504215923 02/07/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4262600

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	EXECUTIVE ORDER 9424, CONFIRMATORY LICENSE

CONVEYING PARTY DATA

Name	Execution Date
SANDIA CORPORATION	01/26/2017

RECEIVING PARTY DATA

Name:	U.S. DEPARTMENT OF ENERGY
Street Address:	1000 INDEPENDNCE AVE., SW
City:	WASHINGTON
State/Country:	D.C.
Postal Code:	20585

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14942304

CORRESPONDENCE DATA

Fax Number: (202)586-7127

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Email: brenda.banks@hq.doe.gov

Correspondent Name: BRENDA K. BANKS

Address Line 1: 1000 INDEPENDENCE AVE. Address Line 4: WASHINGTON, D.C. 20585

NAME OF SUBMITTER:	BRENDA K. BANKS
SIGNATURE:	/Brenda K. Banks/
DATE SIGNED:	02/07/2017

Total Attachments: 1

source=S147322_SD13432_5_ConfirmatoryLicense_signed#page1.tif

REEL: 041645 FRAME: 0493 504215923

PATENT

CONFIRMATORY LICENSE

Application for: METHOD AND SYSTEMS FOR DETERMINING

SUBTERRANEAN FRACTURE CLOSURE

Application No.:

14/942,304

Inventors:

Chad Cannan, Lewis C. Bartel, Terry Palisch, David Aldridge, Todd

Ropper, Steve Savoy and Daniel R. Mitchell

Filing Date:

November 16, 2015

Contract No.:

DE-AC04-94AL85000

Contractor:

Sandia Corporation

The invention identified above is a "Subject Invention" under the above-numbered contract. A copy of the provisions of the above-numbered contract certified on January 9, 1996, governing patent rights in the Subject Invention at the time the invention was made, has been submitted to the U. S. Department of Energy.

The contractor hereby confirms that under the provisions of the above-numbered contract governing patent rights, it has granted to the Government a nonexclusive, nontransferable, irrevocable, paid up license to practice or have practiced for or on behalf of the United States the Subject Invention throughout the world. This license applies to the invention in the above-identified patent application and any and all divisions or continuations thereof and any resulting patent or reissue patent which may be granted thereon.

It is understood and agreed that this document does not preclude the Government from asserting rights under the provisions of said contract or any other agreement between the Government and the Contractor, or any other rights of the Government with respect to the above-identified invention.

The Contractor hereby grants the Government an irrevocable power to inspect and make copies of the above-identified application.

Date: 1/25/17

Kerry Kampschmidt

Senior Managing IP Counsel

Legal Technology Transfer Center, 11500

> PATENT REEL: 041645 FRAME: 0494

RECORDED: 02/07/2017