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PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3397133

	SUBMISSION TYPE:		NEW ASSIGNMENT	
NATURE OF CONVEYANCE:		ASSIGNMENT		
CONVEYING PARTY DA	ATA			
		Name	Execution Date	
QI CAO			07/12/2013	
JING JIN			12/07/2013	
ALBERTO QUINTERO			07/15/2013	
RECEIVING PARTY DA	ГА			
Name:	HALLIBURTON ENERGY SERVICES, INC.			
Street Address:	10200 BELLAIRE BOULEVARD			
City:	HOUSTON			
State/Country:	TEXAS	TEXAS		
Postal Code:	77072			
PROPERTY NUMBERS	Totali 1			
Property Type		Number		
Application Number:	1	4652322	_	
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> PATENT REEL: 035910 FRAME: 0250

DECLARATION AND ASSIGNMENT FOR PATENT APPLICATION

Title of Invention: Communicating Acoustically

Attorney Docket Number: 2012IP061389

As a below named inventor, I hereby declare that:

This declaration is directed to the application attached hereto. If the application is not attached hereto, the application is identified by the attorney docket number as set forth above and/or the title of the invention set forth above.

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

I hereby state that I have reviewed and understand the contents of the above identified application, including the claims, as amended by any amendment specifically referred to above.

I am aware of and acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT International filing date of the continuation-in-part application.

WHEREAS, the undersigned has made certain new and useful inventions and improvements described in the above-identified application.

WHEREAS, Halliburton Energy Services, Inc., a corporation organized and existing under and by virtue of the laws of the State of Delaware, and having an office and place of business at 10200 Bellaire Boulevard, Houston, Texas 77072 (hereinafter "Assignee"), is desirous of acquiring the entire right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefor.

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, I have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the above-identified application, and in and to the above-identified application, all divisions, continuations, continuations-in-part, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents,

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Attorney docket number: 20121P061389 Halliburton docket number: 2012-IP-061389 PCT and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted therefrom; and I do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the said Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

AND, for the consideration aforesaid, I do hereby agree that I and my executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to me relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the said improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

AND, furthermore, I covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me and that full right to convey the same as herein expressed is possessed by me.

IN TESTIMONY WHEREOF, I have hereunto set my hand this 12^{th} day of July, 2013.

Name:	<u>Qi Cao</u>
Residence Address:	<u>BLK 664A, Jurong West ST 64, #10-258</u> <u>Singapore, Singapore 641664</u>
Signature:	Que Date: 12 July 2013

Attorney docket number: 2012IP061389 Halliburton docket number: 2012-IP-061389 PCT

> PATENT REEL: 035910 FRAME: 0252

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DECLARATION AND ASSIGNMENT FOR PATENT APPLICATION

Title of Invention: <u>Communicating Acoustically</u>

Attorney Docket Number: 2012IP061389

As a below named inventor, I hereby declare that:

This declaration is directed to the application attached hereto. If the application is not attached hereto, the application is identified by the attorney docket number as set forth above and/or the title of the invention set forth above.

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

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NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, I have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the above-identified application, and in and to the above-identified application, all divisions, continuations, continuations-in-part, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents,

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and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted therefrom; and I do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the said Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

AND, for the consideration aforesaid, I do hereby agree that I and my executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to me relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the said improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

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IN TESTIMONY WHEREOF, I have hereunto set my hand this (2 day of July, 2013.

Name: Jing Jin

Residence Address: <u>BLK 707, 08-327 Clementi West ST 2</u> <u>Singapore, Singapore 120707</u>

Signature: ______ Date: 12/7/2013

Attorney docket number: 2012IP061389 Halliburton docket number: 2012-IP-061389 PCT

> PATENT REEL: 035910 FRAME: 0254

DECLARATION AND ASSIGNMENT FOR PATENT APPLICATION

Title of Invention: Communicating Acoustically

Attorney Docket Number: 2012IP061389

As a below named inventor, I hereby declare that:

This declaration is directed to the application attached hereto. If the application is not attached hereto, the application is identified by the attorney docket number as set forth above and/or the title of the invention set forth above.

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

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WHEREAS, the undersigned has made certain new and useful inventions and improvements described in the above-identified application.

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Attorney docket number: 2012IP061389 Halliburton docket number: 2012-IP-061389 PCT

> PATENT REEL: 035910 FRAME: 0255

and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted therefrom; and I do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the said Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

AND, for the consideration aforesaid, I do hereby agree that I and my executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to me relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the said improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

AND, furthermore, I covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me and that full right to convey the same as herein expressed is possessed by me.

IN TESTIMONY WHEREOF, I have hereunto set my hand this 15 day of July, 2013.

Name:	<u>Alberto Quintero</u>
Residence Address:	<u>63 Paterson Road #18-01</u>
Signature:	Singapore, Singapore 238539 Date: JULY 15/2013

Attorney docket number: 2012IP061389 Halliburton docket number: 2012-IP-061389 PCT

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