506048844 05/07/2020

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JOHN KENNETH SNYDER	05/05/2020
GRAEME O'BRIEN PHILLIP SALMON	05/05/2020
JEREMY ALEXANDER GREENWOOD	04/20/2020

RECEIVING PARTY DATA

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PROPERTY NUMBERS Total: 2

Property Type	Number
Application Number:	16853998
PCT Number:	US2029081

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	061429-1178187 + 1178183
NAME OF SUBMITTER:	TAMBRA WHITE
SIGNATURE:	/Tambra White/
DATE SIGNED:	05/07/2020

Total Attachments: 4

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PATENT 506048844 REEL: 052597 FRAME: 0845

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> PATENT REEL: 052597 FRAME: 0846

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:

DETERMINING APPROXIMATE WELLBORE CURVATURE

the specification of which was filed with the U.S. Patent & Trademark Office on April 21, 2020, and assigned application no. 16/853,998.

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 Delaware 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

PATENT REEL: 052597 FRAME: 0847 Assignment of Intellectual Property Rights in Application
U.S. Patent Application Entitled: Determining Approximate Wellbore Curvature

Attorney Docket: 061429-1178187 (2019-IPM-103580 U1 US)

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(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.
- 6. Authorize Kilpatrick Townsend & Stockton to insert above the application number and filing date of the above-described patent application when known.

Dated:	5/5/2020	
		John Kenneth Snyder

PATENT REEL: 052597 FRAME: 0848 Assignment of Intellectual Property Rights in Application

U.S. Patent Application Entitled: Determining Approximate Wellbore Curvature Attorney Docket: 061429-1178187 (2019-IPM-103580 U1 US)

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Dated: <u>5/5/2020</u>

Graeme O'Brien Phillip Salmon

PATENT

REEL: 052597 FRAME: 0849

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Dated: 4/20/2020

Jeremy Alexander Greenwood

PATENT REEL: 052597 FRAME: 0850

RECORDED: 05/07/2020