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NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
G. Dickey Arndt	10/22/2008
Phong H. Ngo	10/22/2008
Chau T. Phan	10/22/2008
Julia A. Gross	10/22/2008

RECEIVING PARTY DATA

IIName:	United States of America as represented by the Administrator of the National Aeronautics and Space Administration		
Street Address:	300 E Street, S.W.		
City:	Washington		
State/Country:	DISTRICT OF COLUMBIA		
Postal Code:	20546		

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12353755

CORRESPONDENCE DATA

Fax Number: (281)483-6936

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 281-483-1003

Email: jsc-patentof@mail.nasa.gov

Correspondent Name: JSC Office of Patent Counsel

Address Line 1: 2101 NASA Parkway

Address Line 2: Mailcode AL

Address Line 4: Houston, TEXAS 77058

ATTORNEY DOCKET NUMBER:	MSC-24184-1
NAME OF SUBMITTER:	Theodore U. Ro

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Total Attachments: 1

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PATENT REEL: 022477 FRAME: 0731



Assignment to the Government (by Government Employee)

Title of Hivehhort.	Juawideband Asynchron	ious fracking System and Method			
	G. Dickey Arndt, Phong H. Ngo, Chau T. Phan, Julia A. Gross all employees of NASA Johnson Space Center, together with Jianjun Ni an Independent Consultant, and John Dusl an employee of Jacobs Sverdrup				
	zenter, together with hanjun	TVI all muchement Consultant, and John Du	si an employee of Jacobs Sverdrup		
NASA Case No.: <u>N</u>	<u> 1SC-24184-1</u> Appli	cation No.*: Fil	ling Date*:		
		Agreement are the undersigned inventor ented by the Administrator of the Nationa			
WHEREAS, the makin	g of this Assignment and	Agreement is in accordance with 37 CFF	R Part 501; and		
WHEREAS, the under States Patent on the a	signed inventor(s) has (ha bove-entitled invention.	eve) executed, on the date(s) indicated b	elow, an application for United		
 Assign to the G America, its territories 	overnment my (our) full ar and possessions, and my	ment by the Government, the undersignent and exclusive right in and to said invention (our) entire right, title and interest in and tion(s) and any patent(s) that may issue	n within the United States of d to said application, and any		
with 37 CFR 501.9(d), Government chooses is accordance with 37 CF irrevocable, royalty-free	including rights of priority not to file an application in FR 501.9(d), and such righ e license in the invention	r) full and exclusive foreign rights in and under the International Convention of Parameter in any foreign country, I (we) may request into will be subject to the reservation to the with power to grant licenses for all gover in any foreign patent which may issue or	aris (1883), as amended. If the rights in that country, in e Government of a nonexclusive, nmental purposes. The terms of		
information to, and (c)	pense of the Government to cooperate in any mann this Assignment and Agre	r, (a) to execute any document for, (b) to er with the Government in order to allow rement.	deliver any requested the Government to protect any		
*4. Authorize and read above when required.	equest the attorneys of re	cord in the application to insert the appli	cation number and filing date		
Lhuke (Signature of Inventor)	y A molt	/ O / 2 Z / 0 8 (Date Assignment Executed)	Date Application Executed)		
G. Dickey Arndt		P. O. Box 589, Friendswood, Texas 77	,		
(Inventor's Typed Name)		(Mailing Address - Including Country)			
Pholine	.	10/22/08	10/22/08		
) 	(Date Assignment Executed)	(Date Application Executed)		
Phong H. Ngo		1508 Azalea Trail, Friendswood, Texa.	, ,,		
(Inventor's Typed Name)		(Mailing Address - Including Country)			
Chan	Man	w /aa/08	W/22/08		
(Signature of Inventor)		(Date Assignment Executed)	(Date Application Executed)		
Chau T. Phan		5338 Fenwick Way Ct., Sugar Land, T	exas 77479		
(Inventor's Typed Name)	1 0079	(Mailing Address - Including Country) (0/22/08	10/22/08		
(Signature of Inventor)	Z	(Date Assignment Executed)	(Date Application Executed)		
Julia A. Gross		909 Texas St.# 1708, Houston, Texas 7			
(Inventor's Typed Name)		(Mailing Address - Including Country)	7 V V		

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RECORDED: 03/31/2009

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