

## PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

| SUBMISSION TYPE:   | NEW ASSIGNMENT               |               |                              |                     |                            |                     |            |                |       |              |       |
|--|------------------------------|---------------|------------------------------|---------------------|----------------------------|---------------------|------------|----------------|-------|--------------|-------|
| NATURE OF CONVEYANCE:  | ASSIGNMENT                   |               |                              |                     |                            |                     |            |                |       |              |       |
| CONVEYING PARTY DATA   |                              |               |                              |                     |                            |                     |            |                |       |              |       |
| <table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Jeffery CLAUSEN</td> <td>08/31/2011</td> </tr> <tr> <td>Jonathan Ryan PRILL</td> <td>08/31/2011</td> </tr> </tbody> </table>   |                              | Name          | Execution Date               | Jeffery CLAUSEN     | 08/31/2011                 | Jonathan Ryan PRILL | 08/31/2011 |                |       |              |       |
| Name   | Execution Date               |               |                              |                     |                            |                     |            |                |       |              |       |
| Jeffery CLAUSEN  | 08/31/2011                   |               |                              |                     |                            |                     |            |                |       |              |       |
| Jonathan Ryan PRILL  | 08/31/2011                   |               |                              |                     |                            |                     |            |                |       |              |       |
| RECEIVING PARTY DATA   |                              |               |                              |                     |                            |                     |            |                |       |              |       |
| <table border="1"> <tr> <td>Name:</td> <td>NATIONAL OILWELL VARCO, L.P.</td> </tr> <tr> <td>Street Address:</td> <td>7909 Parkwood Circle Drive</td> </tr> <tr> <td>City:</td> <td>Houston</td> </tr> <tr> <td>State/Country:</td> <td>TEXAS</td> </tr> <tr> <td>Postal Code:</td> <td>77036</td> </tr> </table>                             |                              | Name:         | NATIONAL OILWELL VARCO, L.P. | Street Address:     | 7909 Parkwood Circle Drive | City:               | Houston    | State/Country: | TEXAS | Postal Code: | 77036 |
| Name:  | NATIONAL OILWELL VARCO, L.P. |               |                              |                     |                            |                     |            |                |       |              |       |
| Street Address:  | 7909 Parkwood Circle Drive   |               |                              |                     |                            |                     |            |                |       |              |       |
| City:  | Houston                      |               |                              |                     |                            |                     |            |                |       |              |       |
| State/Country:   | TEXAS                        |               |                              |                     |                            |                     |            |                |       |              |       |
| Postal Code:   | 77036                        |               |                              |                     |                            |                     |            |                |       |              |       |
| PROPERTY NUMBERS Total: 1  |                              |               |                              |                     |                            |                     |            |                |       |              |       |
| <table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13229643</td> </tr> </tbody> </table>  |                              | Property Type | Number                       | Application Number: | 13229643                   |                     |            |                |       |              |       |
| Property Type  | Number                       |               |                              |                     |                            |                     |            |                |       |              |       |
| Application Number:  | 13229643                     |               |                              |                     |                            |                     |            |                |       |              |       |
| CORRESPONDENCE DATA  |                              |               |                              |                     |                            |                     |            |                |       |              |       |
| <p>Fax Number: (780)423-2870</p> <p>Email: dtomkins@parlee.com</p> <p><i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i></p> <p>Correspondent Name: Donald V. Tomkins</p> <p>Address Line 1: 1500, 10180 - 101 Street</p> <p>Address Line 4: Edmonton, CANADA T5J 4K1</p> |                              |               |                              |                     |                            |                     |            |                |       |              |       |
| ATTORNEY DOCKET NUMBER:  | 70786-8                      |               |                              |                     |                            |                     |            |                |       |              |       |
| NAME OF SUBMITTER:   | Donald V. Tomkins            |               |                              |                     |                            |                     |            |                |       |              |       |
| <p>Total Attachments: 4</p> <p>source=Executed Assignment to NOV (E6110459)#page1.tif</p> <p>source=Executed Assignment to NOV (E6110459)#page2.tif</p> <p>source=Executed Assignment to NOV (E6110459)#page3.tif</p> <p>source=Executed Assignment to NOV (E6110459)#page4.tif</p>  |                              |               |                              |                     |                            |                     |            |                |       |              |       |

PATENT

## ASSIGNMENT

1. NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, BE IT KNOWN that for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged:

**CLAUSEN, Jeffery**  
11930 Golden Lodge Lane  
Houston, Texas, U.S.A.  
77066

and

**PRILL, Jonathan Ryan**  
7603 - 16 Avenue SW  
Edmonton, Alberta, CANADA  
T6X 2M3

(the "Assignors")

hereby sell, assign, and set over absolutely to:

**NATIONAL OILWELL VARCO, L.P.**  
7909 Parkwood Circle Drive  
Houston, Texas, U.S.A.  
77036

(the "Assignee")

all rights, title, and interest of any nature whatsoever which the Assignors may have in respect of the invention titled:

**DOWNHOLE ROTARY DRILLING APPARATUS WITH  
FORMATION-INTERFACING MEMBERS AND CONTROL SYSTEM**  
(the "Invention")

as described in U.S. Non-Provisional Patent Application No. 13/229,643 filed with the U.S. Patent and Trademark Office on September 9, 2011 and in International Application No. PCT/CA2011/001006 filed with the Canadian Intellectual Property Office (as PCT Receiving Office) on September 9, 2011, both said U.S. and international applications claiming priority from U.S. Provisional Patent Application No. 61/381,243 filed on September 9, 2010 and U.S. Provisional Patent Application No. 61/410,099 filed on November 4, 2010 (each said provisional application being titled, "ROTARY STEERABLE PUSH-THE-BIT DRILLING SYSTEM").

2. Such rights, title, and interest shall henceforth be held and enjoyed by the Assignee or its successors, assigns, or legal representatives for the full terms of any and all Letters Patent which may be granted therefor by any national or regional patent granting authority, as fully and entirely as such right, title, and interest would have been held and enjoyed by the Assignors had this Assignment had not been made.

3. The Assignors hereby assign to the Assignee any priority rights arising in connection with the Invention by virtue of said patent applications or any other patent applications which may be filed in respect of the Invention or any improvement thereto or any part thereof, and the Assignors hereby authorize the Assignee to make application for and to receive Letters Patent for the Invention in the name of the Assignee in such additional country or countries as the Assignee may elect.

4. The Assignors hereby authorize the Assignee, or an agent of the Assignee, to insert relevant patent application information into this Assignment, subsequent to the Assignors' execution hereof.

5. The Assignors hereby covenant and agree that they will:

- (a) execute or procure any further necessary assurance of title to the Invention, and to any corresponding patent applications or Letters Patent;
- (b) at any time, upon the request of the Assignee, execute and deliver any and all papers that may be necessary or desirable to perfect the Assignee's title to the Invention, and to any corresponding patent applications or Letters Patent;
- (c) sign all documents legally or otherwise required in connection with any additional, divisional, continuing, or reissue applications for patents in respect of the Invention or any improvement thereto or any part thereof;
- (d) make all rightful oaths and declarations required in connection with any patent applications relating to the Invention; and
- (e) generally do all lawful acts to aid the Assignee and its successors, assigns, or legal representatives, to obtain and enforce patent protection in respect of the Invention in any or all countries;

and that they will do all of the foregoing without further compensation, but at the sole expense of the Assignee or its successors, assigns, or other legal representatives.

6. The Assignors hereby authorize and request that any and all Letters Patent for the Invention issuing or resulting from any corresponding patent application, or from any division, continuation, or reissue thereof, be issued to NATIONAL OILWELL VARCO, L.P. as sole Assignee.

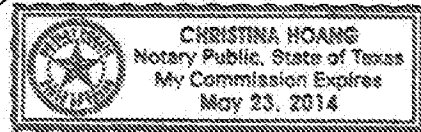
IN WITNESS WHEREOF I have executed this Assignment at HARRIS COUNTY, TEXAS  
this 31<sup>st</sup> day of August, 2011.

SIGNED in the presence of:

Christina Hoang  
(Witness Signature)

CHRISTINA HOANG  
(Witness printed name and address)  
14210 PAWNEE BEND DR.  
CYPRESS, TX 77429

Jeffrey R. Clausen  
JEFFREY CLAUSEN



IN WITNESS WHEREOF I have executed this Assignment at \_\_\_\_\_,  
this \_\_\_\_\_ day of \_\_\_\_\_, 2011.

SIGNED in the presence of:

\_\_\_\_\_  
(Witness Signature)

\_\_\_\_\_  
(Witness printed name and address)

\_\_\_\_\_  
Jonathan Ryan PRILL

6. The Assignors hereby authorize and request that any and all Letters Patent for the Invention issuing or resulting from any corresponding patent application, or from any division, continuation, or reissue thereof, be issued to NATIONAL OILWELL VARCO, L.P. as sole Assignee.

IN WITNESS WHEREOF I have executed this Assignment at \_\_\_\_\_,  
this \_\_\_\_\_ day of \_\_\_\_\_, 2011.

SIGNED in the presence of:

\_\_\_\_\_  
(Witness Signature)

\_\_\_\_\_  
Jeffery CLAUSEN

\_\_\_\_\_  
(Witness printed name and address)

IN WITNESS WHEREOF I have executed this Assignment at Edmonton,  
this 31 day of August, 2011.

SIGNED in the presence of:

\_\_\_\_\_  
(Witness Signature)

\_\_\_\_\_  
Jonathan Ryan PRILL

Norman Dooz

\_\_\_\_\_  
(Witness printed name and address)

2650 99 St, Edmonton, AB, T6C 9V2  
3105 - 41A Ave, Edmonton, AB, T6T 1J4