503169172 02/06/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3215787

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ANTON F. ZAHRADNIK	04/10/2014
ROBERT J. BUSKE	04/10/2014
RUDOLF C. PESSIER	04/02/2014
DON Q. NGUYEN	04/10/2014
MICHAEL S. DAMSCHEN	05/08/2014
MITCHELL A. ROTHE	04/10/2014
JOHNATHAN HOWARD	04/01/2014
CHAITANYA K. VEMPATI	04/02/2014
GREGORY C. PREVOST	05/16/2014
JOHN F. BRADFORD	05/18/2014

RECEIVING PARTY DATA

Name:	BAKER HUGHES INCORPORATED
Street Address:	2001 RANKIN ROAD
City:	HOUSTON
State/Country:	TEXAS
Postal Code:	77073

PROPERTY NUMBERS Total: 2

Property Type	Number
Application Number:	13678521
Application Number:	61560083

CORRESPONDENCE DATA

Fax Number: (713)800-5699

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 7138005700

Email: SMDdocket@smd-iplaw.com

Correspondent Name: SUTTON MCAUGHAN DEAVER PLLC

Address Line 1: THREE RIVERWAY, SUITE 900

Address Line 4: HOUSTON, TEXAS 77056

PATENT REEL: 034906 FRAME: 0934

503169172

ATTORNEY DOCKET NUMBER:	1012.00272.US00
NAME OF SUBMITTER:	DANNY VARA
SIGNATURE:	/Danny Vara/
DATE SIGNED:	02/06/2015
Total Attachments: 10	
source=00272.US00 - exAssgt#page1.	tif
source=00272.US00 - exAssgt#page2.	tif
source=00272.US00 - exAssgt#page3.	tif
source=00272.US00 - exAssgt#page4.	tif
source=00272.US00 - exAssgt#page5.	tif
source=00272.US00 - exAssgt#page6.	tif
source=00272.US00 - exAssgt#page7.	tif
source=00272.US00 - exAssgt#page8.	tif
source=00272.US00 - exAssgt#page9.	tif

source=00272.US00 - exAssgt#page10.tif

PATENT REEL: 034906 FRAME: 0935

ASSIGNMENT AND/OR RATIFICATION OF ASSIGNMENT OF INTELLECTUAL PROPERTY

WHEREAS, We, the undersigned, hereafter individually and collectively, "Assignor," have jointly invented and developed certain new and useful methods, devices, and/or systems that are disclosed, taught and/or claimed in one or more of the applications for patent listed below, entitled "Hybrid Drill Bits Having Increased Drilling Efficiency" (hereafter, collectively, "Application").

Country	Application Number	Filing Date
U.S.	13/678,521	November 15, 2012
U.S.	61/560,083	November 15, 2011

WHEREAS, BAKER HUGHES INCORPORATED, a corporation organized and existing under the laws of the state of Delaware, hereafter "Assignee," to the extent not already transferred to Assignee by an existing assignment obligation from me/us or by a prior written agreement and/or other legal relationship between Assignee and Assignor, is desirous of acquiring the entire and exclusive right, title and interest in and to, and possession of: a) the Application and all rights thereto; b) the subject matter disclosed, taught and/or claimed in the Application; and c) all tangible materials and intangible information concerning the Application and its subject matter, including but not limited to, copyrighted materials, know-how, confidential and proprietary information and trade secrets (hereafter, collectively, the "Intellectual Property").

NOW, THEREFORE, for one dollar (US\$1.00) and/or other good and valuable consideration, the receipt and sufficiency of which We hereby acknowledged, **Assignor** and **Assignee** agree as follows.

Ratification of Prior Assignment. Assignor hereby ratifies and acknowledges his/her/their prior assignment to Assignee of the aforesaid Intellectual Property, which assignment transferred the entire and exclusive right, title and interest in and to, and possession and use of the aforesaid Intellectual Property, in all countries, regions and political subdivisions throughout the world, including without limitation, as applicable, the right to claim priority thereto or benefit thereof in all future applications for patent; the right to file and prosecute all related applications in the United States, in any foreign country or with any application filing convention or treaty, disclosing and/or claiming the Intellectual Property, in whole or in part, including, without limitation, all provisional applications, non-provisional applications, divisional applications, continuation applications, continuation-in-part applications, renewals, reissues, reexaminations, substitutes or extensions thereof; the right to all patents or other related property right that may be issued or granted thereon anywhere in the world; the right to all income, royalties, damages and payments now or hereafter due or payable with respect to any patent or other right described herein; the right to all causes of action (either in law or in equity); the right to sue, counterclaim, and recover for past, present and future infringement of the rights described herein; all as fully and entirely the same as would have been held and enjoyed by Assignor if the transfer and assignment described herein had not

Page 1 of 9

PATENT REEL: 034906 FRAME: 0936 been made.

- Present Assignment. To the extent Assignor has not already assigned to 2. Assignee all or any of the aforesaid Intellectual Property, Assignor does hereby assign, transfer and forever convey, to Assignee, its successors and assigns, the entire and exclusive right, title and interest in and to, and possession and use of, the aforesaid Intellectual Property, in all countries, regions and political subdivisions throughout the world, including without limitation, as applicable, the right to claim priority thereto or benefit thereof in all future applications for patent; the right to file and prosecute all related applications in the United States, in any foreign country or with any application filing convention or treaty, disclosing and/or claiming the Intellectual Property, in whole or in part, including, without limitation, all provisional applications, non-provisional applications, divisional applications, continuation applications, continuation-in-part applications, renewals, reissues, reexaminations, substitutes or extensions thereof; the right to all patents or other related property right that may be issued or granted thereon anywhere in the world; the right to all income, royalties, damages and payments now or hereafter due or payable with respect to any patent or other right transferred herein; the right to all causes of action (either in law or in equity); the right to sue, counterclaim, and recover for past, present and future infringement of the rights transferred herein; all as fully and entirely the same as would have been held and enjoyed by Assignor if the transfer and assignment had not been made.
- 3. <u>Issuance to Assignee</u>. Assignor hereby authorizes and requests the appropriate governmental official to issue any and all patents, certificates, registrations, grants or related property right assigned hereunder, to **Assignee**, as the owner of the entire and exclusive right, title and interest in and to the same.
- 4. <u>Warranty of Title</u>. Assignor hereby represents, warrants and covenants that Assignor had the full right to convey the interest herein ratified and/or has the full right to convey the interest herein assigned; that Assignor has not executed and will not execute any agreement, instrument or assignment in conflict herewith; and that the rights ratified and/or assigned herein are not subject to any other grant, license or right, or otherwise encumbered.
- 5. Further Actions. Assignor hereby covenants and agrees that Assignor will at any time upon request make, execute and deliver without further compensation, any and all other instruments in writing, including further applications, papers, affidavits, powers of attorney, assignments, and other documents; and do all lawful acts and things, which, in the opinion of Assignee, its successors and assigns, may in any country be required or necessary more effectively to secure to and vest in Assignee, its successors and assigns, the property ratified or transferred herein; and that Assignor will execute any application for reissue, division, continuation, continuation-in-part, counterpart, renewal, reexamination, correction, substitute or extension of said Intellectual Property or any resulting patent or related property right. Assignor covenants and agrees that Assignor will at any time upon request communicate to the Assignee, its successors, assigns or other legal representatives any facts relating to the aforesaid Application and Intellectual Property known to him/her, and will testify as to the same in any interference, litigation, mediation, arbitration or other proceeding when requested to do so.
 - 6. Confidentiality. Assignor hereby covenants and agrees to maintain as

Page 2 of 9

PATENT REEL: 034906 FRAME: 0937 confidential all non-public aspects and details of the Intellectual Property unless and until such time as such aspects or details become publicly known through no fault of Assignor. Assignor agrees and understands that this obligation of confidentiality continues to exist regardless of whether Assignor is employed by Assignee or not. Assignor agrees and understands that this obligation of confidentiality is supplemental to all other obligations of confidence that Assignor may now or hereafter owe to Assignee.

- 7. Assignee as Attorney-in-fact. To the extent Assignor is unavailable, unable or unwilling to execute and/or deliver any instrument described in paragraph 5, Assignor hereby appoints each officer of Assignee, and specifically appoints Assignee's general counsel whether or not an officer, as his/her/their limited attorney in fact for the sole and limited purpose of executing such instrument.
- 8. <u>No Challenge</u>. Assignor hereby covenants and agrees that Assignor will never challenge or aid the challenge by another of the validity or enforceability of the Intellectual Property ratified or transferred hereunder.
- 9. <u>Choice of Law</u>. Assignor hereby covenants and agrees that the laws of the State of Texas shall control the interpretation and effect of this document and without application of that state's laws concerning conflict of law.
- 10. <u>Severability</u>. Assignor and Assignee hereby agree that this agreement is severable in the event one or more clauses, covenants or obligations set forth in this agreement are found to be invalid or unenforceable by a court of competent jurisdiction. Assignor and Assignee hereby agree that those clauses, covenants and obligations that are not found to be invalid or unenforceable shall be enforced as if the severed clause, covenant or obligation had never existed.
- 11. Legal Counsel ASSIGNOR UNDERSTANDS AND ACKNOWLEDGES THAT NEITHER IN-HOUSE LEGAL COUNSEL FOR ASSIGNEE NOR OUTSIDE LEGAL COUNSEL REPRESENTING ASSIGNEE CONCERNING THIS AGREEMENT OR THE INTELLECTUAL PROPERTY REFERENCED IN THIS AGREEMENT, REPRESENT THE INTERESTS OF ASSIGNOR, OR ANY OF THEM, CONCERNING THIS AGREEMENT OR THE INTELLECTUAL PROPERTY REFERENCED IN THIS AGREEMENT. ASSIGNOR FURTHER ACKNOWLEDGES AND AGREES THAT HE/SHE/THEY HAVE HAD THE OPPORTUNITY TO CONSULT WITH LEGAL COUNSEL OF HIS/HER/THEIR OWN CHOOSING AND AT HIS/HER/THEIR OWN COST CONCERNING THE EFFECT AND PURPOSE OF THIS AGREEMENT AND THE SCOPE OF THE RIGHTS TRANSFERRED HEREUNDER, AND THAT ASSIGNOR VOLUNTARILY AND WITHOUT RESERVATION OF ANY KIND AGREES TO BE BOUND BY THE TERMS AND CONDITIONS STATED HEREIN.

IN WITNESS WHEREOF, Assignor have hereunto set his/her/their hand and seal.

Page 3 of 9

∧ \ _ ASSIGNÔR	*** NOTARIZATION IS PREFERRED, BUT NOT REQUIRED ***
J. L. dil	
Signature	STATE OF TEXAS §
Anton F. Zahradnik	COUNTY OF Mindspream \$
Name	
227 Burkwood Ct.	BEFORE ME, the undersigned
Address	authority, on this day personally appeared ANTON F. ZAHRADNIK, known to me to be
Sugar Land, TX 77479	the person whose name is subscribed to the foregoing instrument, and acknowledged to me
	that he executed the same for the purposes and consideration therein expressed.
Date of Execution	•
and the second s	GIVEN UNDER MY HAND and seal of office this $\bot O$ day of $\bot O$, 2014.
KIM GREGG Notary Public, State of Texas	
My Commission Expires August 03, 2014	[NOTARY STAMP]
August 05, 2014 (f)	wing) . J
	*** NOTARIZATION IS PREFERRED, BUT
ASSIGNOR	*** NOTARIZATION IS PREFERRED, BUT NOT REQUIRED ***
ASSIGNOR	
ASSIGNOR Signature	NOT REQUIRED *** STATE OF TEXAS §
Signature	NOT REQUIRED *** STATE OF TEXAS §
Renk	NOT REQUIRED ***
Signature Robert J. Buske Name 6 N. Evangeline Oaks Circle	STATE OF TEXAS COUNTY OF Monty Promy \$ BEFORE ME, the undersigned
Signature Robert J. Buske Name	STATE OF TEXAS COUNTY OF Month Promy § BEFORE ME, the undersigned authority, on this day personally appeared ROBERT J. BUSKE, known to me to be the
Signature Robert J. Buske Name 6 N. Evangeline Oaks Circle	STATE OF TEXAS § COUNTY OF Month of § BEFORE ME, the undersigned authority, on this day personally appeared ROBERT J. BUSKE, known to me to be the person whose name is subscribed to the
Signature Robert J. Buske Name 6 N. Evangeline Oaks Circle Address	STATE OF TEXAS COUNTY OF Month Promy § BEFORE ME, the undersigned authority, on this day personally appeared ROBERT J. BUSKE, known to me to be the
Signature Robert J. Buske Name 6 N. Evangeline Oaks Circle Address The Woodlands, TX 77384	STATE OF TEXAS COUNTY OF Month of \$ BEFORE ME, the undersigned authority, on this day personally appeared ROBERT J. BUSKE, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me
Signature Robert J. Buske Name 6 N. Evangeline Oaks Circle Address	STATE OF TEXAS COUNTY OF MEN the undersigned authority, on this day personally appeared ROBERT J. BUSKE, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed. GIVEN UNDER MY HAND and seal of
Signature Robert J. Buske Name 6 N. Evangeline Oaks Circle Address The Woodlands, TX 77384 Date of Execution	STATE OF TEXAS COUNTY OF ME, the undersigned authority, on this day personally appeared ROBERT J. BUSKE, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed.
Signature Robert J. Buske Name 6 N. Evangeline Oaks Circle Address The Woodlands, TX 77384 Date of Execution KIM GREGG Notary Public, State of Texas	STATE OF TEXAS COUNTY OF Month of S BEFORE ME, the undersigned authority, on this day personally appeared ROBERT J. BUSKE, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed. GIVEN UNDER MY HAND and seal of office this 10 day of 100 day of 100 day.
Signature Robert J. Buske Name 6 N. Evangeline Oaks Circle Address The Woodlands, TX 77384 Date of Execution KIM GREGG	STATE OF TEXAS COUNTY OF MEN the undersigned authority, on this day personally appeared ROBERT J. BUSKE, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed. GIVEN UNDER MY HAND and seal of

Page 4 of 9

ASSIGNOR	*** NOTARIZATION IS PREFERRED, BUT NOT REQUIRED ***
Fidelf = Timb	STATE OF TEXAS §
Rudolf C. Pessier Name	COUNTY OF Montes \$
Address Houston, TX 77007 April 2, 2014 Date of Execution KIM GREGG	BEFORE ME, the undersigned authority, on this day personally appeared RUDOLF C. PESSIER, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed. GIVEN UNDER MY HAND and seal of office this 2 day of 12014.
Notary Public, State of Texas My Commission Expires August 03, 2014	[NOTARY STAMP]
ASSIGNOR	*** NOTARIZATION IS PREFERRED, BUT NOT REQUIRED ***
Signature Don Q. Nguyen Name	STATE OF TEXAS § COUNTY OF Moderate §
11503 Springshire Dr. Address Houston, TX 77066	BEFORE ME, the undersigned authority, on this day personally appeared DON Q. NGUYEN, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

Page 5 of 9

*** NOTARIZATION IS PREFERRED, BUT **NOT REQUIRED *** ASSIGNOR** STATE OF TEXAS Signature COUNTY OF _____ Karlos Cepeda Name ME, the undersigned BEFORE 6604 Breen Street authority, on this day personally appeared Address KARLOS CEPEDA, known to me to be the person whose name is subscribed to the Houston, TX 77086 foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed. Date of Execution GIVEN UNDER MY HAND and seal of office this ____ day of ____, 2014. [NOTARY STAMP] *** NOTARIZATION IS PREFERRED, BUT **NOT REQUIRED ***** STATE OF TEXAS Signature COUNTY OF ALADES Michael S. Damschen MSD Name ers 1305 PECKHAM ST. undersigned 8MAY 2014 **BEFORE** ME, the 4109 Cordell St authority, on this day personally appeared Address MGO MICHAEL S. DAMSCHEN, known to me to be BMAY ZO14 77019 the person whose name is subscribed to the Houston, TX 77009 foregoing instrument, and acknowledged to me that he executed the same for the purposes 20 14 8 MAY and consideration therein expressed. Date of Execution GIVEN UNDER MY HAND and seal of office this <u>&</u> day of <u>MAY</u>, 2014. REBECCA ELAYNE WOOLEY Notary Public, State of Texas My Commission Expires

August 15, 2017

Page 6 of 9

*** NOTARIZATION IS PREFERRED, BUT

ASSIGNOR	NOT REQUIRED ***
Milled Rothe Signature	STATE OF TEXAS §
Mitchell A. Rothe	STATE OF TEXAS § S COUNTY OF Montgomery §
Name, 326 SK Pper Jack Dr. 21007 Florette Ln. Address Montgomery TX 77316 Spring TX 77388 April 10. 2014 Date of Execution	BEFORE ME, the undersigned authority, on this day personally appeared MITCHELL A. ROTHE, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed.
KIM GREGG Notary Public, State of Texas My Commission Expires August 03, 2014	GIVEN UNDER MY HAND and seal of office this /o day of And , 2014. [NOTARY STAMP]
ASSIGNOR Signature Johnathan Howard Name	*** NOTARIZATION IS PREFERRED, BUT NOT REQUIRED *** STATE OF TEXAS COUNTY OF Manual S
Name 32510 HADDEN PARK CT. JWW 2014 9110 Gregan's Mill Road of APR 2014 Address CONRIE, TX 77385 The Woodlands, TX 77380	JOHNATHAN HOWARD, known to me to be
April 1,2014	the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed.
Date of Execution KIM GREGG Notary Public, State of Texas My Commission Expires	foregoing instrument, and acknowledged to me that he executed the same for the purposes

Page 7 of 9

ASSIGNOR

*** NOTARIZATION IS PREFERRED, BUT NOT REQUIRED ***

Signature	STATE OF TEXAS \$ S COUNTY OF \$
Gregory C. Prevost Name	COUNTY OF §
4623 Bridgestone Path Dr. Address Spring, TX 77388	BEFORE ME, the undersigned authority, on this day personally appeared GREGORY C. PREVOST, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed.
Date of Execution	GIVEN UNDER MY HAND and seal of office this day of, 2014.
	[NOTARY STAMP]
ASSIGNOR	*** NOTARIZATION IS PREFERRED, BUT NOT REQUIRED ***
Signature	STATE OF TEXAS §
Chaitanya K. Vempati Name	COUNTY OF MANAGEMENT S
130 AUTUMN FOREST AN 8101 Research Forest Dr. #5306 Address CONROL TX 77384 The Woodlands, TX 77382	BEFORE ME, the undersigned authority, on this day personally appeared CHAITANYA K. VEMPATI, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes
02 APR 14	and consideration therein expressed.
Date of Execution	GIVEN UNDER MY HAND and seal of office this day of, 2014.
KIM GREGG Notary Public, State of Texas My Commission Expires August 03, 2014	[NOTARY STAMP]
Balance	

Page 8 of 9

ASSIGNOR	*** NOTARIZATION IS PREFERRED, BUT NOT REQUIRED ***
Signature Gregory C. Prevost Name	STATE OF TEXAS § COUNTY OF Harris §
4623 Bridgestone Path Dr. Address Spring, TX 77388 \(\lambda \text{May 2014} \) Daté of Execution	BEFORE ME, the undersigned authority, on this day personally appeared GREGORY C. PREVOST, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed. GIVEN UNDER MY HAND and seal of office this day of, 2014.
	[NOTARY STAMP]
ASSIGNOR	*** NOTARIZATION IS PREFERRED, BUT NOT REQUIRED ***
Signature	STATE OF TEXAS §
Chaitanya K. Vempati Name	COUNTY OF MANAGEMENT S
Name 130 AUTUMN FOREST KN 8101 Research Forest Dr. #5306 Address CONRUE TX 77384 The Woodlands, TX 77382 O2 APR 14	BEFORE ME, the undersigned authority, on this day personally appeared CHAITANYA K. VEMPATI, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed.
Name 130 AUTUMN FOREST KN 8101 Research Forest Dr. #5306 Address CONRIE TX 77384 The Woodlands, TX 77382	BEFORE ME, the undersigned authority, on this day personally appeared CHAITANYA K. VEMPATI, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes

Page 8 of 9

*** NOTARIZATION IS PREFERRED, BUT NOT REQUIRED ***

ASSIGNOR

Signature

John F. Bradford

Name

26 Gate Hill Dr.

Address

The Woodlands, TX 77381

Date of Execution

AMELIA HERNANDEZ

NOTARY PUBLIC STATE OF TEXAS BY COMM. EXR 10/13/15 STATE OF TEXAS §
COUNTY OF Montgonery §

BEFORE ME, the undersigned authority, on this day personally appeared JOHN F. BRADFORD, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND and seal of office this / day of /////, 2014.

ander Hernards [NOTARY STAMP]

Page 9 of 9

PATENT REEL: 034906 FRAME: 0945

RECORDED: 02/06/2015