PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Batakrishna MANDAL	09/21/2004

RECEIVING PARTY DATA

Name:	Halliburton Energy Services, Inc.
Street Address:	10200 Bellaire Boulevard
Internal Address:	Intellectual Property Department
City:	Houston
State/Country:	TEXAS
Postal Code:	77072

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	12325756	

CORRESPONDENCE DATA

Fax Number: (281)213-2037

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

 Phone:
 281-825-5235

 Email:
 debi@KIPATENTS.US

Correspondent Name: KRUEGER ISELIN LLP (1391)

Address Line 1: P O BOX 1906

Address Line 4: CYPRESS, TEXAS 77410-1906

ATTORNEY DOCKET NUMBER: 1391-777.01

NAME OF SUBMITTER: Daniel J. Krueger

Total Attachments: 1

source=HAL77701-ASG#page1.tif

OP \$40.00 1;

PATENT REEL: 022771 FRAME: 0847

ATTO	DRNEY DOCKET NO.	
	2003-IP-012445	

PAGE 1 OF 1

ASSIGNMENT

WHEREAS, I, the undersigned inventor (or one of the undersigned joint inventors), of residence as listed, having invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made, the said application having been executed on the date set forth below; and

WHEREAS, HALLIBURTON ENERGY SERVICES, INC., a corporation organized and existing under the laws of the State of Delaware, with a principal office at 10200 Bellaire Blvd, Houston, Texas 77072-5206, United States of America, is desirous of acquiring my entire right, title and interest in and to the said invention, and to the said application and any Letters Patent that may issue thereon;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell and assign to the said HALLIBURTON ENERGY SERVICES, INC., its successors and assigns, my entire right, title and interest in and to the said invention and in to the said application and all patents which may be granted therefor, and all divisions, reissues, substitutions, continuations, and extensions thereof; and I hereby authorize and request the Ass't Commissioner for Patents to issue all patents for said invention, or patent resulting therefrom, insofar as my interest is concerned, to the said HALLIBURTON ENERGY SERVICES, INC., as assignee of my entire right, title and interest.

I also hereby sell and assign to HALLIBURTON ENERGY SERVICES, INC., its successors and assigns, my foreign rights to the invention disclosed in said application, in all countries of the world, including the right to file applications and obtain patents under the terms of the International Convention for the Protection of Industrial Property, and of the European Patent Convention, and further agree to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.

I hereby further agree that I will communicate to said HALLIBURTON ENERGY SERVICES, INC., or to its successors, assigns, and legal representatives, any facts known to me respecting said invention, and at the expense of said assignee company, testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, reissue and substitute applications, make all lawful oaths, and generally do everything possible to aid said HALLIBURTON ENERGY SERVICES, INC., its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

IN WITNESS WHEREOF, I hereunto set my hand and seal this day and year;

TITLE OF INVENTION	Method and Apparatus for Generating Acoustic Signal With Single Mode of Propagation				
SIGNATURE OF INVENTOR AND NAME	Paferlenihen Nan Batakrishna Mandal	Mal	(2)	n/a	(3)
DATE	9/21/04				
RESIDENCE (City, State)	4222 Bluewater Drive Missouri City, TX 77459 US				
DATE APPLICATION EXECUTED	9/21/04				

After recordation, please return Assignment to:

Indranil Chowdhury 3918 Palace Springs Sugar Land, Texas 77479

> PATENT REEL: 022771 FRAME: 0848

RECORDED: 06/03/2009