

11-12-1998



100875966

110
10-30-98

ORDINATION FORM COVER SHEET
PATENTS ONLY

TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).

Submission Type

New

Resubmission (Non-Recordation)
Document ID# _____

Correction of PTO Error
Reel # _____ Frame # _____

Corrective Document
Reel # _____ Frame # _____

Conveyance Type

Assignment Security Agreement

License Change of Name

Merger Other _____

U.S. Government
(For Use ONLY by U.S. Government Agencies)

Departmental File Secret File

Conveying Party(ies)

Mark it additional names of conveying parties attached

Name (line 1) Xuanzhi Wu Execution Date 09/04/98
Month Day Year

Name (line 2) _____

Second Party

Name (line 1) Peter Sheldon Execution Date 09/04/98
Month Day Year

Name (line 2) _____

Receiving Party

Mark if additional names of receiving parties attached

Name (line 1) Midwest Research Institute If document to be recorded
is an assignment and the
receiving party is not
domiciled in the United
States, an appointment
of a domestic
representative is attached.
(Designation must be a
separate document from
Assignment)

Name (line 2) _____

Address (line 1) 425 Volker Boulevard

Address (line 2) _____

Address (line 3) Kansas City Missouri 64110
City State/Country Zip Code

Domestic Representative Name and Address

Enter for the first Receiving Party only.

Name Ken Richardson

Address (line 1) National Renewable Energy Laboratory

Address (line 2) 1617 Cole Boulevard

Address (line 3) Golden, CO 80401

Address (line 4) _____

11/09/1998 SBURNS 00000107 140460 09149430
01 FC:581 40.00 CH

FOR OFFICE USE ONLY

Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief Information Officer, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington D.C. Information Collection Budget Package 0651-0027, Patent and Trademark Assignment Practice. DO NOT SEND REQUESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS ADDRESS.

Mail documents to be recorded with required cover sheet(s) information to:
Commissioner of Patents and Trademarks, Box Assignments, Washington, D.C. 20231

Correspondent Name and Address

Area Code and Telephone Number

303/384-7576

Name Ken Richardson

Address (line 1) Assistant Chief Patent Counsel

Address (line 2) National Renewable Energy Laboratory

Address (line 3) 1617 Cole Boulevard

Address (line 4) Golden, CO 80401

Pages

Enter the total number of pages of the attached conveyance document including any attachments.

5 pages

Application Number(s) or Patent Number(s)

Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

Patent Number(s)

09/149,430

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.

Month Day Year

Patent Cooperation Treaty (PCT)

Enter PCT application number

PCT

PCT

PCT

only if a U.S. Application Number has not been assigned.

PCT

PCT

PCT

Number of Properties

Enter the total number of properties involved.

#

Fee Amount

Fee Amount for Properties Listed (37 CFR 3.41): \$

Method of Payment:
Deposit Account

Enclosed

Deposit Account

(Enter for payment by deposit account or if additional fees can be charged to the account.)

Deposit Account Number:

14-0460

Authorization to charge additional fees:

Yes

No

Statement and Signature

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.

Ken Richardson

Name of Person Signing

Signature

October 29, 1998

Date

RECORDATION FORM COVER SHEET
CONTINUATION
PATENTS ONLY

Conveying Party(ies)

Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Execution Date
Month Day Year

Name (line 1) Timothy J. Coutts

09/08/98

Name (line 2)

Execution Date
Month Day Year

Name (line 1)

Name (line 2)

Execution Date
Month Day Year

Name (line 1)

Name (line 2)

Receiving Party(ies)

Mark if additional names of receiving parties attached

Enter additional Receiving Party(ies)

Name (line 1)

If document to be recorded is an assignment and the receiving party is not domiciled in the United states, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)

City

State/Country

Zip Code

Name (line 1)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)

City

State/Country

Zip Code

If document to be recorded is an assignment and the receiving party is not domiciled in the United states, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Application Number(s) or Patent Number(s)

Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

Patent Number(s)

ASSIGNMENT

WHEREAS, We, Xuanzhi Wu of 1130 10th Street, #308, Golden, County of Jefferson, State of Colorado; Peter Sheldon of 2510 South DeFrame Street, Lakewood, County of Jefferson; and Timothy J. Coutts of 11715 W. 20th Avenue; Lakewood, County of Jefferson, State of Colorado have invented certain new and useful improvements in **Photovoltaic Devices Comprising Zinc Stannate Buffer Layer and Method for Making**, which we are about to make application for Letters Patent of the United States, said application being identified as NREL IR No. 97-21 and; executed concurrently herewith; and;

WHEREAS, we now own the entire right, title and interest therein; and

WHEREAS, Midwest Research Institute, of 425 Volker Blvd., Kansas City, Missouri 64110, a corporation fully organized and existing under the laws of the State of Missouri is desirous of acquiring the entire right, title, and interest therein and thereto;

NOW THEREFORE, be it known that for and in consideration of the sum of One Dollar (\$1.00) and certain other good and valuable consideration to us in hand paid, the receipt of which is hereby acknowledged, we, the said Xuanzhi Wu, Peter Sheldon and Timothy J. Coutts by these presents do sell, assign, and transfer unto the said Midwest Research Institute, its successors, legal representatives and assigns, our entire right, title, and interest in and to said invention and the aforesaid application, for the United States of America and for all foreign countries and to all Letters Patents, continuations and reissues, and extensions to be obtained therefor; and we further agree to cooperate with the assignee hereunder in the obtaining and sustaining of any and all such Letters Patent, but at the expense of said assignee.

The Commissioner of Patents is hereby authorized and requested to issue the Letters Patent solely in accordance with the terms of this assignment to Midwest Research Institute, its successors, legal representatives and assigns, as the assignee of the entire right, title and interest therein.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal on the date set forth

hereinafter.

Arthur L. Bone
Witness

Xuanzhi Wu
Xuanzhi Wu

Arthur L. Bone
Witness

Peter Sheldon
Peter Sheldon

Arthur L. Bone
Witness

Timothy J. Coutts
Timothy J. Coutts

COUNTY OF JEFFERSON)
STATE OF COLORADO)

Before me, a Notary Public in and for the said County and State, personally appeared Xuanzhi Wu, Peter Sheldon and Timothy J. Coutts known to me to be the persons whose names are subscribed to the foregoing, and acknowledged to me that they executed the same for the purposes and consideration therein expressed.

Given under my hand and seal of office, this 4th day of September 1998.

My commission expires: October 4, 2001.

[Seal]

Brenda E. Brantley

Approved and consented to this 30 day of ~~September~~ ^{October} 1998. Brenda E. Brantley, Notary Public
State of Colorado
My Commission Expires 10/4/2001

ATTEST:

Brenda E. Brantley

MIDWEST RESEARCH INSTITUTE

By Ken Richardson
Ken Richardson
Its Assistant Chief Patent Counsel