#### 503415202 07/30/2015

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT3461836

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
RANJANI V. SIRIWARDANE	05/30/2013
YUEYING . FAN	05/30/2013

### **RECEIVING PARTY DATA**

Name:	U.S. Department of Energy	
Street Address:	1000 Independence Avenue, S.W.	
Internal Address:	GC-62, 6F-048	
City:	Washington	
State/Country:	DISTRICT OF COLUMBIA	
Postal Code:	20585-0162	

### **PROPERTY NUMBERS Total: 1**

Property Type	Number	
Application Number:	14032628	

### 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.

Phone: 202-586-2810

Email: katherine.baldwin@hq.doe.gov

**Correspondent Name:** KATHERINE BALDWIN

Address Line 1: 1000 INDEPENDENCE AVENUE, S.W.

Address Line 2: GC-62, 6F-048

Address Line 4: WASHINGTON, D.C. 20585-0162

ATTORNEY DOCKET NUMBER:	S-134,096
NAME OF SUBMITTER:	KATHERINE BALDWIN
SIGNATURE:	/Katherine Baldwin/
DATE SIGNED:	07/30/2015

### **Total Attachments: 3**

source=S-134096-ExecutedAssignment#page1.tif source=S-134096-ExecutedAssignment#page2.tif source=S-134096-ExecutedAssignment#page3.tif

> **PATENT** REEL: 036214 FRAME: 0147 503415202

# U.S. Department of Energy Patent Assignment Form

Whereas, I/we, Ranjani V. Siriwardane; Yueying Fan

have invented certain new and useful improvements in :
METAL FERRITE OXYGEN CARRIERS FOR CHEMICAL LOOPING COMBUSTION
OF SOLID FUELS

, for which I/we have/will file an application for United States Letters Patent, identified as: S-134,096 (filed as U.S. Application 14/032,628, filed September 20, 2013) and:

WHEREAS, the Government of the United States desires to acquire the entire right, title, and interest in and to said invention and in and to any Letters Patent wherever they may be issued thereon:

NOW, THEREFORE, to all whom it may concern, be it known that good and valuable consideration, the receipt of which is hereby acknowledged, we by these presents do sell, assign, and transfer unto the said Government of the United States, as represented by the United States Department of Energy, and/or its assigns, the entire right, title, and interest in and to the said invention and in and to any and all Letters Patent wherever they may be granted thereon as well as reissues and extensions of said Letters Patent are or may be granted, reissued, or extended, as fully and entirely as the same would have been held or enjoyed by us had this assignment not been made.

I/We agree to make, execute, and deliver unto the Government of the United States, or to the United States Department of Energy, any and all papers, documents, affidavits, renewal, divisional and reissue applications, statements, or other instruments in such usual or other forms, terms and contents as may be required by the United States Department of Energy, or its duly authorized representative, in or incident to the prosecution or conduct of any and all applications, before as well as after the issuance of any Letters thereon, or in the adjustment or settlement of any interferences or other actions or proceedings that said applications may encounter or in which they may become involved and we agree that we will encounter or in which they may become involved and we agree that we will aid the Government of the United States in every way in protecting the inventions as may be requested by the United States Department of Energy or its assigns, except that any expenses arising through extending such assistance will be paid for by proper arrangement with the Government of the United States.

Inventor:			
Full name of Inventor:	Ranjani V. Siriwardane		
Inventor's signature:	Ranjani V. Siciwardon Date May 30/201		
Address:	1361 Braewick Drive, Morgantown, WV, 26505		
Witness to Signature Full name of Witness:	Usa A. Baker		
Witness' Signature:	Liba A. Baker Date 5/30/13		
Assignment to DOE regarding	g; S-134,096		
METAL FERRITE OXYGEN CAP OF SOLID FUELS	RRIERS FOR CHEMICAL LOOPING COMBUSTION		
inventor:	·		
Full name of Inventor:	Yueying Fan		
Inventor's signature:	Yileyting Fan Date May 30, 2013		
Address;	2074 Pinecrest Drive, Morgantown, WV 26505		
Witness to Signature: Full name of Witness:	1 - 0 00		
Witness' Signature:	Lusa A. Baker Date 5/30/13		
Assignment to DOE regarding	y: S-134,096		
METAL FERRITE OXYGEN CAR OF SOLID FUELS	RIERS FOR CHEMICAL LOOPING COMBUSTION		

Contractor Approval and Consent:			
Full Name:	Kevin S. Donovan		
Signature:	Klynshrum	Date 5/31/13	
Title:	Program Manager		
Organization:	URS Corp.		
Witness to Signature:			
Full name of Witness:	Kathleen A. Kelly		
Witness' Signature:	Korkleen a. Kelly	Date <u>5/31//3</u>	
Assignment to DOF, regard!	ng: S-134,096		
METAL FERRITE OXYGEN CARRIERS FOR CHEMICAL LOOPING COMBUSTION OF SOLID FUELS			
Government Acceptance: Accepted for the Benefit of the Government of the United States.			
Full Name:	John T. Lucas		
Signature:		Date 7/15/15	
Title:	Assistant General Counsel		
Transfer and Intellectual Hoperty (Witness to Signature: )			
Full name of Witness:		'	
Witness' Signature:	Hath Ralah	Date 7 15 15	
Acceptance of assignment to DOE regarding: S-134,096			
METAL FERRITE OXYGEN CARRIERS FOR CHEMICAL LOOPING COMBUSTION OF SOLID FUELS			