504852624 04/04/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4899363

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MARK C. HERSAM	03/06/2018
ETHAN B. SECOR	03/20/2018
KAN-SHENG CHEN	03/26/2018

RECEIVING PARTY DATA

Name:	NORTHWESTERN UNIVERSITY
Street Address:	633 CLARK STREET
City:	EVANSTON
State/Country:	ILLINOIS
Postal Code:	60208

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15906776

CORRESPONDENCE DATA

Fax Number: (414)298-8097

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.

Email: ipadmin@reinhartlaw.com

Correspondent Name: RODNEY DEKRUIF

Address Line 1: 1000 NORTH WATER STREET

Address Line 2: SUITE 1700

Address Line 4: MILWAUKEE, WISCONSIN 53202

ATTORNEY DOCKET NUMBER:	13961
NAME OF SUBMITTER:	TRAVIS MCDONNELL
SIGNATURE:	/Travis McDonnell/
DATE SIGNED:	04/04/2018

Total Attachments: 5

504852624

source=13961 Executed Assignment#page1.tif source=13961 Executed Assignment#page2.tif source=13961 Executed Assignment#page3.tif source=13961 Executed Assignment#page4.tif

> PATENT REEL: 045436 FRAME: 0017

source=13961 Executed Assignment#page5.tif

PATENT REEL: 045436 FRAME: 0018

Attorney Docket No. 13961 NU Reference No. 2016-209-02

ASSIGNMENT

U.S. Serial No: 15/906,776 Filing Date: February 27, 2018

Inventors: Mark C. Hersam; Ethan B. Secor; Kan-sheng Chen

Title of U.S. Patent Application: Nanostructured Lithium-Ion Battery Electrode Composite

Materials via Conformal Graphene Dispersion

For good and valuable consideration, the receipt and sufficiency of which are hereby agreed, each of the undersigned hereby assigns to Northwestern University, an Illinois not-for-profit corporation, having a place of business at 633 Clark Street, Evanston, Illinois 60208 and its successors and assigns ("Assignee") the entire right, title and interest in and to the inventions of such undersigned disclosed in the application listed above, and in any and all other applications anywhere in the world which the undersigned may file and/or be named as an inventor of, solely or jointly, on said inventions, in any and all patents which may be obtained on any of said applications and in any and all reissues, reexaminations, supplemental examinations, inter partes reviews, oppositions, post-grant reviews, supplementary protection certificates and/or extensions thereof, including without limitation, the right to bring suit and to claim and retain all damages and/or seek other remedies for the past, present and future infringement of any of the foregoing, the right of priority, including without limitation to claim priority benefit of or to said patent applications, and request the Commissioner for Patents in the United States and similar authorities outside the United States to issue said patents to and in the name of the Assignee.

Each of the undersigned states that the application listed above is or was made or authorized to be made by him or her. Each of the undersigned believes himself or herself to be the original inventor or a joint inventor with another undersigned of a claimed invention in the application listed above. Each of the undersigned acknowledges that any willful false statement made by him or her in this paragraph is punishable under 18 U.S.C. §1001 by fine or imprisonment of not more than five years, or both.

Except in favor of Assignee, each of the undersigned warrants that: (i) he or she is the owner of all its rights, titles and interests herein assigned and has the right to make this unconditional and irrevocable assignment to Assignee without obtaining any approval or permission of a third party; and (ii) there are no outstanding encumbrances, liens, prior assignments, licenses, or other obligations or restrictions on the rights, titles and interests herein assigned.

Page 1 of 5

PATENT REEL: 045436 FRAME: 0019 Upon the request of Assignee and at no expense to the undersigned, each of the undersigned hereby agrees to execute any and all applications on said inventions, including without limitation for the reissue, reexamination, supplementary protection certificate or extension thereof and any oath, declaration or affidavit relating thereto that said Assignee may deem necessary or expedient, and to cooperate to the best of the ability of the undersigned with and perform any and all affirmative acts requested by Assignee to prepare, file, prosecute, maintain, defend, enforce and vest in Assignee the rights, titles and interests assigned herein, including without limitation, preparing and executing statements and giving and producing evidence in support thereof, whereby said rights, titles and interests will be held and enjoyed by said Assignee to the full end of the term for which said patents may be granted as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment had not been made.

Undersigned (ASSIGNO	MS:
- X	animiranto.

1//\(\) 3/6/18

Inventor Name: Mark C. Hersam

State of IlLinois

County of _____

ERIC ROBERT BISSLER
OFFICIAL SEAL
Hotery Public, Grace of Ultimola
VY, Commission Expires
IN CAL | February 02, 2021

NOTARY PUBLIC

My Commission Expires: 2/02/2021

(Continued on next page)

U.S. Serial No: 15/906,776 Filing Date: February 27, 2018

Inventors: Mark C. Hersam; Ethan B. Secor; Kan-sheng Chen

Title of U.S. Patent Application: Nanostructured Lithium-Ion Battery Electrode Composite Materials via

Conformal Graphene Dispersion

Undersigned (ASSIGNORS) continued:

Inventor Nagae: Edwar B. Secor

DATE

3/20/2018

State of <u>New Maxica</u>

SS.

County of Barralitto

OFFICIAL SEAL
Corina Vandeberg
NOTARY FUBLIC
STATE OF NEW MEDICO

NOTARY PUBLIC

Page 3 of 5

Attorney Docket No. 13961 NU Reference No. 2016-209-02

U.S. Serial No: 15/906,776 Filing Date: February 27, 2018

Inventors: Mark C. Hersam; Ethan B. Secor; Kan-sheng Chen

Title of U.S. Patent Application: Nanostructured Lithium-Ion Battery Electrode Composite Materials via

Conformal Graphene Dispersion

Undersigned (ASSIGNORS) continued:

A notery public or other officer completing this certificate verifies only the identity of the inchristual who algored the decument to which this certificate is elisabled, and not the finishment, e.c., e.c., recovery, or velicity of their decument.

State of California, ss.

County of Alamada,

NOTARY PUBLIC

[NOTARY SEAL]

My Commission Expires: <u>Dec. 17, ZO 2-1</u>



Attorney Docket No. 13961 NU Reference No. 2016-209-02

U.S. Seriai No: 15/906,776 Filing Date: February 27, 2018

Inveniors: Mark C. Hersam; Ethan H. Secor; Kan-shang Chen

Title of U.S. Patent Application: Nanostructured Lithium-Ion Battery Electrode Composite Materials via

Conformal Graphene Dispersion

ASSIGNEE ACCEPTANCE: Northwestern University:

On behalf of Northwestern University, Assignee, the authorized signatory below, hereby confirms Assignee's acceptance of all rights, privileges, titles and interests conveyed by this Assignment.

Authorized Signature:

Date:

e: 413111

Printed Name

Lolita Buckingham, Invention Specialist or

Heather Fletcher, Manager of INVO Docketing & Compliance

Department: Innovation and New Ventures Office (INVO)

Page 5 of 5

PATENT REEL: 045436 FRAME: 0023

RECORDED: 04/04/2018