FORM PTO-1595

07-09-2002



U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

(Rev. 6-93)			Patent and Trademark Office	
<b>李新慧</b> :	103	2149819	TH1412 (US)	
To the Honorable Commissioner of	Patents and Trademarks. Plea	se record the attached original docu	iments or copy thereof.	
1. Name of conveying party(ies): John Frederick KNIFTON - June 1 Talmadge Gail JAMES - June 1 Kevin Dale ALLEN - June 20, 2 Paul Richard WEIDER - June 1 Joseph Broun POWELL - June Lynn Henry SLAUGH - June 17 Timothy WILLIAMS - June 11,	10, 2002 1 2,002 002 0, 2002 11, 2002 7, 2002	2. Name and address of Shell Oil Co P.O. Box 24 900 Louisian Houston, Te	ompany 163	
Additional name(s) of conveying par	rty(ies) attached? Yes	No No		
<ul> <li>3. Nature of Conveyance:</li> <li>Assignment</li> <li>Security Agreement</li> <li>Other</li> <li>Execution Date: <u>June 10, 11, 17,</u></li> <li>4. Application number(s) or patent respectively.</li> </ul>		Additional name(s) & ac	ldress(es) attached? 🗌 Yes 🔀 No	
		the avanution data of the application	n io	
If this document is being filed together with a new application, the execu  A. Patent Application No(s).  10/146,590		B. Patent No(s).	11 15.	
F N		pers attached? Yes No	ications and patents involved:	
5. Name and address of party to whom correspondence concerning document should be mailed:  Name: Donald F. Haas Shell Oil Company Intellectual Property P.O. Box 2463 910 Louisiana Houston, Texas 77252-2463			1104.136 ESTION	
		☐ Enclosed	.41):	
		19	8. Deposit account number:  19-1800  (Attach duplicate copy of this page if paying by deposit account)	
	DO NO	T USE THIS SPACE	and hale a haling of askon associal	
	20.10			
<ol> <li>Statement and signature.</li> <li>To the best of my knowledge and original document.</li> </ol>	belief, the foregoing informat	ion is true and correct and any atta	ched copy is a true copy of the $-26-02$	
Donald F. Haas  Name of Person Signin  Total number of pages including co	g Sign over sheet, attachments, and d	ature	Date	

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PATENT REEL: 013053 FRAME: 0103

## ASSIGNMENT

WHEREAS, we, John Frederick Knifton, Talmadge Gail James, Kevin Dale Allen, Paul Richard Weider, Joseph Broun Powell, Lynn Henry Slaugh, and Timothy Williams, have made a certain improvement in ONE-STEP PRODUCTION OF 1,3-PROPANEDIOL FROM ETHYLENE OXIDE AND SYNGAS WITH A CATALYST WITH A N-HETEROCYCLIC LIGAND for which application papers for United States Patent thereon, identified as TH1412 (US), 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.

Witnesses

**PATENT** REEL: 013053 FRAME: 0104

K. Dol. A.	4.
KEVIN DALE ALLEN	Wendy M. Duke (Witness)
6/20/02	Charles Crimit
Date	(Witness)
Part Ruchel Wil	(Witness)
PAUL RICHARD WEIDER	(Witness)
6/10/02	Den & Bear
Date	(Witness)
In Born Varell	Jan John Jan
JOSEPH BROUN POWELL	(Witness)
6/11/02	William Wysomerster
Date	(Witness)
EYNN HENRY SLAUGH	Pal R. Loto
LYNN HENRY SLAUGH	(Witness)
6/17/02	Vanil J. fanitor
Date	(Witness)
TIMOTHYWILLIAMS	(Witness)
Date L/11/02	(Witness)

**RECORDED: 07/03/2002**