

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT2923073

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
THOMAS M. CRAWFORD	06/30/2014
LONGFEI YE	06/24/2014
JASON RYAN HENDERSON	06/19/2014
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<b>Name:</b>	UNIVERSITY OF SOUTH CAROLINA
<b>Street Address:</b>	OSBORNE ADMINISTRATION BUILDING
<b>City:</b>	COLUMBIA
<b>State/Country:</b>	SOUTH CAROLINA
<b>Postal Code:</b>	29208
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	14251889
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<b>ATTORNEY DOCKET NUMBER:</b>	USC-358 (1035/1036)
<b>NAME OF SUBMITTER:</b>	ALAN R. MARSHALL REG. NO. 56405
<b>SIGNATURE:</b>	/Alan R. Marshall Reg. No. 56405/
<b>DATE SIGNED:</b>	07/02/2014
<b>Total Attachments: 4</b>	
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source=USC-358_Assignment_070214#page4.tif	

## **ASSIGNMENT OF WORLDWIDE RIGHTS**

**WHEREAS**, we, Thomas M. Crawford, a citizen of the United States, residing in Irmo, SC and having a mailing address of University of South Carolina, Osborne Administration Building, Columbia, SC 29208, Longfei Ye, a citizen of China, residing in Columbia, SC and having a mailing address of University of South Carolina, Osborne Administration Building, Columbia, SC 29208 and Jason Ryan Henderson, a citizen of the United States, residing in Columbia, SC and having a mailing address of University of South Carolina, Osborne Administration Building, Columbia, SC 29208, as assignors, have made an invention entitled

**"ALL-NANOPARTICLE CONCAVE DIFFRACTION GRATING FABRICATED BY SELF-ASSEMBLY ONTO MAGNETICALLY-RECORDED TEMPLATES"** as described in a patent application for U.S. Letters Patent bearing U.S. Serial No. 14/251,889 which was filed in the U.S. Patent and Trademark Office on April 14, 2014; and

**WHEREAS**, University of South Carolina, Osborne Administration Building, Suite 109, Columbia, South Carolina, 29208, as assignee, is desirous of securing the entire right, title and interest in and to this invention in all countries throughout the world, and in and to the application for United States Letters Patent on this invention and the Letters Patent to be issued upon this application;

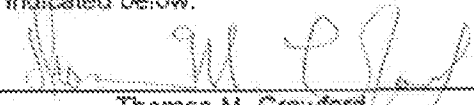
**NOW, THEREFORE**, be it known that for good and valuable consideration the receipt of which from assignee is hereby acknowledged, we, as assignors, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the assignee, its lawful successors and assigns, our entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and all rights to claim priority on the basis of such applications, and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and reissues thereof, and we hereby authorize and request the Commissioner for Patents of the United States and any official of any foreign country whose duty it is to issue patents on applications as

described above, to issue all Letters Patent for this invention to assignee, its successors and assigns, in accordance with the terms of this Agreement.

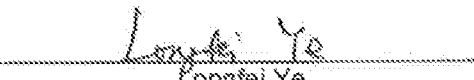
AND, WE HEREBY covenant that we have the full right to convey the interest assigned by this Assignment, and we have not executed, and will not execute any agreement in conflict with this Assignment;

AND, WE HEREBY further covenant and agree that we will, without further consideration, communicate with assignee, its successors and assigns, any facts known to us respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title of this invention in said assignee, its successors and assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the assignee, its successors and assigns.

IN WITNESS WHEREOF, Assignors have executed this document on the date indicated below.

  
\_\_\_\_\_  
Thomas M. Crawford

6/30/19  
\_\_\_\_\_  
Date

  
\_\_\_\_\_  
Longfei Ye

6/26/19  
\_\_\_\_\_  
Date

\_\_\_\_\_  
Jason Ryan Henderson

\_\_\_\_\_  
Date

**ASSIGNMENT OF WORLDWIDE RIGHTS**

**WHEREAS**, we, Thomas M. Crawford, a citizen of the United States, residing in Irmo, SC and having a mailing address of University of South Carolina, Osborne Administration Building, Columbia, SC 29208, Longfei Ye, a citizen of China, residing in Columbia, SC and having a mailing address of University of South Carolina, Osborne Administration Building, Columbia, SC 29208 and Jason Ryan Henderson, a citizen of the United States, residing in Columbia, SC and having a mailing address of University of South Carolina, Osborne Administration Building, Columbia, SC 29208, as assignors, have made an invention entitled

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**WHEREAS**, University of South Carolina, Osborne Administration Building, Suite 109, Columbia, South Carolina, 29208, as assignee, is desirous of securing the entire right, title and interest in and to this invention in all countries throughout the world, and in and to the application for United States Letters Patent on this invention and the Letters Patent to be issued upon this application;

**NOW, THEREFORE**, be it known that for good and valuable consideration the receipt of which from assignee is hereby acknowledged, we, as assignors, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the assignee, its lawful successors and assigns, our entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and all rights to claim priority on the basis of such applications, and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and reissues thereof, and we hereby authorize and request the Commissioner for Patents of the United States and any official of any foreign country whose duty it is to issue patents on applications as

described above, to issue all Letters Patent for this invention to assignee, its successors and assigns, in accordance with the terms of this Agreement.

**AND, WE HEREBY** covenant that we have the full right to convey the interest assigned by this Assignment, and we have not executed, and will not execute any agreement in conflict with this Assignment;

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**IN WITNESS WHEREOF**, Assignors have executed this document on the date indicated below.

\_\_\_\_\_  
Thomas M. Crawford

\_\_\_\_\_  
Date

\_\_\_\_\_  
Longfei Ye

\_\_\_\_\_  
Date

  
\_\_\_\_\_  
Jason Ryan Henderson

2014 June 19  
\_\_\_\_\_  
Date