

PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:

NEW ASSIGNMENT

NATURE OF CONVEYANCE:

ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Chuansheng Bai	11/12/2007
El-Mekki El-Malki	10/29/2007
Jeff Elks	12/01/2007
Zhiguo Hou	11/14/2007
Jon M. McConnachie	11/13/2007
Pallassana S. Venkataraman	11/15/2007
Jason Wu	11/13/2007
SYMYX TECHNOLOGIES, INC.	12/21/2007
Daniel M. Giaquinta	12/14/2007
Alfred Hagemeyer	11/25/2007
Valery Sokolovskii	12/20/2007
Anthony F. Volpe Jr.	12/17/2007
David M. Lowe	12/14/2007
Jun Han	12/20/2007

RECEIVING PARTY DATA

Name:	ExxonMobil Research and Engineering Company
Street Address:	1545 Route 22 East
Internal Address:	P. O. Box 900
City:	Annandale
State/Country:	NEW JERSEY
Postal Code:	08801-0900

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	11973505

CORRESPONDENCE DATA

500455087

PATENT
REEL: 020459 FRAME: 0356

CH \$40.00 11973505

Fax Number: (908)730-3649

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 908-730-3658

Email: angela.m.odell@exxonmobil.com

Correspondent Name: ExxonMobil Research & Engineering Co.

Address Line 1: 1545 Route 22 East

Address Line 2: P. O. Box 900

Address Line 4: Annandale, NEW JERSEY 08801-0900

ATTORNEY DOCKET NUMBER:

2006EM181

NAME OF SUBMITTER:

Lawrence E. Carter

Total Attachments: 10

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ASSIGNMENT
INVENTOR or INVENTORS:

Chuansheng Bai
Zhiguo Hou
Jason Wu

El-Mekki El-Malki
Jon M. McConnachie

Jeff Elks
Pallassana S. Venkataraman

For good and valuable consideration, the undersigned person(s) named above, herein referred to as UNDERSIGNED, hereby agree(s) as follows:

1) UNDERSIGNED hereby assign(s) to ExxonMobil Research and Engineering Company (formerly Exxon Research and Engineering Company), a corporation of Delaware, its successors, legal representatives and assigns, herein referred to collectively as ASSIGNEE, the entire right, title and interest, for the United States and all foreign countries, in and to UNDERSIGNED's invention or improvement and to all patent applications and patents covering same which is described in a patent application entitled

BULK GROUP VIII/GROUP VIB METAL CATALYSTS AND METHOD OF PREPARING SAME

said application having been executed on the 12th, 13th, 14th, 15th day(s) of November, 2007, and being further identified as Case Number LEC-0705; and all rights of priority created by said application under provisions of international conventions or treaties.

2) UNDERSIGNED agree(s) upon the request of ASSIGNEE to execute any and all applications for and documents relating to obtaining patents and the prosecution thereof for said invention or improvement, and any continuations of such applications or substitutes therefor or registrations thereof, and any specific separate assignments of any of the above required for recording in the United States Patent and Trademark Office and any foreign patent office that ASSIGNEE may deem necessary or expedient.

3) UNDERSIGNED agree(s) that in the event of any application based on said assigned invention or improvement, or patent issued thereon, or any reissue or application for the reissue thereof, becoming involved in priority of invention proceedings, UNDERSIGNED will cooperate with ASSIGNEE to the best of the ability of UNDERSIGNED in the matter of preparing and executing all documents and giving and producing evidence in support thereof.

4) UNDERSIGNED agree(s) to perform upon ASSIGNEE's request any and all affirmative acts to obtain United States and foreign patents covering said invention or improvement and to vest all rights therein hereby conveyed to ASSIGNEE, as fully and as entirely as the same would have been held and enjoyed by UNDERSIGNED if this assignment and sale had not been made.

5) UNDERSIGNED hereby authorize(s) ASSIGNEE to insert in this instrument the date(s) on which UNDERSIGNED executed the Declaration for the above-referenced patent application.

IN WITNESS WHEREOF, this assignment has been executed by UNDERSIGNED on the date opposite UNDERSIGNED's NAME.

Date 11/12/2007 Inventor [Signature] (LS) Witness [Signature]
Chuansheng Bai

Date _____ Inventor _____ (LS) Witness _____
El-Mekki El-Malki

Date _____ Inventor _____ (LS) Witness _____
Jeff Elks

Date 11/14/07 Inventor [Signature] (LS) Witness [Signature]
Zhiguo Hou

Date 11/13/07 Inventor [Signature] (LS) Witness [Signature]
Jon M. McConnachie

Date 11/15/07 Inventor [Signature] (LS) Witness [Signature]
Pallassana S. Venkataraman

Date 11/13/07 Inventor [Signature] (LS) Witness [Signature]
Jason Wu



27810

PATENT TRADEMARK OFFICE

Family Number: 2006EM181-US2

ASSIGNMENT
INVENTOR or INVENTORS:

Chuansheng Bai

El-Mekki El-Malki

Jeff Elks

Zhiguo Hou

Jon M. McConnachie

Pallassana S. Venkataraman

Jason Wu

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1) UNDERSIGNED hereby assign(s) to ExxonMobil Research and Engineering Company (formerly Exxon Research and Engineering Company), a corporation of Delaware, its successors, legal representatives and assigns, herein referred to collectively as ASSIGNEE, the entire right, title and interest, for the United States and all foreign countries, in and to UNDERSIGNED's invention or improvement and to all patent applications and patents covering same which is described in a patent application entitled

BULK GROUP VIII/GROUP VIB METAL CATALYSTS AND METHOD OF PREPARING SAME

said application having been executed on the 29th day(s) of October, 2007, and being further identified as Case Number LEC-0705; and all rights of priority created by said application under provisions of international conventions or treaties.

2) UNDERSIGNED agree(s) upon the request of ASSIGNEE to execute any and all applications for and documents relating to obtaining patents and the prosecution thereof for said invention or improvement, and any continuations of such applications or substitutes therefor or registrations thereof, and any specific separate assignments of any of the above required for recording in the United States Patent and Trademark Office and any foreign patent office that ASSIGNEE may deem necessary or expedient.

3) UNDERSIGNED agree(s) that in the event of any application based on said assigned invention or improvement, or patent issued thereon, or any reissue or application for the reissue thereof, becoming involved in priority of invention proceedings, UNDERSIGNED will cooperate with ASSIGNEE to the best of the ability of UNDERSIGNED in the matter of preparing and executing all documents and giving and producing evidence in support thereof.

4) UNDERSIGNED agree(s) to perform upon ASSIGNEE's request any and all affirmative acts to obtain United States and foreign patents covering said invention or improvement and to vest all rights therein hereby conveyed to ASSIGNEE, as fully and as entirely as the same would have been held and enjoyed by UNDERSIGNED if this assignment and sale had not been made.

5) UNDERSIGNED hereby authorize(s) ASSIGNEE to insert in this instrument the date(s) on which UNDERSIGNED executed the Declaration for the above-referenced patent application.

IN WITNESS WHEREOF, this assignment has been executed by UNDERSIGNED on the date opposite UNDERSIGNED's NAME

Date _____ Inventor _____ (LS) Witness _____
Chuansheng Bai

Date 10/29/07 Inventor [Signature] (LS) Witness [Signature]
El-Mekki El-Malki

Date _____ Inventor _____ (LS) Witness _____
Jeff Elks

Date _____ Inventor _____ (LS) Witness _____
Zhiguo Hou

Date _____ Inventor _____ (LS) Witness _____
Jon M. McConnachie

Date _____ Inventor _____ (LS) Witness _____
Pallassana S. Venkataraman

Date _____ Inventor _____ (LS) Witness _____
Jason Wu



27810

PATENT TRADEMARK OFFICE

Family Number: 2006EM181-US2

ASSIGNMENT
INVENTOR or INVENTORS:

Chuansheng Bai
Zhiguo Hou
Jason Wu

El-Mekki El-Malki
Jon M. McConnachie

Jeff Elks
Pallassana S. Venkataraman

For good and valuable consideration, the undersigned person(s) named above, herein referred to as UNDERSIGNED, hereby agree(s) as follows:

1) UNDERSIGNED hereby assign(s) to ExxonMobil Research and Engineering Company (formerly Exxon Research and Engineering Company), a corporation of Delaware, its successors, legal representatives and assigns, herein referred to collectively as ASSIGNEE, the entire right, title and interest, for the United States and all foreign countries, in and to UNDERSIGNED's invention or improvement and to all patent applications and patents covering same which is described in a patent application entitled

BULK GROUP VIII/GROUP VIB METAL CATALYSTS AND METHOD OF PREPARING SAME

said application having been executed on the 1st day(s) of December 2007, and being further identified as Case Number LEC-0705; and all rights of priority created by said application under provisions of international conventions or treaties.

2) UNDERSIGNED agree(s) upon the request of ASSIGNEE to execute any and all applications for and documents relating to obtaining patents and the prosecution thereof for said invention or improvement, and any continuations of such applications or substitutes therefor or registrations thereof, and any specific separate assignments of any of the above required for recording in the United States Patent and Trademark Office and any foreign patent office that ASSIGNEE may deem necessary or expedient.

3) UNDERSIGNED agree(s) that in the event of any application based on said assigned invention or improvement, or patent issued thereon, or any reissue or application for the reissue thereof, becoming involved in priority of invention proceedings, UNDERSIGNED will cooperate with ASSIGNEE to the best of the ability of UNDERSIGNED in the matter of preparing and executing all documents and giving and producing evidence in support thereof.

4) UNDERSIGNED agree(s) to perform upon ASSIGNEE's request any and all affirmative acts to obtain United States and foreign patents covering said invention or improvement and to vest all rights therein hereby conveyed to ASSIGNEE, as fully and as entirely as the same would have been held and enjoyed by UNDERSIGNED if this assignment and sale had not been made.

5) UNDERSIGNED hereby authorize(s) ASSIGNEE to insert in this instrument the date(s) on which UNDERSIGNED executed the Declaration for the above-referenced patent application.

IN WITNESS WHEREOF, this assignment has been executed by UNDERSIGNED on the date opposite UNDERSIGNED's NAME.

Date _____ Inventor Chuansheng Bai (LS) Witness _____

Date _____ Inventor El-Mekki El-Malki (LS) Witness _____

Date 12/1/07 Inventor Jeff Elks (LS) Witness Pallassana S. Venkataraman

Date _____ Inventor Zhiguo Hou (LS) Witness _____

Date _____ Inventor Jon M. McConnachie (LS) Witness _____

Date _____ Inventor Pallassana S. Venkataraman (LS) Witness _____

Date _____ Inventor Jason Wu (LS) Witness _____



27810

PATENT TRADEMARK OFFICE

Family Number: 2006EM181-US2

ASSIGNMENT OF PATENT APPLICATION

WHEREAS, Symyx Technologies, Inc., a corporation organized under the laws of the State of Delaware, located at 415 Oakmead Parkway, Sunnyvale, California 94085, hereinafter referred to as "Assignor," is the co-owner of the invention described and set forth in the below identified application for United States Letter Patent:

Title of Invention: BULK GROUP VIII/GROUP VIB METAL CATALYSTS AND METHOD OF PREPARING SAME

Filing Date: October 9, 2007; Application No. 11/973,505 and

WHEREAS, ExxonMobil Research and Engineering is a corporation organized under the laws of the State of Delaware, located at 1545 Route 22 East, Annandale, New Jersey 08801, hereinafter referred to as "Assignee," is also a co-owner of said invention, and is desirous of acquiring Symyx' interest in the invention and application and in any Letters Patent and Registrations which may be granted on the same;

For good and valuable consideration, receipt of which is hereby acknowledged by Assignor, Assignor has assigned, and by these presents does assign to Assignee all right, title and interest in and to the invention and application, and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignor had this assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof; provided, however, that said assignment of such right, title, and interest to Assignee is subject to those licenses, rights and obligations set forth in the Alliance, Technology Transfer, and License Agreement effective April 1, 2003, between Symyx Technologies, Inc., Symyx Discovery Tools, Inc. and ExxonMobil Research and Engineering Company.

Assignor further agrees that it will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

IN TESTIMONY WHEREOF, Assignor has signed on the date indicated.

SYMYX TECHNOLOGIES, INC.

Date: 12/21/07

By: [Signature]
Rex S. Jackson
Executive Vice President, CFO

STATE OF CALIFORNIA

COUNTY OF SANTA CLARA

On Dec. 21, 2007, before me, Suzanne R. Shadley, Notary Public, personally appeared Rex S. Jackson, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature Suzanne R. Shadley



(Seal)

ASSIGNMENT OF PATENT APPLICATION

JOINT

WHEREAS, Daniel M. Glauquints residing at Saratoga, California, Alfred Hagemeyer residing at Rheine, Germany, Valery Sokolovskii residing at Sunnyvale, California, Anthony F. Volpe, Jr. residing at Santa Clara, California, David M. Lowe residing at Sunnyvale, California, and Jun Han residing at Sunnyvale, California hereinafter referred to as "Assignors," are the inventors of the invention described and set forth in the below identified application for United States Letter Patent:

Title of Invention: BULK GROUP VIII/GROUP VIB METAL CATALYSTS AND METHOD OF PREPARING SAME

Filing Date: October 9, 2007 Application No. 11/973,505 and

WHEREAS, Symyx Technologies, Inc., a Delaware corporation, located at 415 Oakmead Parkway, Sunnyvale, California 94085, hereinafter referred to as "Assignee," is desirous of acquiring an interest in the invention and application and in any Letters Patent and Registrations which may be granted on the same;

For good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have assigned, and by these presents do assign to Assignee all right, title and interest in and to the invention and application, and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignors had this assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignors further agree that they will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

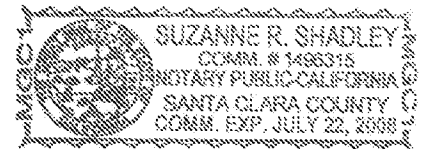
Date: 12/14/07Daniel M. Glaquinta
Daniel M. Glaquinta

STATE OF California

COUNTY OF Santa Clara

On Dec. 14, 2007, before me, Suzanne R. Shadley, Notary Public, personally appeared Daniel M. Glaquinta personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal

Signature Suzanne R. Shadley

(Seal)

Date: 11/25/07

Alfred Hagemeyer
Alfred Hagemeyer

WITNESSED BY:

Date: 11/25/07

THEO HAGEMeyer
Print Name

Theo Hagemeyer
Signature

Date: 11/25/07

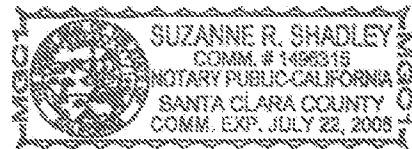
CHRISTOPH HAGEMeyer
Print Name

Ch. Hagemeyer
Signature

Date: 12/20/07V. Sokolovskii
Valery SokolovskiiSTATE OF California
COUNTY OF Santa Clara

On Dec. 20, 2007, before me, Suzanne R. Shadley, Notary Public, personally appeared Valery Sokolovskii personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal

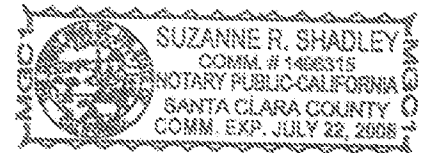
Signature Suzanne R. Shadley

(Seal)

Date: 12-17-2007Anthony F. Volpe, Jr.
Anthony F. Volpe, Jr.STATE OF California
COUNTY OF Santa Clara

On Dec. 17, 2007, before me, Suzanne R. Shadley, Notary Public, personally appeared Anthony F. Volpe, Jr. personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

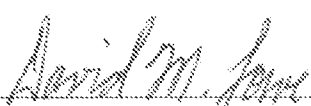
WITNESS my hand and official seal

Signature Suzanne R. Shadley

(Seal)

PATENT

REEL: 020459 FRAME: 0366

Date: 12-14-07

 David M. Lowe

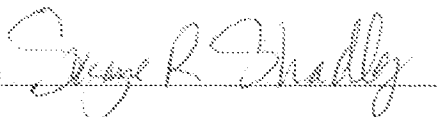
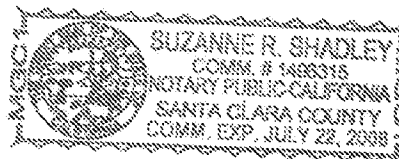
STATE OF California

COUNTY OF Santa Clara

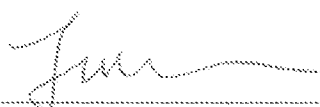
On Dec. 14, 2007, before me, Suzanne R. Shadley, Notary Public, personally appeared David M. Lowe personally known to me (or ~~proved to me on the basis of satisfactory evidence~~) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/~~she/they~~ executed the same in his/~~her/their~~ authorized capacity(ies), and that by his/~~her/their~~ signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal

Signature

(Seal)

Date: 12/20/2007

 Jun Han

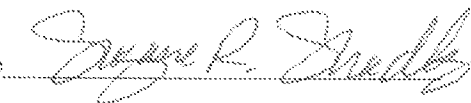
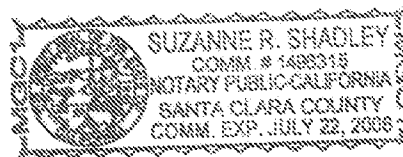
STATE OF California

COUNTY OF Santa Clara

On Dec. 20, 2007, before me, Suzanne R. Shadley, Notary Public, personally appeared Jun Han personally known to me (or ~~proved to me on the basis of satisfactory evidence~~) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/~~she/they~~ executed the same in his/~~her/their~~ authorized capacity(ies), and that by his/~~her/their~~ signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal

Signature

(Seal)

PATENT