

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4589047

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
BO SHEN	06/26/2017
EDWARD A. VINEYARD	06/29/2017
OMAR ABDELAZIZ	07/26/2017
RECEIVING PARTY DATA	
Name:	UT-Battelle, LLC
Street Address:	One Bethel Valley Road
Internal Address:	4500N, MS-6258
City:	Oak Ridge
State/Country:	TENNESSEE
Postal Code:	37831-6258
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	15619010
CORRESPONDENCE DATA	
Fax Number:	(865)574-0381
<i>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.</i>	
Phone:	(865) 574-4179
Email:	warfielde@ornl.gov
Correspondent Name:	COLIN L. CINI
Address Line 1:	ONE BETHEL VALLEY ROAD
Address Line 2:	4500N, MS-6258
Address Line 4:	OAK RIDGE, TENNESSEE 37831-6258
ATTORNEY DOCKET NUMBER:	3856.1 UTB
NAME OF SUBMITTER:	ELIZABETH WARFIELD
SIGNATURE:	/Elizabeth Warfield/
DATE SIGNED:	09/12/2017
Total Attachments: 4	
source=3856.1 UTB Assignment#page1.tif	
source=3856.1 UTB Assignment#page2.tif	

source=3856.1 UTB Assignment#page3.tif

source=3856.1 UTB Assignment#page4.tif

ASSIGNMENT

WHEREAS, we the below-named inventors whose residences are as stated below, have an interest in an invention entitled:

Method and Device for Controlling Heat Pump

(hereinafter referred to as "Subject Invention") for which are described in United States Patent Application No. 15/619,010 filed on June 9, 2017, and

WHEREAS, UT-BATTELLE, LLC, a limited liability company of the State of Tennessee, having an office at One Bethel Valley Road, P. O. Box 2008, Oak Ridge, Tennessee 37831-6258, hereinafter referred to as "ASSIGNEE," is desirous of acquiring our entire right, title and interest of the undersigned in the same;

NOW, THEREFORE, in accordance with the terms of our employment agreement with ASSIGNEE and for good and valuable consideration, the receipt of which is hereby acknowledged, we hereby assign and transfer to ASSIGNEE and its successors in interest our entire right, title and interest in the Subject Invention to all rights of priority thereto pursuant to the International Convention for the Protection of Industrial Property, and in any Letters Patent on the Subject Invention that may be granted in the United States of America and in any and all foreign countries, including any and all Letters Patent that are divisions, reissues, continuations, substitutions or extensions of any Letters Patent or patent applications therefor on the Subject Invention.

We hereby authorize and request the Commissioner of the United States Patent and Trademark Office and the officials of any and all foreign countries to issue any and all of said Letters Patent, when granted, to the ASSIGNEE.

Further, we hereby agree to communicate to said ASSIGNEE or its representatives any facts known to us respecting said Subject Invention, to testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, substitution, renewal and reissue applications, to execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, and to make all rightful oaths and generally do everything possible to aid said ASSIGNEE and its representatives to obtain and enforce proper protection for said Subject Invention in the United States of America and in any and all foreign countries.

We further agree that the terms, covenants and conditions of this assignment shall inure to the benefit of ASSIGNEE, its successors, assigns, and legal representatives, and shall be binding on us, our heirs, legal representatives, and assigns.

Name of Inventor:

Bo Shen

Docket No. 3856.1

Signature: Bo Shen

Date: 06/26/2017

Residence:

56 Rolling Links Boulevard, Oak Ridge, Tennessee 37830

Name of Inventor:

Edward A. Vineyard

Signature: _____

Date: _____

Residence:

5631 Fountain Gate Road, Knoxville, Tennessee 37918

Name of Inventor:

Omar Abdelaziz

Signature: _____

Date: _____

Residence:


10721 Cable Run, Knoxville, Tennessee 37931

Name of Inventor: **Bo Shen**

Signature: _____ Date: _____

Residence: 56 Rolling Links Boulevard, Oak Ridge, Tennessee 37830

Name of Inventor: **Edward A. Vineyard**

Signature:  Date: 6-29-17

Residence: 5631 Fountain Gate Road, Knoxville, Tennessee 37918

Name of Inventor: **Omar Abdelaziz**

Signature: _____ Date: _____

Residence: 10721 Cable Run, Knoxville, Tennessee 37931

Name of Inventor: **Bo Shen**

Signature: _____ Date: _____

Residence: 56 Rolling Links Boulevard, Oak Ridge, Tennessee 37830

Name of Inventor: **Edward A. Vineyard**

Signature: _____ Date: _____

Residence: 5631 Fountain Gate Road, Knoxville, Tennessee 37918

Name of Inventor: **Omar Abdelaziz**

Signature:  _____ Date: 7/26/2017

Residence: 10721 Cable Run, Knoxville, Tennessee 37931