501778264 01/06/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Max M Tirtowidjojo	05/10/2006
Barry B Fish	05/10/2006
Dennis W. Jewell	05/17/2006
Mark D. Bearden	05/10/2006
John G. Pendergast Jr.	05/17/2006
Jon H. Siddall	06/05/2006
Brien A. Stears	05/16/2006
Haivan D. Tran	06/02/2006
Richard M. Wehmeyer	05/10/2006

RECEIVING PARTY DATA

Name:	Dow Global Technologies LLC
Street Address:	2040 Dow Center
City:	Midland
State/Country:	MICHIGAN
Postal Code:	48674

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12296961

CORRESPONDENCE DATA

 Fax Number:
 (979)238-0878

 Phone:
 979-238-3360

 Email:
 dpatton@dow.com

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

via US Mail.

Correspondent Name: Darlene Patton

Address Line 1: 2301 N. Brazosport Blvd
Address Line 4: Freeport, TEXAS 77541

PATENT

REEL: 027493 FRAME: 0101

CH \$40.00 12296

501778264

ATTORNEY DOCKET NUMBER:	64832A US-PCT
NAME OF SUBMITTER:	Darlene Patton
Total Attachments: 10 source=64832A_Inventors_to_DGTI#page1 source=64832A_Inventors_to_DGTI#page2 source=64832A_Inventors_to_DGTI#page3 source=64832A_Inventors_to_DGTI#page4 source=64832A_Inventors_to_DGTI#page5 source=64832A_Inventors_to_DGTI#page7 source=64832A_Inventors_to_DGTI#page7 source=64832A_Inventors_to_DGTI#page8 source=64832A_Inventors_to_DGTI#page8 source=64832A_Inventors_to_DGTI#page9 source=64832A_Inventors_to_DGTI#page1	.tif .tif .tif .tif .tif .tif .tif

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

FORM 110 (R 5/97)

Docket Ref. 64832

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:

MIXED ALCOHOL SYNTHESIS WITH ENHANCED CARBON VALUE USE

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, by virtue of my/our employee agreement(s) and contractual agreement(s) between our employer(s) and Dow Global Technologies Inc., hold the invention and all patent and other rights and powers obtainable or exercisable in respect thereof in trust for Dow Global Technologies Inc. As trustee(s), and for good and valuable consideration and/or the remuneration received for my/our work from my/our employer, I/we sell, assign and transfer unto:

> DOW GLOBAL TECHNOLOGIES INC. Washington Street 1790 Building 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 desi

			de own marine, of in the marine of its designed for
nominee(s)); and a	all rights and powers to file any	corresponding or equivalent a	pplications in any and all countries, including all
rights to claim pri	ority under all United States dor	nestic laws, International Con	vention(s) and Treaties in the name of Assignee, and
	ze Assignee or its designee to ins		()
Application No	60/791,763	Filing Date	April 13, 2006
	nited States of America		
of the application,	on which the claim for priority	will be based; and in and to an	y Letters Patent that may be issued for the
invention in any ar	nd all countries. I/we do hereby	agree to assist Assignee in the	prosecution of the application(s) and in any
interference, confl	ict, opposition or litigation which	ch may arise involving the inve	ention or the patent or patents thereon, and to
execute for any an-	d all countries any document rel	ating to applications derived t	rom, corresponding to or equivalent to the above
identified applicat	ion as Assignee may request; an	d I/we do hereby authorize As	signee or its designee (or nominee(s)) to insert here
any corresponding		-	
Application No.		Filing Date	
in country			
to the above Prior	ity application of any country w	here that country's patent pr	operty must be identified and entered hereinabove
for recordal of this	s Assignment. I/we authorize As	ssignee or its designee to trans	late this Assignment into all languages necessary;
and we request tha	t any such Letters Patent be issu	ed to Assignee; and consent to	the recordal of this Assignment, or a Notarial True
Copy thereof, bein	g under covenant not only that I	we have full power to make t	he same, but also that such assigned rights are not
	y grant, license, or other right he		
and Declared by me	e/us:	-	

Subscribed

At: Freeport, Texas 77541, USA

this 10 day	
Effective as of	April 13, 2006
	Mary to 1 10 5
Signature:	Myx Vincomay re
Full Name:	Max M. Tirtowidjojo /\U
Residence:	110 Rosewood
	Lake Jackson, Texas 77566 💙
Country:	United States of America
Citizenship:	United States of America
P. O. Address:	Same as Residence
Employed By:	The Dow Chemical Company
Of Country:	United States of America
At: Freeport, 7	Texas 77541, USA
this 17 ^{+L} day	of May ,2006
	of May , 20 06 April 13, 2006
this 17 ^{+L} day	of May ,2006
this 17 ¹¹ day Effective as of A	of May , 20 06 April 13, 2006
this day Effective as of A Signature:	April 13, 2006 Terrelo
this 17 ⁺¹ day Effective as of A Signature: Full Name:	April 13, 2006 Dennis W. Jewell
this 17 ⁺¹ day Effective as of A Signature: Full Name:	April 13, 2006 Dennis W. Jewell 209 Coleman Drive
this 17th day Effective as of A Signature: Full Name: Residence:	April 13, 2006 Dennis W. Jewell 209 Coleman Drive Angleton, Texas 77515
this 17th day Effective as of A Signature: Full Name: Residence: Country:	Dennis W. Jewell 209 Coleman Drive Angleton, Texas 77515 United States of America
this 17th day Effective as of A Signature: Full Name: Residence: Country: Citizenship:	Dennis W. Jewell 209 Coleman Drive Angleton, Texas 77515 United States of America United States of America
this 17th day Effective as of A Signature: Full Name: Residence: Country: Citizenship: P. O. Address:	April 13, 2006 Dennis W. Jewell 209 Coleman Drive Angleton, Texas 77515 United States of America United States of America Same as Residence

At: Freeport, Texas 77541, USA		
this 10 day o		
Effective as of	April 13, 200	
	Ô 2 4	
Signature:	Barry B Fish	
Full Name:	Barry B. Fish	
Residence:	71 Rosewood Street	
~	Lake Jackson, Texas 77566	
Country:	United States of America	
Citize nsh ip:	United States of America	
P. O. Address:	Same as Residence	
Employed By:	The Dow Chemical Company	
Of Country:	United States of America	
At: Freeport, Texas 77541, USA		
this 10 day	of May ,2006	
	of May ,2006	
this <u>//</u> day e Effective as of A	of May ,2006	
this <u>//</u> day e Effective as of A	of May , 2006 April 13, 2006	
this / O day Effective as of A Signature:	April 13, 2006 Mark D. Beadle	
this / day Effective as of A Signature: Full Name:	April 13, 2006 Mark D. Bearden	
this / day Effective as of A Signature: Full Name:	April 13, 2006 Mark D. Bearden 118 Clover Street	
this / O day Effective as of A Signature: O Full Name: Residence:	April 13, 2006 April 13, 2006 Mark D. Bearden 118 Clover Street Lake Jackson, Texas 77566	
this / O day Effective as of / Signature: / Full Name: Residence:	April 13, 2006 April 13, 2006 Mark D. Bearden 118 Clover Street Lake Jackson, Texas 77566 United States of America	
this / O day Effective as of / Signature: O Full Name: Residence: Country: Citizenship:	April 13, 2006 April 13, 2006 Mark D. Bearden 118 Clover Street Lake Jackson, Texas 77566 United States of America United States of America	

This Assignment 113 is in the ENGLISH language and has the same meaning in other languages with the same 113 number and R/Date

FORM 113

Docket Ref. 64832

Page two of two

Additional names, addresses and signatures to be attached to Form No. 110 Entitled: INDIVIDUAL ASSIGNMENT AND INVENTORS DECLARATION

At: Freeport, Texas 77541, USA this 1.7 day of 20.0 teleffective as of April 13, 2006 Signature: John G. Pendergast, Jr. Residence: 60 Parsley Court Lake Jackson, Texas 77566 Country: United States of America Citizenship: United States of America P. O. Address: Same as Residence Employed By: The Dow Chemical Company Of Country: United States of America	At: Midland, Michigan 48674, USA this 570 day of 1000 2000 Effective as of April 13, 2006 Signature: 700 H. Siddall Residence: 3308 Hubbard Road Midland, Michigan 48640 Country: United States of America Citizenship: United States of America P. O. Address: Employed By: The Dow Chemical Company Of Country: United States of America
At: Freeport, Texas 77541, USA this	At: Exerport. Texas 77541, USA this 2 Aday of Surve 20 CV Effective as of April 13, 2006 Signature: Full Name: Haivan D. Tran Residence: 3103 East Cedar Hollow Drive Pearland, Texas 77584 Country: United States of America Citizenship: United States of America P. O. Address: Same as Residence Employed By: The Dow Chemical Company Of Country: United States of America
At: Freeport, Texas 77541, USA this 10 day of 10 day of 13, 2000 Signature: Man Welmyer Residence: 205 Zinnia Street Lake Jackson, Texas 77566 Country: United States of America Citizenship: United States of America P. O. Address: Employed By: Of Country: United States of America United States of America Same as Residence The Dow Chemical Company United States of America	At:
At:	At:

FORM 222

Docket Ref. 64832

	NOTARIAL CERTIFICATE (INDIVIDUAL)
	UNITED STATES OF AMERICA) STATE OF TEXAS) SS County/Parish of Brazoria)
	On this 10th day of
	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.
THUMBER OF THE PARTY OF THE PAR	Notary Public Notary Public
	NOTARIAL CERTIFICATE (INDIVIDUAL) UNITED STATES OF AMERICA)
	UNITED STATES OF AMERICA) STATE OF TEXAS) SS County/Parish of Brazoria)
	On this _b th day of, 20 00, personally appeared
	before me, Barry B. Fish
]	known or identified to me to be the individual described in and who executed the
1	foregoing document and acknowledged the same as a free act and deed for uses and
	purpasses the rein expressed. AKIA L. MCJ
Hilliam	Notary Public
	STACK TEXAS I
	NOTARIAL CERTIFICATE (INDIVIDUAL)
	UNITED STATES OF AMERICA) STATE OF TEXAS) SS
	County/Parish of Brazoria)
(On this 17th day of 1 1 ay , 20 0Ce, personally appeared
Ŀ	pefore me, Dennis W. Jewell
k	mown or identified to me to be the individual described in and who executed the
f	oregoing document and acknowledged the same as affree act and deed for uses and
g iii.	maposos, therein expressed.
Ņ.,	
	Notary Public
	. TN =

This Assignment 222 is in the ENGLISH language and has the same meaning in other languages with the same 222 number and RiDate

FORM 222

Docket Ref. 64832

REEL: 027493 FRAME: 0106

NOTARIAL CERTIFICATE (INDIVIDUAL)

	UNITED STATES OF AMERICA) STATE OF TEXAS) SS
	County/Parish of Brazoria On this
	before me, Mark D. Bearden
William .	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. Notary Public NOTARIAL CERTIFICATE (INDIVIDUAL)
	UNITED STATES OF AMERICA) STATE OF TEXAS) SS
	County/Parish of Brazoria
	On this 1 1th day of, 20 6th, personally appeared before me,
	John G. Fendergast, Jr. 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.
INSTITUTION.	Notary Public Notary Public Notary Public
HIMI	STOR TEXTS NOTARIAL CERTIFICATE (INDIVIDUAL)
	UNITED STATES OF AMERICA) STATE OF MICHIGAN) SS County/Parish of Midland)
	On this 5th day of 4th , 2006, personally appeared before me, Jon H. Siddall
	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 Stary Public Stary Public
	Jennifer S. Havercome Notary fuelc, bay county, michigan Acting in midland county, michigan my commission for Act with 12/2012

FORM 222

Docket Ref. 64832

NOTARIAL CERTIF	ICATE (INDIVIDUAL)
UNITED STATES OF AMERICA) STATE OF TEXAS) SS County/Parish of Brazoria)	
before me,	, 20 00, personally appeared
known or identified to me to be the individual foregoing document and acknowledged the spurposes therein expressed.	A. Stears all described in and who executed the same as a free act and deed for uses and
SOLVE OF LET	Motary Public Notary Public
NOTARIAL CERTIFICATION	CATE (INDIVIDUAL)
UNITED STATES OF AMERICA) STATE OF TEXAS) SS County/Parish of Harris)	
On this 2rd day of June before me,	, 20 <u>Cr</u> , personally appeared
known or identified to me to be the individual foregoing document and acknowledged the sapurposes therein expressed.	n D. Tran I described in and who executed the The arm as a free act and deed for uses and
My Commission Expires April 29, 2009	Notary Philipio
NOTABLE OF STREET	TAME (HUMITANITA)
UNITED STATES OF AMERICA) STATE OF TEXAS) SS County/Parish of Brazoria)	MIE (INDIVIDUAL)
On this 10 th day of May before me,	, 20_ θ , personally appeared
Richard M known or identified to me to be the individual	. Wehmeyer described in and who executed the
foregoing document and acknowledged the sa	me as a free act and deed for uses and
purposes therein expressed.	In Chi X Inn QV.
SEAN OF THE	Notary Public

This Assignee 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:

DOW GLOBAL TECHNOLOGIES INC.

2040 Dow Center

Midland, Michigan 48674

UNITED STATES OF AMERICA

hereby accept the ASSIGNMENT attached hereto which is dated: May 10, 2006; May 16, 2006; May 17, 2006; June 2, 2006; June 5, 2006

From, the ASSIGNOR: Max M. Tirtowidjojo, 110 Rosewood, Lake Jackson, Texas 77566, UNITED STATES OF AMERICA, Citizen of United States of America; Barry B. Fish, 71 Rosewood Street, Lake Jackson, Texas 77566, UNITED STATES OF AMERICA, Citizen of United States of America; Dennis W. Jewell, 209 Coleman Drive, Angleton, Texas 77515, UNITED STATES OF AMERICA, Citizen of United States of America; Mark D. Bearden, 118 Clover Street, Lake Jackson, Texas 77566, UNITED STATES OF AMERICA, Citizen of United States of America; John G. Pendergast, Jr., 60 Parsley Court, Lake Jackson, Texas 77566, UNITED STATES OF AMERICA, Citizen of United States of America; Jon H. Siddall, 3308 Hubbard Road, Midland, Michigan 48640, UNITED STATES OF AMERICA, Citizen of United States of America; Brien A. Stears, 5227 Pilgrim Oaks Lane, League City, Texas 77573, UNITED STATES OF AMERICA, Citizen of United States of America; Haivan D. Tran, 3103 East Cedar Hollow Drive, Pearland, Texas 77584, UNITED STATES OF AMERICA, Citizen of United States of America; and Richard M. Wehmeyer, 205 Zinnia Street, Lake Jackson, Texas 77566, UNITED STATES OF AMERICA, Citizen of United States of America of the invention entitled:

MIXED ALCOHOL SYNTHESIS WITH ENHANCED CARBON VALUE USE

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, Michig	gan 48674, USA	
this 5H	day of Dece	ember	, 20 08

CORP. SEAL.

DOW GLOBAL TECHNOLOGIES INC.

JOHN B. TREANGEN Authorized Representative

NOTARIAL CERTIFICATE (Corporation)

UNITED STATES OF AMERICA)
STATE OF MICHIGAN) SS
County/Parish of Midland)

On this 5th day of December, 2008 , personally appeared before me, JOHN B. TREANGEN, Authorized Representative,

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 by authority of the said Corporation incorporated under the laws of the State of Delaware, United States of America

I further certify that said authority, dated August 30, 2007, is based on

A delegation of signature authority of the said Corporation,

which I have seen, appointing the said individual Attorney-in-fact with full power to sign the foregoing document on behalf of the said corporation and that the purposes for which said document is granted are within the scope of the objects or activities of said corporation.

Rebecca Sue Hollingshead

027493 FRAME: 0108

Delaware

PAGE 2

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF
DELAWARE DO HEREBY CERTIFY THAT THE ATTACHED IS A TRUE AND
CORRECT COPY OF CERTIFICATE OF FORMATION OF "DOW GLOBAL
TECHNOLOGIES LLC" FILED IN THIS OFFICE ON THE TWENTY-THIRD DAY
OF DECEMBER, A.D. 2010, AT 10:40 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE EFFECTIVE DATE OF THE AFORESAID CERTIFICATE OF FORMATION IS THE THIRTY-FIRST DAY OF DECEMBER, A.D. 2010.

2332072 8100V

101227862

You may verify this certificate online at corp.delaware.gov/authver.shtml

AUTHENTY CATION: 8457755

DATE: 12-29-10

P.2/3

State of Delaware Secretary of State Division of Corporations Delivered 10:40 AM 12/23/2010 FILED 10:40 AM 12/23/2010 SRV 101227862 - 2332072 FILE

Certificate of Formation

211

Dow Global Technologies LLC

This Certificate of Formation of Dow Global Technologies LLC has been duly executed and is being filed by Noreen D. Warrick, as an authorized representative, to form a limited fiability company under the Delaware Limited Liability Company Act (6 <u>Del.C.</u>§18-101, <u>ct</u> <u>scg</u>.).

The name of the limited liability company is:

Dow Global Technologies LLC

- 2. The address of the limited liability company's registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, in the City of Wilmington, County of New Castle. The name of the limited liability company's registered agent for service of process in the State of Delaware at such address is the Corporation Trust Company.
- The effective date for the formation of this limited liability company is December 31, 2010.

IN WITNESS WHEREOF, the undersigned has executed this Certificate of Formation of Dow Global Technologies LLC this 23 day of December, 2010.

Norcen D. Warrick

Authorized Representative

Moreempriarrick

Delaware

PAGE 1

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF
DELAWARE DO HEREBY CERTIFY THAT THE ATTACHED IS A TRUE AND
CORRECT COPY OF THE CERTIFICATE OF CONVERSION OF A DELAWARE
CORPORATION UNDER THE NAME OF "DOW GLOBAL TECHNOLOGIES INC." TO
A DELAWARE LIMITED LIABILITY COMPANY, CHANGING ITS NAME FROM
"DOW GLOBAL TECHNOLOGIES INC." TO "DOW GLOBAL TECHNOLOGIES LLC",
FILED IN THIS OFFICE ON THE TWENTY-THIRD DAY OF DECEMBER, A.D.
2010, AT 10:40 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE EFFECTIVE DATE OF THE AFORESAID CERTIFICATE OF CONVERSION IS THE THIRTY-FIRST DAY OF DECEMBER, A.D. 2010.

2332072 8100V

101227862

You may verify this certificate online at corp.delaware.gov/authver.shtml

AUTHENT CATION: 8457755

DATE: 12-29-10

P.3/3

State of Delaware Secretary of State Division of Corporations Delivered 10:40 AM 12/23/2010 FILED 10:40 AM 12/23/2010 SRV 101227862 - 2332072 FILE

Certificate of Conversion
of
Dow Global Technologies Inc.
(a Delaware corporation)
to
Dow Global Technologies LLC
(a Delaware limited liability company)

Pursuant to Section 18-214 of the Limited Liability Company Act

Dow Global Technologies Inc., a Delaware corporation (the "Corporation"), files this Certificate of Conversion (the "Certificate") and hereby certifies the following:

- The jurisdiction where the Corporation was first formed is Delaware.
- The jurisdiction immediately prior to filing this Certificate is Delaware.
- The date the Corporation was first formed is April 6, 1993.
- 4. The name of the Corporation immediately prior to filling this Certificate is Dow Global Technologies Inc.
- 5. The name of the limited liability company as set forth in the Certificate of Formation is Dow Global Technologies LLC.
- 6. The future effective date of the conversion to a limited liability company is December 31, 2010.

IN WITNESS WHEREOF, the undersigned has executed this Certificate on the 23 day of December, 2010.

Dow Global Technologies Inc.

Name: Noreen D. Warriel

Title: Secretary

PATENT REEL: 027493 FRAME: 0112

RECORDED: 01/06/2012