PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

 SUBMISSION TYPE:
 NEW ASSIGNMENT

 NATURE OF CONVEYANCE:
 EXECUTIVE ORDER 9424, CONFIRMATORY LICENSE

CONVEYING PARTY DATA

Name	Execution Date
UT-BATTELLE, LLC	11/04/2009

RECEIVING PARTY DATA

Name:	U.S. Department of Energy	
Street Address:	1000 Independence Ave., SW	
City:	Washington	
State/Country:	DISTRICT OF COLUMBIA	
Postal Code:	20585	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12540401

CORRESPONDENCE DATA

Fax Number: (202)586-7127

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NAME OF SUBMITTER: Brenda K. Banks

Total Attachments: 1 source=S-115215#page1.tif

PATENT 501060025 REEL: 023751 FRAME: 0166

CONFIRMATORY LICENSE

Title: Integrated Reactor and Centrifugal Separator and Uses Thereof Inventor(s): Joseph F. Birdwell, Jr., Harold L. Jennings, Joanna McFarlane, and

Constantino Tsouris

Serial No.: 12/540,401
Filing Date (U.S.) August 13, 2009
Contractor: UT-Battelle, LLC
DOE Contract No.: DE-AC05-000R22725

The invention identified above is a "Subject Invention" under the above-numbered contract. A copy of the provision of the above-numbered contract (certified on 04-13-00) 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 agent 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.

Signed this $4^{1/2}$ day of 209.

RECORDED: 01/08/2010

UT-Battelle, LLC

Mark-Reeves, Deputy Director

Technology Transfer

PATENT REEL: 023751 FRAME: 0167