

## 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>Graham A. McElhinney</td> <td>11/22/2012</td> </tr> <tr> <td>Leon Ceh</td> <td>11/27/2012</td> </tr> <tr> <td>Kenneth Stenerson</td> <td>11/21/2012</td> </tr> <tr> <td>Euan Forbes</td> <td>11/21/2012</td> </tr> </tbody> </table>		Name	Execution Date	Graham A. McElhinney	11/22/2012	Leon Ceh	11/27/2012	Kenneth Stenerson	11/21/2012	Euan Forbes	11/21/2012
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Graham A. McElhinney	11/22/2012										
Leon Ceh	11/27/2012										
Kenneth Stenerson	11/21/2012										
Euan Forbes	11/21/2012										
RECEIVING PARTY DATA											
Name:	Pathfinder Energy Services, LLC.										
Street Address:	23500 Colonial Parkway										
City:	Katy										
State/Country:	TEXAS										
Postal Code:	77493										
PROPERTY NUMBERS Total: 2											
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13542476</td> </tr> <tr> <td>Application Number:</td> <td>61508732</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13542476	Application Number:	61508732				
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CORRESPONDENCE DATA											
Fax Number:	7136892219										
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>											
Phone:	713-689-1137										
Email:	ncorona@slb.com										
Correspondent Name:	Mimi Corona										
Address Line 1:	10001 Richmond Avenue										
Address Line 2:	IP Administration Center of Excellence										
Address Line 4:	Houston, TEXAS 77042										
ATTORNEY DOCKET NUMBER:	11-PAT102-US-NP_PSP										
NAME OF SUBMITTER:	Mimi Corona										

CH \$80.00 13542476

Signature:	/Mimi Corona/
Date:	06/14/2013
Total Attachments: 5 source=11PAT102USNP-PSP_20130614_Executed-Assignment#page1.tif source=11PAT102USNP-PSP_20130614_Executed-Assignment#page2.tif source=11PAT102USNP-PSP_20130614_Executed-Assignment#page3.tif source=11PAT102USNP-PSP_20130614_Executed-Assignment#page4.tif source=11PAT102USNP-PSP_20130614_Executed-Assignment#page5.tif	

**ASSIGNMENT -- WORLDWIDE**

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned individual(s) (referred to herein as the "INVENTOR(S)") hereby assign, transfer, and set over to:

**Pathfinder Energy Services, LLC.**

Having the following address:

**23500 Colonial Parkway, Katy, TX 77493.**

(Referred to herein as "COMPANY"), its successors, and assigns, the entire right, title, and interest, worldwide, in and to the invention known by the following title:

**At-Bit Magnetic Ranging And Surveying**

for which the undersigned has/have executed an application for patent in the United States of America on or about this same day, together with said patent application, all divisions, continuations, continuations-in-part, reissues, re-examinations, and extensions thereof, and all United States Letters Patent and any legal equivalent thereof in a foreign country, including the right to claim priority, which may be granted therefor. Such interest represents the entire ownership of said applications and Letters Patent when granted and is to be owned by COMPANY, its successors, and assigns, or their legal representatives, for the full and entire term for which such Letters Patent may be granted or extended, as fully and entirely as the same would have been enjoyed by the INVENTOR(S) if this assignment had not been made.

In addition, the undersigned INVENTOR(S) each hereby agrees:

1. To sign and execute any further documents which may be necessary or desirable, lawful, and proper in connection with the prosecution of all applications for patent(s) on the INVENTION in the United States Patent and any legal equivalent thereof in a foreign country, including without limitation said application and all divisions, continuations, continuations-in-part, amendments thereof, and all interference proceedings associated therewith, or otherwise necessary or desirable to secure the title thereto to COMPANY;
2. To execute all papers and documents and to perform all lawful acts which may be necessary in connection with claims to priority or otherwise under the International Convention for the Protection of Industrial Property or similar treaties or agreements;
3. To perform all lawful affirmative acts which may be necessary to obtain the grant of a valid and enforceable patent to COMPANY;

The undersigned INVENTOR(S) each hereby authorizes and requests the Commissioner of Patents and Trademarks in the United States to issue any and all Letters Patent resulting from said application, including without limitation any division, continuation, continuation-in-part, reissue or re-examination thereof to COMPANY.

The undersigned INVENTOR(S) each hereby grants to COMPANY the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for the recordation of this document.

IN WITNESS WHEREOF, this Assignment has been executed by each of the undersigned individuals on the date appearing by such individuals' signature:

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Assignment - Worldwide

IN WITNESS WHEREOF, this Assignment has been executed by each of the undersigned individuals on the date appearing by such individuals' signature:

22/Nov/2012  
Date

Inventor Signature:  
Print or Type Name:

[Handwritten Signature]  
Graham A. McElhinney



State of:  
County of:

Before me personally appeared: Graham A. McElhinney

Each of whom acknowledged the foregoing instrument to be a free act and deed and also represented that he/she is authorized to execute this Assignment.

Dated: 22/Nov/2012      22/11/2012

Witness 1: Raymond Nanan      Witness 2: ATINKE CHINEME

Printed Name: RAYMOND NANAN      Printed Name: ATINKE CHINEME

When this Assignment is not filed concurrently with the patent application, the following identifying information may be added after execution:  
  
U.S. Application Serial No.: 13/542476; Filing Date: 05 Jul 2012  
U. S. Provisional Number: 61/508732; Filing Date: 18 Jul 2011

IN WITNESS WHEREOF, this Assignment has been executed by each of the undersigned individuals on the date appearing by such individuals' signature:

Nov 27/12  
Date

Inventor Signature: [Signature]  
Print or Type Name: Leon Ceh

Notary Public

State of:  
County of:

Before me personally appeared: Leon Ceh

Each of whom acknowledged the foregoing instrument to be a free act and deed and also represented that he/she is authorized to execute this Assignment.

Dated: Nov 27 2012  
WitNESS 1: [Signature]  
Printed Name: Trevor Ceh

NOV 27 2012  
WitNESS 2: [Signature]  
Printed Name: Jane Uvild

When this Assignment is not filed concurrently with the patent application, the following identifying information may be added after execution:  
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IN WITNESS WHEREOF, this Assignment has been executed by each of the undersigned individuals on the date appearing by such individuals' signature:

Nov 21/12  
Date

Inventor Signature: [Signature]  
Print or Type Name: Kenneth Stenerson

Notary Public

State of:  
County of:

Before me personally appeared: Kenneth Stenerson

Each of whom acknowledged the foregoing instrument to be a free act and deed and also represented that he/she is authorized to execute this Assignment.

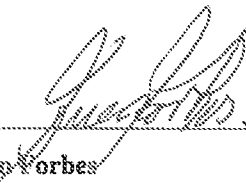
Dated: 11-21-2012

Witness 1: [Signature] Witness 2: \_\_\_\_\_

Printed Name: LINDSAY HALL Printed Name: \_\_\_\_\_

When this Assignment is not filed concurrently with the patent application, the following identifying information may be added after execution:  
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IN WITNESS WHEREOF, this Assignment has been executed by each of the undersigned individuals on the date appearing by such individuals' signature:

21<sup>st</sup> Nov 2012                      Inventor Signature:   
 Date                                      Print or Type Name: Euan Forbes

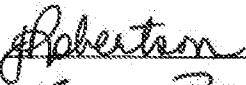
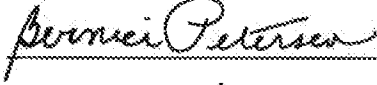
Notary Public

State of:  
County of:

Before me personally appeared: Euan Forbes

Each of whom acknowledged the foregoing instrument to be a free act and deed and also represented that he/she is authorized to execute this Assignment.

Dated: Nov. 21/12                      21 NOVEMBER 2012

Witness 1:                       Witness 2: 

Printed Name: Joanne Robertson                      Printed Name: BERNICE PETERSEN

When this Assignment is not filed concurrently with the patent application,  
 the following identifying information may be added after execution:

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