

# PATENT ASSIGNMENT

Electronic Version v1.1

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
Arkadiy Yurievich Segal	06/21/2011
Kurt Kreso Butula	06/21/2011
Jerome Maniere	06/21/2011
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	Schlumberger Technology Corporation
<b>Street Address:</b>	One Hampshire Street
<b>City:</b>	Cambridge
<b>State/Country:</b>	MASSACHUSETTS
<b>Postal Code:</b>	02139
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	13129834
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(617)768-2402
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
<b>Phone:</b>	617-768-2000
<b>Email:</b>	sfernandez4@slb.com
<b>Correspondent Name:</b>	Schlumberger Technology Corporation
<b>Address Line 1:</b>	One Hampshire Street
<b>Address Line 4:</b>	Cambridge, MASSACHUSETTS 02139
<b>ATTORNEY DOCKET NUMBER:</b>	18.0074 US PCT
<b>NAME OF SUBMITTER:</b>	Susannah Fernandez
<b>Total Attachments: 9</b> source=18_0074USPCT_assignment_submitted#page1.tif source=18_0074USPCT_assignment_submitted#page2.tif	

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**PATENT**  
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## Assignment

WHEREAS, the undersigned inventors hereinafter referred to as the "Inventors" each said Inventor's address being listed below

**Arkadiy Yurievich Segal**, a citizen of Russia, residing at 4-1-34, Vishnyakovskaya str., Moscow 121402 RU;

**Kurt Kreso Butula**, a citizen of Hungary, residing at 27, Vinogradska str., Zagreb 10000 HR;  
and

**Jerome Maniere**, a citizen of France, residing at 5 allees des Pins, Pessac 33600, FR.

Has/have invented certain new and useful improvements in

### **METHOD FOR DETERMINING THE CLOSURE PRESSURE OF A HYDRAULIC FRACTURE**

as described and set forth in an application for Letters Patent of the United States of America, filed with the United States Patent and Trademark Office on May 18, 2011, Serial No. 13/129,834 (Docket No. 18.0074 US PCT).

WHEREAS each of the undersigned persons warrants that no person other than these undersigned persons are inventors of the above-described invention;

AND WHEREAS, SCHLUMBERGER TECHNOLOGY CORPORATION, One Hampshire Street, Cambridge, Massachusetts 02139, the "**COMPANY**", is desirous of acquiring or confirming their acquisition of the entire right, title and interest in and to said invention, inventions or improvements, and in and to said application, and in and to any and all patents, both of the United States and of all foreign countries;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, BE IT KNOWN, that the undersigned Inventors, for good and valuable considerations, the receipt and sufficiency of which hereby acknowledge, have sold, assigned, transferred and conveyed, and by this assignment do sell, assign, transfer and convey, unto said **COMPANY**, their successors and assigns, the entire right, title and interest throughout the world, in and to the above-described invention, inventions or improvements described or set forth in said application, in any form or embodiment thereof, and in and to said application, and in and to any applications filed in any foreign country based thereon, including the right to file foreign applications under the provisions of any convention or treaty; and in and to any confirmation, divisional, continuation, continuation-in-part, or substitute application which may be filed on said invention, inventions or improvements in the United States or in any foreign country; and in and to any and all patents, certificates, utility models, reissues, extensions, additions or confirmations thereof which may be granted in the United States or in any foreign country upon said invention, inventions or improvements,

TO HAVE AND TO HOLD the same to the full end of the term or terms for which any and all such United States and foreign patents and grants may be issued on said invention, inventions or improvements.


AND said Inventors do hereby authorize and request the issuing authority to issue any and all of said United States and foreign patents on said application or applications to said **COMPANY**, their successors and assigns, as the assignee of the entire right, title and interest in and to the same, for the sole use and benefit of said **COMPANY**, their successors and assigns.

AND said Inventors do hereby covenant and warrant that said Inventors have full right to convey the entire right, title and interest herein assigned free and clear of all licenses, encumbrances and liens whatsoever, and that no said Inventors has executed and will execute any instruments in conflict herewith.

AND said Inventors, for the conditions aforesaid, do hereby covenant and agree to and with the said **COMPANY**, their successors and assigns, that each Inventor, his or her executors, administrators, or other personal representatives, shall and will do all lawful acts and things, make all rightful oaths, and make, execute and deliver any and all other instruments in writing, and any and all further applications, papers, powers, affidavits, assignments, disclaimers and other documents, which in the opinion of counsel for said **COMPANY**, their successors and assigns, may be required or necessary in this or in any foreign country more effectually to secure to and vest in said **COMPANY**, their successors and assigns, the entire right, title and interest in and to said invention, inventions or improvements, application or applications, patents, rights, titles, benefits, privileges, and advantages hereby sold, assigned, confirmed, transferred and conveyed.

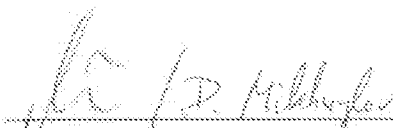
WITNESSED:

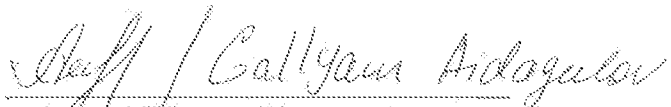
IN WITNESS WHEREOF I, Arkadiy Yurievich Segal, have hereunto set my hand and seal this  
21 day of June, 2011.

  
(Signature of Inventor)

WITNESSED:

BE IT KNOWN, that Arkadiy Yurievich Segal is known to us to be the individual described in this assignment, that on this 21 day of June, 2011, we were personally present and did see him/her sign and execute this assignment and that he/she acknowledged to us that he/she executed the same as his/her free act and deed for the uses and purposes therein set forth.

  
First Witness (Signature)

  
Second Witness (Signature)

Universitetskoy prigorod, 9-601  
Moscow, Russia, 119296

Moscow region, Troitsk,  
V-3-112, 142082

Post Office Address

Post Office Address

WITNESSED:

IN WITNESS WHEREOF I, Kurt Kreso Butula, have hereunto set my hand and seal this  
21<sup>st</sup> day of JUNE, 2011.

Kurt Kreso Butula  
(Signature of Inventor)

WITNESSED:

BE IT KNOWN, that Kurt Kreso Butula is known to us to be the individual  
described in this assignment, that on this 21<sup>st</sup> day of JUNE, 2011, we were  
personally present and did see him/her sign and execute this assignment and that he/she  
acknowledged to us that he/she executed the same as his/her free act and deed for the uses and  
purposes therein set forth.

T. Kofman  
First Witness (Signature)

Aslanbek  
Second Witness (Signature)

GLEB A. KOROLEV

ASLANBEK A. ALEROEV

ULANSKY PER. 5

ULANSKY PER. 5

101000 Moscow, RUSSIA


101000 Moscow, RUSSIA

Post Office Address

Post Office Address


WITNESSED:

IN WITNESS WHEREOF I, **Jerome Maniere**, have hereunto set my hand and seal this  
21 day of June, 2011.

  
(Signature of Inventor)

WITNESSED:

BE IT KNOWN, that **Jerome Maniere** is known to us to be the individual described in this assignment, that on this 21 day of JUNE, 2011, we were personally present and did see him/her sign and execute this assignment and that he/she acknowledged to us that he/she executed the same as his/her free act and deed for the uses and purposes therein set forth.

  
First Witness (Signature)JOSE LUIS BASHBUSH BAUZAEJERCITO NACIONAL 425  
MEXICO D.F. 11520  
MEXICO

Post Office Address

  
Second Witness (Signature)MIGUEL ANGEL FIGUEROAEJERCITO NACIONAL 425, PISO 3  
MEXICO D.F. 11520  
MEXICO

Post Office Address

**DECLARATION FOR PATENT APPLICATION AND POWER OF ATTORNEY**

As a below named inventor, I/We hereby declare that:

My/Our residence, post office address(s) and citizenship(s) are as stated below next to my/our name(s), and

I/We believe I/We am/are the original, first and sole inventor of the subject matter which is claimed (if only one name is listed below) or an original and first inventor of at least some of the subject matter which is claimed (if plural names are listed below) and for which a patent is sought on the invention entitled

**A METHOD FOR DETERMINATION OF A HYDRAULIC FRACTURE CLOSURE PRESSURE**

the specification of which



is attached hereto.



was filed November 27, 2009  
as PCT International Application No. PCT/RU2009/000653 and

was filed on May 18, 2011  
as Application Serial Number 13/129,834

and was amended on (if applicable).

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

I/We acknowledge the duty to disclose information which is 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.

**Prior Foreign Application(s)**

I/We hereby claim foreign priority benefits under Title 35, United States Code, Section 119 (a)-(d) or (f), or 365(b) of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application(s) for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Country	Application No.	Filed (d/m/y)	Issued (d/m/y)	Priority Claimed
RU	2008147999	5 December 2008		Y <input checked="" type="checkbox"/> N <input type="checkbox"/>

**Prior United States Applications**

I/We hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I/We acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

Application Serial No.	Filing Date (d/m/y)	Status (Patented, Pending, Abandoned)



And, I/We hereby appoint, both jointly and severally, as my attorney(s) and/or agent(s) with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith the following attorney(s) and agent(s).

Registered practitioners associated with Customer Number 37003.

I/We hereby request that all correspondence be directed to: Customer No. 37003.

I hereby declare (if sole inventor) or each of us hereby declares (if joint inventors) that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

**SOLE OR FIRST INVENTOR**

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Full Name: Arkadiy Yurievich Segal

Residence: 4-1-34, Vishnyakovskaya str., Moscow 121402 RU

Citizenship: Russia

Post Office Address: 4-1-34, Vishnyakovskaya str., Moscow 121402 RU

SECOND INVENTOR

Signature: Kurt Kreso Butula Date: June 21, 2018

Full Name: Kurt Kreso Butula

Residence: 27, Vinogradska str., Zagreb 10000 HR

Citizenship: HR

Post Office Address: 27, Vinogradska str., Zagreb 10000 HR

THIRD INVENTOR

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Full Name: Jerome Maniere

Residence: 5 allées des Pins, Pessac 33600, FR

Citizenship: France

Post Office Address: 5 allées des Pins, Pessac 33600, FR