# 505573473 07/16/2019

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5620271

		NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		ASSIGNMENT		
CONVEYING PARTY	/ DATA			
		Name	Execution Date	
GUANGHUI ZHANG			03/26/2019	
THEODORE R. KRA	USE		06/17/2019	
YUNJIE XU			06/10/2019	
RECEIVING PARTY	DATA			
Name:	UCHIC	AGO ARGONNE, LLC		
Street Address:	5801 S	OUTH ELLIS AVENUE		
City:	CHICAG	GO		
State/Country:	ILLINO	IS		
Postal Code:	60637			
Property Type Application Number: 1569		Number 691666		
Application Number		15691666		
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#### ASSIGNMENT

1. Guanghui Zhang, for good and valuable considerations to me in hand paid, the receipt and sufficiency whereof is hereby acknowledged, have sold, assigned, conveyed and set over, and do hereby sell, assign, convey and set over unto UChicago Argonne, LLC, having a place of business at 5801 South Ellis Avenue, Chicago, Illinois 60637, its successors and assigns, the entire right, title and interest in and to all subject matter invented or designed by me and disclosed in the patent application for the, "ALKALINE ACTIVATION WITH SINGLE AND BI-METALLIC CATALYSTS" (ANL-IN-16-071) filed in the U.S. Patent and Trademark Office on August 30, 2107 as Application Serial No. 15/691,666, and any divisions and continuations thereof and in and to all Letters Patent of the United States, including any reissues and extensions thereof that may be obtained therefor, and the right, where such right can be legally exercised, in its own name to apply for and obtain Letters Patent, Inventor's Certificates, Utility Models and Designs, in countries foreign to the United States, including the full right to claim for any such application the benefits of the International Convention as fully and entirely as I could have done if the application had been in my name, and the entire interest in any Letters Patent, Inventor's Certificate, Utility Model or Design which may be granted on any such application in such foreign country; and we hereby authorize and request the Commissioner of Patents and Trademarks of the United States, and any official of any country or countries foreign to the United States whose duty it is to issue Letters Patent, Inventors Certificates, Utility Models or Designs, on applications as aforesaid, to issue any and all Letters Patent, Inventor's Certificates, Utility Models and Designs that may be granted for said invention to said UChicago Argonne, LLC, its successors and assigns.

And for the above-named considerations, I hereby agree that I will without additional compensation but without cost to myself, promptly communicate to said UChicago Argonne, LLC, its successors and assigns, any facts known to us respecting said invention whenever requested, and testify in any legal proceedings, sign all lawful papers, execute all divisional, continuing and reissue applications for Letters Patent, Inventor's Certificates, Utility Models and Designs and assignments thereof, make all rightful oaths and generally do everything possible to aid said assignee, its successors and assigns, as and when requested by them, in obtaining and enforcing proper Letters Patents, Inventor's Certificate, Utility Model and Design protection for said invention or inventions and improvements, in the United States and in all other countries.

Guanghui Zhang	03/26/2019	<u>Guanghu</u>	i zhanj	03/26/2019
Printed Name	Printed Date	Sienatore		Bated
JIAN YANG WANG	03/26/w19	Jian yary	Wary	03/26/2019
Witness Printed Name	Printed Date	Witness Signatur	s	Date

#### ASSIGNMENT

I, Theodore R. Krause of Naperville, IL for good and valuable considerations to me in hand paid, the receipt and sufficiency whereof is hereby acknowledged, have sold, assigned, conveyed and set over, and do hereby sell, assign, convey and set over unto UChicago Argonne, LLC, having a place of business at 5801 South Ellis Avenue, Chicago, Illinois 60637, its successors and assigns, the entire right, title and interest in and to all subject matter invented or designed by me and disclosed in the patent application for the, "ALKALINE ACTIVATION WITH SINGLE AND BI-METALLIC CATALYSTS" (ANL-IN-16-071) filed in the U.S. Patent and Trademark Office on August 30, 2107 as Application Serial No. 15/691,666, and any divisions and continuations thereof and in and to all Letters Patent of the United States, including any reissues and extensions thereof that may be obtained therefor, and the right, where such right can be legally exercised, in its own name to apply for and obtain Letters Patent, Inventor's Certificates, Utility Models and Designs, in countries foreign to the United States, including the full right to claim for any such application the benefits of the International Convention as fully and entirely as I could have done if the application had been in my name, and the entire interest in any Letters Patent, Inventor's Certificate, Utility Model or Design which may be granted on any such application in such foreign country; and we hereby authorize and request the Commissioner of Patents and Trademarks of the United States, and any official of any country or countries foreign to the United States whose duty it is to issue Letters Patent, Inventors Certificates, Utility Models or Designs, on applications as aforesaid, to issue any and all Letters Patent, Inventor's Certificates, Utility Models and Designs that may be granted for said invention to said UChicago Argonne, LLC, its successors and assigns.

And for the above-named considerations, I hereby agree that I will without additional compensation but without cost to myself, promptly communicate to said UChicago Argonne, LLC, its successors and assigns, any facts known to us respecting said invention whenever requested, and testify in any legal proceedings, sign all lawful papers, execute all divisional, continuing and reissue applications for Letters Patent, Inventor's Certificates, Utility Models and Designs and assignments thereof, make all rightful oaths and generally do everything possible to aid said assignee, its successors and assigns, as and when requested by them, in obtaining and enforcing proper Letters Patents, Inventor's Certificate, Utility Model and Design protection for said invention or inventions and improvements, in the United States and in all other countries.

Theodore R. Krause Printed Name

<u>&/17/19</u> Printed Date . <u>7 heodora</u> Signature

Witness Printed Name

Printed Date

Witness Signature

Date

PATENT REEL: 049764 FRAME: 0957

### ASSIGNMENT

I, Yunjie Xu, for good and valuable considerations to me in hand paid, the receipt and sufficiency whereof is hereby acknowledged, have sold, assigned, conveyed and set over, and do hereby sell, assign, convey and set over unto UChicago Argonne, LLC, having a place of business at 5801 South Ellis Avenue, Chicago, Illinois 60637, its successors and assigns, the entire right, title and interest in and to all subject matter invented or designed by me and disclosed in the patent application for the, "ALKALINE ACTIVATION WITH SINGLE AND BI-METALLIC CATALYSTS" (ANL-IN-16-071) filed in the U.S. Patent and Trademark Office on August 30, 2107 as Application Serial No. 15/691,666, and any divisions and continuations thereof and in and to all Letters Patent of the United States, including any reissues and extensions thereof that may be obtained therefor, and the right, where such right can be legally exercised, in its own name to apply for and obtain Letters Patent, Inventor's Certificates, Utility Models and Designs, in countries foreign to the United States, including the full right to claim for any such application the benefits of the International Convention as fully and entirely as I could have done if the application had been in my name, and the entire interest in any Letters Patent, Inventor's Certificate, Utility Model or Design which may be granted on any such application in such foreign country; and we hereby authorize and request the Commissioner of Patents and Trademarks of the United States, and any official of any country or countries foreign to the United States whose duty it is to issue Letters Patent, Inventors Certificates, Utility Models or Designs, on applications as aforesaid, to issue any and all Letters Patent, Inventor's Certificates, Utility Models and Designs that may be granted for said invention to said UChicago Argonne, LLC, its successors and assigns.

And for the above-named considerations, I hereby agree that I will without additional compensation but without cost to myself, promptly communicate to said UChicago Argonne, LLC, its successors and assigns, any facts known to us respecting said invention whenever requested, and testify in any legal proceedings, sign all lawful papers, execute all divisional, continuing and reissue applications for Letters Patent, Inventor's Certificates, Utility Models and Designs and assignments thereof, make all rightful oaths and generally do everything possible to aid said assignee, its successors and assigns, as and when requested by them, in obtaining and enforcing proper Letters Patents, Inventor's Certificates, Utility Model and Design protection for said invention or inventions and improvements, in the United States and in all other countries.

Yunjie Xu	06/10/2019	Musie Xm	06/1012019
Printed Name	Printed Date	Signature	Dated
Mathew Li			06/10/2019
Witness Printed Name	Printed Date	Witness Signature	Date

**RECORDED: 07/16/2019**