

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3037447

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
JERRY Y.S. LIN	09/23/2014
JOSE ORTIZ-LANDEROS	09/22/2014
XUE-LIANG DONG	09/23/2014
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	ARIZONA BOARD OF REGENTS ON BEHALF OF ARIZONA STATE UNIVERSITY
<b>Street Address:</b>	699 SOUTH MILLS AVENUE
<b>Internal Address:</b>	SUITE 601, ROOM 691AA
<b>City:</b>	TEMPE
<b>State/Country:</b>	ARIZONA
<b>Postal Code:</b>	85281
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	14478763
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(314)231-1776
<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>	
<b>Phone:</b>	314-889-8000
<b>Email:</b>	uspt@polsinelli.com
<b>Correspondent Name:</b>	POLSINELLI PC
<b>Address Line 1:</b>	100 SOUTH FOURTH STREET
<b>Address Line 2:</b>	SUITE 1000
<b>Address Line 4:</b>	ST. LOUIS, MISSOURI 63102
<b>ATTORNEY DOCKET NUMBER:</b>	055743-480839(M14-016P)
<b>NAME OF SUBMITTER:</b>	ARI BAI
<b>SIGNATURE:</b>	/Ari Bai, reg. no. 38726/
<b>DATE SIGNED:</b>	09/25/2014
<b>Total Attachments: 4</b>	
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UNITED STATES PATENT ASSIGNMENT

WHEREAS, Jerry Y.S. Lin of Scottsdale, Arizona and Jose Ortiz-Landeros of Tempe, Arizona and Xue-Liang Dong of Tempe, Arizona (hereinafter referred to as "ASSIGNORS"), for an invention (the "INVENTION") relating to an improvement in **TUBULAR CERAMIC-CARBONATE DUAL-PHASE MEMBRANES AND METHODS OF MANUFACTURE THEREOF** and has executed an application for a United States patent based thereon (Serial Number 61/874,226 filed September 5, 2013 (055743-461581) (the "APPLICATION");

AND, WHEREAS, Arizona Board of Regents on behalf of Arizona State University, incorporated in the State of Arizona, having its principal place of business at 699 South Mills Avenue, Suite 601, Room 691 AA, Tempe, Arizona, 85281 (hereinafter referred to as "ASSIGNEE"), is desirous of acquiring certain rights thereunder;


NOW, THEREFORE, for one dollar and other good and valuable consideration, receipt of all of which is hereby acknowledged, ASSIGNORS have agreed to and do hereby sell, assign, and transfer unto said ASSIGNEES the entire right, title and interest in and throughout the United States of America (including its territories and dependencies) and all countries foreign thereto in and to said INVENTION, said APPLICATION, any other United States application (including divisional, continuing, or reissue applications) based in whole or in part on said APPLICATION or in whole or in part on said INVENTION, any foreign applications based in whole or in part on any of the aforesaid United States applications or in whole or in part on said INVENTION, and any and all patents (including extensions thereof) of any country which have been or may be granted on any of the aforesaid applications or on said INVENTION or any part thereof;

TO BE HELD AND ENJOYED by said ASSIGNEES, their successors and assigns, as fully and entirely as the same would have been held and enjoyed by ASSIGNORS had no sale and assignment of said interest been made.

AND ASSIGNORS hereby authorize and request the Commissioner of Patents of the United States of America to issue any and all United States patents which may be granted upon said United States applications or any of them, or upon said INVENTION or any part thereof, to said ASSIGNEES;

AND ASSIGNORS, their successors and assigns, hereby agree to execute without further consideration any further lawful documents and any further assurances, and any divisional, continuing, reissue, or other applications for patents of any country, that may be deemed necessary by said ASSIGNEES fully to secure to said ASSIGNEES interest as aforesaid in and to said INVENTION or any part thereof, and in and to said several patents or any of them;

AND ASSIGNORS hereby covenants and agrees with said ASSIGNEES, their successors and assigns, that ASSIGNORS have granted no right or license to make, use, or sell said INVENTION, to anyone except said ASSIGNEES, that prior to the execution of this assignment, ASSIGNORS' right, title and interest in said INVENTION have not been otherwise encumbered, and that ASSIGNORS have not executed and will not execute any instrument in conflict herewith.

  
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JERRY Y.S. LIN

Date: 7/23/14

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JOSE ORTIZ-LANDEROS

Date: \_\_\_\_\_

\_\_\_\_\_  
XUE-LIANG DONG

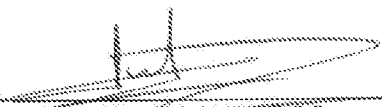
Date: \_\_\_\_\_

AND ASSIGNORS, their successors and assigns, hereby agree to execute without further consideration any further lawful documents and any further assurances, and any divisional, continuing, reissue, or other applications for patents of any country, that may be deemed necessary by said ASSIGNEES fully to secure to said ASSIGNEES interest as aforesaid in and to said INVENTION or any part thereof, and in and to said several patents or any of them;

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\_\_\_\_\_  
JERRY Y.S. LIN

Date: \_\_\_\_\_

  
\_\_\_\_\_  
JOSE ORTIZ-LANDEROS

Date: 22-69-2019

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XUE-LIANG DONG

Date: \_\_\_\_\_

AND ASSIGNORS, their successors and assigns, hereby agree to execute without further consideration any further lawful documents and any further assurances, and any divisional, continuing, reissue, or other applications for patents of any country, that may be deemed necessary by said ASSIGNEES fully to secure to said ASSIGNEES interest as aforesaid in and to said INVENTION or any part thereof, and in and to said several patents or any of them;

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\_\_\_\_\_  
JERRY Y.S. LIN

Date: \_\_\_\_\_

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JOSE ORTIZ-LANDEROS

Date: \_\_\_\_\_

  
\_\_\_\_\_  
XUE-LIANG DONG

Date: 09/23/2014