	12-09-2003		<u> </u>			
FORM PTO-1595 Rev. 08/28/92	102617803		er sheet JLY	U.S. DEPARTI Patent	t and Tradem	ark Office
Assistant	Commissioner for Patents and Trademarks: Plea	ase record the	attached original docu	uments or copy there	of.	
1. Name of conveying pa Robert J. Gulotty, Mark E. Jones Daniel A. Hickman	Jr.	THE D 2030 D Midlan	OW CHEM low Center d, Michigar		IPANY	
Additional name(s) of	conveying party(ies) is attached.	Addit	onal name(s) &	address(es) are	attached.	
 3. Nature of convey x Assignment Security Agr Other 	eement		☐ Merg ☐ Chan	er ige of Name		
Execution Date(December 15, 19, 200 Effective as of Novem 		•	1		
10/130,107) or Patent Number(s): 7 May 14, 2002	ication the		f the opplication		100) P.C 2 MI 9: 18
It this document	is being filed together with a new appl Additional Application Number(s				15.	
5. Name and address of concerning document	party to whom correspondence should be mailed:	6. involve		of applications a	and patents	5
Intellectual Pro P. O. Box 196	· •		.ccount	3.41) \$40. It the above fee f unt <u>04-1512</u> .	rom our De	
HEYRNE U GOUGOOLS TOATSE		i		debit or credit ou		
	DO NOT USE	THIS SPACE	<u></u>			
9. Statement and signat To the best of my kno of the original docum	owledge and belief, the foregoing infor	rmation is th	ue and correct ai	nd any attached	copy is a ti	rue cop

Dated: December 3, 2003

61,215 US

das A Ronde

Crystal S. Rohde Office Professional (989) 636-1954

Total number of pages including attachments: 5

PATENT REEL: 014756 FRAME: 0218

This Assignment 110 is in the ENGLISH language and has the same meaning in other languages with the same 110 number and R/Date

FORM 110 (R 5/97)

INDIVIDUAL ASSIGNMENT AND INVENTOR'S DECLARATION (WITH PRIORITY RIGHTS)

I/we verily believe I am/we are the original, first and sole/joint inventor(s) of the subject matter which is embraced by and for which a patent is sought on the invention entitled:

OXYHALOGENATION PROCESS USING CATALYST HAVING POROUS RARE EARTH HALIDE SUPPORT which invention was made and invented by me/us out of and in the course of my/our employment with my/our respective employers as stated below my/our name(s). I/we acknowledge that I/we hold the invention and all patent and other rights and powers obtainable or exercisable in respect thereof in trust for our respective employers. As trustee(s), and for good and valuable consideration and/or the remuneration received for my/our work, I/we sell, assign and transfer unto:

> THE DOW CHEMICAL COMPANY 2030 Dow Center Midland, Michigan 48674 **United States of America**

a corporation organized and existing under the laws of the State of DELAWARE, U.S.A.

(hereinafter referred to as the "Assignee");

my/our entire right, title and interest throughout the world, in and to the invention and all rights and powers to make applications, including provisional applications when permitted by law, for Letters Patent in its own name, or in the name of its designee (or nominee(s)); and all rights and powers to file any corresponding or equivalent applications in any and all countries, including all rights to claim priority under all United States domestic laws, International Convention(s) and Treaties in the name of Assignee, and do hereby authorize Assignee or its designee to insert here the

Application No. PCT/US00/31490 Filing Date November 16, 2000

in country International

of the application, on which the claim for priority will be based; and in and to any Letters Patent that may be issued for the invention in any and all countries. I/we do hereby agree to assist Assignee in the prosecution of the application(s) and in any interference, conflict, opposition or litigation which may arise involving the invention or the patent or patents thereon, and to execute for any and all countries any document relating to applications derived from, corresponding to or equivalent to the above identified application as Assignee may request; and I/we do hereby authorize Assignee or its designee (or nominee(s)) to insert here any corresponding equivalent

Application No. 10/130,107 _ Filing Date ___ May 14, 2002 in country _

to the above Priority application of any country where that country's patent property must be identified and entered hereinabove for recordal of this Assignment. I/we authorize Assignee or its designee to translate this Assignment into all languages necessary; and we request that any such Letters Patent be issued to Assignee; and consent to the recordal of this Assignment, or a Notarial True Copy thereof, being under covenant not only that I/we have full power to make the same, but also that such assigned rights are not encumbered by any grant, license, or other right heretofore given.

Subscribed and Declared by me/us:

At: Midland N	lichigan 48674 LISA	an 48674, USA At: Midland, Michigan 48674, USA		
At: Midland, Michigan 48674, USA this <u>3</u> day of <u>9</u> (2001)			of DECEMBER , 20 00	
Effective as of N	lovember 16, 2000	Effective as of November 16, 2000		
Signature:/	obert / Sulot J.	Signature:	Malezones	
Full Name:	Robert J. Gulotty, Jr.	Full Name:	Mark E. Jones	
Residence:	4212 Bluebird Drive	Residence:	3856 Ken's Lane	
	Midland, Michigan 48640		Midland, Michigan 48642	
Country:	United States of America	Country:	United States of America	
Citizenship:	United States of America	Citizenship:	United States of America	
P. O. Address:	Same as Residence	P. O. Address:	Same as Residence	
Employed By:	The Dow Chemical Company	Employed By:	The Dow Chemical Company	
Of Country:	United States of America	Of Country:	United States of America	
At: Midland, N	Aichigan 48674, USA	At:		
this <u>19</u> day	of December , 2000	this day	, 20, 20	

this 19 day	of December , 2000	this day of	, 20
Effective as of N	lovember 16, 2000		
Signature:	aniel a Hickoren	Signature:	·
Full Name:	Daniel A. Hickman	Full Name:	
Residence:	2010 Westbury Drive	Residence:	
	Midland, Michigan 48642		
Country:	United States of America	Country:	
Citizenship:	United States of America	Citizenship:	
P. O. Address:	Same as Residence	P. O. Address:	
Employed By:	The Dow Chemical Company	Employed By:	
Of Country:	United States of America	Of Country:	

() Additional names and signatures are attached.

Docket Ref. 61215

FORM 2	22
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NOTARIAL CERTIFICATE (INDIVIDUAL)

UNITED STATES OF AMERICA)STATE OF MICHIGAN)SSCounty/Parish of Midland)	
On this <u>3(A</u> day of <u>AMAM</u> before me, <u>Robert I</u>	, 20 <u>0/</u> , personally appeared

known or identified to me to be the individual described in and who executed the foregoing document and acknowledged the same as a free act and deed for uses and purposes therein expressed.

SEAL

SEAL

Natary Public

JENNIFER S. HAVERCAMP NOTARY PUBLIC, BAY COUNTY, MICHIGAN ACTING IN MIDLAND COUNTY, MICHIGAN MY COMMISSION EXPIRES MAY 12, 2002

NOTARIAL CERTIFICATE (INDIVIDUAL)

UNITED STATES OF AMERICA)
STATE OF MICHIGAN) SS
County/Parish of Midland)
ich D	Ann land
On this 154 day of 100	remon
before me,	

, 20<u>00</u>, personally appeared

Docket Ref. 61215

Mark E. Jones

known or identified to me to be the individual described in and who executed the foregoing document and acknowledged the same as a free act and deed for uses and purposes therein expressed.

lotary Publi

JENNIFER S. HAVERCAMP NOTARY PUBLIC, BAY COUNTY, MICHIGAN ACTING IN MIDLAND COUNTY, MICHIGAN MY COMMISSION EXPIRES MAY 12, 2002

NOTARIAL CERTIFICATE (INDIVIDUAL)

UNITED STATES OF AMERICA)			
STATE OF MICHIGAN)	SS		
County/Parish of Midland)			
On this day of)ecer	nber	, 20 <u>00</u> , per	sonally appeared

Daniel A. Hickman

known or identified to me to be the individual described in and who executed the foregoing document and acknowledged the same as a free act and deed for uses and purposes therein expressed.

SEAL

Notary Public

JENNIFER S. HAVERCAMP NOTARY PUBLIC, BAY COUNTY, MICHIGAN ACTING IN MIDLAND COUNTY, MICHIGAN MY COMMISSION EXTIMATES MAY 12, 2002

PATENT REEL: 014756 FRAME: 0220 This Assignce Acceptance 660 is in the ENGLISH language and has the same meaning in other languages with the same 660 number. FORM 660

ASSIGNEE ACCEPTANCE

WE, the ASSIGNEE:

THE DOW CHEMICAL COMPANY 2030 Dow Center Midland, Michigan 48674 UNITED STATES OF AMERICA

hereby accept the ASSIGNMENT attached hereto which is dated:

January 3, 2001; December 15, 2000; December 19, 2000

From, the ASSIGNOR: Robert J. Gulotty, Jr., 4212 Bluebird Drive, Midland, Michigan 48640, United States of America; Mark E. Jones, 3856 Ken's Lane, Midland, Michigan 48642, United States of America; Daniel A. Hickman, 2010 Westbury Drive, Midland, Michigan 48642, United States of America

of the invention entitled:

OXYHALOGENATION PROCESS USING CATALYST HAVING POROUS RARE EARTH HALIDE SUPPORT

without any restrictions and with all rights and obligations deriving therefrom and declare that this confirmation of acceptance shall be deemed a part of the said ASSIGNMENT.

Signed at	Midland, Michigan 48674, USA
this <u> </u>	day of (Cctoker), 2003
	THE DOW CHEMICAL COMPANY
COR	
	GRAHAM E. TAYEOR

Authorized Representative

NOTARIAL CERTIFICATE (Corporation)

UNITED STATES OF AM	ERICA)
STATE OF MICHIGAN) SS
County/Parish of Midland)
	(Cctobeld), 2003, personally appeared
before me, GRAHAM E. TA	LOR, Authorized Representative,
known or identified to me to be and acknowledged the same as a	he individual described in and who executed the foregoing document free act and deed for uses and purposes therein expressed by incorporated under the laws of the State of Delaware, United
States of America.	
I further certify that said author	ty, dated February 13, 2003, is based on
an authorization Policy of the	aid Corporation,
foregoing document on behalf of	the said individual Attorney-in-fact with full power to sign the f the said corporation and that the purposes for which said document of the objects or activities of said corporation.
SEAL	<u>Notary Public</u>
JEAL	dinn Heritier
	Notary Public, Bay County, Michigan
	A. C M. Band County

Notary Public, Bay County, Michigan Acting in Midland County My Commission Expires December 03, 2006

PATENT REEL: 014756 FRAME: 0221

TRUE COPY

TO ALL TO WHOM THESE PRESENTS SHALL COME,

I Do Hereby Certify that the annexed document(s) are TRUE COPIES of the original document(s) which I have compared.

at <u>Midland, Michiga</u>	n 48674, USA				
this <u>03rd</u> day of	December	20 <u>03</u>			
	Office F	<u>a</u> <u>A</u> <u>Re</u> N S. Rohde Professional EMICAL COMP	any		
NOTARIAL CERTIFICATE					
UNITED STATES OF AMERICA STATE OF MICHIGAN County/Parish of Midland	A)) SS)				
On this <u>03rd</u> day of before me,	December	_20 <u>03</u> , per	sonally appeared		
	Crystal S. Rohde	>			

known or identified to me to be the individual who executed the foregoing document and acknowledged the same as a free act and deed for uses and purposes therein expressed.

Notary Public

Amber K. Mobley Notary Public, Midland County, Michigan My Commission Expires July 11, 2007

PATENT REEL: 014756 FRAME: 0222

RECORDED: 12/05/2003