PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT5122091

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
VALLOUREC OIL AND GAS FRANCE	04/25/2018
VALLOUREC DEUTSCHLAND GMBH	04/25/2018
VALLOUREC DRILLING PRODUCTS FRANCE	04/25/2018
VALLOUREC DRILLING PRODUCTS USA, INC.	04/25/2018

RECEIVING PARTY DATA

Name:	TUBOSCOPE VETCO (FRANCE) SAS
Street Address:	COMBLE DU PRE PIEMARD - B.P 36
City:	BERLAIMONT
State/Country:	FRANCE
Postal Code:	59145
Name:	GRANT PRIDECO: L.P.
Street Address:	7909 PARKWOOD CIRCLE DRIVE
City:	HOUSTON
State/Country:	TEXAS
Postal Code:	77036

PROPERTY NUMBERS Total: 10

Property Type	Number
Application Number:	14366398
Application Number:	14346220
Application Number:	13689239
Application Number:	15106477
Application Number:	15524655
Application Number:	13121963
Application Number:	14364516
Application Number:	13060965
Application Number:	13384708
Application Number:	13751866

CORRESPONDENCE DATA

Fax Number:	(713)238-8008

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:	7132388000
Email:	pathou@conleyrose.com, lmcbryde@conleyrose.com
Correspondent Name:	CONLEY ROSE PC
Address Line 1:	575 N. DAIRY ASHFORD RD.
Address Line 2:	SUITE 1102
Address Line 4:	HOUSTON, TEXAS 77079

ATTORNEY DOCKET NUMBER:	3314-VALLOUREC
NAME OF SUBMITTER:	GREGORY L. MAAG
SIGNATURE:	/GREOGRY L. MAAG/
DATE SIGNED:	09/02/2018

Total Attachments: 44

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AGREEMENT FOR THE ASSIGNMENT OF TRADE MARKS AND PATENTS TO NOV

This Agreement is made on 25 April, 2018 (hereinafter the "**Effective Date**").

BETWEEN THE UNDERSIGNED:

VALLOUREC OIL AND GAS FRANCE, a *société par actions simplifiée*, duly organized and existing under the laws of France, having its registered office at 54 rue Anatole France, 59620 Aulnoye-Aymeries, France, represented by Frederic Arnou duly empowered (hereinafter "**VOGF**"), formerly known as Vallourec Mannesmann Oil & Gas France;

VALLOUREC DEUTSCHLAND GmbH, duly organized and existing under the laws of Germany, having its registered office at Theodorstraße 109, 40472 Düsseldorf, represented by Frederic Arnou duly empowered (hereinafter "**VAD**"), formerly known as V&M Deutschland GmbH and successor-in-interest to Vallourec Mannesman Oil & Gas Germany GmbH,

VALLOUREC DRILLING PRODUCTS FRANCE, duly organized and existing under the laws of France, having its registered office at 5 rue des Guérins - B.P. 45, 58200 Cosne-Cours-sur-Loire, France, represented by Frederic Arnou duly empowered (hereinafter "**VDPF**"), formerly known as VAM Drilling France and successor-in-interest to Société de Matériel de Forage Industriel (hereinafter "SMFI"),

VALLOUREC DRILLING PRODUCTS USA, INC., duly organized and existing under the laws of Delaware, having its registered office at 6300 Navigation Blvd., Houston, TX 77011, USA, represented by Frederic Arnou duly empowered (hereinafter "**VDP USA**"), formerly known as VAM Drilling USA, Inc. VDP USA is also the assignee of certain intellectual property assets from OMSCO Inc., a Delaware corporation,

Each of VOGF, VAD, VDPF and VDP USA hereinafter referred to as an **"Assignor"** and together the **"Assignors"**

on the one hand

AND:

TUBOSCOPE VETCO (FRANCE) SAS, a French *société par actions simplifiée*, duly organized and existing under the laws of France, having its registered office at comble du Pré Piémard – B.P 36 – 59145 Berlaimont, France, represented by Trevor Brian Martin in his capacity as Managing Director ("**Tubo France**"), and

GRANT PRIDECO, L.P., a Delaware limited partnership having its principal place of business at 7909 Parkwood Circle Drive, Houston, Texas 77036 USA, represented by Trevor Brian Martin in his capacity as Manager of Grant Prideco Holding LLC, the general partner of Grant Prideco, L.P. ("**GP**").

Each of Tubo France and GP hereinafter referred to as an **"Assignee"** and together the **"Assignees"**

on the other hand

hereinafter individually or collectively referred to as "**Party**" or "**Parties**."

WHEREAS:

National Oilwell Varco, L.P. and Vallourec Tubes SAS entered into a master sale agreement for the global sale and purchase of the global business division referred to as Vallourec Drilling Products (VDP) (the "**VDP Business**"), which consists of developing, manufacturing and selling (a) drill pipe, (b) drill collars, (c) heavy weight drill pipe, and drilling accessories and tools such as (d) drilling pup joints, (e) landing strings based on drill pipe designs, (f) risers based on drill pipe designs, and (g) rotary kellies or rotary substitutes worldwide, on 29 March, 2018 (the "**Master Sale Agreement**").

In this context, the Assignors have agreed to assign to the Assignees the full and absolute title in certain trademarks, patents, patent applications and domain names.

The Parties have come together and have agreed to the following.

IT IS AGREED AS FOLLOWS:

ARTICLE 1 - DEFINITIONS

For the purposes of this Agreement, each of the expressions referred to below shall have the meaning ascribed to it in its definition, namely:

Affiliate means any business entity more than 50% owned by a Party, any business entity which owns more than 50% of a Party, or any business entity that is more than 50% owned by a business entity that owns more than 50% of a Party. An entity remains an Affiliate only so long as such ownership interests remains greater than 50%.

Agreement means this agreement for the assignment of the Domain Names, Trade Marks and Patents and, as the case may be, its amendments.

Appendices mean the appendices attached to this Agreement.

Assigned Patents means the patents listed in Appendix B1 to this Agreement.

Assignee and **Assignees** have the meanings set forth in the preamble to this Agreement.

Assignor and **Assignors** have the meanings set forth in the preamble to this Agreement.

Baker Hughes means Baker Hughes, a GE company or an Affiliate thereof.

Competing Business means the business of manufacturing and selling (a) drill pipe, except for forged non-welded drill pipe for non-oil and gas markets, (b) drill collars, (c) heavy weight drill pipe, except for forged non-welded heavy weight drill pipe, (d) drilling pup joints, (e) landing strings based on drill pipe designs, (f) risers based on drill pipe designs, and (g) rotary kellies or rotary substitutes;

Documentation has the meaning set forth in the Article 2.6 of this Agreement.

Domain Names means the domain names that are described in Appendix C to this Agreement.

Effective Date means the date upon which this Agreement takes effect, i.e. the date set out on the first page of this Agreement provided all Parties have executed the Agreement.

GP has the meaning set forth in the preamble to this Agreement.

Licensed-back Items means the Patents that are licensed-back by the Assignee to the Assignor listed in Appendix D to this Agreement.

Lump Sum shall have the meaning ascribed to it under Article 5 of this Agreement.

Master Sale Agreement has the meaning set forth in the recitals to this Agreement.

OCTG means Oil Country Tubular Goods.

Party and **Parties** have the meanings set forth in the preamble to this Agreement.

Patents means the patent applications and the registered patents, including all reissues or extensions as well as any patents, reissues or extensions that may issue from foreign applications, divisions, continuations in whole or in part or substitute applications claiming the benefit thereof, as described in Appendix B1 to this Agreement. This term includes the Assigned Patents and the Potentially Assigned Patents.

Perpetual means for the whole remaining duration of protection of the Patents and Trade Marks.

Potentially Assigned Patents means the patent applications and the registered patents as described in Appendix B2 to this Agreement. The assignment of these Patents is subject to the condition precedent set out under Article 2.2 of this Agreement.

Practice(ing) means:

- manufacture the Products, cause the Products to be manufactured, have the Products manufactured;

- offer the Products for sale, cause the Products to be offered for sale, have the Products offered for sale;

- sell the Products, cause the Products to be sold, have the Products sold;

- lease the Products, cause the Products to be leased, have the Products leased;
- loan the Products, cause the Products to be loaned, have the Products loaned;
- distribute the Products, cause the Products to be distributed, have the Products distributed;
- use the Products, cause the Products to be used, have the Products used;
- import/export the Products, cause the Products to be imported/exported, have the Products be imported/exported; and
- dispose of the Products, cause the Products to be disposed, have the Products disposed.

Products mean any and all apparatuses, machines, and systems, in particular forging machines, implementing, supplied or used under the Licensed-back Items.

SMFI has the meaning set forth in the preamble to this Agreement.

Territory means all the territories in which the Trade Marks, the Patents, the Licensed-back Items are in force as they are identified respectively in the tables provided under Appendix A, Appendix B1, Appendix B2, and Appendix D to this Agreement.

Trade Marks means the registered Trade Marks (or applications thereof) listed in Appendix A to this Agreement.

Tubo France has the meaning set forth in the preamble to this Agreement.

VAD has the meaning set forth in the preamble to this Agreement.

VDP Business has the meaning set forth in the recitals to this Agreement.

VDPF has the meaning set forth in the preamble to this Agreement.

VDP USA has the meaning set forth in the preamble to this Agreement.

VMD has the meaning set forth in the preamble to this Agreement.

VOGF has the meaning set forth in the preamble to this Agreement.

ARTICLE 2 – SUBJECT MATTER OF THE ASSIGNMENT

2.1 In consideration of the Assignees' undertaking to pay the Lump Sum:

(i) Each of VAD, VDPF, and VOGF hereby assigns, transfers, and sets over to Tubo France, which accepts, (A) full and absolute title and interest to the Trade Marks, Domain Names and the Patents owned by such Assignor; (B) the unionist priority right attached to such Patents and Trade Marks; and (C) the right to file any proceedings for any act of infringement, unfair

competition, passing off or parasitism of goodwill occurring prior to or following the Effective Date in relation to such Trade Marks, Domain Names and/or Patents;

(ii) VDP USA hereby assigns, transfers, and sets over to GP, which accepts, (i) full and absolute title and interest to the Trade Marks and the Patents owned by such Assignor; (ii) the unionist priority right attached to such Patents and Trade Marks; and (iii) the right to file any proceedings for any act of infringement, unfair competition, passing off or parasitism of goodwill occurring prior to or following the Effective Date in relation to such Trade Marks and/or Patents;

(iii) If it is discovered after the Effective Date that an Affiliate of the Assignors that is not party to this Agreement owns any of the Patents or Trade Marks or Domain Names, the Assignors agree to promptly procure the assignment by such Affiliate to the relevant Assignee at the Assignors' cost and expense; and

(iv) The relevant Assignee shall, as of the Effective Date, be solely subrogated in all and any rights, claims and privileges to which relevant Assignor is entitled over such Trade Marks and the Patents and shall acquire absolute title to, and be entitled to undisturbed enjoyment of, such Trade Marks and the Patents which it may use unconditionally in the future.

2.2 Subject to the condition precedent of clearing the right of first refusal of Baker Hughes, the provisions of Article 2.1 above will apply *mutatis mutandis* to the Potentially Assigned Patents upon the earlier to occur of (i) forty-five (45) days after receipt of notice by Baker Hughes of the relevant Assignor's intent to transfer the Potentially Assigned Patents to the relevant Assignee, if Baker Hughes has not responded within such timeframe that it wishes to exercise its right of first refusal with respect to the Potentially Assigned Patents and (ii) receipt by the Assignors of confirmation from Baker Hughes that it does not intend to exercise any right of first refusal with respect to the Potentially Assigned Patents. The Assignors shall promptly notify Assignees of any confirmation received from Baker Hughes in relation to the foregoing clause (ii).

2.3 The Assignors authorize the United States Patent and Trademark Office and any other applicable jurisdiction outside the United States to record the transfer of the Patents to the relevant Assignee as recipient of the relevant Assignor's right, title and interest therein.

2.4 The Assignors further agree to: (a) for a period of six (6) months after the Effective Date, cooperate with the Assignees in the prosecution and maintenance of the rights associated with the Patents including foreign counterparts; (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer; and (c) perform such other acts as Assignees lawfully may request to obtain or maintain the Patents in any and all countries.

If certain Trade Marks or Patents are still registered under a former company's name of the Assignors or of the Vallourec Group, the Assignors shall promptly carry out, at the Assignors' reasonable cost, the necessary steps and formalities to regularize the situation. As soon as the change in name has been officially registered, the Assignors shall inform the Assignees thereof.

2.6 The Assignors undertake to hand over to the Assignees, promptly after the Effective Date (and in no event later than sixty (60) days after the Effective Date), all documents, technical studies, plans, diagrams, gauges, know-how as well as all prototypes, relating to the Patents, the products and/or processes protected by the Patents allowing the Assignees full use of the Patents (the "**Documentation**"). The Assignors hereby grant to the Assignees any and all rights of reproduction, representation and adaptation that they hold with respect to the Documentation, on any medium of expression, whether existing or to be discovered. Such rights comprise, in particular:

- the right to reproduce, without limitation in number, all or part of the Documentation, by all currently known or unknown processes in all media whatsoever currently known or unknown;

- the right to transmit the originals, duplicates or copies of the Documentation;

- the right to digitalise the Documentation, to store in all media, compress, decompress or use all other similar technical processes with respect to any of the Documentation for its storage, transfer and/or exploitation;

- the right to communicate, publish and to make the Documentation available to the public in any form whatsoever, by all means, modes and processes currently known or unknown;

- the right at its own risk and peril to modify, adapt, translate, integrate, improve and rectify the Documentation.

ARTICLE 3 – LICENSE BACK TO ASSIGNOR

The relevant Assignees hereby grant the relevant Assignors in return a non-exclusive, royalty-free, irrevocable, Perpetual license to use and Practice in the Territory the Licensed-back Items with the right to grant sub-licenses for any purposes outside the VDP Business, including in the field of use of the OCTG business of the Assignors or their Affiliates, so long as such use is outside of the Competing Business.

ARTICLE 4 – UNREGISTERED TRADE NAMES

4.1 The Assignors will not file any claims in particular claims for infringement, unfair competition, passing off, and parasitism on goodwill against the Assignees if the latter use the following words in connection with the VDP Business:

- Express;

- EIS;
- CDS
- Express-M2M;
- DPR SR;
- DPR HP;
- EasyLanding

The Assignors further accept that the Assignees may take steps to secure the registration of trademarks with respect to these words (either alone or in combination with other marks) for products and services related to the VDP Business, as long as it is not in association with a mark likely to cause confusion with the trademark VAM®.

Furthermore, the Assignors undertake not to use in the course of trade the registered trademark VAM® with the above-mentioned words in connection with products and services similar or identical to those sold by the Assignee as for example:

- VAM® Express

- VAM EIS®

- VAM® CDS

4.2 The corresponding logos, designed after the VAM® graphic charter, are the work product of VOGF. VOGF remains the owner of the copyright in these logos. No rights of use are provided to the Assignees with respect to the following logos:

-
-
-
-

4.3 Trade names of the Assignors or any of their Affiliates in their proprietary steel grades shall remain proprietary to the Assignors and their Affiliates, including but not limited to the following trade names: VM-95 DP; VM-105 DP.

ARTICLE 5 – PRICE

The price of the Master Sale Agreement includes the lump sum remuneration to be paid by the Assignees or their Affiliates in consideration of the assignment of the Trade Marks and the Patents contemplated under this Agreement (hereinafter the "**Lump Sum**").

ARTICLE 6 – WARRANTIES AND INDEMNITIES

6.1 The Assignors warrant the following:

6.1.1 one of the relevant Assignors is the owner of the entire right, title, and interest, as of the Effective Date, the Trade Marks and the Patents, other than patents co-owned with the Association pour la Recherche et le Dévelopement de Méthodes et Processus Industriels;

6.1.2 no Assignor has granted over the Trade Marks and the Patents any pledge, mortgage or security in favour of a third party;

6.1.3 the Trade Marks and the Patents are currently valid and all appropriate duties and fees due until the Effective Date, including, in particular, those relating to filing and/or renewal, have been paid, it being understood that the Assignees shall be responsible for paying all future fees as from the Effective Date;

6.1.4 one of the relevant Assignors has the sole right and authority to enter into this Agreement and grant the rights hereunder,

6.1.5 there is no action or proceeding pending or threatened, or any basis for any of the foregoing Articles 6.1.1 through 6.1.4 known to the Assignors;

6.1.6 the performance of the Assignors' duties under this Agreement and the Assignors' duties with the Assignees will not breach, or constitute default under, any agreement to which an Assignor is bound, including any agreement limiting the use or disclosure of proprietary or confidential information of another company, except for the right of the Association pour la Recherche et le Dévelopement de Méthodes et Processus Industriels under that certain patent co-ownership agreement, pursuant to which such party has a right to purchase VDPF's ownership interest in Patents BR9326-AE-PCT, BR9326-BR-PCT, BR9326-CN-PCT, BR9326-FR-BN, BR9326-NO-PCT and BR9326-US-PCT, until the expiration date of these Patents.

6.2 All the above-mentioned warranties are accurate and genuine, and that the Assignors have not voluntary omitted to inform the Assignees of relevant information which might affect the Trade Marks or the Patents.

6.3 Other than as set forth in the Master Sale Agreement, no warranties other than those mentioned under the Article 6 above are given by the Assignors to the Assignee.

In particular, the Assignees hereby expressly acknowledge and agree that the Assignors make no representation or warranty, whether expressed or implied, regarding:

- total or partial refund of the Lump Sum and any of other complementary costs or fees paid by the Assignees under this Agreement or in connection with the Trade Marks, the Patents or the Domain names,

in the event any Trade Marks or Patents or Domain Names are annulled or expire after the Effective Date; or

- the fitness of Trade Marks, the Patents, the Domain Names or the Documentation for a particular purpose.

ARTICLE 7 – INFRINGEMENT

7.1 The Assignees shall defend themselves, at their own costs and expense, against all claims and proceedings initiated by any third parties in connection with the use of the Trade Marks, the Domain Names and the Patents occurring on or after the Effective Date, including claims and proceedings for infringement, unfair competition, passing off or parasitism on goodwill. The foregoing shall not limit the Parties rights or obligations under the terms of the Master Sale Agreement.

7.2 The Assignees may bring as they deem fit, at their own cost and expense, any claims and proceeding against any third parties for any act of infringement, unfair competition, passing off or parasitism on goodwill in connection with the use of the Trade Marks and the Patent prior or after the Effective Date.

7.3 The Assignors will provide the Assignees with all reasonable assistance required for the purpose of defending the Assignees' rights. The Assignees shall bear all the costs and expenses in connection with such assistance.

ARTICLE 8 – MISCELLANEOUS OBLIGATIONS AND FORMALITIES

The Assignees shall carry out all formalities required for the purpose of making this Agreement enforceable against third parties in all countries within the Territory and shall alone bear the cost thereof.

ARTICLE 9 – REGISTRATION TAX

The Assignees are responsible for and must pay all tax registration duties and any other taxes, as the case may be, arising as a result of this Agreement.

ARTICLE 10 - CONTRACTUAL DOCUMENTS

10.1 The Agreement shall comprise the following contractual documents, set out in their order of priority:

10.1.1 the Master Sale Agreement;

10.1.2 this Agreement; and

10.1.3 the Appendices.

10.2 In the event of any discrepancy, the document highest in order of priority shall prevail.

ARTICLE 11 - SEVERABILITY

11.1 In the event that any provision whatsoever of this Agreement is annulled, such nullity shall not render invalid any other provisions of the Agreement which shall continue to apply among the Parties.

11.2 If, for any reason whatsoever, the assignment of one of the Trade Marks or Patents under the terms of this Agreement is annulled, the assignments relating to the other Trade Marks and the Patents shall remain in force.

ARTICLE 12 - AMENDMENT OF THE AGREEMENT

Any amendment under this Agreement shall only be valid after the Parties have given their written and signed consent thereto.

ARTICLE 13 - ASSIGNMENT

No Assignor may assign this Agreement without the prior written consent of the Assignees, and no Assignee may assign this Agreement without the prior written consent of the Assignors, in each case, not to be unreasonably withheld or delayed. A corporate reorganization or merger among Affiliates of such Parties shall not constitute an assignment of this Agreement.

ARTICLE 14 - PREVIOUS AGREEMENTS

This Agreement cancels and replaces all the previous agreements signed among the Parties in relation to the Trade Marks or the Patents.

ARTICLE 15 - NOTICES

All notices to be given in connection with this Agreement shall be deemed to have been given if they have been sent by registered post with acknowledgement of receipt, DHL, or email to the following addresses:

To the Assignors

Attn: Directeur Juridique Groupe et Secrétaire Général
Vallourec Tubes SAS
27 avenue du Général Leclerc
92660 Boulogne-Billancourt-Cedex (France)
Email: Stephanie.fougou@vallourec.com

Copy:
Attn: Group Senior Legal Manager
Legal Department
And
General Manager IP
Departement of Industrial
27, avenue du Général Leclerc
92660 Boulogne-Billancourt-Cedex (France)

Email: anais.eiden@vallourec.com;
richard.marsolais@vallourec.com

To the Assignee

National Oilwell Varco, L.P.
Attn: General Counsel
7909 Parkwood Circle Drive
Houston, Texas 77036 USA
Email: craig.weinstock@nov.com; pete.vranderic@nov.com;
jeremy.tillman@nov.com

Or to any other person or address that may be specified from time to time by the Parties.

ARTICLE 16 – GOVERNING LAW

This Agreement shall be governed by the laws of France.

ARTICLE 17 – JURISDICTION

The courts of Paris shall have exclusive jurisdiction to settle any dispute arising in connection with the creation, interpretation or performance of this Agreement, notwithstanding cases of multiple defendants or third-party proceedings.

ARTICLE 17 - APPENDICES

This Agreement includes following appendices:

- Appendix A: List of Trade Marks
- Appendix B1: List of Patents
- Appendix B2: List of Potentially Assigned Patents
- Appendix C: Domain Names
- Appendix D: Licensed-back Items

[*Signature Pages Follow.*]

IN WITNESS WHEREOF, duly authorized representatives of the Parties have executed this Agreement as of the Effective Date in eight (8) originals.

ASSIGNORS

VALLOUREC OIL AND GAS FRANCE

By: _____

Name: Frédéric Arnou

Title: M&A and Strategic Projects director

VALLOUREC DEUTSCHLAND GMBH

By: _____

Name: Frédéric Arnou

Title: M&A and Strategic Projects director

VALLOUREC DRILLING PRODUCTS FRANCE

By: _____

Name: Frédéric Arnou

Title: M&A and Strategic Projects director

VALLOUREC DRILLING PRODUCTS USA, INC.

By: _____

Name: Frédéric Arnou

Title: M&A and Strategic Projects director

IN WITNESS WHEREOF, duly authorized representatives of the Parties have executed this Agreement as of the Effective Date in eight (8) originals.

ASSIGNEES

TUBOSCOPE VETCO (FRANCE) SAS

By: _____

Name: Trevor Brian Martin

Title: Managing Director

GRANT PRIDECO, L.P.

By: Grant Prideco Holding, LLC, its general partner

By: _____

Name: Trevor Brian Martin

Title: Manager

APPENDIX A - TRADE MARKS

[See attached.]

Appendix A - Trademarks

Mark Name	Status	Country	International Classes	Filed Date	Application Number	Registration Date	Registration Number	Owner	Owner registered name*
CRUSHFREE	Allowed	Angola	6	2014-05-19	40166			VDPUS	VDPUS
CRUSHFREE	Allowed	Angola	7	2014-05-19	40167			VDPUS	VDPUS
CRUSHFREE	Registered	Brazil	6	2014-05-23	907733670	2017-01-10	907733670	VDPUS	VDPUS
CRUSHFREE	Registered	Brazil	7	2014-05-23	907733697	2016-12-13	907733697	VDPUS	VDPUS
CRUSHFREE	Application	Ghana	6	2014-05-20	001220/2014			VDPUS	VDPUS
CRUSHFREE	Application	Ghana	7	2014-05-20	001221/2014			VDPUS	VDPUS
CRUSHFREE	Application	Nigeria	6	2014-05-21	2014/17917			VDPUS	VDPUS
CRUSHFREE	Application	Nigeria	7	2014-05-21	2014/17918			VDPUS	VDPUS
CRUSHFREE	Registered	O.A.P.I.	6,7	2014-05-16	32014001814	2014-10-31	79637	VDPUS	VDPUS
CRUSHFREE	Registered	United States of America	6,7	2013-11-26	86/129188	2015-08-25	4800389	VDPUS	VDPUS
ERS 425	Registered	Brazil	6	1999-06-15	821724886	2003-09-09	820013018096	VDPFR	VDF
ERS 425	Registered	European Union IPO	6	1999-06-09	001200641	2000-07-18	001200641	VDPFR	VDF
ERS 425	Registered	France	6	1999-02-25	99/777693	1999-08-06	99/777693	VDPFR	VDF
ERS 425	Registered	Mexico	6	1999-05-14	375322	1999-06-17	613970	VDPFR	VDF
HYDROCLEAN	Registered	Brazil	7	2001-05-29	823944417	2007-04-17	823944417	VDPFR	VDPFR
HYDROCLEAN	Registered	Canada	7	2001-03-16	1096443	2004-03-31	TMA606786	VDPFR	VDPFR
HYDROCLEAN	Registered	European Union IPO	7	1999-03-23	001114313	2000-10-03	001114313	VDPFR	VDF
HYDROCLEAN	Registered	France	7	1999-02-12	99/774949	1999-07-23	99/774949	VDPFR	VDF
HYDROCLEAN	Registered	United States of America	7	1999-06-03	75/768371	2001-02-20	2429421	VDPFR	VDF
X-FORCE	Acknowledged	Algeria	6,7,9,42					VOGF	VOGF
X-FORCE	Acknowledged	Azerbaijan	6,7,9,42					VOGF	VOGF
X-FORCE	Acknowledged	China	6,7,9,42					VOGF	VOGF
X-FORCE	Registered	European Union IPO	6,7,9,42	2017-05-26	016768236	2017-10-25	016768236	VOGF	VOGF
X-FORCE	Registered	France	6,7,9,42	2017-05-24	4363990	2017-09-15	4363990	VOGF	VOGF
X-FORCE	Acknowledged	International	6,7,9,42					VOGF	VOGF
X-FORCE	Acknowledged	Japan	6,7,9,42					VOGF	VOGF
X-FORCE	Acknowledged	Kazakhstan	6,7,9,42					VOGF	VOGF
X-FORCE	Acknowledged	Mexico	6,7,9,42					VOGF	VOGF
X-FORCE	Acknowledged	Norway	6,7,9,42					VOGF	VOGF
X-FORCE	Acknowledged	Russian Federation	6,7,9,42					VOGF	VOGF

Appendix A - Trademarks

X-FORCE	Application	United Arab Emirates	42	2017-11-15	282958			VOGF	VOGF
X-FORCE	Application	United Arab Emirates	6	2017-11-15	282955			VOGF	VOGF
X-FORCE	Application	United Arab Emirates	7	2017-11-15	282956			VOGF	VOGF
X-FORCE	Application	United Arab Emirates	9	2017-11-15	282957			VOGF	VOGF
X-FORCE	Acknowledged	United States of America	6,7,9,42					VOGF	VOGF

**to the best of our knowledge*

APPENDIX B1 - PATENTS

[See attached.]

Appendix B1 – Patents

Patent Ref	Invention Short Title	Country	Status	Application Number	Filed Date	Publication Number	Publication Date	Patent No.	Grant Date	Owner	Registered name of owner
BR7433-AE-PCT	Composant raideur radiale/raideur axiale	United Arab Emirates	Allowed	356/2011	2009-10-05					VOGF	VMOGF
BR7433-AR-BN	Composant raideur radiale/raideur axiale	Argentina	Granted	P090103843	2009-10-06	073776	2010-12-01	73776	2015-05-21	VOGF	VOGF
BR7433-AT-ECT	Composant raideur radiale/raideur axiale	Austria	Granted	09783719.9	2009-10-05	2344802	2011-07-20	2344802	2013-07-31	VOGF	VOGF
BR7433-BR-PCT	Composant raideur radiale/raideur axiale	Brazil	Published	PI0920245-5	2009-10-05	PI0920245	2015-12-29			VOGF	VOGF
BR7433-CA-PCT	Composant raideur radiale/raideur axiale	Canada	Granted	2738094	2009-10-05	2738094	2010-04-22	2738094	2016-10-04	VOGF	VOGF
BR7433-CN-PCT	Composant raideur radiale/raideur axiale	China	Granted	2009801390654.7	2009-10-05	102171502	2011-08-31	102171502	2013-08-07	VOGF	VOGF
BR7433-CZ-ECT	Composant raideur radiale/raideur axiale	Czech Republic	Granted	09783719.9	2009-10-05	2344802	2011-07-20	2344802	2013-07-31	VOGF	VOGF
BR7433-DE-ECT	Composant raideur radiale/raideur axiale	Germany (Federal Republic of)	Granted	09783719.9	2009-10-05	2344802	2011-07-20	2344802	2013-07-31	VOGF	VOGF
BR7433-EP-ECT	Composant raideur radiale/raideur axiale	European Patent	Granted	09783719.9	2009-10-05	2344802	2011-07-20	2344802	2013-07-31	VOGF	VOGF
BR7433-FR-BN	Composant raideur radiale/raideur axiale	France	Granted	08/05683	2008-10-15	2937077	2010-04-16	2937077	2010-10-22	VOGF	VOGF
BR7433-FR-ECT	Composant raideur radiale/raideur axiale	France	Granted	09783719.9	2009-10-05	2344802	2011-07-20	2344802	2013-07-31	VOGF	VOGF
BR7433-GB-ECT	Composant raideur radiale/raideur axiale	United Kingdom	Granted	09783719.9	2009-10-05	2344802	2011-07-20	2344802	2013-07-31	VOGF	VMOGF
BR7433-ID-PCT	Composant raideur radiale/raideur axiale	Indonesia	Granted	W00-2011-01331	2009-10-05	W00-2011-01331	2011-07-21	P00004573 2	2017-05-09	VOGF	VMOGF
BR7433-IN-PCT	Composant raideur radiale/raideur axiale	India	Published	2517/CHENP/2011	2009-10-05	2517/CHENP/2011	2012-08-17			VOGF	VMOGF

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Patent Ref	Invention Short Title	Country	Status	Application Number	Filed Date	Publication Number	Publication Date	Patent No.	Grant Date	Owner	Registered name of owner
BR7433-IT-ECT	Composant raideur radiale/raideur axiale	Italy	Granted	09783719.9	2009-10-05	2344802	2011-07-20	502013902195074	2013-07-31	VOGF	VOGF
BR7433-JP-PCT	Composant raideur radiale/raideur axiale	Japan	Granted	2011-531438	2009-10-05	2012-505981	2012-03-08	5613675	2014-09-12	VOGF	VOGF
BR7433-MX-PCT	Composant raideur radiale/raideur axiale	Mexico	Granted	2011/003431	2009-10-05	2011/003431	2011-04-21	315775	2013-11-27	VOGF	VOGF
BR7433-PL-ECT	Composant raideur radiale/raideur axiale	Poland	Granted	09783719.9	2009-10-05	2344802	2011-07-20	2344802	2013-07-31	VOGF	VOGF
BR7433-RO-ECT	Composant raideur radiale/raideur axiale	Romania	Granted	09783719.9	2009-10-05	2344802	2011-07-20	2344802	2013-07-31	VOGF	VOGF
BR7433-RU-PCT	Composant raideur radiale/raideur axiale	Russian Federation	Granted	2011/119460	2009-10-05			2473001	2013-01-20	VOGF	VMOGF
BR7433-US-PCT	Composant raideur radiale/raideur axiale	United States of America	Granted	13/121963	2009-10-05	2011/0174462	2011-07-21	9,470,344	2016-10-18	VOGF	VOGF
BR7441-CN-MU	Protective over-coating in slip area	China	Granted	201220757319.5	2012-11-16			203452661	2014-02-26	VDPFR	VDF
BR7441-FR-BN	Protective over-coating in slip area	France	Granted	11/03484	2011-11-16	2982633	2013-05-17	2982633	2013-11-15	VDPFR	VDF
BR7442-AE-PCT	Internal shoulder shape	United Arab Emirates	Application	643/2014	2012-12-14					VOGF	VOGF
BR7442-AR-BN	Internal shoulder shape	Argentina	Published	P120104796	2012-12-18	089303	2014-08-13			VOGF	VMOGF
BR7442-BR-PCT	Internal shoulder shape	Brazil	Published	112014014014-6	2012-12-14	112014014014	2014-08-19			VOGF	VOGF
BR7442-CA-PCT	Internal shoulder shape	Canada	Published	2855931	2012-12-14	2855931	2013-06-27			VOGF	VOGF
BR7442-CN-PCT	Internal shoulder shape	China	Granted	201280062770.8	2012-12-14	104204399	2014-12-10	104204399	2016-11-16	VOGF	VOGF
BR7442-EP-ECT	Internal shoulder shape	European Patent	Published	12821264.4	2012-12-14	2795035	2014-10-29			VOGF	VOGF
BR7442-FR-BN	Internal shoulder shape	France	Granted	11/03930	2011-12-19	2984395	2013-06-21	2984396	2013-12-27	VOGF	VOGF
BR7442-ID-PCT	Internal shoulder shape	Indonesia	Application	P0020140353 9	2012-12-14					VOGF	VOGF

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Patent Ref	Invention Short Title	Country	Status	Application Number	Filed Date	Publication Number	Publication Date	Patent No.	Grant Date	Owner	Registered name of owner
BR7442-IN-PCT	Internal shoulder shape	India	Published	4092/DELNP/2014	2012-12-14	4092/DELNP/2014	2015-02-20			VOGF	VOGF
BR7442-JP-PCT	Internal shoulder shape	Japan	Granted	2014-546597	2012-12-14	2015-507723	2015-03-12	6111262	2017-03-17	VOGF	VOGF
BR7442-MX-PCT	Internal shoulder shape	Mexico	Granted	2014/007393	2012-12-14	2014/007393	2014-08-22	346998	2017-04-07	VOGF	VOGF
BR7442-RU-PCT	Internal shoulder shape	Russian Federation	Granted	2014124011	2012-12-14	2014124011	2015-12-27	2613212	2017-03-15	VOGF	VOGF
BR7442-US-PCT	Internal shoulder shape	United States of America	Published	14/366398	2012-12-14	2014/327242	2014-11-06			VOGF	VOGF
BR7445-AE-PCT	Low torque double shoulder	United Arab Emirates	Application	699/2014	2012-12-20					VOGF	VOGF
BR7445-AR-BN	Low torque double shoulder	Argentina	Published	P120105078	2012-12-28	089611	2014-09-03			VOGF	VMOGF
BR7445-AT-ECT	Low torque double shoulder	Austria	Granted	12821278.4	2012-12-20	2798141	2014-11-05	2798141	2015-12-16	VOGF	VOGF
BR7445-BR-PCT	Low torque double shoulder	Brazil	Published	112014015945-9	2012-12-20	112014015945	2014-06-19			VOGF	VOGF
BR7445-CA-PCT	Low torque double shoulder	Canada	Published	2857272	2012-12-20	2857272	2013-07-04			VOGF	VOGF
BR7445-CN-PCT	Low torque double shoulder	China	Granted	201280066617.2	2012-12-20	104053852	2014-09-17	104053852	2016-11-23	VOGF	VMOGF
BR7445-CZ-ECT	Low torque double shoulder	Czech Republic	Granted	12821278.4	2012-12-20	2798141	2014-11-05	2798141	2015-12-16	VOGF	VOGF
BR7445-DE-ECT	Low torque double shoulder	Germany (Federal Republic of)	Granted	602012013255.8	2012-12-20	2798141	2014-11-05	2798141	2015-12-16	VOGF	VOGF
BR7445-EP-ECT	Low torque double shoulder	European Patent	Granted	12821278.4	2012-12-20	2798141	2014-11-05	2798141	2015-12-16	VOGF	VOGF
BR7445-FR-BN	Low torque double shoulder	France	Granted	11/04147	2011-12-29	2985282	2013-07-05	2985282	2016-07-29	VOGF	VOGF
BR7445-FR-ECT	Low torque double shoulder	France	Granted	12821278.4	2012-12-20	2798141	2014-11-05	2798141	2015-12-16	VOGF	VOGF
BR7445-GB-ECT	Low torque double shoulder	United Kingdom	Granted	12821278.4	2012-12-20	2798141	2014-11-05	2798141	2015-12-16	VOGF	VOGF
BR7445-ID-PCT	Low torque double shoulder	Indonesia	Application	P00201403862	2012-12-20					VOGF	VOGF
BR7445-IN-PCT	Low torque double shoulder	India	Published	4520/DELNP/2014	2012-12-20	4520/DELNP/2014	2015-02-06			VOGF	VOGF

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Patent Ref	Invention Short Title	Country	Status	Application Number	Filed Date	Publication Number	Publication Date	Patent No.	Grant Date	Owner	Registered name of owner
BR7445-IT-ECT	Low torque double shoulder	Italy	Granted	12821278.4	2012-12-20	2798141	2014-11-05	502016000015299	2015-12-16	VOGF	VOGF
BR7445-JP-PCT	Low torque double shoulder	Japan	Granted	2014-549512	2012-12-20	2015-507729	2015-03-12	6082406	2017-01-27	VOGF	VOGF
BR7445-MX-PCT	Low torque double shoulder	Mexico	Granted	2014/008039	2012-12-20	2014/008038	2014-08-21	348045	2017-05-25	VOGF	VOGF
BR7445-PL-ECT	Low torque double shoulder	Poland	Granted	12821278.4	2012-12-20	2798141	2014-11-05	2798141	2015-12-16	VOGF	VOGF
BR7445-RO-ECT	Low torque double shoulder	Romania	Granted	12821278.4	2012-12-20	2798141	2014-11-05	2798141	2015-12-16	VOGF	VOGF
BR7445-RU-PCT	Low torque double shoulder	Russian Federation	Granted	2014125711	2012-12-20	2014125711	2015-12-27	2606008	2017-01-10	VOGF	VOGF
BR7445-US-PCT	Low torque double shoulder	United States of America	Granted	14/364516	2012-12-20	2014/367119	2014-12-18	9,500,043	2016-11-22	VOGF	VOGF
BR7446-CN-PCT	Hydroclean Max	China	Published	201380003048.5	2013-06-12	103797269	2014-05-14			VDPFR	VDPFR
BR7446-FR-BN	Hydroclean Max	France	Granted	12/56967	2012-06-22	2992345	2013-12-27	2992345	2014-07-25	VDPFR	VDF
BR7446-GCC-BN	Hydroclean Max	Gulf Cooperation Council	Allowed	2013/24710	2013-06-19					VDPFR	VDF
BR7446-RU-PCT	Hydroclean Max	Russian Federation	Granted	2014/151400	2013-06-12	2014/151400	2016-07-10	2631059	2017-09-18	VDPFR	VDF
BR7446-US-PCT	Hydroclean Max	United States of America	Published	14/234542	2013-06-12	2015/361729	2015-12-17			VDPFR	VDPFR
BR8040-AR-BN	VAM TAURUS	Argentina	Granted	P990102797	1999-06-11	99/0102797	2000-12-11	018657	2006-01-23	VAD	VMD
BR8040-BR-PCT	VAM TAURUS	Brazil	Granted	PI9911225-6	1999-05-21	PI9911225	2001-02-20	PI9911225	2007-10-09	VAD	VMD
BR8040-CA-PCT	VAM TAURUS	Canada	Granted	2,334,926	1999-05-21	2334926	1999-12-23	2334926	2005-07-05	VAD	VMD
BR8040-CN-PCT	VAM TAURUS	China	Granted	99807414.4	1999-05-21	1305561	2001-07-25	1115466	2003-07-23	VAD	VMD
BR8040-DE-ECT	VAM TAURUS	Germany (Federal Republic of)	Granted	59913178.0	1999-05-21	1088150	1999-12-23	59913178	2006-03-01	VAD	VMD
BR8040-DK-ECT	VAM TAURUS	Denmark	Granted	99936336.9	1999-05-21	1088150	1999-12-23	1088150	2006-03-01	VAD	VMD
BR8040-EA-EAT	VAM TAURUS	Eurasian Patent Convention	Granted	2001/00048	1999-05-21			002252	2002-02-28	VAD	VMD

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Patent Ref	Invention Short Title	Country	Status	Application Number	Filed Date	Publication Number	Publication Date	Patent No.	Grant Date	Owner	Registered name of owner
BR8040-EP-ECT	VAM TAURUS	European Patent	Granted	99936336.9	1999-05-21	1088150	1999-12-23	1088150	2006-03-01	VAD	VMOGG
BR8040-FR-ECT	VAM TAURUS	France	Granted	99936336.9	1999-05-21	1088150	1999-12-23	1088150	2006-03-01	VAD	VMD
BR8040-GB-ECT	VAM TAURUS	United Kingdom	Granted	99936336.9	1999-05-21	1088150	1999-12-23	1088150	2006-03-01	VAD	VMD
BR8040-ID-PCT	VAM TAURUS	Indonesia	Granted	W-20002624	1999-05-21	29712	2001-02-01	0009355	2002-11-21	VAD	VMOGG
BR8040-IT-ECT	VAM TAURUS	Italy	Granted	99936336.9	1999-05-21	1088150	1999-12-23	502006901409492	2006-03-01	VAD	VMOGG
BR8040-JP-PCT	VAM TAURUS	Japan	Granted	2000-554962	1999-05-21	2002-518617	2002-06-25	3760098	2006-01-13	VAD	VMD
BR8040-MX-PCT	VAM TAURUS	Mexico	Granted	PAA/2000/012080	1999-05-21			221021	2004-06-18	VAD	VMD
BR8040-NO-PCT	VAM TAURUS	Norway	Granted	2000/6324	1999-05-21	20006324	2000-12-12	324392	2007-10-01	VAD	VMD
BR8040-RU-EAT	VAM TAURUS	Russian Federation	Granted	2001/00048	1999-05-21			002252	2002-02-28	VAD	VMD
BR8040-SA-BN	VAM TAURUS	Saudi Arabia	Granted	99200381	1999-07-25			645	2006-03-25	VAD	VMOGG
BR8040-US-PCT	VAM TAURUS	United States of America	Granted	09/719980	1999-05-21	6513840	2003-02-04	6,513,840	2003-02-04	VAD	VMD
BR8041-AR-BN	WORKOVER RISER HP	Argentina	Granted	P000105348	2000-10-11			026011	2004-06-29	VAD	VMD
BR8041-AT-ECT	WORKOVER RISER HP	Austria	Granted	00984830.0	2000-10-10	1232322	2001-05-17	E243807	2003-06-25	VAD	VMD
BR8041-BR-PCT	WORKOVER RISER HP	Brazil	Granted	PI0015454-7	2000-10-10	PI0015454	2002-07-09	PI0015454-7	2008-08-03	VAD	VMD
BR8041-CA-PCT	WORKOVER RISER HP	Canada	Granted	2389216	2000-10-10	2389216	2003-01-01	2389216	2007-01-30	VAD	VMD
BR8041-DE-ECT	WORKOVER RISER HP	Germany (Federal Republic of)	Granted	500002679.3	2000-10-10	1232322	2001-05-17	1232322	2003-06-25	VAD	VMD
BR8041-EP-ECT	WORKOVER RISER HP	European Patent	Granted	00984830.0	2000-10-10	1232322	2001-05-17	1232322	2003-06-25	VAD	VMOGG
BR8041-FR-ECT	WORKOVER RISER HP	France	Granted	00984830.0	2000-10-10	1232322	2001-05-17	1232322	2003-06-25	VAD	VMD
BR8041-GB-ECT	WORKOVER RISER HP	United Kingdom	Granted	00984830.0	2000-10-10	1232322	2001-05-17	1232322	2003-06-25	VAD	VMD

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Patent Ref	Invention Short Title	Country	Status	Application Number	Filed Date	Publication Number	Publication Date	Patent No.	Grant Date	Owner	Registered name of owner
BR8041-ID-PCT	WORKOVER RISER HP	Indonesia	Granted	W00-2002-01956	2000-10-10			0014983	2004-12-27	VAD	VMOGG
BR8041-IT-ECT	WORKOVER RISER HP	Italy	Granted	00984830.0	2000-10-10	1232322	2001-05-17	602003901144080	2003-06-25	VAD	VMO
BR8041-JP-PCT	WORKOVER RISER HP	Japan	Granted	2001-536845	2000-10-10	2003-514201	2003-04-15	5066316	2012-08-17	VAD	VMO
BR8041-MX-PCT	WORKOVER RISER HP	Mexico	Granted	PAA/2002/003846	2000-10-10	2002002846	2004-12-13	234670	2006-03-06	VAD	VMO
BR8041-NG-BN	WORKOVER RISER HP	Nigeria	Granted	402/2000/22	2000-10-11	RP14362	2002-05-03	RP14362	2002-05-03	VAD	VMO
BR8041-NO-PCT	WORKOVER RISER HP	Norway	Granted	20021962	2000-10-10			325307	2008-11-03	VAD	VMO
BR8041-US-PCT	WORKOVER RISER HP	United States of America	Granted	09/902545	2000-10-10	2002/017788	2002-02-14	6511102	2003-01-28	VAD	VMO
BR9227-AE-PCT	DRILL STEM CONNECTION - Vam Express VX patent coverage	United Arab Emirates	Application	P789/2007	2005-03-02					VOGF	VMOGF
BR9227-AZ-EAT	DRILL STEM CONNECTION - Vam Express VX patent coverage	Azerbaijan	Granted	2007/01865	2005-03-02			010138	2008-06-30	VOGF	VMOGF
BR9227-BR-PCT	DRILL STEM CONNECTION - Vam Express VX patent coverage	Brazil	Granted	PI0520039-3	2005-03-02	PI0520039	2009-04-14	PI0520039	2016-05-17	VOGF	VMOGF
BR9227-CA-DIV	DRILL STEM CONNECTION - Vam Express VX patent coverage	Canada	Granted	2725126	2005-03-02				2012-12-11	VOGF	VOGF
BR9227-CA-DIV2	DRILL STEM CONNECTION - Vam Express VX patent coverage	Canada	Granted	2759755	2005-03-02	2759755	2006-09-08	2759755	2014-11-04	VOGF	VOGF
BR9227-CA-PCT	DRILL STEM CONNECTION - Vam Express VX patent coverage	Canada	Granted	2602473	2005-03-02	2602473	2006-09-08	2602473	2012-05-15	VOGF	VOGF

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Patent Ref	Invention Short Title	Country	Status	Application Number	Filed Date	Publication Number	Publication Date	Patent No.	Grant Date	Owner	Registered name of owner
BR9227-CN-DIV	DRILL STEM CONNECTION - Vam Express VX patent coverage	China	Granted	201110274176.2	2005-03-02	102425381	2012-04-25	102425381	2015-11-25	VOGF	VMOGF
BR9227-CN-DIV2	DRILL STEM CONNECTION - Vam Express VX patent coverage	China	Published	201410524509.6	2005-03-02	104373056	2015-02-25			VOGF	VMOGF
BR9227-CN-PCT	DRILL STEM CONNECTION - Vam Express VX patent coverage	China	Published	2005800488633.5	2005-03-02	101184903	2008-05-21			VOGF	VMOGF
BR9227-DZ-PCT	DRILL STEM CONNECTION - Vam Express VX patent coverage	Algeria	Granted	07/0615	2005-03-02			5837	2010-08-29	VOGF	VMOGF
BR9227-EA-EAT	DRILL STEM CONNECTION - Vam Express VX patent coverage	Eurasian Patent Convention	Granted	200701865	2005-03-02			010138	2008-06-30	VOGF	VMOGF
BR9227-EG-PCT	DRILL STEM CONNECTION - Vam Express VX patent coverage	Egypt	Allowed	900/2007	2005-03-02					VOGF	VMOGF
BR9227-EP-ECT	DRILL STEM CONNECTION - Vam Express VX patent coverage	European Patent	Published	05708690.2	2005-03-02	1861578	2007-12-05			VOGF	VOGF
BR9227-ID-PCT	DRILL STEM CONNECTION - Vam Express VX patent coverage	Indonesia	Granted	W00/2007/02813	2005-03-02	W00/2007/02813	2010-02-11	P0027688	2011-03-03	VOGF	VMOGF
BR9227-IN-PCT	DRILL STEM CONNECTION - Vam Express VX patent coverage	India	Granted	3428/KOLNP/2007	2005-03-02			283221	2017-05-09	VOGF	VOGF
BR9227-JP-DIV	DRILL STEM CONNECTION - Vam Express VX patent coverage	Japan	Granted	2010-284182	2005-03-02	2011-094804	2011-05-12	5403626	2013-11-08	VOGF	VMOGF
BR9227-JP-PCT	DRILL STEM CONNECTION -	Japan	Granted	2007-557601	2005-03-02			4940154	2012-03-02	VOGF	VMOGF

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Patent Ref	Invention Short Title	Country	Status	Application Number	Filed Date	Publication Number	Publication Date	Patent No.	Grant Date	Owner	Registered name of owner
	Vam Express VX patent coverage										
BR9227-KZ-EAT	DRILL STEM CONNECTION - Vam Express VX patent coverage	Kazakhstan	Granted	2007/01865	2005-03-02			010138	2008-06-30	VOGF	VMOGF
BR9227-MX-DIV	DRILL STEM CONNECTION - Vam Express VX patent coverage	Mexico	Granted	MX/a/2010/000247	2005-03-02			298817	2012-05-07	VOGF	VOGF
BR9227-MX-PCT	DRILL STEM CONNECTION - Vam Express VX patent coverage	Mexico	Granted	MX/A/2007/010630	2005-03-02	2006/092649	2006-04-30	277861	2010-08-09	VOGF	VOGF
BR9227-NO-PCT	DRILL STEM CONNECTION - Vam Express VX patent coverage	Norway	Published	2E+07	2005-03-02	20074987	2007-10-02			VOGF	VOGF
BR9227-RU-EAT	DRILL STEM CONNECTION - Vam Express VX patent coverage	Russian Federation	Granted	2007/01865	2005-03-02			010138	2008-06-30	VOGF	VMOGF
BR9227-SG-PCT	DRILL STEM CONNECTION - Vam Express VX patent coverage	Singapore	Granted	2007/06387-8	2005-03-02			136211	2010-06-30	VOGF	VMOGF
BR9227-TM-EAT	DRILL STEM CONNECTION - Vam Express VX patent coverage	Turkmenistan	Granted	2007/01865	2005-03-02			010138	2008-06-30	VOGF	VMOGF
BR9227-US-BN	DRILL STEM CONNECTION - Vam Express VX patent coverage	United States of America	Granted	10/790900	2004-03-01	2005/189147	2005-09-01	7,210,710	2007-05-01	VOGF	VOGF
BR9241-EP-OEB	Elément d'un train de tiges de forage rotatif	European Patent	Granted	98400538.9	1998-03-06	0866209	1998-09-23	866209	2003-06-04	VDPFR	SMFI
BR9241-FR-OEB	Elément d'un train de tiges de forage rotatif	France	Granted	98400538.9	1998-03-06	0866209	1998-09-23	0866209	2003-06-04	VDPFR	VDF
BR9241-GB-OEB	Elément d'un train de tiges de forage rotatif	United Kingdom	Granted	98400538.9	1998-03-06	0866209	1998-09-23	0866209	2003-06-04	VDPFR	SMFI

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Patent Ref	Invention Short Title	Country	Status	Application Number	Filed Date	Publication Number	Publication Date	Patent No.	Grant Date	Owner	Registered name of owner
BR9241-NO-BN	Elément d'un train de tiges de forage rotatif	Norway	Granted	98/01140	1998-03-13			319236	2005-07-04	VDPFR	VDF
BR9241-US-BN	Elément d'un train de tiges de forage rotatif	United States of America	Granted	09/039338	1998-03-16			6,056,073	2000-05-02	VDPFR	VDF
BR9242-EP-OEB	Elément profilé pour un équipement de forage rotatif et tige de forage comportant au moins un tronçon profilé	European Patent	Granted	00400190.5	2000-01-25	1026364	2000-08-09	1026364	2005-06-08	VDPFR	SMFI
BR9242-FR-BN	Elément profilé pour un équipement de forage rotatif et tige de forage comportant au moins un tronçon profilé	France	Granted	99/01391	1999-02-05	2789438	2000-08-11	2789438	2001-05-04	VDPFR	VDF
BR9242-FR-OEB	Elément profilé pour un équipement de forage rotatif et tige de forage comportant au moins un tronçon profilé	France	Granted	00400190.5	2000-01-25	1026364	2000-08-09	1026364	2005-06-08	VDPFR	VDF
BR9242-GB-OEB	Elément profilé pour un équipement de forage rotatif et tige de forage comportant au moins un tronçon profilé	United Kingdom	Granted	00400190.5	2000-01-25	1026364	2000-08-09	1026364	2005-06-08	VDPFR	SMFI
BR9242-NO-BN	Elément profilé pour un équipement de forage rotatif et tige de forage comportant au	Norway	Granted	2000/0556	2000-02-03	2000/0555	2000-08-07	322967	2006-12-18	VDPFR	VDF

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Patent Ref	Invention Short Title	Country	Status	Application Number	Filed Date	Publication Number	Publication Date	Patent No.	Grant Date	Owner	Registered name of owner
	moins un tronçon profilé										
BR9242-NO-DIV	Elément profilé pour un équipement de forage rotatif et tige de forage comportant au moins un tronçon profilé	Norway	Granted	2006/04023	2000-02-03	2006/04023		328794	2010-05-18	VDPFR	VDF
BR9242-US-BN	Elément profilé pour un équipement de forage rotatif et tige de forage comportant au moins un tronçon profilé	United States of America	Granted	09/467197	2000-02-03			6349778	2002-02-26	VDPFR	VDF
BR9243-US-BN	Element profile pour un equipement de forage rotatif et applications a des composants d'un train de tiges de forage	United States of America	Granted	10/155242	2002-05-28	2003/221872	2003-12-04	6,732,821	2004-05-11	VDPFR	VDF
BR9246-FR-BN	Element d'un train de tiges de forage comportant au moins une zone d'appui, tige de forage et joint d'outil	France	Granted	03/02096	2003-02-20	2851608	2004-08-27	2851608	2006-01-27	VDPFR	VDF
BR9246-US-BN	Element d'un train de tiges de forage comportant au moins une zone d'appui, tige de forage et joint d'outil	United States of America	Granted	10/777756	2004-02-13	2004/195009	2004-10-07	7182160	2007-02-27	VDPFR	VDF
BR9326-AE-PCT	Tige de forage instrumentée	United Arab Emirates	Allowed	61/2012	2010-07-20					VDPFR - ARMINE	VDF-ARMINE

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Patent Ref	Invention Short Title	Country	Status	Application Number	Filed Date	Publication Number	Publication Date	Patent No.	Grant Date	Owner	Registered name of owner
BR9326-BR-PCT	Tige de forage instrumentée	Brazil	Published	PI1016019-1	2010-07-20	PI1016019	2016-04-26			VDPFR - ARMINE	VDF-ARMINE
BR9326-CN-PCT	Tige de forage instrumentée	China	Granted	201080032566.2	2010-07-20	102482921	2012-05-30	102482921	2015-06-24	VDPFR	VDF-ARMINE
BR9326-FR-BN	Tige de forage instrumentée	France	Granted	09/03560	2009-07-20	2948145	2011-01-21	2948145	2011-08-26	VDPFR	VDF-ARMINE
BR9326-NO-PCT	Tige de forage instrumentée	Norway	Published	2E+07	2010-07-20	20120155	2012-04-18			VDPFR	VDF-ARMINE
BR9326-US-PCT	Tige de forage instrumentée	United States of America	Granted	13/384708	2010-07-20	2012/189400	2012-08-09	8,915,315	2014-12-23	VDPFR - ARMINE	VDF-ARMINE
BR9402-FR-BN	Coupler with damper support	France	Granted	11/02349	2011-07-27	2978487	2013-02-01	2978487	2015-07-03	VDPFR	VDF
BR9403-BR-PCT	Low torque sub with backreaming function	Brazil	Published	112014007932-3	2012-10-01	112014007932	2017-04-18			VDPFR	VDPFR
BR9403-CN-PCT	Low torque sub with backreaming function	China	Granted	201280048998.6	2012-10-01	103874822	2014-06-18	103874822	2016-02-03	VDPFR	VDF
BR9403-FR-BN	Low torque sub with backreaming function	France	Granted	11/03009	2011-10-04	2980815	2013-04-05	2980815	2013-09-27	VDPFR	VDF
BR9403-GCC-BN	Low torque sub with backreaming function	Gulf Cooperation Council	Allowed	2012/22424	2012-10-02					VDPFR	VDF
BR9403-US-PCT	Low torque sub with backreaming function	United States of America	Published	14/346220	2012-10-01	2014/224546	2014-08-14			VDPFR	VDPFR
BR9418-BR-PCT	Improved landing pipe	Brazil	Published	112015012358-9	2013-11-27	112015012358	2017-07-11			VDPUS	VDPUS
BR9418-CN-PCT	Improved landing pipe	China	Published	201380059738.9	2013-11-27	104919128	2015-09-16			VDPUS	VDPUS
BR9418-EP-OEB	Improved landing pipe	European Patent	Published	13151249.3	2013-01-15	2754861	2014-07-16			VDPUS	VDUS
BR9418-IN-PCT	Improved landing pipe	India	Published	3607/CHENP/2015	2013-11-27	3607/CHENP/2015	2016-07-01			VDPUS	VDPUS
BR9418-US-BN	Improved landing pipe	United States of America	Published	13/689239	2012-11-29	2014/0145432	2014-05-29			VDPUS	VDPUS
BR9424-AR-BN	Shale drill pipe 4 1/4	Argentina	Application	P140100244	2014-01-27					VDPUS	VDPUS

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Patent Ref	Invention Short Title	Country	Status	Application Number	Filed Date	Publication Number	Publication Date	Patent No.	Grant Date	Owner	Registered name of owner
BR9424-AT-ECT	Shale drill pipe 4 1/4	Austria	Granted	14703417.7	2014-01-27	2948613	2015-12-02	2948613	2017-04-05	VDPUS	VDPUS
BR9424-AU-PCT	Shale drill pipe 4 1/4	Australia	Granted	2014208899	2014-01-27	2014208899	2015-07-02	2014208899	2017-08-03	VDPUS	VDPUS
BR9424-CA-PCT	Shale drill pipe 4 1/4	Canada	Granted	2,899,284	2014-01-27	2,899,284	2014-07-31	2,899,284	2017-05-09	VDPUS	VDPUS
BR9424-CN-PCT	Shale drill pipe 4 1/4	China	Allowed	201480006416.2	2014-01-27	105247158	2016-01-13			VDPUS	VDPUS
BR9424-DE-ECT	Shale drill pipe 4 1/4	Germany (Federal Republic of)	Granted	602014008295.6	2014-01-27	2948613	2015-12-02	2948613	2017-04-05	VDPUS	VDPUS
BR9424-DK-ECT	Shale drill pipe 4 1/4	Denmark	Granted	14703417.7	2014-01-27	2948613	2015-12-02	2948613	2017-04-05	VDPUS	VDPUS
BR9424-DZ-PCT	Shale drill pipe 4 1/4	Algeria	Application	150344	2014-01-27					VDPUS	VDPUS
BR9424-EP-ECT	Shale drill pipe 4 1/4	European Patent	Granted	14703417.7	2014-01-27	2948613	2015-12-02	2948613	2017-04-05	VDPUS	VDPUS
BR9424-FR-ECT	Shale drill pipe 4 1/4	France	Granted	14703417.7	2014-01-27	2948613	2015-12-02	2948613	2017-04-05	VDPUS	VDPUS
BR9424-GB-ECT	Shale drill pipe 4 1/4	United Kingdom	Granted	14703417.7	2014-01-27	2948613	2015-12-02	2948613	2017-04-05	VDPUS	VDPUS
BR9424-GCC-BN	Shale drill pipe 4 1/4	Gulf Cooperation Council	Application	2014/26294	2014-01-23					VDPUS	VDPUS
BR9424-ID-PCT	Shale drill pipe 4 1/4	Indonesia	Published	P00201504943	2014-01-27	2017/03279	2017-03-31			VDPUS	VDPUS
BR9424-IT-ECT	Shale drill pipe 4 1/4	Italy	Granted	502017000088028	2014-01-27	2948613	2015-12-02	2948613	2017-04-05	VDPUS	VDPUS
BR9424-NL-ECT	Shale drill pipe 4 1/4	Netherlands	Granted	14703417.7	2014-01-27	2948613	2015-12-02	2948613	2017-04-05	VDPUS	VDPUS
BR9424-NO-ECT	Shale drill pipe 4 1/4	Norway	Granted	14703417.7	2014-01-27	2948613	2015-12-02	2948613	2017-04-05	VDPUS	VDPUS
BR9424-TR-ECT	Shale drill pipe 4 1/4	Turkey	Granted	14703417.7	2014-01-27	2948613	2015-12-02	2948613	2017-04-05	VDPUS	VDPUS
BR9424-US-BN	Shale drill pipe 4 1/4	United States of America	Granted	13/751866	2013-01-28	2014/209394	2014-07-31	9,222,314	2015-12-29	VDPUS	VDPUS
BR9424-ZA-PCT	Shale drill pipe 4 1/4	South Africa	Granted	2015/04481	2014-01-27			2015/04481	2016-11-30	VDPUS	VDPUS
BR9448-BR-PCT	Hardbanding - CMT Cold Metal Banding technology	Brazil	Application	112015010996-1	2014-12-22					VDPFR	VDPFR

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Patent Ref	Invention Short Title	Country	Status	Application Number	Filed Date	Publication Number	Publication Date	Patent No.	Grant Date	Owner	Registered name of owner
BR9440-CA-PCT	Hardbanding - CMT Cold Metal Banding technology	Canada	Application	2929806	2014-12-22					VDPFR	VDPFR
BR9440-CN-PCT	Hardbanding - CMT Cold Metal Banding technology	China	Published	201480070001.1	2014-12-22	105829004	2016-08-03			VDPFR	VDPFR
BR9440-EP-ECT	Hardbanding - CMT Cold Metal Banding technology	European Patent	Published	14831004.8	2014-12-22	3084112	2016-10-26			VDPFR	VDPFR
BR9440-FR-BN	Hardbanding - CMT Cold Metal Banding technology	France	Granted	13/63310	2013-12-20	3015546	2015-06-26	3015546	2015-12-25	VDPFR	VDPFR
BR9440-MX-PCT	Hardbanding - CMT Cold Metal Banding technology	Mexico	Application	2016/006440	2014-12-22					VDPFR	VDPFR
BR9440-RU-PCT	Hardbanding - CMT Cold Metal Banding technology	Russian Federation	Application	2016129467	2014-12-22					VDPFR	VDPFR
BR9440-US-PCT	Hardbanding - CMT Cold Metal Banding technology	United States of America	Published	15/106477	2014-12-22	2016/340985	2016-11-24			VDPFR	VDPFR
BR9458-AO-PCT	VX with metal seal	Angola	Application	3435	2015-10-14					VOGF	VOGF
BR9458-AR-BN	VX with metal seal	Argentina	Published	P150103337	2015-10-15	102282	2017-02-15			VOGF	VOGF
BR9458-AU-PCT	VX with metal seal	Australia	Published	2015332753	2015-10-14	2015332753	2017-03-30			VOGF	VOGF
BR9458-BN-PCT	VX with metal seal	Brunei	Application	BN/N/2017/0051	2015-10-14					VOGF	VOGF
BR9458-BR-PCT	VX with metal seal	Brazil	Published	112017007196-7	2015-10-14	112017007196	2017-04-18			VOGF	VOGF
BR9458-CA-PCT	VX with metal seal	Canada	Published	2,962,539	2015-10-14	2,962,539	2016-04-21			VOGF	VOGF

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Patent Ref	Invention Short Title	Country	Status	Application Number	Filed Date	Publication Number	Publication Date	Patent No.	Grant Date	Owner	Registered name of owner
BR9458-CN-PCT	VX with metal seal	China	Published	201580055764.3	2015-10-14	107075925	2017-08-18			VOGF	VOGF
BR9458-DZ-PCT	VX with metal seal	Algeria	Application	170186	2015-10-14					VOGF	VOGF
BR9458-EA-EAT	VX with metal seal	Eurasian Patent Convention	Published	201790605	2015-10-14	201790605	2017-07-31			VOGF	VOGF
BR9458-EG-PCT	VX with metal seal	Egypt	Application	2017/635	2015-10-14					VOGF	VOGF
BR9458-EP-ECT	VX with metal seal	European Patent	Published	15778986.8	2015-10-14	3207208	2017-08-23			VOGF	VOGF
BR9458-FR-BN	VX with metal seal	France	Granted	14/59834	2014-10-16	3027338	2016-04-22	3027338	2016-12-02	VOGF	VOGF
BR9458-GCC-BN	VX with metal seal	Gulf Cooperation Council	Application	2015/30201	2015-10-14					VOGF	VOGF
BR9458-ID-PCT	VX with metal seal	Indonesia	Application	PID201702373	2015-10-14					VOGF	VOGF
BR9458-IN-PCT	VX with metal seal	India	Published	201717009077	2015-10-14	201717009077	2017-08-11			VOGF	VOGF
BR9458-IQ-BN	VX with metal seal	Iraq	Granted	328/2015	2015-10-08			4657	2016-08-10	VOGF	VOGF
BR9458-JP-PCT	VX with metal seal	Japan	Published	2017-520345	2015-10-14	2017-532512	2017-11-02			VOGF	VOGF
BR9458-MX-PCT	VX with metal seal	Mexico	Published	MX/A/2017/004917	2015-10-14	MX/A/2017/004917	2017-07-19			VOGF	VOGF
BR9458-MY-PCT	VX with metal seal	Malaysia	Application	PI2017700867	2015-10-14					VOGF	VOGF
BR9458-NG-PCT	VX with metal seal	Nigeria	Allowed	F/P/2017/174	2015-10-14					VOGF	VOGF
BR9458-OA-PCT	VX with metal seal	O.A.P.I.	Application		2015-10-14					VOGF	VOGF
BR9458-TH-PCT	VX with metal seal	Thailand	Application	1701002029	2015-10-14					VOGF	VOGF
BR9458-UA-PCT	VX with metal seal	Ukraine	Application	a201703546	2015-10-14					VOGF	VOGF
BR9458-US-PCT	VX with metal seal	United States of America	Published	15/515,709	2015-10-14	20170298698	2017-10-19			VOGF	VOGF
BR9458-VN-PCT	VX with metal seal	Vietnam	Published	1-2017-01381	2015-10-14	52842	2017-06-26			VOGF	VOGF
BR9466-AR-BN	Helical shoulder	Argentina	Published	P150104005	2015-12-04	103986	2017-06-21			VOGF	VOGF

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Patent Ref	Invention Short Title	Country	Status	Application Number	Filed Date	Publication Number	Publication Date	Patent No.	Grant Date	Owner	Registered name of owner
BR9466-BR-PCT	Helical shoulder	Brazil	Published	112017000999 0-0	2015-12-08	112017000999 0	2017-08-01			VOGF	VOGF
BR9466-CA-PCT	Helical shoulder	Canada	Published	2,966,957	2015-12-08	2,966,957	2016-06-16			VOGF	VOGF
BR9466-CN-PCT	Helical shoulder	China	Published	201580066511 .6	2015-12-08	107002472	2017-08-01			VOGF	VOGF
BR9466-EP-ECT	Helical shoulder	European Patent	Published	15805508.7	2015-12-08	3230551	2017-10-18			VOGF	VOGF
BR9466-FR-BN	Helical shoulder	France	Granted	14/62123	2014-12-08	3029593	2016-06-10	3029593	2017-04-28	VOGF	VOGF
BR9466-ID-PCT	Helical shoulder	Indonesia	Application	PID201703606	2015-12-08					VOGF	VOGF
BR9466-IN-PCT	Helical shoulder	India	Published	201717014921	2015-12-08	201717014921	2017-09-15			VOGF	VOGF
BR9466-JP-PCT	Helical shoulder	Japan	Application	2017-530736	2015-12-08					VOGF	VOGF
BR9466-MX-PCT	Helical shoulder	Mexico	Application	MX/A/2017/007528	2015-12-08					VOGF	VOGF
BR9466-RU-PCT	Helical shoulder	Russian Federation	Application	2017119635	2015-12-08					VOGF	VOGF
BR9466-SA-PCT	Helical shoulder	Saudi Arabia	Application	517381677	2015-12-08					VOGF	VOGF
BR9466-US-PCT	Helical shoulder	United States of America	Application	15/524,655	2015-12-08					VOGF	VOGF
GEMO01-US	Shale drill pipe 4 1/4	United States of America	Granted	29444223	2013-01-28			D726289	2015-04-07	VDPUS	VDUS

BR reference in Bold letters: Suggestion not to make registrations of transfer

APPENDIX B2 – POTENTIALLY-ASSIGNED PATENTS

[See attached.]

Appendix B2 – Potentially Assigned Patents

Patent Ref	Invention Short Title	Status	Country	Application Number	Filed Date	Publication Number	Publication Date	Patent No.	Grant Date	owner	registered name of owner
BR9284-EP-ECT	WDP/Tilted entry	Alowed	European Patent	09741328.0	2009-09-22	2331786	2011-06-15			VDPFR	VDF
BR9284-FR-BN	WDP/Tilted entry	Granted	France	08/05376	2008-09-30	2936554	2010-04-02	2936554	2010-10-29	VDPFR	VDF
BR9284-US-PCT	WDP/Tilted entry	Granted	United States of America	13/060965	2009-09-22	2011/155470	2011-06-30	8,844,654	2014-09-30	VDPFR	VDPFR
BR9318-BR-PCT	WDP/ Guide tube cylindrical holder	Published	Brazil	PI1012640-6	2010-03-04	PI1012640	2012-11-27			VDPFR	VDF
BR9318-EP-OEB	WDP/ Guide tube cylindrical holder	Granted	European Patent	09290230.3	2009-03-30	2236736	2010-10-06	2236736	2017-13-12	VDPFR	VDPFR
BR9318-US-PCT	WDP/ Guide tube cylindrical holder	Granted	United States of America	13/259735	2010-03-04	2012/111555	2012-05-10	9,200,486	2015-12-01	VDPFR	VDPFR
BR9381-BR-PCT	Direct contact coupler with balanced pressure	Application	Brazil	112013021936-0	2012-02-29					VDPFR	VDF
BR9381-EP-ECT	Direct contact coupler with balanced pressure	Published	European Patent	12706592.8	2012-02-29	2681403	2014-01-08			VDPFR	VDF
BR9381-FR-BN	Direct contact coupler with balanced pressure	Granted	France	11/00610	2011-03-01	2972215	2012-09-07	2972215	2013-03-22	VDPFR	VDF
BR9381-GCC-BN	Direct contact coupler with balanced pressure	Application	Gulf Cooperation Council	2012/20645	2012-02-29					VDPFR	VDF
BR9381-US-PCT	Direct contact coupler with balanced pressure	Granted	United States of America	14/002228	2012-02-29	2014-0034393	2014-02-06	9,441,418	2016-09-13	VDPFR	VDPFR
BR9382-BR-PCT	Inner sleeve with cable storage	Application	Brazil	112013021934-3	2012-02-28					VDPFR	VDF
BR9382-EP-ECT	Inner sleeve with cable storage	Published	European Patent	12706047.3	2012-02-28	2681401	2014-01-08			VDPFR	VDF
BR9382-FR-BN	Inner sleeve with cable storage	Granted	France	11/00608	2011-03-01	2972217	2012-09-07	2972217	2014-02-14	VDPFR	VDF

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Patent Ref	Invention Short Title	Status	Country	Application Number	Filed Date	Publication Number	Publication Date	Patent No.	Grant Date	owner	registered name of owner
BR9382-GCC-BN	Inner sleeve with cable storage	Application	Gulf Cooperation Council	2012/20648	2012-02-29					VDPFR	VDF
BR9382-US-PCT	Inner sleeve with cable storage	Granted	United States of America	14/002260	2012-02-28	2014-0102806	2014-04-17	9,447,644	2016-09-20	VDPFR	VDPFR
BR9386-BR-PCT	High Frequency antenna coupler	Published	Brazil	112013008038-6	2011-09-21	1.12013E+11	2016-05-14			VDPFR	VDF
BR9386-CA-PCT	High Frequency antenna coupler	Published	Canada	2811365	2011-09-21	2811365	2012-03-29			VDPFR	VDF
BR9386-EP-ECT	High Frequency antenna coupler	Published	European Patent	11757899.7	2011-09-21	2619414	2013-07-31			VDPFR	VDF
BR9386-FR-BN	High Frequency antenna coupler	Granted	France	10/57724	2010-09-24	2965415	2012-03-30	2965415	2012-09-07	VDPFR	VDF
BR9386-GCC-BN	High Frequency antenna coupler	Allowed	Gulf Cooperation Council	2011/19347	2011-09-21					VDPFR	VDF
BR9386-US-PCT	High Frequency antenna coupler	Granted	United States of America	13/821462	2011-09-21	2013/169385	2013-07-04	9,322,224	2016-04-26	VDPFR	VDPFR
BR9398-BR-PCT	Security element for surface interface - antenna selection	Application	Brazil	112013032600-2	2012-06-22					VDPFR	VDF
BR9398-EP-ECT	Security element for surface interface - antenna selection	Published	European Patent	12729598.8	2012-06-22	2723979	2014-04-30			VDPFR	VDF
BR9398-FR-BN	Security element for surface interface - antenna selection	Granted	France	11/01826	2011-06-22	2976966	2012-12-28	2976966	2013-07-05	VDPFR	VDF
BR9398-GCC-BN	Security element for surface interface - antenna selection	Application	Gulf Cooperation Council	2012/21568	2012-06-23					VDPFR	VDF
BR9398-US-PCT	Security element for surface interface - antenna selection	Published	United States of America	14/127584	2012-06-22	2014-0104073	2014-04-17			VDPFR	VDPFR
BR9323-BR-PCT	WDP/ Backbone spring sleeve	Published	Brazil	PI0924988-5	2009-05-07	PI0924988	2016-02-02			VDPFR	VDF

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Patent Ref	Invention Short Title	Status	Country	Application Number	Filed Date	Publication Number	Publication Date	Patent No.	Grant Date	owner	registered name of owner
BR9323-DE-ECT	WDP/ Backbone spring sleeve	Granted	Germany (Federal Republic of)	09786026.6	2009-05-07	2430281	2012-03-21	2430281	2013-09-25	VDPFR	VDPFR
BR9323-EP-ECT	WDP/ Backbone spring sleeve	Granted	European Patent	09786026.6	2009-05-07	2430281	2012-03-21	2430281	2013-09-25	VDPFR	VDF
BR9323-FR-ECT	WDP/ Backbone spring sleeve	Granted	France	09786026.6	2009-05-07	2430281	2012-03-21	2430281	2013-09-25	VDPFR	VDF
BR9323-GB-ECT	WDP/ Backbone spring sleeve	Granted	United Kingdom	09786026.6	2009-05-07	2430281	2012-03-21	2430281	2013-09-25	VDPFR	VDF
BR9323-NO-ECT	WDP/ Backbone spring sleeve	Granted	Norway	09786026.6	2009-05-07	2430281	2012-03-21	2430281	2013-09-25	VDPFR	VDF
BR9323-US-PCT	WDP/ Backbone spring sleeve	Granted	United States of America	13/318530	2009-05-07	2012/0048623	2012-03-01	9,217,298	2015-12-22	VDPFR	VDPFR
BR9405-BR-PCT	Inner sleeve WITHOUT Anchoring nut SCREWED cable	Application	Brazil	112014008496-3	2012-10-04					VDPFR	VDPFR
BR9405-EP-ECT	Inner sleeve WITHOUT Anchoring nut SCREWED cable	Published	European Patent	12769019.6	2012-10-04	2766555	2014-08-20			VDPFR	VDPFR
BR9405-FR-BN	Inner sleeve WITHOUT Anchoring nut SCREWED cable	Granted	France	11/03153	2011-10-14	2981394	2013-04-19	2981394	2013-11-01	VDPFR	VDF
BR9405-GCC-BN	Inner sleeve WITHOUT Anchoring nut SCREWED cable	Granted	Gulf Cooperation Council	2012/22507	2012-10-10			4226	2016-12-31	VDPFR	VDF
BR9405-US-PCT	Inner sleeve WITHOUT Anchoring nut SCREWED cable	Granted	United States of America	14/350284	2012-10-04	2014/284065	2014-09-25	9,617,799	2017-04-11	VDPFR	VDPFR
BR9315-FR-BN	WDP High flexibility guide tube	Granted	France	09/00019	2009-01-06	2940816	2010-07-09	2940816	2011-02-06	VDPFR	VDF
BR9315-US-PCT	WDP High flexibility guide tube	Granted	United States of America	13/143119	2010-01-04	2011/290475	2011-12-01	9,291,004	2016-03-22	VDPFR	VDPFR
BR9374-CN-MU	Sealing direct connect	Granted	China	ZL201120579995.3	2011-11-16	202689959	2013-01-23	ZL201120579995.3	2013-01-23	VDPFR	VDF

Appendix B2 – Potentially Assigned Patents

Patent Ref	Invention Short Title	Status	Country	Application Number	Filed Date	Publication Number	Publication Date	Patent No.	Grant Date	owner	registered name of owner
BR9374-FR-BN	Sealing direct connect	Granted	France	10/04446	2010-11-16	2967452	2012-05-18	2967452	2012-11-16	VDPFR	VDF
BR9374-US-BN	Sealing direct connect	Granted	United States of America	13/297646	2011-11-16	2012/0122338	2012-05-17	8,668,510	2014-03-11	VDPFR	VDPFR
BR9379-DE-ECT	Electromagnetic coupler	Granted	Germany (Federal Republic of)	602012030731.5	2012-02-22	2678515	2014-01-01	2678515	2017-04-05	VDPFR	VDF
BR9379-EP-ECT	Electromagnetic coupler	Granted	European Patent	12706806.2	2012-02-22	2678515	2014-01-01	2678515	2017-04-05	VDPFR	VDF
BR9379-FR-BN	Electromagnetic coupler	Published	France	11/00523	2011-02-22	2971882	2012-08-24			VDPFR	VDF
BR9379-FR-ECT	Electromagnetic coupler	Granted	France	12706806.2	2012-02-22	2678515	2014-01-01	2678515	2017-04-05	VDPFR	VDF
BR9379-GB-ECT	Electromagnetic coupler	Granted	United Kingdom	12706806.2	2012-02-22	2678515	2014-01-01	2678515	2017-04-05	VDPFR	VDF
BR9379-GCC-BN	Electromagnetic coupler	Application	Gulf Cooperation Council	2012/20599	2012-02-22			2971882	24/08/2012	VDPFR	VDF
BR9379-NO-ECT	Electromagnetic coupler	Granted	Norway	12706806.2	2012-02-22	2678515	2014-01-01	2678515	2017-04-05	VDPFR	VDF
BR9379-US-PCT	Electromagnetic coupler	Published	United States of America	14/000806	2012-02-22	2014-0041945	2014-02-13			VDPFR	VDPFR
BR9380-BR-PCT	Direct contact coupler with electric shield	Published	Brazil	112013022059-7	2012-02-28	1.12013E+11	2016-11-29			VDPFR	VDF
BR9380-DE-ECT	Direct contact coupler with electric shield	Granted	Germany (Federal Republic of)	602012007144.3	2012-02-28	2681402	2014-01-08	2681402	2015-05-06	VDPFR	VDPFR
BR9380-EP-ECT	Direct contact coupler with electric shield	Granted	European Patent	602012007144.3	2012-02-28	2681402	2014-01-08	2681402	2015-05-06	VDPFR	VDPFR
BR9380-FR-BN	Direct contact coupler with electric shield	Granted	France	11/00611	2011-03-01	2972311	2012-09-07	2972311	2013-11-01	VDPFR	VDF
BR9380-FR-ECT	Direct contact coupler with electric shield	Granted	France	12706846.8	2012-02-28	2681402	2014-01-08	2681402	2015-05-06	VDPFR	VDPFR

Appendix B2 – Potentially Assigned Patents

Patent Ref	Invention Short Title	Status	Country	Application Number	Filed Date	Publication Number	Publication Date	Patent No.	Grant Date	owner	registered name of owner
BR9380-GB-ECT	Direct contact coupler with electric shield	Granted	United Kingdom	12706046.5	2012-02-28	2681402	2014-01-08	2681402	2015-05-06	VDPFR	VDPFR
BR9380-GCC-BN	Direct contact coupler with electric shield	Application	Gulf Cooperation Council	2012/20546	2012-02-29					VDPFR	VDF
BR9380-NO-ECT	Direct contact coupler with electric shield	Granted	Norway	12706046.5	2012-02-28	2681402	2014-01-08	2681402	2015-05-06	VDPFR	VDPFR
BR9380-US-PCT	Direct contact coupler with electric shield	Granted	United States of America	14/002372	2012-02-28	2014/0080338	2014-03-20	9,325,084	2016-04-26	VDPFR	VDPFR
BR9387-BR-PCT	Coaxial tubular pipe	Published	Brazil	112013007911-8	2011-10-03	1.12013E+11	2016-06-14			VDPFR	VDF
BR9387-CA-PCT	Coaxial tubular pipe	Published	Canada	2813019	2011-10-03	2813019	2012-04-12			VDPFR	VDF
BR9387-EP-ECT	Coaxial tubular pipe	Granted	European Patent	11764181.1	2011-10-03	2625369	2013-08-14	2625369	2017-11-29	VDPFR	VDF
BR9387-FR-BN	Coaxial tubular pipe	Granted	France	10/58029	2010-10-04	2965802	2012-04-06	2965802	2013-08-16	VDPFR	VDF
BR9387-GCC-BN	Coaxial tubular pipe	Granted	Gulf Cooperation Council	2011/19433	2011-10-02			0004241	2016-12-31	VDPFR	VDF
BR9387-US-PCT	Coaxial tubular pipe	Granted	United States of America	13/822136	2011-10-03	2013/186669	2013-07-25	8,950,787	2015-02-10	VDPFR	VDPFR
BR9401-BR-PCT	Coupler with armature	Published	Brazil	112014001307-1	2012-07-26	1.12014E+11	2017-02-21			VDPFR	VDF
BR9401-EP-ECT	Coupler with armature	Published	European Patent	12746441.1	2012-07-26	2737157	2014-06-04			VDPFR	VDF
BR9401-FR-BN	Coupler with armature	Granted	France	11/02348	2011-07-27	2978619	2013-02-01	2978619	2014-03-28	VDPFR	VDF
BR9401-GCC-BN	Coupler with armature	Application	Gulf Cooperation Council	2012/21878	2012-07-28					VDPFR	VDF
BR9401-US-PCT	Coupler with armature	Granted	United States of America	14/234785	2012-07-26	2014-0174715	2014-06-26	9,725,964	2017-08-08	VDPFR	VDPFR

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Patent Ref	Invention Short Title	Status	Country	Application Number	Filed Date	Publication Number	Publication Date	Patent No.	Grant Date	owner	registered name of owner
BR9404-BR-PCT	Rotational clamping	Application	Brazil	112014008690-7	2012-10-04					VDPFR	VDPFR
BR9404-DE-ECT	Rotational clamping	Granted	Germany (Federal Republic of)	602012013702.9	2012-10-04	2769048	2014-08-27	2769048	2018-01-06	VDPFR	VDPFR
BR9404-EP-ECT	Rotational clamping	Granted	European Patent	12769018.8	2012-10-04	2769048	2014-08-27	2769048	2018-01-06	VDPFR	VDPFR
BR9404-FR-BN	Rotational clamping	Granted	France	11/03168	2011-10-17	2981393	2013-04-19	2981393	2013-11-01	VDPFR	VDF
BR9404-FR-ECT	Rotational clamping	Granted	France	12769018.8	2012-10-04	2769048	2014-08-27	2769048	2018-01-06	VDPFR	VDPFR
BR9404-GB-ECT	Rotational clamping	Granted	United Kingdom	12769018.8	2012-10-04	2769048	2014-08-27	2769048	2018-01-06	VDPFR	VDPFR
BR9404-GCC-BN	Rotational clamping	Granted	Gulf Cooperation Council	2012/22546	2012-10-14			0004243	2016-12-31	VDPFR	VDF
BR9404-NO-ECT	Rotational clamping	Granted	Norway	12769018.8	2012-10-04	2769048	2014-08-27	2769048	2018-01-06	VDPFR	VDPFR
BR9404-US-PCT	Rotational clamping	Granted	United States of America	14/350250	2012-10-04	2014/238750	2014-08-28	9,617,798	2017-04-11	VDPFR	VDPFR
BR9396-FR-BN	Security element for surface interface mechanical	France	Granted	11/01925	2011-06-22	2976985	2012-12-28	2976985	2013-07-05	VDPFR	VDF
BR9397-FR-BN	Security element for surface interface - electronics	France	Granted	11/01924	2011-06-22	2976984	2012-12-28	2976984	2013-07-05	VDPFR	VDF
BR9383-FR-BN	Inner sleeve with lock	France	Granted	11/00609	2011-03-01	2972218	2012-09-07	2972218	2013-03-22	VDPFR	VDF

APPENDIX C- DOMAIN NAMES

Mark Name	Registration Date	Owners
arctic-drill-pipe.com	2012-11-07	VALLOUREC DRILLING PRODUCTS FRANCE
protools-service.com	2011-04-08	VALLOUREC DRILLING PRODUCTS FRANCE
protools-services.com	2011-04-08	VALLOUREC DRILLING PRODUCTS FRANCE
protools-solution.com	2011-04-08	VALLOUREC DRILLING PRODUCTS FRANCE
protools-solutions.com	2011-04-08	VALLOUREC DRILLING PRODUCTS FRANCE
shaledrillpipe.com	2012-10-08	VALLOUREC DRILLING PRODUCTS FRANCE

APPENDIX D - LICENSED-BACK ITEMS

[See attached.]

Appendix D – Licensed Back Items

Patent Ref	Invention Short Title	Country	Status	Application Number	Filed Date	Publication Number	Publication Date	Patent No.	Grant Date	Owner	Registered name of owner
BR7433-AE-PCT	Composant raideur radiale/raideur axiale	United Arab Emirates	Allowed	355/2011	2009-10-05					VOGF	VMOGF
BR7433-AR-BN	Composant raideur radiale/raideur axiale	Argentina	Granted	P090103843	2009-10-06	073776	2010-12-01	73776	2015-05-21	VOGF	VOGF
BR7433-AT-ECT	Composant raideur radiale/raideur axiale	Austria	Granted	09783719.9	2009-10-05	2344802	2011-07-20	2344802	2013-07-31	VOGF	VOGF
BR7433-BR-PCT	Composant raideur radiale/raideur axiale	Brazil	Published	PI0920245-5	2009-10-05	PI0920245	2015-12-29			VOGF	VOGF
BR7433-CA-PCT	Composant raideur radiale/raideur axiale	Canada	Granted	2738094	2009-10-05	2738094	2010-04-22	2738094	2016-10-04	VOGF	VOGF
BR7433-CN-PCT	Composant raideur radiale/raideur axiale	China	Granted	2009801390647	2009-10-05	102171502	2011-08-31	102171502	2013-08-07	VOGF	VOGF
BR7433-CZ-ECT	Composant raideur radiale/raideur axiale	Czech Republic	Granted	09783719.9	2009-10-05	2344802	2011-07-20	2344802	2013-07-31	VOGF	VOGF
BR7433-DE-ECT	Composant raideur radiale/raideur axiale	Germany (Federal Republic of)	Granted	09783719.9	2009-10-05	2344802	2011-07-20	2344802	2013-07-31	VOGF	VOGF
BR7433-EP-ECT	Composant raideur radiale/raideur axiale	European Patent	Granted	09783719.9	2009-10-05	2344802	2011-07-20	2344802	2013-07-31	VOGF	VOGF
BR7433-FR-BN	Composant raideur radiale/raideur axiale	France	Granted	08/05693	2008-10-15	2937077	2010-04-16	2937077	2010-10-22	VOGF	VOGF
BR7433-FR-ECT	Composant raideur radiale/raideur axiale	France	Granted	09783719.9	2009-10-05	2344802	2011-07-20	2344802	2013-07-31	VOGF	VOGF
BR7433-GB-ECT	Composant raideur radiale/raideur axiale	United Kingdom	Granted	09783719.9	2009-10-05	2344802	2011-07-20	2344802	2013-07-31	VOGF	VMOGF
BR7433-ID-PCT	Composant raideur radiale/raideur axiale	Indonesia	Granted	W00-2011-01331	2009-10-05	W00-2011-01331	2011-07-21	P00004573 2	2017-05-09	VOGF	VMOGF
BR7433-IN-PCT	Composant raideur radiale/raideur axiale	India	Published	2517/CHENP/2011	2009-10-05	2517/CHENP/2011	2012-08-17			VOGF	VMOGF

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Patent Ref	Invention Short Title	Country	Status	Application Number	Filed Date	Publication Number	Publication Date	Patent No.	Grant Date	Owner	Registered name of owner
BR7433-IT-ECT	Composant raideur radiale/raideur axiale	Italy	Granted	09783719.9	2009-10-05	2344802	2011-07-20	602013002195074	2013-07-31	VOGF	VOGF
BR7433-JP-PCT	Composant raideur radiale/raideur axiale	Japan	Granted	2011-531438	2009-10-05	2012-505981	2012-03-08	5613675	2014-09-12	VOGF	VOGF
BR7433-MX-PCT	Composant raideur radiale/raideur axiale	Mexico	Granted	2011/003431	2009-10-05	2011/003431	2011-04-21	315775	2013-11-27	VOGF	VOGF
BR7433-PL-ECT	Composant raideur radiale/raideur axiale	Poland	Granted	09783719.9	2009-10-05	2344802	2011-07-20	2344802	2013-07-31	VOGF	VOGF
BR7433-RO-ECT	Composant raideur radiale/raideur axiale	Romania	Granted	09783719.9	2009-10-05	2344802	2011-07-20	2344802	2013-07-31	VOGF	VOGF
BR7433-RU-PCT	Composant raideur radiale/raideur axiale	Russian Federation	Granted	2011/119460	2009-10-05			2473001	2013-01-20	VOGF	VMOGF
BR7433-US-PCT	Composant raideur radiale/raideur axiale	United States of America	Granted	13/121953	2009-10-05	2011/0174482	2011-07-21	9,470,344	2016-10-18	VOGF	VOGF
BR9458-AO-PCT	VX with metal seal	Angola	Application	3435	2015-10-14					VOGF	VOGF
BR9458-AR-BN	VX with metal seal	Argentina	Published	P150103337	2015-10-15	102282	2017-02-15			VOGF	VOGF
BR9458-AU-PCT	VX with metal seal	Australia	Published	2015332753	2015-10-14	2015332753	2017-03-30			VOGF	VOGF
BR9458-BN-PCT	VX with metal seal	Brunei	Application	BN/N/2017/0051	2015-10-14					VOGF	VOGF
BR9458-BR-PCT	VX with metal seal	Brazil	Published	112017007196-7	2015-10-14	112017007196	2017-04-18			VOGF	VOGF
BR9458-CA-PCT	VX with metal seal	Canada	Published	2,962,539	2015-10-14	2,962,539	2016-04-21			VOGF	VOGF
BR9458-CN-PCT	VX with metal seal	China	Published	201580055764.3	2015-10-14	107075925	2017-08-18			VOGF	VOGF
BR9458-DZ-PCT	VX with metal seal	Algeria	Application	1/0186	2015-10-14					VOGF	VOGF
BR9458-EA-EAT	VX with metal seal	Eurasian Patent Convention	Published	201790605	2015-10-14	201790605	2017-07-31			VOGF	VOGF
BR9458-EG-PCT	VX with metal seal	Egypt	Application	2017/635	2015-10-14					VOGF	VOGF

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Patent Ref	Invention Short Title	Country	Status	Application Number	Filed Date	Publication Number	Publication Date	Patent No.	Grant Date	Owner	Registered name of owner
BR9458-EP-ECT	VX with metal seal	European Patent	Published	15778986.8	2015-10-14	3207208	2017-08-23			VOGF	VOGF
BR9458-FR-BN	VX with metal seal	France	Granted	14/59934	2014-10-16	3027338	2016-04-22	3027338	2016-12-02	VOGF	VOGF
BR9458-GCC-BN	VX with metal seal	Gulf Cooperation Council	Application	2015/30201	2015-10-14					VOGF	VOGF
BR9458-ID-PCT	VX with metal seal	Indonesia	Application	PID201702373	2015-10-14					VOGF	VOGF
BR9458-IN-PCT	VX with metal seal	India	Published	201717009077	2015-10-14	201717009077	2017-08-11			VOGF	VOGF
BR9458-IQ-BN	VX with metal seal	Iraq	Granted	329/2015	2015-10-08			4557	2016-08-10	VOGF	VOGF
BR9458-JP-PCT	VX with metal seal	Japan	Published	2017-520345	2015-10-14	2017-532512	2017-11-02			VOGF	VOGF
BR9458-MX-PCT	VX with metal seal	Mexico	Published	MX/A/2017/004917	2015-10-14	MX/A/2017/004917	2017-07-19			VOGF	VOGF
BR9458-MY-PCT	VX with metal seal	Malaysia	Application	PI2017700867	2015-10-14					VOGF	VOGF
BR9458-NG-PCT	VX with metal seal	Nigeria	Allowed	P/P/2017/174	2015-10-14					VOGF	VOGF
BR9458-OA-PCT	VX with metal seal	O.A.P.I.	Application		2015-10-14					VOGF	VOGF
BR9458-TH-PCT	VX with metal seal	Thailand	Application	1701002029	2015-10-14					VOGF	VOGF
BR9458-UA-PCT	VX with metal seal	Ukraine	Application	a201703546	2015-10-14					VOGF	VOGF
BR9458-US-PCT	VX with metal seal	United States of America	Published	15/515,709	2015-10-14	2017/0298698	2017-10-19			VOGF	VOGF
BR9458-VN-PCT	VX with metal seal	Vietnam	Published	1-2017-01381	2015-10-14	52842	2017-08-26			VOGF	VOGF