PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: **ASSIGNMENT**

CONVEYING PARTY DATA

Name	Execution Date
Marian Wiercigroch	01/15/2009

RECEIVING PARTY DATA

Name:	University Court of the University of Aberdeen	
Street Address:	Research and Innovation	
Internal Address:	University Office	
City:	Aberdeen	
State/Country:	UNITED KINGDOM	
Postal Code:	AB24 3FX	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12303728

CORRESPONDENCE DATA

Fax Number: (216)363-9001

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

Phone: 216.363.9000

Email: uspto@faysharpe.com Correspondent Name: **FAY SHARPE LLP**

Address Line 1: 1228 Euclid Avenue, 5th Floor

Address Line 2: The Halle Building Address Line 4: Cleveland, OHIO 44115

ATTORNEY DOCKET NUMBER: ASTE 2000003US01

NAME OF SUBMITTER: Georgeen B. Sonntag

Total Attachments: 2

501275593

source=Docasteaasign#page1.tif source=Docasteaasign#page2.tif

PATENT REEL: 024918 FRAME: 0504

Attorney Docket No.: ASTE 2 00003

ASSIGNMENT

For good and	valuable	consideration,	the receip	t and su	ifficiency o	f which is	hereby
acknowledged,							
ABERDEEN ABSAX UK Application has		") who has cre	eated a cer	tain inver	ntion for wl	hich a U.S.	Patent

	executed concurrently herewith
	executed on
\boxtimes	filed December 6, 2008, and assigned Application Serial No. 12/303,728

and is entitled

RESONANCE ENHANCED DRILLING: METHOD AND APPARATUS

hereby sell, assign and transfer to University Court of the University of Aberdeen, ("Assignee"), having a place of business at Research and Innovation, University Office, Kings College, Aberdeen AB24 3FX, United Kingdom, its successors. assigns, nominees or other legal representatives, the full, exclusive, entire worldwide rights, title and interest in, to, and under said invention as described and claimed in said application, including any provisional application(s) from which it claims priority, the same to be held and enjoyed by Assignee for its own use and enjoyment, and for the use and enjoyment of its successors, assigns, nominees, or other legal representatives. to the end of the term or terms for which said Letters Patent are or may be granted, reissued, or extended, as fully and entirely as the same would have been held and enjoyed by Inventor(s) if this assignment and sale had not been made; all of the entire rights, title and interest in and to said invention and said application, and all original and reissued patents granted for said invention, and all divisions, reissues, continuations-inpart, and continuations of said application, including the subject matter of any and all claims which may be obtained in every patent, and the right, where such right can be legally exercised, in Assignee's own name to apply for and obtain patents in countries foreign to the United States, including the full right to claim for any such application the benefits of the International Convention and the Patent Cooperation Treaty as fully and entirely as Inventor(s) could have done if the foreign application had been filed in the names of the Inventor(s), and the entire interest in any Letters Patent which may be granted on any such application in such foreign countries, and Inventor(s) authorize(s) and request(s) the Commissioner of Patents of the United States, and any official of any country or countries foreign to the United States whose duty is to issue patents on applications as aforesaid, to issue the said Letters Patent to Assignee, its successors, assigns, nominees, or other legal representatives, as Assignee and owner of the said entire rights, and Inventor(s) covenant(s) that Inventor(s) has/have the full right to convey the said entire interest herein assigned and that Inventor(s) has/have not executed and will not execute any agreement in conflict herewith, and Inventor(s) will communicate to Assignee, its successors, assigns, nominees, or other legal representatives all facts known to Inventor(s) respecting said invention, whenever requested, and testify in any legal proceedings, sign all lawful papers, execute and

> PATENT REEL: 024918 FRAME: 0505

deliver all divisional, continuing, and reissue applications, make all rightful oaths or declarations, and do all lawful acts requisite for the application for such divisional, continuing, or reissue applications, or the procuring thereof, and that if and when Assignee, its successors, assigns, nominees, or other legal representatives desire to file a disclaimer relating thereto, Inventor(s) will, upon request, sign and deliver all lawful papers requisite for the filing of such disclaimer; and

Inventor(s) further covenant(s) and agree(s) that Inventor(s) will, at any time upon request, do everything possible to aid Assignee, its successors, assigns, nominees, or other legal representatives, either in the name of Inventor(s) or Assignee, to apply for, obtain, and enforce proper patent protection for said invention in all countries, according to the International Convention and the Patent Cooperation Treaty, and all the laws and treaties in force, all without further consideration but at the expense of Assignee, its successors, assigns, nominees, or other legal representatives.

Signed atABERDEEN	on 15/40/, 200 <u>4</u>
Witnesses:	Marian Wiercigroch
CESS	
Printed Name: Chiana Ubaja	kq.
North .	

N:\ASTE\200003\GBS0003514V001.docx

Printed Name: Rachael Wakefield