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PATENT



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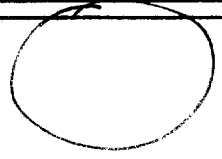
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09/423162

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**Patent Application Number(s)**

**Patent Number(s)**

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If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor.

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Enter PCT application number only if a U.S. Application Number has not been assigned.

PCT <input type="text" value="IB98/00680"/>	PCT <input type="text"/>	PCT <input type="text"/>
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Clifford W. Browning  
Name of Person Signing

*Clifford W. Browning*  
Signature

Nov. 1, 1999  
Date

**ASSIGNMENT (PATENT)**

WHEREAS, Michael GRÄTZEL, Chemin du Marquisat 7a, CH-1025 Saint-Sulpice, Switzerland hereinafter referred to as Assignor, has made a new and useful invention in

**TRANSITION METAL COMPLEX PHOTOSENSITIZER AND USE OF THIS COMPLEX  
IN A PHOTOVOLTAIC CELL**

which is found in International Patent Application No. PCT/IB 98/00680 and for which Assignor will make application for Letters Patent of the United States; and

WHEREAS, Ecole Polytechnique Fédérale de Lausanne, with address at DPR - Ecublens, CH-1015 Lausanne, Switzerland, hereinafter referred to as Assignee, desires to acquire 100% of the right, title, and interest in, to and under said invention disclosed, described and claimed or intended so to be in said application, and in, to and under said application, and in, to and under any and all Letters Patent, United States and foreign, which may be obtained thereof and thereon;

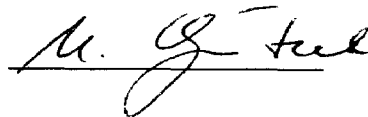
NOW, THEREFORE, to all and whom it may concern, be it known that for and in consideration of the sum of One Dollar (\$1.00) and other good, valuable and sufficient considerations to Assignor in hand paid, the receipt of which is hereby acknowledged, Assignor has sold, assigned and transferred, and by these presents does sell, assign and transfer unto Assignee, 100% of the right, title, and interest in, to and under said invention disclosed, described and claimed or intended so to be in said application, and any and all other applications thereon and arising therefrom, including any and all divisions and continuations thereof, and any and all divisions and continuations thereof, and any and all patents to be issued and obtained therefor and thereon, United States and foreign, including all reissues and extensions thereof.

Assignor hereby authorizes and requests the firm of Woodard, Emhardt, Naughton, Moriarty & McNett of Bank One Center/Tower, 111 Monument Circle, Suite 3700, Indianapolis, Indiana 46204-5137, to insert here in parentheses (Serial No. \_\_\_\_\_, Filed \_\_\_\_\_ 19\_\_ ) the date and serial number of said application for Letters Patent of the United States when officially known, and Assignor hereby authorizes and requests the Honorable Commissioner of Patents to issue said Letters Patent to Assignee, its assigns and legal representatives.

Assignor agrees to sign and execute any and all other papers necessary and desirable for the procurement of Letters Patent on said invention in this and all foreign countries for the use of Assignee.

WITNESS Assignor's hands this 19 day of June, 1998.

Michael GRÄTZEL



**ASSIGNMENT (PATENT)**

WHEREAS, Mohammad Khaja Nazeeruddin, Chemin de la Chiésaz 9, CH-1024 Ecublens, Switzerland hereinafter referred to as Assignor, has made a new and useful invention in

**TRANSITION METAL COMPLEX PHOTOSENSITIZER AND USE OF THIS COMPLEX  
IN A PHOTOVOLTAIC CELL**

which is found in International Patent Application No. PCT/IB 98/00680 and for which Assignor will make application for Letters Patent of the United States; and

WHEREAS, Ecole Polytechnique Fédérale de Lausanne, with address at DPR - Ecublens, CH-1015 Lausanne, Switzerland, hereinafter referred to as Assignee, desires to acquire 100% of the right, title, and interest in, to and under said invention disclosed, described and claimed or intended so to be in said application, and in, to and under said application, and in, to and under any and all Letters Patent, United States and foreign, which may be obtained thereof and thereon;

NOW, THEREFORE, to all and whom it may concern, be it known that for and in consideration of the sum of One Dollar (\$1.00) and other good, valuable and sufficient considerations to Assignor in hand paid, the receipt of which is hereby acknowledged, Assignor has sold, assigned and transferred, and by these presents does sell, assign and transfer unto Assignee, 100% of the right, title, and interest in, to and under said invention disclosed, described and claimed or intended so to be in said application, and any and all other applications thereon and arising therefrom, including any and all divisions and continuations thereof, and any and all divisions and continuations thereof, and any and all patents to be issued and obtained therefor and thereon, United States and foreign, including all reissues and extensions thereof.

Assignor hereby authorizes and requests the firm of Woodard, Emhardt, Naughton, Moriarty & McNett of Bank One Center/Tower, 111 Monument Circle, Suite 3700, Indianapolis, Indiana 46204-5137, to insert here in parentheses (Serial No. \_\_\_\_\_, Filed \_\_\_\_\_ 19 \_\_) the date and serial number of said application for Letters Patent of the United States when officially known, and Assignor hereby authorizes and requests the Honorable Commissioner of Patents to issue said Letters Patent to Assignee, its assigns and legal representatives.

Assignor agrees to sign and execute any and all other papers necessary and desirable for the procurement of Letters Patent on said invention in this and all foreign countries for the use of Assignee.

WITNESS Assignor's hands this 30 day of June, 1998.

Mohammad Khaja NAZEERUDDIN



**ASSIGNMENT (PATENT)**

WHEREAS, Péter Péchy, Avenue Victor-Ruffly 17, CH-1012 Lausanne, Switzerland hereinafter referred to as Assignor, has made a new and useful invention in

**TRANSITION METAL COMPLEX PHOTOSENSITIZER AND USE OF THIS COMPLEX  
IN A PHOTOVOLTAIC CELL**

which is found in International Patent Application No. PCT/IB 98/00680 and for which Assignor will make application for Letters Patent of the United States; and

WHEREAS, Ecole Polytechnique Fédérale de Lausanne, with address at DPR - Ecublens, CH-1015 Lausanne, Switzerland, hereinafter referred to as Assignee, desires to acquire 100% of the right, title, and interest in, to and under said invention disclosed, described and claimed or intended so to be in said application, and in, to and under said application, and in, to and under any and all Letters Patent, United States and foreign, which may be obtained thereof and thereon;

NOW, THEREFORE, to all and whom it may concern, be it known that for and in consideration of the sum of One Dollar (\$1.00) and other good, valuable and sufficient considerations to Assignor in hand paid, the receipt of which is hereby acknowledged, Assignor has sold, assigned and transferred, and by these presents does sell, assign and transfer unto Assignee, 100% of the right, title, and interest in, to and under said invention disclosed, described and claimed or intended so to be in said application, and any and all other applications thereon and arising therefrom, including any and all divisions and continuations thereof, and any and all divisions and continuations thereof, and any and all patents to be issued and obtained therefor and thereon, United States and foreign, including all reissues and extensions thereof.

Assignor hereby authorizes and requests the firm of Woodard, Emhardt, Naughton, Moriarty & McNett of Bank One Center/Tower, 111 Monument Circle, Suite 3700, Indianapolis, Indiana 46204-5137, to insert here in parentheses (Serial No. \_\_\_\_\_, Filed \_\_\_\_\_ 19 \_\_) the date and serial number of said application for Letters Patent of the United States when officially known, and Assignor hereby authorizes and requests the Honorable Commissioner of Patents to issue said Letters Patent to Assignee, its assigns and legal representatives.

Assignor agrees to sign and execute any and all other papers necessary and desirable for the procurement of Letters Patent on said invention in this and all foreign countries for the use of Assignee.

WITNESS Assignor's hands this 29 day of June, 1998.

Péter PÉCHY

