

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>Chad Hanak</td> <td>01/10/2013</td> </tr> <tr> <td>Robert A. Estes</td> <td>01/10/2013</td> </tr> </tbody> </table>		Name	Execution Date	Chad Hanak	01/10/2013	Robert A. Estes	01/10/2013						
Name	Execution Date												
Chad Hanak	01/10/2013												
Robert A. Estes	01/10/2013												
RECEIVING PARTY DATA													
<table border="1"> <tr> <td>Name:</td> <td>BAKER HUGHES INCORPORATED</td> </tr> <tr> <td>Street Address:</td> <td>2929 ALLEN PARKWAY</td> </tr> <tr> <td>Internal Address:</td> <td>SUITE 2100</td> </tr> <tr> <td>City:</td> <td>HOUSTON</td> </tr> <tr> <td>State/Country:</td> <td>TEXAS</td> </tr> <tr> <td>Postal Code:</td> <td>77019-2117</td> </tr> </table>		Name:	BAKER HUGHES INCORPORATED	Street Address:	2929 ALLEN PARKWAY	Internal Address:	SUITE 2100	City:	HOUSTON	State/Country:	TEXAS	Postal Code:	77019-2117
Name:	BAKER HUGHES INCORPORATED												
Street Address:	2929 ALLEN PARKWAY												
Internal Address:	SUITE 2100												
City:	HOUSTON												
State/Country:	TEXAS												
Postal Code:	77019-2117												
PROPERTY NUMBERS Total: 1													
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13666646</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13666646								
Property Type	Number												
Application Number:	13666646												
CORRESPONDENCE DATA													
<p>Fax Number:</p> <p><i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 860-286-2929</p> <p>Email: usptopatentmail@cantorcolburn.com</p> <p>Correspondent Name: CANTOR COLBURN LLP</p> <p>Address Line 1: 20 CHURCH STREET</p> <p>Address Line 2: 22ND FLOOR</p> <p>Address Line 4: HARTFORD, CONNECTICUT 06103</p>													
ATTORNEY DOCKET NUMBER:	DDR4-54433-US												
NAME OF SUBMITTER:	Paul S. Madan												
<p>Total Attachments: 2</p> <p>source=SignedAssignment_filed#page1.tif</p> <p>source=SignedAssignment_filed#page2.tif</p>													

OP \$40.00 13666646

ASSIGNMENT

IN CONSIDERATION OF ONE (1) DOLLAR AND OTHER GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, the undersigned, do/does hereby:

SELL, ASSIGN AND TRANSFER to **BAKER HUGHES INCORPORATED**, having a place of business at **2929 ALLEN PARKWAY, SUITE 2100, HOUSTON, TEXAS 77019-2118**, 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 application for United States Letters Patent, which has been executed by the undersigned and is entitled "**PASSIVE MAGNETIC RANGING FOR SAGD AND RELIEF WELLS VIA A LINEARIZED TRAILING WINDOW KALMAN FILTER**" (further identified as Serial No. 13/666,646; filed November 1, 2012) 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 and all foreign countries on any of such inventions or improvements; all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such inventions or improvements; and specifically including the right to file foreign applications under the provisions of any convention or treaty and claim priority based on such application in the United States;

AUTHORIZE AND HEREBY REQUEST the issuing authorities to issue any and all United States and foreign patents granted on such inventions or improvements to **BAKER HUGHES INCORPORATED**;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and 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, when requested and at the expense of the Assignee, to carry out in good faith the intent and purposes of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such improvements; execute all rightful oaths, declarations, assignments, powers of attorney and other papers; communicate to the Assignee all facts known to the undersigned relating to such improvements and the history thereof; and generally do everything possible which the Assignee shall consider desirable for vesting title to such improvements in the Assignee, and for securing, maintaining and enforcing proper patent protection for such improvements;

TO BE BINDING on the heirs, assigns, representatives and successors of the undersigned and extend to the successors, assigns and nominees of the Assignee.

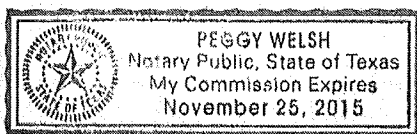
IN WITNESS WHEREOF, the undersigned have hereunto subscribed their name(s) on the date set opposite their signature(s).

(Signature) Chad Hanak
Name: Chad Hanak

Date 1-10-13

§
§

3 BEFORE ME, the undersigned authority, on this 10th day of January, 2012 personally appeared **Chad Hanak** the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same of his own free will for the purposes and consideration therein expressed.



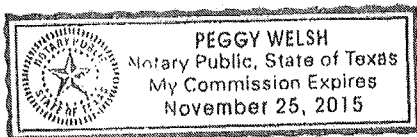
Peggy Welsh
Notary Public/Witness

(Signature) Robert A. Estes
Name: Robert A. Estes

Date 1-10-13

§
§

3 BEFORE ME, the undersigned authority, on this 10th day of January, 2012 personally appeared **Robert A. Estes** the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same of his own free will for the purposes and consideration therein expressed.



Peggy Welsh
Notary Public/Witness