Form PTO-1595 (Rev. 08/05) Doc Code: 1-29221 OMB No. 0651-0027 (exp. 6/30/2008)	U.S. DEPARTMENT OF COMMERC United States Patent and Trademark Off						
RECORDATION FORM COVER SHEET							
PATENTS ONLY To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.							
1. Name of conveying party(ies)							
Xunming Deng	2. Name and address of receiving party(ies)						
0 0	Name: The University of Toledo						
	Internal Address:						
Additional name(s) of conveying party(les) attached? Yes No							
3. Nature of conveyance/Execution Date(s):	Street Address: 2801 W. Bancroft Street						
Execution Date(s) March 6, 2008							
⊠ Assignment □ Merger	City: Toledo						
☐ Security Agreement ☐ Change of Name ☐ Joint Research Agreement	State: Ohio						
☐ Joint Research Agreement☐ Government Interest Assignment	Country: US Zip: 43606						
☐ Executive Order 9424, Confirmatory License	Zip: 43606						
Other	Additional name(s) & address(es) attached? ☐ Yes ☒ No						
4. Application or patent number(s):	document is being filed together with a new application.						
A. Patent Application No.(s)	B. Patent No.(s)						
11/899,797 filed September 7, 2007							
Additional numbers att	ached? ⊡ Yes (汉) No						
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents						
Name: Catherine B. Martineau	involved: 1						
Internal Address:	7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card						
MacMillan, Sobanski & Todd, LLC	Authorized to be charged by credit card Authorized to be charged to deposit account						
Street Address: One Maritime Plaza, Fifth Floor	☐ Enclosed						
720 Water Street	None required (government interest not affecting title)						
City: Toledo	8. Payment Information						
State: OH Zip: 43604	a. Credit Card Last 4 Numbers						
Phone Number: (419) 255-5900	Expiration Date						
Fax Number: (419) 255-9639	b. Deposit Account Number 13-0005						
Email Address: martineau@mstfirm.com	Authorized User Name MacMillan Sobanski Todd						
9. Signature: Cathyne B Nartingan	March 6, 2008						
Signature							

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to: Mall Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, VA 22313-1450

Catherine B. Martineau, Reg. No. 31,854

Name of Person Signing

PATENT REEL: 020619 FRAME: 0945

Date

Total number of pages including

cover

ASSIGNMENT

Attorney Docket No. 1-29221/PHYS00402A

WHEREAS I,

Xunming Deng, of 7749 Sandia Court, Sylvania, Ohio 43560

have made certain inventions in a

HYBRID WINDOW LAYER FOR PHOTOVOLTAIC CELLS,

the specification of which has *United States Serial No. 11/899,797*, filed *September 7, 2007*, which is a divisional application of *United States Serial No. 10/696,545*, filed *October 29, 2003*, and

WHEREAS, *The University, of Toledo*, of 2801 W. Buncroft Street, Toledo, Ohio, organized and operating in the State of Ohio, herein called "ASSIGNEE", is desirous of acquiring our entire right, title, and interest in said invention and application therefor, and in any patent or patents to be obtained therefor;

NOW, THEREFORE, To All Whom It May Concern, be it known that, for and in consideration of the sum of One Dollar (\$1.00), and other good and valuable considerations, the receipt of which is hereby acknowledged, I have sold, assigned, and transferred, and by these presents do-hereby sell, assign, transfer and convey unto said Assignee the entire right, title and interest (a) in and to said Inventions, including the right to claim priority to said Inventions; (b) in and to all rights to all United States and corresponding non-United States patent applications and Patent(s), including those filed under the Paris Convention for the Protection of Industrial Property, The Patent Cooperation Treaty or otherwise; (c) in and to any and all applications filed and any and all Patent(s) granted on said Inventions in the United States, in any foreign country, or under any international convention, agreement, protocol, or treaty, including each and every application filed and any and all Patent(s) granted on any application which is a divisional, substitution, continuation, or continuation-in-part of any of said Application(s); and (d) in and to each and every reissue, reexamination, or extensions of any of said Patent(s).

And I further covenant and agree that I will, at the request and expense of the said Assignee, execute such other and further assurances of title as may be necessary or proper to fully convey the interest herein sought to be conveyed; that I will, at the request and expense of the said Assignee, execute such application papers as may be desired by the said Assignee for the filing of any division or renewal of the application herein conveyed, or for the reissues or extensions of any Letters Patent that may be granted upon said application, and will execute such Supplemental Oaths and Preliminary Statements, or other papers as desired by the said Assignee.

And I further assign unto the said Assignee our whole right, title, and interest to the invention disclosed in the application throughout all countries foreign to the United States, and do hereby authorize the said Assignee to apply for patents therefor in its own name in countries where such procedure is proper and to claim the benefit of the International Convention and do agree to execute applications for the said invention in the several countries where it is necessary that the same be executed by the inventors, and to execute assignments of such applications and the patents to be obtained therefor to the said assignee, as well as all other necessary papers.

I do hereby authorize and request the Commissioner of Patents or other proper Officer, to issue such Letters Patent, or any of them, to the said Assignee, as the assignee of our entire right, title, and interest in and to the same for the sole use and behalf of the said Assignee, and its successors or assigns.

Page 1 of 2

ASSIGNMENT

Attorney Docket No. 1-29221/PHYS00402A

IN TESTIMONY WHEREOF I have hereunto set my hand and affixed my seal at
Tolero (city), Ohio (state), this let day of March, 2008
Xunming Deng
STATE OF ON O
COUNTY OF LUCE)
This day of 1000 before me, a Notary Public in and for the County aforesaid, personally appeared 1000 personally known to me and known to be the person described in and who executed the foregoing assignment and acknowledged the same to be his voluntary act and deed, and that he executed the same for the uses and purposes therein set forth.

REEL: 020619 FRAME: 0947

LAW OFFICES OF

MACMILLAN, SOBANSKI & TODD, LLC

Richard S. MacMillan Mark J. Sobanski Ted C. Gillespie Douglas V. Pavelko John B. Molnar Catherine B. Martineau Gregg W. Emch William E. Lahey Gary M. Sutter Thedford I. Hitaffer Scott A. Blake Gregory W. Robinette Anita S. Toska C. Fred Charpie, III

RECORDED: 03/06/2008

One Maritime Plaza, Fifth Floor 720 Water Street Toledo, Ohio 43604-1853 Telephone (419) 255-5900 Facsimile (419) 255-9639

<u>www.mstfirm.com</u> martineau@mstfirm.com James A. Duggan Jonathan D. Sandys Oliver E. Todd, Jr. PLC- Of Counsel Allen W. Inks - Of Counsel Staci E. Schweikerr - Of Counsel

Livonia, Michigan Office Mark L. Mollon Donald A. Wilkinson Frank G. McKenzie Frank L. Lollo 38705 Seven Mile Road, Suite 405 Livonia, Michigan 48152-0193 Telephone (734) 542-0900

FACSIMILE TRANSMISSION FROM TOLEDO, OHIO OFFICE

To:	Mail Stop	Assignment Rec	cordation Se	rvices Date:	<u>3/6/2008</u>
Firm:		<u> </u>			
City:	Alexandria	State:	VA	Zip Code:	22313
Fax No.:		571-27	3-0140		
From:	Catherine	B. Martineau, F	<u>leg. No. 31,8</u>	5 <u>4</u>	
Total pages	including cover p	age:	1		
Comments: Recordation Our File 1-	Attached is an As n Cover Sheet in re 29221).	signment for Thegard to Serial N	e University umber 11/89	of Toledo and a 9,797 filed Septe	lso a ember 7, 2007

CONFIDENTIALITY NOTICE

The documents accompanying this transmission contain confidential information intended for a specific individual and purpose. The information is private, and is protected by law. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution or the taking of any action in reliance on the contents of this telecopied information is strictly prohibited. If you have received this communication in error, please notify us at 419/255-5900 (collect) so that we can arrange for the retrieval of the original document at no cost to you. Thank you.

PATENT REEL: 020619 FRAME: 0948