27	2028-12-08	Granted	cooled roof and throat for a radiant syngas cooler	FirstLaw P.C.	2020-01-27	257.06
226658-KR-7	Korea	Divisional	102015702	2008-12-08			101659706	2016-09-19	2028-12-08	Granted	cooled roof and throat for a radiant syngas cooler	FirstLaw P.C.	2020-09-19	181.22
226658-US-1	US	Priority	11/970943	2008-01-08	200901734	2009-07-09	8752615	2014-06-17	2031-01-10	Granted	SYSTEMS FOR CONTROLLING	Armstrong Teasdale LLP	2021-12-17	3603
226658-US-6	US	Divisional	14/279918	2014-05-16	201402461	2014-09-04	9739539	2017-08-22	2029-05-31	Granted	SYSTEMS FOR CONTROLLING	Armstrong Teasdale LLP	2021-02-22	1603
226658-US-8	US	Continuation	15/660383	2017-07-26	201703361	2017-11-23			2028-01-08	Dropped	SYSTEMS FOR CONTROLLING	Armstrong Teasdale LLP		

PATENT

REEL: 050798 FRAME: 0696

226828-CN-2	China	Secondary	201110365 296.3	2011-11-08	102533342 A	2012-07-04	102533342 24	2017-05-24	2031-11-08	Granted	METHOD FOR CONCENTRATING SOLID FUEL IN SLURRY	China Patent Agent H.K. Ltd.	2019-11-08	300.76
226828-IN-3	India	Secondary	3153/DEL/2011	2011-11-08	Journal02/2013	2013-01-11			2031-11-08	Published	METHOD FOR CONCENTRATING SOLID FUEL IN A SLURRY	KAnalysis Consultant s (P) Ltd		
226828-US-1	US	Priority	12/941757	2010-11-08	201201119 08A1	2012-05-10	2014-03-11	8668751	2032-12-24	Granted	FUEL IN A SLURRY APPARATUS FOR ASSEMBLING GASIFICATION REACTOR INJECTION DEVICES	Fletcher Yoder	2021-09-11	3603
226925-CN-3	China	Secondary	200980142 425.3	2009-07-20	102203221 A	2011-09-28	2014-08-20	200980142 425.3	2029-07-20	Granted	APPARATUS FOR ASSEMBLING GASIFICATION REACTOR INJECTION DEVICES	China Patent Agent H.K. Ltd.	2020-07-20	586.98
226925-US-1	US	Priority	12/196063	2008-08-21	0043290	2010-02-25	2013-11-12	8580001	2031-10-09	Granted	REACTOR INJECTION DEVICES	Armstrong Teasdale LLP	2021-05-12	3603
227627-US-1	US	Priority	12/411801	2009-03-26	201002479 27A1	2010-09-30	2011-11-29	8067098	2029-07-14	Granted	RESISTANT COATING SYSTEM Channel System, Apparatus and Method for Transporting Channel	Hartman Global IP Law	2023-05-29	7403
227691-AU-3	Australia	Secondary	52321/99	1999-07-27			2003-05-29	757214	2019-07-27	Granted	Method for Transporting Channel System, Apparatus and Method for Transporting Channel	Davies Collision Cave		
227691-CA-4	Canada	Secondary	2336571	1999-07-27	CA233857 1 A1	2000-02-17	2009-01-27	CA233857 1 C	2019-07-27	Granted	Method for Transporting Channel System, Apparatus and Method for Transporting Channel	GEE POWER		
227691-CN-10	China	Secondary	99809323. 8	1999-07-27			2003-04-23	ZL9980932 3.8	2019-07-27	Granted	Method for Transporting Channel System, Apparatus and Method for Transporting Channel	GEE POWER		

PATENT

REEL: 050798 FRAME: 0698

227691-DE-13	Germany	Designated EP	3	1999-07-27	69937117.1	2007-09-12	2019-07-27	Granted	Channel System, Apparatus and Method for Transporting Channel	Ruger Barthel Abel	
227691-IT-15	Italy	Designated EP	3	1999-07-27	1152963	2007-09-12	2019-07-27	Granted	Channel System, Apparatus and Method for Transporting Channel	GEE POWER	
227691-JP-7	Japan	Secondary	2000-563550	1999-07-27	4620250	2010-11-05	2019-07-27	Granted	Channel System, Apparatus and Method for Transporting Channel	YANAGIDA & ASSOCIATES	
227691-KR-8	Korea	Secondary	2001-7001319	1999-07-27	1602234	2006-07-10	2019-07-27	Granted	Channel System, Apparatus and Method for Transporting Channel	GEE POWER	
227691-US-1	US	Priority	09/129714	1998-08-05	6213289	2001-04-10	2018-08-05	Granted	Channel System, Apparatus and Method for Transporting Channel	GEE POWER	
227695-US-3	US	Continuation	12/565269	2009-09-23	8006827	2011-08-30	2028-04-17	Granted	Channel System, Apparatus and Method for Transporting Channel	GEE POWER	2023-02-28
227716-AU-2	Australia	Secondary	200920157	2009-04-21	200920157.8	2014-06-19	2029-04-21	Granted	Channel System, Apparatus and Method for Transporting Channel	Davies Collison Cave	2020-04-21
227716-CA-3	Canada	Secondary	2663886	2009-04-23	2663886	2017-07-04	2029-04-23	Granted	Channel System, Apparatus and Method for Transporting Channel	Wilson and Company inc.	2020-04-23
227716-CN-4	China	Secondary	200910139	2009-04-30	101571295.A	2017-07-14	2029-04-30	Granted	Channel System, Apparatus and Method for Transporting Channel	Patent Agent H.K. Ltd.	2020-04-30
227716-IN-6	India	Secondary	788/DEL/2009	2009-04-16	101571295	2017-07-14	2029-04-30	Granted	Channel System, Apparatus and Method for Transporting Channel	KANALYSIS CONSULTANTS (P) LTD	2020-04-30

PATENT

REEL: 050798 FRAME: 0699

228075-US-1	US	Priority	12/105320	2008-04-18	8147130	2012-04-03	2032-01-20	Granted	ESTIMATING FOULING THICKNESS COATINGS FOR	GEE POWER	2019-10-03	3603
228135-CN-3	China	Designated PCT	200980105 490.9	2009-01-05	200980105 490.9	2013-10-16	2029-01-05	Granted	MEASUREMENT DEVICE FOR	China Patent Agent H.K. Ltd.	2020-01-05	586.98
228135-DE-5	Germany	Designated EP	09711421. 9	2009-01-05	2252724 2252724	2010-11-24	2029-01-05	Granted	COMBUSTION SYSTEM COMPONENT EXPOSED TO SLAG, FOULING COATINGS FOR	Valipat SA	2020-01-05	707.49
228135-US-1	US	Priority	12/028873	2008-02-11	8227078	2012-07-24	2034-09-07	Granted	COMBUSTION SYSTEM COMPONENT EXPOSED TO SLAG, FOULING COATINGS FOR	GEE POWER	2020-01-24	3603
228148-CN-3	China	Designated PCT	200980112 507.3	2009-02-17	200980112 507.3	2015-05-20	2029-02-17	Granted	COMBUSTION SYSTEM, AND PROCESS FOR PREVENTING SLAG, ASH, IN A	China Patent Agent H.K. Ltd.	2020-02-17	586.98
228148-RU-4	Russia	Designated PCT	201014342 9	2009-02-17	2510687	2014-04-10	2029-02-17	Granted	COMBUSTION SYSTEM, AND PROCESS FOR PREVENTING SLAG, ASH, IN A	Goroditsky & Partners	2020-02-17	148

PATENT

REEL: 050798 FRAME: 0700

228148-US-1	US	Priority	12/054677	2008-03-25	0246500	01	2009-10-01	7914904	2011-03-29	2029-07-02	Granted	IN A COMBUSTION SYSTEM, AND PROCESS FOR PREVENTING SLAG, ASH, SYSTEM FOR AN INTEGRATED GASIFIER AND SYNGAS SYSTEM FOR AN INTEGRATED GASIFIER AND SYNGAS P.C.	GEE POWER	2022-09-29	7403
228510-CN-5	China	Designated PCT	200980131 147.1	2009-06-30	102112586 A	29	2011-06-29	200980131 147.1	2015-01-14	2029-06-30	Granted	China Patent Agent H.K. AND SYNGAS Ltd.	2020-06-30	586.98	
228510-KR-9	Korea	Designated PCT	102011700 5220	2009-06-30	102011053 986A	24	2011-05-24	10-1621112	2016-05-09	2029-06-30	Granted	FirstLaw P.C.	2020-05-09	219.14	
228551-AU-10	Australia	Secondary	200831656 1	2008-10-27	WO09/558 29	30	2009-04-30	200831656 1	2012-08-30	2028-10-27	Granted	Davies Collision Cave	2019-10-27	382.44	
228551-AU-3	Australia	Secondary	200822984 8	2008-10-09	200822984 8	09	2008-10-09	200822984 8	2013-03-04	2028-10-09	Granted	Davies Collision Cave	2019-10-09	382.44	
228551-CA-11	Canada	Designated PCT	2703541	2008-10-27	2703541	27	2008-10-27	2703541	2014-07-22	2028-10-27	Granted	Craig Wilson and Company inc.	2019-10-27	195.18	
228551-CA-4	Canada	Secondary	2641768	2008-10-23	2641768	23	2008-10-23	2641768	2016-12-13	2028-10-23	Granted	Craig Wilson and Company inc.	2019-10-23	195.18	

PATENT

REEL: 050798 FRAME: 0701

228551-CN-12	China	Designated PCT	200880113 824.2	2008-10-27	101952658	2009-04-30	2013-03-27	2028-10-27	Granted	METHOD FOR SUPPLYING FUEL TO A GASIFICATION SYSTEM FOR A GASIFIER AND METHOD OF GASIFICATION SYSTEMS START-UP	China Patent Agent H.K. Ltd.	2019-10-27	586.98
228551-CN-5	China	Secondary	200810179 952.9	2008-10-24	101481631 A	2009-07-15	2014-01-29	2028-10-24	Granted	METHOD FOR SUPPLYING FUEL TO A GASIFICATION SYSTEMS START-UP	China Patent Agent H.K. Ltd.	2019-10-24	586.98
228551-DE-15	Germany	Designated EP	08166421. 1	2008-10-13			2019-01-23	2028-10-13	Granted	METHOD FOR SUPPLYING FUEL TO A GASIFICATION SYSTEMS START-UP	GEE POWER	2019-10-13	707.49
228551-EP-6	EP	Secondary	08166421. 1	2008-10-13	2067939	2009-06-10	2019-01-23	2028-10-13	Granted	METHOD FOR SUPPLYING FUEL TO A GASIFICATION SYSTEMS START-UP	freightpartners IP Law Firm		
228551-IN-13	India	Secondary	2688/DEL NP/2010	2008-10-27	WO09/558 29	2009-04-30	2018-11-30	2028-10-27	Granted	METHOD FOR SUPPLYING FUEL TO A GASIFICATION SYSTEMS START-UP	GEE POWER	2019-10-27	399
228551-IN-7	India	Secondary	2342/DEL/ 2008	2008-10-13			2019-03-19	2028-10-13	Granted	METHOD FOR SUPPLYING FUEL TO A GASIFICATION SYSTEMS START-UP	KAnalysis Consultant s (P) Ltd	2019-10-13	399
228551-IT-16	Italy	Designated EP	08166421. 1	2008-10-13			2019-01-23	2028-10-13	Granted	METHOD FOR SUPPLYING FUEL TO A GASIFICATION SYSTEMS START-UP	GEE POWER	2019-10-13	468.87

PATENT

REEL: 050798 FRAME: 0702

228551-US-14	US	Divisional	14/581320	2014-12-23	2015-06-25	2015-01-30	2018-01-30	2029-12-09	Granted	SYSTEM FOR A GASIFIER AND METHOD OF GASIFICATION SYSTEM START-UP	Armstrong Teasdale LLP	2021-07-30	1603
228551-US-2	US	Secondary	12/209711	2008-09-12	2009-04-30	2015-02-10	2015-02-10	2031-11-03	Granted	SYSTEM FOR A GASIFIER AND METHOD OF GASIFICATION SYSTEM START-UP	Armstrong Teasdale LLP	2022-08-10	3603
228551-US-8	US	Continuation-in-part	12/347614	2008-12-31	2009-07-16	2015-03-31	2015-03-31	2031-08-23	Granted	SYSTEM FOR A GASIFIER AND METHOD OF GASIFICATION SYSTEM START-UP	Armstrong Teasdale LLP	2022-09-30	3603
228845-US-2	US	Secondary	12/209011	2008-09-11	2008-09-11	2015-07-07	2015-07-07	2033-03-27	Granted	WASTE GASIFICATION SYSTEM FOR USE WITH A PRESSURIZED VESSEL AND METHODS OF ASSEMBLY FOR USE WITH A PRESSURIZED VESSEL	GEE POWER	2023-01-07	3603
228927-CN-3	China	Designated PCT	200880123	2008-10-27	2011-04-13	2014-01-29	2014-01-29	2028-10-27	Granted	METHODS OF ASSEMBLY FOR USE WITH A PRESSURIZED VESSEL	China Patent Agent H.K. Ltd.	2019-10-27	586.98
228927-US-1	US	Priority	11/965079	2007-12-27	2009-07-02	2011-08-30	2011-08-30	2031-03-13	Granted	METHODS OF ASSEMBLY FOR USE WITH A PRESSURIZED VESSEL	Armstrong Teasdale LLP	2023-02-28	7403
228998-US-1	US	Priority	12/114545	2008-05-02	2009-11-05	2012-10-16	2012-10-16	2029-11-10	Granted	SYSTEMS FOR CONTROLLING	Armstrong Teasdale LLP	2020-04-16	3603

PATENT

REEL: 050798 FRAME: 0703

229314-AU-3	Australia	Secondary	200831122	2008-07-21	WO09/048 667	200831122 9	2012-12-20	2028-07-21	Granted	AND METHODS FOR CARBON DIOXIDE AND	GEE POWER	2020-07-21	382.44
229314-CA-4	Canada	Secondary	2700956	2008-07-21	WO09/048 667	2700956	2013-01-15	2028-07-21	Granted	METHODS FOR CARBON DIOXIDE AND	Craig Wilson and Company inc.	2020-07-21	195.18
229314-CN-5	China	Designated PCT	200880111	2008-07-21	102858429 A	200880111 775.9	2015-04-08	2028-07-21	Granted	METHODS FOR CARBON DIOXIDE AND	China Patent Agent H.K. Ltd.	2020-07-21	873.19
229314-US-1	US	Priority	11/870235	2007-10-10	0095155	7892324	2011-02-22	2032-09-03	Granted	METHODS FOR CARBON DIOXIDE INJECTOR	Armstrong Teasdale LLP	2022-08-22	7403
229490-CN-3	China	Designated PCT	200980132	2009-06-30	102124268 A	102124268	2016-08-24	2029-06-30	Granted	AND METHOD OF ASSEMBLING INJECTOR	China Patent Agent H.K. Ltd.	2020-06-30	586.98
229490-US-1	US	Priority	12/191036	2008-08-13	0037613	7784282	2010-08-31	2028-08-13	Granted	AND METHOD OF ASSEMBLING	Armstrong Teasdale LLP	2022-02-28	7403
230172-CN-5	China	Designated PCT	201080015	2010-02-23	102378931 A	201080015 810.4	2014-09-24	2030-02-23	Granted	SENSORS, SYSTEMS, AND METHODS OF MAKING	China Patent Agent H.K. Ltd.	2020-02-23	586.98
230172-CN-6	China	Designated PCT	201080015	2010-02-23	102378932	201080015 823.1	2013-08-21	2030-02-23	Granted	OPTICAL FIBER SENSORS FOR HARSH ENVIRONMENTS	China Patent Agent H.K. Ltd.	2020-02-23	586.98
230172-US-1	US	Priority	12/413648	2009-03-30	0247027	8019190	2011-09-13	2029-05-15	Granted	SENSORS, SYSTEMS, AND METHODS OF MAKING	GEE POWER	2023-03-13	7403
230172-US-2	US	Priority	12/413641	2009-03-30	0247026	8135247	2012-03-13	2029-08-13	Granted	SENSORS AND HARSH ENVIRONMENT SYSTEMS WITH PACKAGED SENSORS	GEE POWER	2023-09-13	7403

PATENT

REEL: 050798 FRAME: 0704

230286-AU-3	Australia	Designated PCT	200933372	2009-11-06	200933372	2016-05-05	2029-11-06	Granted	ADDITIVES FOR IMPROVED REFRACTORY LIFE	Phillips Ormonde Fitzpatrick	2019-11-06	382.44
230286-CN-5	China	Designated PCT	200980150	2009-11-06	200980150	2014-11-05	2029-11-06	Granted	ADDITIVES FOR IMPROVING REFRACTORY LIFE	China Patent Agent H.K. Ltd.	2019-11-06	586.98
230286-IN-6	India	Designated PCT	3939/DEL NP/2011	2009-11-06	3939DELN P2011	2012-04-06	2029-11-06	Granted	ADDITIVES FOR IMPROVED REFRACTORY LIFE	GEE POWER	2019-11-06	399
230286-JP-7	Japan	Designated PCT	2011-539546	2009-11-06	201251108	2012-05-17	2029-11-06	Granted	ADDITIVES FOR IMPROVED REFRACTORY LIFE	GEE POWER	2020-03-27	159.23
230286-KR-8	Korea	Designated PCT	102011701	2009-11-06	102011098	2011-09-01	2029-11-06	Granted	ADDITIVES FOR IMPROVED REFRACTORY LIFE	FirstLaw P.C.	2020-05-18	351.86
230286-PL-9	Poland	Designated PCT	P-395236	2009-11-06	217799	2014-01-23	2029-11-06	Granted	ADDITIVES FOR IMPROVED REFRACTORY LIFE	Polservice	2019-11-06	290.48
230286-US-1	US	Priority	12/330180	2008-12-08	201001391	2010-06-10	2032-02-21	Granted	ADDITIVES FOR IMPROVED REFRACTORY LIFE	GEE POWER	2019-12-12	3603
230286-US-10	US	Divisional	13/404835	2012-02-24	201201520	2012-06-21	2028-12-08	Granted	ADDITIVES FOR IMPROVED REFRACTORY LIFE	GEE POWER	2020-06-18	3603
230374-CN-3	China	Designated PCT	201480016	2014-02-26	105143414	2015-12-09	2034-02-26	Granted	AND SYSTEMS OF PRODUCING PARTICULATE FREE, COOLED	China Patent Agent H.K. Ltd.	2020-02-26	300.76

PATENT

REEL: 050798 FRAME: 0705

230374-US-1	US	Priority	13/833179	2013-03-15	201402599	2014-09-18	2016-08-09	2034-09-19	Granted	FREE COOLED FEED INJECTOR SYSTEM	Armstrong Teasdale LLP Patent Agent H.K. Ltd.	2020-02-09	1603
230714-CN-4	China	Designated PCT	200980154	2009-10-07	102362119	2012-02-22	2015-12-16	2029-10-07	Granted	FEED INJECTOR SYSTEM	Patent Agent H.K. Ltd.	2019-10-07	586.98
230714-JP-5	Japan	Secondary	2011-534585	2009-10-07	201250768	2012-03-29	2014-03-07	2029-10-07	Granted	INJECTOR SYSTEM	GEE POWER	2020-03-07	415.41
230714-KR-6	Korea	Secondary	102011701	2009-10-07	102011091	2011-08-12	2016-03-02	2029-10-07	Granted	INJECTOR SYSTEM	FirsLaw P.C.	2020-03-02	370.82
230714-US-1	US	Priority	12/264281	2008-11-04	0107642	2010-05-06	2012-05-15	2030-04-02	Granted	INJECTOR SYSTEM	GEE POWER	2019-11-15	3603
230831-CN-2	China	Secondary	201310319	2013-07-26	103569962	2014-02-12	2017-06-13	2033-07-26	Granted	SYSTEM FOR CATALYTIC REACTION	Patent Agent H.K. Ltd.	2020-07-26	300.76
230831-US-1	US	Priority	13/560961	2012-07-27	201400301	2014-01-30	2014-12-30	2033-03-11	Granted	SYSTEM FOR CATALYTIC REACTION	Fletcher Yoder	2022-06-30	3603
231122-CN-5	China	Designated PCT	200980141	2009-06-30	102177106	2011-09-07	2017-08-29	2029-06-30	Granted	MATERIAL WITH IMPROVED RESISTANCE TO MOLTEN MATERIAL	China Patent Agent H.K. Ltd.	2020-06-30	586.98
231122-US-1	US	Priority	12/191863	2008-08-14	0040778	2010-02-18	2013-07-09	2032-03-22	Granted	IMPROVED RESISTANCE TO MOLTEN MATERIAL	GEE POWER	2021-01-09	3603
231182-CN-4	China	Secondary	201010112	2010-01-22	101899329	2010-12-01	2014-07-16	2030-01-22	Granted	METHODS FOR TREATING A STREAM COMPRISING AN	China Patent Agent H.K. Ltd.	2020-01-22	586.98
231267-AU-2	Australia	Secondary	201020004	2010-01-06	201020004	2010-01-06	2016-09-01	2030-01-06	Granted	REFRACTORY LINING SYSTEMS	GEE POWER	2020-01-06	382.44

PATENT

REEL: 050798 FRAME: 0706

231267-CN-4	China	Secondary	2010/10003 288.X	2010-01-07	101798532 A	2010-08-11	2010-03-26	2030-01-07	Granted	REFRACTORY LINING SYSTEMS IN JOINTS IN REFRACTORY LINING SYSTEMS	China Patent Agent H.K. Ltd.	2020-01-07	586.98
231267-DE-8	Germany	Designated EP	09180257.9	2009-12-21			2012-05-16	2029-12-21	Granted	REFRACTORY LINING SYSTEMS IN JOINTS IN REFRACTORY LINING SYSTEMS	GEE POWER	2019-12-21	537.05
231267-IN-6	India	Secondary	2692/DEL/2009	2009-12-23					Application	REFRACTORY LINING SYSTEMS IN JOINTS IN REFRACTORY LINING SYSTEMS	KAnalysis Consultant s (P) Ltd		
231267-IT-10	Italy	Designated EP	09180257.9	2009-12-21			2012-05-16	2029-12-21	Granted	REFRACTORY LINING SYSTEMS IN JOINTS IN REFRACTORY LINING SYSTEMS	GEE POWER	2019-12-21	355.25
231267-PL-11	Poland	Designated EP	09180257.9	2009-12-21			2012-05-16	2029-12-21	Granted	REFRACTORY LINING SYSTEMS IN JOINTS IN REFRACTORY LINING SYSTEMS	GEE POWER	2019-12-21	290.48
231267-US-1	US	Priority	12/349776	2009-01-07		2010-07-08	2012-02-21	2030-06-22	Granted	REFRACTORY LINING SYSTEMS	Cantor Colburn	2023-08-21	7403
231268-US-1	US	Priority	12/350543	2009-01-08		2010-07-08	2013-02-12	2030-02-09	Granted	PROBE FOR VESSEL	Colburn LLP	2020-08-12	3603
231415-CN-2	China	Secondary	201010118 578.9	2010-01-21	101955805 A	2011-01-26	2014-12-24	2030-01-21	Granted	BRICK AND TAPERED MORTAR JOINT	China Patent Agent H.K. Ltd.	2020-01-21	586.98
231415-US-1	US	Priority	12/357823	2009-01-22		2010-07-22	2012-05-15	2033-01-11	Granted	BRICK AND TAPERED MORTAR JOINT	Cantor Colburn LLP	2019-11-15	3603
231417-US-1	US	Priority	12/357448	2009-01-22		2010-07-22	2013-08-20	2031-05-05	Granted	GAS FEED INJECTOR APPARATUS	Cantor Colburn LLP	2021-02-20	3603
232450-US-1	US	Priority	12/353346	2009-01-14	201001753 21A1	2010-07-15	2014-10-14	2031-10-19	Granted	GASIFIER VESSEL THROAT PLUG WITH INSTRUMENTATION	Cantor Colburn	2022-04-14	3603

PATENT

REEL: 050798 FRAME: 0707

232480-CN-4	China	Secondary	201010003	2010-01-06	101885994	2010-11-17	A	2030-01-06	Published	HEAT INTEGRATION IN COAL GASIFICATIO N AND METHANATIO N REACTION PROCESS integration design of SNG/power co production with Coal	China Patent Agent H.K. Ltd.	2019-12-16	537.05
232480-CN-7	China	Divisional	201510272	2015-05-26	104910985	2015-09-16	104910985	2030-01-06	Dropped	HEAT INTEGRATION IN COAL GASIFICATIO N AND METHANATIO N REACTION PROCESS	China Patent Agent H.K. Ltd.		
232480-DE-8	Germany	EP	09179375	2009-12-16	2390474	2011-11-30	233.2	2029-12-16	Granted	HEAT INTEGRATION IN COAL GASIFICATIO N AND METHANATIO N REACTION PROCESS	RWS Group Ltd	2019-12-16	537.05
232480-US-1	US	Priority	12/349127	2009-01-06	0170247	2010-07-08	8024930	2031-07-15	Granted	HEAT INTEGRATION IN COAL GASIFICATIO N AND METHANATIO N REACTION PROCESS SYSTEM AND METHOD FOR SULFUR RECOVERY	Cantor Colburn LLP	2023-03-27	7403
232531-CN-2	China	Secondary	201010255	2010-08-05	101993049	2011-03-30	101993049	2030-08-05	Granted	HEAT INTEGRATION IN COAL GASIFICATIO N AND METHANATIO N REACTION PROCESS SYSTEM AND METHOD FOR SULFUR RECOVERY	China Patent Agent H.K. Ltd.	2020-08-05	586.98
232531-US-1	US	Priority	12/535740	2009-08-05	0033370	2011-02-10	7901646	2029-08-05	Granted	HEAT INTEGRATION IN COAL GASIFICATIO N AND METHANATIO N REACTION PROCESS SYSTEM AND METHOD FOR SULFUR RECOVERY	GEE POWER	2022-09-08	7403
232573-CN-3	China	Designated PCT	201080008	2010-01-29	102325966	2012-01-18	201080008	2030-01-29	Granted	HEAT INTEGRATION IN COAL GASIFICATIO N AND METHANATIO N REACTION PROCESS SYSTEM AND METHOD FOR SULFUR RECOVERY	China Patent Agent H.K. Ltd.	2020-01-29	586.98
232573-IN-4	India	Secondary	5773/DEL NP/2011	2010-01-29	5773/DEL NP/2011	2013-02-01		2030-01-29	Published	HEAT INTEGRATION IN COAL GASIFICATIO N AND METHANATIO N REACTION PROCESS SYSTEM AND METHOD FOR SULFUR RECOVERY	KAnalysis Consultant s (P) Ltd		

PATENT

REEL: 050798 FRAME: 0708

232573-JP-5	Japan	Secondary	2011-551095	2010-01-29	2012-08-16	2015-05-22	2030-01-29	Granted	GENERATED POWER INTEGRATION FOR GASIFICATIO	GEE POWER	2020-05-22	130.12
232573-KR-6	Korea	Secondary	102011701 9224	2010-01-29	2011-12-06	2016-12-07	2030-01-29	Granted	GENERATED POWER INTEGRATION FOR GASIFICATIO	FirstLaw P.C.	2019-12-07	484.58
232573-US-1	US	Priority	12/389758	2009-02-20	2010-08-26	2016-05-03	2034-04-28	Granted	GENERATED POWER INTEGRATION FOR GASIFICATIO	GEE POWER	2019-11-03	1603
232884-US-1	US	Priority	12/469368	2009-05-20	2010-11-25	2014-07-22	2030-06-09	Granted	SYSTEMS FOR MIXING REACTOR ASSEMBLY AND APPARATUS FOR ASSEMBLY AND APPARATUS FOR ASSEMBLY	Armstrong Teasdale LLP Phillips Ormonde & Fitzpatrick China Patent Agent H.K. Ltd.	2022-01-22	3603
232909-AU-2	Australia	Secondary	201022178	2010-09-15		2016-08-25	2030-09-15	Granted	AND APPARATUS FOR ASSEMBLY AND APPARATUS FOR ASSEMBLY	Phillips Ormonde & Fitzpatrick	2020-09-15	382.44
232909-CN-4	China	Secondary	201010508 049.X	2010-09-28	2011-04-27	2014-11-26	2030-09-28	Granted	AND APPARATUS FOR ASSEMBLY AND APPARATUS FOR ASSEMBLY	China Patent Agent H.K. Ltd.	2020-09-28	586.98
232909-KR-5	Korea	Secondary	102010009 3106	2010-09-27	2011-04-05	2017-04-04	2030-09-27	Granted	AND APPARATUS FOR ASSEMBLY AND APPARATUS FOR ASSEMBLY	FirstLaw P.C. GE Precision Healthcare LLC	2020-04-04	200.18
232909-RU-7	Russia	Secondary	201013944	2010-09-27		2015-06-10	2030-09-27	Granted	AND APPARATUS FOR ASSEMBLY AND APPARATUS FOR ASSEMBLY	GE Precision Healthcare LLC	2020-09-27	148
232909-US-1	US	Priority	12/568275	2009-09-28	2011-03-31	2014-09-16	2031-01-22	Granted	AND APPARATUS FOR ASSEMBLY AND APPARATUS FOR ASSEMBLY	Armstrong Teasdale LLP	2022-03-16	3603
233005-US-2	US	Secondary	12/480473	2009-06-08	2010-12-02	2014-11-04	2032-11-11	Granted	INSTALLING A SEAL IN A SYNGAS COOLER	Fletcher Yoder	2022-05-04	3603

PATENT

REEL: 050798 FRAME: 0709

233019-CN-5	China	Secondary	200910253 234.6 11	2009-12-11	101760245 A	2010-06-30	2016-04-13	2029-12-11	Granted	China Patent Agent H.K. Ltd.	2019-12-11	586.98
233019-EP-6	EP	Secondary	09177442. 2	2009-11-30	2199375 23	2010-06-23			Rejected	Europe & Baden		
233019-US-3	US	Secondary	12/337742 12	2008-12-18	0146857 17	2010-06-17	2013-11-05	2031-06-17	Granted	None	2021-05-05	3603
233019-US-4	US	Secondary	12/337762 12	2008-12-18	201001468 58A1 17	2010-06-17	2013-12-31	2031-02-13	Granted	GEE POWER	2021-06-30	3603
233019-US-7	US	Divisional	14/056528 14	2013-10-17	201400599 30A1 06	2014-03-06	2016-06-14	2029-08-25	Granted	GEE POWER	2019-12-14	1603
233151-AU-2	Australia	Secondary	201020153 4	2010-04-16			2016-07-29	2030-04-16	Granted	Phillips Ormonde & Fitzpatrick	2020-04-16	382.44
233151-CN-4	China	Secondary	201010171 604.4 22	2010-04-22	101892103 A	2010-11-24			Published	China Patent Agent H.K. Ltd.		
233151-CN-6	China	Divisional	201610130 980.6 09	2016-03-09	105713673 29	2016-06-29		2030-04-22	Published	China Patent Agent H.K. Ltd.		
233151-KR-5	Korea	Secondary	102010003 6675 21	2010-04-21	102010116 540A 01	2010-11-01	2016-11-23	2030-04-21	Granted	FirstLaw P.C.	2019-11-23	257.06
233151-US-1	US	Priority	12/428416 22	2009-04-22	0272619 28	2010-10-28	2012-05-22	2030-01-13	Granted	GEE POWER	2019-11-22	3603

PATENT

REEL: 050798 FRAME: 0710

233173-CN-2	China	Secondary	201010167 824.X	2010-04-16	101921628 A	2010-12-22	201010167 2014-11-26	2030-04-16	Granted	APPARATUS FOR SHIELDING COOLING TUBES IN A RADIANT	China Patent Agent H.K. Ltd.	2020-04-16	586.98
233387-AU-2	Australia	Secondary	201020040 2	2010-02-03			201020040 2016-07-29	2030-02-03	Granted	APPARATUS FOR A FEED INTO A GASIFIER UTILIZING A SLURRY	Phillips Ormonde & Fitzpatrick	2020-02-03	382.44
233387-CA-3	Canada	Secondary	2693005	2010-02-11			2017-06-13	2030-02-11	Granted	APPARATUS FOR A FEED INTO A GASIFIER UTILIZING A SLURRY	Craig Wilson and Company inc.	2020-02-11	195.18
233387-CN-4	China	Secondary	201010143 660.7	2010-03-01	101829524 A	2010-09-15	201010143 2014-12-10	2030-03-01	Granted	APPARATUS FOR A FEED INTO A GASIFIER UTILIZING A SLURRY	China Patent Agent H.K. Ltd.	2020-03-01	586.98
233387-IN-5	India	Secondary	326/DEL/2 010	2010-02-15					Application	GASIFIER UTILIZING A SLURRY	KAnalysis Consultant s (P) Ltd		
233387-US-1	US	Priority	12/394626 27	2009-02-27	0219271	2010-09-02	2012-05-08	2031-05-10	Granted	APPARATUS FOR A FEED INTO A GASIFIER UTILIZING A SLURRY	Cantor Colburn LLP	2019-11-08	3603
233439-AU-2	Australia	Secondary	201020078 6	2010-03-02			201020078 2016-11-03	2030-03-02	Granted	APPARATUS OF PARTICULATE REMOVAL FROM GASIFIER	Phillips Ormonde & Fitzpatrick	2020-03-02	382.44
233439-CN-3	China	Secondary	201010143 127.0	2010-03-04	101864328 A	2010-10-20	201010143 2014-09-17	2030-03-04	Granted	APPARATUS OF PARTICULATE REMOVAL FROM GASIFIER	China Patent Agent H.K. Ltd.	2020-03-04	586.98

PATENT

REEL: 050798 FRAME: 0711

233439-KR-4	Korea	Secondary	9152	102010001	2010-03-03	102010100	2010-09-15	652A	2016-06-09	2030-03-03	Granted	101630880	2020-06-09	FirstLaw P.C.	219.14
233439-PL-5	Poland	Secondary	P390592	2010-03-02	2010-03-02	216650	2013-09-04	2030-03-02	2013-09-04	2030-03-02	Granted	216650	2020-03-02	PolSERVICE	290.48
233439-US-1	US	Priority	12/397658	2009-03-04	2010-09-09	0223847	2010-09-09	2031-01-22	2013-01-22	2031-01-22	Granted	8357215	2020-07-22	Cantor Colburn LLP	3603
233502-US-1	US	Priority	12/538301	2009-08-10	2011-02-10	0030383	2011-02-10	2032-02-02	2013-07-09	2032-02-02	Granted	8479487	2021-01-09	None	3603
233502-US-2	US	Secondary	12/610407	2009-11-02	2011-05-05	69A1	2011-05-05	2032-12-30	2014-03-04	2032-12-30	Granted	8661830	2021-09-04	None	3603
233522-US-1	US	Priority	12/538268	2009-08-10	2011-02-10	82A1	2011-02-10	2032-09-30	2013-12-31	2032-09-30	Granted	8617293	2021-06-30	GEE POWER	3603
233554-CN-2	China	Secondary	381.7	200910266	2009-12-24	A	2010-12-01	2029-12-24	2016-08-10	2029-12-24	Granted	101898070	2019-12-24	China Patent Agent H.K.	586.98
233593-CN-3	China	Designated PCT	201080012	2010-02-12	2012-02-15	102356275	2012-02-15	2030-02-12	2013-07-24	2030-02-12	Granted	201080012	2020-02-12	China Patent Agent H.K.	586.98

233593-DE-6	Germany	Designated EP	10705485.0	2010-02-12	2409080	2012-01-25	602010037608.7	2016-11-02	2030-02-12	Granted	HAVING ADJUSTABLE INJECTOR GASSIFIER NOZZLE	GEE POWER	2020-02-12	537.05
233593-IN-5	India	Secondary NP	6735/DEL NP/2011	2010-02-12						Application	HAVING ADJUSTABLE INJECTOR GASSIFIER NOZZLE	KAnalysis Consultant s (P) Ltd		
233593-NL-7	Netherlands	Designated EP	10705485.0	2010-02-12	2409080	2012-01-25	2409080	2016-11-02	2030-02-12	Granted	HAVING ADJUSTABLE INJECTOR GASSIFIER NOZZLE	RWS Group Ltd	2020-02-12	571.14
233593-US-1	US	Priority	12/406428	2009-03-18	0237173	2010-09-23	8104695	2012-01-31	2030-06-11	Granted	HAVING ADJUSTABLE INJECTOR GASSIFIER NOZZLE	Canfor Colburn LLP	2023-07-31	7403
233630-CN-2	China	Secondary	201010144003.4	2010-03-11	101839199A	2010-09-22	10183919930	2017-06-30	2030-03-11	Granted	PROVIDING A SACRIFICIAL SHIELD FOR AND APPARATUS FOR	China Patent Agent H.K.	2020-03-11	586.98
233630-US-1	US	Priority	12/402162	2009-03-11	8555647	2013-10-15	8555647	2013-10-15	2030-11-18	Granted	PROVIDING A SACRIFICIAL SHIELD FOR AND APPARATUS FOR	GEE POWER	2021-04-15	3603
234261-AU-2	Australia	Secondary	2010201230	2010-03-26	2010201230	2010-03-26	2010201230	2016-05-05	2030-03-26	Granted	BLENDING LIGNITE AND COKE APPARATUS FOR	Phillips Ormonde & Fitzpatrick	2020-03-26	382.44
234261-CA-3	Canada	Secondary	2697107	2010-03-18	2697107	2017-09-05	2697107	2017-09-05	2030-03-18	Granted	BLENDING LIGNITE AND COKE APPARATUS FOR	Craig Wilson and Company inc.	2020-03-18	195.18
234261-CN-4	China	Secondary	201010159796.7	2010-03-31	101851536A	2010-10-06	201010159796.7	2015-06-03	2030-03-31	Granted	BLENDING LIGNITE AND COKE	China Patent Agent H.K.	2020-03-31	586.98

PATENT

REEL: 050798 FRAME: 0713

235976-US-1	US	Priority	12/955948	2010-11-30	201201318 53A1	2012-05-31	8945496	2015-02-03	2032-10-26	Granted	SELECTIVE SULFUR METHOD AND SYSTEM FOR SEALING AN ANNULUS METHOD AND SYSTEM FOR SEALING AN ANNULUS METHOD AND SYSTEM FOR SEALING AN ANNULUS METHOD AND SYSTEM FOR SEALING AN ANNULUS	GEE POWER Phillips Ormonde & Fitzpatrick China Patent Agent H.K. Ltd.	2022-08-03	3603
235985-AU-2	Australia	Secondary	201020191	2010-05-12			201020191 2	2016-05-19	2030-05-12	Granted	METHOD AND SYSTEM FOR SEALING AN ANNULUS	China Patent Agent H.K. Ltd.	2020-05-12	382.44
235985-CN-4	China	Secondary	201010183	2010-05-12	101886701 A	2010-11-17	201010183 776.3	2015-04-01	2030-05-12	Granted	METHOD AND SYSTEM FOR SEALING AN ANNULUS	China Patent Agent H.K. Ltd.	2020-05-12	586.98
235985-IN-5	India	Secondary	1020/DEL/2010	2010-04-28	1020DEL2 010	2013-09-20			2030-04-28	Published	METHOD AND SYSTEM FOR SEALING AN ANNULUS	KANalysis Consultant s (P) Ltd		
235985-PL-6	Poland	Secondary	P-391196	2010-05-11			219533	2014-09-23	2030-05-11	Granted	METHOD AND SYSTEM FOR SEALING AN ANNULUS	PolSERVICE	2020-05-11	290.48
235985-US-1	US	Priority	12/464579	2009-05-12	0288474	2010-11-18	8424877	2013-04-23	2031-12-20	Granted	METHOD AND SYSTEM FOR SEALING AN ANNULUS	Armstrong Teasdale LLP	2020-10-23	3603
236150-CA-3	Canada	Secondary	2707938	2010-06-17			2707938	2017-08-01	2030-06-17	Granted	N SYSTEM FLOW DAMPING	Wilson and Company inc. Patent Agent H.K. Ltd.	2020-06-17	195.18
236150-CN-4	China	Secondary	201010226	2010-06-30	101935554 A	2011-01-05	201010226 965.4	2014-12-24	2030-06-30	Granted	N SYSTEM FLOW DAMPING	Patent Agent H.K. Ltd.	2020-06-30	586.98
236150-IN-5	India	Secondary	1391/DEL/2010	2010-06-15	1391DEL2 010	2013-09-20	300566	2018-08-31	2030-06-15	Granted	N SYSTEM FLOW DAMPING	GEE POWER	2020-06-15	399
236150-KR-7	Korea	Secondary	102010006	2010-06-29	102011001 962A	2011-01-06	101646272	2016-08-01	2030-06-29	Granted	N SYSTEM FLOW DAMPING	FirstLaw P.C.	2020-08-01	332.9
236150-US-1	US	Priority	12/495439	2009-06-30	201003259 57A1	2010-12-30	8986403	2015-03-24	2031-12-20	Granted	N SYSTEM FLOW DAMPING	GEE POWER	2022-09-24	3603
236209-CN-2	China	Secondary	201210415	2012-10-26	103087775 A	2013-05-08	103087775	2016-09-07	2032-10-26	Granted	METHOD AND SYSTEM FOR DRY MIXING A GASIFICATION FEED	China Patent Agent H.K. Ltd.	2019-10-26	300.76

PATENT

REEL: 050798 FRAME: 0716

236209-US-1	US	Priority	13/284842	2011-10-28	2013-05-02	20130109564A1	2015-12-01	2034-08-05	Granted	Fletcher Yoder	2023-06-01	3603
236511-CN-3	China	Designated PCT	201480015770.1	2014-02-19	2015-11-11	105051166	2019-04-23	2034-02-18	Granted	China Patent Agent H.K. Ltd.	2020-02-19	300.76
236511-IN-4	India	Designated PCT	5003/CHE NP/2015	2014-02-19				2034-02-19	Application	KAnalysis Consultants (P) Ltd		
236514-AU-2	Australia	Secondary	201021942	2010-09-14			2016-09-01	2030-09-14	Granted	Phillips Ormonde & Fitzpatrick	2020-09-14	382.44
236514-CA-3	Canada	Secondary	2714303	2010-09-02			2018-06-05	2030-09-02	Granted	Craig Wilson and Company	2020-09-02	195.18
236514-CN-4	China	Secondary	201010290777.8	2010-09-14	2011-04-20	102021040A	2014-11-26	2030-09-14	Granted	China Patent Agent H.K. Ltd.	2020-09-14	586.98
236514-US-1	US	Priority	12/559428	2009-09-14	2011-03-17	20110061298A1	2015-07-21	2031-06-11	Granted	Fletcher Yoder	2023-01-21	3603
236619-AU-3	Australia	Designated PCT	201029862	2010-08-11			2016-04-28	2030-08-11	Granted	Ormonde & Fitzpatrick	2020-08-11	382.44
236619-CA-4	Canada	Designated PCT	2775058	2010-08-11			2018-04-17	2030-08-11	Granted	Wilson and Company	2020-08-11	195.18
236619-CN-5	China	Designated PCT	201080054	2010-08-11	2012-11-14	102782434A	2014-10-08	2030-08-11	Granted	Patent Agent H.K. Ltd.	2020-08-11	586.98
236619-DE-6	Germany	Designated PCT	112010003	2010-08-11	2012-10-04	112010003764		2030-08-11	Published	Ruger Barthelt Abel	2020-08-11	537.05

PATENT

REEL: 050798 FRAME: 0717

236619-IN-7	India	Designated PCT	2186/DEL NP/2012	2015-08-21	2010-08-11	2186/DEL NP/2012	2015-08-21	2030-08-11	Published	N COOLING SYSTEM HAVING SEAL	KAnalysis Consultant s (P) Ltd	
236619-JP-8	Japan	Designated PCT	2013-02-21	2010-08-11	2010-08-11	2013-02-21	2015-05-01	2030-08-11	Granted	N COOLING SYSTEM HAVING SEAL	GEE POWER	2020-05-01 139.83
236619-KR-9	Korea	Designated PCT	102012088 683A	2012-08-08	2010-08-11	102012088 683A	2016-12-20	2030-08-11	Granted	N COOLING SYSTEM HAVING SEAL	FirstLaw P.C.	2019-12-20 257.06
236619-PL-10	Poland	Designated PCT	P-398742	2010-08-11	2010-08-11	P-398742	2014-06-24	2030-08-11	Granted	N COOLING SYSTEM HAVING SEAL	PolSERVICE	2020-08-11 290.48
236619-US-1	US	Priority	12/567661	2011-03-31	2009-09-25	12/567661	2013-12-03	2032-06-18	Granted	N COOLING SYSTEM HAVING SEAL	GEE POWER	2021-06-03 3603
237027-CN-3	China	Designated PCT	201080060 845.X	2012-09-19	2010-10-06	201080060 845.X	2015-09-23	2030-10-06	Granted	GAS ENGINE DRIVES FOR GASIFICATIO N PLANTS	China Patent Agent H.K. Ltd.	2019-10-06 586.98
237027-IN-4	India	Designated PCT	3967/DEL NP/2012	2015-10-30	2010-10-06	3967/DEL NP/2012			Published	GAS ENGINE DRIVES FOR GASIFICATIO N PLANTS	KAnalysis Consultant s (P) Ltd	
237027-US-1	US	Priority	12/613592	2011-05-12	2009-11-06	12/613592	2014-07-15	2033-05-15	Granted	GAS ENGINE DRIVES FOR GASIFICATIO N PLANTS	GEE POWER	2022-01-15 3603
237158-CN-2	China	Secondary	201310113 701.1	2013-10-23	2013-04-03	201310113 701.1	2017-06-13	2033-04-03	Granted	SYSTEM FOR DRYING A GASIFICATIO N FEED	China Patent Agent H.K. Ltd.	2020-04-03 300.76
237158-US-1	US	Priority	13/438774	2013-10-03	2012-04-03	13/438774	2015-04-21	2033-04-01	Granted	SYSTEM FOR DRYING A GASIFICATIO N FEED	Fletcher Yoder	2022-10-21 3603
237160-US-1	US	Continuatio n-in-part	14/042684	2014-01-30	2013-09-30	14/042684	2015-08-25	2031-04-25	Granted	SEGMENTED SOLID FEED PUMP	Fletcher Yoder	2023-02-25 3603
237160-BR-2	Brazil	Secondary	102012005 665	2018-02-27	2012-03-14	102012005 665	2017-11-28	2032-03-14	Published	SEGMENTED SOLID FEED PUMP	Gusmao Labrunie Patent Agent H.K. Ltd.	2020-03-14 100 300.76
237160-CN-3	China	Secondary	201210083 619.4	2012-09-26	2012-03-16	201210083 619.4	2017-11-28	2032-03-16	Granted	SEGMENTED SOLID FEED PUMP	Valpat SA	2020-03-14 332.52
237160-DE-6	Germany	Designated EP	12159364.4	2012-09-19	2012-03-14	12159364.4	2015-08-05	2032-03-14	Granted	SEGMENTED SOLID FEED PUMP	Valpat SA	2020-03-14 332.52

PATENT

REEL: 050798 FRAME: 0718

237160-GB-7	UK	Designated EP	12159364.4	2012-03-14	2012-09-19	2500566	2015-08-05	2032-03-14	Granted	SEGMENTED SOLID FEED PUMP	Valipat SA	2020-03-14	190.35
237160-IN-5	India	Secondary	559/DEL/2012-02-29	2012-02-29	2015-06-05	559DEL2012		2032-02-29	Published	SEGMENTED SOLID FEED PUMP	KAnalysis Consultant s (P) Ltd		
237160-NL-8	Netherlands	Designated EP	12159364.4	2012-03-14	2012-09-19	2500566	2015-08-05	2032-03-14	Granted	SEGMENTED SOLID FEED PUMP	Valipat SA	2020-03-14	389.34
237160-US-1	US	Priority	13/052000	2011-03-18	2012-09-20	20120234652A1	2013-10-01	2031-08-31	Granted	SEGMENTED SOLID FEED PUMP	GEE POWER	2021-04-01	3603
237164-CN-2	China	Secondary	201210368784.4	2012-09-27	2013-04-10	103029990A	2016-08-03	2032-09-27	Granted	METHOD FOR TRANSPORTING SOLID FEED IN A SOLID FEED PUMP	China Patent Agent H.K. Ltd.	2020-09-27	300.76
237164-US-1	US	Priority	13/252044	2011-10-03	2013-04-04	20130081925A1	2013-11-12	2032-04-06	Granted	METHOD FOR TRANSPORTING SOLID FEED IN A SOLID FEED PUMP	Fletcher Yoder	2021-05-12	3603
237549-JP-4	Japan	Secondary	2010-206190	2010-09-15	2011-06-07	2011068891	2015-02-13	2030-09-15	Granted	CAPTURE COOLING SYSTEM AND METHOD	GEE POWER	2020-02-13	130.12
237549-KR-5	Korea	Secondary	1020100091552	2010-09-17	2011-03-30	102011033053A	2017-01-02	2030-09-17	Granted	CAPTURE COOLING SYSTEM AND METHOD	FirstLaw P.C.	2020-01-02	257.06
237549-US-1	US	Priority	12/566613	2009-09-24	2011-03-24	20110067302A1	2014-06-03	2029-11-07	Granted	CAPTURE COOLING SYSTEM AND METHOD	Fletcher Yoder	2021-12-03	3603
237591-CN-4	China	Designated PCT	201080045025.3	2010-04-01	2012-07-04	201080045025.3A	2015-07-29	2030-04-01	Granted	DIOXIDE ABSORBENT AND METHOD OF USING	China Patent Agent H.K. Ltd.	2020-04-01	586.98
237591-IN-6	India	Designated PCT	1087/DELNP/2012	2010-04-01	2015-04-10	1087DELNP2012			Published	carbon dioxide absorbent and method of use	KAnalysis Consultant s (P) Ltd		
237591-JP-7	Japan	Designated PCT	2012-522824	2010-04-01	2013-05-07	2013500333	2015-07-17	2030-04-01	Granted	carbon dioxide absorbent and method of use	GEE POWER	2020-07-17	139.83

PATENT

REEL: 050798 FRAME: 0719

237591-US-1	US	Continuatio n-in-part	12/512105	2009-07-30	201001587 77A1	2010-06-24	2011-10-04	2011-10-04	8030509	2011-10-04	2029-08-26	Granted	DIOXIDE ABSORBENT AND METHOD OF USING R	GEE POWER	2023-04-04	7403
237616-US-1	US	Priority	12/578514	2009-10-13	2011-04-14	2011-04-14	2012-03-06	2012-03-06	8129696	2012-03-06	2031-07-19	Granted	TREATMENT SYSTEM AND METHOD USING HIGH ENERGY	GEE POWER	2023-09-06	7403
237632-AU-2	Australia	Secondary	201320147	2013-03-07	103316567	2013-09-25	2018-01-11	2018-01-11	201320147 5	2018-01-11	2033-03-07	Granted	SYSTEM FOR RECOVERING ACID GASES FROM A GAS STREAM	Phillips Ormonde & Fitzpatrick	2020-03-07	209.97
237632-CN-3	China	Secondary	201310096	2013-03-25	103316567	2013-09-25	2018-06-08	2018-06-08	103316567	2018-06-08	2033-03-25	Granted	SYSTEM FOR RECOVERING ACID GASES FROM A GAS AGENT H.K.	China Patent Agent H.K. Ltd.	2020-03-25	300.76
237632-JP-5	Japan	Secondary	2013-055843	2013-03-19	201319964	2013-10-03	2033-03-19	2033-03-19		2033-03-19	2033-03-19	Published	SYSTEM FOR RECOVERING ACID GASES FROM A GAS STREAM	GPOJ Patent Firm		
237632-JP-7	Japan	Divisional	2017-098594	2017-05-18			2018-08-17	2018-08-17	6387147	2018-08-17	2033-03-19	Granted	Pressure Rich Solvent for H2S Reabsorption	GEE POWER	2021-08-17	139.83
237632-KR-6	Korea	Secondary	102013003	2013-03-21	102013108	2013-10-02	2033-03-21	2033-03-21		2033-03-21	2033-03-21	Published	SYSTEM FOR RECOVERING ACID GASES FROM A GAS STREAM	FirstLaw P.C.		
237632-US-1	US	Priority	13/429212	2012-03-23	201302477	2013-09-26	2015-02-03	2015-02-03	8945292	2015-02-03	2032-12-21	Granted	SYSTEM FOR RECOVERING ACID GASES FROM A GAS STREAM	Fletcher Yoder	2022-08-03	3603
237636-AU-2	Australia	Secondary	201120228	2011-05-17	201120228	2011-05-17	2016-10-20	2016-10-20	201120228 5	2016-10-20	2031-05-17	Granted	SYSTEM FOR RECOVERING ACID GASES FROM A GAS FOR COMPRESSIN G A GAS	Ormonde & Fitzpatrick Patent Agent H.K. Ltd.	2020-05-17	209.97
237636-CN-4	China	Secondary	201110204	2011-05-17	102311806	2012-01-11	2015-08-19	2015-08-19	201110204 448.1	2015-08-19	2031-05-17	Granted	SYSTEM FOR RECOVERING ACID GASES FROM A GAS FOR COMPRESSIN G A GAS	Patent Agent H.K. Ltd.	2020-05-17	586.98

PATENT

REEL: 050798 FRAME: 0720

237636-US-1	US	Priority	12/781781	2010-05-17	2011-11-17	8303695	2012-11-06	2031-05-07	Granted	FOR COMPRESSIN G A GAS	GEE POWER	2020-05-06	3603
237637-US-1	US	Priority	12/781778	2010-05-17	2011-11-17	8500877	2013-08-06	2030-05-17	Granted	NA	GEE POWER	2021-02-06	3603
237821-CN-1	China	Priority	201010105	2010-01-29	ZL201010105037.2	2014-08-06	2030-01-29	Granted	AND METHODS FOR DETERMININ G A REAL TIME SOLID FLOW RATE	Liu Shen Associates	2020-01-29	586.98	
237821-US-3	US	Designated PCT	13/575811	2011-01-06	2013-02-08	9267831B2	2016-02-23	2033-02-13	Granted	AND METHODS FOR DETERMININ G A REAL TIME SOLID FLOW RATE	GEE POWER	2023-08-23	3603
237869-AU-3	Australia	Designated PCT	201031860	2010-09-28	201031860	2016-05-05	2030-09-28	Granted	WITH TOTAL ZERO DISCHARGE OF PLANT PROCESS	Phillips Ormonde & Fitzpatrick	2020-09-28	382.44	
237869-CN-4	China	Designated PCT	201080061	2010-09-28	102781844	2014-10-15	2030-09-28	Granted	WITH TOTAL ZERO DISCHARGE OF PLANT PROCESS	China Patent Agent H.K. Ltd.	2020-09-28	586.98	
237869-US-1	US	Priority	12/617621	2009-11-12	2011-05-12	8425636	2013-04-23	2031-12-23	Granted	WITH TOTAL ZERO DISCHARGE OF PLANT PROCESS	GEE POWER	2020-10-23	3603
238029-AU-3	Australia	Designated PCT	201120361	2011-01-06	201120361	2016-09-22	2031-01-06	Granted	AND METHOD USING FUEL INJECTORS	Phillips Ormonde & Fitzpatrick	2020-01-06	209.97	
238029-CA-4	Canada	Designated PCT	2786506	2011-01-06	2786506	2018-05-22	2031-01-06	Granted	AND METHOD USING FUEL INJECTORS	Craig Wilson and Company inc.	2020-01-06	156.75	

PATENT

REEL: 050798 FRAME: 0721

238029-IN-6	India	Designated PCT	5926/DEL NP/2012	2011-01-06	35/2016	2016-08-26	2031-01-06	Published	N SYSTEM AND METHOD USING FUEL INJECTORS	KAnalysis Consultant s (P) Ltd	
238029-KR-7	Korea	Designated PCT	102012702 0420	2011-01-06	102012123 393A	2012-11-08	2031-01-06	Granted	AND METHOD USING FUEL INJECTORS	FirstLaw P.C.	2020-06-01 276.02
238029-US-1	US	Priority	12/684000	2010-01-07	201101623 76A1	2011-07-07	2032-04-11	Granted	AND METHOD USING FUEL INJECTORS	GEE POWER	2021-10-15 3603
238085-CN-4	China	Secondary	201110197 748.1	2011-07-06	102371107 A	2012-03-14	2031-07-06	Granted	SYSTEM FOR ACID GAS REMOVAL	Patent Agent H.K. Ltd.	2020-07-06 586.98
238085-US-1	US	Priority	12/831174	2010-07-06	0006200	2012-01-12	2032-01-07	Granted	SYSTEM FOR ACID GAS REMOVAL	Fletcher Yoder	2021-04-22 3603
238088-US-1	US	Priority	12/652019	2010-01-04	201101650 26A1	2011-07-07	2031-06-05	Granted	FLAME STABILITY AND TEMPERATURE IN A CLAUSE THERMAL REACTOR	GEE POWER	2021-06-03 3603
238090-CN-3	China	Secondary	201010547 925.X	2010-11-05	102052101 A	2011-05-11	2030-11-05	Granted	METHOD FOR IMPROVING PERFORMANCE OF AN IGCC POWER PLANT	China Patent Agent H.K. Ltd.	2019-11-05 586.98
238090-US-1	US	Priority	12/613308	2009-11-05	0099971	2011-05-05	2032-05-11	Granted	METHOD FOR IMPROVING PERFORMANCE OF AN IGCC POWER PLANT	GEE POWER	2021-03-10 3603
238253-AU-3	Australia	Designated PCT	201031372 3	2010-06-08			2030-06-08	Granted	PROCESS FOR THE RECOVERY OF CO2 FROM A GAS STREAM AND A RELATED	Phillips Ormonde & Fitzpatrick	2020-06-08 382.44

PATENT

REEL: 050798 FRAME: 0722

238253-BR-4	Brazil	Designated PCT	112012009 8187	2010-06-08						Application	Gusmao Labrunie	2020-06-08	100
238253-CN-5	China	Designated PCT	201080049 722.6	2010-06-08	2015-11-25	201080049 722.6	2012-09-12	2030-06-08		Granted	China Patent Agent H.K. Ltd.	2020-06-08	586.98
238253-EP-6	EP	Designated PCT	10727262 7	2010-06-08		2493592	2012-09-05			Published	Ruger Barthelt Abel	2020-06-08	1792.64
238253-IN-7	India	Designated PCT	3578/DEL NP/2012	2010-06-08	2018-05-22	296986	2015-10-30	2030-06-08		Granted	GEE POWER	2020-06-08	399
238253-JP-8	Japan	Designated PCT	2012-536800	2010-06-08	2015-04-10	5726198	2013-03-14	2030-06-08		Granted	GEE POWER	2020-04-10	241.72
238253-US-1	US	Priority	12/609454	2009-10-30	2014-02-11	8647413	2011-05-05	2032-06-16		Granted	GEE POWER	2021-08-11	3603

238260-AU-4	Australia	Designated PCT	201027668	2010-04-12	201027668	2017-02-16	2030-04-12	Granted	CARBON DIOXIDE ABSORBENTS, METHODS OF USING THE SAME, AND	Phillips Ormonde & Fitzpatrick	2020-04-12	382.44
238260-BR-5	Brazil	Designated PCT	112012002	2010-04-12				Application	CARBON DIOXIDE ABSORBENTS, METHODS OF USING THE SAME, AND	Gusmao Labrunie	2020-04-12	100
238260-DE-6	Germany	Designated PCT	112010003	2010-04-12	112010003	2012-09-27		Published	carbon dioxide and the method using same	Ruger Barthelt Abel	2020-04-12	537.05
238260-IN-7	India	Designated PCT	1089/DEL NP/2012	2010-04-12			2018-05-29	Instructed	CARBON DIOXIDE ABSORBENTS, METHODS OF USING THE SAME, AND	KAnalysis Consultant s (P) Ltd	2020-04-12	399
238260-US-3	US	Continuation-in-part	13/332843	2011-12-21	201201710	2012-07-05	2016-09-13	Granted	CARBON DIOXIDE ABSORBENTS, METHODS OF USING THE SAME, AND	GEE POWER	2020-03-13	1603
238260-US-9	US	Divisional	15/261262	2016-09-09	201603754	2016-12-29	2018-05-01	Granted	CARBON DIOXIDE ABSORBENTS, METHODS OF USING THE SAME, AND	GEE POWER	2021-11-01	1603
238290-CN-3	China	Secondary	201310325	2013-07-30	103571544	2014-02-12	2033-07-30	Dropped	FOR PREHEATING FEEDSTOCK	Patent Agent H.K. Ltd.		
238401-CN-3	China	Designated PCT	201280041	2012-08-14	201280041	2015-10-07	2032-08-14	Granted	SCRUBBER ASSEMBLY	Patent Agent H.K. GEE	2020-08-14	300.76
238401-US-1	US	Priority	13/220741	2011-08-30	201300475	2013-02-28	2015-04-21	Granted	SCRUBBER ASSEMBLY	GEE POWER	2022-10-21	3603

PATENT

REEL: 050798 FRAME: 0724

238651-AU-2	Australia	Secondary	201120506	2011-07-28	2011-07-28	2016-12-01	2031-07-28	2011205062	Granted	SYSTEM AND METHOD FOR DRY FEED GASIFIER START-UP	Phillips Ormonde & Fitzpatrick	2020-07-28	209.97
238651-CA-3	Canada	Secondary	2746920	2011-07-21	2018-07-10	2031-07-21	2031-07-21	2746920	Granted	SYSTEM AND METHOD FOR DRY FEED GASIFIER START-UP	Craig Wilson and Company inc.	2020-07-21	156.75
238651-CN-4	China	Secondary	102373095	2012-03-14	2016-11-23	2031-08-05	2031-08-05	102373095	Granted	SYSTEM AND METHOD FOR DRY FEED GASIFIER START-UP	China Patent Agent H.K. Ltd.	2020-08-05	586.98
238651-IN-5	India	Secondary	1974/DEL/2011	2011-07-14	1974DEL2011-07-14	2013-10-04	2031-07-14	1974DEL2011-07-14	Published	SYSTEM AND METHOD FOR DRY FEED GASIFIER START-UP	KAnalysis Consultant s (P) Ltd		
238651-US-1	US	Priority	12/851690	2010-08-06	2012-02-09	2015-09-22	2032-01-14	9139788	Granted	SYSTEM AND METHOD FOR DRY FEED GASIFIER START-UP	Armstrong Teasdale LLP	2023-03-22	3603
238714-CN-3	China	Designated PCT	201180012	2011-01-06	2012-11-14	2018-06-19	2031-01-06	102782098	Granted	AND METHOD FOR HEATING AND DRYING SOLID FEEDSTOCK IN A GASIFICATIO	China Patent Agent H.K. Ltd.	2020-01-06	586.98
238714-US-1	US	Priority	12/652835	2010-01-06	2011-07-07	2013-01-08	2031-04-09	8349036	Granted	AND METHOD FOR HEATING AND DRYING SOLID FEEDSTOCK IN A GASIFICATIO	Armstrong Teasdale LLP	2020-07-08	3603
238770-AU-2	Australia	Secondary	201120167	2011-04-14	2016-07-29	2031-04-14	2031-04-14	2011201679	Granted	GAS PURIFICATIO N AND RECOVERY WITH	Phillips Ormonde & Fitzpatrick	2020-04-14	209.97

PATENT

REEL: 050798 FRAME: 0725

238770-CA-3	Canada	Secondary	2737330	2011-04-14		2019-01-15	2031-04-14	Granted	GAS PURIFICATION AND RECOVERY WITH	Craig Wilson and Company inc.	2020-04-14	156.75
238770-CN-4	China	Secondary	201110112 969.4	2011-04-21	102233225 A	2016-03-30	2031-04-21	Granted	GAS PURIFICATION AND RECOVERY WITH	China Patent Agent H.K. Ltd.	2020-04-21	586.98
238770-DK-8	Denmark	Designated EP	11163278 2	2011-04-20	2380653 26	2017-08-09	2031-04-20	Granted	GAS PURIFICATION AND RECOVERY WITH	RWS Group Ltd	2020-04-20	353.69
238770-NL-7	Netherlands	Designated EP	11163278 2	2011-04-20	2380653 26	2017-08-09	2031-04-20	Granted	GAS PURIFICATION AND RECOVERY WITH	RWS Group Ltd	2020-04-20	457.51
238770-PL-6	Poland	Designated EP	11163278 2	2011-04-20	2380653 26	2017-08-09	2031-04-20	Granted	GAS PURIFICATION AND RECOVERY WITH	RWS Group Ltd	2020-04-20	442.74
238770-US-1	US	Priority	12/766826	2010-04-23	0259197	2013-07-02	2031-04-15	Granted	GAS PURIFICATION AND RECOVERY WITH AND METHOD FOR CO-FEEDING	GEE POWER	2021-01-02	3603
238832-CN-1	China	Priority	200910250 066.5	2009-12-03	102086415 08	2014-08-20	2029-12-03	Granted	SOLID AND LIQUID FUELS AND METHOD FOR CO-FEEDING	Liu Shen Associates	2019-12-03	586.98
238832-US-3	US	Designated PCT	13/513435	2010-11-09	201301342 32A1	2016-05-03	2031-03-12	Granted	SOLID AND LIQUID FUELS AND METHOD FOR CO-FEEDING	GEE POWER	2019-11-03	1603
238991-CA-3	Canada	Secondary	2726406	2010-12-23				Examination Requested	TRANSPORT SOLIDS	Craig Wilson and Company inc.	2019-12-23	249

PATENT

REEL: 050798 FRAME: 0726

239049-CA-2	Canada	Secondary	2711128	2010-07-15	101967406 A	2011-02-09	201010246 445.X	2018-04-24	2030-07-15	Granted	SYSTEM AND METHOD TO OPERATE A QUENCH SCRUBBER SYSTEM UNDER HIGH ENTRAINMENT	Craig Wilson and Company inc.	2020-07-15	195.18
239049-CN-3	China	Secondary	445.X	2010-07-27	101967406 A	2011-02-09	201010246 445.X	2014-06-04	2030-07-27	Granted	SYSTEM AND METHOD TO OPERATE A QUENCH SCRUBBER SYSTEM UNDER HIGH ENTRAINMENT	China Patent Agent H.K. Ltd.	2020-07-27	586.98
239049-KR-4	Korea	Secondary	2597	2010-07-27	102011011 582A	2011-02-08	101676039	2016-11-08	2030-07-27	Granted	SYSTEM AND METHOD TO OPERATE A QUENCH SCRUBBER SYSTEM UNDER HIGH ENTRAINMENT	FirstLaw P.C.	2019-11-08	238.1
239049-PL-5	Poland	Secondary	P-391922	2010-07-23			218564	2014-04-17	2030-07-23	Granted	SYSTEM AND METHOD TO OPERATE A QUENCH SCRUBBER SYSTEM UNDER HIGH ENTRAINMENT	PolSERVICE	2020-07-23	290.48
239049-RU-6	Russia	Secondary	3	2010-07-26	201013090		2540592	2014-12-22	2030-07-26	Granted	SYSTEM AND METHOD TO OPERATE A QUENCH SCRUBBER SYSTEM UNDER HIGH ENTRAINMENT	GE Precision Healthcare LLC	2020-07-26	148

PATENT

REEL: 050798 FRAME: 0728

239049-US-1	US	Priority	12/5/10229	2009-07-27	201100167 87A1	2011-01-27	2014-09-02	2031-08-09	Granted	Fletcher Yoder	2022-03-02	3603
239051-US-1	US	Priority	12/7/14321	2010-02-26	0209407	2011-09-01	2013-07-16	2030-02-26	Granted	GEE POWER	2021-01-16	3603
239263-CN-3	China	Designated PCT	201080045 026.8	2010-08-16	102549118 A	2012-07-04	2014-06-04	2030-08-16	Granted	China Patent Agent H.K. Ltd.	2020-08-16	586.98
239263-IN-4	India	Designated PCT	2242/DEL NP/2012	2010-08-16	2242/DEL NP/2012	2015-08-21		2029-09-29	Published	KAnalysis Consultant s (P) Ltd		
239263-JP-5	Japan	Designated PCT	2012-530888	2010-08-16	201350602 8	2013-02-21	2015-01-09	2029-09-29	Granted	GEE POWER	2020-01-09	144.68
239263-KR-6	Korea	Designated PCT	102012700 8003	2010-08-16	102012099 389A	2012-09-10	2017-03-08	2029-09-29	Granted	FirstLaw P.C.	2020-03-08	238.1
239263-US-1	US	Priority	12/5/69278	2009-09-29	201100727 23A1	2011-03-31	2015-01-06	2031-04-30	Granted	GEE POWER Phillips Ormonde	2022-07-06	3603
239308-AU-2	Australia	Secondary	201125072 6	2011-11-11					Application	Fitzpatrick	2019-11-02	209.97
239308-IN-3	India	Secondary	3139/DEL/ 2011	2011-11-04	3139DEL2 011	2013-09-27		2031-11-04	Published	KAnalysis Consultant s (P) Ltd		
239308-KR-5	Korea	Secondary	102011011 7026	2011-11-10	102012050 914A	2012-05-21	2018-04-02	2031-11-10	Granted	FirstLaw P.C.	2021-04-02	332.9
239308-US-6	US	Secondary	13/293577	2011-11-10	201201178 74A1	2012-05-17	2016-02-23	2034-07-25	Granted	GEE POWER	2023-08-23	3603

PATENT

REEL: 050798 FRAME: 0729

240811-CN-3	China	Designated PCT	201080044 995.1	2010-08-09	102575849 A	2012-07-11	2015-02-11	2030-08-09	Granted	CONVEYANCE AND INJECTION SYSTEM FOR A GASIFIER AND DRY-PROCESS FEEDING SYSTEMS PROVIDED WITH A AND METHOD TO PRODUCE SYNTHETIC GAS AND METHOD TO PRODUCE SYNTHETIC GAS	China Patent Agent H.K. Ltd.	2020-08-09	586.98
240821-CN-1	China	Priority	201010217 557.2	2010-06-24	102295114 A	2011-12-28	2013-07-31	2030-06-24	Granted	SYSTEMS PROVIDED WITH A AND METHOD TO PRODUCE SYNTHETIC GAS	Liu Shen Associates	2020-06-24	586.98
240889-CN-2	China	Secondary	201410049 689.7	2014-02-13	103980950	2014-08-13		2034-02-13	Published	AND METHOD TO PRODUCE SYNTHETIC GAS	China Patent Agent H.K. Ltd.		
240889-US-1	US	Priority	13/766588	2013-02-13			2014-05-13	2033-02-13	Granted	AND METHOD TO PRODUCE SYNTHETIC GAS	Armstrong Teasdale LLP	2021-11-13	3603
241016-CN-2	China	Secondary	201110340 230.9	2011-10-19	102533364 A	2012-07-04	2014-11-19	2031-10-19	Granted	METHOD OF SUBSTITUTE NATURAL GAS PRODUCTION	China Patent Agent H.K. Ltd.	2019-10-19	300.76
241016-IN-3	India	Secondary	2710/DEL/2011	2011-09-19	01/2013	2013-01-04		2031-09-19	Published	METHOD OF SUBSTITUTE NATURAL GAS PRODUCTION	KAnalysis Consultant s (P) Ltd		
241016-JP-4	Japan	Secondary	2011-226310	2011-10-14	201208730 0	2012-05-10	2015-09-18	2031-10-14	Granted	NATURAL GAS PRODUCTION METHOD OF SUBSTITUTE NATURAL GAS	GEE POWER	2020-09-18	110.71
241016-KR-5	Korea	Secondary	102011010 6565	2011-10-18	102012040 675A	2012-04-27	2018-05-24	2031-10-18	Granted	METHOD OF SUBSTITUTE NATURAL GAS PRODUCTION	FirstLaw P.C.	2021-05-24	181.22
241016-PL-6	Poland	Secondary	P-396625	2011-10-18			2017-04-18	2031-10-18	Granted	METHOD OF SUBSTITUTE NATURAL GAS PRODUCTION	PolSERVICE	2019-10-13	233.67

PATENT

REEL: 050798 FRAME: 0730

241016-US-1	US	Priority	12/907932	2010-10-19	201200936	2012-04-19	8420031	2013-04-16	2030-12-31	Granted	NATURAL GAS PRODUCTION	Fletcher Yoder	2020-10-16	3603
241030-CN-2	China	Secondary	201210367	2012-09-28	103028349	2013-04-10	103028349	2016-08-17	2032-09-28	Granted	FEED	Patent Agent H.I.K.	2020-09-28	300.76
241030-CN-4	China	Divisional	201610205	2012-09-28	105838448	2016-08-10			2032-09-28	Published	Multiple stream feeding injector	Patent Agent H.I.K.		
241030-US-1	US	Priority	13/249114	2011-09-29	201300842	2013-04-04	8795602	2014-08-05	2032-05-24	Granted	STREAM FEED	Fletcher Yoder	2022-02-05	3603
241030-US-3	US	Continuation	14/317901	2014-06-27	201403055	2014-10-16	9278326	2016-03-08	2031-09-29	Granted	STREAM FEED	Fletcher Yoder	2023-09-08	3603
241288-CN-3	China	Designated PCT	201180014	2011-02-25	102791835	2012-11-21			2031-02-25	Published	SYSTEM FOR HEAT INTEGRATION WITH METHANATIO N SYSTEM	China Patent Agent H.I.K. Ltd.		
241288-IN-4	India	Designated PCT	7442/DEL NP/2012	2011-02-25	7442DELN	2014-02-21	303668	2018-11-29	2031-02-25	Granted	SYSTEM FOR HEAT INTEGRATION WITH METHANATIO N SYSTEM	GEE POWER	2020-02-25	220
241288-KR-5	Korea	Designated PCT	102012702	2011-02-25	102013054	2013-05-24	1767287	2017-08-04	2031-02-25	Granted	SYSTEM FOR HEAT INTEGRATION WITH METHANATIO N SYSTEM	FirstLaw P.C.	2020-08-04	351.86
241288-US-1	US	Priority	12/726039	2010-03-17	0229382	2011-09-22	8354082	2013-01-15	2030-12-25	Granted	SYSTEM FOR HEAT INTEGRATION WITH METHANATIO N SYSTEM	GEE POWER	2020-07-15	3603
241365-AU-2	Australia	Secondary	201120250	2011-05-27			201120250	2016-09-08	2031-05-27	Granted	Coal Dry Feed System for a Gasifier and Method for Coal Dry Feed System for a Gasifier	Phillips Ormonde & Fitzpatrick Craig Wilson and Company inc.	2020-05-27	209.97
241365-CA-3	Canada	Secondary	2741169	2011-05-26			2741169	2018-08-14	2031-05-26	Granted	Coal Dry Feed System for a Gasifier	Wilson and Company inc.	2020-05-26	156.75

PATENT

REEL: 050798 FRAME: 0731

241365-CN-1	China	Priority	201010193 544.6	2010-06-03	1517/DEL/2011-05-26	1517DEL2 2013-09-011 27	102011005 2011-06-03	2010-06-03	201010101 2016-06-15	2030-06-03	Granted	ZL2010101 93544.6	2016-06-15	2030-06-03	and Method for Coal Dry Feed System for a Gasifier	GEE POWER	2020-06-03	586.98
241365-IN-4	India	Secondary	1517/DEL/2011-05-26	2011-05-26	1517DEL2 2013-09-011 27	2013-09-27	2011-12-09	2011-05-26	2031-05-26	2031-05-26	Published			2031-05-26	Coal Dry Feed System for a Gasifier	KAnalysis Consultants (P) Ltd		
241365-KR-5	Korea	Secondary	102011005 4032	2011-06-03	102011133 2011-12-003A 09	2011-12-09	2011-12-09	2018-04-09	2018-04-09	2031-06-03	Granted	10-1848919	2018-04-09	2031-06-03	Coal Dry Feed System for a Gasifier	FirstLaw P.C.	2021-04-09	276.02
241365-PL-6	Poland	Secondary	P-395110	2011-06-03			2011-06-03	2015-11-12	2015-11-12	2031-06-03	Granted	223052	2015-11-12	2031-06-03	Coal Dry Feed System for a Gasifier	Polservice	2020-06-03	262.07
241365-US-7	US	Secondary	13/112386	2011-05-20	201103017 61A1	2011-12-08	2011-12-08	2015-09-01	2015-09-01	2031-10-13	Granted	9122280	2015-09-01	2031-10-13	G A DRY FEED SYSTEM	GEE POWER	2023-03-01	3603
241441-AU-3	Australia	Designated PCT	201121320 5	2011-01-26			2011-01-26	2016-08-25	2016-08-25	2031-01-26	Granted	201121320 5	2016-08-25	2031-01-26	WATER TREATMENT SYSTEMS	Phillips Ormonde Fitzpatrick & Craig Wilson and Company inc. China Patent Agent H.K. Ltd.	2020-01-26	209.97
241441-CA-4	Canada	Designated PCT	2788294	2011-01-26			2011-01-26	2018-04-24	2018-04-24	2031-01-26	Granted	2788294	2018-04-24	2031-01-26	WATER TREATMENT SYSTEMS	Wilson and Company inc. China Patent Agent H.K. Ltd.	2020-01-26	156.75
241441-CN-5	China	Designated PCT	201180016 640.6	2011-01-26	102811956 A	2012-12-05	2012-12-05	2016-11-30	2016-11-30	2031-01-26	Granted	102811956 30	2016-11-30	2031-01-26	WATER TREATMENT SYSTEMS	China Patent Agent H.K. Ltd.	2020-01-26	586.98
241441-IN-6	India	Designated PCT	6615/DEL NP/2012	2011-01-26	6615DELN P2012	2015-10-23	2015-10-23	2018-08-28	2018-08-28	2031-01-26	Granted	300391	2018-08-28	2031-01-26	WATER TREATMENT SYSTEMS	GEE POWER	2020-01-26	220
241441-PL-8	Poland	Designated PCT	P-401545	2011-01-26			2011-01-26			2031-01-26	Application			2031-01-26	WATER TREATMENT SYSTEMS	Polservice		
241441-US-1	US	Priority	12/699004	2010-02-02	0186489	2011-08-04	2011-08-04	2013-10-15	2013-10-15	2031-02-24	Granted	8557118	2013-10-15	2031-02-24	WATER TREATMENT SYSTEMS	GEE POWER	2021-04-15	3603

PATENT

REEL: 050798 FRAME: 0732

241459- CN-3	China	Designated PCT	2011-03- 14	102918328 A	2013-02- 06	102918328 17	2016-02- 17	2031-03- 14	Granted	AND METHODS FOR FEEDSTOCK AND METHODS FOR FEEDSTOCK N SYSTEMS	China Patent Agent H.K. Ltd.	2020-03- 14	586.98
241459- US- 1	US	Priority	2010-04- 06	201102396 58A1	2011-10- 06	8739549 03	2014-06- 03	2033-04- 03	Granted	AND METHODS FOR FEEDSTOCK N SYSTEMS	Fletcher Yoder	2021-12- 03	3603
241531- AU- 2	Australia	Secondary	2011-09- 09	201122143 0	2011-09- 09	201122143 0	2016-10- 27	2031-09- 09	Granted	AND METHODS FOR REMOVING WATER FROM N SYSTEMS	Phillips Ormonde & Fitzpatrick	2020-09- 09	209.97
241531- CA- 3	Canada	Secondary	2011-09- 01	2751721	2031-09- 01	2751721	2018-08- 14	2031-09- 01	Granted	AND METHODS FOR REMOVING WATER FROM N SYSTEMS	Craig Wilson and Company inc.	2020-09- 01	156.75
241531- CN-4	China	Secondary	2011-09- 13	102397740 A	2012-05- 15	102397740 30	2016-03- 30	2031-09- 13	Granted	AND METHODS FOR REMOVING WATER FROM N SYSTEMS	China Patent Agent H.K. Ltd.	2020-09- 13	586.98
241531- DE- 6	Germany	Designated EP	2011-08- 31	11179571 2	2014-01- 08	602011039 265.4	2017-07- 05	2031-08- 31	Granted	AND METHODS FOR REMOVING WATER FROM N SYSTEMS	RWS RWS Group Ltd	2020-08- 31	400.7
241531- NL- 7	Netherlands	Designated EP	2011-08- 31	11179571 2	2014-01- 08	2428264	2017-07- 05	2031-08- 31	Granted	AND METHODS FOR REMOVING WATER FROM N SYSTEMS	RWS RWS Group Ltd	2020-08- 31	457.51
241531- US- 1	US	Priority	2010-09- 13	12/880576	2012-03- 15	0060690	2013-07- 23	2030-10- 15	Granted	AND METHODS FOR REMOVING WATER FROM N SYSTEMS	Armstrong Teasdale LLP	2021-01- 23	3603

PATENT

REEL: 050798 FRAME: 0733

241619-CN-6	China	Secondary	201110147	2011-05-20	102251246 A	2011-11-23	102251246 18	2016-05-18	2031-05-20	Granted	PROTECTING TURBINE ENGINE SURFACES FROM protecting turbine engine surface from corrosion	China Patent Agent H.K. Ltd.	2020-05-20	586.98
241619-DE-10	Germany	Designated EP	11166703.6	2011-05-19	2388357	2011-11-23	60 2011 060 455.4	2019-07-17	2031-05-19	Granted	PROTECTING TURBINE ENGINE SURFACES FROM Ruger Barthelt Abel	Ruger Barthelt Abel	2020-05-19	400.7
241619-EP-7	EP	Secondary	11166703.6	2011-05-19	2388357	2011-11-23	2388357	2019-07-17	2031-05-19	Acknowledged	PROTECTING TURBINE ENGINE SURFACES FROM Ruger Barthelt Abel	Ruger Barthelt Abel		
241619-IT-11	Italy	Designated EP	11166703.6	2011-05-19			2388357	2019-07-17	2031-05-19	Granted	PROTECTING TURBINE ENGINE SURFACES FROM Ruger Barthelt Abel	Ruger Barthelt Abel	2020-05-19	264.34
241619-JP-8	Japan	Secondary	2011-110892	2011-05-18	201124725 5	2011-12-08	6270302	2018-01-12	2031-05-18	Granted	PROTECTING TURBINE ENGINE SURFACES FROM GEE POWER	GEE POWER	2021-01-12	130.12
241619-PL-12	Poland	Designated EP	11166703.6	2011-05-19			2388357	2019-07-17	2031-05-19	Granted	PROTECTING TURBINE ENGINE SURFACES FROM Ruger Barthelt Abel	Ruger Barthelt Abel	2020-05-19	261.51
241619-US-1	US	Priority	12/785258	2010-05-21	0284367	2011-11-24	8268134	2012-09-18	2031-06-11	Granted	PROTECTING TURBINE ENGINE SURFACES FROM NA	GEE POWER	2020-03-18	3603
241619-US-2	US	Priority	12/785302	2010-05-21	0284368	2011-11-24	8372251	2013-02-12	2030-12-11	Dropped	PROTECTING GASIFIER SURFACES FROM CORROSION FOR PREPARING FUEL COMPOSITIO NS FROM RENEWABLE SOURCES, AND	GEE POWER	2020-08-12	3603
241641-BR-2	Brazil	Secondary	1103540-4	2011-07-26	1103540-4 22	2013-01-22	1103540-4 13	2019-08-13	2031-07-26	Granted	PROTECTING GASIFIER SURFACES FROM CORROSION FOR PREPARING FUEL COMPOSITIO NS FROM RENEWABLE SOURCES, AND	Gusmao Labrunie	2020-07-26	357

PATENT

REEL: 050798 FRAME: 0734

241641-CN-3	China	Secondary	201110221 670.2	2011-07-28	102344821 A	2012-02-08		Published	FOR PREPARING FUEL COMPOSITIONS FROM RENEWABLE SOURCES, AND of liquid fuel production from biomass	China Patent Agent H.K. Ltd.									
241641-CN-5	China	Divisional	201610131 493.1	2016-03-08	105623723 01	2016-06-01		Published	FOR PREPARING FUEL COMPOSITIONS FROM RENEWABLE SOURCES, AND of liquid fuel production from biomass	China Patent Agent H.K. Ltd.		2031-07-28							
241641-IN-4	India	Secondary	1941/DEL/ 2011	2011-07-11	1941DEL2 011	2013-01-04	305669	Granted	FOR PREPARING FUEL COMPOSITIONS FROM RENEWABLE SOURCES, AND of liquid fuel production from biomass	KAnalysis Consultant s (P) Ltd		2031-07-11	2019-01-15	2014-02-25	2015-07-21	2018-04-26	2020-07-11	2020-01-14	220
241641-US-1	US	Priority	12/845333	2010-07-28	201200292 52A1	2012-02-02	8657999	Granted	FOR PREPARING FUEL COMPOSITIONS FROM RENEWABLE SOURCES, AND of liquid fuel production from biomass			2032-07-09	2014-02-25	2015-07-21	2018-04-26	2020-07-11	2020-01-14	2021-08-25	3603
241648-US-1	US	Priority	12/714303	2010-02-26	201102094 06A1	2011-09-01	9085472	Granted	FOR PREPARING FUEL COMPOSITIONS FROM RENEWABLE SOURCES, AND of liquid fuel production from biomass	Fletcher Yoder		2031-04-08	2015-07-21	2018-04-26	2020-07-11	2020-01-14	2023-01-21	2023-01-21	3603
241666-BR-3	Brazil	Designated PCT	112012020 371-1	2011-01-14				Application	FOR PREPARING FUEL COMPOSITIONS FROM RENEWABLE SOURCES, AND of liquid fuel production from biomass	Gusmao Labrunie China Patent Agent H.K. Ltd.									100
241666-CN-4	China	Designated PCT	201180019 404.X	2011-01-14	102834492 A	2012-12-19	201180019 404.X	Granted	FOR PREPARING FUEL COMPOSITIONS FROM RENEWABLE SOURCES, AND of liquid fuel production from biomass	China Patent Agent H.K. Ltd.		2031-01-14	2016-01-06	2018-04-26	2020-07-11	2020-01-14	2020-01-14	2020-01-14	586.98
241666-IN-5	India	Designated PCT	6981/DEL NP/2012	2011-01-04			296195	Granted	FOR PREPARING FUEL COMPOSITIONS FROM RENEWABLE SOURCES, AND of liquid fuel production from biomass	GEE POWER									220

PATENT

REEL: 050798 FRAME: 0735

241712-CN-4	China	Secondary	2011-05-18	2011-12-21	102284228 A	2016-08-17	2031-05-18	102284228 17	2016-08-17	2031-05-18	Granted	SYSTEM FOR INTEGRATING ACID GAS REMOVAL AND CARBON CAPTURE	China Patent Agent H.K. Ltd.	2020-05-18	586.98
241751-US-1	US	Priority	2010-05-18	2011-11-24	0286894	2013-04-16	2031-03-02	8419843	2013-04-16	2031-03-02	Granted	SYSTEM FOR INTEGRATING ACID GAS REMOVAL AND CARBON CAPTURE	GEE POWER	2020-10-16	3603
241751-US-1	US	Priority	2010-04-30	2011-11-03	02866364	2013-01-29	2030-12-22	8360342	2013-01-29	2030-12-22	Granted	having differential tip cooling system and method	GEE POWER	2020-07-29	3603
241751-US-2	US	Continuation	2013-01-22	2013-05-23	201301258 59	2016-10-11	2032-05-27	9464610	2016-10-11	2032-05-27	Granted	INJECTOR HAVING DIFFERENTIAL TIP COOLING	Fletcher Yoder	2020-04-11	1603
241756-CN-3	China	Secondary	2011-04-08	2011-11-09	102235966 A	2015-08-05	2031-04-08	201110098 821.X	2015-08-05	2031-04-08	Granted	METHOD FOR ONLINE MONITORING OF MOLTEN SALT CORROSION	China Patent Agent H.K. Ltd.	2020-04-08	586.98
241756-CN-6	China	Secondary	2011-04-08	2011-11-30	102262045 A	2016-01-13	2031-04-08	201110093 302.4	2016-01-13	2031-04-08	Granted	SYSTEM AND METHOD FOR ONLINE MONITORING OF MOLTEN SALT CORROSION	China Patent Agent H.K. Ltd.	2020-04-08	586.98
241756-US-1	US	Priority	2010-04-09	2011-10-13	0251721	2012-07-17	2032-02-04	8224595	2012-07-17	2032-02-04	Granted	MONITORING OF MOLTEN SALT CORROSION	Dority Manning Attorneys at Law PA	2020-01-17	3603
241756-US-2	US	Priority	2010-04-09	2030-04-09	7982474	2011-07-19	2030-04-09	7982474	2011-07-19	2030-04-09	Granted	NA	Manning Attorneys at Law PA	2023-01-19	7403
241765-CN-2	China	Secondary	2011-06-14	2011-12-14	102277199 A	2015-04-01	2031-06-14	201110170 642.2	2015-04-01	2031-06-14	Granted	INCREASING THE LIFE OF FUEL INJECTORS	China Patent Agent H.K. Ltd.	2020-06-14	586.98

PATENT

REEL: 050798 FRAME: 0736

242021-KR-6	Korea	102011013	2011-12-14	102012067	2012-06-25	101872526	2018-06-22	2031-12-14	Granted	N QUENCH CHAMBER AND SCRUBBER ASSEMBLY	FirstLaw P.C.	2021-06-22	238.1
242021-US-1	US	12/968423	2010-12-15	201101200	2011-05-26	9028569	2015-05-12	2032-06-16	Granted	N QUENCH CHAMBER AND SCRUBBER ASSEMBLY GASIFICATIO	GEE POWER	2022-11-12	3603
242039-US-1	US	12/957276	2010-11-30	201101200	2011-05-26	9109173	2015-08-18	2030-10-20	Granted	N QUENCH CHAMBER DIP TUBE PRESSURE CONVEYANC E GAS SELECTION AND METHOD OF FLUIDIZATION	GEE POWER	2023-02-18	3603
242384-US-1	US	12/841994	2010-07-22	0017562	2012-01-26	8512446	2013-08-20	2030-07-22	Granted	FLUIDIZATION CHINA DEVICE FOR SOLID FUEL PARTICLES	Fletcher Yoder	2021-02-20	3603
242413-CN-3	China	201180030	2011-06-21	103328892	2013-09-25	103328892	2016-03-23	2031-06-21	Granted	AGENT H.K. LTD.	AGENT H.K. LTD.	2020-06-21	586.98
242413-US-1	US	12/822132	2010-06-23	0318234	2011-12-29	8377387	2013-02-19	2030-12-23	Granted	NA DEHYDRATIO N SYSTEM WITH DESICCANT	GEE POWER	2020-08-19	3603
242523-US-1	US	12/854075	2010-08-10	201200370	2012-02-16	8632627	2014-01-21	2031-09-08	Granted	refractory lining for a gasifier	Fletcher Yoder	2021-07-21	3603
242526-CN-8	China	201610354	2016-05-25	CN105779	2016-07-20	019A			Published	WALLS, AND GASIFICATIO N DEVICES AND METHODS	Liu Shen Associates		
242526-US-6	US	13/037968	2011-03-01	201202223	2012-09-06	9702628	2017-07-11	2034-02-04	Granted	SYSTEM FOR THERMALLY CONTROLLIN G A SOLID FEED PUMP effectively cool solids pump	GEE POWER	2021-01-11	1603
242869-CA-2	Canada	2751890	2011-09-08						Application	Craig Wilson and Company inc.		2020-09-08	249
242869-CN-11	China	201510298	2015-06-03	104960926	2015-10-07	104960926	2017-07-04	2031-09-21	Granted	Patent Agent H.K.	Patent Agent H.K.	2020-09-21	586.98

PATENT

REEL: 050798 FRAME: 0738

242869-CN-3	China	Secondary	2011-09-21	1023556668 A	2012-07-11	201110291 346.8	2015-07-08	2031-09-21	Granted	G A SOLID FEED PUMP	China Patent Agent H.K. Ltd.	2020-09-21	586.98
242869-DE-9	Germany	Designated EP	2011-09-06	2431310	2012-03-21	2431310	2013-11-13	2031-09-06	Granted	G A SOLID FEED PUMP	Valipat SA	2020-09-06	400.7
242869-IN-5	India	Secondary	2011-09-06	2555/DEL/2011	2013-01-04	2555/DEL/2011		2031-09-06	Published	G A SOLID FEED PUMP	KAnalysis Consultant s (P) Ltd		
242869-IT-10	Italy	Designated EP	2011-09-06	2431310	2012-03-21	2431310	2013-11-13	2031-09-06	Granted	G A SOLID FEED PUMP	Valipat SA	2020-09-06	264.34
242869-JP-6	Japan	Secondary	2011-09-16	201206693 8	2012-04-05	5965601	2016-07-08	2031-09-16	Granted	G A SOLID FEED PUMP	GEE POWER	2020-07-08	130.12
242869-KR-7	Korea	Secondary	2011-09-20	102012030 974A	2012-03-29	101853132	2018-04-23	2031-09-20	Granted	G A SOLID FEED PUMP	FirstLaw P.C.	2021-04-23	238.1
242869-PL-8	Poland	Designated EP	2011-09-06	2431310	2012-03-21	2431310	2013-11-13	2031-09-06	Granted	G A SOLID FEED PUMP	Valipat SA	2020-09-06	261.51
242869-US-1	US	Priority	2010-09-21	0067702	2012-03-22	8464860	2013-06-18	2031-09-21	Granted	G A SOLID FEED PUMP INJECTION	GEE POWER China Patent Agent H.K. Ltd.	2020-12-18	3603
242872-CN-2	China	Secondary	2011-07-07	102390691 A	2012-03-28	201110199 400.6	2015-11-25	2031-07-07	Granted	SOLIDS FLOW THROUGH A	China Patent Agent H.K. Ltd.	2020-07-07	586.98

PATENT

REEL: 050798 FRAME: 0739

242872-US-1	US	Priority	12/831288	2010-07-07	2012-01-12	201200066 24A1	2014-08-05	2032-05-24	Granted	8794385	2014-08-05	2032-05-24	INJECTION FOR FREE SOLIDS FLOW THROUGH A BACK MIXING DEVICE FOR PNEUMATIC CONVEYING SYSTEMS	Cooper Legal Group LLC	2022-02-05	3603
243168-AU-3	Australia	Designated PCT	201132086 5	2011-09-08			2017-01-05	2031-09-08	Granted	201132086 5	2017-01-05	2031-09-08	Mixer for Producing Steady Flow in Pneumatic Conveying	Phillips Ormonde & Fitzpatrick	2020-09-08	209.97
243168-AU-8	Australia	Divisional	201626938 7	2011-09-08			2018-07-12	2031-09-08	Granted	201626938 7	2018-07-12	2031-09-08	BACK MIXING DEVICE FOR PNEUMATIC CONVEYING SYSTEMS	Phillips Ormonde & Fitzpatrick	2020-09-08	209.97
243168-CN-4	China	Designated PCT	201180052 781.3	2011-09-08	2013-06-26	103180668 A	2016-10-19	2031-09-08	Granted	103180668 19	2016-10-19	2031-09-08	BACK MIXING DEVICE FOR PNEUMATIC CONVEYING SYSTEMS	China Patent Agent H.K. Ltd.	2020-09-08	586.98
243168-DE-9	Germany	Designated EP	11758627. 1	2011-09-08	2013-09-04	2633234	2018-08-22	2031-09-08	Granted	602011051 326.5	2018-08-22	2031-09-08	BACK MIXING DEVICE FOR PNEUMATIC CONVEYING SYSTEMS	Valpat SA	2020-09-08	400.7
243168-EP-5	EP	Designated PCT	11758627. 1	2011-09-08	2013-09-04	2633234	2018-08-22	2031-09-08	Granted	2633234	2018-08-22	2031-09-08	BACK MIXING DEVICE FOR PNEUMATIC CONVEYING SYSTEMS	freightpartners IP Law Firm		
243168-KR-6	Korea	Designated PCT	102013701 0700	2011-09-08	2014-01-02	102014000 232A	2018-03-27	2031-09-08	Granted	10-1844619	2018-03-27	2031-09-08	BACK MIXING DEVICE FOR PNEUMATIC CONVEYING SYSTEMS	Lee & Ko	2021-03-27	313.94
243168-US-1	US	Priority	12/915553	2010-10-29	2012-05-03	201201070 60A1	2014-09-16	2032-12-27	Granted	8834074	2014-09-16	2032-12-27	BACK MIXING DEVICE FOR PNEUMATIC CONVEYING SYSTEMS	GEE POWER	2022-03-16	3603
243168-US-7	US	Divisional	14/458492	2014-08-13	2014-11-27	201403485 98A1	2015-03-24	2030-10-29	Granted	8985912	2015-03-24	2030-10-29	BACK MIXING DEVICE FOR PNEUMATIC CONVEYING SYSTEMS	GEE POWER	2022-09-24	3603
243169-AU-3	Australia	Designated PCT	201132093 9	2011-08-26			2016-11-10	2031-08-26	Granted	201132093 9	2016-11-10	2031-08-26	FEEDER DISCHARGE	Ormonde &	2020-08-26	209.97

PATENT

REEL: 050798 FRAME: 0740

243169-CN-4	China	Designated PCT	2011-08-26	103492808	2014-01-01	103492808	2016-01-27	2031-08-26	Granted	FEEDER DISCHARGE	Patent Agent H.K.	2020-08-26	586.98
243169-DE-7	Germany	Designated EP	2011-08-26	2632832	2013-09-04	602011047	2018-04-11	2031-08-26	Granted	FEEDER DISCHARGE	RWS Group Ltd	2020-08-26	400.7
243169-KR-6	Korea	Designated PCT	2011-08-26	102013139	2013-12-20	101779242	2017-09-11	2031-08-26	Granted	FEEDER DISCHARGE	FirstLaw P.C.	2020-09-11	370.82
243169-US-1	US	Priority	2010-10-29	201201070	2012-05-03	8882400	2014-11-11	2033-07-18	Granted	FEEDER DISCHARGE	GEE POWER	2022-05-11	3603
243361-US-1	US	Priority	2010-08-10	0039776	2012-02-16	8268266	2012-09-18	2031-01-19	Granted	PROCESSING SECTION MONITOR	Fletcher Yoder Phillips	2020-03-18	3603
243700-AU-2	Australia	Secondary	2011-10-07	201123280	2011-10-07	201123280	2016-09-01	2031-10-07	Granted	CONTROL SYSTEM MONITOR	& Fitzpatrick Craig	2019-10-07	209.97
243700-CA-3	Canada	Secondary	2011-09-29	2753736	2011-09-29				Allowed	CONTROL SYSTEM MONITOR	Wilson and Company inc.	2020-09-29	249
243700-CN-4	China	Secondary	2011-10-08	777.3	2012-05-09	102443444	2015-04-01	2031-10-08	Granted	CONTROL SYSTEM MONITOR	China Patent Agent H.K.	2019-10-08	300.76
243700-CN-9	China	Divisional	2015-02-10	368.4	2015-06-17	104711037	2017-06-09	2031-09-23	Granted	Mounted Slag Slumping Sensor and Gasifier MONITOR	China Patent Agent H.K.	2019-10-08	300.76
243700-IN-5	India	Secondary	2011-09-30	2838/DEL/2011	2011-09-30				Application	CONTROL SYSTEM MONITOR	KAnalysis Consultant s (P) Ltd		
243700-KR-7	Korea	Secondary	2011-10-06	102011010	2012-04-18	102012036	2017-09-11	2031-10-06	Granted	CONTROL SYSTEM MONITOR	FirstLaw P.C.	2020-09-11	200.18
243700-PL-8	Poland	Secondary	2011-10-07	P-396577	2011-10-07	226076	2016-12-07	2031-10-07	Granted	CONTROL SYSTEM MONITOR	PolSERVICE	2019-10-07	233.67
243700-US-1	US	Priority	2010-10-08	12/901391	2010-10-08	201200850	2015-04-28	2030-10-08	Granted	CONTROL SYSTEM MONITOR	Fletcher Yoder	2022-10-28	3603

PATENT

REEL: 050798 FRAME: 0741

243792-CN-3	China	Designated PCT	201180042	2011-07-19	103459956	18	2013-12-18	103459956	21	2016-12-21	19	2031-07-19	Granted	METHOD FOR CONTROLLIN G AIR SEPARATION UNIT	China Patent Agent H.K. Ltd.	2020-07-19	586.98
243792-US-1	US	Priority	12/875053	2010-09-02	0055331	08	2012-03-08	8414681	09	2013-04-09	22	2031-06-22	Granted	METHOD FOR CONTROLLIN G AN AIR SEPARATION UNIT	Fletcher Yoder	2020-10-09	3603
243806-US-1	US	Priority	12/875063	2010-09-02	201200550	08	2012-03-08	9028568	12	2015-05-12	08	2033-11-08	Granted	TREATING CARBON DIOXIDE COOLING SYSTEM	Fletcher Yoder	2022-11-12	3603
243951-US-1	US	Priority	12/831189	2010-07-06	201200059	12	2012-01-12	8888872	18	2014-11-18	25	2030-11-25	Granted	WATER TREATMENT SYSTEMS AND WATER TREATMENT SYSTEMS	China Patent Agent H.K. Ltd.	2020-03-23	300.76
244043-CN-2	China	Secondary	201210093	2012-03-23	102688605	26	2012-09-26	445.X	09	2015-09-09	23	2032-03-23	Granted	WATER TREATMENT SYSTEMS AND WATER TREATMENT SYSTEMS	Valipat SA	2020-03-19	332.52
244043-DE-6	Germany	Designated EP	12160040	2012-03-19	2502883	26	2012-09-26	2502883	03	2016-08-03	19	2032-03-19	Granted	WATER TREATMENT SYSTEMS AND WATER TREATMENT SYSTEMS	GEE POWER	2020-03-19	220
244043-IN-4	India	Secondary	792/DEL/2	2012-03-19	102012109	08	2012-10-08	1889989	13	2018-08-13	22	2032-03-22	Granted	WATER TREATMENT SYSTEMS AND WATER TREATMENT SYSTEMS	FirstLaw P.C.	2021-08-13	257.06
244043-KR-5	Korea	Secondary	102012002	2012-03-22	2502883	26	2012-09-26	2502883	03	2016-08-03	19	2032-03-19	Granted	WATER TREATMENT SYSTEMS AND WATER TREATMENT SYSTEMS	Valipat SA	2020-03-19	389.34
244043-NL-7	Netherlands	Designated EP	12160040	2012-03-19	US-2012-0241388	27	2012-09-27	8323382	04	2012-12-04	11	2031-05-11	Granted	WATER TREATMENT SYSTEMS AND WATER TREATMENT SYSTEMS	GEE POWER	2020-06-04	3603
244324-CN-3	China	Secondary	201310133	2013-04-17	103374419	30	2013-10-30	103374419	18	2017-01-18	17	2033-04-17	Granted	METHOD FOR CHANGING PUMPS FOR FEEDSTOCK SUPPLY SYSTEM	China Patent Agent H.K. Ltd.	2020-04-17	300.76

PATENT

REEL: 050798 FRAME: 0742

244401-AU-2	Australia	Secondary	7	2011-10-28	2011-10-28	2016-09-29	2031-10-28	2011244867	2447341	2013-01-11	2013-01-11	2015-12-30	2031-10-31	2447341	2015-06-16	2032-01-26	9057030	Granted	METHOD FOR PROTECTING GASIFIER QUENCH RING	Phillips Ormonde & Fitzpatrick	2019-10-28	209.97
244401-IN-6	India	Secondary	2011	3099/DEL/2011-10-31	Journal02/2013-01-11	2013-01-11	2012-05-02	2447341	2012-05-02	2012-05-02	2012-05-02	2015-12-30	2031-10-31	2447341	2015-06-16	2032-01-26	9057030	Published	METHOD FOR PROTECTING GASIFIER QUENCH RING	KAnalysis Consultant s (P) Ltd	2019-10-28	230.26
244401-IT-8	Italy	Designated EP	502016000	2011-10-28	2011-10-28	2015-12-30	2031-10-28	2447341	2012-05-02	2012-05-02	2012-05-02	2015-12-30	2031-10-28	2447341	2015-06-16	2032-01-26	9057030	Granted	METHOD FOR PROTECTING GASIFIER QUENCH RING	Valipat SA	2019-10-28	230.26
244401-US-1	US	Priority	12/916527	2010-10-30	2010-10-30	2015-06-16	2032-01-26	20120102835A1	2012-05-03	2012-05-03	2012-05-03	2015-06-16	2032-01-26	9057030	2015-06-16	2032-01-26	9057030	Granted	METHOD FOR PROTECTING GASIFIER QUENCH RING	Fletcher Yoder	2022-12-16	3603
244410-CN-2	China	Secondary	366.4	2012-08-27	2012-08-27	2016-09-14	2032-08-27	102953813A	2013-03-06	2013-03-06	2016-09-14	2032-08-27	102953813	2016-09-14	2032-08-27	102953813	Granted	METHOD FOR SWITCHING FUEL FEEDS DURING GASIFIER START-UP	China Patent Agent H.K. Ltd.	2020-08-27	300.76	
244410-JP-4	Japan	Secondary	184701	2012-08-24	2012-08-24	2016-07-22	2032-08-24	2013043992	2013-03-04	2013-03-04	2016-07-22	2032-08-24	5973281	2016-07-22	2032-08-24	5973281	Granted	METHOD FOR SWITCHING FUEL FEEDS DURING GASIFIER START-UP	GEE POWER	2020-07-22	139.83	
244410-KR-5	Korea	Secondary	2293	102012009	2012-08-23	2018-11-20	2032-08-23	102013022363A	2013-03-06	2013-03-06	2018-11-20	2032-08-23	1922143	2018-11-20	2032-08-23	1922143	Granted	METHOD FOR SWITCHING FUEL FEEDS DURING GASIFIER START-UP	FirstLaw P.C.	2021-11-20	332.9	
244410-US-1	US	Priority	13/218074	2011-08-25	2011-08-25	2014-09-30	2032-01-10	20130048085A1	2013-02-28	2013-02-28	2014-09-30	2032-01-10	8845770	2014-09-30	2032-01-10	8845770	Granted	METHOD FOR SWITCHING FUEL FEEDS DURING GASIFIER START-UP	Armstrong Teasdale LLP	2022-03-30	3603	
244439-AU-2	Australia	Secondary	2	2012-05-18	2012-05-18	2017-06-15	2032-05-18	2012202932	2012-05-18	2012-05-18	2017-06-15	2032-05-18	201220293	2017-06-15	2032-05-18	201220293	Granted	DRAIN APPARATUS	Ormonde &	2020-05-18	209.97	
244439-CN-4	China	Secondary	328.7	2012-05-18	2012-05-18	2017-01-18	2032-05-18	102795587A	2012-11-28	2012-11-28	2017-01-18	2032-05-18	102795587	2017-01-18	2032-05-18	102795587	Granted	DRAIN APPARATUS	Patent Agent H.K.	2020-05-18	300.76	

PATENT

REEL: 050798 FRAME: 0743

244439-DE-5	Germany	Secondary	102012104	2012-05-16	2012-11-22	102012104	2012-11-22	279	2012-11-22	2032-05-16	Examination Requested	DRAIN APPARATUS	Ruger Barthelt Abel	2020-05-16	332.52
244439-IN-6	India	Secondary	1512/DEL/2012	2012-05-17	2015-12-04	1512DEL2	2015-12-04	012	2015-12-04	2032-05-17	Published	DRAIN APPARATUS	KAnalysis Consultant s (P) Ltd		
244439-JP-7	Japan	Secondary	2012-2012-112924	2012-05-17	2012-12-10	201224190	2012-12-10	4	2012-12-10	2016-09-30	Granted	POWER	GEE	2020-09-30	134.97
244439-KR-8	Korea	Secondary	102012005	2012-05-18	2012-11-28	201201300	2012-11-28	71	2012-11-28	2019-05-17	Granted	APPARATUS	FirstLaw P.C.	2022-05-17	86.42
244439-PL-9	Poland	Secondary	P-399241	2012-05-18		P-399241				2018-05-24	Granted	APPARATUS	Polservice	2020-05-18	233.67
244439-US-1	US	Priority	13/113013	2011-05-20	2012-11-22	201202912	2012-11-22	46	2012-11-22	2013-02-12	Granted	APPARATUS	Fletcher Yoder	2020-08-12	3603
244457-CN-2	China	Secondary	201210037	2012-02-10	2012-09-19	102674013	2012-09-19	A	2012-09-19	2016-07-06	Granted	FEED PUMP	Agent H.K. Ltd.	2020-02-10	300.76
244457-US-1	US	Priority	13/025058	2011-02-10	2012-08-16	201202052	2012-08-16	22A1	2012-08-16	2014-11-18	Granted	FEED PUMP	Fletcher Yoder	2022-05-18	3603
244636-CN-3	China	Secondary	201310026	2013-01-18	2013-07-24	103215088	2013-07-24	A	2013-07-24	2017-11-21	Granted	QUENCH RING	Patent Agent H.K. Ltd.	2020-01-18	300.76
244636-PL-1	Poland	Priority	P-397847	2012-01-19						2018-10-31	Granted	QUENCH RING	GEE POWER	2020-01-19	233.67
244636-US-2	US	Secondary	13/488319	2012-06-04	2013-07-25	201301891	2013-07-25	65A1	2013-07-25	2015-05-19	Granted	QUENCH RING	Fletcher Yoder	2022-11-19	3603
245014A-US-1	US	Continuation-in-part	14/187694	2014-02-24	2014-06-12	201401576	2014-06-12	68A1	2014-06-12	2016-02-16	Granted	GASIFIER	Manning Attorneys at Law PA	2023-08-16	3603
245072-CN-4	China	Secondary	201210014	2012-01-06	2012-07-18	102589249	2012-07-18	A	2012-07-18	2016-12-14	Granted	LIQUEFACTION SYSTEM	Patent Agent H.K. Ltd.	2020-01-06	300.76
245221-AU-2	Australia	Secondary	2011123929	2011-10-24	2011-10-24	201123929	2011-10-24	8	2011-10-24	2016-12-08	Granted	COOLING SYNGAS	Ormonde & Patent Agent H.K.	2019-10-24	209.97
245221-CN-3	China	Secondary	201110372	2011-11-04	2012-07-11	102559278	2012-07-11	A	2012-07-11	2016-12-14	Published	COOLING SYNGAS	Patent Agent H.K.	2019-10-28	332.52
245221-DE-5	Germany	Designated EP	1187146	2011-10-28	2012-05-23	602011056	2012-05-23	558.3	2012-05-23	2019-02-27	Granted	COOLING SYNGAS	Firm	2019-10-28	332.52
245221-EP-4	EP	Secondary	1187146	2011-10-28	2012-05-23	2455443	2012-05-23	2455443	2012-05-23	2019-02-27	Granted	COOLING SYNGAS	Firm	2019-10-28	332.52

PATENT

REEL: 050798 FRAME: 0744

245221-US-1	US	Priority	12/939937	2010-11-04	201201110	2012-05-10	8783036	2014-07-22	2032-11-09	Granted	COOLING SYNGAS BYPRODUCT REMOVAL FROM SYNTHESIS	Fletcher Yoder	2022-01-22	3603
245375-JP-3	Japan	Secondary	2011-252125	2011-11-18	201211194	2012-06-14	6014319	2016-09-30	2031-11-18	Granted	REMOVAL FROM SYNTHESIS BYPRODUCT	GEE POWER	2020-09-30	115.57
245375-US-1	US	Priority	12/951397	2010-11-22	US-2012-0124908	2012-05-24	8535418	2013-09-17	2031-05-19	Granted	REMOVAL FROM SYNTHESIS VESSELS AND SYSTEMS	Armstrong Teasdale LLP	2021-03-17	3603
245617-AU-2	Australia	Secondary	201122687	2011-09-26	201122687	2016-05-26	201122687	2016-05-26	2031-09-26	Granted	FOR PNEUMATICALY CONVEYING VESSELS AND SYSTEMS	Phillips Ormonde & Fitzpatrick	2020-09-26	209.97
245617-CA-3	Canada	Secondary	2752996	2011-09-22						Application	FOR PNEUMATICALY CONVEYING blowing tank design for high pressure pneumatic VESSELS AND SYSTEMS	Craig Wilson and Company inc.	2020-09-22	249
245617-CN-1	China	Priority	201010508	2010-09-30	201010508	2014-12-31	201010508	2014-12-31	2030-09-30	Granted	FOR PNEUMATICALY CONVEYING VESSELS AND SYSTEMS	Liu Shen Associates	2020-09-30	586.98
245617-IN-4	India	Secondary	20112657/DEL/2011	2011-09-14						Application	FOR PNEUMATICALY CONVEYING VESSELS AND SYSTEMS	KAnalysis Consultant s (P) Ltd		
245617-JP-5	Japan	Secondary	2011213605	2011-09-29	201207692	2012-04-19	6132460	2017-04-28	2031-09-29	Granted	FOR PNEUMATICALY CONVEYING VESSELS AND SYSTEMS	GEE POWER	2020-04-28	134.97
245617-KR-6	Korea	Secondary	102011009	2011-09-29	102012044	2012-05-08	101925148	2018-11-28	2031-09-29	Granted	FOR PNEUMATICALY CONVEYING	FirstLaw P.C.	2021-11-28	276.02

PATENT

REEL: 050798 FRAME: 0745

245617-PL-7	Poland	Secondary	P396457	2011-09-28	2017-03-31	2031-09-28	Granted	PL225255	2020-09-28	262.07
245617-US-8	US	Secondary	13/237305	2011-09-20	2016-02-23	2034-01-05	Granted	9266688B2	2023-08-23	3603
245625-CA-2	Canada	Secondary	2751345	2011-09-01	2018-11-06	2031-09-01	Granted	2,751,345	2020-09-01	156.75
245625-CN-3	China	Secondary	453.6	2011-09-15	2015-04-01	2031-09-15	Granted	245625 - 3	2020-09-15	586.98
245625-DE-7	Germany	Designated EP	11179580.3	2011-08-31	2014-10-08	2031-08-31	Granted	2431447	2020-08-31	400.7
245625-GB-8	UK	Designated EP	11179580.3	2011-08-31	2014-10-08	2031-08-31	Granted	2431447	2020-08-31	215.32
245625-IN-5	India	Secondary	2477/DEL/2011	2011-08-30	2013-10-11	2031-08-30	Published	2477DEL2		
245625-KR-6	Korea	Secondary	102011009	2011-09-14	2018-01-09	2031-09-14	Granted	10-1818772	2021-01-09	238.1
245625-PL-9	Poland	Designated EP	11179580.3	2011-08-31	2014-10-08	2031-08-31	Granted	2431447	2020-08-31	261.51

PATENT

REEL: 050798 FRAME: 0746

245625-US-1	US	Priority	12/883161	2010-09-15	0063957	2012-03-15	8475552	2013-07-02	2031-06-28	Granted	Fletcher Yoder	2021-01-02	3603
245680-CN-1	China	Priority	201010551 175.3	2010-11-08	102466104 A	2012-05-23	ZL2010105 51175.3	2015-08-26	2030-11-08	Granted	GEE POWER	2019-11-08	586.98
245680-US-2	US	Secondary	13/253104	2011-10-05	201201114 18A1	2012-05-10	9387997B2	2016-07-12	2033-08-02	Granted	GEE POWER	2020-01-12	1603
245706-AU-2	Australia	Secondary	201220156 7	2012-03-16		2032-03-16	201220156 7	2016-09-08	2032-03-16	Granted	Phillips Ormonde & Fitzpatrick	2020-03-16	209.97
245706-CN-3	China	Secondary	201210093 441.1	2012-03-23	102691577 A	2012-09-26	201210093 441.1	2015-11-25	2032-03-23	Granted	China Patent Agent H.K. Ltd.	2020-03-23	300.76
245706-DE-5	Germany	Designated EP	12160288. 2	2012-03-20	2508721	2014-03-12	2508721	2015-05-27	2032-03-20	Granted	Valipat SA	2020-03-20	332.52
245706-IT-6	Italy	Designated EP	12160288. 2	2012-03-20	2508721	2014-03-12	2508721	2015-05-27	2032-03-20	Granted	Valipat SA	2020-03-20	230.26
245706-NL-9	Netherlands	Designated EP	12160288. 2	2012-03-20	2508721	2014-03-12	2508721	2015-05-27	2032-03-20	Granted	Valipat SA	2020-03-20	389.34

PATENT

REEL: 050798 FRAME: 0747

245706-PL-8	Poland	Designated EP	12160288.2	2012-03-20	2014-03-12	2508721	2015-05-27	2032-03-20	Granted	GASIFICATIO N COMBINED CYCLE SYSTEM WITH VAPOR ABSORPTION CHILLING	Valipat SA	2020-03-20	233.1
245706-US-1	US	Priority	13/069456	2011-03-23	2012-09-27	201202406 03A1	2014-01-21	2032-04-06	Granted	WITH VAPOR ABSORPTION CHILLING	GEE	2021-07-21	3603
245799-CN-2	China	Secondary	201110403 216.9	2011-11-30	2012-07-04	102538013 A	2015-12-09	2031-11-30	Granted	INJECTOR HAVING TIP COOLING	Patent Agent H.K. Ltd.	2019-11-30	300.76
245799-US-1	US	Priority	12/957232	2010-11-30	2012-05-31	201201327 25A1	2017-11-21	2034-03-25	Granted	INJECTOR HAVING TIP COOLING	Fletcher Yoder	2021-05-21	1603
245913-CN-2	China	Secondary	201210011 910.0	2012-01-04	2012-07-11	102562303 A	2017-04-12	2032-01-04	Granted	FLUIDIZING SOLID FEEDSTOCK FROM A SOLID FEED SYSTEM AND METHOD FOR COOLING	China Patent Agent H.K. Ltd.	2020-01-04	300.76
245916-AU-2	Australia	Secondary	201220384 9	2012-06-29	2013-01-11	201220384 9	2017-03-09	2032-06-29	Granted	GASIFICATIO N COMBINED CYCLE POWER GENERATION SYSTEM, GASIFICATIO N REACTOR AND METHOD	Phillips Ormonde & Fitzpatrick	2020-06-29	209.97
245916-CN-1	China	Priority	201110181 439.5	2011-06-30	2013-01-02	102851080 A	2015-08-26	2031-06-30	Granted	GASIFICATIO N REACTOR AND METHOD SYSTEM AND METHOD FOR COOLING	Liu Shen	2020-06-30	586.98
245916-IN-3	India	Secondary	2035/DEL/ 2012	2012-06-29	2013-12-13	2035DEL2 012	2013-12-13	2032-06-29	Published	GASIFICATIO N REACTOR AND METHOD SYSTEM AND METHOD FOR COOLING	KAnalysis Consultant s (P) Ltd		

PATENT

REEL: 050798 FRAME: 0748

247029-KR-7	Korea	Secondary	102012001	2012-02-06	102012090	2012-08-17	10-1885931	2018-07-31	2032-02-06	Granted	RECOVERY IN SYNGAS APPLICATION FirstLaw P.C.	2021-07-31	351.86
247029-PL-8	Poland	Secondary	P-398023	2012-01-07			227903	2018-01-31	2032-01-07	Granted	RECOVERY IN SYNGAS APPLICATION Polservice	2020-02-07	233.67
247029-US-1	US	Priority	13/022553	2011-02-07	201201987	2011-02-07	8992640	2015-03-31	2034-01-31	Granted	SYNGAS APPLICATION Fletcher Yoder	2022-09-30	3603
247080-CN-4	China	Secondary	201210187	2012-06-08	102818279	2012-12-12	102818279	2017-09-22	2032-06-08	Granted	ASSEMBLY AND METHOD OF FUEL INJECTION APPARATUS FOR USE IN Patent Agent H.K.	2020-06-08	300.76
247081-CN-2	China	Secondary	525.3	2012-03-14	102676230	2012-09-19	201210081	2015-04-01	2032-03-14	Granted	INJECTOR TIP Ltd.	2020-03-14	300.76
247081-DE-6	Germany	Designated EP	12158391	2012-03-07		2014-02-19	2500643	2016-07-27	2032-03-07	Granted	APPARATUS FOR USE IN COOLING AN Valpat SA	2020-03-07	332.52
247081-IN-4	India	Secondary	474/DEL/2	2012-02-21	474DEL20	2015-06-05			2032-02-21	Published	APPARATUS FOR USE IN Consultant KAnalysis s (P) Ltd		
247081-KR-5	Korea	Secondary	102012002	2012-03-13	102012104	2012-09-24	10-1948245	2019-02-08	2032-03-13	Granted	APPARATUS FOR USE IN FirstLaw P.C.	2022-02-08	181.22
247081-NL-7	Netherlands	Designated EP	12158391	2012-03-07		2014-02-19	2500643	2016-07-27	2032-03-07	Granted	APPARATUS FOR USE IN Valpat SA	2020-03-07	389.34
247081-US-1	US	Priority	13/046921	2011-03-14		2012-09-20	8475545	2013-07-02	2031-07-13	Granted	APPARATUS FOR USE IN Teasdale LLP	2021-01-02	3603
247193-CA-2	Canada	Secondary	2801477	2013-01-10			2,801,477	2018-10-23	2033-01-10	Granted	DEAERATION IN A FLASH VESSEL Wilson and Company inc.	2020-01-10	156.75
247193-CN-3	China	Secondary	201310026	2013-01-18	103214049	2013-07-24	103214049	2017-04-12	2033-01-18	Granted	DEAERATION IN FLASH VESSEL Patent Agent H.K. Ltd.	2020-01-18	300.76

PATENT

REEL: 050798 FRAME: 0750

247193-DE-6	Germany	Designated EP	13151662.7	2013-01-17	2617798	2013-07-24	602013039960.3	2018-07-11	2033-01-17	Granted	DOWNSTREA M OF A	RWS Group Ltd	2020-01-17	275.71
247193-EP-4	EP	Secondary	13151662.7	2013-01-17	2617798	2013-07-24	2617798	2018-07-11	2033-01-17	Granted	DEAERATION IN A FLASH VESSEL	freightpartners IP Law Firm		
247193-KR-5	Korea	Secondary	1020130005542	2013-01-17	102013085009A	2013-07-26	10-1885932	2018-07-31	2033-01-17	Granted	DEAERATION IN A FLASH VESSEL	FirstLaw P.C.	2021-07-31	351.86
247193-NL-7	Netherlands	Designated EP	13151662.7	2013-01-17	2617798	2013-07-24	2617798	2018-07-11	2033-01-17	Granted	DOWNSTREA M OF A	RWS Group Ltd	2020-01-17	321.16
247193-US-1	US	Priority	13/353208	2012-01-18	20130183204A1	2013-07-18	9381446B2	2016-07-05	2034-04-17	Granted	DEAERATION IN A FLASH VESSEL	Fletcher Yoder	2020-01-05	1603
247289-CN-2	China	Secondary	201310026062.5	2013-01-18	103215079A	2013-07-24	10321507912	2017-04-12	2033-01-18	Granted	N SYSTEM AND METHOD FOR GASIFYING A FUEL	China Patent Agent H.K. Ltd.	2020-01-18	300.76
247289-US-1	US	Priority	13/353153	2012-01-18	20130180175A1	2013-07-18	9290708B2	2016-03-22	2034-07-20	Granted	N SYSTEM AND METHOD FOR GASIFYING A FUEL	Fletcher Yoder	2023-09-22	3603
247817-CN-2	China	Secondary	201310027820.5	2013-01-25	103224815A	2013-07-31	10322481524	2017-05-24	2033-01-25	Granted	SYSTEM AND METHOD FOR HEATING A GASIFIER	China Patent Agent H.K. Ltd.	2020-01-25	300.76
247817-US-1	US	Priority	13/360521	2012-01-27	20130192139A1	2013-08-01	9150801	2015-10-06	2034-04-23	Granted	METHOD FOR HEATING A GASIFIER	Fletcher Yoder	2023-04-06	3603
248078-AU-2	Australia	Secondary	2012203593	2012-06-20	2012203593	2012-06-20	2012203593	2016-10-06	2032-06-20	Granted	Flow Pattern Transition Pipe & PATTERN CONVERTING TUBE AND PNEUMATIC TRANSMISSION SYSTEM	Ormonde	2020-06-20	209.97
248078-CN-1	China	Priority	201110165304.X	2011-06-20	102837969A	2012-12-26	201110165304.X	2015-01-14	2031-06-20	Granted	N SYSTEM	Liu Shen Associates	2020-06-20	586.98

PATENT

REEL: 050798 FRAME: 0751

248078-IN-3	India	Secondary	1899/DEL/2012-06-20	1899DEL2015-12-04	2015-12-04	2032-06-20	Published	Flow Pattern Transition Pipe s (P) Ltd	KAnalysis Consultant s (P) Ltd		
248078-JP-4	Japan	Secondary	2012-138405	201300157	2013-01-07	2032-06-20	Granted	Flow Pattern Transition Pipe	GEE	2019-10-07	125.27
248078-KR-5	Korea	Secondary	102012006	102013001	2013-01-03	2032-06-20	Granted	Flow Pattern Transition Pipe	FirstLaw P.C.	2022-02-15	313.94
248078-US-6	US	Designated PCT	6153	137A	2012-12-20	2032-11-22	Granted	Flow Pattern Transition Pipe	GEE	2022-03-16	3603
248132-CN-2	China	Secondary	13/527848	94	2012-12-20		Granted	SYSTEM FOR MIXING REACTOR FEED	China Patent Agent H.K. Ltd.	2019-12-21	300.76
248132-US-1	US	Priority	201110452	201110452	2011-12-21	2031-12-21	Granted	SYSTEM FOR MIXING REACTOR FEED	China Patent Agent H.K. Ltd.	2019-12-21	300.76
248148-CN-1	China	Priority	12/977515	201201601	2012-06-28	2033-10-03	Granted	COAL WATER SLURRY AND PREPARATION THEREOF	Armstrong Teasdale LLP	2022-11-19	3603
248506-CN-2	China	Secondary	589.1	102954472	2013-03-06	2032-08-10	Granted	GASIFICATION FUEL INJECTION	Patent Agent H.K. Ltd.	2020-08-10	300.76
248506-US-1	US	Priority	13/207352	201300402	2013-02-14	2033-05-03	Granted	GASIFICATION FUEL INJECTION	Fletcher Yoder	2020-05-08	1603
248660-BR-2	Brazil	Secondary	BR102012018388-9	388	2012-07-12	2032-07-24	Published	SYSTEM FOR RECOVERING HEAT FROM BIOMASS GASIFIER	Gusmao Labrunie	2020-07-24	100
248660-IN-3	India	Secondary	2218/DEL/2012-07-18	2218DEL2014-01-31	2014-01-31	2032-07-18	Published	SYSTEM FOR RECOVERING HEAT FROM BIOMASS GASIFIER	KAnalysis Consultant s (P) Ltd		
248660-US-1	US	Priority	13/190425	201300252	2013-01-31	2032-03-06	Granted	SYSTEM FOR RECOVERING HEAT FROM BIOMASS GASIFIER	Fletcher Yoder	2021-10-22	3603
248679-CN-2	China	Secondary	201210300038.1	102952585	2013-03-06	2032-08-22	Granted	GASIFICATION SYSTEM	China Patent Agent H.K. Ltd.	2020-08-22	300.76

PATENT

REEL: 050798 FRAME: 0752

248679-DE-7	Germany	Designated EP	12181095.6	2012-08-20	2018-11-14	2032-08-20	602012053406.0	2018-11-14	2032-08-20	Granted	RECOVERY FROM A GASIFICATION SYSTEM	Valipat SA	2020-08-20	332.52
248679-EP-3	EP	Secondary	12181095.6	2012-08-20	2018-11-14	2032-08-27	2562373	2018-11-14	2032-08-20	Granted	RECOVERY FROM A GASIFICATION SYSTEM	freigutpartners IP Law Firm		
248679-IN-4	India	Secondary	2325/DEL/2012	2012-07-27	2014-01-31	2032-07-27	2325DEL2012012012	2014-01-31	2032-07-27	Published	RECOVERY FROM A GASIFICATION SYSTEM	KAnalysis Consultants (P) Ltd		
248679-IT-8	Italy	Designated EP	12181095.6	2012-08-20	2018-11-14	2032-08-20	2562373	2018-11-14	2032-08-20	Granted	RECOVERY FROM A GASIFICATION SYSTEM	Valipat SA	2020-08-20	230.26
248679-JP-5	Japan	Secondary	2012-181519	2012-08-20	2013-03-04	2032-08-20	2013043991	2013-03-04	2032-08-20	Granted	RECOVERY FROM A GASIFICATION SYSTEM	GEE POWER	2020-06-17	120.42
248679-KR-6	Korea	Secondary	1020120091488	2012-08-21	2013-03-05	2032-08-21	10-1899599	2018-09-11	2032-08-21	Granted	RECOVERY FROM A GASIFICATION SYSTEM	FirstLaw P.C.	2021-09-11	351.86
248679-US-1	US	Priority	13/215090	2011-08-22	2013-02-28	2033-11-10	20130047574A1	2015-02-24	2033-11-10	Granted	RECOVERY FROM A GASIFICATION SYSTEM	Fletcher Yoder	2022-08-24	3603
248724-CN-2	China	Secondary	201310137442.6	2013-04-19	2013-10-30	2033-04-19	103372492A	2017-10-13	2033-04-19	Granted	METHOD FOR CHINA PULVERIZING	China Patent Agent H.K. Agent H.K. Ltd.	2020-04-19	300.76
248724-US-1	US	Priority	13/450771	2012-04-19	2013-10-24	2032-09-19	20130277464A1	2014-11-25	2032-09-19	Granted	METHOD FOR PULVERIZING A SUBSTANCE	Fletcher Yoder	2022-05-25	3603
248742-BR-2	Brazil	Secondary	BR1020120130137097	2012-06-06	2013-11-26	2032-06-06	1020120137097	2019-04-16	2032-06-06	Granted	ASSEMBLIES FOR BIOMASS GASIFICATION SYSTEMS	Gusmao Labrunie	2020-06-06	357
248742-IN-3	India	Secondary	1717/DEL/2012	2012-06-05						Application	RECOVERY FROM A GASIFICATION SYSTEM	KAnalysis Consultants (P) Ltd		

PATENT

REEL: 050798 FRAME: 0753

248742-US-1	US	Priority	13/157234	2011-06-09	2012-03-13	2012-12-13	8945248	2015-02-03	2033-08-24	Granted	ASSEMBLIES FOR BIOMASS GASIFICATION SYSTEMS RECOVERY SYSTEMS	Fletcher Yoder	2022-08-03	3603
248843-BR-2	Brazil	Secondary	102012020 441-0	2012-08-15	2014-03-18	2014-03-18				Published	BIOMASS GASIFICATION RECOVERY SYSTEMS	Gusmao Labrunie	2020-08-15	100
248843-IN-3	India	Secondary	2193/DEL/ 2012	2012-07-16	2014-01-31	2014-01-31	312291	2019-05-06	2032-07-16	Granted	FOR KAnalysis Consultant s (P) Ltd	2020-07-16	220	
248843-US-1	US	Priority	13/215040	2011-08-22	2013-02-28	2013-02-28	9458398B2	2016-10-04	2034-03-20	Granted	BIOMASS GASIFICATION SYSTEM AND METHOD FOR PREPARING COAL-WATER-SLURRY SYSTEMS	Fletcher Yoder	2020-04-04	1603
248981-CN-1	China	Priority	201110138 005.7	2011-05-26	2012-11-28	2012-11-28	ZL2011101 38005.7	2015-07-22	2031-05-26	Granted	FOR	Liu Shen Associates	2020-05-26	586.98
249221-BR-2	Brazil	Secondary	102012017 638-6	2012-07-17	2014-03-11	2014-03-11				Published	BIOMASS GASIFICATION SYSTEMS	Gusmao Labrunie	2020-07-17	100
249221-IN-3	India	Secondary	2145/DEL/ 2012	2012-07-11						Application	FOR KAnalysis Consultant s (P) Ltd			
249221-US-1	US	Priority	13/186360	2011-07-19	2013-01-24	2013-01-24	9127219	2015-09-08	2034-01-13	Granted	BIOMASS GASIFICATION OXIDATION FEED	Fletcher Yoder	2023-03-08	3603
249280-CN-3	China	Designated PCT	201280072 618.8	2012-04-23	2015-06-24	2015-06-24	104736681	2018-08-17	2032-04-23	Granted	SYSTEM AND METHOD OXIDATION FEED	China Patent Agent H.K. Ltd.	2020-04-23	300.76
249280-US-2	US	Designated PCT	13/512018	2012-04-23	2013-10-24	2013-10-24	8771550	2014-07-08	2032-05-27	Granted	SYSTEM AND METHOD	Fletcher Yoder	2022-01-08	3603

PATENT

REEL: 050798 FRAME: 0754

249516-BR-2	Brazil	Secondary	BR1020120137089	2012-06-06						Application	REMOVAL FOR BIOMASS GASIFICATION REMOVAL	Gusmao Labrunie	2020-06-06	100
249516-IN-3	India	Secondary	1706/DEL/2012	2012-06-04	1706/DEL/2012	2015-09-25				Published	REMOVAL FOR BIOMASS GASIFICATION REMOVAL	KAnalysis Consultant s (P) Ltd		
249516-US-1	US	Priority	13/157636	2011-06-10	20120313378A1	2012-12-13	2015-04-14	2016-09-21	2033-11-22	Granted	BIOMASS GASIFICATION AND METHODS FOR COOLING GASIFICATION AND METHODS FOR COOLING GASIFICATION AND METHODS FOR COOLING GASIFICATION	Fletcher Yoder	2022-10-14	3603
249784-CN-2	China	Secondary	201210143424.4	2012-04-27	102776032A	2012-11-14	2016-09-21	2018-01-26	2032-04-27	Granted	COOLING GASIFICATION AND METHODS FOR COOLING GASIFICATION	China Patent Agent H.K. Ltd.	2020-04-27	300.76
249784-US-1	US	Priority	13/098230	2011-04-29	20120273175A1	2012-11-01	2015-06-02	2018-01-26	2034-04-02	Granted	COOLING GASIFICATION AND METHODS FOR COOLING GASIFICATION	GEE POWER	2022-12-02	3603
250163-CN-2	China	Secondary	201210557683.1	2012-12-20	103173248A	2013-06-26	2018-01-26	2018-01-26	2032-12-20	Granted	MULTI-PORT INJECTOR SYSTEM AND METHOD	China Patent Agent H.K. Ltd.	2019-12-20	300.76
250167-BR-2	Brazil	Secondary	102013000570-3	2013-01-09	102013000570	2015-05-19	2018-01-26	2018-01-26	2033-01-09	Published	N FUEL INJECTION GASIFICATION	Gusmao Labrunie	2020-01-09	100
250167-CN-3	China	Secondary	201310008861.X	2013-01-10	103196143A	2013-07-10	2017-07-11	2018-01-26	2033-01-10	Granted	N FUEL INJECTION GASIFICATION	Patent Agent H.K. Ltd.	2020-01-10	300.76
250167-DE-4	Germany	Secondary	102013100225.0	2013-01-10	102013100225	2013-07-11	2017-07-11	2018-01-26	2033-01-10	Published	N FUEL INJECTION GASIFICATION	Ruger Barthel Abel	2020-01-10	275.71
250167-IT-5	Italy	Secondary	M/2013A00005	2013-01-04			2015-06-03	2018-01-26	2033-01-04	Granted	N FUEL INJECTION GASIFICATION	Zanardo Milano	2020-01-04	196.17
250167-US-1	US	Priority	13/347657	2012-01-10	20130175365A1	2013-07-11	2016-01-05	2018-01-26	2034-01-19	Granted	N FUEL INJECTION HAVING A FUEL INJECTOR WITH TIP	Fletcher Yoder	2023-07-05	3603
250199-CN-2	China	Secondary	201210442429.7	2012-11-08	103087777A	2013-05-08	2017-07-28	2018-01-26	2032-11-08	Granted	FUEL INJECTOR WITH TIP	China Patent Agent H.K. Ltd.	2019-11-08	300.76

PATENT

REEL: 050798 FRAME: 0755

250199-US-1	US	Priority	13/292049	2011-11-08	201301127 72A1	2013-05-09	9422488B2	2016-08-23	2034-05-13	Granted	Fletcher Yoder	2020-02-23	1603
HAVING A FUEL INJECTOR WITH TIP SYSTEM TO ESTIMATE VARIABLES IN AN INTEGRATED GASIFICATIO N COMBINED CYCLE (IGCC) Patent Agent H.K. Ltd.													
250547-CN-3	China	Designated PCT	201180069 400.2	2011-12-22	103430121 04	2013-12-04	103430121	2016-09-28	2031-12-22	Granted	China Patent Agent H.K.	2019-12-22	300.76
SYSTEM TO ESTIMATE VARIABLES IN AN INTEGRATED GASIFICATIO N COMBINED CYCLE (IGCC) Patent Agent H.K. Ltd.													
250547-US-1	US	Priority	13/053690	2011-03-22	8538561	2013-12-21	8538561	2013-09-17	2031-12-21	Granted	GEE POWER	2021-03-17	3603
PREDICTIVE CONTROL SYSTEM AND METHOD FOR INTEGRATED GASIFICATIO N COMBINED CYCLE (IGCC) Patent Agent H.K. Ltd.													
250557-CN-3	China	Designated PCT	201180069 421.4	2011-12-22	103459785 18	2013-12-18	201180069 421.4	2015-10-07	2031-12-22	Granted	China Patent Agent H.K.	2019-12-22	300.76
PREDICTIVE CONTROL SYSTEM AND METHOD FOR INTEGRATED GASIFICATIO N COMBINED CYCLE (IGCC) Patent Agent H.K. Ltd.													
250557-US-1	US	Priority	13/053731	2011-03-22	8417361	2013-03-22	8417361	2013-04-09	2031-03-22	Granted	GEE POWER	2020-10-09	3603
GENERATION POWER COOLING SYSTEM WITH CONVECTIVE SYNGAS COOLER AND QUENCH Patent Agent H.K. Ltd.													
250592-CN-2	China	Secondary	201310103 619.0	2013-03-28	103361124 A	2013-10-23	103361124	2018-03-30	2033-03-28	Granted	China Patent Agent H.K.	2020-03-28	300.76
COOLER AND QUENCH Patent Agent H.K. Ltd.													

250592-US-1	US	Priority	13/432026	2012-03-28	20130255916A1	2013-10-03	8951313	2015-02-10	2033-07-31	Granted	COOLING SYSTEM WITH CONVECTIVE SYNGAS COOLER AND QUENCH	GEE POWER	2022-08-10	3603
250637-AU-2	Australia	Secondary	2012203484	2012-06-14	2012203484	2017-06-29	2012203484	2032-06-14	2032-06-14	Granted	CONVEYING APPARATUS, SYSTEMS AND METHOD	GEE POWER Phillips & Fitzpatrick	2020-06-14	209.97
250637-CN-7	China	Divisional	201610165219.6	2016-03-22	CN105647589A	2016-06-08	6006993	2016-09-16	2032-06-12	Published	CONVEYING APPARATUS, SYSTEM AND METHOD	Liu Shen Associates	2020-09-16	164.09
250637-IN-3	India	Secondary	1772/DEL/2012	2012-06-08	1772DEL2012012012	2015-10-30	10-1866570	2018-06-04	2032-06-06	Published	CONVEYING APPARATUS, SYSTEM AND METHOD	KAnalysis Consultant s (P) Ltd	2021-06-04	370.82
250637-JP-4	Japan	Secondary	2012-2012-132486	2012-06-12	2013001571	2013-01-07	6006993	2016-09-16	2032-06-12	Granted	CONVEYING APPARATUS, SYSTEM AND METHOD	GEE POWER	2020-09-16	164.09
250637-KR-5	Korea	Secondary	1020120063033	2012-06-06	102013000328A	2013-01-02	10-1866570	2018-06-04	2032-06-06	Granted	CONVEYING APPARATUS, SYSTEM AND METHOD	FirstLaw P.C.	2021-06-04	370.82
250637-US-6	US	Secondary	13/493964	2012-06-11	20120321396A1	2012-12-20	9115320	2015-08-25	2033-04-20	Granted	CONVEYING APPARATUS, SYSTEM AND METHOD	GEE POWER	2023-02-25	3603
251362-CN-2	China	Secondary	201610001513.3	2016-01-05	10575466413	2016-07-13			2036-01-05	Published	CHAMBER WITH INTEGRATED SCRUBBER SYSTEM	China Patent Agent H.K. Ltd.		
251362-DE-4	Germany	Secondary	102016100169.4	2016-01-05	102016100169	2016-07-07			2036-01-05	Published	CHAMBER WITH INTEGRATED SCRUBBER SYSTEM	Ruger Barthel Abel	2020-01-05	105.27
251362-IN-3	India	Secondary	7071/CHE/2015	2015-12-30					2035-12-30	Examination Requested	INTEGRATED SCRUBBER SYSTEM	KAnalysis Consultant s (P) Ltd		

PATENT

REEL: 050798 FRAME: 0757

251362-US-1	US	Priority	14/589012	2015-01-05	2016-07-07	2017-05-23	2035-07-01	Granted	INTEGRATED SCRUBBER SYSTEM	GEE POWER	2020-11-23	1603
252101-CN-3	China	Secondary	201310001	2013-01-04	2013-07-10	2017-09-22	2033-01-04	Granted	CHAMBER WITH SYSTEM AND METHOD FOR PROTECTING A DIP TUBE	China Patent Agent H.K. Ltd.	2020-01-04	300.76
252101-DE-5	Germany	Designated EP	13150240	2013-01-04	2013-08-14	2017-09-20	2033-01-04	Granted	CHAMBER WITH SYSTEM AND METHOD FOR PROTECTING A DIP TUBE	RWS Group Ltd	2020-01-04	275.71
252101-NL-4	Netherlands	Designated EP	13150240	2013-01-04	2013-08-14	2017-09-20	2033-01-04	Granted	CHAMBER WITH SYSTEM AND METHOD FOR PROTECTING A DIP TUBE	RWS Group Ltd	2020-01-04	321.16
252101-US-1	US	Priority	13/344437	2012-01-05	2013-07-11	2016-03-29	2033-04-29	Granted	METHOD FOR PROTECTING APPARATUS WITH FLOW CONTROL ELEMENT FEEDING EQUIPMENT	Fletcher Yoder Phillips Ormonde & Fitzpatrick Liu Shen Associates	2023-09-29	3603
252373-AU-3	Australia	Secondary	201320530	2013-04-18	2013-04-18	2017-04-06	2033-04-18	Granted	WITH FLOW CONTROL ELEMENT FEEDING EQUIPMENT	Phillips Ormonde & Fitzpatrick Liu Shen Associates	2020-04-18	209.97
252373-CN-1	China	Priority	201210135	2012-05-03	2013-11-06	2016-04-27	2032-05-03	Granted	WITH FLOW CONTROL ELEMENT FEEDING EQUIPMENT	Phillips Ormonde & Fitzpatrick Liu Shen Associates	2020-05-03	300.76
252373-US-2	US	Secondary	13/875510	2013-05-02	2013-11-07	2016-08-30	2033-05-02	Granted	WITH FLOW CONTROL ELEMENT METHOD HAVING CONTROL FOR SOLIDS	GEE POWER Phillips Ormonde & Fitzpatrick	2020-02-29	1603
252971-AU-2	Australia	Secondary	201320146	2013-03-07	2013-03-18	2017-01-12	2033-03-07	Granted	WITH FLOW CONTROL ELEMENT METHOD HAVING CONTROL FOR SOLIDS	China Patent Agent H.K. Ltd.	2020-03-07	209.97
252971-CN-3	China	Secondary	201310079	2013-03-13	2013-09-18	2016-12-28	2033-03-13	Granted	WITH FLOW CONTROL ELEMENT METHOD HAVING CONTROL FOR SOLIDS	China Patent Agent H.K. Ltd.	2020-03-13	300.76
252971-DE-7	Germany	Designated EP	13158497	2013-03-11	2013-09-18	2015-03-04	2033-03-11	Granted	WITH FLOW CONTROL ELEMENT METHOD HAVING CONTROL FOR SOLIDS	Valipat SA	2020-03-11	275.71
252971-GB-9	UK	Designated EP	13158497	2013-03-11	2013-09-18	2015-03-04	2033-03-11	Granted	WITH FLOW CONTROL ELEMENT METHOD HAVING CONTROL FOR SOLIDS	Valipat SA	2020-03-11	165.37

PATENT

REEL: 050798 FRAME: 0758

252971-JP-5	Japan	Secondary	050197	2013-03-13	2013-09-26	201319019	6088302	2017-02-10	2033-03-13	Granted	METHOD HAVING CONTROL FOR SOLIDS	GEE POWER	2020-02-10	168.94
252971-KR-6	Korea	Secondary	6177	2013-03-12	2013-09-25	102013002			2033-03-12	Published	METHOD HAVING CONTROL FOR SOLIDS	FirstLaw P.C.		
252971-NL-8	Netherlands	Designated EP	13158497.1	2013-03-11	2013-09-18	2639454	2639454	2015-03-04	2033-03-11	Granted	METHOD HAVING CONTROL FOR SOLIDS	Valipat SA	2020-03-11	321.16
252971-PL-10	Poland	Designated EP	13158497.1	2013-03-11	2013-09-18	2639454	2639454	2015-03-04	2033-03-11	Granted	METHOD HAVING CONTROL FOR SOLIDS	Valipat SA	2020-03-11	204.69
252971-US-1	US	Priority	13/419387	2012-03-13	2013-09-19	201302400	9970424	2018-05-15	2037-03-16	Granted	METHOD HAVING CONTROL FOR SOLIDS	Fletcher Yoder	2021-11-15	1603
253116-CN-3	China	Designated PCT	201380029	2013-05-15	2015-02-04	104334838	104334838	2017-08-29	2033-05-15	Granted	Heat Recovery Using Organic Rankine Cycle RECOVERY	Patent Agent H.K. Rankine Cycle Ltd.	2020-05-08	300.76
253116-US-1	US	Priority	13/489288	2012-06-05	2013-12-05	201303189	9003796	2015-04-14	2033-03-16	Granted	USING ORGANIC AND METHODS FOR SLURRY PREHEATING PROCESS	Fletcher Yoder China Patent Agent H.K.	2022-10-14	3603
253441-CN-2	China	Secondary	206.5	2014-03-14	2014-09-17	104046394			2034-03-14	Published	STREAM DESULFURIZATION	GEE POWER	2022-05-11	3603
253843-US-1	US	Priority	13/598276	2012-08-29	2014-03-06	201400603	8882887	2014-11-11	2032-11-30	Granted	BIOMASS GASIFIER	Gusmao Labrunie	2020-02-28	100
254021-BR-2	Brazil	Secondary	004834-8	2013-02-28	2015-07-21	102013004	8348		2033-02-28	Published	BIOMASS GASIFIER	Craig Wilson and Company inc.	2020-02-28	249
254021-CA-3	Canada	Secondary	2807985	2013-02-28	2013-09-18	103305276			2033-02-28	Examination Requested	BIOMASS GASIFIER	Patent Agent H.K.		
254021-CN-4	China	Secondary	744.1	2013-03-08	2018-11-11	201810621			2033-03-08	Published	BIOMASS GASIFIER	Patent Agent H.K.		
254021-CN-7	China	Divisional	285.9	2018-06-15	2018-11-23	108865275			2032-03-09	Published	BIOMASS GASIFIER	Patent Agent H.K.		
254021-IN-6	India	Secondary	013	2013-01-30	2015-02-27	265DEL20	265DEL20		2033-01-30	Published	BIOMASS GASIFIER	KAnalysis Consultants (P) Ltd		

PATENT

REEL: 050798 FRAME: 0759

254021-US-1	US	Priority	13/416056	2012-03-09	2013-09-12	2013-02-29	2015-08-04	9096807	2015-08-04	2033-12-29	Granted	BIO MASS GASIFIER METHOD FOR GASIFICATIO N AND METHODS FOR GENERATING OXYGEN AND HYDROGEN FOR PLANT AND METHODS FOR GENERATING OXYGEN AND HYDROGEN FOR PLANT	GEE POWER	2023-02-04	3603
254074-US-1	US	Priority	13/589080	2012-08-17	2014-02-20	2033-01-11	2014-07-01	8764860	2014-07-01	2033-01-11	Granted	Fletcher Yoder	2022-01-01	3603	
254164-CN-3	China	Designated PCT	201380017 216.2	2013-03-01	2014-12-10	2033-03-01	2017-07-07	104204303	2017-07-07	2033-03-01	Granted	China Patent Agent H.K. Ltd.	2020-03-01	300.76	
254164-US-1	US	Priority	13/430590	2012-03-26	2013-09-26	2033-03-06	2016-05-03	9328426B2	2016-05-03	2033-03-06	Granted	Fletcher Yoder	2019-11-03	1603	
254286-AU-3	Australia	Secondary	201320603 8	2013-05-27		2033-05-27	2018-02-01	201320603 8	2018-02-01	2033-05-27	Granted	Ormonde & Fitzpatrick	2020-05-27	209.97	
254286-CN-2	China	Secondary	201310240 878.8	2013-06-18	2014-01-15	2033-06-18	2018-08-21	103509607	2018-08-21	2033-06-18	Granted	China Patent Agent H.K. Ltd.	2020-06-18	300.76	
254286-US-1	US	Priority	13/526370	2012-06-18	2013-12-19	2034-06-27	2016-11-01	9481838B2	2016-11-01	2034-06-27	Granted	Fletcher Yoder	2020-05-01	1603	
254718-CN-2	China	Secondary	201310103 620.3	2013-03-28	2013-10-23	2033-03-28	2017-04-12	103361140 A	2017-04-12	2033-03-28	Granted	China Patent Agent H.K. Ltd.	2020-03-28	300.76	
254718-US-1	US	Priority	13/435852	2012-03-30	2013-10-03	2033-10-09	2015-08-04	9096803	2015-08-04	2033-10-09	Granted	GEE POWER	2023-02-04	3603	
254718-US-3	US	Divisional	14/794918	2015-07-09	2015-11-05	2032-03-30	2015-12-22	9217112	2015-12-22	2032-03-30	Granted	GEE POWER	2023-06-22	3603	

PATENT

REEL: 050798 FRAME: 0760

256089-US-1	US	Continuation-in-part	13/429503	2012-03-26	201202076	2012-08-16	2016-08-30	2033-09-30	Granted	AND SYSTEMS FOR CO2	GEE POWER	2020-02-29	1603
256089-US-2	US	Divisional	15/088877	2016-04-01	201602140	2016-07-28	2018-03-20		Granted	SYSTEMS FOR CO2	GEE POWER	2021-09-20	1603
256413-CN-2	China	Secondary	201310285	2013-07-09	103537163	2014-01-29	2017-08-15	2033-07-09	Granted	METHOD FOR GAS TREATMENT	Patent Agent H.K. Ltd.	2020-07-09	300.76
256413-US-1	US	Priority	13/544948	2012-07-09	201400076	2014-01-09	2014-09-09	2032-11-26	Granted	GAS TREATMENT	Fletcher Yoder	2022-03-09	3603
256597-CN-2	China	Secondary	201310534	2013-11-01	103805290	2014-05-21	2017-11-17	2033-11-01	Granted	METHOD FOR USING BOILER FEEDWATER	China Patent Agent H.K. Ltd.	2019-11-01	300.76
256597-US-1	US	Priority	13/666893	2012-11-01	201401160	2014-05-01	2015-10-20	2033-04-22	Granted	BOILER FEEDWATER	Fletcher Yoder	2023-04-20	3603
256661-CN-2	China	Secondary	201310101	2013-03-27	103359460	2013-10-23	2017-05-03	2033-03-27	Granted	DRAWING SOLID FEED INTO AND/OR OUT OF A SOLID FEED PUMP	China Patent Agent H.K. Ltd.	2020-03-27	300.76
256661-US-1	US	Priority	13/431903	2012-03-27	201302596	2013-10-03	2015-05-05	2033-09-16	Granted	DRAWING SOLID FEED INTO AND/OR OUT OF A SOLID FEED PUMP	Fletcher Yoder	2022-11-05	3603
256661-US-3	US	Continuation	14/673412	2015-03-30	201502043	2015-07-23	2018-03-27	2033-06-25	Granted	SYSTEM AND METHOD FOR REMOVAL OF LIQUID FROM SOLIDS FLOW	Fletcher Yoder	2021-09-27	1603
257202-CN-2	China	Secondary	201310648	2013-12-04	103851890	2014-06-11	2017-11-07	2033-12-04	Granted	METHOD FOR REMOVAL OF LIQUID FROM SOLIDS FLOW	China Patent Agent H.K. Ltd.	2019-12-04	300.76
257202-US-1	US	Priority	13/705154	2012-12-04	201401528	2014-06-05	2018-07-10	2035-07-05	Granted	A SOLIDS FLOW	Fletcher Yoder	2022-01-10	1603

PATENT

REEL: 050798 FRAME: 0761

257233-CN-2	China	Secondary	201310648 049.3	2013-12-04	103848181 11	2014-06-11	103848181 08	2017-08-08	2033-12-04	Granted	METHOD TO SUPPLY SOLID FEEDSTOCK TO SOLIDS	China Patent Agent H.K. Ltd.	2019-12-04	300.76
257233-US-1	US	Priority	13/705161	2012-12-04	201401511 91A1	2014-06-05	9181046 10	2015-11-10	2032-12-04	Granted	FEEDSTOCK TO A SOLIDS	Fletcher Yoder	2023-05-10	3603
257238-CN-2	China	Secondary	201310646 286.6	2013-12-04	103848180 11	2014-06-11	103848180 27	2018-03-27	2033-12-04	Granted	SOLIDS FEEDER SYSTEM AND METHOD	China Patent Agent H.K. Ltd.	2019-12-04	300.76
257238-US-1	US	Priority	13/705149	2012-12-04	201401508 73A1	2014-06-15	9156631 13	2015-10-13	2032-12-04	Granted	SYSTEM AND METHOD	Fletcher Yoder	2023-04-13	3603
257312-CN-2	China	Secondary	201310611 227.5	2013-11-26	103836280 04	2014-06-04	103836280 05	2018-01-05	2033-11-26	Granted	CONVEYING SOLIDS THROUGH AN OUTLET PIPE	China Patent Agent H.K. Ltd.	2019-11-26	300.76
257312-US-1	US	Priority	13/685637	2012-11-26	201401445 11A1	2014-05-29	9109731 18	2015-08-18	2033-07-23	Granted	METHOD FOR CONVEYING SOLIDS THROUGH AN OUTLET PIPE	Fletcher Yoder	2023-02-18	3603
257358-CN-1	China	Priority	201210151 019.7	2012-05-15	CN103421 558A	2013-12-04	ZL2012101 51019.7	2015-11-25	2032-05-15	Granted	APPARATUS AND PREPARATION METHOD	Liu Shen Associates	2020-05-15	300.76
257486-CN-2	China	Secondary	201310450 225.2	2013-09-27	103706265 09	2014-04-09	103706265 19	2018-01-19	2033-09-27	Granted	STRUCTURES SUITABLE FOR GAS SEPARATION AND RELATED STEEL MILL POWER GENERATION	China Patent Agent H.K. Ltd.	2020-09-27	300.76
257598-CN-1	China	Priority	201210091 616.5	2012-03-30	103361135 A	2013-10-23	ZL2012100 91616.5	2015-10-07	2032-03-30	Granted	DEVICE AND METHOD	Liu Shen Associates	2020-03-30	300.76

PATENT

REEL: 050798 FRAME: 0762

257598-KR-2	Korea	Secondary	102013003	2013-03-29	102013111	2013-10-10	431A	2033-03-29	Published	METHOD FOR POWER GENERATION IN STEEL MILL	Lee & Ko	
257598-PL-3	Poland	Secondary	P-403349	2013-03-28				2018-01-10	Granted	METHOD FOR POWER GENERATION IN STEEL MILL	PolSERVICE	205.26
258825-CN-2	China	Secondary	201310134	2013-04-18	103373609	2013-10-30	A	2017-05-17	Granted	RESTRICTING BACKFLOW OF SOLIDS IN A PUMP	China Patent Agent H.K. Ltd.	300.76
258825-US-1	US	Priority	13/449639	2012-04-18	201302768	2013-10-24	89A1	2015-04-14	Granted	RESTRICTING BACKFLOW OF SOLIDS IN A PUMP	Armstrong Teasdale LLP	3603
259007-US-1	US	Priority	13/360542	2012-01-27	201301921	2013-08-01	37A1	2015-09-29	Granted	HEATING A GASIFIER	Fletcher Yoder	3603
259348-CN-2	China	Secondary	201310224	2013-06-07	558.3	2014-01-01	103484165	2019-05-14	Granted	METHOD FOR SLURRY HANDLING	China Patent Agent H.K. Ltd.	300.76
259348-KR-5	Korea	Secondary	102013006	2013-06-05	102013137	2013-12-17	549A	2033-06-05	Published	METHOD FOR SLURRY HANDLING	Lee & Ko	
259348-PL-4	Poland	Secondary	P-404251	2013-06-07				2033-06-07	Application	SLURRY HANDLING	PolSERVICE	
259348-US-1	US	Priority	13/491463	2012-06-07	201303270	2013-12-12	28A1	2015-12-29	Granted	SLURRY HANDLING	Fletcher Yoder	3603
259523-CN-4	China	Designated PCT	201380043	2013-07-29	740.7	2015-04-22	104540927	2017-08-08	Granted	GASIFICATION SYSTEM	China Patent Agent H.K. Ltd.	300.76
259523-DE-5	Germany	Designated EP	13747579	2013-07-29	4			2019-03-27	Granted	WITHIN GASIFICATION SYSTEM	freightpartners IP Law Firm	275.71

PATENT

REEL: 050798 FRAME: 0763

259523-EP-3	EP	Designated PCT	13747579.4	2013-07-29	2015-06-24	2885382	2019-03-27	2033-07-29	Granted	ADJUSTMENT WITHIN GASIFICATION SYSTEM ADJUSTMENT	freightpartners IP Law Firm	3603
259523-US-1	US	Priority	13/589865	2012-08-20	2014-02-20	75A1	2015-08-18	2033-11-28	Granted	GASIFICATION SYSTEM	Fletcher Yoder Patent Agent H.K. Ltd.	3603
259664-CN-6	China	Divisional	201910062.968.X	2013-09-04	2019-07-26	CN110055101A			Published	GASIFICATION SYSTEM AND METHOD	KAnalysis Consultant s (P) Ltd	
259664-IN-5	India	Secondary	3764/CHE/2013.2013	2013-08-26	2016-06-17	3764/CHE/2013.2013		2033-08-26	Published	GASIFICATION SYSTEM AND METHOD	KAnalysis Consultant s (P) Ltd	
259664-KR-3	Korea	Secondary	102013010.4955	2013-09-02				2033-09-02	Application	GASIFICATION SYSTEM AND METHOD	FirstLaw P.C.	
259664-US-1	US	Priority	13/603368	2012-09-04	2014-03-06	39A1	2015-08-11	2032-09-11	Granted	GASIFICATION SYSTEM FOR AUTOMATED INTEGRATION OF DESIGN ANALYSIS SUBPROCESS POWER SYSTEM AND METHOD FOR SYNGAS TREATMENT LIQUIDS	Fletcher Yoder Patent Agent H.K. Ltd.	3603
25MB7195-US-1	US	Priority	09/682750	2001-10-12			2004-05-11	2021-10-12	Granted	ANALYSIS SUBPROCESS POWER SYSTEM AND METHOD FOR SYNGAS TREATMENT LIQUIDS	GEE Patent Agent H.K. Ltd.	3603
260061-US-1	US	Priority	13/662240	2012-10-26	2014-05-01	20140120004A1	2015-09-22	2033-07-20	Granted	SYNGAS TREATMENT LIQUIDS	Fletcher Yoder Patent Agent H.K. Ltd.	3603
260387-CN-2	China	Secondary	201310628.569.8	2013-11-29	2014-06-11	10384942011	2018-01-12	2033-11-29	Granted	METHOD OF OPERATION LIQUIDS	Patent Agent H.K. Ltd.	300.76
260387-US-1	US	Priority	13/689235	2012-11-29	2014-05-29	20140148520A1	2016-06-07	2034-06-10	Granted	SYSTEM AND METHOD OF OPERATION LIQUIDS	None	1603
260387-US-4	US	Divisional	15/167440	2016-05-27	2016-09-22	20160272896A1	2017-04-18	2032-11-29	Granted	SYSTEM AND METHOD OF OPERATION LIQUIDS	GEE POWER	1603
260387-ZA-3	South Africa	Secondary	2013/0859.1	2013-11-14			2016-04-28	2033-11-14	Granted	SYSTEM AND METHOD OF OPERATION LIQUIDS	Adams & Adams	21.86

PATENT

REEL: 050798 FRAME: 0764

260389-AU-3	Australia	Secondary	201320625	2013-06-11	2017-08-03	201320625	2017-08-03	2033-06-11	Granted	METHOD FOR PROTECTING GASIFIER QUENCH RING	Phillips Ormonde & Fitzpatrick	2020-06-11	209.97
260389-CN-2	China	Secondary	201310295	2013-07-15	2014-01-29	103540364	2014-01-29	2033-07-15	Published	METHOD FOR PROTECTING GASIFIER QUENCH RING	China Patent Agent H.K. Ltd.		
260389-DE-5	Germany	Designated EP	13176143	2013-07-11				2019-03-27	Granted	METHOD FOR PROTECTING GASIFIER QUENCH RING	freigutpartners IP Law Firm	2020-07-11	275.71
260389-EP-4	EP	Secondary	13176143	2013-07-11	2014-01-15	2684939	2014-01-15	2033-07-11	Granted	METHOD FOR PROTECTING GASIFIER QUENCH RING	Ruger Barthelet Abel		
260389-US-1	US	Priority	13/549385	2012-07-13	2014-01-16	201400141	2014-01-16	2034-01-09	Granted	METHOD FOR PROTECTING GASIFIER QUENCH RING	Fletcher Yoder	2023-03-08	3603
260693-AU-2	Australia	Secondary	201326074	2013-11-25				2017-03-16	Granted	METHOD FOR PREPARING COAL WATER SLURRY AND METHOD FOR	Phillips Ormonde & Fitzpatrick	2019-11-25	209.97
260693-CN-1	China	Priority	201210506	2012-11-30	2014-06-11	CN103849	2014-06-11	2032-11-30	Granted	PREPARING COAL WATER SLURRY AND METHOD FOR	Liu Shen Associates	2019-11-30	300.76
260693-US-4	US	Secondary	14/089825	2013-11-26	2014-06-05	201401503	2014-06-05	2034-05-24	Granted	PREPARING COAL WATER SLURRY AND METHOD FOR	GEE POWER	2023-09-29	3603
261640-CN-3	China	Designated PCT	201480014	2014-02-19	2015-12-23	105189371	2015-12-23	2034-02-19	Published	PREPARING COAL WATER SLURRY AND METHOD FOR	China Patent Agent H.K. UNIT OXYGEN Ltd.		

PATENT

REEL: 050798 FRAME: 0765

261640-CN-4	China	Divisional	201910603 475.2	2019-07-05								N WASTE WATER TREATMENT USING AIR SEPARATION UNIT OXYGEN Ltd.	China Patent Agent H.K.		
261640-US-1	US	Priority	13/798033	2013-03-12	2014-09-18	201402630 45A1	2017-01-03	2034-02-19	9533899	2017-01-03	2034-02-19	SEPARATION UNIT OXYGEN Yoder	Fletcher Yoder	2020-07-03	1603
261784-CN-1	China	Priority	201210352 612.8	2012-09-20	2014-03-26	CN103672 848A	2015-12-02	2032-09-20	ZL201210352612.8	2015-12-02	2032-09-20	DE-SCALING RADIANT SYNGAS	Liu Shen Associates	2020-09-20	300.76
262095-CN-2	China	Secondary	201310451 417.5	2013-09-27	2014-04-09	103710052		2033-09-27			2033-09-27	FOR A SYNGAS COOLER AND METHOD OF MAINTAINING THE SAME	China Patent Agent H.K. Ltd.		
262095-IT-3	Italy	Secondary	MI2013A0 01536	2013-09-18			2015-12-17	2033-09-18	1419926	2015-12-17	2033-09-18	FOR A SYNGAS COOLER AND METHOD OF MAINTAINING THE SAME	Barzano and Zanardo Milano	2020-09-18	196.17
262095-US-1	US	Priority	13/630454	2012-09-28	2014-04-03	201400902 96A1	2015-12-01	2034-03-01	9200223	2015-12-01	2034-03-01	FOR A SYNGAS COOLER AND METHOD OF MAINTAINING THE SAME	GEE POWER	2023-06-01	3603
262095-US-4	US	Divisional	14/921593	2015-10-23	2016-02-11	201600390 55A1	2017-01-03	2032-09-28	9533382	2017-01-03	2032-09-28	FOR A SYNGAS COOLER PREHEATER FUEL SYSTEM AND METHODS OF ASSEMBLING SAME	Armstrong Teasdale LLP	2020-07-03	1603
262112-CN-2	China	Secondary	201310552 057.8	2013-11-08	2014-05-21	103805285	2017-08-04	2033-11-08	103805285	2017-08-04	2033-11-08	FOR A SYNGAS COOLER PREHEATER FUEL SYSTEM AND METHODS OF ASSEMBLING SAME	China Patent Agent H.K. Ltd.	2019-11-08	300.76

PATENT

REEL: 050798 FRAME: 0766

262112-US-1	US	Priority	13/671597	2012-11-08	2014-05-08	20140127089A1	2015-07-14	2034-03-29	Granted	PREHEATER FUEL SYSTEM AND METHODS OF ASSEMBLING SAME SYSTEM FOR USE IN CONDITION MONITORING OF PRESSURE SYSTEM FOR USE IN CONDITION MONITORING OF PRESSURE SYSTEM FOR USE IN CONDITION MONITORING OF PRESSURE SYSTEM AND METHOD FOR REMOVING RESIDUAL GAS FROM A GASIFICATIO N SYSTEM	2023-01-14	3603
262204-CN-2	China	Secondary	201310611341.8	2013-11-26	2014-06-04	10383817004	2018-03-13	2033-11-26	Granted	China Patent Agent H.K. Ltd.	2019-11-26	300.76
262204-US-1	US	Priority	13/684737	2012-11-26	2014-05-29	20140144242A1	2015-09-29	2034-03-03	Granted	Armstrong Teasdale LLP	2023-03-29	3603
262271-CN-2	China	Secondary	201310573281.5	2013-11-15	2014-05-28	10382016828	2018-01-16	2033-11-15	Granted	China Patent Agent H.K. Ltd.	2019-11-15	300.76
262271-US-1	US	Priority	13/678537	2012-11-15	2014-05-15	20140134055A1	2015-09-22	2034-01-04	Granted	Fletcher Yoder China	2023-03-22	3603
262312-CN-2	China	Secondary	201410027261.2	2014-01-21	2014-07-23	10393755123		2034-01-21	Examination Requested	Patent Agent H.K.		
262585-CN-3	China	Designated PCT	201480015419.2	2014-03-03	2015-10-28	10500880128	2017-12-29	2034-03-03	Granted	Patent Agent H.K.	2020-03-03	300.76
262585-DE-4	Germany	Designated PCT	112014001327.7	2014-03-03	2016-01-21	112014001327		2034-03-03	Published	Barthel Abel	2020-03-03	207.53
262585-US-1	US	Priority	13/830833	2013-03-14	2014-09-18	20140263746A1	2015-05-05	2033-09-03	Granted	Fletcher Yoder	2022-11-05	3603

PATENT

REEL: 050798 FRAME: 0767

263196-BR-2	Brazil	Secondary	102014003 883	2014-02-19	2015-10-20	104059705 883	2014-09-24	2014-03-07	2018-02-23	104059705 23	2034-02-19	Published	2020-02-19	Gusmao Labrunie	100
263196-CN-3	China	Secondary	201410081 980.2	2014-03-07	2014-09-24	104059705 24	2014-03-07	2018-02-23	104059705 23	2034-03-07	Granted	2020-03-07	China Patent Agent H.K. Ltd.	300.76	
263196-IN-4	India	Secondary	1117/CHE/ 2014	2014-03-05						2034-03-05	Application			KAnalysis Consultant s (P) Ltd	
263196-US-1	US	Priority	13/788655	2013-03-07	2014-09-11	201402508 58A1	2014-09-11	2016-09-27	9453171B2 27	2035-03-06	Granted	2020-03-27	Armstrong Teasdale LLP	1603	
263297-BR-2	Brazil	Secondary	102014003 012-3	2014-02-07	2015-11-03	102014003 012	2015-11-03			2034-02-07	Published	2020-02-07	Gusmao Labrunie	100	
263297-CN-3	China	Secondary	201410047 844.1	2014-02-11	2014-08-20	103992804 20	2014-08-20			2034-02-11	Published		China Patent Agent H.K. Ltd.		

263297-IN-4	India	Secondary	568/CHE/2 014 07	2014-02-07				2034-02-07	Application	AND SYSTEMS FOR TREATING CARBONACE AND METHODS FOR COAL BENEFICIATI AND METHODS FOR COAL BENEFICIATI AND METHODS FOR COAL BENEFICIATI AND METHODS FOR COAL BENEFICIATI	KAnalysis Consultant s (P) Ltd	2020-02-10	100
263298-CN-2	Brazil	Secondary	102014003 116-2	2014-02-10	102014003 116 08			2034-02-10	Published	FOR COAL BENEFICIATI	Gusmao Labrunie China Patent Agent H.K.	2020-02-11	300.76
263298-CN-2	China	Secondary	201410047 841.8	2014-02-11	2014-08-13	103977891 13	2018-01-26	2034-02-11	Granted	FOR COAL BENEFICIATI	Agent H.K.	2020-02-11	300.76
263298-IN-3	India	Secondary	567/CHE/2 014 07	2014-02-07				2034-02-07	Application	METHOD FOR PREPARING COAL WATER SLURRY	KAnalysis Consultant s (P) Ltd		
263300-BR-3	Brazil	Secondary	102014002 344-5	2014-01-30	102014002 344 03			2034-01-30	Published	COAL WATER SLURRY	Gusmao Labrunie	2020-01-30	100
263300-CN-1	China	Priority	201310038 770.0	2013-01-31	CN103965 981A 06		2016-05-25	2033-01-31	Granted	WATER-COAL-SLURRY	Liu Shen Associates	2020-01-31	300.76
263300-IN-4	India	Secondary	223/CHE/2 014 20	2014-01-20			2019-08-30	2034-01-20	Granted	METHOD FOR PREPARING COAL WATER SLURRY	KAnalysis Consultant s (P) Ltd	2019-08-30	101
263300-US-2	US	Secondary	14/169585 31	2014-01-31	201402086 37A1 31		2019-05-14	2036-04-13	Granted	COAL WATER SLURRY	GEE POWER	2022-11-14	1603
263394-BR-3	Brazil	Secondary	102014002 345-3	2014-01-30	102014002 345 04			2034-01-30	Published	THE PREPARATIO N OF COAL WATER N FOR SLURRY	Gusmao Labrunie China Patent Agent H.K.	2020-01-30	100
263394-CN-2	China	Secondary	201410039 097.7	2014-01-27	103965982 06		2018-02-02	2034-01-27	Granted	MATERIAL OF SYSTEM AND METHOD	Agent H.K.	2020-01-27	300.76

PATENT

REEL: 050798 FRAME: 0770

263394-IN-4	India	Secondary	286/CHE/2014-01-23	2014-01-23	Application	2034-01-23	METHOD FOR THE PREPARATION OF COAL WATER METHYLATION	KAnalysis Consultant s (P) Ltd	1603
263394-US-1	US	Priority	13/756364	2013-01-31	2014-02-08	2014-02-08	2016-08-02	Fletcher Yoder	2020-02-02
263745-CN-2	China	Designated PCT	201380074/362.9	2013-10-17	2016-01-06	2017-10-27	105229122	China Patent Agent H.K. Ltd.	2019-10-17
263745-IN-3	India	Designated PCT	5183/CHE NP/2015	2013-10-17	2016-01-06	2017-10-27	105229122	KAnalysis Consultant s (P) Ltd	300.76
263745-US-4	US	Designated PCT	14/772797	2013-10-17	2016-01-06	2018-01-23	9874142	GEE POWER	2021-07-23
263770-CN-2	China	Secondary	2016/10792/071.9	2016-08-31	2017-03-08	2018-01-23	106479575	China Patent Agent H.K. Ltd.	1603
263770-US-1	US	Priority	14/843794	2015-09-02	2017-03-02	2018-01-23	106479575	Fletcher Yoder	1603
263839-CN-3	China	Designated PCT	201480077/143.0	2014-12-15	2016-10-26	2018-08-24	106062480	China Patent Agent H.K. Ltd.	2019-12-15
263839-US-1	US	Priority	14/153544	2014-01-13	2015-07-16	2017-05-09	9644158	GEE POWER	2020-11-09

PATENT

REEL: 050798 FRAME: 0771

264163-BR-3	Brazil	102014012 Secondary 494-2	2014-05-23	102014012 2016-06-14	2016-06-14	100	2020-05-23	Gusmao Labrunie Patent Agent H.K. Ltd.	FOR APPARATUS FOR GASIFICATIO
264163-CN-2	China	201410250 Secondary 585.2	2014-06-06	2014-12-24	2034-06-06	101	2019-08-28	KAnalysis Consultant s (P) Ltd	FOR APPARATUS FOR GASIFICATIO
264163-IN-4	India	2617/CHE/ Secondary 2014	2014-05-28		2034-05-28	1603	2020-12-20	Fletcher Yoder	FOR APPARATUS FOR GASIFICATIO
264163-US-1	US	13/912034 Priority	2013-06-06	2014-12-11	2035-05-31	249	2020-09-25	Wilson and Company inc.	FOR APPARATUS FOR HIGH ASH CONTENT FEEDSTOCK
264404-IN-3	India	569/CHE/2 Secondary 014	2014-02-07		2034-02-07	186.27	2019-10-10	China Patent Agent H.K. Ltd.	FOR APPARATUS FOR HIGH ASH CONTENT FEEDSTOCK
264416-CA-3	Canada	201409-2,868,480 Secondary	2014-09-25		2034-09-25	1603	2020-02-29	GEE POWER	FOR APPARATUS FOR HIGH ASH CONTENT FEEDSTOCK
264416-CN-2	China	201410532 Secondary 976.3	2014-10-10	2015-04-29	2034-10-09	3603	2022-10-07	Armstrong Teasdale LLP	FOR APPARATUS FOR HIGH ASH CONTENT FEEDSTOCK
264416-US-1	US	14/051594 Priority	2013-10-11	2015-04-16	2034-05-15	100	2020-05-29	Gusmao Labrunie Patent Agent H.K. Ltd.	FOR APPARATUS FOR GASIFICATIO
264416-US-5	US	15/145824 Divisional	2016-05-04	2016-08-25	2033-10-11	249	2020-09-20	GEE POWER	FOR APPARATUS FOR GASIFICATIO
264660-IN-2	India	354/DEL/2 Secondary 013	2013-02-07	2015-01-16	2033-02-07	186.27	2019-10-10	China Patent Agent H.K. Ltd.	FOR APPARATUS FOR GASIFICATIO
264660-US-1	US	13/737718 Priority	2013-01-09	2014-07-10	2033-07-18	3603	2022-10-07	Armstrong Teasdale LLP	FOR APPARATUS FOR GASIFICATIO

265168-CA-3	Canada	Secondary	2855307	2014-06-26	2018-10-23	2034-06-26	Granted	SYSTEM AND METHOD FOR TREATMENT OF A MEDIUM SYSTEM AND METHOD FOR TREATMENT OF A MEDIUM	Craig Wilson and Company inc. China Patent Agent H.K. Ltd.	2020-06-26	156.75
265168-CN-2	China	Secondary	844.4	2014-04-28	2019-05-14	2034-04-27	Granted	SYSTEM AND METHOD FOR TREATMENT OF A MEDIUM	China Patent Agent H.K. Ltd.	2020-04-28	300.76
265168-US-1	US	Priority	13/931421	2013-06-28	2017-05-23	2034-10-16	Granted	SYSTEM AND METHOD FOR TREATMENT OF A MEDIUM	GEE POWER	2020-11-23	1603
265735-CN-2	China	Secondary	312.6	2014-11-14	2015-05-27	2034-11-14	Published	SOLIDS COMBINING SYSTEM FOR A SOLID FEEDSTOCK	China Patent Agent H.K. Ltd.		
265735-US-1	US	Priority	14/082008	2013-11-15	2017-01-17	2034-04-11	Granted	SOLIDS COMBINING SYSTEM FOR A SOLID FEEDSTOCK	Fletcher Yoder Patent Agent H.K.	2020-07-17	1603
267133-CN-3	China	Designated PCT	201480016	2014-02-24	2017-06-30	2034-02-24	Granted	FOR FEED INJECTOR COMPRISING A SOLID FEED	Patent Agent H.K.	2020-02-24	300.76
267133-DE-5	Germany	Designated EP	14708763	2014-02-24	2018-12-19	2034-02-24	Granted	INJECTOR WITH A HEAT COMPRISING A SOLID FEED	GEE POWER	2020-02-24	207.53
267133-EP-4	EP	Designated PCT	14708763	2014-02-24	2018-12-19	2034-02-24	Granted	INJECTOR WITH A HEAT COMPRISING A SOLID FEED	freightpartners IP Law Firm		
267133-IT-6	Italy	Designated EP	14708763	2014-02-24	2018-12-19	2034-02-24	Granted	INJECTOR WITH A HEAT COMPRISING A SOLID FEED	GEE POWER	2020-02-24	139.35
267133-US-1	US	Priority	13/840043	2013-03-15	2016-03-08	2034-05-20	Granted	FOR FEED INJECTOR	Fletcher Yoder	2023-09-08	3603

PATENT

REEL: 050798 FRAME: 0773

267472-CN-2	China	Secondary	201410498 150.X	2014-09-25	2015-03-25	104436727	2034-09-25	Published	AND METHODS FOR COAL WATER SLURRY	China Patent Agent H.K. Ltd.		
267472-IN-3	India	Secondary	4344/CHE/ 2014	2014-09-04	2019-08-29	319392	2034-09-04	Granted	METHODS FOR COAL WATER SLURRY	KAnalysis Consultants (P) Ltd	2019-08-29	101
267472-US-1	US	Priority	14/036001	2013-09-25	2015-03-26	201500826 90A1	2034-04-19	Granted	METHODS FOR COAL WATER SLURRY	GEE POWER	2023-06-01	3603
267762-AU-4	Australia	Secondary	201426828 6	2014-12-01	2019-05-02	201426828 6	2034-12-01	Granted	TRANSPORTING SOLIDS WITH IMPROVED SOLIDS	Phillips Ormonde & Fitzpatrick	2019-12-01	209.97
267762-CN-2	China	Secondary	201410760 426.7	2014-12-12	2015-06-17	104709715	2034-12-11	Granted	TRANSPORTING SOLIDS WITH IMPROVED SOLIDS	China Patent Agent H.K. Ltd.	2019-12-12	186.27
267762-DE-8	Germany	Designated EP	14197289 3	2014-12-11	2015-06-17	2884179	2034-12-11	Granted	TRANSPORTING SOLIDS WITH IMPROVED SOLIDS	RWS Group Ltd	2019-12-11	150.72
267762-IN-3	India	Secondary	5882/CHE/ 2014	2014-11-24	2034-11-24	Application			TRANSPORTING SOLIDS WITH IMPROVED SOLIDS	KAnalysis Consultants (P) Ltd		
267762-KR-6	Korea	Secondary	102014017 5619	2014-12-09	2034-12-09	Application			TRANSPORTING SOLIDS WITH IMPROVED SOLIDS	Lee International Patent & Law Office		
267762-NL-7	Netherlands	Designated EP	14197289 3	2014-12-11	2015-06-17	2884179	2034-12-11	Granted	TRANSPORTING SOLIDS WITH IMPROVED SOLIDS	RWS Group Ltd	2019-12-11	184.8

PATENT

REEL: 050798 FRAME: 0774

267762-US-1	US	Priority	14/106630	2013-12-13	2015-06-18	2017-03-28	2034-12-04	Granted	9604182	2015-01-18	2017-03-28	2034-12-04	2020-09-28	1603
TRANSPORTING SOLIDS WITH IMPROVED SOLIDS METHOD FOR GASIFICATION AND COOLING SYNGAS														
Fletcher Yoder														
China Patent Agent H.K. Ltd.														
267929-CN-2	China	Secondary	201410651	2014-11-17	2015-05-27	2034-11-17	2034-11-17	Published	104650984	2015-05-27	2034-11-17	2034-11-17		
advanced gasifier double integrated composite structure annulus cooler.														
Fletcher Yoder														
2023-02-18														
3603														
267929-US-1	US	Priority	14/081329	2013-11-15	2015-05-21	2015-08-18	2033-11-15	Granted	9109171	2015-05-21	2015-08-18	2033-11-15	2023-02-18	3603
SYSTEM AND METHOD FOR TREATMENT OF A GASEOUS MEDIUM														
Fletcher Yoder														
China Patent Agent H.K. Ltd.														
267968-CN-2	China	Secondary	201410640	2014-11-13	2015-05-20	2018-12-07	2034-11-12	Granted	104624025	2015-05-20	2018-12-07	2034-11-12	2019-11-13	186.27
SYSTEM AND METHOD FOR TREATMENT OF A GASEOUS MEDIUM														
GEE POWER														
2019-10-05														
1603														
267968-US-1	US	Priority	14/078815	2013-11-13	2015-05-14	2016-04-05	2034-05-16	Granted	9302220B2	2015-05-14	2016-04-05	2034-05-16	2019-10-05	1603
METHOD FOR HYBRID REFRIGERATION GAS LIQUEFACTION														
Fletcher Yoder														
268342-US-1	US	Priority	14/097105	2013-12-04	2015-06-04	2014-11-26	2033-12-04	Published		2015-06-04	2014-11-26	2033-12-04	2020-01-10	186.27
generation system for producing electricity from syngas obtained from														
Liu Shen Associates														
2020-01-10														
186.27														

268696-US- 2	US	Secondary	14/593083	2015-01-09	201501980 88A1	2015-07-16	9988983	2018-06-05	2036-03-05	Granted	GENERATION SYSTEM FOR USING SYNGAS GENERATED IN GASIFIER TO PRODUCE ELECTRICITY METHOD FOR CONTINUOUS SOLIDS SLURRY DEPRESSURE ZATION	GEE POWER	2021-12-05	1603
268835-AU- 4	Australia	Secondary	201427126 3	2014-12-03	201427126 3	2019-03-21	201427126 3	2019-03-21	2034-12-03	Granted	METHOD FOR CONTINUOUS SOLIDS SLURRY DEPRESSURE ZATION	Phillips Ormonde & Fitzpatrick	2019-12-03	209.97
268835-CN-2	China	Secondary	201410754 986.1	2014-12-11	201506-104711035	2015-06-17			2034-12-11	Published	METHOD FOR CONTINUOUS SOLIDS SLURRY DEPRESSURE ZATION	China Patent Agent H.K. Ltd.		
268835-IN- 3	India	Secondary	5897/CHE/2014	2014-11-25					2034-11-25	Application	METHOD FOR CONTINUOUS SOLIDS SLURRY DEPRESSURE ZATION	KAnalysis Consultant s (P) Ltd		
268835-KR- 5	Korea	Secondary	102014017 7302	2014-12-10					2034-12-10	Allowed	METHOD FOR CONTINUOUS SOLIDS SLURRY DEPRESSURE ZATION	Lee & Ko		
268835-US- 1	US	Priority	14/103695	2013-12-11	201520159 654A1	2015-06-11	9702372	2017-07-11	2035-10-29	Granted	METHOD FOR CONTINUOUS SOLIDS SLURRY DEPRESSURE ZATION	Fletcher Yoder	2021-01-11	1603
268855-CN-2	China	Secondary	201410755 219.2	2014-12-11	201506-104711040	2015-06-17			2034-12-11	Published	METHOD FOR CONTINUOUS SOLIDS SLURRY DEPRESSURE ZATION	China Patent Agent H.K. Ltd.		

PATENT

REEL: 050798 FRAME: 0776

268855-IN-3	India	Secondary	5948/CHE/2014-11-27	2014-11-27	2034-11-27	Application	METHOD FOR CONTINUOUS SLAG HANDLING WITH DIRECT COOLING	KAnalysis Consultants (P) Ltd	2019-12-17	150.72
268874-CN-1	China	Priority	201310334/564.4	2013-08-02	2033-08-02	Published	METHOD FOR PRODUCING SYNTHETIC NATURAL GAS	Liu Shen Associates	2019-12-17	150.72
268874-CN-2	China	Divisional	201811283/958.0	2018-10-31	2019-02-22	Published	NATURAL GAS	Liu Shen Associates Patent Agent H.K.	2019-12-17	150.72
268889-CN-2	China	Secondary	201410804/498.7	2014-12-19	2015-06-24	Allowed	COOLER	Patent Agent H.K.	2019-12-17	150.72
268889-DE-4	Germany	Designated EP	14198602/6	2014-12-17	2019-02-20	Granted	COOLER	Valipat SA	2019-12-17	150.72
268889-EP-3	EP	Secondary	14198602/6	2014-12-17	2015-06-24	Granted	COOLER	ers IP Law Firm	2019-12-17	150.72
268889-IT-5	Italy	Designated EP	14198602/6	2014-12-17	2019-02-20	Granted	COOLER	Valipat SA	2019-12-17	150.72
268889-US-1	US	Priority	14/136678	2013-12-20	2016-08-02	Granted	COOLER	Fletcher Yoder	2020-02-02	1603
268974-CN-2	China	Secondary	201410731/041.8	2014-12-05	2015-06-10	Published	METHOD FOR COOLING SYNGAS WITHIN A GASIFIER	China Patent Agent H.K. Ltd.	2020-02-02	1603
268974-US-1	US	Priority	14/099124	2013-12-06	2016-04-26	Granted	WITHIN A GASIFIER	Fletcher Yoder	2019-10-26	1603
270436-US-1	US	Priority	14/173440	2014-02-05	2015-08-06	Granted	PREPARATION SLURRY	Fletcher Yoder Patent	2020-01-26	1603
270479-CN-3	China	Designated PCT	201580018/048.8	2015-03-24	2017-02-22	Granted	GASIFIER AND SYNGAS COOLER	Patent Agent H.K. Ltd.	2020-03-24	186.27
270479-US-1	US	Priority	14/242408	2014-04-01	2015-10-01	Granted	GASIFIER AND SYNGAS COOLER	Fletcher Yoder	2020-06-27	1603

PATENT

REEL: 050798 FRAME: 0777

270532-IN-1	India	Priority	2555/CHE/ 2014-05-23	2014-05-23				2034-05-23	Application	BIOMASS DRYER ASSEMBLY METHOD FOR BLACK WATER REMOVAL METHOD FOR BLACK WATER REMOVAL INJECTOR SYSTEM INJECTOR SYSTEM INJECTOR FEED INJECTOR SYSTEM INJECTOR SYSTEM APPARATUS FOR PROCESSING AND COAL WATER TRADEMA SLURRY AND RK LAW ASSOCIATED OFFICE SYSTEM GASIFICATIO N SYSTEM AND METHOD GASIFICATIO N SYSTEM AND METHOD GASIFICATIO N SYSTEM AND METHOD GASIFICATIO N SYSTEM AND METHOD GASIFICATIO N SYSTEM AND METHOD SOLIDS PUMP HAVING FEED GUIDES	KAnalysis Consultant s (P) Ltd China Patent Agent H.K. Ltd. Fletcher Yoder Patent Agent H.K. ers IP Law Firm ers IP Law Firm KAnalysis Consultant s (P) Ltd Fletcher Yoder Patent Agent H.K. ers IP Law Firm ers IP Law Firm KAnalysis Consultant s (P) Ltd Fletcher Yoder Patent Agent H.K. ers IP Law Firm ers IP Law Firm SHANGHA IPATENT TRADEMA RK LAW OFFICE LLC Patent Agent H.K. Ltd. KAnalysis Consultant s (P) Ltd Zarnardo Milano GPOJ Patent Firm Fletcher Yoder Patent Agent H.K. Ltd.	2020-02-26	186.27								
270987-CN-2	China	Secondary	201510088 239.3	2015-02-26	2015-08-26	104862009	2019-07-16	2035-02-25	Granted	ZL2015100 88239.3	2016-10-11	2034-09-19	2035-05-27	2035-05-22	2035-05-22	2035-05-22	2035-05-11	Application	INJECTOR SYSTEM	1603	
270987-US-1	US	Priority	2014191400 14/191400	2014-02-26	2015-08-27	201502401 71A1	2016-10-11	2034-09-19	Granted	9464244B2	2016-10-11	2034-09-19	2035-05-27	2035-05-22	2035-05-22	2035-05-22	2035-05-11	Application	INJECTOR SYSTEM	1603	
272672-CN-2	China	Secondary	201510276 850.9	2015-05-27	2016-02-10	105316044	2019-03-27	2035-05-22	Published		2019-03-27	2035-05-22	2035-05-22	2035-05-22	2035-05-22	2035-05-22	2035-05-22	2035-05-11	Published	INJECTOR SYSTEM	150.72
272672-DE-5	Germany	Designated EP	15168963. 5	2015-05-22	2015-12-02	2949730	2019-03-27	2035-05-22	Granted	2949730	2019-03-27	2035-05-22	2035-05-22	2035-05-22	2035-05-22	2035-05-22	2035-05-22	2035-05-11	Granted	INJECTOR SYSTEM	150.72
272672-EP-3	EP	Secondary	15168963. 5	2015-05-22	2015-12-02	2949730	2019-03-27	2035-05-22	Granted	2949730	2019-03-27	2035-05-22	2035-05-22	2035-05-22	2035-05-22	2035-05-22	2035-05-22	2035-05-11	Granted	INJECTOR SYSTEM	150.72
272672-IN-4	India	Secondary	2373/CHE/ 2015-05-2015	2015-05-11	2015-12-03	201503457 82A1	2019-05-28	2037-01-27	Application	10,302,300	2019-05-28	2037-01-27	2037-01-27	2037-01-27	2037-01-27	2037-01-27	2037-01-27	2037-01-27	Application	INJECTOR SYSTEM	1603
272672-US-1	US	Priority	14/288095 27	2014-05-27	2015-12-03	201503457 82A1	2019-05-28	2037-01-27	Granted	10,302,300	2019-05-28	2037-01-27	2037-01-27	2037-01-27	2037-01-27	2037-01-27	2037-01-27	2037-01-27	Granted	INJECTOR SYSTEM	1603
272725-CN-1	China	Priority	201410103 868.4	2014-03-19	2015-09-23	CN104927 947A	2019-06-18	2034-03-19	Published		2019-06-18	2034-03-19	2034-03-19	2034-03-19	2034-03-19	2034-03-19	2034-03-19	2034-03-19	Published	SYSTEM	
273207-CN-2	China	Secondary	201510247 729.3	2015-05-15	2015-11-25	105087072	2019-06-18	2035-05-14	Granted	ZL2015102 47729.3	2019-06-18	2035-05-14	2035-05-14	2035-05-14	2035-05-14	2035-05-14	2035-05-14	2035-05-14	Granted	AND METHOD	186.27
273207-IN-3	India	Secondary	2371/CHE/ 2015-05-2015	2015-05-11	2015-11-25	105087072	2019-06-18	2035-05-14	Application		2019-06-18	2035-05-14	2035-05-14	2035-05-14	2035-05-14	2035-05-14	2035-05-14	2035-05-14	Application	AND METHOD	186.27
273207-IT-4	Italy	Secondary	102015000 013655	2015-04-30	2017-09-22	102015000 013655	2017-09-22	2035-04-30	Granted	102015000 013655	2017-09-22	2035-04-30	2035-04-30	2035-04-30	2035-04-30	2035-04-30	2035-04-30	2035-04-30	Granted	AND METHOD	105.27
273207-JP-5	Japan	Secondary	2015-094550 094550	2015-05-07	2016-02-17	6558826	2019-07-26	2035-05-07	Granted	6558826	2019-07-26	2035-05-07	2035-05-07	2035-05-07	2035-05-07	2035-05-07	2035-05-07	2035-05-07	Granted	AND METHOD	105.27
273207-US-1	US	Priority	14/278517 15	2014-05-15	2015-11-19	201503293 58A1	2017-01-31	2034-05-15	Granted	9556390	2017-01-31	2034-05-15	2034-05-15	2034-05-15	2034-05-15	2034-05-15	2034-05-15	2034-05-15	Granted	AND METHOD	1603
273350-CN-2	China	Secondary	201510473 288.9	2015-08-05	2016-02-17	105329626	2019-05-10	2035-08-04	Granted	ZL2015104 73288.9	2019-05-10	2035-08-04	2035-08-04	2035-08-04	2035-08-04	2035-08-04	2035-08-04	2035-08-04	Granted	HAVING FEED GUIDES	186.27

273350-IN-3	India	Secondary	3903/CHE/2015-07-30	2015-07-30	2035-07-30	Application	SOLIDS PUMP HAVING FEED GUIDES	KAnalysis Consultant s (P) Ltd	
273350-US-1	US	Priority	14/452195	2014-08-05	2015-12-08	Granted	SOLIDS PUMP HAVING FEED GUIDES	Fletcher Yoder	2023-06-08 3603
273450-CN-4	China	Designated PCT	201480067 367.3	2014-12-11	2016-10-05	105992875	ZL201480067367.3	2019-04-12	2019-12-11 186.27
273450-IN-5	India	Designated PCT	201647020 281	2014-12-11	2034-12-11	Application	SOLIDS PUMP HAVING FEED GUIDES	KAnalysis Consultant s (P) Ltd	
273450-JP-6	Japan	Designated PCT	2016-536856	2014-12-11	2019-04-05	6505102	6505102	2019-04-05	2022-04-05 91.31
273450-US-2	US	Secondary	14/566581	2014-12-10	2015-06-11	2017-10-10	9784121	2017-10-10	2021-04-10 1603
273658-IN-1	India	Priority	2557/CHE/2014-05-23	2014-05-23	2034-05-23	Application	Slurry Depressurization Method for Continuous Solids	KAnalysis Consultant s (P) Ltd	
274129-CN-2	China	Secondary	201511035 900.0	2015-11-05	2016-06-22	105694977	105694977	2016-06-22	
274150-CN-2	China	Secondary	201511036 303.X	2015-11-16	2016-08-10	105838443	105838443	2016-08-10	
274545-CN-1	China	Priority	201410209 911.5	2014-05-19	2015-11-25	CN105087092A	CN105087092A	2015-11-25	
274545-IN-2	India	Secondary	2498/CHE/2015-05-18	2015-05-18	2035-05-18	Application	NATURAL GAS PRODUCING SYSTEM AND METHOD	KAnalysis Consultant s (P) Ltd	
274564-CN-2	China	Secondary	201510469 812.5	2015-08-04	2016-02-10	105312129	105312129	2016-02-10	

PATENT

REEL: 050798 FRAME: 0779

274564-IN-3	India	Secondary	3857/CHE/ 2015-07-28	2015-07-28	2035-07-28	Application	ATTRITOR SYNGAS COOLER	KAnalysis Consultants (P) Ltd Patent Agent H.K.	
274779-CN-2	China	Secondary	201610253 2016-04-22	2016-11-02	2036-04-22	Published			
274779-IN-3	India	Secondary	201644012 2016-04-13		2036-04-13	Examination Requested	RADIANT SYNGAS COOLER	KAnalysis Consultants (P) Ltd	
274779-JP-4	Japan	Secondary	2016-082605 2016-04-18		2036-04-18	Examination Requested	RADIANT SYNGAS COOLER	GPOJ Patent Firm IPATENT AND TRADEMA	
274899-CN-1	China	Priority	201410316 2014-07-04	CN105331 392A 2016-02-17	2034-07-04	Dropped	COAL GASIFICATION SYSTEM AND METHOD heating device and using the device of coal gasification system and method for SLURRY PREHEATER AND COAL GASIFICATION SYSTEM AND METHOD USING THE WATER	RK LAW OFFICE LLC	2020-01-23
276289-CN-1	China	Priority	201510035 2015-01-23	105861064 17	2018-11-16	2035-01-22	Granted	TRADEMA RK LAW OFFICE LLC	186.27
276289-US-2	US	Secondary	15/004250 2016-01-22	201700022 80A1 2017-01-05		2036-01-22	Allowed	Fletcher Yoder	
276401-CN-2	China	Secondary	201510709 2015-10-28	105565409 11		2035-10-28	Published	China Patent Agent H.K. Ltd.	
276401-IN-3	India	Secondary	5357/CHE/ 2015-10-07		2035-10-07	Application	WATER PROCESSING SYSTEM WITH HIGH PRESSURE WATER PROCESSING SYSTEM WITH HIGH PRESSURE WATER	KAnalysis Consultants (P) Ltd	
276401-US-1	US	Priority	14/526743 2014-10-29	201601222 04A1 2016-05-05	2018-06-26	2037-01-21	Granted	GEE POWER	2021-12-26

PATENT

REEL: 050798 FRAME: 0780

276717-CN-1	China	Priority	201410698 369.4	2014-11-27	2016-06-22	CN105695 008A	2016-11-27	2034-11-27	Dropped	APPARATUS AND METHOD FOR MAKING COAL WATER SLURRY NATURAL GAS AND PRODUCING SYSTEM AND METHOD INJECTOR FOR A GASIFICATION SYSTEM INJECTOR FOR A GASIFICATION SYSTEM	IPATENT AND TRADEMA RK LAW OFFICE	143.34	
277166-CN-1	China	Priority	201410587 405.X	2014-10-28	2016-06-01	CN105623 760A	2016-10-28	2034-10-28	Published	PRODUCING SYSTEM AND METHOD INJECTOR FOR A GASIFICATION SYSTEM INJECTOR FOR A GASIFICATION SYSTEM	IPATENT AND TRADEMA RK LAW OFFICE	143.34	
277813-CN-2	China	Secondary	201620144 520.4	2016-02-26			2016-11-23	2026-02-26	Granted	FOR A PATENT AGENT H.K. LTD.	2020-02-26	143.34	
277813-US-1	US	Priority	14/633354 14633354	2015-02-27	2016-09-01	201602515 85A1	2017-09-12	2035-09-05	Granted	GASIFICATION SYSTEM TRANSPORTING DEVICES AND SYSTEMS TRANSPORTING DEVICES AND SYSTEMS	Fletcher Yoder China Patent Agent H.K. Ltd.	2021-03-12	1603
277982-CN-2	China	Secondary	201510949 664.7	2015-12-18	2016-06-29	105712086		2035-12-18	Published	TRANSPORTING DEVICES AND SYSTEMS TRANSPORTING DEVICES AND SYSTEMS	Agent H.K. Ltd.		
277982-IN-3	India	Secondary	5973/CHE/ 2015	2015-11-04				2035-11-04	Examination Requested	ANALYSIS CONSULTANTS (P) LTD			
278151-CN-2	China	Secondary	201710182 760.2	2017-03-24	2017-10-03	107227175		2037-03-24	Examination Requested	China Patent Agent H.K. Ltd.			
278151-DE-4	Germany	Secondary	102017105 984.9	2017-03-21	2017-09-28	102017105 984		2037-03-21	Published	METHOD FOR RUGER GASIFICATION BARTHELME ABEL	2020-03-21	82.54	
278151-IN-3	India	Secondary	201744008 534	2017-03-10				2037-03-10	Application	ANALYSIS CONSULTANTS (P) LTD			
278151-US-1	US	Priority	15/080043 15080043	2016-03-24			2017-10-31	2036-03-24	Granted	METHOD FOR GASIFICATION INJECTOR FOR A GASIFICATION SYSTEM	Fletcher Yoder IPATENT AND TRADEMA RK LAW OFFICE	2021-04-30	1603
278167-CN-1	China	Priority	201410587 383.7	2014-10-28	2016-05-04	CN105542 857A		2034-10-28	Published	SYNGAS PRODUCING SYSTEM AND METHOD	IPATENT AND TRADEMA RK LAW OFFICE		

PATENT

REEL: 050798 FRAME: 0781

279286-CN-2	China	Secondary	201610635 846.1	2016-08-05	106433801 22	2017-02-22	2036-08-05	Published	SYSTEM, SYSTEM HAVING QUENCH SYSTEM, AND METHOD OF	China Patent Agent H.K. Ltd.	2021-05-21	1603
279286-US-1	US	Priority	14/818805	2015-08-05	201700380 60A1	2017-02-09	2036-01-01	Granted	SYSTEM, AND METHOD OF CONTINUOUS SLAG	GEE China Patent Agent H.K. Ltd.	2021-05-21	1603
279867-CN-2	China	Secondary	201710769 465.7	2017-08-31	107779231 09	2018-03-09	2037-08-31	Examination Requested	HANDLING SYSTEM SLAG	China Patent Agent H.K. Ltd. Ruger Barthelt Abel	2020-08-18	82.54
279867-DE-4	Germany	Secondary	102017118 929.7	2017-08-18	102017118 929A1	2018-03-01	2037-08-18	Published	HANDLING SYSTEM SLAG	China KAnalysis Consultant s (P) Ltd	2020-08-18	82.54
279867-IN-3	India	Secondary	201744030 641	2017-08-30		2018-08-08	2037-08-30	Published	HANDLING SYSTEM	China KAnalysis Consultant s (P) Ltd	2020-08-18	82.54
280323-CN-2	China	Secondary	201810133 804.7	2018-02-09	108410515 17	2018-08-17	2038-02-09	Published	N QUENCH SYSTEM	Patent Agent H.K. Fletcher Yoder	2022-05-20	1603
280323-US-1	US	Priority	15/429099	2017-02-09	201802232 01A1	2018-08-09	2037-05-29	Granted	N QUENCH SYSTEM	Patent Agent H.K. Fletcher Yoder	2022-05-20	1603
280447-CN-2	China	Secondary	201810135 354.5	2018-02-09	108410516 17	2018-08-17	2038-02-09	Published	N QUENCH SYSTEM	Patent Agent H.K. Fletcher Yoder	2022-05-20	1603
280447-US-1	US	Priority	15/429092	2017-02-09	201802231 99A1	2018-08-09	2037-06-01	Granted	N QUENCH SYSTEM	Patent Agent H.K. Fletcher Yoder	2022-05-20	1603
281257-CN-2	China	Secondary	201710740 285.6	2017-08-24	107779230 09	2018-03-09	2037-08-24	Examination Requested	EXTERNAL DOWNCOMER TUBE ARRANGEMENT	China Patent Agent H.K. Ltd.	2022-05-20	1603
281257-DE-4	Germany	Secondary	102017119 405.3	2017-08-24		2018-03-09	2037-08-24	Application	EXTERNAL DOWNCOMER TUBE ARRANGEMENT	Ruger Barthelt Abel	2020-08-24	82.54
281257-IN-3	India	Secondary	201744029 869	2017-08-23		2018-08-08	2037-08-23	Application	EXTERNAL DOWNCOMER TUBE ARRANGEMENT	KAnalysis Consultant s (P) Ltd	2022-05-20	1603
281257-US-1	US	Priority	15/246355	2016-08-24	201800587 62A1	2018-03-01	2037-01-30	Granted	EXTERNAL DOWNCOMER TUBE ARRANGEMENT	Fletcher Yoder	2022-09-19	1603

PATENT

283256-DE-2	Germany	Secondary	102017106 571.7	2017-03-28	102017106 571	2017-10-05	2037-03-28	Published	GENERATING SYNGAS AND AN ASSOCIATED METHOD THEREOF	Ruger Barthelt Abel	2020-03-28	82.54
283256-US-1	US	Priority	15/085409	2016-03-30	201702842 95A1	2017-10-05	2036-10-22	Granted	METHOD THEREOF	GEE POWER Patent	2021-11-01	1603
285353-CN-2	China	Secondary	201810007 626.3	2018-01-04	108317874 24	2018-07-24	2038-01-04	Published	COOLER	Agent H.K. Barthelt	2020-01-02	82.54
285353-DE-3	Germany	Secondary	102018100 024.3	2018-01-02	102018100 024	2018-07-05	2038-01-02	Published	COOLER	Agent H.K. Barthelt	2020-01-02	82.54
285353-US-1	US	Priority	15/397981	2017-01-04	201801871 08A1	2018-07-05	2037-06-08	Granted	SYNGAS COOLER	Fletcher Yoder	2022-09-05	1603
287410-CN-2	China	Secondary	201810139 514.3	2018-02-09	201810139 00A1	2018-08-17	2038-02-09	Published	N QUENCH SYSTEM	Agent H.K. Fletcher Yoder	2022-11-14	1603
287410-US-1	US	Priority	15/429077	2017-02-09	201802232 00A1	2018-08-09	2037-05-12	Granted	N QUENCH SYSTEM	Fletcher Yoder	2022-11-14	1603
287476-CN-1	China	Priority	201610462 964.7	2016-06-23	CN107541 293A	2018-01-05	2036-06-23	Published	COMPONENT COATED WITH CHROMIUM COATING AND METHOD FOR PROTECTING GASIFICATION OFFICE	SHANGHAI IPATENT AND TRADEMA RKLAW OFFICE LLC		
287476-US-2	US	Secondary	15/616352	2017-06-07			2037-06-07	Application	COMPONENT COATED WITH CHROMIUM COATING AND METHOD FOR PROTECTING GASIFICATION OFFICE	Hoffman Warnick		

PATENT

REEL: 050798 FRAME: 0783

305907-US-4	US	Secondary	12/533780	2009-07-31	2010-03-04	20100050654	8110012	2012-02-07	2030-08-04	Granted	HOT SOLIDS COMBUSTION AND GASIFICATION FOR GENERATING AN OUTPUT SELECTED FROM H2 SYNGAS	MKG, LLC	2023-08-07	7403
306675-IN-11	India	Designated PCT	8345/DEL NP/2011	2010-03-30	2030-03-30	2956682	2956682	2018-04-11	2030-03-30	Granted	FOR GENERATING AN OUTPUT SELECTED FROM H2 SYNGAS	GEE POWER	2020-03-30	399
306675-PL-13	Poland	Designated EP	10712240.0	2010-03-30	2012-02-08	2414288	2414288	2014-10-08	2030-03-30	Granted	FOR GENERATING AN OUTPUT SELECTED FROM H2 SYNGAS	Patpol Ltd	2020-03-30	323.83
306675-US-2	US	Secondary	12/749221	2010-03-29	2010-11-11	20100284894	8562933	2013-10-22	2032-05-01	Granted	PROCESS SELECTIVELY OPERABLE BASED ON ITS PRIMARY PURPOSE	ALSTOM Power Inc.	2021-04-22	3603
307452-CN-13	China	Divisional	201210050744.5	2004-05-24	2012-07-18	102585910	ZL1210050744.5	2015-04-22	2024-05-23	Granted	GASIFIER WITH CO2 REMOVAL AND HYDROGEN	China Patent Agent H.K. Ltd.	2020-05-24	1159.41
307452-CN-2	China	Designated PCT	200480014652.5	2004-05-24	2006-06-28	1795257	ZL0480014652.5	2012-05-02	2024-05-23	Granted	GASIFIER WITH CO2 REMOVAL AND HYDROGEN	China Patent Agent H.K. Ltd.	2020-05-24	1159.41
307452-IN-5	India	Designated PCT	1904/KOL NP/2005	2004-05-24			228053	2009-01-28	2024-05-24	Granted	GASIFIER WITH CO2 REMOVAL AND HYDROGEN	GEE POWER	2020-05-24	638
307452-US-1	US	Priority	10/449137	2003-05-29	2004-12-02	20040237404	7083658	2006-08-01	2024-09-30	Granted	GASIFIER WITH CO2 REMOVAL AND HYDROGEN	ALSTOM Power Inc.		

PATENT

REEL: 050798 FRAME: 0784

307452-US-11	US	Continuation	13/159002	2011-06-13	20010243803	2011-10-06	8480768	2013-07-09	2024-01-11	Granted	GASIFIER WITH CO2 REMOVAL AND HYDROGEN GASIFIER WITH CO2 REMOVAL AND HYDROGEN GENERATING AN IMPROVED H2:CO RATIO IN SYNGAS AND AN ASSOCIATED METHOD	ALSTOM Power Inc.	2021-01-09	3603
307452-US-8	US	Continuation	12/239232	2008-09-26	20090013602	2009-01-15	7988752	2011-08-02	2023-05-29	Granted	GASIFIER WITH CO2 REMOVAL AND HYDROGEN GENERATING AN IMPROVED H2:CO RATIO IN SYNGAS AND AN ASSOCIATED METHOD	ALSTOM Power Inc.	2023-02-02	7403
315651-US-1	US	Priority	15/400975	2017-01-07	20180195466A1	2018-07-12			2037-01-07	Published	GASIFIER WITH CO2 REMOVAL AND HYDROGEN GENERATING AN IMPROVED H2:CO RATIO IN SYNGAS AND AN ASSOCIATED METHOD	Hoffman Warrick		