

## PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT																				
NATURE OF CONVEYANCE:	ASSIGNMENT																				
<b>CONVEYING PARTY DATA</b>																					
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Xiou HE</td> <td>04/22/2012</td> </tr> <tr> <td>Changli LI</td> <td>04/22/2012</td> </tr> <tr> <td>Zhaobin ZHANG</td> <td>04/22/2012</td> </tr> <tr> <td>Jingkun LIU</td> <td>04/22/2012</td> </tr> <tr> <td>Mujun YUAN</td> <td>04/22/2012</td> </tr> <tr> <td>Cong ZHOU</td> <td>04/22/2012</td> </tr> <tr> <td>Yuping GUO</td> <td>04/22/2012</td> </tr> <tr> <td>Yonghua ZHAO</td> <td>04/22/2012</td> </tr> <tr> <td>Hainu SHEN</td> <td>04/22/2012</td> </tr> </tbody> </table>		Name	Execution Date	Xiou HE	04/22/2012	Changli LI	04/22/2012	Zhaobin ZHANG	04/22/2012	Jingkun LIU	04/22/2012	Mujun YUAN	04/22/2012	Cong ZHOU	04/22/2012	Yuping GUO	04/22/2012	Yonghua ZHAO	04/22/2012	Hainu SHEN	04/22/2012
Name	Execution Date																				
Xiou HE	04/22/2012																				
Changli LI	04/22/2012																				
Zhaobin ZHANG	04/22/2012																				
Jingkun LIU	04/22/2012																				
Mujun YUAN	04/22/2012																				
Cong ZHOU	04/22/2012																				
Yuping GUO	04/22/2012																				
Yonghua ZHAO	04/22/2012																				
Hainu SHEN	04/22/2012																				
<b>RECEIVING PARTY DATA</b>																					
<table border="1"> <tr> <td>Name:</td> <td>China Petroleum &amp; Chemical Corporation</td> </tr> <tr> <td>Street Address:</td> <td>No. 22 Chaoyangmen North Street</td> </tr> <tr> <td>Internal Address:</td> <td>Chaoyang District</td> </tr> <tr> <td>City:</td> <td>Beijing</td> </tr> <tr> <td>State/Country:</td> <td>CHINA</td> </tr> <tr> <td>Postal Code:</td> <td>100728</td> </tr> </table>		Name:	China Petroleum & Chemical Corporation	Street Address:	No. 22 Chaoyangmen North Street	Internal Address:	Chaoyang District	City:	Beijing	State/Country:	CHINA	Postal Code:	100728								
Name:	China Petroleum & Chemical Corporation																				
Street Address:	No. 22 Chaoyangmen North Street																				
Internal Address:	Chaoyang District																				
City:	Beijing																				
State/Country:	CHINA																				
Postal Code:	100728																				
<table border="1"> <tr> <td>Name:</td> <td>SINOPEC Engineering Incorporation</td> </tr> <tr> <td>Street Address:</td> <td>Bldg. 21 Anyuan, Anhuibeili</td> </tr> <tr> <td>Internal Address:</td> <td>Chaoyang District</td> </tr> <tr> <td>City:</td> <td>Beijing</td> </tr> <tr> <td>State/Country:</td> <td>CHINA</td> </tr> <tr> <td>Postal Code:</td> <td>100101</td> </tr> </table>		Name:	SINOPEC Engineering Incorporation	Street Address:	Bldg. 21 Anyuan, Anhuibeili	Internal Address:	Chaoyang District	City:	Beijing	State/Country:	CHINA	Postal Code:	100101								
Name:	SINOPEC Engineering Incorporation																				
Street Address:	Bldg. 21 Anyuan, Anhuibeili																				
Internal Address:	Chaoyang District																				
City:	Beijing																				
State/Country:	CHINA																				
Postal Code:	100101																				
<table border="1"> <tr> <td>Name:</td> <td>China Petroleum &amp; Chemical Corporation Beijing Research Institute of Chemical Industry</td> </tr> <tr> <td>Street Address:</td> <td>No. 14 Beisanhuan East Road</td> </tr> <tr> <td>Internal Address:</td> <td>Chaoyang District</td> </tr> <tr> <td>City:</td> <td>Beijing</td> </tr> </table>		Name:	China Petroleum & Chemical Corporation Beijing Research Institute of Chemical Industry	Street Address:	No. 14 Beisanhuan East Road	Internal Address:	Chaoyang District	City:	Beijing												
Name:	China Petroleum & Chemical Corporation Beijing Research Institute of Chemical Industry																				
Street Address:	No. 14 Beisanhuan East Road																				
Internal Address:	Chaoyang District																				
City:	Beijing																				

CH \$40.00 13504117

State/Country:	CHINA
Postal Code:	100013

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13504117

**CORRESPONDENCE DATA**

Fax Number: (415)393-9887  
 Phone: 415.954.0200  
 Email: tomika.thomas@squiresanders.com  
*Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.*  
 Correspondent Name: Squire Sanders (US) LLP  
 Address Line 1: 275 Battery Street, Suite 2600  
 Address Line 4: San Francisco, CALIFORNIA 94111

ATTORNEY DOCKET NUMBER:	106956.00017
-------------------------	--------------

NAME OF SUBMITTER:	Stephanie X. Wang, Ph.D.
--------------------	--------------------------

Total Attachments: 3  
 source=106956\_00017\_executed\_Assignment#page1.tif  
 source=106956\_00017\_executed\_Assignment#page2.tif  
 source=106956\_00017\_executed\_Assignment#page3.tif

YHf096098PUS

张江

Attorney Docket: 106956.00017

### ASSIGNMENT

- (1-11) Insert Name(s) of Inventor(s)
- |                   |                  |
|-------------------|------------------|
| (1) Xiou HE       | (7) Yuping GUO   |
| (2) Changli LI    | (8) Yonghua ZHAO |
| (3) Zhaobin ZHANG | (9) Hainü SHEN   |
| (4) Jingkun LIU   |                  |
| (5) Mujun YUAN    |                  |
| (6) Cong ZHOU     |                  |

For good and valuable consideration, receipt of which is hereby acknowledged, the undersigned agree(s) to assign, hereby do(es) assign, transfer and set over to:

- |   |  |
|---|--|
| (12) Insert Name and Address of co-Assignees  | (12) China Petroleum & Chemical Corporation<br>No. 22 Chaoyangmen North Street, Chaoyang District<br>Beijing 100728 P.R. China<br><br>SINOPEC Engineering Incorporation<br>Bldg. 21 Anyuan, Anhuibeili, Chaoyang District<br>Beijing 100101 P.R. China<br><br>China Petroleum & Chemical Corporation Beijing Research<br>Institute of Chemical Industry<br>No. 14 Beisanhuan East Road, Chaoyang District<br>Beijing 100013 P.R. China |
| (13) Insert Country of Incorporation of co-Assignees  | (13) P.R. China  |
| (14)  | (14) (hereinafter designated as the co-Assignee) the entire worldwide right, title, interest, and patent applications and patents for every country, including divisions, reissues, continuations and all other extensions, rights and priorities in the invention known as and related to   |
| (15) Insert Identification of Invention, such as Title, Case Number or Foreign Application Number | (15) <b>Ethylene Cracking Furnace with Multi-Pass Radiant Coil</b><br>(Case No. 106956.00017) (Serial No. 13/504,117) for which the undersigned has (have) executed an application for patent in the United States of America  |
| (16) Insert Date of Signing of Application  | (16)   |

- 1) The undersigned agree(s) to execute all papers necessary in connection with the application and any continuing or divisional applications thereof and also to execute separate assignments in connection with such applications as the co-Assignee may deem necessary or expedient.
- 2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation or division thereof and to cooperate with the co-Assignees in every way possible in obtaining evidence and going forward with such interference.
- 3) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.
- 4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the co-Assignees.
- 5) The undersigned hereby authorize(s) and request(s) the Commissioner of Patents and the duly constituted authorities of foreign countries to issue any and all Letters Patents resulting from said application or any division or divisions or continuing or reissue applications thereof to the said co-Assignees, its successors and assigns, as co-Assignees of the entire right, title and interest, and hereby covenants that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed and will not execute any agreement in conflict herewith.
- 6) *The undersigned hereby grant(s) practitioners associated with Customer Number*

**44955**

*the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.*

Date	<u>April 22, 2012</u>	Name of Inventor	<u>Xiyou HE</u> Xiyou HE
Date	<u>April, 22, 2012</u>	Name of Inventor	<u>Changli LI</u> Changli LI
Date	<u>April 22, 2012</u>	Name of Inventor	<u>Zhaobin ZHANG</u> Zhaobin ZHANG
Date	<u>April 22, 2012</u>	Name of Inventor	<u>Jingkun LIU</u> Jingkun LIU

Date April 22, 2012

Name of Inventor Mujun YUAN  
Mujun YUAN

Date April 22, 2012

Name of Inventor Cong ZHOU  
Cong ZHOU

Date April 22, 2012

Name of Inventor Yuping GUO  
Yuping GUO

Date April 22, 2012

Name of Inventor Yonghua ZHAO  
Yonghua ZHAO

Date April 22, 2012

Name of Inventor Hainü Shen  
Hainü SHEN