

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4584298

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
JOHN KEITH SAVAGE	04/15/2015
STEVEN GRAHAM BELL	04/15/2015
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	HALLIBURTON ENERGY SERVICES, INC.
<b>Street Address:</b>	10200 BELLAIRE BOULEVARD
<b>City:</b>	HOUSTON
<b>State/Country:</b>	TEXAS
<b>Postal Code:</b>	77072
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15556562
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(780)423-2870
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
<b>Phone:</b>	780-423-8171
<b>Email:</b>	Tkuharchuk@parlee.com
<b>Correspondent Name:</b>	PARLEE MCLAWS LLP
<b>Address Line 1:</b>	1700 ENBRIDGE CENTRE
<b>Address Line 2:</b>	10175 - 101 STREET NW
<b>Address Line 4:</b>	EDMONTON, CANADA T5J 0H3
<b>ATTORNEY DOCKET NUMBER:</b>	16463-428
<b>NAME OF SUBMITTER:</b>	TERRENCE N. KUHARCHUK
<b>SIGNATURE:</b>	/Terrence N. Kuharchuk/
<b>DATE SIGNED:</b>	09/07/2017
<b>Total Attachments: 2</b>	
source=Assignment#page1.tif	
source=Assignment#page2.tif	

## ASSIGNMENT OF INVENTION

We, the undersigned:

**John Keith SAVAGE**  
712 - 173 Street, S.W.  
Edmonton, Alberta  
T6W 0M4  
Canada

**Steven Graham BELL**  
195 Ackerman Crescent  
Red Deer, Alberta  
T4R 3B8  
Canada

(hereinafter referred to as the "Inventors") have made an invention, while in the employ either as an employee or a consultant of Halliburton Energy Services, Inc. (hereinafter referred to as the "Assignee"), entitled:

### **DIRECTIONAL DRILLING APPARATUS WITH AN ALIGNED HOUSING BORE**

as set forth and described in an application for Letters Patent pursuant to the Patent Cooperation Treaty, filed concurrently herewith with the Canadian Intellectual Property Office as Receiving Office or as PCT International Application No. PCT/CA2015/000249 filed on April 16, 2015 [Attorney's File No. 16463-355; the attorney is hereby authorized to fill in the application number and filing date after assignment by the Patent Cooperation Treaty Office] (hereinafter referred to as the "Invention").

**FOR GOOD AND VALUABLE CONSIDERATION**, the receipt and sufficiency of which are hereby acknowledged, we do hereby irrevocably assign, grant, sell, convey, transfer and make over unto the Assignee as follows:

**HALLIBURTON ENERGY SERVICES, INC.**  
10200 Bellaire Boulevard  
Houston, Texas  
77072  
United States of America

Also of:  
1406 - 5 Street  
Nisku, Alberta  
T9E 7R6  
Canada


our entire right, title and interest in and to the Invention, the PCT International Application as noted above, any other application(s) for patent for the Invention filed or to be filed pursuant to the Patent Cooperation Treaty, or in the United States of America, Canada and in any further countries worldwide arising from or related to the PCT International Application, including any and all divisional and continuation applications thereof, and any and all patents issued and which may be issued or re-issued for the Invention in the United States of America, Canada and in any further countries worldwide, together with the right to claim in respect of the United States of America, Canada and any further countries worldwide, the priority date of the PCT International Application or any further patent applications filed worldwide.

This Assignment shall enure to the benefit of and be binding upon the Inventors and Halliburton Energy Services, Inc. and our respective heirs, executors, administrators and assigns.

IN WITNESS WHEREOF I have caused this Assignment to be executed at  
Nisku, Alberta, Canada this 15<sup>th</sup> day of April, 2015.

SIGNED, SEALED AND DELIVERED

in the presence of:

  
(Witness) **NESTOR GIL** **HBAG861** John Keith Savage  
11573 15 AVE NW, EDM A6 T6J 7C3

IN WITNESS WHEREOF I have caused this Assignment to be executed at  
Nisku, Alberta, Canada this 15<sup>th</sup> day of April, 2015.

SIGNED, SEALED AND DELIVERED

in the presence of:

  
(Witness) **NESTOR GIL** **HBAG861** Steven Graham Bell  
11573 15 AVE NW, EDM A6 T6J 7C3