

# PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
Name	Execution Date
MICHAEL W. BOSTICK	08/30/2011
HONGXIAN HE	08/30/2011
YOUGEN LI	09/01/2011
QUINN QUN ZHU	08/27/2011
<b>RECEIVING PARTY DATA</b>	
Name:	E. I. DU PONT DE NEMOURS AND COMPANY
Street Address:	4417 LANCASTER PIKE
Internal Address:	BARLEY MILL PLAZA 25
City:	WILMINGTON
State/Country:	DELAWARE
Postal Code:	19809
<b>PROPERTY NUMBERS Total: 1</b>	
Property Type	Number
Application Number:	13218591
<b>CORRESPONDENCE DATA</b>	
Fax Number:	(302)355-3982
Phone:	302-992-2973
Email:	CAROL.A.REEDER@USA.DUPONT.COM
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>	
Correspondent Name:	LYNNE M.CHRISTENBURY
Address Line 1:	4417 LANCASTER PIKE
Address Line 2:	BARLEY MILL PLAZA 25
Address Line 4:	WILMINGTON, DELAWARE 19809
ATTORNEY DOCKET NUMBER:	CL4783USNA
NAME OF SUBMITTER:	CAROL REEDER

CH \$40.00 13218591

**501690809**

**PATENT**  
**REEL: 027059 FRAME: 0744**

**Total Attachments: 4**

source=20110929\_CL4783USNA\_Assignment#page1.tif

source=20110929\_CL4783USNA\_Assignment#page2.tif

source=20110929\_CL4783USNA\_Assignment#page3.tif

source=20110929\_CL4783USNA\_Assignment#page4.tif

## ASSIGNMENT

We, the undersigned

MICHAEL W. BOSTICK, HONGXIAN HE, YOUGEN LI, QUINN QUN ZHU

Hereby declare that

We are the true and first inventors of an invention entitled

MUTANT DELTA-9 ELONGASES AND THEIR USE IN MAKING POLYUNSATURATED FATTY ACIDS

which is disclosed in the United States Patent Application No. 13/218591 filed on August 26, 2011 and which is identified as Case Number CL4783USNA.

For valuable consideration, the receipt and adequacy of which is hereby acknowledged and in fulfillment of our pre-existing obligation of assignment, we hereby:

I. Sell, assign, and transfer unto **E. I. DU PONT DE NEMOURS AND COMPANY**, a corporation organized and existing under the laws of the State of Delaware in the United States of America and having its principal place of business at Wilmington, Delaware, hereinafter referred to as the assignee, (A) the sole and entire right, title, and interest in and to: (1) the aforesaid application for Letters Patent, (2) any priority rights derived from the aforesaid application for Letters Patent by virtue of the International Convention for the Protection of Industrial Property and any other treaty or understanding for intellectual property for any and all member countries of the aforesaid International Convention or other treaty or understanding, (3) any and all our inventions, whether joint or sole, disclosed in the aforesaid application for Letters Patent, (4) any and all applications for Letters Patent for any such inventions in any country whatsoever, (5) any and all patents for any such inventions in any country whatsoever; and (B) the sole right to (1) file such applications in its name or ours, (2) file such applications under the aforesaid International Convention or other treaty or understanding, (3) have said patents granted in its name or ours, and (4) enforce said patents and to sue for and recover profits and damages for any and all infringements thereof whether past or future; and

II. Agree, whenever requested, to communicate to said assignee, its successors, assigns, and legal representatives, any facts known to us respecting said rights, to testify in any legal proceeding respecting said rights, to execute all applications, papers or instruments necessary or required by said assignee, its successors, assigns and legal representatives, to carry into effect any of the provisions of this instrument, and generally to do everything possible to aid said assignee, its successors, assigns, and legal representatives to obtain and enforce proper patent protection for said inventions in any and all countries.

  
\_\_\_\_\_(L.S.)  
MICHAEL W. BOSTICK  
DATE: 8/30/2011

\_\_\_\_\_(L.S.)  
YOUGEN LI  
DATE: \_\_\_\_\_

\_\_\_\_\_(L.S.)  
HONGXIAN HE  
DATE: \_\_\_\_\_

\_\_\_\_\_(L.S.)  
QUINN QUN ZHU  
DATE: \_\_\_\_\_

## ASSIGNMENT

We, the undersigned

MICHAEL W. BOSTICK, HONGXIAN HE, YUGEN LI, QUINN QUN ZHU

Hereby declare that

We are the true and first inventors of an invention entitled

MUTANT DELTA-9 ELONGASES AND THEIR USE IN MAKING POLYUNSATURATED FATTY ACIDS

which is disclosed in the United States Patent Application No. 13/218591 filed on August 26, 2011 and which is identified as Case Number CL4783USNA.

For valuable consideration, the receipt and adequacy of which is hereby acknowledged and in fulfillment of our pre-existing obligation of assignment, we hereby:

I. Sell, assign, and transfer unto **E. I. DU PONT DE NEMOURS AND COMPANY**, a corporation organized and existing under the laws of the State of Delaware in the United States of America and having its principal place of business at Wilmington, Delaware, hereinafter referred to as the assignee, (A) the sole and entire right, title, and interest in and to: (1) the aforesaid application for Letters Patent, (2) any priority rights derived from the aforesaid application for Letters Patent by virtue of the International Convention for the Protection of Industrial Property and any other treaty or understanding for intellectual property for any and all member countries of the aforesaid International Convention or other treaty or understanding, (3) any and all our inventions, whether joint or sole, disclosed in the aforesaid application for Letters Patent, (4) any and all applications for Letters Patent for any such inventions in any country whatsoever, (5) any and all patents for any such inventions in any country whatsoever; and (B) the sole right to (1) file such applications in its name or ours, (2) file such applications under the aforesaid International Convention or other treaty or understanding, (3) have said patents granted in its name or ours, and (4) enforce said patents and to sue for and recover profits and damages for any and all infringements thereof whether past or future; and

II. Agree, whenever requested, to communicate to said assignee, its successors, assigns, and legal representatives, any facts known to us respecting said rights, to testify in any legal proceeding respecting said rights, to execute all applications, papers or instruments necessary or required by said assignee, its successors, assigns and legal representatives, to carry into effect any of the provisions of this instrument, and generally to do everything possible to aid said assignee, its successors, assigns, and legal representatives to obtain and enforce proper patent protection for said inventions in any and all countries.

\_\_\_\_\_(L.S.)  
MICHAEL W. BOSTICK  
DATE: \_\_\_\_\_

\_\_\_\_\_(L.S.)  
YUGEN LI  
DATE: \_\_\_\_\_

*Hongxian He*  
\_\_\_\_\_(L.S.)  
HONGXIAN HE  
DATE: 8/30/2011

\_\_\_\_\_(L.S.)  
QUINN QUN ZHU  
DATE: \_\_\_\_\_

**ASSIGNMENT**

We, the undersigned

MICHAEL W. BOSTICK, HONGXIAN HE, YOUGEN LI, QUINN QUN ZHU

Hereby declare that

We are the true and first inventors of an invention entitled

MUTANT DELTA-9 ELONGASES AND THEIR USE IN MAKING POLYUNSATURATED FATTY ACIDS

which is disclosed in the United States Patent Application No. 13/218591 filed on August 26, 2011 and which is identified as Case Number CL4783USNA.

For valuable consideration, the receipt and adequacy of which is hereby acknowledged and in fulfillment of our pre-existing obligation of assignment, we hereby:

I. Sell, assign, and transfer unto **E. I. DU PONT DE NEMOURS AND COMPANY**, a corporation organized and existing under the laws of the State of Delaware in the United States of America and having its principal place of business at Wilmington, Delaware, hereinafter referred to as the assignee, (A) the sole and entire right, title, and interest in and to: (1) the aforesaid application for Letters Patent, (2) any priority rights derived from the aforesaid application for Letters Patent by virtue of the International Convention for the Protection of Industrial Property and any other treaty or understanding for intellectual property for any and all member countries of the aforesaid International Convention or other treaty or understanding, (3) any and all our inventions, whether joint or sole, disclosed in the aforesaid application for Letters Patent, (4) any and all applications for Letters Patent for any such inventions in any country whatsoever, (5) any and all patents for any such inventions in any country whatsoever; and (B) the sole right to (1) file such applications in its name or ours, (2) file such applications under the aforesaid International Convention or other treaty or understanding, (3) have said patents granted in its name or ours, and (4) enforce said patents and to sue for and recover profits and damages for any and all infringements thereof whether past or future; and

II. Agree, whenever requested, to communicate to said assignee, its successors, assigns, and legal representatives, any facts known to us respecting said rights, to testify in any legal proceeding respecting said rights, to execute all applications, papers or instruments necessary or required by said assignee, its successors, assigns and legal representatives, to carry into effect any of the provisions of this instrument, and generally to do everything possible to aid said assignee, its successors, assigns, and legal representatives to obtain and enforce proper patent protection for said inventions in any and all countries.

\_\_\_\_\_(L.S.)

MICHAEL W. BOSTICK

DATE: \_\_\_\_\_

 \_\_\_\_\_(L.S.)

YOUGEN LI

DATE: 9/1/2011

\_\_\_\_\_(L.S.)

HONGXIAN HE

DATE: \_\_\_\_\_

\_\_\_\_\_(L.S.)

QUINN QUN ZHU

DATE: \_\_\_\_\_

PATENT

REEL: 027059 FRAME: 0748

## ASSIGNMENT

We, the undersigned

MICHAEL W. BOSTICK, HONGXIAN HE, YOUGEN LI, QUINN QUN ZHU

Hereby declare that

We are the true and first inventors of an invention entitled

MUTANT DELTA-9 ELONGASES AND THEIR USE IN MAKING POLYUNSATURATED FATTY ACIDS

which is disclosed in the United States Patent Application No. 13/218591 filed on August 26, 2011 and which is identified as Case Number CL4783USNA.

For valuable consideration, the receipt and adequacy of which is hereby acknowledged and in fulfillment of our pre-existing obligation of assignment, we hereby:

I. Sell, assign, and transfer unto **E. I. DU PONT DE NEMOURS AND COMPANY**, a corporation organized and existing under the laws of the State of Delaware in the United States of America and having its principal place of business at Wilmington, Delaware, hereinafter referred to as the assignee, (A) the sole and entire right, title, and interest in and to: (1) the aforesaid application for Letters Patent, (2) any priority rights derived from the aforesaid application for Letters Patent by virtue of the International Convention for the Protection of Industrial Property and any other treaty or understanding for intellectual property for any and all member countries of the aforesaid International Convention or other treaty or understanding, (3) any and all our inventions, whether joint or sole, disclosed in the aforesaid application for Letters Patent, (4) any and all applications for Letters Patent for any such inventions in any country whatsoever, (5) any and all patents for any such inventions in any country whatsoever; and (B) the sole right to (1) file such applications in its name or ours, (2) file such applications under the aforesaid International Convention or other treaty or understanding, (3) have said patents granted in its name or ours, and (4) enforce said patents and to sue for and recover profits and damages for any and all infringements thereof whether past or future; and

II. Agree, whenever requested, to communicate to said assignee, its successors, assigns, and legal representatives, any facts known to us respecting said rights, to testify in any legal proceeding respecting said rights, to execute all applications, papers or instruments necessary or required by said assignee, its successors, assigns and legal representatives, to carry into effect any of the provisions of this instrument, and generally to do everything possible to aid said assignee, its successors, assigns, and legal representatives to obtain and enforce proper patent protection for said inventions in any and all countries.

\_\_\_\_\_(L.S.)  
MICHAEL W. BOSTICK  
DATE: \_\_\_\_\_

\_\_\_\_\_(L.S.)  
HONGXIAN HE  
DATE: \_\_\_\_\_

\_\_\_\_\_(L.S.)  
YOUGEN LI  
DATE: \_\_\_\_\_

\_\_\_\_\_(L.S.)  
QUINN QUN ZHU  
DATE: 9-27-2011