CU. 182 Q/A

Form **PTO-1595** (Rev. 07/05) OMB No. 0651-0027 (exp. 6/30

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United States Patent and Trademark Office

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| To the Director of the U.S. | , attached documents or the new address(es) below. |
| 1. Name of conveying party(ies) | 2. Name and address of receiving party(ies) |
| #1: Tao ZHANG; #2: Na JI; #3: Mingyuan ZHENG; #4: Aiqin WANG; | Name: Dalian Institute of Chemical Physics, Chinese Academy |
| #5: Yuying SHU; #6: Xiaodong WANG; #7: Jingguang CHEN | Internal Address: |
| Additional name(s) of conveying party(ies) attached? Yes 🗹 No | |
| 3. Nature of conveyance/Execution Date(s): | Street Address: No. 457 Zhongshan Road |
| Execution Date(s) #1 & 7: 12/10/2009; #2-6:12/09/2009 | |
| Assignment Merger | |
| Security Agreement Change of Name | City: Dalian |
| Joint Research Agreement | State: Liaoning |
| Government Interest Assignment | Country Office 7im |
| Executive Order 9424, Confirmatory License | Country: China Zip: |
| Other | Additional name(s) & address(es) attached? Yes Vo |
| 4. Application or patent number(s): | document is being filed together with a new application. |
| A. Patent Application No.(s) | B. Patent No.(s) |
| | 12734763 |
| | |
| Additional numbers att | ached? Yes No |
| 5. Name and address to whom correspondence concerning document should be mailed: | 6. Total number of applications and patents involved: 1 |
| Name:Raymond Y. Chan | 7. Total fee (37 CFR 1.21(h) & 3.41) \$.40.00 |
| Internal Address: | Authorized to be charged by credit card |
| Suite 128 | Authorized to be charged by credit card Authorized to be charged to deposit account |
| Street Address: | Enclosed |
| 108 N. Ynez Avenue | None required (government interest not affecting title) |
| City: Monterey Park | 8. Payment Information |
| State: California Zip:91754 | a. Credit Card Last 4 Numbers Expiration Date |
| Phone Number: 626-571-9812 | |
| Fax Number: 626-571-9813 | b. Deposit Account Number |
| Email Address: raymondc@davidandraymond.com | Authorized User Name |
| 9. Signature: | |
| Signature | 0 / (8/-0/0) Date |
| | |
| Raymond Y. Chan Name of Person Signing | Total number of pages including cover sheet, attachments, and documents: |

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

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IAPO1 Rec'd PCT 18 MAY 2010,

UTILITY PATENT

Attorney's

Attorney's Docket No.: <u>USP4385C/SZ48</u>6-SYA

ASSIGNMENT

| whose post of certain new and Appl hereinafter ref | d useful improvements in Tungstication in Synthesis ferred to as the INVENTION) for which executed on even data herewith executed on: | einafter referred to as ASSIGNOR, have invented a en Carbide Catalysts, their Preparation Ethylene Glycol from Cellulose an application for United States Letters Patent was |
|--|---|--|
| | filed on: | Serial No.: |
| | | |

WHEREAS, Dalian Institute of Chemical Physics, Chinese Academy of Sciences No.457 Zhongshan Road, Dalian, Liaoning, P.R. China whose post office address is hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right, title and interest in and to the same in the United States;

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, I (we), ASSIGNOR, by these presents do sell, assign and transfer unto said ASSIGNEE, the entire right, title, and interest in and to said INVENTION and application throughout the United States of America, including any and all Letters Patent granted on any division, continuation, continuation-in-part and reissue of said application.

ALSO, ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution and maintenance of said application or any other patent application(s) in the United States for said INVENTION, including additional documents that may be required to affirm the rights of ASSIGNEE in and to said INVENTION, all without further consideration. ASSIGNOR also agrees, without further consideration and at ASSIGNEE'S expense, to identify and communicate to ASSIGNEE at ASSIGNEE'S request documents and information concerning the INVENTION that are within ASSIGNOR'S possession or control, and to provide further assurances and testimony on behalf of ASSIGNEE that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. ASSIGNOR'S obligations under this instrument shall extend to ASSIGNOR'S heirs, executors, administrators and other legal representatives.

ALSO, ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all Letters Patent referred to above to ASSIGNEE, as the ASSIGNEE of the entire right, title and interest in and to the same, for ASSIGNEE'S sole use and behoof; and for the use and behoof of ASSIGNEE'S legal representatives and successors, to the full end of the term for which such Letters Patent may be granted; as fully and entirely as the same would have been held by ASSIGNOR had this assignment and sale not been made.

ASSIGNOR authorizes Raymond Y. Chan to insert or complete any information in this document needed to effect its recordal in the U.S. Patent and Trademark Office.

ASSIGNOR NAME:

Tao ZHANG

ADDRESS:

No.457 Zhongshan Road, Dalian, Liaoning, P.R. China

SIGNATURE

Dec. 10, 200)

12/734763

IAPO1Rec'd PCT 18 MAY 2010

UTILITY PATENT

Attorney's

Docket No.: USP4385C/SZ486-SYA

ASSIGNMENT

| certain new and useful improve and Application | appear(s) below, hereinafter referred to as ASSIGNOR, have invented a ments in Tungsten Carbide Catalysts, their Preparation in Synthesis of Ethylene Glycol from Cellulose NVENTION) for which an application for United States Letters Patent was |
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| whose post office address is | Institute of Chemical Physics, Chinese Academy of Sciences No.457 Zhongshan Road, Dalian, Liaoning, P.R. China GNEE, is desirous of acquiring the entire right, title and interest in and to the |
| acknowledged, I (we), ASSIGN entire right, title, and interest | E, for good and valuable consideration, receipt of which is hereby IOR, by these presents do sell, assign and transfer unto said ASSIGNEE, the n and to said INVENTION and application throughout the United States of I Letters Patent granted on any division, continuation, continuation-in-part |
| connection with the filing, application(s) in the United Strequired to affirm the rights of ASSIGNOR also agrees, with communicate to ASSIGNOR'S plant are within ASSIGNOR'S behalf of ASSIGNEE that lawfull and defense of any patent as | ereby agrees to execute any documents that legally may be required in prosecution and maintenance of said application or any other patent states for said INVENTION, including additional documents that may be f ASSIGNEE in and to said INVENTION, all without further consideration. Out further consideration and at ASSIGNEE'S expense, to identify and ASSIGNEE'S request documents and information concerning the INVENTION possession or control, and to provide further assurances and testimony on ally may be required of ASSIGNOR in respect of the prosecution, maintenance pplication or patent encompassed within the terms of this instrument. This instrument shall extend to ASSIGNOR'S heirs, executors, administrators |
| issue any and all Letters Paten and interest in and to the san ASSIGNEE'S legal representati | reby authorizes and requests the Commissioner of Patents and Trademarks to referred to above to ASSIGNEE, as the ASSIGNEE of the entire right, title ie, for ASSIGNEE'S sole use and behoof; and for the use and behoof of ves and successors, to the full end of the term for which such Letters Patent tirely as the same would have been held by ASSIGNOR had this assignment |
| | s Raymond Y. Chan to insert or complete any information in this document he U.S. Patent and Trademark Office. |
| ASSIGNOR NAME: Na JI ADDRESS: No.457 Zhongsha | n Road,Dalian,Liaoning,P.R.China |
| Na Ji SIGNATURE | Dec. 9. 200 |
| | |

UTILITY PATENT

Attorney's Docket No.:USP4385C/SZ486-SYA

ASSIGNMENT

| WHE | EREAS, I (we), | Mingyuai | ı ZHENG | | | | | |
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| | ffice address(es) | | | | | | | |
| certain new an | d useful improver | nents in ' | Tungsten | Carbide | Catal | Lysts, | their | Preparation |
| and App | lication | in Sy | nthesis | of Ethy1 | ene G1 | Lycol | from C | Cellulose |
| hereinafter ref | ferred to as the IN | IVENTION |) for which an a | application for U | United State | es Letters F | Patent was | |
| X | executed on eve | n data here | with | | | | | |
| | executed on: | | | | | | | |
| | filed on: | | | Serial No.: | | | | |
| | | | | | | | | |

whose post office address is No.457 Zhongshan Road, Dalian, Liaoning, P.R. China hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right, title and interest in and to the same in the United States;

WHEREAS, Dalian Institute of Chemical Physics, Chinese Academy of Sciences

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, I (we), ASSIGNOR, by these presents do sell, assign and transfer unto said ASSIGNEE, the entire right, title, and interest in and to said INVENTION and application throughout the United States of America, including any and all Letters Patent granted on any division, continuation, continuation-in-part and reissue of said application.

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ASSIGNOR NAME: Mingyuan ZHENG

Mongyuan Then

ADDRESS: No.457 Zhongshan Road, Dalian, Liaoning, P.R. China

12-07- 2008 DATE

Attorney's

Docket No.: USP4385C/SZ486-SYA

ASSIGNMENT

| | EREAS, I (we), | | | | | |
|-----------------|---------------------|--------------------------|-------------------|-----------------------|--------------|-------------|
| whose post of | ffice address(es) a | appear(s) below, herein: | after referred to | as ASSIGNOR, ha | ave invented | a |
| certain new an | d useful improven | nents in Tungsten | Carbide | Catalysts | their l | Preparation |
| and App | lication i | in Synthesis | of Ethyle | ene Glycol | from Ce | ∍11ulose |
| (hereinafter re | ferred to as the IN | VENTION) for which an a | application for U | Inited States Letters | Patent was | |
| X | executed on even | data herewith | | | | |
| | executed on: | | | | | |
| | filed on: | | Serial No.: | | | |
| | | | | | | |

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ASSIGNOR NAME:

Aiqin WANG

ADDRESS: No.457 Zhongshan Road.Dalian,Liaoning,P.R.China

Ailin Wang

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Attorney's

Docket No.: USP4385C/SZ486-SYA

ASSIGNMENT

| WH. | EREAS, I (we), | Yuying SHU | | | | |
|-----------------|----------------------|---------------------|----------------------|---------------------|-----------------|-------------|
| whose post of | office address(es) | appear(s) below, h | ereinafter referred | to as ASSIGNOR | ., have invente | d a |
| certain new ai | nd useful improve | ments in Tungs | ten Carbid | le Catalyst | ts,their | Preparation |
| and App | lication | in Synthes | is of Ethy | lene Glyco | ol from (| Cellulose |
| (hereinafter re | eferred to as the In | NVENTION) for which | ch an application fo | r United States Let | ters Patent was | |
| <u> </u> | executed on eve | en data herewith | | | | |
| 厅 | executed on: | | | | | |
| Fi | filed on: | | Serial No.: | | | |
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ASSIGNOR NAME:

Yuying SHU

ADDRESS:

No.457 Zhongshan Road, Dalian, Liaoning, P.R. China

Juryong Shu SIGNATURE Dec. of. so

Docket No.: USP4385C/SZ486-SYA

ASSIGNMENT

| WHEREAS, I (we), Xiaodong WANG |
|--|
| whose post office address(es) appear(s) below, hereinafter referred to as ASSIGNOR, have invented a |
| certain new and useful improvements in Tungsten Carbide Catalysts, their Preparation |
| and Application in Synthesis of Ethylene Glycol from Cellulose |
| (hereinafter referred to as the INVENTION) for which an application for United States Letters Patent was |
| X executed on even data herewith |
| executed on: |
| filed on: Serial No.: |
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ASSIGNOR NAME:

same in the United States;

Xiaodong WANG

ADDRESS:

No.457 Zhongshan Road, Dalian, Liaoning, P.R. China

SIGNATURE WORK

IAPOIRes'd PCT 18 MAY 2010

12/734763

Attorney's

Docket No.: USP4385C/SZ486-SYA

ASSIGNMENT

| whose post of | ffice address |), Jingguang CHEN (es) appear(s) below, hereinafter referred to as ASSIGNOR, have invented a overnents in Tungsten Carbide Catalysts, their Preparation |
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| and Ap | plicati | on in Synthesis of Ethylene Glycol from Cellulose |
| | | e INVENTION) for which an application for United States Letters Patent was |
| X | executed on | even data herewith |
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| WHE | EREAS, Da | lian Institute of Chemical Physics, Chinese Academy of Sciences |
| whose post off | ice address is | No.457 Zhongshan Road, Dalian, Liaoning, P.R. China |
| hereinafter refe | erred to as As | SSIGNEE, is desirous of acquiring the entire right, title and interest in and to the |

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ASSIGNOR NAME:

same in the United States:

Jingguang CHEN

ADDRESS:

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Fingguary Chen

RECORDED: 05/18/2010