505267879 01/08/2019

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	NUNC PRO TUNC ASSIGNMENT
EFFECTIVE DATE:	03/27/2017

CONVEYING PARTY DATA

Name	Execution Date
YUSHAN YAN	06/27/2017
BINGJUN XU	06/16/2017
JUNHUA WANG	06/16/2017
YUN ZHAO	06/16/2017

RECEIVING PARTY DATA

Name:	UNIVERSITY OF DELAWARE
Street Address:	1 INNOVATION WAY
Internal Address:	DELAWARE TECHNOLOGY PARK, BUILDING 1, SUITE 500
City:	NEWARK
State/Country:	DELAWARE
Postal Code:	19711

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16146887

CORRESPONDENCE DATA

Fax Number: (314)345-7600

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: 314-863-0800

Email: stl.uspatents@stinson.com

Correspondent Name: STINSON LEONARD STREET LLP

Address Line 1: 7700 FORSYTH BOULEVARD, SUITE 1100

Address Line 4: ST. LOUIS, MISSOURI 63105

NAME OF SUBMITTER:KATHLEEN M. PETRILLOSIGNATURE:/Kathleen M. Petrillo/	
SIGNATURE: /Kathleen M. Petrillo/	
DATE SIGNED: 01/08/2019	

Total Attachments: 6

PATENT REEL: 047932 FRAME: 0644

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PATENT REEL: 047932 FRAME: 0645

ASSIGNMENT

WHEREAS, We, Yushan Yan of Hockessin, Delaware, Bingjun Xu of West Chester, Pennsylvania, Junhua Wang of Newark, Delaware, and Yun Zhao of Newark, Delaware, have invented an improvement in POLY (ARYL PIPERIDINIUM) POLYMERS FOR USE AS HYDROXIDE EXCHANGE MEMBRANES AND IONOMERS (UD16-40; UDE 1640.USP) described in a U.S. provisional patent application assigned Serial No. 62/314,008, filed March 28, 2016 and an international application no. PCT/US2017/024615 ("PCT application") filed March 28, 2017;

AND, WHEREAS, University of Delaware of Newark, Delaware, a corporation of the State of Delaware (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, we have agreed to and do hereby sell, assign and transfer unto said ASSIGNEE the entire right, title and interest, including the right to claim priority, in and throughout the United States of America (including its territories and dependencies) and all countries foreign thereto in and to said invention, said United States application, any other United States applications (including provisional, non-provisional, divisional, continuing, or reissue applications) based in whole or in part on said United States application or 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 ASSIGNEE, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by us had no sale and assignment of said interest been made;

AND We hereby authorize and request the Director of the United States Patent and Trademark Office 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 ASSIGNEE;

AND We hereby jointly and severally agree for ourselves and for our respective heirs, executors and administrators, to execute without further consideration any further lawful documents and any further assurances, and any provisional, non-provisional, divisional, continuing, reissue, or other applications for patents of any country, that may be deemed necessary by said ASSIGNEE fully to secure to said ASSIGNEE its interest as aforesaid in and to said invention or any part thereof, and in and to said several patents or any of them;

AND We hereby jointly and severally covenant for ourselves and our respective legal representatives that we have granted no right or license to make, use or sell said invention, to anyone except said ASSIGNEE, that prior to the execution of this deed

our right, title and interest in said invention had not been otherwise encumbered, and that we have not executed and will not execute any instrument in conflict herewith.

This nunc pro tunc Assignment is effective as of March 27, 2017.

IN WITNESS WHEREOF, we have hereunto set our hands.

6/27/2017 Date	Yushan Yan	stay-	, same di same
STATE OF			
COUNTY OF New Castle			
On this 27th day of me, a Notary Public, pers	onally appeared	Yushan Yan to	
to be the person describe	ed in and who exe	ecuted the fore	3dorud

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal and the date and year last above written.

free act and deed.

assignment and acknowledged that he/she executed same as his/her

Page 3 of 6

6/16/2417 Date Bingjun Xti

STATE OF <u>Polawave</u>)
COUNTY OF <u>Vew (asyle)</u>

On this / day of June, 2017, before me, a Notary Public, personally appeared Bingjun Xu to me known to be the person described in and who executed the foregoing assignment and acknowledged that he/she executed same as his/her free act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal and the date and year last above written.

Notary Public W. Halberg

My Commission Expires:

July 1, 2021

KRISTIN L.P. HALBERG Notary Public State of Delaware My Commission Expires On July 01, 2021

REEL: 047932 FRAME: 0649

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Juhna Wang

STATE OF <u>Velamene</u>)
COUNTY OF <u>New CarA(a</u>)

On this /6 day of ________, 2017, before me, a Notary Public, personally appeared Junhua Wang to me known to be the person described in and who executed the foregoing assignment and acknowledged that he/she executed same as his/her free act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal and the date and year last above written.

Kuster W. Halley

My Commission Expires:

July 1, 2021

KRISTIN L.P. HALBERG Notary Public State of Delaware My Commission Expires On July 01, 2021

6//6/2017 \frac{1}{Yun Zhao}	
STATE OF Delawares COUNTY OF New Castle	
On this /// day of, 2017, before me, Notary Public, personally appeared Yun Zhao to me known to be the person described in and who executed the foregoing assignment and acknowledged that he/she executed same as his/he free act and deed.	
IN TESTIMONY WHEREOF, I have hereunto set my hand and sead and the date and year last above written.	1
Notary Public Halvey	
My Commission Expires: KRISTIN L.P. HALBERG Notary Public State of Delaware My Commission Expires On July 01, 2021	

KMP/clp