FORM PTO-1619A Expires 06/30/99 OMB 0651-0027

01-10-2000 101241215

U.S. Department of Commerce Patent and Trademark Office PATENT

MeD 12.16.99		EEI
TO: The Commissioner of Patents and Trader	PATENTS ONLY marks: Please record the attached of	original document(s) or conv(ies).
Submission Type	Conveyance Type	ga. googanos,
X		Security Agreement
Resubmission (Non-Recordation) Document ID#	License C	change of Name
Correction of PTO Error Reel # Frame #		Other Sovernment
Corrective Document Reel # Frame #	(For Use ONLY by	U.S. Government Agencies)
Conveying Party(ies)	Mark if additional names of o	conveying parties attached Execution Date Month Day Year
Name (line 1) James R. Birchak		12 10 99
Name (line 2)		
Second Party		Execution Date Month Day Year
Name (line 1) Mark A. Proett		12 10 99
Name (line 2)		
Receiving Party Name (line 1) Halliburton Energy Ser		ional names of receiving parties attached
Name (line 1) Halliburton Energy Ser	vices, Inc.	If document to be recorded is an assignment and the
Name (line 2)		receiving party is not domiciled in the United States, an appointment
Address (line 1) 4100 Clinton Drive		of a domestic representative is attached. (Designation must be a
Address (line 2)		separate document from Assignment.)
Address (line 3) Houston	Texas/U.S. State/Country	77020 Zip Code
Domestic Representative Name and	Addross	Receiving Party only.
Name		
Address (line 1)		
Address (line 2)		
Address (line 3)		
Address (line 4)		
01/07/2000 DHGUYEH 60000136-080300 09464728	FOR OFFICE USE ONLY	
1 FC:581 (40.00 CH		
Public burden reporting for this collection of information is estimated to	o average approximately 30 minutes per Cover Sheet I	to be recorded, including time for reviewing the document and

gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief Information Officer, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20503. See OMB Information Collection Budget Package 0651-0027, Patent and Trademark Assignment Practice. DO NOT SEND REQUESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS ADDRESS.

Mail documents to be recorded with required cover sheet(s) information to: Commissioner of Patents and Trademarks, Box Assignments, Washington PAT ENST

FORM PTC Expires 06/30/99 OMB 0651-0027	D-1619B	Page 2	U.S. Department of Commerce Patent and Trademark Office PATENT
Correspond	ent Name and Address	Area Code and Telephone Numbe	580-251-3012
Name	Craig W. Roddy		
Address (line 1)	Halliburton Energy Ser	vices	
Address (line 2)	P.O. Box 1431		
Address (line 3)	Duncan, OK 73536-0440		
Address (line 4)			
Pages	Enter the total number of pa including any attachments.	ges of the attached conveyance doc	sument # six
Application	Number(s) or Patent Nun	nber(s) _{Mark}	k if additional numbers attached
	• •	Patent Number (DO NOT ENTER BOTH numb	• • •
Pat	tent Application Number(s)	Pat	ent Number(s)
	s being filed together with a <u>new</u> Pate st named executing inventor.	ent Application, enter the date the patent applic	Cation was Month Day Year 12 10 99
Patent Coop	peration Treaty (PCT)	POT DOT	
	er PCT application number	PCT PCT	PCT
_	<u>rif</u> a U.S. Application Number not been assigned.	PCT PCT PCT	PCT
Number of P	Properties	tal number of properties involved.	# one
Fee Amount	Fee Amount	for Properties Listed (37 CFR 3.41):	\$ 40.00
	of Payment: Enclo		
	payment by deposit account or if addi	itional fees can be charged to the account.) Deposit Account Number:	# 08-0300
	P	Authorization to charge additional fees:	Yes X No
Statement a	nd Signature		
attache		elief, the foregoing information is true original document. Charges to depos	
Craig W.	Roddy	Clary W Koddy	12-16-99
Name	of Person Signing	Signature	Date

FORM PTO-1619C Expires 06/30/99 OMB 0651-0027

RECORDATION FORM COVER SHEET CONTINUATION PATENTS ONLY

U.S. Department of Commerce Patent and Trademark Office PATENT

Conveying Pa	rtv(ies)	 T		
Enter additional C		Mark if additional na	nmes of conveying parties at	Execution Date
Name (line 1)			00	Month Day Year
Marine (iiile i)	Thomas E. Ritter		2	12 13 99
Name (line 2)			a. +	Supplier Pale
			2.4	Execution Date Month Day Year
Name (line 1)	Vimal V. Shah	PB-4-3-2-41 - 1411 - 2-1111 - 1111 - 1111 - 1111 - 1111 - 1111 - 1111 - 1111 - 1111 - 1111 - 1111 - 1111 - 111		12 10 99
Name (line 2)			<u>§</u> a	
<u> </u>				Execution Date Month Day Year
Name (line 1)	Curtis R. Vickery			12 15 99
Name (line 2)				
Receiving Pa	rty(ies)	Mark i	f additional names of receivi	ng parties attached
Enter additional R	eceiving Party(ies)			
Name (line 1)				If document to be recorded is an assignment and the
Name (line 2)				receiving party is not domiciled in the United
Name (mez)	·			States, an appointment of a domestic representative
Address (line 1)				is attached. (Designation
				must be a separate document from
Address (line 2)				Assignment.)
Address (line 3)				
, , , , , , , , , , , , , , , , , , ,	City	State	e/Country	Zip Code
Name (line 1)				If document to be recorded
				is an assignment and the receiving party is not
Name (line 2)	<u> </u>	W-1740-WA		domiciled in the United States, an appointment of a
Address (line 1)				domestic representative is attached. (Designation must
				be a separate document from
Address (line 2)				Assignment.)
Address (line 3)	1			
Application N	City		e/Country	Zip Code
• •	umber(s) or Patent Num Patent Application Number or the F	· · ·	Mark if additional numbers at	
	tent Application Number(s)	atent Number (DO NO		Number(s)
	Application Number (3)		T aten	Number (3)
		<u></u>		
		'		

ASSIGNMENT

Whereas, I/We, James R. Birchak of Harris County, Spring, Texas; Mark A. Proett of Fort Bend County, Missouri City, Texas; Thomas E. Ritter of Harris County, Katy, Texas; Vimal V. Shah of Harris County, Houston, Texas and Curtis M. Vickery of Duncan, Stephens County, Oklahoma, have invented **VIBRATIONAL FORCED MODE FLUID PROPERTY MONITOR AND METHOD** for which I have made application for Letters Patent of the United States; and Whereas, HALLIBURTON ENERY SERVICES, INC., a Delaware Corporation, having a place of business at 4100 Clinton Drive, Houston, Texas 77020 is desirous of acquiring an interest therein;

NOW, THEREFORE, in consideration of the sum of ten dollars (\$10.00) and other 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 first executed on December 10, 1999, submitted concurrently herewith, 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 thisday of December	er, 1999, at Houston, Harris County, Texas U.S.A.
	James R. Birchar Signature
	Signature
State of Texas)	
County of Harris) ss	
Before me personally appeared said	James R. Birchak and acknowledged the foregoing
instrument to hadis iften act and deed th	is 10 day of December, 1999.
Seal Seal Seal Seal Seal Seal Seal Seal	(Notary Public)
Executed this day of December	er, 1999, at Houston, Harris Coupty, Texas U.S.A.
	Male afinto
	Signature
G O.T.	C
State of Texas)) ss	
County of Harris)	
Before me personally appeared said Ma to be his free activated decoloring 10 Seal Seal Seal Seal Seal Seal	ark A. Proett and acknowledged the foregoing instrument day of December, 1999. (Notary Public)
Executed this _/5/2000 day of December	er, 1999, at Houston Harris County, Texas U.S.A. Signature
State of Texas)	
) ss County of Harris)	
Before me personally appeared said	Thomas E. Ritter and acknowledged the foregoing
instrument to be his free act and deed thi	- 17h
Seal DAVID A. C. NOTARY PUBLIC, STATE MY COMMISSION E JULY 31, 20	ARP E OF TEXAS (Notary Public) XPIRES 001

Executed this	_day of December, 1999, at Houston, Harris County, Texas U.S.A.
	Signature
State of Texas)) ss
County of Harris	
Before me personally	appeared said Vimal V. Shah and acknowledged the foregoing instrument
to be his free accumulation	detathis 10 day of December, 1999.
Seal STATE OF THE	Notary Public)
Executed this 16, 20	03,day of December, 1999, at Duncan, Stephens County, Oklahoma U.S.A.
Executed this	Signature Stephens County, Oktaholika U.S.A.
	Signature
State of Oklahoma)) ss
County of Stephens) The state of the
	appeared said Curtis R. Vickery and acknowledged the foregoing
instrument to be his fre	e act and deed this
Seal	Sheia D. M. Blos (Notary Public)
	(= : = : = 2)

RECORDED: 12/16/1999