

PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT | | | | | | | | | | |
|--|-------------------------|---------------|-------------------------|---------------------|------------------|--------------------|------------|------------------|------------|--------------|------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT | | | | | | | | | | |
| CONVEYING PARTY DATA | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Name</th> <th style="width: 30%;">Execution Date</th> </tr> </thead> <tbody> <tr> <td>Tobin J. Marks</td> <td>03/22/2007</td> </tr> <tr> <td>Alexander W. Hains</td> <td>03/22/2007</td> </tr> <tr> <td>Michael D. Irwin</td> <td>03/22/2007</td> </tr> <tr> <td>He Yan</td> <td>03/22/2007</td> </tr> </tbody> </table> | | Name | Execution Date | Tobin J. Marks | 03/22/2007 | Alexander W. Hains | 03/22/2007 | Michael D. Irwin | 03/22/2007 | He Yan | 03/22/2007 |
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| RECEIVING PARTY DATA | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Name:</td> <td>Northwestern University</td> </tr> <tr> <td>Street Address:</td> <td>633 Clark Street</td> </tr> <tr> <td>City:</td> <td>Evanston</td> </tr> <tr> <td>State/Country:</td> <td>ILLINOIS</td> </tr> <tr> <td>Postal Code:</td> <td>60208</td> </tr> </table> | | Name: | Northwestern University | Street Address: | 633 Clark Street | City: | Evanston | State/Country: | ILLINOIS | Postal Code: | 60208 |
| Name: | Northwestern University | | | | | | | | | | |
| Street Address: | 633 Clark Street | | | | | | | | | | |
| City: | Evanston | | | | | | | | | | |
| State/Country: | ILLINOIS | | | | | | | | | | |
| Postal Code: | 60208 | | | | | | | | | | |
| PROPERTY NUMBERS Total: 1 | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Property Type</th> <th style="width: 70%;">Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>12046929</td> </tr> </tbody> </table> | | Property Type | Number | Application Number: | 12046929 | | | | | | |
| Property Type | Number | | | | | | | | | | |
| Application Number: | 12046929 | | | | | | | | | | |
| CORRESPONDENCE DATA | | | | | | | | | | | |
| <p>Fax Number: (404)365-9532</p> <p><i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 404-233-7000</p> <p>Email: ipdocket@mmmlaw.com</p> <p>Correspondent Name: Tim T. Xia</p> <p>Address Line 1: 3343 Peachtree Road, N.E.</p> <p>Address Line 2: 1600 Atlanta Financial Center</p> <p>Address Line 4: Atlanta, GEORGIA 30326</p> | | | | | | | | | | | |
| ATTORNEY DOCKET NUMBER: | 16936-64925 | | | | | | | | | | |
| NAME OF SUBMITTER: | Tim T. Xia | | | | | | | | | | |
| Total Attachments: 5 | | | | | | | | | | | |

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PATENT
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ASSIGNMENT

WHEREAS, We/I, **Tobin J. MARKS, Alexander W. HAINS, Michael D. IRWIN**, each a citizen of the United States of American; and **He YAN**, a citizen of the People's Republic of China, all residing in Illinois, U.S.A., have invented new and useful improvements for which we filed a U.S. patent application in the United States Patent and Trademark Office on **March 12, 2007**, which is entitled "***Electron-Blocking Layer / Hole-Transport Layer for Organic Photovoltaics and Applications of Same***," and was assigned U.S. Serial No. **60/906,456**.

AND WHEREAS, **Northwestern University**, a corporation organized and existing under and by virtue of the laws of the State of Illinois, and having a place of business at 633 Clark Street, Evanston, Illinois 60208, U.S.A., (hereinafter "Assignee") is desirous of acquiring the entire right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent 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 and other good and valuable considerations, the receipt and sufficiency whereof is hereby acknowledged, we/I have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and in and to the application, all divisionals, continuations, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted therefrom; and we/I do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the Assignee, its successors and assigns.

AND, for the consideration aforesaid, we/I do hereby agree that we/I and our/my executors and legal representatives will make, execute and deliver any and all other instruments in writing

including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to us/me relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

AND, furthermore we/I covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by us/me and that full right to convey the same as herein expressed is possessed by us/me.

We/I also authorize counsel for Applicant to enter above the serial number of the application or other related information when it becomes available.

IN TESTIMONY WHEREOF, I have hereunto set my hand this 22 day of March, 2007.

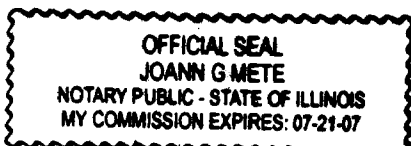
Tobin J. Marks
Tobin J. MARKS

STATE OF ILL)
COUNTY OF COCK) ss.

On this 22nd day of March, 2007, before me personally appeared **Tobin J. MARKS** to me known and known to me to be the person described in and who executed the foregoing instrument, and he duly acknowledged to me that he executed the same for the uses and purposes therein set forth.

[SEAL]

Joann G. Mete
Notary Public



IN TESTIMONY WHEREOF, I have hereunto set my hand this 22 day of
March, 2007.

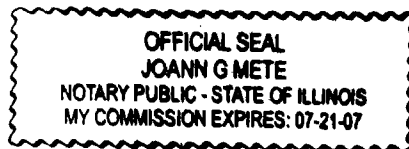
Alexander W. Hains
Alexander W. HAINS

STATE OF IL)
COUNTY OF COOK) ss.

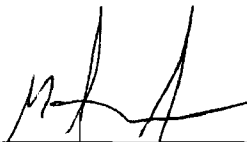
On this 22nd day of March, 2007, before me personally appeared
Alexander W. HAINS to me known and known to me to be the person described in and who
executed the foregoing instrument, and he duly acknowledged to me that he executed the same for
the uses and purposes therein set forth

[SEAL]

Joann G. Mete
Notary Public



IN TESTIMONY WHEREOF, I have hereunto set my hand this 22 day of
March, 2007.




Michael D. IRWIN

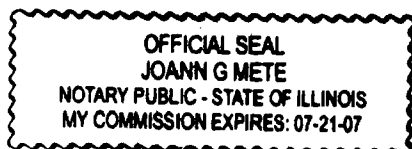
STATE OF IL)
COUNTY OF COOK) ss.

On this 22nd day of March, 2007, before me personally appeared
Michael D. IRWIN to me known and known to me to be the person described in and who executed
the foregoing instrument, and he duly acknowledged to me that he executed the same for the uses and
purposes therein set forth.

[SEAL]



Notary Public



IN TESTIMONY WHEREOF, I have hereunto set my hand this 21 day of
March, 2007.

He Yan
He YAN

STATE OF IL)
COUNTY OF COOK) ss.

On this 22nd day of March, 2007, before me personally appeared He
YAN to me known and known to me to be the person described in and who executed the foregoing
instrument, and he duly acknowledged to me that he executed the same for the uses and purposes
therein set forth.

[SEAL]

Joann G. Mete
Notary Public

