PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT5518593

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
GE ENERGY OILFIELD TECHNOLOGY, INC.	03/12/2019

RECEIVING PARTY DATA

Name:	PRIME DOWNHOLE MANUFACTURING LLC
Street Address:	800 NORTHPARK CENTRAL DRIVE
Internal Address:	SUITE 100
City:	HOUSTON
State/Country:	TEXAS
Postal Code:	77073

PROPERTY NUMBERS Total: 3

Property Type	Number
Patent Number:	7475741
Patent Number:	8418782
Patent Number:	8668188

CORRESPONDENCE DATA

Fax Number: (713)751-3290

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: 7137513200
Email: Houpatentdocket@kslaw.com
Correspondent Name: KING & SPALDING LLP
Address Line 1: 1100 LOUISIANA STREET
Address Line 2: SUITE 4000
Address Line 4: HOUSTON, TEXAS 77002

ATTORNEY DOCKET NUMBER:	28182
NAME OF SUBMITTER:	RAJESH D. PATEL
SIGNATURE:	/Rajesh D. Patel/
DATE SIGNED:	05/12/2019

Total Attachments: 17
source=Oilfield_to_Prime#page1.tif
source=Oilfield_to_Prime#page2.tif

source=Oilfield_to_Prime#page3.tif
source=Oilfield_to_Prime#page4.tif
source=Oilfield_to_Prime#page5.tif
source=Oilfield_to_Prime#page6.tif
source=Oilfield_to_Prime#page7.tif
source=Oilfield_to_Prime#page8.tif
source=Oilfield_to_Prime#page9.tif
source=Oilfield_to_Prime#page10.tif
source=Oilfield_to_Prime#page11.tif
source=Oilfield_to_Prime#page12.tif
source=Oilfield_to_Prime#page13.tif
source=Oilfield_to_Prime#page14.tif
source=Oilfield_to_Prime#page15.tif
source=Oilfield_to_Prime#page16.tif
source=Oilfield_to_Prime#page17.tif

Patent Assignment

This Patent Assignment is made and entered into this 12th day of March, 2019, by and between GE Energy Oilfield Technology, Inc., with a place of business at 17021 Aldine Westfield Road, Houston, TX 77073 ("Assignor"), and Prime Downhole Manufacturing LLC, with a place of business at 800 Northpark Central Drive, Suite 100, Houston, TX 77073 ("Assignee").

WHEREAS, Assignor and Assignee are parties that certain Asset Purchase Agreement dated the 12th day of March, 2019 ("Effective Date");

WHEREAS, pursuant to the Asset Purchase Agreement, Assignor shall assign to Assignee and Assignee shall acquire from Assignor, all right, title and interest in and to the patents and patent applications identified on Schedule A hereof as part of the Transferred Assets (as that term is defined in the Asset Purchase Agreement), and any continuations, divisionals, continuations-in-part, reissues, reexaminations, extensions or foreign equivalents thereof, and the subject matter of all claims recited therein (collectively, the "Patents"); and

WHEREAS, the assignment of the Patents shall be made of record in the United States Patent and Trademark Office and the corresponding agencies in any other applicable countries as required; and

WHEREAS, Assignor agrees that it will execute or arrange for execution of such further assignment documents or other legal instruments as may be required, if any, from Assignor to permit Assignee to obtain recordation of the assignment of the Patents from Assignor to Assignee.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Assignor does hereby sell, assign and transfer to Assignee, effective as of the Effective Date, all right, title and interest in and to said Patents, for the United States and for all other countries, including, without limitation, all corresponding rights that are or may be secured under the laws of the United States or any other country or under international conventions and treaties, now or hereafter in effect, the same to be held and enjoyed by Assignee for its own use and benefit and for the use and benefit of its successors, assigns, or other legal representatives, to the end of the term or terms for which the Patents are granted, reexamined, or reissued, as fully and entirely as would have been held and enjoyed by Assignor if this assignment had not been made as well as all causes of action (either in law or in equity) related thereto, and the right to sue, counterclaim, and recover damages for past, present or future infringement or other unauthorized use of the Patents.

This Patent Assignment may be executed simultaneously in any number of counterparts (which may be by electronic transmission), each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument.

To the extent that any provision of this Patent Assignment conflicts or is inconsistent with the terms of the Asset Purchase Agreement, the Asset Purchase Agreement will govern.

This Patent Assignment and any dispute arising out of or related to or in connection with this Assignment shall be governed by, and construed in accordance with, the laws of the State of Texas, regardless of the laws that might otherwise govern under applicable principles of conflicts of laws thereof.

[Signature Page Follows]

IN WITNESS WHEREOF, Assignor and Assignee have duly executed this Patent Assignment as of the date first set forth above.

GE Energy Oilfield Technology, Inc.
(Assignor)

By: _____
Name: Spencer DePhillips
Title: Vice President

ACKNOWLEDGMENT

STATE OF Texas)
)
COUNTY OF Harris)

Before the undersigned authority duly empowered to administer oaths personally appeared the individual identified above who, after being duly sworn, attested that he/she is the authorized representative of the party identified above, and that he/she signed the foregoing instrument with full authority to do so on behalf of such party.

This 11th day of March, 2019.

_____
Notary Public

[NOTARY SEAL]

My commission expires:

September 1, 2019

LENORA EVANS
My Commission Expires
September 1, 2019

Prime Downhole Manufacturing LLC
(Assignee)

By: _____
Name: Shawn Housley
Title: Chief Financial Officer

SCHEDULE A

Patents

[see attached]

Docket Number	Docket Number + Filing Suffix	Docket Title	Filing Country Code	Filing Type Description	Filing Status Description	Application Number	Application Date	Patent Number w/ Country	Issue Date	List of All Filing Inventors	Google Patents	Google Patents
124093	124093 -1	FLUID DRIVEN ALTERNATOR HAVING AN INTERNAL IMPELLER	US	ORD-UTILITY PATENT FILING	Issued	09/464310	12/15/1999	US6607030	8/19/2003	WILLIAM BAUER, EDWARD FRASER, HENRY MORE	124093-1	124093-1
124095	124095 -1	METHOD AND APPARATUS FOR DATA COMMUNICATION WITH AN UNDERGROUND INSTRUMENT PACKAGE	US	PRI-PRIORITY APPLICATION	Issued	09/544969	4/7/2000	US6556144	4/29/2003	George Roberts, Edward Fraser	124095-1	124095-1
124095	124095 -11	METHOD AND APPARATUS FOR DATA COMMUNICATION WITH AN UNDERGROUND INSTRUMENT PACKAGE	DE	EPC-EUROPEAN PATENT CONVENTION	Issued	00923243.0	4/7/2000	DE1166476	7/19/2006		124095-11	124095-11
124095	124095 -12	METHOD AND APPARATUS FOR DATA COMMUNICATION WITH AN UNDERGROUND INSTRUMENT PACKAGE	GB	EPC-EUROPEAN PATENT CONVENTION	Issued	00923243.0	4/7/2000	GB1166476	7/19/2006		124095-12	124095-12
124095	124095 -13	METHOD AND APPARATUS FOR DATA COMMUNICATION WITH AN UNDERGROUND INSTRUMENT PACKAGE	SE	EPC-EUROPEAN PATENT CONVENTION	Issued	00923243.0	4/7/2000	SE1166476	7/19/2006		124095-13	124095-13
124095	124095 -14	METHOD AND APPARATUS FOR DATA COMMUNICATION WITH AN UNDERGROUND INSTRUMENT PACKAGE	CN	DIV-DIVISIONAL FILING	Issued	200910262570.7	4/7/2000	CN200910262570.7	8/14/2013		124095-14	124095-14
124095	124095 -4	METHOD AND APPARATUS FOR DATA COMMUNICATION WITH AN UNDERGROUND INSTRUMENT PACKAGE	MX	ORD-UTILITY PATENT FILING	Issued	2001/010121	4/7/2000	MX233591	1/10/2006		124095-4	124095-4
124095	124095 -8	METHOD AND APPARATUS FOR DATA COMMUNICATION WITH AN UNDERGROUND INSTRUMENT PACKAGE	IL	ORD-UTILITY PATENT FILING	Issued	145818	4/7/2000	IL145818	08/01/2006		124095-8	124095-8
124095	124095 -9	METHOD AND APPARATUS FOR DATA COMMUNICATION WITH AN UNDERGROUND INSTRUMENT PACKAGE	JP	ORD-UTILITY PATENT FILING	Issued	2000-610154	4/7/2000	JP4413438	11/27/2009		124095-9	124095-9

155769	155769	-1	Method for Precise Drilling Guidance of Twin Wells	US	ORD-UTILITY PATENT FILING	Issued	10/998781	11/30/2004	US7475741	1/13/2009	ROBERT WATERS	155769-1	155769-1
155769	155769	-2	Method for Precise Drilling Guidance of Twin Wells	CA	ORD-UTILITY PATENT FILING	Issued	2527271	11/17/2005	CA2527271	1/7/2014	ROBERT WATERS	155769-2	155769-2
155769	155769	-3	Method for Precise Drilling Guidance of Twin Wells	CN	ORD-UTILITY PATENT FILING	Issued	200510128513.1	11/30/2005	CN200510128513.1	6/8/2011	ROBERT WATERS	155769-3	155769-3
155769	155769	-4	Method for Precise Drilling Guidance of Twin Wells	RU	ORD-UTILITY PATENT FILING	Issued	2005137146	11/29/2005	RU2386810	4/20/2010	ROBERT WATERS	155769-4	155769-4
155769	155769	-5	Method for Precise Drilling Guidance of Twin Wells	US	CIP-CONTINUATION IN PART	Issued	12/352288	1/12/2009	US8418782	4/16/2013	ROBERT WATERS, Edwin Meador	155769-5	155769-5
155769	155769	-6	Method for Precise Drilling Guidance of Twin Wells	AU	ORD-UTILITY PATENT FILING	Issued	2010200041	1/6/2010	AU2010200041	1/19/2017	ROBERT WATERS, Edwin Meador	155769-6	155769-6
155769	155769	-7	Method for Precise Drilling Guidance of Twin Wells	CA	ORD-UTILITY PATENT FILING	Issued	2689815	1/7/2010	CA2689815	3/28/2017	ROBERT WATERS, Edwin Meador	155769-7	155769-7
155769	155769	-8	Method for Precise Drilling Guidance of Twin Wells	RU	ORD-UTILITY PATENT FILING	Issued	2010100112	1/11/2010	RU2515930	5/20/2014	ROBERT WATERS, Edwin Meador	155769-8	155769-8
230554	230554	-1	APPARATUS AND METHOD FOR RESISTIVITY WELL LOGGING	US	PRI-PRIORITY APPLICATION	Issued	10/291440	11/8/2002	US6777940	8/17/2004	Don Macune	230554-1	230554-1
230555	230555	-1	MULTIPLE TRANSMITTER AND RECEIVER WELL LOGGING SYSTEM AND METHOD TO COMPENSATE FOR RESPONSE SYMMETRY AND BOREHOLE RUGOSITY EFFECTS	US	PRI-PRIORITY APPLICATION	Issued	10/237439	9/9/2002	US6822455	11/23/2004	William Flanagan - Lead	230555-1	230555-1

230555	230555 -10	MULTIPLE TRANSMITTER AND RECEIVER WELL LOGGING SYSTEM AND METHOD TO COMPENSATE FOR RESPONSE SYMMETRY AND BOREHOLE RUGOSITY EFFECTS	HK	RCN-REGISTRATION OF CHINA PATENT	Issued	07113346.7	12/6/2007	HK1108489	12/2/2011	William Flanagan - Lead	230555-10	230555-10
230555	230555 -3	MULTIPLE TRANSMITTER AND RECEIVER WELL LOGGING SYSTEM AND METHOD TO COMPENSATE FOR RESPONSE SYMMETRY AND BOREHOLE RUGOSITY EFFECTS	CA	PCT-PATENT COOPERATION TREATY	Issued	2496403	2/21/2005	CA2496403	12/10/2013	William Flanagan	230555-3	230555-3
230555	230555 -4	MULTIPLE TRANSMITTER AND RECEIVER WELL LOGGING SYSTEM AND METHOD TO COMPENSATE FOR RESPONSE SYMMETRY AND BOREHOLE RUGOSITY EFFECTS	EP	PCT-PATENT COOPERATION TREATY	Filed	03749071.1	2/15/2005	EP		William Flanagan	230555-4	230555-4
230555	230555 -5	MULTIPLE TRANSMITTER AND RECEIVER WELL LOGGING SYSTEM AND METHOD TO COMPENSATE FOR RESPONSE SYMMETRY AND BOREHOLE RUGOSITY EFFECTS	US	CIP-CONTINUATION IN PART	Issued	10/980690	11/3/2004	US7183771	2/27/2007	William Flanagan - Lead	230555-5	230555-5
230555	230555 -7	MULTIPLE TRANSMITTER AND RECEIVER WELL LOGGING SYSTEM AND METHOD TO COMPENSATE FOR RESPONSE SYMMETRY AND BOREHOLE RUGOSITY EFFECTS	CA	PCT-PATENT COOPERATION TREATY	Issued	2584585	4/18/2007	CA2584585	1/6/2015	William Flanagan	230555-7	230555-7

230555	230555	-8	MULTIPLE TRANSMITTER AND RECEIVER WELL LOGGING SYSTEM AND METHOD TO COMPENSATE FOR RESPONSE SYMMETRY AND BOREHOLE RUGOSITY EFFECTS	CN	PCT-PATENT COOPERATION TREATY	Issued	200580037836.8	5/8/2007	CN101069105	4/6/2011	William Flanagan	230555-8	230555-8
230555	230555	-9	MULTIPLE TRANSMITTER AND RECEIVER WELL LOGGING SYSTEM AND METHOD TO COMPENSATE FOR RESPONSE SYMMETRY AND BOREHOLE RUGOSITY EFFECTS	EP	PCT-PATENT COOPERATION TREATY	Filed	05823165.5	4/27/2007	EP		William Flanagan	230555-9	230555-9
230569	230569	-1	APPARATUS AND METHOD FOR PROVIDING COMMUNICATION BETWEEN A PROBE AND A SENSOR	US	ORD-UTILITY PATENT FILING	Issued	11/159793	6/23/2005	US7411517	8/12/2008		230569-1	230569-1
230569	230569	-3	APPARATUS AND METHOD FOR PROVIDING COMMUNICATION BETWEEN A PROBE AND A SENSOR	CA	PCT-PATENT COOPERATION TREATY	Issued	2609483	11/23/2007	CA2609483	4/15/2014	William Flanagan - Lead	230569-3	230569-3
230569	230569	-4	APPARATUS AND METHOD FOR PROVIDING COMMUNICATION BETWEEN A PROBE AND A SENSOR	EP	PCT-PATENT COOPERATION TREATY	Filed	06773485.5	6/20/2006	EP			230569-4	230569-4
230569	230569	-5	APPARATUS AND METHOD FOR PROVIDING COMMUNICATION BETWEEN A PROBE AND A SENSOR	CN	PCT-PATENT COOPERATION TREATY	Issued	200680022844.X	12/24/2007	CN101208618	11/23/2011	William Flanagan - Lead	230569-5	230569-5
230569	230569	-7	APPARATUS AND METHOD FOR PROVIDING COMMUNICATION BETWEEN A PROBE AND A SENSOR	HK	ORD-UTILITY PATENT FILING	Issued	08109151.8	6/20/2006	HKHK1119251	9/21/2012	William Flanagan - Lead	230569-7	230569-7

230573	230573 -1	PRESSURE PULSE GENERATOR FOR MWD	US	PCT-PATENT COOPERATION TREATY	Issued	10/466986	7/23/2003	US7057524	6/6/2006	Frank Innes - Lead	230573-1	230573-1
230573	230573 -3	PRESSURE PULSE GENERATOR FOR MWD	CA	PCT-PATENT COOPERATION TREATY	Issued	2435788	1/22/2002	CA2435788	3/23/2010	Frank Innes - Lead	230573-3	230573-3
230573	230573 -6	PRESSURE PULSE GENERATOR FOR MWD	FR	EPP-EUROPEAN PATENT - PCT ORIGINATED	Issued	02710105.4	1/22/2002	FR1354125	1/11/2016	Frank Innes - Lead	230573-6	230573-6
230573	230573 -7	PRESSURE PULSE GENERATOR FOR MWD	DE	EPC-EUROPEAN PATENT CONVENTION	Issued	60208662.0	1/22/2002	DE1354125	1/11/2016	Frank Innes - Lead	230573-7	230573-7
230573	230573 -8	PRESSURE PULSE GENERATOR FOR MWD	GB	EPP-EUROPEAN PATENT - PCT ORIGINATED	Issued	02710105.4	1/22/2002	GB1354125	1/11/2016	Frank Innes - Lead	230573-8	230573-8
230574	230574 -1	DRILLING SIGNALLING SYSTEM	US	PCT-PATENT COOPERATION TREATY	Issued	10/466984	2/19/2004	US7382686	6/3/2008	Frank Innes - Lead	230574-1	230574-1
230574	230574 -6	DRILLING SIGNALLING SYSTEM	FR	EPC-EUROPEAN PATENT CONVENTION	Issued	02716144.7	1/22/2002	FR1354127	12/14/2005	Frank Innes - Lead	230574-6	230574-6
230574	230574 -7	DRILLING SIGNALLING SYSTEM	DE	EPC-EUROPEAN PATENT CONVENTION	Issued	DE60207982.9	1/22/2002	DE1354127	12/14/2005	Frank Innes - Lead	230574-7	230574-7
230574	230574 -8	DRILLING SIGNALLING SYSTEM	GB	EPC-EUROPEAN PATENT CONVENTION	Issued	02716144.7	1/22/2002	GB1354127	12/14/2005	Frank Innes - Lead	230574-8	230574-8
230574	230574 -9	DRILLING SIGNALLING SYSTEM	CA	PCT-PATENT COOPERATION TREATY	Issued	2435785	1/22/2002	CA2435785	3/9/2010	Frank Innes - Lead	230574-9	230574-9

230576	230576	-1	TELESCOPIC DATA COUPLER	US	PCT-PATENT COOPERATION TREATY	Issued	10/543842	7/29/2005	US7277025	10/2/2007	Victor Allan	230576-1	230576-1
230576	230576	-5	TELESCOPIC DATA COUPLER	CA	ORD-UTILITY PATENT FILING	Issued	2516170	12/14/2004	CA2516170	8/21/2012		230576-5	230576-5
230576	230576	-6	TELESCOPIC DATA COUPLER	NO	ORD-UTILITY PATENT FILING	Issued	20053686	12/14/2004	NO333767	9/16/2013		230576-6	230576-6
230576	230576	-7	TELESCOPIC DATA COUPLER	DE	EPP-EUROPEAN PATENT - PCT ORIGINATED	Issued	04806041.2	12/14/2004	DE1699997	9/25/2013		230576-7	230576-7
230576	230576	-8	TELESCOPIC DATA COUPLER	FR	EPP-EUROPEAN PATENT - PCT ORIGINATED	Issued	04806041.2	12/14/2004	FR1699997	9/25/2013		230576-8	230576-8
230576	230576	-9	TELESCOPIC DATA COUPLER	GB	EPP-EUROPEAN PATENT - PCT ORIGINATED	Issued	04806041.2	12/14/2004	GB1699997	9/25/2013		230576-9	230576-9
243305	243305	-1	Chassis Vibration Isolator - Slotted Spring	US	PRI-PRIORITY APPLICATION	Issued	12/871964	8/31/2010	US8668188	3/11/2014	Viatcheslav Gnateski - Lead	243305-1	243305-1
243305	243305	-2	Chassis Vibration Isolator - Slotted Spring	CA	ORD-UTILITY PATENT FILING	Filed	2749493	8/18/2011	CA		Viatcheslav Gnateski - Lead		
243305	243305	-3	Chassis Vibration Isolator - Slotted Spring	CN	ORD-UTILITY PATENT FILING	Issued	201110268834.7	8/31/2011	CN102384198	7/22/2015	Viatcheslav Gnateski - Lead	243305-3	243305-3
243305	243305	-4	Chassis Vibration Isolator - Slotted Spring	EP	ORD-UTILITY PATENT FILING	Filed	11178712.3	8/24/2011	EP		Viatcheslav Gnateski - Lead	243305-4	243305-4
245287	245287	-1	Telemetry Conveyed by Drill Pipe Utilizing Specks	US	PRI-PRIORITY APPLICATION	Issued	12/914196	10/28/2010	US8639186	1/28/2014	David Ayers - Lead	245287-1	245287-1

250170	250170	-1	Annular Disposed Stirling Heat Exchanger	US	ORD-UTILITY PATENT FILING	Issued	13/301289	11/21/2011	US8950489	2/10/2015	David Ayers - Lead	250170-1	250170-1
250170	250170	-2	Annular Disposed Stirling Heat Exchanger	CA	ORD-UTILITY PATENT FILING	Filed	2795090	11/8/2012	CA		David Ayers - Lead		
250170	250170	-3	Annular Disposed Stirling Heat Exchanger	CN	ORD-UTILITY PATENT FILING	Issued	201210461958.1	11/16/2012	CN103134234	6/27/2017	David Ayers - Lead	250170-3	250170-3
250170	250170	-4	Annular Disposed Stirling Heat Exchanger	EP	ORD-UTILITY PATENT FILING	Filed	12193190.1	11/19/2012	EP		David Ayers - Lead	250170-4	250170-4
251577	251577	-1	Motor Driven Pulser Positional Measurement System	US	PRI-PRIORITY APPLICATION	Issued	13/270426	10/11/2011	US9312798B2	4/12/2016	John Pike - Lead	251577-1	251577-1
251577	251577	-2	Motor Driven Pulser Positional Measurement System	CA	ORD-UTILITY PATENT FILING	Filed	2791507	10/4/2012	CA		John Pike - Lead		
251577	251577	-3	Motor Driven Pulser Positional Measurement System	CN	ORD-UTILITY PATENT FILING	Issued	201210383384.0	10/11/2012	CN103051140	7/11/2017	John Pike - Lead	251577-3	251577-3
251577	251577	-4	Motor Driven Pulser Positional Measurement System	EP	ORD-UTILITY PATENT FILING	Granted/will expire	12187659.3	10/8/2012	EP2595307	5/30/2018	John Pike - Lead	251577-4	251577-4
251577	251577	-5	Motor Driven Pulser Positional Measurement System	GB	EPC-EUROPEAN PATENT CONVENTION	Issued	12187659.3	10/8/2012	GB2595307	5/30/2018	John Pike - Lead	251577-5	251577-5
251577	251577	-6	Motor Driven Pulser Positional Measurement System	NO	EPC-EUROPEAN PATENT CONVENTION	Issued	12187659.3	10/8/2012	NO2595307	5/30/2018	John Pike - Lead	251577-6	251577-6
251852	251852	-1	Method and Apparatus for Improved Down Hole Feed-Thru Seal	US	PRI-PRIORITY APPLICATION	Issued	13/301369	11/21/2011	US8734175	5/27/2014	David Ayers - Lead	251852-1	251852-1
272853	272853	-3	Improve retention of electrical spring contacts for downhole tool wet connect	US	PCT-PATENT COOPERATION TREATY	Filed	15/117316	8/8/2016	US		Khanh Duong - Lead	272853-3	272853-3

272853	272853	-4	Improve retention of electrical spring contacts for downhole tool wet connect	EP	PCT-PATENT COOPERATION TREATY	Filed	15707003.8	8/15/2016	EP		Khanh Duong - Lead	272853-4	272853-4
272853	272853	-5	Improve retention of electrical spring contacts for downhole tool wet connect	CA	PCT-PATENT COOPERATION TREATY	Filed	2938868	8/4/2016	CA		Khanh Duong - Lead		
272853	272853	-6	Improve retention of electrical spring contacts for downhole tool wet connect	CN	PCT-PATENT COOPERATION TREATY	Filed	201580008524.8	8/12/2016	CN		Khanh Duong - Lead	272853-6	272853-6
272853	272853	-7	Improve retention of electrical spring contacts for downhole tool wet connect	RU	PCT-PATENT COOPERATION TREATY	Filed	2016132369	8/5/2016	RU		Khanh Duong - Lead		
276552	276552	-2	DC current imbalance detector	EP	PCT-PATENT COOPERATION TREATY	Filed	15701049.7	7/18/2017	EP		Kenneth Tomkins - Lead	276552-2	276552-2
276552	276552	-3	DC current imbalance detector	US	PCT-PATENT COOPERATION TREATY	Filed	15/541557	7/5/2017	US		Kenneth Tomkins - Lead	276552-3	276552-3
276552	276552	-4	DC current imbalance detector	CA	PCT-PATENT COOPERATION TREATY	Filed	2972702	6/29/2017	CA		Kenneth Tomkins - Lead		
276552	276552	-5	DC current imbalance detector	CN	PCT-PATENT COOPERATION TREATY	Filed	201580072839.9	7/7/2017	CN		Kenneth Tomkins - Lead	276552-5	276552-5
277909	277909	-1	Data-Fusion Receiver	US	PRI-PRIORITY APPLICATION	Issued	10/922630	8/20/2004	US7151466	12/19/2006	Jeffrey Gabelmann, J Stephen Kattner, Robert Houston	277909-1	277909-1
277909	277909	-3	Data-Fusion Receiver	CA	PCT-PATENT COOPERATION TREATY	Issued	2582576	3/29/2007	CA2582576	10/14/2014	Jeffrey Gabelmann, J Stephen Kattner, Robert Houston	277909-3	277909-3

277909	277909 -4	Data-Fusion Receiver	EP	PCT-PATENT COOPERATION TREATY	Filed	05812189.8	3/2/2007	EP		Jeffrey Gabelmann, J Stephen Kattner, Robert Houston	277909-4	277909-4
277909	277909 -5	Data-Fusion Receiver	NO	PCT-PATENT COOPERATION TREATY	Issued	20071445	3/16/2007	NO337871	7/4/2016	Jeffrey Gabelmann, J Stephen Kattner, Robert Houston	277909-5	277909-5
277919	277919 -3	Isolation Ring On Gap Sub	US	ORD-UTILITY PATENT FILING	Issued	13/858690	4/8/2013	US9829133	11/28/2017	Mark Miller, Craig MacDonald, Michael Doan	277919-3	277919-3
277919	277919 -5	Isolation Ring On Gap Sub	BR	PCT-PATENT COOPERATION TREATY	Filed	112015003419-5	2/13/2015	BR		Mark Miller, Craig MacDonald, Michael Doan		
277919	277919 -6	Isolation Ring On Gap Sub	CA	PCT-PATENT COOPERATION TREATY	Filed	2881827	2/12/2015	CA		Mark Miller, Craig MacDonald, Michael Doan		
277919	277919 -7	Isolation Ring On Gap Sub	CN	PCT-PATENT COOPERATION TREATY	Issued	201380043282.7	2/13/2015	CN104956239	11/17/2017	Mark Miller, Craig MacDonald, Michael Doan	277919-7	277919-7
277919	277919 -8	Isolation Ring On Gap Sub	EP	PCT-PATENT COOPERATION TREATY	Filed	13829488.9	2/19/2015	EP		Mark Miller, Craig MacDonald, Michael Doan	277919-8	277919-8
277936	277936 -2	Composite Isolation Joint For Gap Sub Or Internal Gap	US	ORD-UTILITY PATENT FILING	Filed	14/169399	1/31/2014	US		Mark Miller, Craig MacDonald	277936-2	277936-2

277936	277936 -4	Composite Isolation Joint For Gap Sub Or Internal Gap	CA	PCT-PATENT COOPERATION TREATY	Filed	2905556	9/11/2015	CA		Mark Miller, Craig MacDonald		
277936	277936 -5	Composite Isolation Joint For Gap Sub Or Internal Gap	EP	PCT-PATENT COOPERATION TREATY	Filed	14765184.8	9/22/2015	EP		Mark Miller, Craig MacDonald	277936-5	277936-5
277937	277937 -1	Orienting Hanger Assembly for Deploying MWD Tools	US	PRI-PRIORITY APPLICATION	Issued	14/271052	5/6/2014	US9453406B2	9/27/2016	Mark Miller, Craig MacDonald	277937-1	277937-1
277937	277937 -3	Orienting Hanger Assembly for Deploying MWD Tools	EP	PCT-PATENT COOPERATION TREATY	Granted/will expire	14891238.9	10/31/2016	EP		Mark Miller, Craig MacDonald	277937-3	277937-3
277937	277937 -4	Orienting Hanger Assembly for Deploying MWD Tools	CA	PCT-PATENT COOPERATION TREATY	Filed	2947950	11/3/2016	CA		Mark Miller, Craig MacDonald		
277937	277937-NO-5	Orienting Hanger Assembly for Deploying MWD Tools	NO	Norway Patent EPO child law	Granted	14891238.9	5/6/2014	3140496	02//06/2019	Mark Miller, Craig MacDonald	277937-NO-5	
277937	277937-GB-6	Orienting Hanger Assembly for Deploying MWD Tools	GB	United Kingdom Patent EPO child law	Granted	14891238.9	5/6/2014	3140496	02//06/2019	Mark Miller, Craig MacDonald	277937-GB-6	
277939	277939 -1	Method for Aligning MWD Tools Using Orienting Hanger Assembly	US	PRI-PRIORITY APPLICATION	Issued	14/271059	5/6/2014	US9435166B2	9/6/2016	Mark Miller, Craig MacDonald	277939-1	277939-1
277939	277939 -3	Method for Aligning MWD Tools Using Orienting Hanger Assembly	EP	PCT-PATENT COOPERATION TREATY	Granted/will expire	15722850.3	10/31/2016	EP3140508	7/11/2018	Mark Miller, Craig MacDonald	277939-3	277939-3
277939	277939 -4	Method for Aligning MWD Tools Using Orienting Hanger Assembly	CA	PCT-PATENT COOPERATION TREATY	Filed	2947327	10/27/2016	CA		Mark Miller, Craig MacDonald		

277939	277939-DE-5	Method for Aligning MWD Tools Using Orienting Hanger Assembly	DE	Germany (Fed	Granted	15722850.3	5/1/2015	3140508	5/1/2019	Mark Miller, Craig MacDonald	277939-DE-5	
277939	277939-IT-6	Method for Aligning MWD Tools Using Orienting Hanger Assembly	IT	Italy Patent EP	Granted	15722850.3	5/1/2015	3140508	5/1/2019	Mark Miller, Craig MacDonald	277939-IT-6	
278651	278651 -3	High-Signal-Strength Mud Siren for MWD Telemetry	US	ORD-UTILITY PATENT FILING	Filed	14/995199	1/14/2016	US10156127	12/18/2018	Kamil Iftikhar, Wilson Chin - Lead, Cary Reeves	278651-3	278651-3
278651	278651 -4	High-Signal-Strength Mud Siren for MWD Telemetry	DE	PCT-PATENT COOPERATION TREATY	Filed	112016000413.3	9/27/2017	DE		Kamil Iftikhar, Wilson Chin - Lead, Cary Reeves	278651-4	278651-4
278651	278651 -5	High-Signal-Strength Mud Siren for MWD Telemetry	CA	PCT-PATENT COOPERATION TREATY	Filed	2973799	7/13/2017	CA		Kamil Iftikhar, Wilson Chin - Lead, Cary Reeves		
278651	278651 -6	High-Signal-Strength Mud Siren for MWD Telemetry	CN	PCT-PATENT COOPERATION TREATY	Filed	201680005967.6	7/14/2017	CN		Kamil Iftikhar, Wilson Chin - Lead, Cary Reeves	278651-6	278651-6
278651	278651 -7	High-Signal-Strength Mud Siren for MWD Telemetry	RU	PCT-PATENT COOPERATION TREATY	Filed	2017123961	7/6/2017	RU		Kamil Iftikhar, Wilson Chin - Lead, Cary Reeves		
278651	278651-US-8	High-Signal-Strength Mud Siren for MWD Telemetry	US	CIP-CONTINUATION IN PART	Filed	16/221735	12/17/2018	US		Kamil Iftikhar, Wilson Chin -Lead	278651-US-8	

281459	281459 -1	High speed telemetry signal processing	US	PRI-PRIORITY APPLICATION	Issued	15/185221	6/17/2016	US9850754	12/26/2017	Wilson Chin, Yihan Jiang - Lead	281459-1	281459-1
281459	281459 -2	High speed telemetry signal processing	WO	ORD-UTILITY PATENT FILING	Filed/ will expire	PCT/US2017/036465	6/8/2017	WO	*30 month National Phase deadline was 12/17/2018 (currently cannot identify national phase apps)	Wilson Chin, Yihan Jiang - Lead	281459-2	281459-2
281459	281459 - CA-3	High speed telemetry signal processing	CA	PCT-PATENT COOPERATION TREATY	Filed	3,027,707	12/13/2018	CA		Wilson Chin, Yihan Jiang - Lead	281459-2	281459-2
281459	281459 - CN-4	High speed telemetry signal processing	CN	PCT-PATENT COOPERATION TREATY	Filed	201780037609.8	12/17/2018	CN		Wilson Chin, Yihan Jiang - Lead	281459-2	281459-2
281459	281459 -EP-5	High speed telemetry signal processing	EP	PCT-PATENT COOPERATION TREATY	Filed	17731048.9	12/13/2018	EP		Wilson Chin, Yihan Jiang - Lead	281459-2	281459-2
281459	281459-RU-6	High speed telemetry signal processing	RU	PCT-PATENT COOPERATION TREATY	Filed	2018142985	12/5/2018	RU		Wilson Chin, Yihan Jiang - Lead	281459-2	281459-2