

Form PTO-1595 (Rev. 07/05)  
OMB No. 0651-0027 (exp. 6/30/2008)

U.S. DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office

## RECORDATION FORM COVER SHEET PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

### 1. Name of conveying party(ies)

Harold J. VINEGAR - January 3, 2007  
Eric Pierre de ROUFFIGNAC - January 26, 2007  
Lanny Gene SCHOELING - January 3, 2007

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

### 3. Nature of conveyance/Execution Date(s):

Execution Date(s) January 3 and 26, 2007

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Joint Research Agreement  
☐ Government Interest Assignment  
☐ Executive Order 9424, Confirmatory License  
☐ Other \_\_\_\_\_

### 2. Name and address of receiving party(ies)

Name: Shell Oil Company

Internal Address: Intellectual Property

Street Address: 910 Louisiana

City: Houston

State: Texas

Country: USA Zip: 77002

Additional name(s) & address(es) attached? ☐ Yes ☒ No

### 4. Application or patent number(s):

A. Patent Application No.(s)  
11/584,427

☐ This document is being filed together with a new application.  
B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

### 5. Name and address to whom correspondence concerning document should be mailed:

Name: Shell Oil Company

Internal Address: Intellectual Property

Street Address: 910 Louisiana

City: Houston

State: Texas Zip: 77002

Phone Number: (713) 241-3997

Fax Number: (713) 241-6617

Email Address: del.christensen@shell.com

### 6. Total number of applications and patents involved: 1

### 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00

- ☐ Authorized to be charged by credit card  
☒ Authorized to be charged to deposit account  
☐ Enclosed  
☐ None required (government interest not affecting title)

### 8. Payment Information

a. Credit Card Last 4 Numbers \_\_\_\_\_  
Expiration Date \_\_\_\_\_

b. Deposit Account Number 19-1800

Authorized User Name Ana Almaquer

### 9. Signature:

/Del S. Christensen/  
Signature

June 11, 2007  
Date

Del S. Christensen  
Name of Person Signing

Total number of pages including cover sheet, attachments, and documents: 5

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

CH \$40.00 191800 11584427

TH3147 (US)

ASSIGNMENT

WHEREAS, we, Harold J. Vinegar, Eric Pierre de Rouffignac and Lanny Gene Schoeling have made a certain improvement in **"SOLUTION MINING SYSTEMS AND METHODS FOR TREATING HYDROCARBON CONTAINING FORMATIONS"** for which application papers for United States Patent thereon, identified as U.S. Patent Application Serial No. 11/584,427 filed October 20, 2006, have been executed by us, and,

WHEREAS, SHELL OIL COMPANY, a Delaware Corporation, has equitable rights in and to this invention and desires to confirm such rights and to acquire all right, title and interest in and to said invention;

NOW THEREFORE, for valuable consideration received, we hereby sell, assign, and transfer to said SHELL OIL COMPANY, its successors and assigns, all right, title and interest in and to said invention in the United States and in all other countries throughout the world; including without limitation those in and to the above-named application and any continuation, substitute or division application thereof and the patent or patents which may be issued thereon in the United States and any reissue of any such patent, and those in and to any application or patent or utility model in any and all such other countries of the world, and further including the right to file further applications in all countries throughout the world in the name of SHELL OIL COMPANY or whomsoever that company may nominate, and to claim the priority of the above-named United States application under the International Convention of Paris of 1883.

With respect to any country where for the filing of such an application and/or the transfer of priority rights a separate deed of sale, assignment or transfer is required, we will undertake at the request of SHELL OIL COMPANY to execute such separate deed to SHELL OIL COMPANY or to whomsoever that company may nominate.

And we hereby agree that we will upon request execute any instrument which SHELL OIL COMPANY desires to carry this assignment in effect, and perfect the title transferred hereby, or to prosecute any of the above-mentioned United States applications or any foreign application on this invention.

And the Commissioner of Patents of the United States is hereby authorized to issue Letters Patent on said above-named application and on any continuation, substitute or division thereof to SHELL OIL COMPANY.

IN TESTIMONY WHEREOF, we have hereunto subscribed our names.

Assignment

U.S. Pat. Appl.: 11/584,427  
Page 2 of 2

Witnesses:

M. Kabat  
Camilla K. Godey

Harold J. Vinegar  
Harold J. Vinegar  
1/3/07  
Date

\_\_\_\_\_

Eric Pierre de Rouffignac

\_\_\_\_\_

Date

M. Kabat  
Camilla K. Godey

Lanny Gene Schoeling  
Lanny Gene Schoeling  
1/3/07  
Date

PATENT

REEL: 019417 FRAME: 0287

TH3147 (US)

ASSIGNMENT

WHEREAS, we, Harold J. Vinegar, Eric Pierre de Rouffignac and Lanny Gene Schoeling have made a certain improvement in **"SOLUTION MINING SYSTEMS AND METHODS FOR TREATING HYDROCARBON CONTAINING FORMATIONS"** for which application papers for United States Patent thereon, identified as U.S. Patent Application Serial No. 11/584,427 filed October 20, 2006, have been executed by us, and,

**WHEREAS**, SHELL OIL COMPANY, a Delaware Corporation, has equitable rights in and to this invention and desires to confirm such rights and to acquire all right, title and interest in and to said invention;

NOW THEREFORE, for valuable consideration received, we hereby sell, assign, and transfer to said SHELL OIL COMPANY, its successors and assigns, all right, title and interest in and to said invention in the United States and in all other countries throughout the world; including without limitation those in and to the above-named application and any continuation, substitute or division application thereof and the patent or patents which may be issued thereon in the United States and any reissue of any such patent, and those in and to any application or patent or utility model in any and all such other countries of the world, and further including the right to file further applications in all countries throughout the world in the name of SHELL OIL COMPANY or whomsoever that company may nominate, and to claim the priority of the above-named United States application under the International Convention of Paris of 1883.

With respect to any country where for the filing of such an application and/or the transfer of priority rights a separate deed of sale, assignment or transfer is required, we will undertake at the request of SHELL OIL COMPANY to execute such separate deed to SHELL OIL COMPANY or to whomsoever that company may nominate.

And we hereby agree that we will upon request execute any instrument which SHELL OIL COMPANY desires to carry this assignment in effect, and perfect the title transferred hereby, or to prosecute any of the above-mentioned United States applications or any foreign application on this invention.

And the Commissioner of Patents of the United States is hereby authorized to issue Letters Patent on said above-named application and on any continuation, substitute or division thereof to SHELL OIL COMPANY.

IN TESTIMONY WHEREOF, we have hereunto subscribed our names.

Assignment

U.S. Pat. Appl.: 11/584,427  
Page 2 of 2

Witnesses:

\_\_\_\_\_  
Harold J. Vinegar

\_\_\_\_\_  
Date

\_\_\_\_\_  
A.M. Mollinger  
\_\_\_\_\_  
A.A. Savitski

\_\_\_\_\_  
Eric Pierre de Rouffignac

\_\_\_\_\_  
January 26, 2007  
Date

\_\_\_\_\_  
Lanny Gene Schoeling

\_\_\_\_\_  
Date