10-12-2001 FORM PTO-1595 U.S. DEPARTMENT OF COMMERCE 1-31-92 Patent and Trademark Office 101872550 copy thereof. To the Honorable Commissioner of Patents and Tradema. 1. Name of conveying party(ies): 2. Name and address of receiving party(ies): Eric Pierre de Rouffignac; Harold J. Vinegar; Scott L. Wellington; John Michael Name: Shell Oil Company Karanikas; Ilya Emil Berchenko; George Leo Stegemeier; Etuan Zhang; Thomas David Fowler; Robert Charles Ryan Internal Address: _ Street Address: P. O. Box 2463 City Houston State Texas ZIP 77252-8463 Additional name(s) & address(es) attached? Yes No Additional name(s) of conveying party(ies) attached? Yes No 3. Nature of Conveyance: Assignment Execution Date: September 7, 2001 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the filing date of this application is: A. Patent Application No.(s) 09/841,493 filed April 24, 2001 B. Patent No.(s) IN SITU THERMAL PROCESSING OF A COAL FORMATION USING A MOVABLE HEATING ELEMENT Additional numbers attached? Yes No 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: 1 concerning document should be mailed: Eric B. Meyertons Internal Address: Conley, Rose & Tayon, P.C. Street Address: P.O. Box 398 City Austin State TX ZIP 78767-0398 Fee authorization is enclosed Authorized to be charged to deposit account 8. Deposit account number: 19-1800 (Attach a duplicate copy of this page if paying by deposit account) 10/11/2001 LMUELLER 00000104 191800 09841493 DO NOT USE THIS SPACE Ol FC:581 40.00 CH 9. 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. Eric B. Meyertons Signature Name of Person Signing Total number of pages comprising cover sheet: ___1 Reg. No. 34,876 OMB No. 0651-011 (exp.4/94)

> PATENT REEL: 012230 FRAME: 0567

ASSIGNMENT

WHEREAS, we, Eric Pierre de Rouffignac, Harold J. Vinegar, Scott Lee Wellington, John Michael Karanikas, Ilya Emil Berchenko, George Leo Stegemeier, Etuan Zhang, Thomas David Fowler, and Robert Charles Ryan, have made certain improvement in "IN SITU THERMAL PROCESSING OF A COAL FORMATION USING A MOVABLE HEATING ELEMENT" for which application papers for United States Patent thereon, identified as U.S. Patent Application Serial No. 09/841,493 filed April 24, 2001, 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.

PATENT REEL: 012230 FRAME: 0568

Page 2 of 3

Witnesses:

and & Carl Jamere Promouri Eric Pierre de Rouffignach

9-86-0/ Date

Bulan Feh

Sandra D. Mullo

Harold J. Vinegar

9/6/01 Date

Jame Four Musely

Melila Do L Dodane

Scott Lee Wellingten Scott Lee Wellington

 $\frac{9-6-0}{\text{Date}}$

James Lewis Mendell

John Michael Karanikas

Melin Do & Broder

September 6th, 2001

Burban Ali

Sandra D. Mullo

Ilya Emil Bercherko

09/06/01 Date

U.S. Pat. Appl.: 09/841,493

Page 3 of 3

Witnesses:

Ashly Bordh

George Loo Stegemeier

Anda J. hasells

Mella D. S. D.

Etuan Zhang

Etuan Zhang

Brown Feli Memas Derid Fowler
Thomas David Fowler

Andra D. Mullo 9/6/2001
Date

Berlan Fili Robert Charles Ryan
Robert Charles Ryan

Agndra S. Mulla 9/6/01

Date