

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT5605721

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT	
<b>CONVEYING PARTY DATA</b>		
	<b>Name</b>	<b>Execution Date</b>
	RICHARD THOMAS HAY	01/06/2011
<b>RECEIVING PARTY DATA</b>		
<b>Name:</b>	HALLIBURTON ENERGY SERVICES, INC.	
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<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>	16503852	
<b>CORRESPONDENCE DATA</b>		
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<b>ATTORNEY DOCKET NUMBER:</b>	7523.1720US03	
<b>NAME OF SUBMITTER:</b>	DELAUNDA N. LANFORD	
<b>SIGNATURE:</b>	/Delaunda N. Lanford/	
<b>DATE SIGNED:</b>	07/05/2019	
<b>Total Attachments: 3</b>		
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### ASSIGNMENT

WHEREAS, I, Richard Thomas Hay, residing at 24915 Corbin Gate Dr., Spring, TX 77389, made certain new and useful inventions and improvements which are described in an application for U.S. Letters Patent on December 14, 2010, which application was assigned U.S. patent application serial number 61/422,858, and is entitled LOSSY TUNNELING EM TELEMTRY IN A WORK STRING METHOD AND APPARATUS;

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, the undersigned do hereby:

SELL, 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 entire right, title and interest for the United States and all foreign countries in and to: any and all inventions and improvements which are disclosed in the identified application for U.S. Letters Patent, and which may be further identified below; such application and all divisional, continuing, substitute, renewal, reissue and all other applications for patent which have been or shall be filed in the United States (including all provisional and non-provisional applications), and in all foreign countries on any of such inventions and/or improvements (including any applications for utility models); all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such inventions and/or improvements; and specifically including the right to file foreign applications under the provisions of any convention or treaty and to claim priority based on the identified application;

AUTHORIZE AND REQUEST that any attorney associated with U.S. PTO Customer No. 21186 may (directly or through his/her designee) delete, insert, or alter any information identifying this application, or any related application, below, after execution of this Assignment;

**Additional Application Information**

*No Provisional claim for priority is being made at this time.*

*No U.S. Non-Provisional claim for priority is being made at this time.*

*No International or foreign claim for priority is being made at this time.*

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

ASSIGNMENT

Client Ref. No. Docket: 2010-IP-030883/EBilling: 2010-IPRO-030883

Assignors: Richard Thomas Hay

Title: LOSSY TUNNELING EM TELEMTRY IN A WORK STRING METHOD AND APPARATUS

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Docket No: 1880.333PRV

Serial Number: 61/422,858

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and/or property herein conveyed has been or will 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 will (1) execute all provisional, non-provisional, divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such improvements; (2) execute all rightful oaths, declarations, assignments, powers of attorney and other papers; (3) communicate to the Assignee all facts known to the undersigned relating to such improvements 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 such improvements; and (5) take such further actions as the Assignee shall reasonably consider necessary or desirable for vesting title to such improvements in the Assignee, or for securing, maintaining and enforcing proper patent protection for such improvements;

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

Client Ref. No. Docket: 2010-IP-030883/EBilling: 2010-IPRO-030883

Docket No: 1880.333PRV

Assignors: Richard Thomas Hay

Serial Number: 61/422,858

Title: LOSSY TUNNELING EM TELEMETRY IN A WORK STRING METHOD AND APPARATUS

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IN TESTIMONY WHEREOF, I have hereunto set my hand this 6<sup>th</sup> day of

January 6, 2011.



Richard Thomas Hay

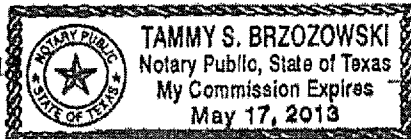
STATE OF TEXAS )

)ss

COUNTY OF MARICOPA )

On this 6 day of January, 2011 before me personally appeared Richard Thomas Hay, 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