

## 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>Hsu-Hsiang Wu</td><td>01/03/2013</td></tr><tr><td>Burkay Donderici</td><td>01/03/2013</td></tr></tbody></table>	Name	Execution Date	Hsu-Hsiang Wu	01/03/2013	Burkay Donderici	01/03/2013	
Name	Execution Date						
Hsu-Hsiang Wu	01/03/2013						
Burkay Donderici	01/03/2013						
RECEIVING PARTY DATA							
Name:	Halliburton Energy Services, Inc.						
Street Address:	10200 Bellaire Blvd						
City:	Houston						
State/Country:	TEXAS						
Postal Code:	77072						
PROPERTY NUMBERS Total: 1							
<table border="1"><thead><tr><th>Property Type</th><th>Number</th></tr></thead><tbody><tr><td>PCT Number:</td><td>US2012070357</td></tr></tbody></table>	Property Type	Number	PCT Number:	US2012070357			
Property Type	Number						
PCT Number:	US2012070357						
CORRESPONDENCE DATA							
Fax Number:	6057911857						
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>							
Phone:	6123736900						
Email:	jolinares@slwip-rc.com						
Correspondent Name:	Schwegman Lundberg & Woessner, P.A.						
Address Line 1:	PO Box 2938						
Address Line 4:	Minneapolis, MINNESOTA 55402						
ATTORNEY DOCKET NUMBER:	1880.438WO1						
NAME OF SUBMITTER:	Janine Olinares						
Total Attachments: 5 source=1880_438WO1 Assignment#page1.tif source=1880_438WO1 Assignment#page2.tif source=1880_438WO1 Assignment#page3.tif source=1880_438WO1 Assignment#page4.tif source=1880_438WO1 Assignment#page5.tif							

CH \$40.00 US2012070357

RECORDATION FORM COVER SHEET  
PATENTS ONLY

Atty Ref/Docket No.: 1880.438WO1

Patent and Trademark Office

To the Director of the U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Hsu-Hsiang Wu, Burkay Donderici

Additional name(s) of conveying party(ies) attached?

[ ] Yes [X] No

3. Nature of conveyance:

[X] Assignment

[ ] Merger

[ ] Security Agreement [ ] Change of Name

[ ] Other

Execution Date: January 3, 2013, January 3, 2013

2. Name and address of receiving party(ies):

Name: Halliburton Energy Services, Inc.

Street Address: 10200 Bellaire Blvd

City: Houston State: TX Zip: 77072

Country: United States of America

Additional name(s) & address(es) attached? [ ] Yes [X] No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)

B. Patent No.(s)

Serial No. PCT/US2012/070357, filed December 18, 2012

Additional numbers attached? [ ] Yes [X] No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: David R. Cochran

Address:

Schwegman, Lundberg & Woessner, P.A.

P.O. Box 2938

Minneapolis, MN 55402-0938

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41): \$ 40.00

[ ] Enclosed

[X] Authorized to be charged to deposit account  
19-0743

8. Please charge any additional fees or credit any over payments to our Deposit Account No.: 19-0743

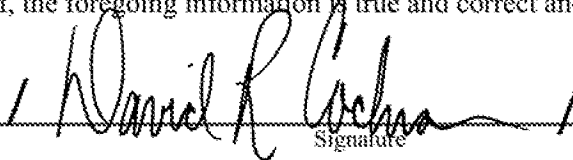
DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

David R. Cochran/Reg. No. 46,632

Name of Person Signing



Signature

25 January 2013

Date

Total number of pages including cover sheet: 5

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks

Mail Stop Assignment Recordation Services

P.O. Box 1450

Alexandria, VA 22313-1450

PATENT  
REEL: 029696 FRAME: 0002

### ASSIGNMENT

WHEREAS, Hsu-Hsiang Wu and Burkay Donderici (hereinafter the "Undersigned") have made one or more inventions and other subject matter (hereinafter collectively referred to as the "Invention") which are described in a patent application filed on December 18, 2012, which application was assigned PCT patent application serial number PCT/US2012/070357, and which is titled METHODS AND APPARATUS TO ACQUIRE COMPENSATED SIGNALS FOR DETERMINATION OF FORMATION PARAMETERS.

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency, and adequacy of which are hereby acknowledged by the Undersigned, the Undersigned do hereby irrevocably and unconditionally:

CONVEY, ASSIGN, AND TRANSFER to Halliburton Energy Services, Inc. (the "Assignee"), a corporation of the State of Delaware, having a place of business at 10200 Bellaire Blvd, Houston, TX 77072, the Undersigned's entire right, title, and interest for the United States and all foreign countries and jurisdictions in and to:

the Invention which is disclosed in the above-identified application or applications;

such application or applications, and all divisional, continuing (including continuation-in-part), substitute, renewal, reissue, and all other applications for a patent or patents which have been or shall be filed in the United States (including all provisional and non-provisional applications), and in all foreign countries and jurisdictions based in whole or in part on any of such Invention (including any application for a utility model or an innovation patent application);

all original and reissued patents which have been or shall be issued in the United States and all foreign countries and jurisdictions based in whole or in part on any of such Invention;

including the right to claim priority to the above-identified patent application or applications in relation to subject matter based in whole or in part on the above-identified patent application or applications and any of the foregoing including the right to file foreign applications under the provisions of any convention or treaty;

and including the right to all causes of action, remedies, and other enforcement rights related to the above-identified application or applications, including without limitation the right to sue for past, present, or future infringement, misappropriation, or violation of any and all rights related to the above-identified patent application or applications and any of the foregoing, including the right to obtain and collect damages for past, present, or future infringement;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such Invention to the Assignee;

AUTHORIZE AND REQUEST that any attorney associated with U.S. Patent and Trademark Office (USPTO) Customer No. 21186 may (directly or through his/her designee) delete, insert, or alter any

information related to the above-identified patent application or applications or any of the foregoing, after execution of this Assignment;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or shall be made to others by the Undersigned, and that the full right to convey the same as herein expressed is possessed by the Undersigned;

COVENANT, that when requested and without compensation, but at the expense of the Assignee, in order to carry out in good faith the intent and purpose of this Assignment, the Undersigned shall (1) execute all provisional, non-provisional, divisional, continuing (including continuation-in-part), substitute, renewal, reissue, and all other patent applications for the Invention; (2) execute all rightful oaths, declarations, assignments, powers of attorney and other papers for the Invention; (3) communicate to the Assignee all facts known to the Undersigned relating to the Invention and the history thereof; (4) cooperate with the Assignee in any interference, reexamination, reissue, opposition, dispute, or litigation involving any of the applications or patents for the Invention; and (5) take such further actions as the Assignee shall reasonably consider necessary or desirable for vesting title to such Invention in the Assignee, or for securing, maintaining and enforcing proper patent protection for the Invention;

COVENANT, that should any provision of this agreement be held unenforceable by an authority of competent jurisdiction, such a ruling shall not affect the validity and enforceability of the remaining provisions. To the extent that any such provision is found to be unenforceable, the Undersigned, when requested and without compensation shall act in good faith to substitute for such provision a new provision with content and purpose as close as possible to the provision deemed unenforceable.

THIS AGREEMENT IS TO BE BINDING on the heirs, assigns, representatives, and successors of the Undersigned, and is to extend to the benefit of the successors, assigns, and nominees of the Assignee.

AGREED as of the date of my signature below:

Assignment

Assignors: Hsu-Hsiang Wu et al.

Docket No: 1880.438WO1  
Client Ref. No. 2012-IP-062037 PCT/E-Billing No. 2012-IPRO-062037

Title: METHODS AND APPARATUS TO ACQUIRE COMPENSATED SIGNALS FOR DETERMINATION OF FORMATION  
PARAMETERS

Page 3 of 4

Assignor:

(Signature): *Hsu Hsiang Wu*

Name: Hsu-Hsiang Wu

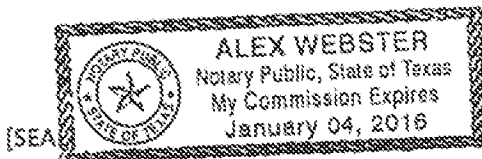
City/State: Sugar Land, TX

Date: Jan 102 / 2013

STATE OF Texas

COUNTY OF Harris )ss

On this 3<sup>rd</sup> day of January, 2013 before me personally appeared Hsu-Hsiang Wu, to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth.



*Alex Webster*

Notary Public

Assignment


Assignors: Hsu-Hsiang Wu et al.

Docket No: 1880438WO1  
Client Ref No: 2012-IP-062037 PCT/E-Billing No: 2012-IPRO-062037

Title: METHODS AND APPARATUS TO ACQUIRE COMPENSATED SIGNALS FOR DETERMINATION OF FORMATION PARAMETERS

Page 4 of 4

Assignor:

(Signature): 

Name: Burkay Donderici

City/State: Houston, TX

Date: 3rd Jan 2013

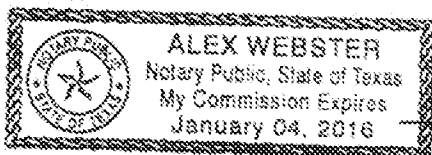
STATE OF Texas

)ss

COUNTY OF Harris

On this 3rd day of January, 2013 before me personally appeared Burkay Donderici, to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth.

[SEAL]





Notary Public