

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5644771

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
SILURIA TECHNOLOGIES, INC.	07/15/2019
RECEIVING PARTY DATA	
Name:	LUMMUS TECHNOLOGY LLC
Street Address:	2103 RESEARCH FOREST DRIVE
City:	THE WOODLANDS
State/Country:	TEXAS
Postal Code:	77380
PROPERTY NUMBERS Total: 2	
Property Type	Number
Application Number:	15826997
Application Number:	15690090
CORRESPONDENCE DATA	
Fax Number:	(216)241-0816
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
Email:	ipdocket@calfee.com
Correspondent Name:	J. ANDREW MASON
Address Line 1:	CALFEE, HALTER & GRISWOLD LLP
Address Line 2:	THE CALFEE BUILDING, 1405 EAST SIXTH STREET
Address Line 4:	CLEVELAND, OHIO 44114
ATTORNEY DOCKET NUMBER:	39143/04010; 04117
NAME OF SUBMITTER:	JENNY SHAW
SIGNATURE:	/Jenny Shaw/
DATE SIGNED:	07/31/2019
Total Attachments: 14	
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EXHIBIT 9.1 (c)

INTELLECTUAL PROPERTY ASSIGNMENT AGREEMENT

This Intellectual Property Assignment Agreement (the "Assignment") is hereby entered into on July 15, 2019 (the "Effective Date"), by, between, and among Siluria (assignment for the benefit of creditors), LLC, a California limited liability company, in its sole and limited capacity as assignee for the benefit of creditors of Siluria Technologies, Inc. ("Seller"), with its principal office located at 3945 Freedom Circle, Suite 560, Santa Clara, CA 95054, United States and Lummus Technology LCC (the "Buyer"), a Delaware limited liability company, with its principal office located at 2103 Research Forest Drive, The Woodlands, TX 77380.

1. Seller desires to transfer and assign to Buyer, and Buyer desires to accept the transfer and assignment of all of Seller's right, title and interest in, to and under, all of the following (hereafter collectively referred to as "Intellectual Property"):

(i) the entire worldwide right, title and interest of Seller in and to each and all patents and patent applications in the United States and in all foreign countries and regions including, without limitation corresponding provisional applications, Patent Cooperation Treaty patent applications, European Patent Office applications, and corresponding national patent applications and all inventions, improvements and discoveries disclosed in said patents and applications, including but not limited to those set forth in Schedule A hereto, and in and to all substitutions, divisions, continuations, continuations-in-part, reexaminations, extensions, renewals and reissues (as applicable) thereof, including without limitation of generality, all rights of priority resulting from the filing of patent applications relating to any of the foregoing as well as any and all choses in action and any and all claims and demands, both at law and in equity, that Seller has or may have for damages or profits accrued or to accrue on account of the past, present, and future infringement of any of said patents, patent applications, inventions, improvements and discoveries (or any provisional rights therein), the same to be held and enjoyed by Buyer, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by Seller if the assignment set forth in this Assignment had not been made;

(ii) the full and complete right to file patent applications in the name of the Seller, at the Buyer's, or its designee's election, on the aforesaid inventions, improvements, discoveries and applications in all countries of the world;

(iii) the entire right, title and interest of Seller in and to any patent which may issue thereon in the United States or in any country, and any renewals, revivals, reissues, reexaminations and extensions thereof, and any patents of confirmation, registration and importation of the same;

(iv) any and all rights throughout the world to trademarks, service marks, brands, certification marks, trade dress, trade names, logos, domain names and other indicia or origin, including any and all applications, registrations, and common law marks, whether

registered or not, together with the goodwill of the business associated with and symbolized by same, held by Seller, including but not limited to those set forth on Schedule B hereto, together with all common law rights therein, and the right of Seller to sue for and recover damages or profits arising out of past, present, or future infringement of any and all of said rights as fully and entirely as the same would have been held and enjoyed by Seller had this Assignment not been made;

(v) any and all copyrights and copyrightable works (including writings, databases, computer software programs and documentation) throughout the world, including any and all applications, registrations, renewals and extensions thereof, and like protections, whether registered or not, whether published or unpublished, together with all common law rights therein, and the right of Seller to sue for and recover damages or profits arising out of past, present, or future infringement of any and all of said rights as fully and entirely as the same would have been held and enjoyed by Seller had this Assignment not been made;

(vi) any and all trade secret rights (including rights to all non-public information regarding product specifications, processes, formulae, product or industrial designs, business information, technical and marketing plans and proposals, ideas, concepts, inventions, research and development, information disclosed by business manuals and drawings, customer, distributor and supplier lists and similar data and information and all other confidential or proprietary technical or business information and materials) throughout the world, including rights Seller may have under the laws governing confidential information or rights in law to prevent the unauthorized use or disclosure of such information;

(v) any and all moral rights throughout the world.

2. Seller, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, does hereby sell, convey, transfer and assign to Buyer, and Buyer hereby accepts the sale, conveyance, transfer and assignment of all right, title and interest of Seller in, to and under the Intellectual Property, including all worldwide right, title and interest of Seller in, to and under the Intellectual Property, together with the right of Seller to claim priority in all countries in accordance with international law, any and all rights of Seller corresponding to said Intellectual Property in countries throughout the world, and all of Seller's rights to sue for past, present or future infringement of said Intellectual Property worldwide together with all claims for damages by reason of past, present or future infringement of said Intellectual Property, and the right to sue for and collect the same for Buyer's own use and enjoyment, all to be held and enjoyed by said Buyer, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by Seller had this Assignment not been made. Seller hereby authorizes and requests the United States Patent and Trademarks Office to issue said Patents and Trademarks in accordance with this Assignment.

3. Seller represents and warrants that Seller has made no other agreements establishing any other encumbrances, liens, security interests, or third-party interests on or to the Intellectual Property, and that Seller has full and complete authority to make this Assignment.

4. This Assignment may be executed in multiple counterparts, each of which shall be deemed an original hereof, and all of which shall constitute a single agreement effective as of the date hereof. Any delivery of an executed counterpart of this Assignment by facsimile or electronic mail shall be as effective as delivery of a manually executed counterpart of this Assignment.

5. This Assignment shall be binding upon and shall inure to the benefit of the parties and their respective successors and assigns.

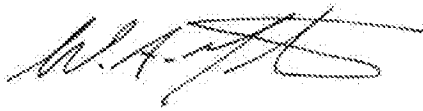
6. This Assignment shall be governed by and construed in accordance with federal law, to the extent applicable, and, where state law is implicated, the internal laws of the State of California, without giving effect to any principles of conflicts of law.

IN WITNESS WHEREOF, Seller and Buyer executed and delivered this Assignment by their duly authorized representatives as of the Effective Date.

By: Siluria (assignment for the benefit of creditors),
LLC, solely as assignee for the benefit of creditors
of Siluria Technologies Inc.

Name: Michael A. Maidy

Title: _____



By: Lummus Technology LLC

Name: W. A. GROTEN

Title: ATTORNEY-IN-FACT

[Signature Page for the Intellectual Property Transfer Agreement]

By:

with
Siluria (assignment for the benefit of creditors),
LLC, solely as assignee for the benefit of creditors
of Siluria Technologies Inc.

Name:

Michael A. Maidy

Title:

Manager

By:

Lummus Technology LLC

Name:

Title:

[Signature Page for the Intellectual Property Transfer Agreement]

SCHEDULE A - Patents

Country	Date	Status	App. No.	Pub Date	Patent No.	Title
US	5/13/05	Issued	11/280,986	11/16/06	7902639	Printable Electric Circuits, Electronic Components and Method of Forming the Same
US	5/13/05	Issued	11/433,824	11/16/06	7695981	SEED LAYERS, CAP LAYERS, AND THIN FILMS AND METHODS OF MAKING THEREOF
US	5/19/06	Issued	11/679,726	9/4/08	8865347	Digital Alloys and Methods for Forming the Same
DE	5/19/06	Validated	7795127.5		602007039888.6	DIGITAL ALLOYS AND METHODS FOR FORMING THE SAME
EP	5/19/06	Issued	7795127.5	3/25/09	2038915	DIGITAL ALLOYS AND METHODS FOR FORMING THE SAME
FR	5/19/06	Validated	7795127.5		2038915	DIGITAL ALLOYS AND METHODS FOR FORMING THE SAME
GB	5/19/06	Validated	7795127.5		2038915	DIGITAL ALLOYS AND METHODS FOR FORMING THE SAME
HK	5/18/07	Issued	9108767.5	1/8/10	1130945	DIGITAL ALLOYS AND METHODS FOR FORMING THE SAME
US	4/27/06	Issued	11/740,213	2/28/08	7976726	PREVENTION OF QUANTUM DOT QUENCHING ON METAL SURFACES
US	5/19/06	Issued	12/030,752	3/4/10	7960721	LIGHT EMITTING DEVICES MADE BY BIO-FABRICATION
AU	5/24/10	Issued	2011258422		2011258422	Nanowire Catalysts
AZ	5/24/10	Validated	201291333		27816	Nanowire Catalysts
BR	5/24/10	Published	BR1120120300164	11/1/16		Nanowire Catalysts
CA	5/24/10	Issued	2800142		2800142	Nanowire Catalysts
CN	5/24/10	Issued	20110035734.8	5/22/13	20110035734.8	Nanowire Catalysts
DE	5/24/10	Validated	11726004.2	4/10/13	60201101530.8	Nanowire Catalysts
EA	5/24/10	Issued	201291333		27816	Nanowire Catalysts
EP	5/24/10	Issued	11726004.2	4/10/13	2576046	Nanowire Catalysts
FR	5/24/10	Validated	11726004.2	4/10/13	2576046	Nanowire Catalysts
GB	5/24/10	Validated	11726004.2	4/10/13	2576046	Nanowire Catalysts
GC	5/24/10	Issued	GC201118615		GC0006855	Nanowire Catalysts
ID	5/24/10	Issued	W-00201204869	7/18/13	IDP000042303	Nanowire Catalysts
IL	5/24/10	Pending	223215			Nanowire Catalysts
IN	5/24/10	Published	10592/DELP/2012	9/26/14		A Method for the Preparation of Ethylene from Methane and a Downstream Product of Ethylene
KZ	5/24/10	Validated	201291333		27816	Nanowire Catalysts
MX	5/24/10	Issued	MX/a/2012/013521		329036	Nanowire Catalysts
MY	5/24/10	Issued	PI2012005065		MY164976A	Nanowire Catalysts
NL	5/24/10	Validated	11726004.2	4/10/13	2576046	Nanowire Catalysts

Country	Priority Date	Status	App. No.	Pub Date	Patent No.	Title
RU	5/24/10	Validated	201291333		27816	Nanowire Catalysts
TI	5/24/10	Pending	TI/A/2012/00184			Nanowire Catalysts
UA	5/24/10	Issued	A201214531		112159	Nanowire Catalysts
US	5/24/10	Issued	13/115,082	2/16/12	9718054	Nanowire Catalysts
AU	5/24/10	Pending	2016269476			Nanowire Catalysts
CN	5/24/10	Published	201610354185.5	10/12/16		Nanowire Catalysts
DE	5/24/10	Validated	4003879.5		2853521	Nanowire Catalysts
EP	5/24/10	Issued	4003879.5	4/1/15	2853521	Nanowire Catalysts
FR	5/24/10	Validated	4003879.5		2853521	Nanowire Catalysts
GB	5/24/10	Validated	4003879.5		2853521	Nanowire Catalysts
MX	5/24/10	Pending	MX/a/2015/003783			Nanowire Catalysts
US	5/24/10	Issued	15/628,023	5/3/18	10195603	Nanowire Catalysts
US	5/24/10	Pending	16/218,154			Nanowire Catalysts
AU	5/24/11	Issued	2012258698		2012258698	Catalyst for Oxidative Coupling of Methane
AZ	5/24/11	Issued	201391757		29867	Catalysts for Petrochemical Catalysis
BR	5/24/11	Pending	BR120130302267			Catalysts for Petrochemical Catalysis
CA	5/24/11	Issued	2837201		2837201	Catalysts for Petrochemical Catalysis
CN	5/24/11	Issued	201280035351.5	4/30/14	201280035351.5	Catalysts for Petrochemical Catalysis
EA	5/24/11	Issued	201391757		29867	Catalysts for Petrochemical Catalysis
EP	5/24/11	Published	12724516.5	4/9/14		Catalysts for Petrochemical Catalysis
GC	5/24/11	Issued	2012/21374		GC0007519	Catalysts for Petrochemical Catalysis
ID	5/24/11	Issued	W-00201306044	3/10/15	48736	Catalysts for Petrochemical Catalysis
KZ	5/24/11	Issued	201391757		29867	Catalysts for Petrochemical Catalysis
MY	5/24/11	Issued	PI 2013004215		MY162772A	Catalysts for Petrochemical Catalysis
RU	5/24/11	Issued	201391757		29867	Catalysts for Petrochemical Catalysis
TH	5/24/11	Published	1301006655	2/5/16		Catalysts for Petrochemical Catalysis
TI	5/24/11	Pending	TI/A/2013/00152			Catalysts for Petrochemical Catalysis
US	5/24/11	Issued	13/479,767	1/24/13	8921256	Catalysts for Petrochemical Catalysis
AU	5/24/11	Issued	2017203318		2017203318	Catalyst for Oxidative Coupling of Methane
EA	5/24/11	Pending	201690873			Catalysts for Petrochemical Catalysis
US	5/24/11	Issued	14/517,524	3/12/15	9040762	Catalysts for Petrochemical Catalysis
US	5/24/11	Issued	14/692,495	8/13/15	9446387	Catalysts for Petrochemical Catalysis
US	5/24/11	Issued	15/228,937	11/24/16	9963402	Catalysts for Petrochemical Catalysis
US	5/24/11	Published	15/944,665	3/14/19		Catalysts for Petrochemical Catalysis
AU	11/29/11	Issued	2012345913		2012345913	Nanowire Catalysts and Methods for Their Use and Preparation
AZ	11/29/11	Validated	201419067		29490	Nanowire Catalysts and Methods for Their Use and Preparation

Country	Priority Date	Status	App. No.	Pub Date	Patent No.	Title
BR	11/29/11	Published	BR1120140127956	6/13/17		Nanowire Catalysts and Methods for Their Use and Preparation
CA	11/29/11	Pending	2856310			Nanowire Catalysts and Methods for Their Use and Preparation
CN	11/29/11	Issued	201280067139.7	9/10/14	CN104039451B	Nanowire Catalysts and Methods for Their Use and Preparation
EA	11/29/11	Issued	201491067		29490	Nanowire Catalysts and Methods for Their Use and Preparation
EP	11/29/11	Published	12806753.5	10/8/14		Nanowire Catalysts and Methods for Their Use and Preparation
GC	5/24/12	Issued	2013/23289		GC0007445	Nanowire Catalysts
HK	11/29/11	Published	15102749.3	9/25/15		Nanowire Catalysts and Methods for Their Use and Preparation
KZ	11/29/11	Validated	201419067		29490	Nanowire Catalysts and Methods for Their Use and Preparation
MY	11/29/11	Pending	PI2014001556			Nanowire Catalysts and Methods for Their Use and Preparation
RU	11/29/11	Validated	201419067		29490	Nanowire Catalysts and Methods for Their Use and Preparation
TH	11/29/11	Published	1401002911	3/4/16		Nanowire Catalysts and Methods for Their Use and Preparation
US	11/29/11	Issued	13/689,611	6/27/13	8962517	NANOWIRE CATALYSTS AND METHODS FOR THEIR USE AND PREPARATION
AU	11/29/11	Pending	2017210566			Nanowire Catalysts and Methods for Their Use and Preparation
US	11/29/11	Issued	14/557,225	3/26/15	9751818	NANOWIRE CATALYSTS AND METHODS FOR THEIR USE AND PREPARATION
US	11/29/11	Published	15/666,976	5/3/18		NANOWIRE CATALYSTS AND METHODS FOR THEIR USE AND PREPARATION
US	11/29/11	Pending	16/256,727			Polymer Templated Nanowire Catalysts
AU	11/13/12	Issued	2013207783		2013207783	Process for providing C2 hydrocarbons via oxidative coupling of methane and for separating hydrocarbon compounds
CA	11/13/12	Pending	2860773			Process for providing C2 hydrocarbons via oxidative coupling of methane and for separating hydrocarbon compounds
US	11/13/12	Issued	13/739,954	8/29/13	9133079	Process for Separating Hydrocarbon Compounds
US	11/13/12	Issued	14/820,460	12/24/15	9527784	Process for Separating Hydrocarbon Compounds

Country	Priority Date	Status	App. No.	Pub Date	Patent No.	Title
US	11/13/12	Pending	16/287,006			Process for Separating Hydrocarbon Compounds
US	2/3/12	Issued	13/757,036	9/26/13	9446397	METHOD FOR ISOLATION OF NANOMATERIALS
AU	5/24/12	Issued	2013266189		2013266189	Catalytic Forms and Formulations
CA	5/24/12	Pending	2874043			Catalytic Forms and Formulations
EP	5/24/12	Published	13727755.4	4/8/15		Catalytic Forms and Formulations
HK	5/24/12	Published	15109425.9	3/24/16		Catalytic Forms and Formulations
JP	5/24/12	Issued	2015-514205	8/6/15	6308998	Catalytic Forms and Formulations
US	5/24/12	Pending	16/366,149			Catalytic Forms and Formulations
AU	5/24/12	Issued	2013266250		2013266250	Oxidative Coupling of Methane Systems and Methods
CA	5/24/12	Pending	2874526			Oxidative Coupling of Methane Systems and Methods
EP	5/24/12	Published	13728871.8	4/8/15		Oxidative Coupling of Methane Systems and Methods
US	5/24/12	Issued	13/900,898	4/17/14	9469577	Oxidative Coupling of Methane Systems and Methods
US	5/24/12	Issued	14/789,901	11/12/15	9556086	Oxidative Coupling of Methane Systems and Methods
US	5/24/12	Pending	16/167,856			Oxidative Coupling of Methane Systems and Methods
US	7/9/12	Issued	13/936,783	1/9/14	9670113	Natural Gas Processing and Systems
AU	7/9/12	Issued	2013288708		2013288708	Natural Gas Processing and Systems
BR	7/9/12	Pending	12015000393			Natural Gas Processing and Systems
CA	7/9/12	Pending	2878665			Natural Gas Processing and Systems
EP	7/9/12	Published	13817389.3	5/13/15		Natural Gas Processing and Systems
GC	7/9/12	Issued	GC-2013-24891		GC0007381	Natural Gas Processing and Systems
MY	7/9/12	Pending	2015000048			Natural Gas Processing and Systems
RU	7/9/12	Issued	2015104028		2664802	Natural Gas Processing and Systems
TH	7/9/12	Published	1501000070	7/6/16		Natural Gas Processing and Systems
US	7/9/12	Issued	13/936,870	1/16/14	9969660	Natural Gas Processing and Systems
VN	7/9/12	Pending	12015-00454			Natural Gas Processing and Systems
GC	7/9/12	Pending	2013/34689			Natural Gas Processing and Systems
US	7/9/12	Pending	16/213,027			Natural Gas Processing and Systems
AU	12/7/12	Issued	2013355038		2013355038	Integrated Processes and Systems for Conversion of Methane to Multiple Higher Hydrocarbon Products

Country	Priority Date	Status	App. No.	Pub Date	Patent No.	Title
U.S.	12/7/12	Issued	14/099,614	6/19/14	9538328	Integrated Processes and Systems for Conversion of Methane to Multiple Higher Hydrocarbon Products
U.S.	12/7/12	Issued	15/418,080	11/30/17	10183900	Integrated Processes and Systems for Conversion of Methane to Multiple Higher Hydrocarbon Products
U.S.	12/7/12	Pending	16/040,976			Integrated Processes and Systems for Conversion of Methane to Multiple Higher Hydrocarbon Products
CA	3/15/13	Pending	2902192			Catalysts for Petrochemical Catalysis
EP	3/15/13	Published	14765794.4	1/20/16		Catalysts for Petrochemical Catalysis
ZA	3/15/13	Pending	201509145			Catalysts for Petrochemical Catalysis
U.S.	3/15/13	Issued	14/995,135	5/5/16	9738571	Catalysts for Petrochemical Catalysis
U.S.	3/15/13	Issued	15/647,806	4/5/18	10368563	Catalysts for Petrochemical Catalysis
U.S.	3/15/13	Published	15/688,966	1/10/19		Catalysts for Petrochemical Catalysis
U.S.	3/15/13	Pending	16/381,300			Catalysts for Petrochemical Catalysis
DE	11/27/13	Validated	14866399		3074119	Reactors and Systems for Oxidative Coupling Methane
EP	11/27/13	Issued	14866399	10/5/16	3074119	Reactors and Systems for Oxidative Coupling Methane
FR	11/27/13	Validated	14866399		3074119	Reactors and Systems for Oxidative Coupling Methane
GB	11/27/13	Validated	14866399		3074119	Reactors and Systems for Oxidative Coupling Methane
U.S.	11/27/13	Issued	14/553,795	6/4/15	10047020	Reactors And Systems For Oxidative Coupling Of Methane
U.S.	11/27/13	Pending	16/290,689			Reactors and Systems for Oxidative Coupling Methane Systems
CA	1/8/14	Pending	2935937			Ethylene-to-Liquids Systems and Methods
CN	1/8/14	Published	2015800127382.0	1/12/16		Ethylene-to-Liquids Systems and Methods
EP	1/8/14	Published	15735177.6	1/16/16		Ethylene-to-Liquids Systems and Methods
U.S.	1/8/14	Allowed	14/591,250	2/20/15		Ethylene-to-Liquids Systems and Methods
U.S.	1/8/14	Issued	14/789,917	1/19/15	9321702	Ethylene-to-Liquids Systems and Methods
U.S.	1/8/14	Issued	14/789,936	1/19/15	9321703	Ethylene-to-Liquids Systems and Methods
U.S.	1/8/14	Issued	15/076,512	3/14/16	952047	Ethylene-to-Liquids Systems and Methods

Country	Priority Date	Status	App. No.	Pub Date	Patent No.	Title
US	1/8/14	Pending	16/197,984			Ethylene-to-Liquids Systems and Methods
AU	1/9/14	Pending	2015204709			Oxidative Coupling of Methane Implementations for Olefin Production
CA	1/9/14	Pending	2935946			Oxidative Coupling of Methane Implementations for Olefin Production
EP	1/9/14	Published	15/7349119	1/130/16		Oxidative Coupling of Methane Implementations for Olefin Production
US	1/9/14	Issued	14/592,668	7/30/15	9701597	Oxidative Coupling of Methane Implementations for Olefin Production
US	1/9/14	Issued	14/789,946	10/29/15	9352295	Oxidative Coupling of Methane Implementations for Olefin Production
US	1/9/14	Published	15/076,402	9/22/16		Oxidative Coupling of Methane Implementations for Olefin Production
US	1/9/14	Allowed	16/021,441	10/25/18		Reactors and Systems for Oxidative Coupling Methane Systems
CA	5/2/14	Pending	2947483			Heterogeneous Catalysts
EP	5/2/14	Published	15/742135.5	3/8/17		Heterogeneous Catalysts
NZ	5/2/14	Pending	726075			Heterogeneous Catalysts
US	5/2/14	Issued	14/701,963	11/5/15	9956544	Heterogeneous Catalysts
US	5/2/14	Published	15/895,852	1/24/19		Heterogeneous Catalysts
CA	5/9/14	Pending	2946599			Fischer Tropsch Based Gas to Liquids Systems and Methods
AE	9/17/14	Pending	P6000299/17			Catalysts for Oxidative Coupling of Methane and Oxidative Dehydrogenation of Ethane
AU	9/17/14	Pending	2015317805			Catalysts for Oxidative Coupling of Methane and Oxidative Dehydrogenation of Ethane
CA	9/17/14	Pending	2960555			Catalysts for Oxidative Coupling of Methane and Oxidative Dehydrogenation of Ethane
EP	9/17/14	Published	15/781781.8	7/26/17		Catalysts for Oxidative Coupling of Methane and Oxidative Dehydrogenation of Ethane
QA	9/17/14	Pending	QA/201703/00107			Catalysts for Oxidative Coupling of Methane and Oxidative Dehydrogenation of Ethane
SA	9/17/14	Pending	517381090			Catalysts for Oxidative Coupling of Methane and Oxidative Dehydrogenation of Ethane
SG	9/17/14	Issued	11201701718X		11201701718X	Catalysts for Oxidative Coupling of Methane and Oxidative Dehydrogenation of Ethane

Country	Priority Date	Status	App. No.	Pub Date	Patent No.	Title
US	9/17/14	Issued	14/856,177	3/17/16	9751079	Catalysts for Natural Gas Processes
ZA	9/17/14	Pending	2017/01607			Catalysts for Oxidative Coupling of Methane and Oxidative Dehydrogenation of Ethane
US	9/17/14	Issued	15/667,089	5/3/18	10300465	Catalysts for Natural Gas Processes
US	9/17/14	Pending	16/359,786			Catalysts for Natural Gas Processes
US	3/17/15	Issued	14/789,953		9334204	Efficient Oxidative Coupling of Methane Processes and Systems
AE	3/17/15	Pending	P6001175/2017			Oxidative Coupling of Methane Methods and Systems
CN	3/17/15	Published	201680025279.6	12/18		Oxidative Coupling of Methane Methods and Systems
EP	3/17/15	Published	16765752.7	12/18		Oxidative Coupling of Methane Methods and Systems
QA	3/17/15	Pending	QA/201709/00391			Oxidative Coupling of Methane Methods and Systems
SA	3/17/15	Pending	517382296			Oxidative Coupling of Methane Methods and Systems
US	3/17/15	Published	15/690,090	6/28/18		Oxidative Coupling of Methane Methods and Systems
US	3/17/15	Issued	15/076,480	9/22/16	9567269	Efficient Oxidative Coupling of Methane Processes and Systems
US	3/17/15	Issued	15/341,551	4/27/17	9790144	Efficient Oxidative Coupling of Methane Processes and Systems
US	3/17/15	Published	15/699,798	8/9/18		Efficient Oxidative Coupling of Methane Processes and Systems
CA	4/1/15	Pending	2975743			Advanced Oxidative Coupling of Methane
US	4/1/15	Published	14/868,911	10/6/16		Advanced Oxidative Coupling of Methane
EP	10/16/15	Published	16855929.2	8/22/18		Advanced Oxidative Coupling of Methane
US	10/16/15	Pending	16/357,012			Separation Methods and Systems for Oxidative Coupling of Methane
CA	4/13/16	Pending	3019396			Reactors and Systems for Oxidative Coupling of Methane
EP	4/13/16	Published	17783162.5	2/20/19		Reactors and Systems for Oxidative Coupling of Methane
US	4/13/16	Issued	15/487,181	10/19/17	9944573	Reactors and Systems for Oxidative Coupling of Methane
US	4/13/16	Allowed	15/912,104	11/15/18		Oxidative Coupling of Methane for Olefin Production

Country	Priority Date	Status	App. No.	Pub Date	Patent No.	Title
US	6/16/15	Issued	14/789,957		9328297	Ethylene-to-Liquids Systems and Methods
AE	6/16/15	Pending	P6001648/2017			Ethylene-to-Liquids Systems and Methods
EP	6/16/15	Published	16812367.7	4/25/18		Ethylene-to-Liquids Systems and Methods
QA	6/16/15	Pending	QA/201712/00559			Ethylene-to-Liquids Systems and Methods
SA	6/16/15	Pending	517390542			Ethylene-to-Liquids Systems and Methods
US	6/16/15	Published	15/809,121	10/25/18		Ethylene-to-Liquids Systems and Methods
US	6/16/15	Pending	16/359,792			Ethylene-to-Liquids Systems and Methods
CA	3/16/16	Pending	3017274			Catalysts and Methods for Natural Gas Processes
EP	3/16/16	Published	17717536.1	1/23/19		Catalysts and Methods for Natural Gas Processes
GC	3/16/16	Pending	33069			Catalysts and Methods for Natural Gas Processes
US	3/16/16	Published	15/461,053	9/21/17		Catalysts and Methods for Natural Gas Processes
US	12/2/16	Published	16/826,997	7/5/18		Method of Generating Oxygenated Compounds
WO	12/2/16	Published	PCT/US2017/064048	6/7/18		Method of Generating Oxygenated Compounds
WO	12/19/16	Published	PCT/US17/25544	6/28/18		METHODS AND SYSTEMS FOR PERFORMING CHEMICAL SEPARATIONS
US	12/19/16	Pending	16/170,429			METHODS AND SYSTEMS FOR PERFORMING CHEMICAL SEPARATIONS
GC	5/23/17	Pending	2018/35369			INTEGRATION OF OXIDATIVE COUPLING OF METHANE PROCESSES
US	5/23/17	Published	16/987,068	4/25/19		INTEGRATION OF OXIDATIVE COUPLING OF METHANE PROCESSES
WO	5/23/17	Published	PCT/US2018/034184	11/29/18		INTEGRATION OF OXIDATIVE COUPLING OF METHANE PROCESSES
US	7/7/17	Pending	16/030,298			SYSTEMS AND METHODS FOR THE OXIDATIVE COUPLING OF METHANE
WO	7/7/17	Published	PCT/US2018/041322	1/10/19		SYSTEMS AND METHODS FOR OLEFIN PRODUCTION
US	1/30/19	Pending	62/798,896			SUPPORTED CATALYSTS FOR THE OXIDATIVE COUPLING OF METHANE
US	11/2/18	Pending	62/755,050			SYSTEMS AND METHODS FOR THE OXIDATIVE COUPLING OF METHANE

SCHEDULE B*Trademarks*

<u>Title</u>	<u>Status</u>	<u>Filing Date</u>	<u>Application Number</u>	<u>Publication Date</u>
MODUS	Allowed	7/20/17	87536219	11/21/17
GEMINI	Allowed	3/12/18	87831085	7/31/18
ORION	Allowed	6/5/18	87949431	7/31/18
ORION	Allowed	6/5/18	87949437	7/31/18
ORION	Allowed	6/5/18	87949446	7/31/18
SILURIA	Allowed	9/13/18	88116245	1/29/19

<u>Country</u>	<u>Trademark</u>	<u>Reg. No.</u>	<u>Reg. Date</u>	<u>Status</u>
European Union (EUTM)	SILURIA	014483441	12/28/2015	Registered
European Union (EUTM)	SILURIA	015446776	6/10/2016	Registered