

## PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

EPAS ID: PAT5975966

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
PHILIP D. NGUYEN	01/02/2020
RONALD GLEN DUSTERHOFT	01/02/2020
ANTONIO RECIO III	01/03/2020
GOLCHEHREH SALAMAT	01/03/2020
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<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>	16641016
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(404)541-3116
<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>	andavis@kilpatricktownsend.com
<b>Correspondent Name:</b>	KILPATRICK TOWNSEND & STOCKTON LLP
<b>Address Line 1:</b>	1100 PEACHTREE STREET
<b>Address Line 2:</b>	SUITE 2800
<b>Address Line 4:</b>	ATLANTA, GEORGIA 30309
<b>ATTORNEY DOCKET NUMBER:</b>	061429-1161831
<b>NAME OF SUBMITTER:</b>	ANGIE DAVIS
<b>SIGNATURE:</b>	/Angie Davis/
<b>DATE SIGNED:</b>	02/21/2020
<b>Total Attachments: 5</b>	
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**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:

**ENHANCING TREATMENT FLUID PLACEMENT IN A  
SUBTERRANEAN FORMATION**

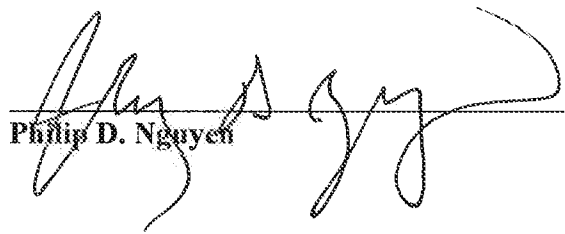
the specification of which was filed with the U.S. Receiving Office of the PCT on December 31, 2019, and assigned application no. PCT/US2019/069039.

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 (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: 1/2/2020

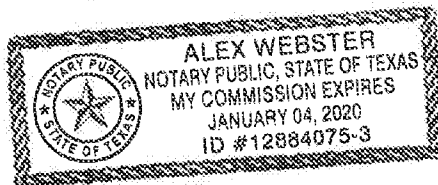
  
Philip D. Nguyen

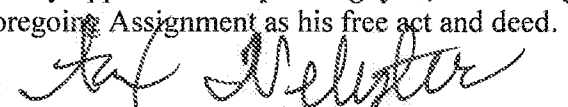
STATE OF Texas

COUNTY OF Harris

2nd Before me, a Notary Public in and for the State of Texas, on this 2nd day of January, 2020 personally appeared **Philip D. Nguyen**, who being duly sworn, signed and acknowledged the foregoing Assignment as his free act and deed.

(Seal)



  
NOTARY PUBLIC  
My Commission Expires:

*Assignment of Intellectual Property Rights in Application*

International Patent Application Entitled: *Enhancing Treatment Fluid Placement in a Subterranean Formation*

Attorney Docket: 061429-1161835 (HES Ref: 2019-IPM-103150 U1 PCT)

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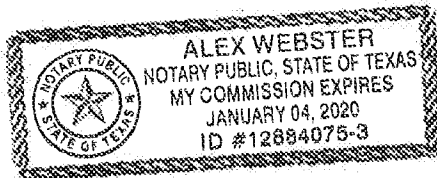
Dated: 01/02/2020

  
\_\_\_\_\_  
Ronald Glen Dusterhoft

STATE OF Texas  
COUNTY OF Harris

2nd Before me, a Notary Public in and for the State of Texas, on this  
day of January 2020, personally appeared **Ronald Glen Dusterhoft**, who  
being duly sworn, signed and acknowledged the foregoing Assignment as his free act and  
deed.

(Seal)



  
\_\_\_\_\_  
NOTARY PUBLIC  
My Commission Expires:

*Assignment of Intellectual Property Rights in Application*

International Patent Application Entitled: *Enhancing Treatment Fluid Placement in a Subterranean Formation*

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Dated: 1-3-2020

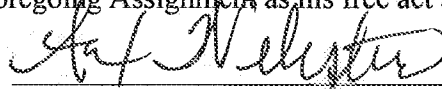


Antonio Recio III

STATE OF TEXAS

COUNTY OF HARRIS

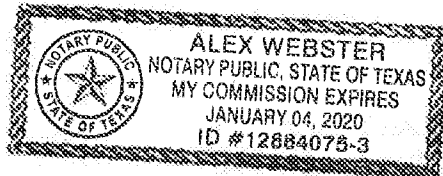
Before me, a Notary Public in and for the State of Texas, on this 3rd day of January, 2020, personally appeared Antonio Recio III, who being duly sworn, signed and acknowledged the foregoing Assignment as his free act and deed.



NOTARY PUBLIC

My Commission Expires:

(Seal)



Dated:

1-3-2020

Golchehreh Salamat

Golchehreh Salamat

STATE OF

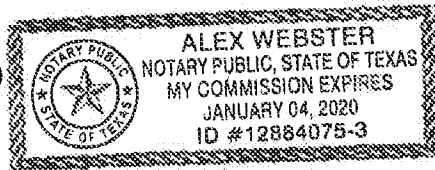
TEXAS

COUNTY OF

HARRIS

Before me, a Notary Public in and for the State of Texas, on this 3rd day of January, 2020, personally appeared Golchehreh Salamat, who being duly sworn, signed and acknowledged the foregoing Assignment as his free act and deed.

(Seal)



Alex Webster

NOTARY PUBLIC

My Commission Expires: