

## PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Umit S. Ozkan</td> <td>12/05/2012</td> </tr> <tr> <td>Dieter von Deak</td> <td>05/16/2012</td> </tr> <tr> <td>Elizabeth Biddinger</td> <td>12/05/2012</td> </tr> </tbody> </table>		Name	Execution Date	Umit S. Ozkan	12/05/2012	Dieter von Deak	05/16/2012	Elizabeth Biddinger	12/05/2012		
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Elizabeth Biddinger	12/05/2012										
RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>The Ohio State University</td> </tr> <tr> <td>Street Address:</td> <td>1524 North High Street</td> </tr> <tr> <td>City:</td> <td>Columbus</td> </tr> <tr> <td>State/Country:</td> <td>OHIO</td> </tr> <tr> <td>Postal Code:</td> <td>43201</td> </tr> </table>		Name:	The Ohio State University	Street Address:	1524 North High Street	City:	Columbus	State/Country:	OHIO	Postal Code:	43201
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CORRESPONDENCE DATA											
<p>Fax Number: 5132416234  <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 513-241-2324    Email: smeyer@whe-law.com    Correspondent Name: Kevin E. Kuehn    Address Line 1: 441 Vine Street    Address Line 2: 2700 Carew Tower    Address Line 4: Cincinnati, OHIO 45202</p>											
ATTORNEY DOCKET NUMBER:	OSU-11186US										
NAME OF SUBMITTER:	Kevin E. Kuehn										
Total Attachments: 6											

OP \$80.00 61487431

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ASSIGNMENT OF PATENT RIGHTS

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we, the undersigned, **Umit S. Ozkan**, a U.S. citizen, residing at 531 Highgate Avenue, Worthington, Ohio 43085 (US); **Dieter von Deak**, a U.S. citizen, residing at 50 N Evergreen Rd, Apt. 53D, Edison, New Jersey 08837 (US); and **Elizabeth Biddinger**, a U.S. citizen, residing at 2215 Lake Park Drive, S.E., Apt. W, Smyrna, Georgia 30080 (hereinafter "Assignors") hereby sell, assign and transfer to **The Ohio State University**, an Institution of Higher Education in the State of Ohio having offices located at the Technology Commercialization and Knowledge Transfer Office, 1524 North High Street, Columbus, Ohio 43201 (hereinafter "Assignee"), its successors, assigns and legal representatives, the entire right, title and interest, in and to any and all inventions which are disclosed in

U.S. Patent Application Serial No. 61/487,431;

Entitled: **PHOSPHORUS DOPED CARBON-CONTAINING CATALYST FOR PROTON EXCHANGE MEMBRANES AND METHOD FOR MAKING SAME**

and

U.S. Patent Application Serial No. 13,474,341

Entitled: **CATALYSTS FOR USE IN ELECTROCHEMICAL APPLICATIONS AND ELECTRODES AND DEVICES USING SAME**

SUCH ASSIGNMENT shall be in and to each said application and extensions thereof including all rights of priority arising therefrom and in and to all non-provisional, divisional, continuing applications, substitute, renewal, reissue applications, all provisional applications directed to the same invention which have been or will be filed and all other applications for Letters Patent which have been or shall be filed in the United States and all countries of the world and all international applications on any of said inventions, and in and to all original and reissued patents which have been or shall be issued in the United States and all countries of the world on said invention. We hereby authorize and request the Commissioner of Patents or other proper Officer to issue such Letters Patent to the above Assignee, its successors and/or assigns.

ASSIGNORS also agree that said Assignee may apply for, receive and maintain Letters Patent for said inventions in its own name; and that, when requested, without charge to, but at the expense of said Assignee, its successors, assigns and legal representatives, Assignors will carry out in good faith the intent and purpose of this assignment and that the undersigned will execute all divisional, continuing, substitute, renewal, reissue and all other patent applications on any and all said inventions for the U.S., all other countries of the world and under all treaties; and will execute all rightful oaths, supplemental oaths, preliminary statements, assignments, powers of attorney, assurance of title, declarations and other papers for the U.S., all other countries and under all treaties, and will communicate to said Assignee, its successors, assign and representatives, all facts known to the undersigned relating to said inventions and the history thereof; and generally do everything possible which said Assignee, its successors, assigns or representatives shall consider desirable for aiding in securing and maintaining proper patent protection for said inventions, and for complying with applicable law and for vesting title to said inventions and all applications for patents and all patents on said inventions in said Assignee, its successors, assigns and legal representatives for the U.S., all other countries and under all related treaties.

ASSIGNORS hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country as proof of the right of said Assignee to apply for, defend or enforce a patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority,

ASSIGNORS FURTHER covenant with said Assignee, its successors, assigns and legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Date: December 5, 2012 By: Umit S. Ozkan  
Umit S. Ozkan

WITNESSED BY:  
Jeff Chalmers  
Printed Name Jeff Chalmers  
Date: 12/5/12

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Date: \_\_\_\_\_ By: \_\_\_\_\_  
Dieter von Deak

WITNESSED BY:  
\_\_\_\_\_  
Printed Name \_\_\_\_\_  
Date: \_\_\_\_\_

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Date: \_\_\_\_\_ By: \_\_\_\_\_  
Elizabeth Biddinger

WITNESSED BY:  
\_\_\_\_\_  
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Date: \_\_\_\_\_

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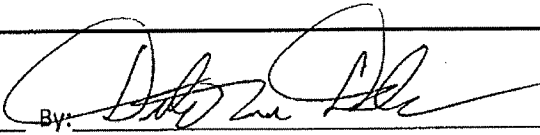
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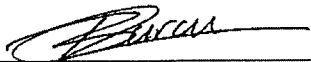
Date: \_\_\_\_\_ By: \_\_\_\_\_  
Umit S. Ozkan

WITNESSED BY:

\_\_\_\_\_  
Printed Name \_\_\_\_\_  
Date: \_\_\_\_\_

Date: 5/16/12 By:   
Dieter von Deak

WITNESSED BY:

  
\_\_\_\_\_  
Printed Name BURCU Bayram  
Date: 5/16/2012

Date: \_\_\_\_\_ By: \_\_\_\_\_  
Elizabeth Biddinger

WITNESSED BY:

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Date: \_\_\_\_\_ By: \_\_\_\_\_  
Umit S. Ozkan

WITNESSED BY:

\_\_\_\_\_  
Printed Name \_\_\_\_\_  
Date: \_\_\_\_\_

Date: \_\_\_\_\_ By: \_\_\_\_\_  
Dieter von Deak

WITNESSED BY:

\_\_\_\_\_  
Printed Name \_\_\_\_\_  
Date: \_\_\_\_\_

Date: 12-5-12 By: *Elizabeth Biddinger*  
Elizabeth Biddinger

WITNESSED BY:

*Nicholas Cromie*  
Printed Name Nicholas Cromie  
Date: 12-5-12