## RECORDATION FORM COVER SHEET PATENTS ONLY

Atty Ref/Docket No.: 1880.275WO1	Patent and Trademark Office
To the Director of the U.S. Patent and Trademark Office:	Please record the attached original documents or copy thereof.
1. Name of conveying party(ies):	<ol><li>Name and address of receiving party(ies):</li></ol>
Paul Cooper, Kristopher V Sherrill, Ricardo Ortiz, Daniel Flores and Batakrishna Mandal Additional name(s) of conveying party(ies) attached?  [ ]Yes [X]No 3. Nature of conveyance:	Name: <u>Halliburton Energy Services, Inc.</u> Street Address: <u>10200 Bellaire Blvd</u> City: <u>Houston</u> State: <u>TX</u> Zip: <u>77072</u> Additional name(s) & address(es) attached? [ JYes [X]No
[X] Assignment [ ] Merger [ ] Security Agreement [ ] Change of Name [ ] Other  Execution Date: August 31, 2009, August 14, 2009, August 14, 2009, February 15, 2010, August 18, 2009	
<ol> <li>Application number(s) or patent number(s):</li> <li>If this document is being filed together with a new applica</li> <li>A. Patent Application No.(s)</li> <li>Serial No. PCT/US2009/50859, filed July 16, 200</li> <li>Additional numbers attached? [ ]Ycs [X]No</li> </ol>	B. Patent No.(s)
5. Name and address of party to whom correspondence concerning document should be mailed:  Name: Mark V. Muller  Address:  Schwegman, Lundberg & Woessner, P.A.  P.O. Box 2938  Minneapolis, MN 55402-0938	<ol> <li>Total number of applications and patents involved: 1</li> <li>Total fee (37 CFR 3.41):\$ 40.00</li> <li>[ ]Enclosed</li> <li>[X]Authorized to be charged to deposit account 19-0743</li> <li>Please charge any additional fees or credit any over payments to our Deposit Account No.: 19-0743</li> </ol>
DO NOT I	SE THIS SPACE
9. Statement and signature.	THE ALLEG ME PROPERTY.
To the best of my knowledge and belief, the foregoing info of the original document.  Mark V. Muller/Reg. No. 37,509  Name of Person Signing	FEBRUARY 19, 2010 Signature Date  Cotal number of pages including cover sheet: 16
Mail documents to be recorded with required cover sheet in	·

Commissioner of Patents and Trademarks Mail Stop Assignment Recordation Services P.O. Box 1450 Alexandria, VA 22313-1450

ASSIGNMENT 804 Robin St., Houston Tx 77019

WHEREAS, We, Paul Cooper, residing at 2222 Smith St #223, Houston, TX-77002, and Kristopher V Sherrill, residing at 12730 Smokey Mountain Court, Humble, TX 77346, and Ricardo Ortiz, residing at 1116 Smallwood Lane, Texas, Houston, TX 77023, and Daniel Flores, residing at 3000 N. Sam Houston Parkway E., Bldg. J, Room 3R41, Houston, TX 77032, and Batakrishna Mandal, residing at 4222 Bluewater Dr., Missouri City, TX 77459, made certain new and useful inventions and improvements for which we filed an application for Letters Patent of the United States on July 16, 2009, which application was assigned U.S. patent application serial number PCT/US09/50859, and is entitled ACOUSTIC VELOCITY MEASUREMENTS <u>USING TILTED TRANSDUCERS</u>;

AND WHEREAS, Halliburton Energy Services, Inc., a corporation organized and existing under and by virtue of the laws of the State of Delaware, and having an office and place of business at 10200 Bellaire Blvd, Houston, TX 77072 (hereinafter "Assignee"), is desirous of acquiring the entire right, priority right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefore;

Docket No: 1880.275WO1 Client Ref. No. 2006-IP-021556/E-Billing # 2006-IP-021556 Serial Number: PCT/US09/50859 Filing Date: July 16, 2009

Title: ACOUSTIC VELOCITY MEASUREMENTS USING TILTED TRANSDUCERS

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NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and in and to the said application, all divisions, continuations, continuations-in-part, or renewals thereof, all Letters Patent which may be granted there from, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted there from; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the said Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

AND, for the consideration aforesaid, we do hereby agree that we and our executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to us relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the said improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

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AND, furthermore, we covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by us and that full right to convey the same as herein expressed is possessed by us.

Docket No: 1880,275WQ1
Client Ref. No. 2006-IP-021556/E-Billing # 2006-IP-021556
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Title: ACOUSTIC VELOCITY MEASUREMENTS USING TILTED TRANSDUCERS
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	STIMONY WHEF	REOF, 1 have 1	hereunto set i	my hand this _	31 <u>54</u> day of	, _
Avgus⊦	, 20 <u><b>09</b>.</u>					
<b></b>						
			P	Alon	res.	
				Paul Cooper		
STATE OF T	EXAS	١		•		
	<del></del>					
COUNTY OF	HARRIS	)ss )				
On this	315+ day of	August	_, 20 <u>09</u> _ be	fore me perso	nally appeare	d <u>Paul Cooper.</u>
to me known and l	known to me to be	the person des	scribed in and	who execute	d the foregoin	ng instrument,
and he/she duly ac	knowledged to me	that he/she ex	ecuted the sa	me for the use	es and purpos	es therein set
forth.						
[SEAL]	DAWN MEGEE MY COMMISSION EXPI	RES	1	<u>(veril</u>	Mu	gel
	A GOLD ON TRAIN		Notary	Public		ί `

Dookst No: 1880.275WO1 Client Ref. No. 2006-IP-021556/E-Billing # 2006-IP-021556 Serial Number: PCT/US09/50859

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IN TESTIMONY WHEREOF, I have hereunto set my hand this $\frac{19^{-5}}{100}$ day of
August ,2009.
Kristopher V Sherrill
STATE OF Texas
COUNTY OF Harris
On this 1444 day of <u>Hugus</u> , 20 <u>04</u> before me personally appeared <u>Kristopher V</u>
Sherrill, to me known and known to me to be the person described in and who executed the foregoing
instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes

[SEAL]

therein set forth.

CHERY AMOUR SMITH JAMES My Commission Expires March 29, 2011

Notary Public

**PATENT** 

**REEL: 023968 FRAME: 0948** 

Docket No: 1880.275WO1

Client Ref. No. 2006-IP-021556/E-Billing # 2006-IP-021556

Serial Number: PCT/US09/50859

Filing Date: July 16, 2009
Title: ACOUSTIC VELOCITY MÉASUREMENTS USING TILTED TRANSDUCERS

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IN TESTIMONY WHEREOF, I have hereunto set my hand this 14 day of

Ricardo Ortiz

STATE OF DX A.S

COUNTY OF

On this 14th day of thugust, 20 09 before me personally appeared Ricardo Ortiz, to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth.

[SEAL]

dy Commission Expires

**PATENT** 

REEL: 023968 FRAME: 0949

[SEAL] \_\_\_\_\_\_\_Notary Public

On this \_\_\_\_\_\_ day of \_\_\_\_\_\_, 20\_\_\_\_ before me personally appeared <u>Daniel</u>

instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes

Flores, to me known and known to me to be the person described in and who executed the foregoing

therein set forth.

Docket No: 1880,275WQ1

Client Ref. No. 2006-IP-021556/E-Billing # 2006-IP-021556 Serial Number: PCT/US09/50859

Filing Date: July 16, 2009

Title: ACOUSTIC VELOCITY MEASUREMENTS USING TILTED TRANSDUCERS

Page 8 of 8

IN TESTIMONY WHEREOF, I have hereunto set my hand this -/S day of

Batakrishna Mandal

STATE OF Texas

On this 189h day of August 2007 before me personally appeared Batakrishna Mandal, to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth.

Notary Public

## ASSIGNMENT

WHEREAS, We, Paul Cooper, residing at 2222 Smith St #223, Houston, TX 77002, and Kristopher V Sherrill, residing at 12730 Smokey Mountain Court, Humble, TX 77346, and Ricardo Ortiz, residing at 1116 Smallwood Lane, Texas, Houston, TX 77023, and Daniel Flores, residing at 3000 N. Sam Houston Parkway E., Bldg. J, Room 3R41, Houston, TX 77032, and Batakrishna Mandal, residing at 4222 Bluewater Dr., Missouri City, TX 77459, made certain new and useful inventions and improvements which are described in an application for International Letters Patent on July 16, 2009, which application was assigned International patent application serial number PCT/US09/50859, and is entitled ACOUSTIC VELOCITY MEASUREMENTS USING TILTED TRANSDUCERS;

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, the undersigned do hereby:

SELL, ASSIGN AND TRANSFER to Halliburton Energy Services, Inc. (the "Assignee"), a corporation of the State of Delaware, having a place of business at 10200 Bellaire Blvd, Houston, TX 77072, 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 identified application for PCT Letters Patent, and which may be further identified below; 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 (including all provisional and non-provisional applications), and in all foreign countries on any of such inventions and/or improvements (including any applications for utility models); all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such inventions and/or improvements; and specifically including the right to file foreign applications under the provisions of any convention or treaty and to claim priority based on the identified application;

AUTHORIZE AND REQUEST that any attorney associated with U.S. PTO Customer No. <u>21186</u> may (directly or through his/her designee) delete, insert, or alter any information identifying this application, or any related application, below, after execution of this Assignment;

## Additional Application Information

No Provisional claim for priority is being made at this time.

No U.S. Non-Provisional claim for priority is being made at this time.

International Application Serial No. PCT/US2009/002905, filed on May 11, 2009.

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such improvements to the Assignee;

ASSIGNMENT Client Ref. No. 2006-IP-02 (556/E-Billing # 2006-IP-021556 Assignors: Paul Cooper et al. Title: ACOUSTIC VELOCITY MÉASUREMENTS USING TILTED TRANSDUCERS Page 2 of 7

Docket No: 1880.275WO1

Serial Number: PCT/US09/50859

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and/or property hercin 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, that when requested and without compensation, but at the expense of the Assignee, in order to carry out in good faith the intent and purpose of this Assignment, the undersigned will (1) execute all provisional, non-provisional, divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such improvements; (2) execute all rightful oaths, declarations, assignments, powers of attorney and other papers; (3) communicate to the Assignee all facts known to the undersigned relating to such improvements and the history thereof; (4) cooperate with the Assignee in any interference, reexamination, reissue, opposition, dispute, or litigation involving any of the applications or patents for such improvements; and (5) take such further actions as the Assignee shall reasonably consider necessary or desirable for vesting title to such improvements in the Assignee, or for securing, maintaining and enforcing proper patent protection for such improvements;

THIS AGREEMENT IS TO BE BINDING on the heirs, assigns, representatives and successors of the undersigned, and is to extend to the benefit of the successors, assigns and nominees of the Assignee.

AGREED as of the date of my signature below:

ASSIGNMENT Citent Ref. No. 2006-IP-021556/IJ-Billing # 2006-IP-021556 Assignors: Paul Cooper et al. Title: ACOUSTIC VELOCITY MEASUREMINTS USING TILTED T	Docket No: 1880.275WO1  Scrial Number: PCT/US09/50859  FRANSDUCERS
IN TESTIMONY WHEREOF, I have he	
STATE OF	Paul Cooper
COUNTY OF)	
On this day of, Cooper, to me known and known to me to be the personegoing instrument, and he/she duly acknowledged uses and purposes therein set forth.	20 before me personally appeared   aul on described in and who executed the to me that he/she executed the same for the
[SEAL]	
	Notary Public

ASSIGNMENT Client Ref. No. 2006-IP-021556/E-Billing # 2006 Assignors: Paul Cooper et al. Tide: ACOUSTIC VELOCITY MEASUREMEN Page 4 of 7		Docket No: 1880.275WO1 Serial Number: PCT/US09/50859
IN TESTIMONY WHE, 20	REOF, I have hercunto set my l	hand this day of
STATE OF	 Kri: )	stopher V Sherrill
COUNTY OF	)ss )	
On this day of Kristopher V Sherrill, to me known a executed the foregoing instrument, an same for the uses and purposes therein	I he/she duly acknowledged to	
[SEAL]		
· · · · · · · · · · · · · · · · · · ·	Notary Publ	ic

ASSIGNMENT Client Ref. No. 2006-IP-021556 Assignors: Paul Cooper et al. Title: ACOUSTIC VELOCITY Page 5 of 7		FILTED TRANSDUCERS	Docker No: 1880,275WO1 Scriel Number: PCT/US09/50859
IN TESTIM		nave hercunto set my h	and this day of
STATE OF	<del></del>		rdo Ortiz
COUNTY OF	)ss		
Micardo Omz, jo me kno	wn and known to me t d he/she duly acknowl	to be the person describ	ne personally appeared ped in and who executed the e executed the same for the
SEAL]			
	<u>-</u>	 Notary Publi	c

ASSIGNMENT Client Ref. No. 2006-IP-021556/E-Billing # 2006-IP-021556

Assignors: Paul Cooper et al.

Title: ACOUSTIC VELOCITY MEASUREMENTS USING TILTED TRANSDUCERS

Docket No: 1880.275WQ1

Serial Number: PCT/US09/50859

KIM WEROYICH Notary Public, Stane of Texas Terrounde, Stane of Texts of the Commission Express (November 2), 2013 My Commission Expires

IN TESTIMONY WHEREOF, I have hereunto set my hand this 15 day of

Daniel Flores

On this 15th day of 10than, 2010 before me personally appeared Daniel Flores, to me known and known to me to be the person described in and who executed the foregoing instrument, and he/she duly acknowledged to me that he/she executed the same for the uses and purposes therein set forth.

Notary Public

**RECORDED: 02/22/2010** 

rial Number: PC'f/11509/50859
this day of
nna Mandal
ersonally appeared ribed in and who hat he/she executed the