

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5378974

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
TROND HAGEN	01/02/2018
CHRISTOPHER MILTON	01/02/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	HALLIBURTON ENERGY SERVICES, INC.
<b>Street Address:</b>	3000 N. SAM HOUSTON PARKWAY E.
<b>City:</b>	HOUSTON
<b>State/Country:</b>	TEXAS
<b>Postal Code:</b>	77032-3219
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16324250
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(858)350-6111
<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>	404-815-6500
<b>Email:</b>	tlwhite@kilpatricktownsend.com
<b>Correspondent Name:</b>	KILPATRICK TOWNSEND & STOCKTON LLP
<b>Address Line 1:</b>	1100 PEACHTREE STREET NE
<b>Address Line 2:</b>	SUITE 2800
<b>Address Line 4:</b>	ATLANTA, GEORGIA 30309
<b>ATTORNEY DOCKET NUMBER:</b>	061429-1124802
<b>NAME OF SUBMITTER:</b>	TAMBRA WHITE
<b>SIGNATURE:</b>	/Tambra White/
<b>DATE SIGNED:</b>	02/15/2019
<b>Total Attachments: 3</b>	
source=Assignment#page1.tif	
source=Assignment#page2.tif	
source=Assignment#page3.tif	

**ASSIGNMENT OF INTELLECTUAL PROPERTY RIGHTS  
IN PATENT APPLICATION**

Whereas we, the undersigned inventors, have invented certain new and useful innovations as set forth in the patent application entitled:

**ALTERNATING POLARITY OF CASING-SIDE ANTENNAS IN A WELLBORE**

the specification of which was filed with the U.S. Receiving Office of the PCT on December 26, 2017, and assigned application no. PCT/US2017/068420.

For one dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which we acknowledge, we:

1. Agree to assign, transfer, convey, and sell, hereby assign, transfer, convey, and sell and have assigned, transferred, conveyed, and sold to Halliburton Energy Services, Inc., a corporation of the State of Texas having a principal place of business at 3000 N. Sam Houston Parkway E., Houston, Texas 77032-3219 ("Assignee"), the entire right, title, and interest in and to:
  - (a) all intellectual property (including, without limitation, any innovation, information, invention, discovery, product, process, work or design) disclosed, embodied, shown, or claimed in the above-referenced patent application, implicitly or explicitly;
  - (b) the above-referenced patent application, the right to claim priority to the above-referenced patent application, all applications based in whole or in part upon the above-referenced patent application, including, without limitation, all applications that are a provisional, non-provisional, design, divisional, continuation, continuation-in-part, registration, utility model, industrial design, reissue, renewal, substitute, extension, reexamination, post-grant review, inter partes review, supplemental examination or non-U.S. patent application or application for other rights based in whole or in part on the above-referenced patent application;
  - (c) all patents (including, without limitation, all U.S. and non-U.S. patents, registrations, utility models, industrial designs, design patents, counterparts, continuations, continuations-in-part, divisionals, reissues, renewals, substitutes, extensions, reexaminations, post-grant reviews, inter partes reviews and supplemental examinations) that are granted or issued upon, or that claim priority to, any and all applications described in (b) of this paragraph or that disclose or claim intellectual property described in (a) of this paragraph, in whole or in part; and
  - (d) all claims for damages by reason of past infringement of any rights under the applications or patents described in (a), (b) or (c) of this paragraph

(including provisional rights to reasonable royalties pursuant to 35 U.S.C. §154(d)) and the right to sue for and collect such damages and royalties for Assignee's own use.

2. Authorize and request the U.S. Patent and Trademark Office or any other U.S. or non-U.S. agency to issue to the Assignee any and all patent(s), or other rights or documents, resulting from the intellectual property, patent application(s) and patents described in paragraph 1 of this Assignment.
3. Agree to sign all papers and documents, including without limitation, applications, declarations, oaths and petitions, and, at the Assignee's expense, perform any other acts that are necessary in connection with prosecution of patent application(s) or intellectual property described in paragraph 1 of this Assignment and the enforcement of patent(s) or other rights resulting from such patent application(s) or intellectual property.
4. Agree that the terms, covenants, and conditions of this Assignment shall inure to the benefit of the Assignee, its successors, assigns and other legal representative, and shall be binding upon us, as well as our heirs, legal representatives, and assigns.
5. Promise and affirm that we have not entered, and will not enter, into any assignment, contract, or understanding that conflicts with this Assignment.

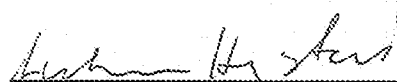
Dated: Jan 2, 2018

  
Trond Hagen

Witness Signature:

Witness Printed Name:

Address:

  
Audun Hystad  
Strandgata 25  
3263 Larvik  
Norway

Dated: Jan 2, 2018

Christopher Milton  
Christopher Milton

Witness Signature:

Audun Hystad

Witness Printed Name:

Audun Hystad

Address:

Strandgata 25

3263 Larvik

Norway