3-25-2003 U.S. DEPARTMENT OF COMMERCE FORM PTO-1595 MAR 1 7 2003 1-31-92 Patent and Trademark Office To the Honorable Commissioner of Patents and Trademarks. I 3-17-03 1. Name of conveying party(ies): 2. Name and address of teceiving party(ies): Harold J. Vinegar, Scott Lee Wellington, Eric Pierre de Rouffignac, Ilya Shell Oil Company Emil Berchenko, Etuan Zhang, Thomas David Fowler, and Robert Internal Address: ___ Charles Ryan Street Address: P. O. Box 2463 Additional name(s) of conveying party(ies) attached? Yes No City Houston State Texas ZIP 77252-8463 3. Nature of Conveyance: Assignment Merger Security Agreement ☐ Change of Name Other Execution Date: February 3, 2003 4. Application number: If this document is being filed together with a new application, the filing date of this application is: A. Patent Application No.(s) 10/279,230 filed October 24, 2002 and entitled: IN SITU THERMAL PROCESSING OF AN OIL RESERVOIR FORMATION Additional numbers attached? Yes 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 7. Total fee (37 CFR 3.41): 40.00 Meyertons, Hood, Kivlin, Kowert & Goetzel, P.C. Authorized to be charged to deposit account P.O. Box 398 Austin, TX 78767-0398 Fee previously paid 8. Deposit account number: 19-1800/TH2172y (Attach a duplicate copy of this page if paying by deposit account) DO NOT USE THIS SPACE 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. David W. Quimby Signature Name of Person Signing Signature Date

Total number of sheets (including cover sheet, attachments, and documents): Reg. No. 39,338

OMB No. 0651-011 (exp.4/94)

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PATENT REEL: 013866 FRAME: 0881

ASSIGNMENT

WHEREAS, we, Harold J. Vinegar, Scott Lee Wellington, Eric Pierre de Rouffignac, Ilya Emil Berchenko, Etuan Zhang, Thomas David Fowler, and Robert Charles Ryan, have made a certain improvement in "IN SITU THERMAL PROCESSING OF AN OIL RESERVOIR FORMATION" for which application papers for United States Patent thereon, identified as U.S. Patent Application Serial No. 10/279,230 filed October 24, 2002, 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: 013866 FRAME: 0882

Witnesses: Orice Pandall Llong Rigge Margaret Margar	Harold J. Vinegar Harold J. Vinegar Jam. 31, 2003 Date Scott Lee Wellington Feb. 3, 2003 Date
	Eric Pierre de Rouffignac
	Date
Even Moca Ce Robert John	Ilya Emil Berchenko Jan 30 2003 Date
Laura Megents Go Ley	Etuan Zhang 2/3/03 Date
Jan Pan Men	Thomas David Fowler 1/20/2003
/ 4	Date

Witnesses:	
	Harold J. Vinegar
	Date
	Scott Lee Wellington
	Date
S. Huisman	Eric Pierre de Rouffignac 1/29/02 Date
	Ilya Emil Berchenko
	Date
	Etuan Zhang
	Date
	Thomas David Fowler
	Date

Assignment

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Witnesses:

Robert Charles Ryan

Date

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