

# PATENT ASSIGNMENT

Electronic Version v1.1

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
Name	Execution Date
CHENGHUA HAN	03/12/2010
HONGFA HUANG	03/12/2010
<b>RECEIVING PARTY DATA</b>	
Name:	SCHLUMBERGER TECHNOLOGY CORPORATION
Street Address:	300 SCHLUMBERGER DRIVE
City:	SUGAR LAND
State/Country:	TEXAS
Postal Code:	77478
<b>PROPERTY NUMBERS Total: 2</b>	
Property Type	Number
Application Number:	61289584
Application Number:	12711419
<b>CORRESPONDENCE DATA</b>	
Fax Number:	(281)285-5537
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
Phone:	2812855534
Email:	ABROWN15@SLB.COM
Correspondent Name:	AUTREY BROWN
Address Line 1:	14910 AIRLINE ROAD
Address Line 2:	BLDG 14
Address Line 4:	ROSHARON, TEXAS 77583
ATTORNEY DOCKET NUMBER:	22.1684
NAME OF SUBMITTER:	Kevin B. McGoff
Total Attachments: 5 source=SignedAssignment22-1684#page1.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:

**Chenghua Han**, a citizen of China, residing at 2418 Parkwood Lane, Sugar Land, Texas 77479, United States of America;

and

**Hongfa Huang**, a citizen of China, residing at 5515 Chesapeake Place, Sugar Land, Texas 77479, United States of America.

Has/have invented certain new and useful improvements in

**THERMITE CHARGES AND USE THEREOF IN WELL PERFORATION AND DOWNHOLE FRACING**

as described and set forth in a United States Provisional Patent Application filed on December 23, 2009 under Serial Number 61/289584, and an application for Letters Patent of the United States of America, filed with the United States Patent and Trademark Office on February 24, 2010, Serial No. 12/711,419, (Docket No.22.1684). **This assignment is effective as of December 23, 2009.**

AND WHEREAS, the **"COMPANIES"**, listed in **Schedule A**, are 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, that may be obtained therefore **as outlined in Schedule A;**

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 COMPANIES, 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,

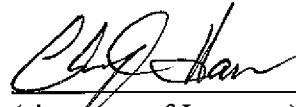
TO HAVE AND TO HOLD the same to the full end of the term or terms for which any and all such United States and foreign patents and grants may be issued on said invention, inventions or improvements.

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 **COMPANIES**, 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 **COMPANIES**, 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 **COMPANIES**, 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 **COMPANIES**, 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 **COMPANIES**, 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.

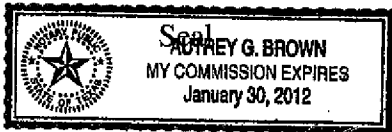
IN WITNESS WHEREOF I, **Chenghua Han**, have hereunto set my hand and seal this  
12<sup>th</sup> day of March, 2010.

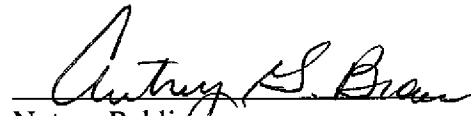
  
(signature of Inventor)

STATE OF TEXAS

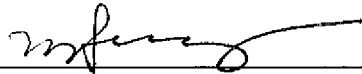
COUNTY OF BRAZORIA

BEFORE ME this 12<sup>th</sup> day of March, 2010 personally appeared **Chenghua Han**, to me known to be the person who is described in and who executed the foregoing assignment instrument and acknowledged to me that he executed the same of his own free will for the purpose therein expressed.



  
Notary Public

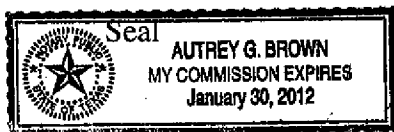
IN WITNESS WHEREOF I, **Hongfa Huang**, have hereunto set my hand and seal this  
12 day of March, 2010.

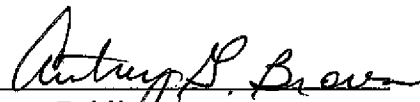
  
(signature of Inventor)

STATE OF TEXAS

COUNTY OF BRAZORIA

BEFORE ME this 12 day of March, 2010, personally appeared **Hongfa Huang**, to me known to be the person who is described in and who executed the foregoing assignment instrument and acknowledged to me that he executed the same of his own free will for the purpose therein expressed.



  
Notary Public

**Schedule A**  
**“COMPANIES”**

**SCHLUMBERGER TECHNOLOGY CORPORATION**

Corporation of: United States of America

Located at: 300 Schlumberger Drive, Sugar Land, Texas 77478 U.S.A.

Assignee for applications in: United States of America

**SCHLUMBERGER CANADA LIMITED**

Corporation of: Canada

Located at: 525-3<sup>rd</sup> Avenue S.W., Calgary, Alberta, Canada T2P 0G4

Assignee for applications in: Canada

**SERVICES PETROLIERS SCHLUMBERGER**

Corporation of: France

Located at: 42 rue Saint Dominique, 75007 Paris, France

Assignee for applications in: France

**SCHLUMBERGER HOLDINGS LIMITED**

Corporation of: British Virgin Islands

Located at: P.O. Box 71, Craigmuir Chambers, Road Town, 1110 Tortola, British Virgin Islands

Assignee for applications in: Japan, The Netherlands, Netherlands Antilles, United Kingdom, Saudi Arabia

**SCHLUMBERGER TECHNOLOGY B.V.**

Corporation of: the Netherlands

Located at: Parkstraat 83-89, 2514 JG The Hague, The Netherlands

Assignee for applications in: Albania, Argentina, Australia, Azerbaijan, Brunei, Bulgaria, Chad, Colombia, Czech Republic, Denmark, Equatorial Guinea, Faroe Islands, Germany, Greece, Hungary, Indonesia, Ireland, Israel, Italy, Kazakhstan, Korea, Kuwait, Lithuania, Malaysia, Mexico, Myanmar, New Zealand, Norway, Oman, Pakistan, Poland, Qatar, Romania, Russia, Slovakia, Slovenia, South Africa, Thailand, Trinidad, Tunisia, Turkey, Turkmenistan, Uzbekistan, and Venezuela

**PRAD RESEARCH AND DEVELOPMENT LIMITED**

Corporation of: British Virgin Islands

Located at: P.O. Box 71, Craigmuir Chambers, Road Town, 1110 Tortola, British Virgin Islands

Assignee for applications in: Countries not otherwise listed.