

PATENT ASSIGNMENT COVER SHEET

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Stylesheet Version v1.2

EPAS ID: PAT4123308

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
JOHN L. LIENHARD	05/05/2015
RONAN K. MCGOVERN	04/27/2015
LIGE SUN	05/13/2015
ADAM M. WEINER	05/05/2015
SYED M. ZUBAIR	04/26/2015
RECEIVING PARTY DATA	
Name:	MASSACHUSETTS INSTITUTE OF TECHNOLOGY
Street Address:	77 MASSACHUSETTS AVENUE
City:	CAMBRIDGE
State/Country:	MASSACHUSETTS
Postal Code:	02139
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	15305485
CORRESPONDENCE DATA	
Fax Number:	(617)443-0004
<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:	6174439292
Email:	kwhitehouse@sunsteinlaw.com
Correspondent Name:	DOROTHY WU CHIANG
Address Line 1:	125 SUMMER STREET
Address Line 2:	SUNSTEIN KANN MURPHY & TIMBERS LLP
Address Line 4:	BOSTON, MASSACHUSETTS 02110-1618
ATTORNEY DOCKET NUMBER:	1118/A42
NAME OF SUBMITTER:	DOROTHY WU CHIANG
SIGNATURE:	/Dorothy Wu Chiang, #69,535/
DATE SIGNED:	11/01/2016
Total Attachments: 14	

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ASSIGNMENT

ASSIGNORS: John H. Lienhard
Ronan K. McGovern
Lige Sun
Adam M. Weiner
Syed M. Zubair

ASSIGNEE: Massachusetts Institute of Technology
77 Massachusetts Avenue
Cambridge, MA 02139

INVENTION: Method and Apparatus for Partially Desalinating Produced Water
to Form Extraction Fluid Used for Fossil Fuel Extraction

ATTORNEY DOCKET: 1118/A42WO

INT'L APPLICATION NO: PCT/US2015/027258

INT'L FILING DATE: April 23, 2015

Assignor is a joint inventor of a certain new and useful invention (the "Invention") described in a patent application (the "Application") filed under the Patent Cooperation Treaty bearing the above attorney docket number and the above international application number and having as a title the above name for the Invention.

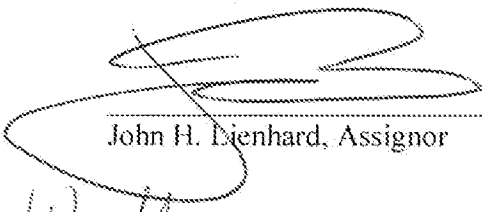
For valuable consideration, receipt of which is acknowledged, each Assignor hereby assigns to Assignee (which term shall include Assignee's successors and assigns), all of Assignor's right, title and interest in the Invention, all improvements therein, the Application and all priority rights arising therefrom, and any patents, and any reissues and extensions thereof, which issue in any country upon any patent applications which correspond with any of the following: the Application, any divisional, continuation-in-whole, or substitute United States application which is based on the Application; or any continuation-in-part United States application (including divisions, continuations-in-whole or -in-part, and substitutions thereof or therefor) based in-part on any of the above described applications.

Each Assignor further agrees that such Assignor and Assignor's heirs and legal representatives will, without further consideration, cooperate with Assignee in the prosecution of all of the above applications, execute, verify, acknowledge and deliver all such further papers, including applications for patents and for reissues and extensions therefor, and instruments of assignment and transfer thereof, and will communicate any facts known to Assignor relating to the Invention, to obtain or maintain or enforce patents for the Invention and improvements therein in any and all countries and to vest title thereto in Assignee. Each Assignor further agrees that such Assignor will, without further compensation to Assignor during the term of such Assignor's employment by Assignee and thereafter for reasonable compensation as determined by Assignee, perform such other acts as may be reasonably required when requested by Assignee, including attending depositions, preparing and executing declarations and affidavits and testifying as a witness, to obtain or maintain or enforce patents for the Invention and improvements therein in any and all countries and to vest title thereto in Assignee.

I hereby authorize and request Sunstein Kann Murphy & Timbers LLP to supply any missing patent/application identification information or correct any errors in the patent/application identification information provided above, whether discovered prior to or after recordation.

IN WITNESS WHEREOF, each Assignor hereby executes this instrument on the date set forth below.

Date: 5 May 2015


John H. Dienhard, Assignor

Witness Signature: Theresa Werth

Print Witness Name: Theresa Werth

Address: 119 Lakeview Ave. Waltham, MA 02457

Witness Signature: Christine Gervais

Print Witness Name: Christine Gervais

Address: 1243 Beacon St Brookline MA 02446

Date: _____

Ronan K. McGovern, Assignor

Witness Signature: _____

Print Witness Name: _____

Address: _____

Witness Signature: _____

Print Witness Name: _____

Address: _____

Date: _____

Lige Sun, Assignor

Witness Signature: _____

Print Witness Name: _____

Address: _____

Witness Signature: _____

Print Witness Name: _____

Address: _____

Date: _____
Adam M. Weiner, Assignor

Witness Signature: _____

Print Witness Name: _____

Address: _____

Witness Signature: _____

Print Witness Name: _____

Address: _____

Date: _____
Syed M. Zubair, Assignor

Witness Signature: _____

Print Witness Name: _____

Address: _____

Witness Signature: _____

Print Witness Name: _____

Address: _____

01118/A42WO 2296847.1

ASSIGNMENT

ASSIGNORS: John H. Lienhard
Ronan K. McGovern
Lige Sun
Adam M. Weiner
Syed M. Zubair

ASSIGNEE: Massachusetts Institute of Technology
77 Massachusetts Avenue
Cambridge, MA 02139

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Date: _____

John H. Lienhard, Assignor

Witness Signature: _____

Print Witness Name: _____

Address: _____

Witness Signature: _____

Print Witness Name: _____

Address: _____

Date: April 27th 2015Ronan K. McGovern
Ronan K. McGovern, AssignorWitness Signature: Emily W. TowPrint Witness Name: Emily W. TowAddress: 32A Burnside Ave. Somerville MA 02144Witness Signature: David WapsingerPrint Witness Name: David WapsingerAddress: 23 Speridakis Terrace, Cambridge MA 02139Date: 4/27/Lige Sun, Assignor

Witness Signature: _____

Print Witness Name: _____

Address: _____

Witness Signature: _____

Print Witness Name: _____

Address: _____

Date: _____
Adam M. Weiner, Assignor

Witness Signature: _____

Print Witness Name: _____

Address: _____

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Print Witness Name: _____

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Date: _____
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Witness Signature: _____

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ASSIGNORS:

John H. Lienhard
Ronan K. McGovern
Lige Sun
Adam M. Weiner
Syed M. Zubair

ASSIGNEE:

Massachusetts Institute of Technology
77 Massachusetts Avenue
Cambridge, MA 02139

INVENTION:

Method and Apparatus for Partially Desalinating Produced Water
to Form Extraction Fluid Used for Fossil Fuel Extraction

ATTORNEY DOCKET:

1118/A42WO

INT'L APPLICATION NO:

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Date: _____

John H. Lienhard, Assignor

Witness Signature: _____

Print Witness Name: _____

Address: _____

Witness Signature: _____

Print Witness Name: _____

Address: _____

1118/A42WO

Date: _____

Ronan K. McGovern, Assignor

Witness Signature: _____

Print Witness Name: _____

Address: _____

Witness Signature: _____

Print Witness Name: _____

Address: _____

Date: 05/13/2015


Lige Sun, Assignor

Witness Signature: Chen Meng

Print Witness Name: Meng Chen

Address: Nordring 26, 94787 Badum, Germany

Witness Signature: Li Ji

Print Witness Name: Jin Chen

Address: Xi An New Na Da Jie 170, 100035 Beijing, China

PATENT

REEL: 040189 FRAME: 0016

1118/A42WO

Date: _____

Adam M. Weiner, Assignor

Witness Signature: _____

Print Witness Name: _____

Address: _____

Witness Signature: _____

Print Witness Name: _____

Address: _____

Date: _____

Syed M. Zubair, Assignor

Witness Signature: _____

Print Witness Name: _____

Address: _____

Witness Signature: _____

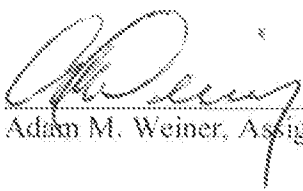
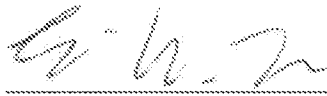
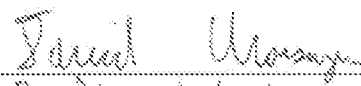
Print Witness Name: _____

Address: _____

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PATENT

REEL: 040189 FRAME: 0017

Date: 5/5/2015
Adam M. Weiner, AssignorWitness Signature: Print Witness Name: Emily W. TowAddress: 32A Burnside Ave. Somerville, MA 02144Witness Signature: Print Witness Name: David WaringerAddress: 23 Spencerville Terrace, Cambridge, MA 02139

Date: _____

Syed M. Zubair, Assignor

Witness Signature: _____

Print Witness Name: _____

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Address: _____

Date: _____

Adam M. Weiner, Assignor

Witness Signature: _____

Print Witness Name: _____

Address: _____

Witness Signature: _____

Print Witness Name: _____

Address: _____

Date: April 26, 2015S. M. Zubair
Syed M. Zubair, AssignorWitness Signature: [Signature]Print Witness Name: Ihsan ul Haq ToorAddress: 5505 Ali Street, Firdous Courts, Dhahran, Saudi ArabiaWitness Signature: [Signature]Print Witness Name: Ahmet Z. SahinAddress: 8924 Marooj courts, Dhahran, Saudi Arabia