OMB No. 0651-0027 (exp. 6/30/2008)				
10	3428467			
To the Director of the U.S. Patent and Trademark Office	ase record the attached documents or the new address(es) below			
1. Name of conveying party(ies)	2. Name and address of receiving party(ies)			
see names attached	Name: Halliburton Energy Services, Inc.			
	Internal Address:			
Additional name(s) of conveying party(ies) attached?	□ N°			
3. Nature of conveyance/Execution Date(s):	Street Address: 10200 Bellaire Blvd.			
Execution Date(s) see attached				
Assignment Merger				
Security Agreement Change of Na	me City: Houston			
Joint Research Agreement	State: TX			
Government Interest Assignment				
Executive Order 9424, Confirmatory License	Country: US Zip: 77072			
Other 4. Application or patent number(s): A. Patent Application No.(s) 11/742,430	Additional name(s) & address(es) attached? ☐ Yes ✓ This document is being filed together with a new applicat B. Patent No.(s)			
4. Application or patent number(s): A. Patent Application No.(s) 11/742,430 Additional number	This document is being filed together with a new applicat B. Patent No.(s) bers attached? Yes INo			
4. Application or patent number(s): A. Patent Application No.(s) 11/742,430	This document is being filed together with a new applicat B. Patent No.(s) bers attached? Yes VNo			
4. Application or patent number(s): A. Patent Application No.(s) 11/742,430 Additional numl 5. Name and address to whom correspondence	This document is being filed together with a new application B. Patent No.(s) bers attached? Yes ✓ No e 6. Total number of applications and patents involved: 1			
4. Application or patent number(s): A. Patent Application No.(s) 11/742,430 Additional numl 5. Name and address to whom correspondence concerning document should be mailed:	This document is being filed together with a new applicat B. Patent No.(s) bers attached? Yes ✓ No e 6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00			
4. Application or patent number(s): A. Patent Application No.(s) 11/742,430 Additional numl 5. Name and address to whom correspondence concerning document should be mailed: Name:Craig W. Roddy	This document is being filed together with a new application B. Patent No.(s) bers attached? Yes ✓ No e 6. Total number of applications and patents involved: 1			
A. Patent Application No.(s) A. Patent Application No.(s) 11/742,430 Additional numl S. Name and address to whom correspondence concerning document should be mailed: Name:Craig W. Roddy Internal Address: Halliburton Energy Services, Inc.	This document is being filed together with a new applicat B. Patent No.(s) bers attached? Yes ✓ No e 6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00 Authorized to be charged by credit card			
4. Application or patent number(s): A. Patent Application No.(s) 11/742,430 Additional numl 5. Name and address to whom correspondence concerning document should be mailed: Name:Craig W. Roddy	This document is being filed together with a new applicat B. Patent No.(s) bers attached? Yes ✓ No e 6. Total number of applications and patents involved: 1 — 7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00 — Authorized to be charged by credit card ✓ Authorized to be charged to deposit account Enclosed Enclosed			
A. Patent Application No.(s) A. Patent Application No.(s) 11/742,430 Additional numl S. Name and address to whom correspondence concerning document should be mailed: Name:Craig W. Roddy Internal Address: Halliburton Energy Services, Inc. Street Address: 2600 S. 2nd	This document is being filed together with a new applicat B. Patent No.(s) bers attached? Yes ✓ No e 6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 □ Authorized to be charged by credit card ✓ Authorized to be charged to deposit account			
A. Patent Application No.(s) A. Patent Application No.(s) 11/742,430 Additional numl S. Name and address to whom correspondence concerning document should be mailed: Name:Craig W. Roddy Internal Address: Halliburton Energy Services, Inc. Street Address: 2600 S. 2nd City: Duncan	This document is being filed together with a new applicat B. Patent No.(s) bers attached? Yes ✓ No e 6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00 Authorized to be charged by credit card ✓ Authorized to be charged to deposit account Enclosed None required (government interest not affecting 8. Payment Information a. Credit Card			
4. Application or patent number(s): A. Patent Application No.(s) 11/742,430 Additional numl Additional address to whom correspondence concerning document should be mailed: Name:Craig W. Roddy Internal Address: Halliburton Energy Services, Inc. Street Address: 2600 S. 2nd City: Duncan State: OK Zip:73536-0440	This document is being filed together with a new applicat B. Patent No.(s) bers attached? Yes ✓ No e 6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card ✓ Authorized to be charged to deposit account Enclosed None required (government interest not affecting 8. Payment Information			
4. Application or patent number(s): A. Patent Application No.(s) 11/742,430 Additional numl Additional numl Additional numl State: Craig W. Roddy Internal Address: Halliburton Energy Services, Inc. Street Address: 2600 S. 2nd City: Duncan State: OK Zip:73536-0440 Phone Number: 580-251-3012	This document is being filed together with a new applicat B. Patent No.(s) bers attached? Yes ✓ No e 6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00 Authorized to be charged by credit card ✓ Authorized to be charged to deposit account Enclosed None required (government interest not affecting 8. Payment Information a. Credit Card			
4. Application or patent number(s): A. Patent Application No.(s) 11/742,430 Additional number 5. Name and address to whom correspondence concerning document should be mailed: Name:Craig W. Roddy Internal Address: Halliburton Energy Services, Inc. Street Address: 2600 S. 2nd City: Duncan State: OK Zip:73536-0440 Phone Number: 580-251-3012 Fax Number: 580-251-3917	This document is being filed together with a new applicat B. Patent No.(s) bers attached? Yes ✓ No e 6. Total number of applications and patents involved:_1 7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00 Authorized to be charged by credit card ✓ Authorized to be charged to deposit account Enclosed None required (government interest not affecting 8. Payment Information a. Credit Card Last 4 Numbers Expiration Date			
4. Application or patent number(s): A. Patent Application No.(s) 11/742,430 Additional numl Additional numl Additional numl State: Craig W. Roddy Internal Address: Halliburton Energy Services, Inc. Street Address: 2600 S. 2nd City: Duncan State: OK Zip:73536-0440 Phone Number: 580-251-3012	This document is being filed together with a new applicat B. Patent No.(s) bers attached? Yes ✓ No e 6. Total number of applications and patents involved:_1 7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00 Authorized to be charged by credit card ✓ Authorized to be charged to deposit account Enclosed None required (government interest not affecting 8. Payment Information a. Credit Card Last 4 Numbers Expiration Date b. Deposit Account Number <u>08-0300</u>			

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

Daniel Bour - 10/20/2006 Ronnie Morgan - 10/24/2006 Chris Gordon - 10/25/2006 Melissa Allin - 10/26/2006 Mark Savery - 10/25/2006 Renee Manuel - 10/20/2006 Robert Bates - 10/20/2006

ASSIGNMENT

Whereas, I/We, Daniel Bour, of St. Tammany Parish, Mandeville, Louisiana; Ronnie G. Morgan of Jefferson County, Waurika, Oklahoma; Christopher L. Gordon, of Stephens County, Duncan, Oklahoma; Melissa G. Allin, of Stephens County, Comanche, Oklahoma; Mark, R. Savery, of Stephens County, Duncan, Oklahoma; Renee Manuel, of Lafayette Parish, Lafayette, Louisiana; and Robert Bates, of Terrebonne Parish, Houma, Louisiana, have invented METHOD TO CONTROL THE PHYSICAL INTERFACE BETWEEN TWO OR MORE FLUIDS for which I/We have made application for Letters Patent of the United States; and

Whereas, HALLIBURTON ENERGY SERVICES, INC., a Delaware Corporation, having a place of business at 10200 Bellaire Boulevard, Houston, Texas 77072 is desirous of acquiring an interest therein;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/We, by these presents do sell, assign and transfer and convey unto HALLIBURTON ENERGY SERVICES, INC., its successors and assigns, the full and exclusive right, for the United States of America and its territorial possessions and for any and all foreign countries, in and to the said invention, described in the Patent Application serial number 11/531,579 filed on September 13, 2006, and any divisional, continuing or reissue application based on the present application preparatory to obtaining Letters Patent of the United States therefor; said invention, application and any and all Letters Patent issuing therefor to be held and enjoyed by HALLIBURTON ENERGY SERVICES, INC., for its own use and behoof, and for its legal representatives, successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me and had this assignment and sale not been made.

And I do further agree to sign all papers, make all rightful oaths and do all requisite acts for the filing of any disclaimer or for the filing and assignment of any divisional, continuing or reissue application or applications for patent based on the present application, as well as for any other U.S. or foreign application for patent which relates to the said invention.

And I do further agree to communicate to HALLIBURTON ENERGY SERVICES, INC., its successors, assign or other legal representatives, such facts relating to the invention disclosed in the present application or Letters Patent issuing thereon as may be known to me, and to testify as to such facts in any interference or other litigation.

Executed this 20 day of October, 2006, at New Orleans, Orleans Parish, Louisiana, U.S.A..

State of Louisiana Parish of Orleans

) ss

)

Before me personally appeared said Daniel Bour and acknowledged the foregoing instrument to be his free act and deed this 204 day of October, 2006.

Seal

Murles fare # 8006

Executed this <u>24th</u> day of October 2006, at Duncan, Stephens County, Oklahoma, U.S.A.

Konno A Morgan Ronnie G. Morgan

State of Oklahoma County of Stephens

) ss

Before me personally appeared said Ronnie G. Morgan and acknowledged the foregoing instrument to be his free act and deed this <u>24th</u> day of October, 2006.

Seal

SHEILA D. GIBBS Stephens County Notary Public in and for State of Oklahoma 00014119 Expires 10/3/08 ommission

(Notary)

Executed this ______ day of October 2006, at Duncan, Stephens County, Oklahoma, U.S.A.

Christopher L. Gordon

State of Oklahoma)) ss County of Stephens)

Before me personally appeared said Christopher L. Gordon and acknowledged the foregoing instrument to be his free act and deed this <u>25th</u> day of October, 2006.

SHEILA D. GIBB. Stephens County Seal Notary Public in and to (Notary) State of Oklahomic Commission # 00014119 Expires 10.2

Executed this <u>26th</u> day of October 2006, at Duncan, Stephens County, Oklahoma, U.S.A.

felister X

State of Oklahoma)) ss County of Stephens)

Before me personally appeared said Melissa G. Allin and acknowledged the foregoing instrument to be his free act and deed this <u>26th</u> day of October, 2006.

Seal

SHEILA D. GIB3S Stephens County Notary Public in and for State of Oklahoma Commission # 00014119 Expires 10/3/08

Aprila J. U.C. (Notary)

Executed this day of Octobe	er 2006, at Duncan, Stephens County, Oklahoma, U.S.A.
	Mark. R. Savery
State of Oklahoma)) ss	
County of Stephens)	
Before me personally appeared said M to be his free act and deed this <u>25</u> t	lark R. Savery and acknowledged the foregoing instrument <u>h</u> day of October, 2006.
Seal Stephens County SEAL Notary Public in and fo State of Oklahoma Commission # 00014119 Expires 1	(itotaiy)
Executed this 20th day of October	r 2006, at New Orleans, Orleans Parish, Louisiana, U.S.A.
	Renee Manuel
State of Louisiana)	
) ss Parish of Orleans)	

Before me personally appeared said Renee Manuel and acknowledged the foregoing instrument to be his free act and deed this ______ day of October, 2006.

(Notary) CHARLES R. LAWE

Seal

Executed this <u>20</u> day of October 2006, at New Orleans, Orleans Parish, Louisian, U.S.A.

Robert Bates

State of Louisiana)) ss Parish of Orleans)

Before me personally appeared said Robert Bates and acknowledged the foregoing instrument to be his free act and deed this ______ day of October, 2006.

Seal

Marls Kanc # 800 6 (Notacy CHARLES R. LANE

OF PRESERVELIC RECORDS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE? JUL 19 AM 11: 17

Mail Stop Assignment Recordation Services Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

FINANCE SECTION

CORRECTION OF RECORDED COVER SHEET ERROR(S) (37 C.F.R. 3.34)

- NOTE (HAND CARRIED): "Assignments may be hand carried to the Office of Public Records Customer Service Window on the 2nd floor of the South Tower building, 2900 Crystal Drive, Arlington VA 22202." See "Updated Lists of Exceptions to the Centralized Delivery and Facsimile Transmission Policy for Patent Related Correspondence," September 19, 2005; 1299 OG 98, October 18, 2005, Exceptions for Certain Hand Carried Correspondence, item 3.
- NOTE (FACSIMILE): "Assignments or other documents affecting title: 571 273 0140 facsimile number "Note: Customers may submit documents directly into the automated Patent and Trademark Assignment System and receive the resulting recordation notice at their facsimile machine. (Assignment documents submitted through the Electronic Patent Assignment System also permits the recordation notice to be faxed to customers.) Credit card payments to record assignment documents are now accepted, and use of the Credit Card form (PTO 2038) is required for the credit card information to be separated from the assignment records. Only documents with an identified patent application or patent number, a single cover sheet to record a single type of transaction, and the fee paid by an authorization to charge a USPTO deposit account or credit card may be submitted via facsimile. Please refer to the USPTO Web S ite, at http://www.uspto.gov/web/offices/ ac/ido/opr/ptasfax.pdf for more information regarding the submission of assignment documents via facsimile.

"Assignment Branch telephone number for assistance: 571 272 3350"

See "Updated Lists of Exceptions to the Centralized Delivery and Facsimile Transmission Policy for Patent Related Correspondence," September 19, 2005; 1299 OG 98, October 18, 2005, Exceptions for Certain Facsimile Transmitted Correspondence, item 5.

	CERTIFICATION UNDER 37 C.F.R. §§ 1.8(a) and 1.10* (When using Express Mail, the Express Mail label number is mandatory; Express Mail certification is optional.)
l h	ereby certify that, on the date shown below, this correspondence is being:
	MAILING
X	deposited with the United States Postal Service in an envelope addressed to the Director of the United States Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 37 C.F.R. § 1.8(a) 37 C.F.R. § 1.10°
X	with sufficient postage as first class mail.
	TRANSMISSION
	transmitted by facsimile to the Patent and Trademark Office, (571) 273-0140.
Dof	te: 7/16/2007 Signature
Da	Lindsie lowisena
	(type or print name of person certifying)
•W	ARNING: Each paper or fee filed by Express Mail must have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. § 1.10(b).

"Since the filing of correspondence under § 1.10 without the Express Mail mailing is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

(Correction of Recorded Cover Sheet Error(s) [16-8]-page 1 of 2)

1. Applicant has noted an error in the cover sheet for the assignment(s) (document(s)) previously recorded on <u>10/31/2006</u>

Date of recordal

Reel 018478 Frame 0747

- 2. Attached hereto is:
 - the originally recorded document.
 - X a copy of the originally recorded document.
- 3. Also attached hereto is a corrected cover sheet for recordation.
- 4. The error in the originally recorded cover sheet is apparent when that cover sheet is compared with the recorded document because:

In box 4 of the Recordation Form Cover Sheet, the Application Number should be 11/742,430.

5. The recording fee is shown in the corrected cover sheet filed herewith. Payment of this recording fee is in the manner set forth in the corrected cover sheet.

NOTE:	"A fee is required for each application, patent ar	nd registration against which the document is recorded
	as identified in the cover sheet." 37 CFR 3.41	Cary W. Coddy
		SIGNATURE OF PRACTITIONER
Reg. No).: 36 , 256	Craig W. Roddy
		(type or print name of practitioner)

Tel. No.: (580) 251-3012

PO)	Box	1	<u>43</u>	1
P.O.	A	ddress			

Customer No.: 28857

(Correction of Recorded Cover Sheet Error(s) [16-8]—page 2 of 2) PATENT REEL: 019594 FRAME: 0175

Duncan, OK 73533-0440

RECORDED: 07/19/2007