PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3002523

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|-------------------------|----------------|
| ANNA LEE TONKOVICH | 06/19/2014 |
| RAVI ARORA | 07/10/2014 |
| JOHN BROPHY | 06/06/2014 |
| FRANCIS P. DALY | 07/28/2014 |
| SOUMITRA DESHMUKH | 07/10/2014 |
| MADDALENA FANELLI | 06/05/2014 |
| KAI TOD PAUL JAROSCH | 07/10/2014 |
| TIMOTHY J. LAPLANTE | 07/28/2014 |
| RICHARD Q. LONG | 06/06/2014 |
| TERRY MAZANEC | 06/05/2014 |
| DANIEL FRANCIS RYAN | 06/05/2014 |
| LAURA J. SILVA | 07/10/2014 |
| WAYNE W. SIMMONS | 08/22/2014 |
| BRUCE STANGELAND | 06/07/2014 |
| YONG WANG | 06/10/2014 |
| THOMAS YUSCHAK | 07/10/2014 |
| STEVEN T. PERRY | 07/18/2014 |
| JEFFREY DALE MARCO | 07/15/2014 |
| MICHAEL ALAN MARCHIANDO | 07/10/2014 |
| ROBERT DWAYNE LITT | 07/15/2014 |

RECEIVING PARTY DATA

| Name: | VELOCYS, INC. |
|-----------------|----------------------|
| Street Address: | 7950 CORPORATE BLVD. |
| City: | PLAIN CITY |
| State/Country: | ОНЮ |
| Postal Code: | 43064 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 14288936 |

CORRESPONDENCE DATA

Fax Number: (216)621-6165

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 216-621-1113

Email: jfarr@rennerotto.com

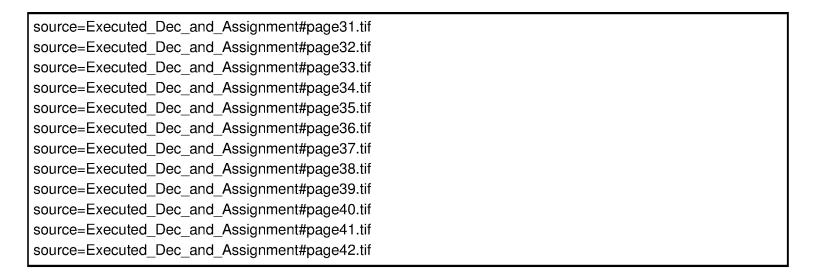
Correspondent Name: RENNER OTTO BOISSELLE & SKLAR, LLP

Address Line 1: 1621 EUCLID AVENUE
Address Line 2: NINETEENTH FLOOR
Address Line 4: CLEVELAND, OHIO 44115

| ATTORNEY DOCKET NUMBER: | VELOP0112USD |
|-------------------------|--|
| NAME OF SUBMITTER: | NEIL A. DUCHEZ |
| SIGNATURE: | /Neil A. DuChez/ |
| DATE SIGNED: | 08/29/2014 |
| | This document serves as an Oath/Declaration (37 CFR 1.63). |

Total Attachments: 42

source=Executed Dec and Assignment#page1.tif source=Executed Dec and Assignment#page2.tif source=Executed Dec and Assignment#page3.tif source=Executed Dec and Assignment#page4.tif source=Executed_Dec_and_Assignment#page5.tif source=Executed Dec and Assignment#page6.tif source=Executed Dec and Assignment#page7.tif source=Executed Dec and Assignment#page8.tif source=Executed Dec and Assignment#page9.tif source=Executed Dec and Assignment#page10.tif source=Executed Dec and Assignment#page11.tif source=Executed Dec and Assignment#page12.tif source=Executed Dec_and Assignment#page13.tif source=Executed Dec and Assignment#page14.tif source=Executed Dec and Assignment#page15.tif source=Executed Dec and Assignment#page16.tif source=Executed Dec and Assignment#page17.tif source=Executed Dec and Assignment#page18.tif source=Executed Dec and Assignment#page19.tif source=Executed Dec and Assignment#page20.tif source=Executed Dec and Assignment#page21.tif source=Executed_Dec_and_Assignment#page22.tif source=Executed Dec and Assignment#page23.tif source=Executed Dec and Assignment#page24.tif source=Executed Dec and Assignment#page25.tif source=Executed_Dec_and_Assignment#page26.tif source=Executed Dec and Assignment#page27.tif source=Executed Dec and Assignment#page28.tif source=Executed Dec and Assignment#page29.tif source=Executed_Dec_and_Assignment#page30.tif



| Popper Otto Dooket No. | \/ELOD0440LICD | DATENIT (110) |
|------------------------|----------------|---------------|
| Renner Otto Docket No. | VELOP011205D | PATENT (US) |

COMBINED DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN PATENT APPLICATION

| Title of Invention: | PROCESS AND APPARATUS EMPLOYING MICROCHANNEL PROCESS TECHNOLOGY |
|---------------------|---|
| | |

As a below named inventor, I hereby declare that this declaration and assignment are directed to:

| Application No. (Express Mail Label No.) | |
|--|--|
| Filing Date (Deposit Date) | |
| Amended on (if applicable) | |

or, if no application is identified above, the attached application.

DECLARATION

The above application was made or authorized to be made by me.

I believe that I am the original or an original joint inventor of a claimed invention in the application.

My residence, mailing address and citizenship are as stated below next to my name.

I have reviewed and understand the contents of the application, including the claims.

I hereby acknowledge that any willful false statement made in this declaration is punishable under Section 1001 of Title 18 of the United States Code by fine or imprisonment of not more than five (5) year, or both.

DOMESTIC PRIORITY CLAIM FOR BENEFIT OF EARLIER U.S./PCT APPLICATION(S) UNDER 35 U.S.C. § 120

I hereby claim, on my behalf or on behalf of the below-identified Assignee(s), the benefit under 35 U.S.C. § 120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose material information as defined in 37 C.F.R. § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

| U.S. APPLICATION NUMBER | DATE OF FILING (day, month, year) | PATENT NUMBER |
|-------------------------|--------------------------------------|---------------|
| 12/576,458 | 09/10/2009 | |
| | | |

CLAIM FOR BENEFIT OF EARLIER U.S. PROVISIONAL APPLICATION(S) UNDER 35 U.S.C. § 119(e)

I hereby claim, on my behalf or on behalf of the below-identified Assignee(s), the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) that is/are listed below.

| U.S. PROVISIONAL APPLICATION NUMBER | DATE OF FILING (day, month, year) |
|-------------------------------------|--------------------------------------|
| 61/104,432 | 10/10/2008 |
| 61/171,884 | 23/04/2009 |
| 61/234,453 | 17/08/2009 |

I hereby claim, on my behalf or on behalf of the below-identified Assignee(s), priority benefits under 35 U.S.C. § 119 (a)-(d) or (f), § 172 or § 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or § 365(a) of any PCT international application(s) which designated at least one country other than the United States of America, that is/are listed below, and have also identified below any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s) or any PCT international application(s) having a filing date before that of the application(s) on which priority is claimed.

| COUNTRY | APPLICATION NUMBER | DATE OF FILING (day, month, year) | PRIORITY NOT CLAIMED |
|---------|--------------------|--------------------------------------|-------------------------|
| | | | |
| | | | |

DUTY OF DISCLOSURE

I hereby acknowledge the duty to disclose to the Patent and Trademark Office all information known to me to be material to patentability as defined in 37 C.F.R. § 1.56, which in pertinent part states that information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and (1) it establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or (2) it refutes, or is inconsistent with, a position the applicant takes in: (i) opposing an argument of unpatentability relied on by the Office, or (ii) asserting an argument of patentability. A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

ASSIGNMENT

For good and valuable consideration, receipt of which is hereby acknowledged, I have sold and assigned and hereby sell and assign to:

| Assignee(s) | Address |
|---------------|--|
| Velocys, Inc. | 7950 Corporate Blvd. Plain City, Ohio 43064 |
| PIC II | · |

[If more than one assignee is listed, each owns an undivided equal share in the application and underlying invention so far as concerns the United States unless otherwise indicated or agreed to by the assignees.]

and the successors and assigns thereof, the entire right, title and interest to (i) said invention, (ii) said application, (iii) any and all provisional applications on which priority is claimed, any and all related patent applications in the United States or a country foreign thereto, including continuations, continuations-in-part, divisionals, renewals, conversions, substitutes, reexaminations, reissues, convention, international (PCT) and other applications based in whole or in part upon said invention or upon said applications, (iv) any and all patents, including renewals, reissues, certificates of reexamination and extensions thereof granted for said invention or upon said applications, for the full term or terms for which the same may be granted, and (v) all priority rights that are or may be predicated upon or arise from said invention, said applications and said patents.

If the application number and filing date are not set forth above, authorization is hereby given for any attorney of record in the subject patent application to insert below the application number and filing date information for this application when that information becomes available

| grand and the control of the control | |
|--|--|
| Application No. | |
| Filing Date | |

I hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into that would conflict with this assignment and sale

I authorize said Assignee(s) to file in my own name or in its own name applications for patent in any country that are predicated upon or arise from said invention, said applications and said patents.

I appoint said Assignee(s) as my common representative to represent me before all competent International authorities in connection with any international application predicated upon or arising from said invention, said applications and said patents.

I further covenant that Assignee(s) will, upon request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent as may be known and accessible to me and will testify as to the same in any proceeding related thereto and will promptly execute and deliver to Assignee(s), or the legal representative thereof, any and all papers, instruments or affidavits required to apply for, obtain, maintain and enforce said application, said invention and said Letters Patent which may be necessary or desirable to carry out the purposes hereof

I agree to perform all affirmative acts which may be necessary to obtain a grant of a valid U.S. patent and any foreign patents to the Assignee(s) and to vest all rights hereby conveyed to the Assignee(s) as fully and entirely as the same would have been held by me if this Assignment had not been made.

I agree that this assignment shall be construed in accordance with the law of the state/country in which the first above-listed Assignee is located as above indicated, and without regard to its conflicts of laws provisions.

| Legal Name of In | ventor: | Anna Lee Tonkovich | er en | ar Marillan and America (America) (A | |
|------------------------|--------------|---|---|--|-------------|
| Inventor's signature: | an | - he tout | Date | 6/19/14 | |
| Residence: (City & Sta | te/Country): | Gilbert, Arizona 85297 | Citizenship: | USA | |
| Post Office Address: | | laxton Avenue, Gilbert, Arizona 85291 5. Swan Dr | 7 | | |

| Legal Name of In | ventor: | Ravi Arora | | |
|------------------------------------|---|----------------------------|--------------|-----------|
| Inventor's signature: | X | | Date | 7/10/2014 |
| Residence: (City & State/Country): | | New Albany, Ohio 43054 USA | Citizenship; | USA |
| Post Office Address: | 7043 Cunningham Drive, New Albany, Ohio 43054 USA | | | |

| 1 / | | | | | |
|--|---|-------------|--|-----------------------|----------|
| Legal Name of Inventor: | | John Brophy | | | |
| Inventor's signature: | | | | Date: | |
| Residence: (City & Stat | e/Country): | Ba | th, United Kingdon | Citizenship: | GB |
| Post Office Address: | Eagle Farm | iho | ouse, Northend, Bath BA1 8EW, United | Kingdom | |
| | | | | | |
| Legal Name of Inv | rentor: | | Francis P. Daly | | |
| Inventor's signature: | | | | Date: | |
| Residence: (City & State | e/Country): | De | elaware, Ohio 43015 | Citizenship: | US |
| Post Office Address: | 188 North I | -ra | nklin Street, Delaware, Ohio 43015 | | |
| | 4 | | 0 " 0 " 1 | | |
| Legal Name of Inv | entor: | | Soumitra Deshmukh | | |
| Inventor's signature: | | | | Date: | |
| Residence: (City & Stat | e/Country): | D | ublin, Ohio 43016 | Citizenship: | IN |
| Post Office Address: | 4647 Tuttle | s ' | View Drive, Dublin, Ohio 43016 | | |
| Legal Name of Inv | /entor: | | Maddalena Fanelli | | |
| Inventor's signature: | | | eddelena fanlli. | Date: | 6/5/2014 |
| | | | olumbus, Ohio 43220 Howe 11, MI 4,8843 | Citizenship: | US |
| Residence: (City & State | te/Country): | C | Jumbus, Ohio 43220 4/8843 | · | 103 |
| Post Office Address: | 5535 Espia | ıΠa | Ide Street, Columbus, Ohio 43220 2 HOSE ARIVE HOWELL, N | 1; 48843 | 3 |
| Post Office Address: | 5535 Espla 4461 Wh | ıΠa | ide Street, Columbus, Ohio 43220 2 HOSE DRIVE HOWELL, N | 11 48845 | 3 |
| | 5535 Espla 4461 Wh | ıΠa | ide Ştreet, Celumbus, Ohio 43220 | 1; 48845 | 3 |
| Post Office Address: | 5535 Espla 4461 Wh | ıΠa | ide Street, Columbus, Ohio 43220 2 HOSE DRIVE HOWELL, N | 7 4884.5 Date: | 3 |
| Post Office Address: | 5535 Espia 4461 Wh ventor: | ina ite | ide Street, Columbus, Ohio 43220 2 HOSE DRIVE HOWELL, N | ,,,,, | CA |
| Post Office Address: Legal Name of Inventor's signature: | ventor: | Be | ide Street, Columbus, Ohio 43220 2 Horse Drive Howell, M Kai Tod Paul Jarosch | Date: | 3 |
| Post Office Address: Legal Name of Inventor's signature: Residence: (City & State Post Office Address: | ventor: te/Country): 839 Vernor | Be | Kai Tod Paul Jarosch exley, Ohio 43209 Road, Bexley, Ohio 43209 | Date: | 3 |
| Post Office Address: Legal Name of Inventor's signature: Residence: (City & State Post Office Address: Legal Name of Inventorial Name of Invent | ventor: te/Country): 839 Vernor | Be | ide Street, Columbus, Ohio 43220 2. Horse Drive Howell, M Kai Tod Paul Jarosch exley, Ohio 43209 | Date: | 3 |
| Post Office Address: Legal Name of Inventor's signature: Residence: (City & State Post Office Address: | ventor: te/Country): 839 Vernor | Be n F | Kai Tod Paul Jarosch Exley, Ohio 43209 Road, Bexley, Ohio 43209 Timothy J. LaPlante | Date: | CA |
| Post Office Address: Legal Name of Inventor's signature: Residence: (City & State Post Office Address: Legal Name of Inventorial Name of Invent | ventor: 839 Vernor | Be n F | Kai Tod Paul Jarosch exley, Ohio 43209 Road, Bexley, Ohio 43209 | Date: Citizenship: | 3 |

Page 4 of 6

PATENT

| | | | | | | *** |
|---------------------------------------|--------------|-----------------------|--------------------------|-----------------|--------------|---|
| Legal Name of Inv | ventor: | | Richard Q. Long | | | |
| Inventor's signature: | | | | | Date: | |
| Residence: (City & State/Country): No | | ew Albany, Ohio 43054 | | Citizenship: | US | |
| Post Office Address: | 7375 Tum | ble | brook Drive, New Alban | y, Ohio 43054 | | |
| | | | | | | |
| Legal Name of Inv | ventor: | | Terry Mazanec | | | |
| Inventor's signature: | | | | | Date: | |
| Residence: (City & Star | te/Country): | So | olon, Ohio 44139 | | Citizenship: | us |
| Post Office Address: | 7168 Selv | vort | hy Lane, Solon, Ohio 44 | 1139 | | |
| | <u> </u> | | | | | |
| Legal Name of In- | ventor: | | Daniel Francis Ryan | | | |
| Inventor's signature: | | | | | Date: | |
| Residence: (City & Sta | te/Country): | Br | rewster, Massachusetts | 02631 | Citizenship: | US |
| Post Office Address: | 245 Old L | ong | Pond Road, Brewster, | Massachusetts | 02631 | |
| | | | | | | |
| Legal Name of In | ventor: | | Laura J. Silva | | | *************************************** |
| Inventor's signature: | | | | | Date: | |
| Residence: (City & Sta | te/Country): | D | ublin, Ohio 43017 | | Citizenship: | US |
| Post Office Address: | 5583 Dun | nfrie | es Court West, Dublin, (| Ohio 43017 | | |
| | | | | | | |
| Legal Name of In | ventor: | | Wayne W. Simmons | | | |
| Inventor's signature: | | | | | Date: | |
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| Post Office Address: | 8870 Tart | an | Fields Drive, Dublin, Oh | nio 43017 | | |
| | | | | | | |
| Legal Name of In | ventor: | | Bruce St/angeland | Bruce Sta | ingeland | Æ |
| Inventor's signature: | Bruce | g | Stangeland | | Date: | 6/7/14 |
| Residence: (City & Sta | 7 | Т | erkeley, California 9470 | 8 | Citizenship: | US |
| Post Office Address: | 691 Crag | moi | nt Avenue, Berkeley, Ca | alifornia 94708 | | |
| ł | l. | | | | | |

| | | | | |
|--------------------------|--------------------|--|----------------|--------------|
| Legal Name of In | ventor: | Yong Wang | | |
| Inventor's signature: | 3 | 2 Sy | Date: | 6/10/2014 |
| Residence: (City & Sta | te/Country): | Richland, Washington 99352 | Citizenship: | US |
| Post Office Address: | | on Gt., Richland, Washington 00352 AwKstone Ct | <u> 199354</u> | |
| Legal Name of In | ventor: | Thomas Yuschak | | |
| Inventor's signature: | 1/2 | Den | Date: | 7/0/14 |
| Residence: (City & Sta | te/Country): | Lewis Center, Ohio 43035 | Citizenship: | US |
| Post Office Address: | 2792 Bold | Venture Drive, Lewis Center, Ohio | 43035 | |
| Legal Name of Inv | ventor: | Steven T. Perry | | |
| Inventor's signature: | M | even T. D | Date: | 18 July 2014 |
| Residence: (City & State | te/Country): | Galloway, Ohio 43119 | Citizenship: | us |
| Post Office Address: | 8458 Squ 854 Ca | ad Drive, Galloway, Ohio 43119 noe Ln, | | |
| Legal Name of Inv | /entor: | Jeffrey Dale Marco | | |
| Inventor's signature: | Follo | & Tale Marie | Date: | 7/15/14 |
| Residence: (City & Stat | re/Country): | South Charleston, Ohio 45368 | Citizenship: | us |
| Post Office Address: | | oth Charleston Pike, South Charlest | | 43140 |
| Legal Name of Inv | | Michael Alan Marchiando | | |
| Inventor's signature: | · 1/2 | Wilchael Alai, Walchiando | Date: | Thake |
| Residence: (City & Stat | e/Country) | London, Ohio 43140 | Citizenship: | US |
| Post Office Address: | | ert Road, London, Ohio 43140 | Citizeristrip. | 100 |
| | 2.99 | | | |
| Legal Name of Inv | ventor: | -Robert Lewis Litt Rober | + Dwayne | Litt /ROL |
| Inventor's signature: | Volet | Dwayne Litt | Date: | 7/15/14 |
| Residence: (City & Stat | e/Country): | Westerville, Ohio 43081 | Citizenship: | u's ' |
| Post Office Address: | 728 Collin | gwood Drive, Westerville, Ohio 430 | 81 | |

| Renner Otto Docket No. | VELOP0112USD | PATENT (US) |
|------------------------|--------------|---------------|
| · | | 17112111 (00) |

COMBINED DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN PATENT APPLICATION

| Title of Invention: | PROCESS AND APPARATUS EMPLOYING MICROCHANNEL PROCESS TECHNOLOGY |
|---------------------|---|
| L | |

As a below named inventor, I hereby declare that this declaration and assignment are directed to:

| Application No. (Express Mail Label No.) | |
|--|--|
| Filing Date (Deposit Date) | |
| Amended on (if applicable) | |

or, if no application is identified above, the attached application.

DECLARATION

The above application was made or authorized to be made by me.

I believe that I am the original or an original joint inventor of a claimed invention in the application.

My residence, mailing address and citizenship are as stated below next to my name.

I have reviewed and understand the contents of the application, including the claims.

I hereby acknowledge that any willful false statement made in this declaration is punishable under Section 1001 of Title 18 of the United States Code by fine or imprisonment of not more than five (5) year, or both.

DOMESTIC PRIORITY CLAIM FOR BENEFIT OF EARLIER U.S./PCT APPLICATION(S) UNDER 35 U.S.C. § 120

I hereby claim, on my behalf or on behalf of the below-identified Assignee(s), the benefit under 35 U.S.C. § 120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose material information as defined in 37 C.F.R. § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

| U.S. APPLICATION NUMBER | DATE OF FILING (day, month, year) | PATENT NUMBER |
|-------------------------|--------------------------------------|---------------|
| 12/576,458 | 09/10/2009 | |
| | | |

CLAIM FOR BENEFIT OF EARLIER U.S. PROVISIONAL APPLICATION(S) UNDER 35 U.S.C. § 119(e)

I hereby claim, on my behalf or on behalf of the below-identified Assignee(s), the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) that is/are listed below.

| U.S. PROVISIONAL APPLICATION NUMBER | DATE OF FILING (day, month, year) |
|-------------------------------------|--------------------------------------|
| 61/104,432 | 10/10/2008 |
| 61/171,884 | 23/04/2009 |
| 61/234,453 | 17/08/2009 |

I hereby claim, on my behalf or on behalf of the below-identified Assignee(s), priority benefits under 35 U.S.C. § 119 (a)-(d) or (f), § 172 or § 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or § 365(a) of any PCT international application(s) which designated at least one country other than the United States of America, that is/are listed below, and have also identified below any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s) or any PCT international application(s) having a filing date before that of the application(s) on which priority is claimed.

| COUNTRY | APPLICATION NUMBER | DATE OF FILING (day, month, year) | PRIORITY NOT CLAIMED |
|---------|--------------------|--------------------------------------|-------------------------|
| | | | |
| | | | |

DUTY OF DISCLOSURE

I hereby acknowledge the duty to disclose to the Patent and Trademark Office all information known to me to be material to patentability as defined in 37 C.F.R. § 1.56, which in pertinent part states that information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and (1) it establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or (2) it refutes, or is inconsistent with, a position the applicant takes in: (i) opposing an argument of unpatentability relied on by the Office, or (ii) asserting an argument of patentability. A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

ASSIGNMENT

For good and valuable consideration, receipt of which is hereby acknowledged, I have sold and assigned and hereby sell and assign to:

| Assignee(s) | Address |
|---------------|------------------------|
| Velocys, Inc. | 7950 Corporate Blvd. |
| | Plain City, Ohio 43064 |

[If more than one assignee is listed, each owns an undivided equal share in the application and underlying invention so far as concerns the United States unless otherwise indicated or agreed to by the assignees.]

and the successors and assigns thereof, the entire right, title and interest to (i) said invention, (ii) said application, (iii) any and all provisional applications on which priority is claimed, any and all related patent applications in the United States or a country foreign thereto, including continuations, continuations-in-part, divisionals, renewals, conversions, substitutes, reexaminations, reissues, convention, international (PCT) and other applications based in whole or in part upon said invention or upon said applications, (iv) any and all patents, including renewals, reissues, certificates of reexamination and extensions thereof granted for said invention or upon said applications, for the full term or terms for which the same may be granted, and (v) all priority rights that are or may be predicated upon or arise from said invention, said applications and said patents.

Page 2 of 6

If the application number and filing date are not set forth above, authorization is hereby given for any attorney of record in the subject patent application to insert below the application number and filing date information for this application when that information becomes available.

| | CONTRACTOR OF THE PROPERTY OF |
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| : MDDBGBBOT NO. | i: |
| Application No. | |
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I hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into that would conflict with this assignment and sale.

I authorize said Assignee(s) to file in my own name or in its own name applications for patent in any country that are predicated upon or arise from said invention, said applications and said patents.

I appoint said Assignee(s) as my common representative to represent me before all competent International authorities in connection with any international application predicated upon or arising from said invention, said applications and said patents.

I further covenant that Assignee(s) will, upon request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent as may be known and accessible to me and will testify as to the same in any proceeding related thereto and will promptly execute and deliver to Assignee(s), or the legal representative thereof, any and all papers, instruments or affidavits required to apply for, obtain, maintain and enforce said application, said invention and said Letters Patent which may be necessary or desirable to carry out the purposes hereof

I agree to perform all affirmative acts which may be necessary to obtain a grant of a valid U.S. patent and any foreign patents to the Assignee(s) and to vest all rights hereby conveyed to the Assignee(s) as fully and entirely as the same would have been held by me if this Assignment had not been made.

I agree that this assignment shall be construed in accordance with the law of the state/country in which the first above-listed Assignee is located as above indicated, and without regard to its conflicts of laws provisions.

| Legal Name of Inv | ventor. | Anna Lee Tonkovich | | |
|-------------------------|---------------------|--------------------------------------|--------------|---------|
| Inventor's signature: | an | - he tont | Date | 6/19/14 |
| Residence: (City & Stat | te/Country): | Gilbert, Arizona 85297 | Citizenship: | USA |
| Post Office Address: | 4086 E. C 3504 S | laxton Avenue, Gilbert, Arizona 8529 | 37 | |

| Legal Name of In | ventor: | Ravi Arora | | | |
|------------------------------------|---|----------------------------|--------------|-----------|--|
| Inventor's signature: | 8 | Mel | Date: | 7/10/2014 | |
| Residence: (City & State/Country); | | New Albany, Ohio 43054 USA | Citizenship: | USA | |
| Post Office Address: | 7043 Cunningham Drive, New Albany, Ohio 43054 USA | | | | |

| Legal Name of In | | | John Brophy | | |
|---|------------------------|----------|--------------------------------------|--------------------|--------------|
| Inventor's signature: | Jac | | sternory, | Date: | 6-6-14 |
| Residence: (City & Sta | ite/Country): | В | ath, United Kingdon | Citizenship: | GB |
| Post Office Address: | Eagle Far | mh | ouse, Northend, Bath BA1 8EW, United | d Kingdom | |
| Legal Name of In | ventor: | ***** | Francis P. Daly | | |
| Inventor's signature: | | | | Date: | |
| Residence: (City & Sta | te/Country): | D | elaware, Ohio 43015 | Citizenship: | US |
| Post Office Address: 188 North Franklin Street, Delaware, Ohio 43015 | | | | | |
| Legal Name of In | ventor: | | Soumitra Deshmukh | | |
| Inventor's signature: | | _ | -R Deshouth | Deter | 7/12/2011 |
| Residence: (City & Sta | te/Country): | | Jublin, Ohio 43016 | Date: | 7/10/2014 |
| Post Office Address: 4647 Tuttles View Drive, Dublin, Ohio 43016 5756 Tuttles GROVE BLVD Spoutanity. | | | Į IIV | | |
| | | | | | |
| Legal Name of Inventor: | | | Maddalena Fanelli | | |
| Inventor's signature: | | | | Date: | |
| Residence: (City & Stat | State/Country): Columb | | olumbus, Ohio 43220 | Citizenship: | US |
| Post Office Address: | 5535 Espl | ana | ide Street, Columbus, Ohio 43220 | | • |
| Legal Name of Inv | ventor: | | Kai Jod Paul Jarosch | | |
| Inventor's signature: | K | <u>.</u> | Javal | Date: | JJ1-10-2014 |
| Residence: (City & Stat | e/Country): | Be | exley, Ohio 43209 | Citizenship: | CA |
| Post Office Address: | 839 Verno | n F | Road, Bexley, Ohio 43209 | | |
| | | | | | |
| Legal Name of Inventor: | | | | | |
| Legal Name of Inv | rentor: | | Timothy J. LaPlante | | |
| Legal Name of Inv | ventor: | | Timothy J. LaPlante | Date: | |
| | | Po | Timothy J. LaPlante | Date: Citizenship: | US |

| Legal Name of Inv | entor: | | Richard Q. Long | | |
|---|---|---|-----------------------------|--------------|----------|
| Inventor's signature: | | | | Date: | |
| Residence: (City & State | e/Country): Ne | | ew Albany, Ohio 43054 | Citizenship: | US |
| Post Office Address: | Address: 7375 Tumblebrook Drive, New Albany, Ohio 43054 | | | | |
| Legal Name of Inv | rentor: | _ | Jerry Mazanec | | |
| Inventor's signature: | | L | hung Magne | Date: | 5 JUN 14 |
| Residence: (City & Stat | e/Country): | S | olon Ohi 44139 | Citizenship: | us ' |
| Post Office Address: | 7168 Selw | ort | hy Lane, Solon, Ohio 44139 | | |
| Legal Name of Inv | rentor: | | Daniel Francis Ryan | | |
| Inventor's signature: | | | | Date: | |
| Residence: (City & Stat | ite/Country): Br | | ewster, Massachusetts 02631 | Citizenship: | US |
| Post Office Address: | 245 Old Lo | 245 Old Long Pond Road, Brewster, Massachusetts 02631 | | | |
| Legal Name of Inv | ventor: | | Laura J. Silva | | |
| Inventor's signature: | | Date: | | | |
| Residence: (City & Sta | ate/Country): D | | ublin, Ohio 43017 | Citizenship: | US |
| Post Office Address: | 5583 Dum | 5583 Dumfries Court West, Dublin, Ohio 43017 | | | |
| Legal Name of In | ventor: | | Wayne W. Simmons | | |
| Inventor's signature: | | | | Date: | |
| Residence: (City & Sta | te/Country): | [| Oublin, Ohio 43017 | Citizenship: | US |
| Post Office Address: 8870 Tartan Fields Drive, Dublin, Ohio 43017 | | | | | |
| | | | | | |
| Legal Name of In | ventor: | | Bruce Strangeland | | |
| Inventor's signature: | | _ | | Date: | 1 |
| Residence: (City & Sta | | | Berkeley, California 94708 | Citizenship: | US |
| Post Office Address: | 691 Cragmont Avenue, Berkeley, California 94708 | | | | |

| Legal Name of In | ventor: | Yong Wang | | |
|--------------------------|-------------------------------|--|--------------|--------------|
| Inventor's signature: | 7 | 2/2 | | |
| | | 7 7 9 | Date: | 6/10/2014 |
| Residence: (City & Sta | ite/Country): | Richland, Washington 99352 | Citizenship: | US |
| Post Office Address: | 2866 H | on St., Richland, Washington 99352 , 9 AwKstone CT | 19354 | <u>-</u> |
| Legal Name of In | ventor: | Thomas Yuschak | | |
| Inventor's signature: | 1/6 | Dah | Date: | 7/0/14 |
| Residence: (City & Sta | te/Country): | Lewis Center, Ohio 43035 | Citizenship: | US |
| Post Office Address: | 2792 Bold | d Venture Drive, Lewis Center, Ohio 43 | 035 | |
| Legal Name of Inv | ventor: | Steven T. Perry | | |
| Inventor's signature: | 7 | leven T. | Date: | 18 July 2014 |
| Residence: (City & Stat | te/Country): | Galloway, Ohio 43119 | Citizenship: | us |
| Post Office Address: | 8458 Squ 854 Ca | ad Drive, Galloway, Ohio 43119 moe Ln, | | |
| Legal Name of Inv | /entor: | Jeffrey Dale Marco | | |
| Inventor's signature: | Folk | or Dala Mario | Date: | 7/15/14 |
| Residence: (City & Stat | e/Country): | South Charleston, Ohio 45368 | Citizenship: | us |
| Post Office Address: | 10008 So | uth Charleston Pike, South Charleston | | 43140 |
| Legal Name of Inv | rentor: | Michael Alan Marchiando | | |
| Inventor's signature: | 111 | MA far Mills | Date: | 7/10/4 |
| Residence: (City & State | e/Country): | London, Ohio 43140 | Citizenship: | US |
| Post Office Address: | 6009 Bigg | ert Road, London, Ohio 43140 | | |
| Legal Name of Inv | entor: | Robert Lewis Litt Robert | Dwayne | Litt /ROL |
| Inventor's signature: | Volet | Dwayne Litt | Date: | 7/15/14 |
| Residence: (City & State | e/Country): | Westerville, Ohio 43081 | Citizenship: | US |
| Post Office Address: | 728 Collin | gwood Drive, Westerville, Ohio 43081 | | |

| ** ** | | 1 |
|------------------------|--------------|-------------|
| Renner Otto Docket No. | VELOP0112USD | PATENT (US) |

COMBINED DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN PATENT APPLICATION

| Title of Invention: PROCESS AND AP TECHNOLOGY | PARATUS EMPLOYING MICROCHANNEL PROCESS |
|---|--|
|---|--|

As a below named inventor, I hereby declare that this declaration and assignment are directed to:

| Application No. (Express Mail Label No.) | |
|--|--|
| Filing Date (Deposit Date) | |
| Amended on (if applicable) | |

or, if no application is identified above, the attached application.

DECLARATION

The above application was made or authorized to be made by me.

I believe that I am the original or an original joint inventor of a claimed invention in the application.

My residence, mailing address and citizenship are as stated below next to my name.

I have reviewed and understand the contents of the application, including the claims.

I hereby acknowledge that any willful false statement made in this declaration is punishable under Section 1001 of Title 18 of the United States Code by fine or imprisonment of not more than five (5) year, or both.

DOMESTIC PRIORITY CLAIM FOR BENEFIT OF EARLIER U.S./PCT APPLICATION(S) UNDER 35 U.S.C. § 120

I hereby claim, on my behalf or on behalf of the below-identified Assignee(s), the benefit under 35 U.S.C. § 120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose material information as defined in 37 C.F.R. § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

| U.S. APPLICATION NUMBER | DATE OF FILING (day, month, year) | PATENT NUMBER |
|-------------------------|--------------------------------------|---------------|
| 12/576,458 | 09/10/2009 | |
| | | |

CLAIM FOR BENEFIT OF EARLIER U.S. PROVISIONAL APPLICATION(S) UNDER 35 U.S.C. § 119(e)

I hereby claim, on my behalf or on behalf of the below-identified Assignee(s), the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) that is/are listed below.

P 1 OT 6

| U.S. PROVISIONAL APPLICATION NUMBER | DATE OF FILING (day, month, year) |
|-------------------------------------|--------------------------------------|
| 61/104,432 | 10/10/2008 |
| 61/171,884 | 23/04/2009 |
| 61/234,453 | 17/08/2009 |

I hereby claim, on my behalf or on behalf of the below-identified Assignee(s), priority benefits under 35 U.S.C. § 119 (a)-(d) or (f), § 172 or § 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or § 365(a) of any PCT international application(s) which designated at least one country other than the United States of America, that is/are listed below, and have also identified below any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s) or any PCT international application(s) having a filing date before that of the application(s) on which priority is claimed.

| COUNTRY | APPLICATION NUMBER | DATE OF FILING (day, month, year) | PRIORITY NOT CLAIMED |
|---------|--------------------|--------------------------------------|-------------------------|
| | | | |
| | | | |

DUTY OF DISCLOSURE

I hereby acknowledge the duty to disclose to the Patent and Trademark Office all information known to me to be material to patentability as defined in 37 C.F.R. § 1.56, which in pertinent part states that information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and (1) it establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or (2) it refutes, or is inconsistent with, a position the applicant takes in: (i) opposing an argument of unpatentability relied on by the Office, or (ii) asserting an argument of patentability. A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

ASSIGNMENT

For good and valuable consideration, receipt of which is hereby acknowledged, I have sold and assigned and hereby sell and assign to:

| Assignee(s) | Address |
|---------------|--|
| Velocys, Inc. | 7950 Corporate Blvd. Plain City, Ohio 43064 |

[If more than one assignee is listed, each owns an undivided equal share in the application and underlying invention so far as concerns the United States unless otherwise indicated or agreed to by the assignees.]

and the successors and assigns thereof, the entire right, title and interest to (i) said invention, (ii) said application, (iii) any and all provisional applications on which priority is claimed, any and all related patent applications in the United States or a country foreign thereto, including continuations, continuations-in-part, divisionals, renewals, conversions, substitutes, reexaminations, reissues, convention, international (PCT) and other applications based in whole or in part upon said invention or upon said applications, (iv) any and all patents, including renewals, reissues, certificates of reexamination and extensions thereof granted for said invention or upon said applications, for the full term or terms for which the same may be granted, and (v) all priority rights that are or may be predicated upon or arise from said invention, said applications and said patents.

Page 2 of 6

If the application number and filing date are not set forth above, authorization is hereby given for any attorney of record in the subject patent application to insert below the application number and filing date information for this application when that information becomes available

| and the second s | AND REPORT OF THE RESIDENCE OF THE RESIDENCE OF THE PROPERTY OF THE PARTY OF THE PA |
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| Application No | |
| Filing Date | |

I hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into that would conflict with this assignment and sale

I authorize said Assignee(s) to file in my own name or in its own name applications for patent in any country that are predicated upon or arise from said invention, said applications and said patents.

I appoint said Assignee(s) as my common representative to represent me before all competent International authorities in connection with any international application predicated upon or arising from said invention, said applications and said patents.

I further covenant that Assignee(s) will, upon request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said. Letters Patent as may be known and accessible to me and will testify as to the same in any proceeding related thereto and will promptly execute and deliver to Assignee(s), or the legal representative thereof, any and all papers, instruments or affidavits required to apply for, obtain, maintain and enforce said application, said invention and said. Letters Patent which may be necessary or desirable to carry out the purposes hereof.

I agree to perform all affirmative acts which may be necessary to obtain a grant of a valid U.S. patent and any foreign patents to the Assignee(s) and to vest all rights hereby conveyed to the Assignee(s) as fully and entirely as the same would have been held by me if this Assignment had not been made.

I agree that this assignment shall be construed in accordance with the law of the state/country in which the first above-listed Assignee is located as above indicated, and without regard to its conflicts of laws provisions

| Legal Name of In | ventor: | Anna Lee Tonkovich | | | |
|------------------------|--------------|--|--------------|---------|--|
| Inventor's signature: | an | - he tont | Date | 6/19/14 | |
| Residence: (City & Sta | te/Country): | Gilbert, Arizona 85297 | Citizenship: | USA | |
| Post Office Address: | | 4086 E. Claxton Avenue, Gilbert, Arizona 85297 3509 S. Swan Dr | | | |

| Legal Name of In | ventor: | Ravi Arora | | |
|------------------------|--------------|-------------------------------------|--------------|-----------|
| Inventor's signature: | X | Act | Date | 7/10/2014 |
| Residence: (City & Sta | te/Country): | New Albany, Ohio 43054 USA | Citizenship: | USA |
| Post Office Address: | 7043 Cur | nningham Drive, New Albany, Ohio 43 | 054 USA | |

| Legal Name of Inv | entor: | | John Brophy | | |
|-----------------------------------|------------------------------|----------|---|---|-------------|
| Inventor's signature: | | 34 | Rugay | Date: | 6-6-14 |
| Residence: (City & State | e/Country): Ba | | ith, United Kingdon | Citizenship: | GB |
| Post Office Address: | Office Address: Eagle Farmho | | ouse, Northend, Bath BA1 8EW, United | Kingdom | |
| 1 | | | | | |
| Legal Name of Inv | entor: | | Francis P. Daly | | |
| Inventor's signature: | | | | Date: | |
| Residence: (City & State | e/Country): | De | elaware, Ohio 43015 | Citizenship: | US |
| Post Office Address: | 188 North | Fra | nklin Street, Delaware, Ohio 43015 | | |
| | | | | | |
| Legal Name of Inv | entor: | | Soumitra Deshmukh | | |
| Inventor's signature: | | <u>S</u> | RDeshauph | Date: | 7/10/2014 |
| Residence: (City & State | e/Country): | D | ublin, Ohio 43016 | Citizenship: | IN |
| Post Office Address: | | | office Drive, Dublin, Ohio 43016 OTTLES GROVE BLVD GROVE | ubl. | |
| | | | | | |
| Legal Name of Inv | entor: | | Maddalena Fanelli | | |
| Inventor's signature: | | | | Date: | |
| Residence: (City & State | e/Country): | Co | olumbus, Ohio 43220 | Citizenship: | US |
| Post Office Address: | 5535 Espla | ana | de Street, Columbus, Ohio 43220 | | |
| | | | | | |
| Legal Name of Inv | entor: | _ | Kai Tod Paul Jarosch | _ | |
| Inventor's signature: | fr | | Lawel | Date: | JJ1-10-2014 |
| Residence: (City & Stat | e/Country): | Be | exley, Ohio 43209 | Citizenship: | CA |
| Post Office Address: 839 Vernon F | | n F | Road, Bexley, Ohio 43209 | | |
| | | | | | |
| Legal Name of Inv | ventor: | | Timothy J. LaPlante | | |
| Inventor's signature: | | | | Date: | |
| Residence: (City & Stat | e/Country): | P | owell, Ohio 43065 | Citizenship: | US |
| Post Office Address: | 8305 Tricia Pri | | rice Drive, Powell, Ohio 43065 | *************************************** | |

| Legal Name of In | ventor: | | Richard Q. Long | | |
|----------------------------------|--------------|------|--------------------------------------|--------------|--------------|
| Inventor's signature: Rhub | | | hox | | [[] is all |
| Residence: (City & Sta | | | | Date: | 6/6/2014 |
| | T | | ew Albany, Ohio 43054 | Citizenship: | US |
| Post Office Address: 7375 Tumble | | | brook Drive, New Albany, Ohio 43054 | | |
| | | | | | |
| Legal Name of Inventor: | | | Terry Mazanec | | |
| Inventor's signature: | | | | Date: | |
| Residence: (City & Sta | te/Country): | Sc | olon, Ohio 44139 | Citizenship: | US |
| Post Office Address: | 7168 Selw | orti | ny Lane, Solon, Ohio 44139 | | |
| | | | | | · |
| Legal Name of Inv | ventor: | | Daniel Francis Ryan | | |
| Inventor's signature: | | | | Date: | |
| Residence: (City & Star | te/Country): | Br | ewster, Massachusetts 02631 | Citizenship: | us |
| Post Office Address: | 245 Old L | ong | Pond Road, Brewster, Massachusetts | 02631 | |
| | I | | | | |
| Legal Name of Inv | ventor: | | Laura J. Silva | | |
| Inventor's signature: | Lai | u | apolen | Date: | 7-10-14 |
| Residence: (City & Stat | te/Country): | Dι | ıblin, Ohio 43017 | Citizenship: | US |
| Post Office Address: | 5583 Dum | frie | s Court West, Dublin, Ohio 43017 | | |
| | | | | | |
| Legal Name of Inv | ventor: | | Wayne W. Simmons | | |
| Inventor's signature: | | | | Date: | |
| Residence: (City & Stat | te/Country): | D | ublin, Ohio 43017 | Citizenship: | us |
| Post Office Address: | 8870 Tarta | an F | ields Drive, Dublin, Ohio 43017 | | |
| | | | | | |
| Legal Name of Inv | ventor: | | Bruce Strangeland | | 1170.1 |
| Inventor's signature: | | | | Date: | |
| Residence: (City & State | te/Country): | Вє | rkeley, California 94708 | Citizenship: | US |
| Post Office Address: | 691 Cragn | non | t Avenue, Berkeley, California 94708 | | |
| | l | | | | |

| Legal Name of In | ventor: | Yong Wang | | |
|--|---|---|---|-------------------------|
| Inventor's signature: | 13 | 2/2 | Date: | 6/10/201 |
| Residence: (City & Sta | te/Country): | Richland, Washington 99352 | Citizenship: | US |
| Post Office Address: | 2884 Troc 2866 H | o n S t., Richland, Washington 99352 . 9 WKSTONE CT. | 9354 | - |
| Legal Name of Inv | ventor: | Thomas Yuschak | | |
| Inventor's signature: | 1/6 | Dan | Date: | 7/0/14 |
| Residence: (City & Sta | te/Country): | Lewis Center, Ohio 43035 | Citizenship: | US |
| Post Office Address: | 2792 Bold | Venture Drive, Lewis Center, Ohio 43 | 035 | |
| Legal Name of Inv | ventor: | Steven T, Perry | | |
| Inventor's signature: | 1 | even T. D | Date: | 18 July 2014 |
| Residence: (City & Sta | te/Country): | Galloway, Ohio 43119 | Citizenship: | us |
| | | | | |
| Post Office Address: | 8458 Sque 854 Ca | a d Drive, Galloway, Ohio 43119 noc Ln, | | |
| Post Office Address: Legal Name of Inv | 854 Ca | Jeffrey Dale Marco | | |
| | 854 Ca | noe Ln, St. | Date: | 7/15/14 |
| Legal Name of Inventor's signature: | ventor: | noe Ln, St. | Date: Citizenship: | 7/15/14 US |
| Legal Name of Inventor's signature: | ventor: | Jeffrey Dale Marco South Charleston, Ohio 45368 uth Charleston Pike, South Charleston | Citizenship: | |
| Legal Name of Inventor's signature: Residence: (City & State | 854 Ca. ventor: te/Country): 10008 501 1855 | Jeffrey Dale Marco South Charleston, Ohio 45368 uth Charleston Pike, South Charleston | Citizenship: | 1 |
| Legal Name of Inventor's signature: Residence: (City & State Post Office Address: | 854 Ca. ventor: te/Country): 10008 501 1855 | Jeffrey Dale Marco South Charleston, Ohio 45368 oth Charleston Pike, South Charleston fring Valley Kd., Lance | Citizenship: | |
| Legal Name of Inventor's signature: Residence: (City & State Post Office Address: Legal Name of Inventor's signature: | ventor: 10008 Sou 1855 ventor: | Jeffrey Dale Marco South Charleston, Ohio 45368 oth Charleston Pike, South Charleston fring Valley Kd., Lance | Citizenship: Ohio 45368 Len, Ohio | |
| Legal Name of Inventor's signature: Residence: (City & State Post Office Address: Legal Name of Inventor's signature: | ventor: 10008 Sor ventor: ventor: te/Country): | Jeffrey Dale Marco South Charleston, Ohio 45368 oth Charleston Pike, South Charleston Michael Alan Marchiando | Citizenship: Ohio 45368: Len , Ohio Date: | 43140 7/10/14 |
| Legal Name of Inventor's signature: Residence: (City & State Post Office Address: Legal Name of Inventor's signature: Residence: (City & State Post Office Address) | ventor: 10008 Sou 1855 ventor: te/Country): 6009 Bigg | Jeffrey Dale Marco South Charleston, Ohio 45368 uth Charleston Pike, South Charleston Michael Alan Marchiando London, Ohio 43140 | Citizenship: Ohio 45368: Ohio Date: Citizenship: | 43140 7/10/14/ US |
| Legal Name of Inventor's signature: Residence: (City & Start Post Office Address: Legal Name of Inventor's signature: Residence: (City & Start Post Office Address: | ventor: 10008 Sou 1855 ventor: te/Country): 6009 Bigg | Jeffrey Dale Marco South Charleston, Ohio 45368 oth Charleston Pike, South Charleston Michael Alan Marchiando London, Ohio 43140 pert Road, London, Ohio 43140 | Citizenship: Ohio 45368: Ohio Date: Citizenship: | 43140 7/10/14/ US |

Page **6** of **6**

PATENT

| Renner Otto Docke | t No. VELOP0112USD | PATENT (US) |
|---------------------|---|----------------------------------|
| COMBINED DEC | LARATION AND ASSIGNMENT FOR UTIL | ITY OR DESIGN PATENT APPLICATION |
| Title of Invention: | PROCESS AND APPARATUS EMPLOYII TECHNOLOGY | NG MICROCHANNEL PROCESS |

As a below named inventor, I hereby declare that this declaration and assignment are directed to:

| Application No. (Express Mail Label No.) | |
|--|--|
| Filing Date (Deposit Date) | |
| Amended on (if applicable) | |

or, if no application is identified above, the attached application.

DECLARATION

The above application was made or authorized to be made by me.

I believe that I am the original or an original joint inventor of a claimed invention in the application.

My residence, mailing address and citizenship are as stated below next to my name.

I have reviewed and understand the contents of the application, including the claims.

I hereby acknowledge that any willful false statement made in this declaration is punishable under Section 1001 of Title 18 of the United States Code by fine or imprisonment of not more than five (5) year, or both.

DOMESTIC PRIORITY CLAIM FOR BENEFIT OF EARLIER U.S./PCT APPLICATION(S) UNDER 35 U.S.C. § 120

I hereby claim, on my behalf or on behalf of the below-identified Assignee(s), the benefit under 35 U.S.C. § 120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose material information as defined in 37 C.F.R. § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

| U.S. APPLICATION NUMBER | DATE OF FILING (day, month, year) | PATENT NUMBER |
|-------------------------|--------------------------------------|---------------|
| 12/576,458 | 09/10/2009 | |
| | | |

CLAIM FOR BENEFIT OF EARLIER U.S. PROVISIONAL APPLICATION(S) UNDER 35 U.S.C. § 119(e)

I hereby claim, on my behalf or on behalf of the below-identified Assignee(s), the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) that is/are listed below.

| U.S. PROVISIONAL APPLICATION NUMBER | DATE OF FILING (day, month, year) |
|-------------------------------------|--------------------------------------|
| 61/104,432 | 10/10/2008 |
| 61/171,884 | 23/04/2009 |
| 61/234,453 | 17/08/2009 |

I hereby claim, on my behalf or on behalf of the below-identified Assignee(s), priority benefits under 35 U.S.C. § 119 (a)-(d) or (f), § 172 or § 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or § 365(a) of any PCT international application(s) which designated at least one country other than the United States of America, that is/are listed below, and have also identified below any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s) or any PCT international application(s) having a filing date before that of the application(s) on which priority is claimed.

| COUNTRY | APPLICATION NUMBER | DATE OF FILING (day, month, year) | PRIORITY NOT CLAIMED |
|---------|--------------------|--------------------------------------|-------------------------|
| | | | |

DUTY OF DISCLOSURE

I hereby acknowledge the duty to disclose to the Patent and Trademark Office all information known to me to be material to patentability as defined in 37 C.F.R. § 1.56, which in pertinent part states that information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and (1) it establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or (2) it refutes, or is inconsistent with, a position the applicant takes in: (i) opposing an argument of unpatentability relied on by the Office, or (ii) asserting an argument of patentability. A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

ASSIGNMENT

For good and valuable consideration, receipt of which is hereby acknowledged, I have sold and assigned and hereby sell and assign to:

| Assignee(s) Address | | | |
|---------------------|------------------------|--|--|
| Velocys, Inc. | 7950 Corporate Blvd. | | |
| | Plain City, Ohio 43064 | | |

[If more than one assignee is listed, each owns an undivided equal share in the application and underlying invention so far as concerns the United States unless otherwise indicated or agreed to by the assignees.1

and the successors and assigns thereof, the entire right, title and interest to (i) said invention, (ii) said application, (iii) any and all provisional applications on which priority is claimed, any and all related patent applications in the United States or a country foreign thereto, including continuations, continuations-in-part, divisionals, renewals, conversions, substitutes, reexaminations, reissues, convention, international (PCT) and other applications based in whole or in part upon said invention or upon said applications, (iv) any and all patents, including renewals, reissues, certificates of reexamination and extensions thereof granted for said invention or upon said applications, for the full term or terms for which the same may be granted, and (v) all priority rights that are or may be predicated upon or arise from said invention, said applications and said patents.

If the application number and filing date are not set forth above, authorization is hereby given for any attorney of record in the subject patent application to insert below the application number and filing date information for this application when that information becomes available.

| | - Committee of the contract of | CONTROL OF THE PROPERTY OF THE |
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| XX. | I commence of the commence of | and the contract of the contra |

I hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into that would conflict with this assignment and sale.

I authorize said Assignee(s) to file in my own name or in its own name applications for patent in any country that are predicated upon or arise from said invention, said applications and said patents.

I appoint said Assignee(s) as my common representative to represent me before all competent International authorities in connection with any international application predicated upon or arising from said invention, said applications and said patents.

I further covenant that Assignee(s) will, upon request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent as may be known and accessible to me and will testify as to the same in any proceeding related thereto and will promptly execute and deliver to Assignee(s), or the legal representative thereof, any and all papers, instruments or affidavits required to apply for, obtain, maintain and enforce said application, said invention and said Letters Patent which may be necessary or desirable to carry out the purposes hereof.

I agree to perform all affirmative acts which may be necessary to obtain a grant of a valid U.S. patent and any foreign patents to the Assignee(s) and to vest all rights hereby conveyed to the Assignee(s) as fully and entirely as the same would have been held by me if this Assignment had not been made.

I agree that this assignment shall be construed in accordance with the law of the state/country in which the first above-listed Assignee is located as above indicated, and without regard to its conflicts of laws provisions.

| Legal Name of In | ventor. | Anna Lee Tonkovich | | |
|------------------------|---------------------|---|--------------|---------|
| Inventor's signature: | an | Le tont | Date | 6419/14 |
| Residence: (City & Sta | ite/Country): | Gilbert, Arizona 85297 | Citizenship: | USA |
| Post Office Address: | 4086 E. C 3509 S | laxton Avenue, Gilbert, Arizona 8529 5, Swair Dr |)7 | |

| Legal Name of Invent | or: | Ravi Arora | | |
|-----------------------------|---------|-------------------------------------|--------------|-----------|
| Inventor's signature: | 8 | Mel | Date | 7/10/2014 |
| Residence: (City & State/Co | untry): | New Albany, Ohio 43054 USA | Citizenship: | USA |
| Post Office Address: 70 | I3 Cun | ningham Drive, New Albany, Ohio 430 | 054 USA | |

| ventor: | | <u> </u> | | | |
|--|--|---|--|---|--|
| | | John Brophy | | | |
| < | 水 | Rugay | Date: | 6-6-14 | |
| te/Country): | В | ath, United Kingdon | Citizenship: | GB | |
| Eagle Far | ted Kingdom | | | | |
| ventor: | | Francis P. Daly | | | |
| Inventor's signature: Date: | | | | | |
| te/Country): | D | elaware, Ohio 43015 | Citizenship: | US | |
| Post Office Address: 188 North Franklin Street, Delaware, Ohio 43015 | | | | | |
| entor: | · | Soumitra Deshmukh | | | |
| | | | Date: | 7/10/2014 | |
| e/Country): | | | | IN | |
| | | | | | |
| **** | | | | | |
| entor: | | Maddalena Fanelli | | | |
| | | | Date: | | |
| e/Country): | Co | olumbus, Ohio 43220 | Citizenship: | US | |
| 5535 Espla | ana | de Street, Columbus, Ohio 43220 | | | |
| entor: | | Kai ≱ od Paul Jarosch | | | |
| K | العمر مرازا | Lawel | Date: | TJ1-10-2014 | |
| e/Country); | Be | xley, Ohio 43209 | Citizenship: | CA | |
| Post Office Address: 839 Vernon Road, Bexley, Ohio 43209 | | | | | |
| 839 Verno | n R | oad, Bexiey, Onio 43209 | | | |
| 839 Verno | n R | oad, Bexiey, Onio 43209 | | | |
| 839 Verno | n R | Timothy J. LaPlante | | | |
| | n R | | Date: | | |
| | | | Date: Citizenship; | Us | |
| | ventor: 188 North ventor: 4647 Tuttl 5756 ventor: 2/Country): 5535 Espli | ventor: te/Country): De 188 North Fra ventor: 6/Country): De 4647 Tuttles 55756 Tu ventor: ce/Country): Country: centor: | rentor: Francis P. Daly Delaware, Ohio 43015 188 North Franklin Street, Delaware, Ohio 43015 Soumitra Deshmukh S.P. Deshmukh Be/Country): Dublin, Ohio 43016 4647 Tuttles View Drive, Dublin, Ohio 43016 \$5756 Tottes Grove Buyd Spoud Tentor: Maddalena Fanelli Be/Country): Columbus, Ohio 43220 5535 Esplanade Street, Columbus, Ohio 43220 Entor: Kai Tod Paul Jarosch | Date: de/Country): Delaware, Ohio 43015 Citizenship: 188 North Franklin Street, Delaware, Ohio 43015 Pentor: Soumitra Deshmukh S-R-Deshmukh Date: de/Country): Dublin, Ohio 43016 Citizenship: 4647 Tuttles View Drive, Dublin, Ohio 43016 5756 Tottes Grove Buy growth Pentor: Maddalena Fanelli Date: de/Country): Columbus, Ohio 43220 Citizenship: S535 Esplanade Street, Columbus, Ohio 43220 entor: Kai Tod Paul Jarosch Date: | |

| Legal Name of Inv | ventor: | | Richard Q. Long | | |
|-------------------------|--------------|----------|---------------------------------------|--------------|--------------|
| Inventor's signature: | | | | Date: | |
| Residence: (City & Stat | te/Country): | N | ew Albany, Ohio 43054 | Citizenship: | US |
| Post Office Address: | 7375 Tum | ble | brook Drive, New Albany, Ohio 43054 | | |
| | | | | | |
| Legal Name of Inv | entor: | | Terry Mazanec | | |
| Inventor's signature: | | | | Date: | |
| Residence: (City & Stat | te/Country): | S | olon, Ohio 44139 | Citizenship: | us |
| Post Office Address: | 7168 Selv | /ort | hy Lane, Solon, Ohio 44139 | | |
| | | | | | |
| Legal Name of Inv | ventor: | , | Daniel Francis Ryan | T | |
| Inventor's signature: | Van | 4 | Francis Kyan | Date: | June 5, 2014 |
| Residence: (City & Stat | te/Country): | Bı | rewster, Massachusetts 02631 | Citizenship: | US |
| Post Office Address: | 245 Old L | ong | g Pond Road, Brewster, Massachusetts | s 02631 | |
| Logal Name of Inc | | | Loure 1 City | | |
| Legal Name of Inv | ventor. | | Laura J. Silva | T | |
| Inventor's signature: | | Γ_ | | Date: | 1 |
| Residence: (City & Stat | I | <u> </u> | ublin, Ohio 43017 | Citizenship: | US |
| Post Office Address: | 5583 Dum | ıfri∈ | es Court West, Dublin, Ohio 43017 | | |
| Legal Name of Inv | ventor: | | Wayne W. Simmons | | |
| Inventor's signature: | | | | Date: | |
| Residence: (City & Stat | te/Country): | | Dublin, Ohio 43017 | Citizenship: | US |
| Post Office Address: | 1 | L | Fields Drive, Dublin, Ohio 43017 | 1 | |
| | | | | | |
| Legal Name of Inv | ventor: | | Bruce Strangeland | | |
| Inventor's signature: | | | 1 | Date: | |
| Residence: (City & Star | te/Country): | В | erkeley, California 94708 | Citizenship: | US |
| Post Office Address: | | 1 | nt Avenue, Berkeley, California 94708 | | |
| 1 | 1 | | | | |

Page **5** of **6**

PATENT

| Legal Name of In | ventor: | Yong Wang | | |
|--------------------------|-----------------------|--|-----------------|--------------|
| Inventor's signature: | 13 | y Ny | Date: | 6/10/2014 |
| Residence: (City & Sta | ite/Country): | Richland, Washington 99352 | Citizenship: | US |
| Post Office Address: | | an Gt., Richland, Washington 99352. Aw KSTon e C4. | .99354 | |
| Legal Name of In | ventor: | Thomas Yuschak | | |
| Inventor's signature: | 1/ | Dan | Date: | 7/0/14 |
| Residence: (City & Sta | te/Country): | Lewis Center, Ohio 43035 | Citizenship: | US |
| Post Office Address: | 2792 Bold | Venture Drive, Lewis Center, Ohio | 43035 | |
| Legal Name of In | ventor: | Steven T, Perry | | |
| Inventor's signature: | 1 | even T. D | Date: | 19 July 2014 |
| Residence: (City & Sta | | Galloway, Ohio 43119 | Citizenship: | us |
| Post Office Address: | 8458 Squa 854 Ca | ad Drive, Galloway, Ohio 43119 noe Ln, | | |
| Legal Name of In | ventor: | Jeffrey Dale Marco | | |
| Inventor's signature: | Tople | s Tale Mario | Date: | 7/15/14 |
| Residence: (City & Sta | te/Country): | South Charleston, Ohio 45368 | Citizenship: | US |
| Post Office Address: | 1 0008 500 | oth Charleston Pike, South Charlesto | on, Ohio 45368. | 43140 |
| Legal Name of In | ventor: | Michael Alan Marchiando | | |
| Inventor's signature: | M | Markelle | Date: | 7/10/4 |
| Residence: (City & State | te/Country): | London, Ohio 43140 | Citizenship: | us |
| Post Office Address: | 6009 Bigg | ert Road, London, Ohio 43140 | • | |
| Legal Name of Inv | ventor: | -Robert Lewis Litt Robert | + Dwayne | Litt /ROL |
| Inventor's signature: | Robert | Dwayne Litt | Date: | 7/15/14 |
| Residence: (City & Stat | te/Country): | Westerville, Ohio 43081 | Citizenship: | u's ' |
| Post Office Address: | 728 Colling | gwood Drive, Westerville, Ohio 4308 | 31 | |

| | | • |
|------------------------|--------------|-------------|
| Renner Otto Docket No. | VELOP0112USD | PATENT (US) |

COMBINED DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN PATENT APPLICATION

| Title of Invention: | PROCESS AND APPARATUS EMPLOYING MICROCHANNEL PROCESS TECHNOLOGY |
|---------------------|---|
| | |

As a below named inventor, I hereby declare that this declaration and assignment are directed to:

| Application No. (Express Mail Label No.) | |
|--|--|
| Filing Date (Deposit Date) | |
| Amended on (if applicable) | |

or, if no application is identified above, the attached application.

DECLARATION

The above application was made or authorized to be made by me.

I believe that I am the original or an original joint inventor of a claimed invention in the application.

My residence, mailing address and citizenship are as stated below next to my name.

I have reviewed and understand the contents of the application, including the claims.

I hereby acknowledge that any willful false statement made in this declaration is punishable under Section 1001 of Title 18 of the United States Code by fine or imprisonment of not more than five (5) year, or both.

DOMESTIC PRIORITY CLAIM FOR BENEFIT OF EARLIER U.S./PCT APPLICATION(S) UNDER 35 U.S.C. § 120

I hereby claim, on my behalf or on behalf of the below-identified Assignee(s), the benefit under 35 U.S.C. § 120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose material information as defined in 37 C.F.R. § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

| U.S. APPLICATION NUMBER | DATE OF FILING (day, month, year) | PATENT NUMBER |
|-------------------------|--------------------------------------|---------------|
| 12/576,458 | 09/10/2009 | |
| | | |

CLAIM FOR BENEFIT OF EARLIER U.S. PROVISIONAL APPLICATION(S) UNDER 35 U.S.C. § 119(e)

I hereby claim, on my behalf or on behalf of the below-identified Assignee(s), the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) that is/are listed below.

| U.S. PROVISIONAL APPLICATION NUMBER | DATE OF FILING |
|-------------------------------------|--------------------|
| U.S. PROVISIONAL APPLICATION NUMBER | (day, month, year) |
| 61/104,432 | 10/10/2008 |
| 61/171,884 | 23/04/2009 |
| 61/234,453 | 17/08/2009 |

I hereby claim, on my behalf or on behalf of the below-identified Assignee(s), priority benefits under 35 U.S.C. § 119 (a)-(d) or (f), § 172 or § 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or § 365(a) of any PCT international application(s) which designated at least one country other than the United States of America, that is/are listed below, and have also identified below any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s) or any PCT international application(s) having a filing date before that of the application(s) on which priority is claimed.

| COUNTRY | APPLICATION NUMBER | DATE OF FILING (day, month, year) | PRIORITY NOT CLAIMED |
|---------|--------------------|--------------------------------------|-------------------------|
| | | | |
| | - Charles Aller | | |

DUTY OF DISCLOSURE

I hereby acknowledge the duty to disclose to the Patent and Trademark Office all information known to me to be material to patentability as defined in 37 C.F.R. § 1.56, which in pertinent part states that information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and (1) it establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or (2) it refutes, or is inconsistent with, a position the applicant takes in: (i) opposing an argument of unpatentability relied on by the Office, or (ii) asserting an argument of patentability. A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

ASSIGNMENT

For good and valuable consideration, receipt of which is hereby acknowledged, I have sold and assigned and hereby sell and assign to:

| Assignee(s) | Address |
|---------------|--|
| Velocys, Inc. | 7950 Corporate Blvd. Plain City, Ohio 43064 |

[If more than one assignee is listed, each owns an undivided equal share in the application and underlying invention so far as concerns the United States unless otherwise indicated or agreed to by the assignees.]

and the successors and assigns thereof, the entire right, title and interest to (i) said invention, (ii) said application, (iii) any and all provisional applications on which priority is claimed, any and all related patent applications in the United States or a country foreign thereto, including continuations, continuations-in-part, divisionals, renewals, conversions, substitutes, reexaminations, reissues, convention, international (PCT) and other applications based in whole or in part upon said invention or upon said applications, (iv) any and all patents, including renewals, reissues, certificates of reexamination and extensions thereof granted for said invention or upon said applications, for the full term or terms for which the same may be granted, and (v) all priority rights that are or may be predicated upon or arise from said invention, said applications and said patents.

Page 2 of 6

If the application number and filing date are not set forth above, authorization is hereby given for any attorney of record in the subject patent application to insert below the application number and filing date information for this application when that information becomes available.

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| Application No. | And the Committee Committe | |
| Filing Date | | Turkey (a series of the constitution of the co |

I hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into that would conflict with this assignment and sale

I authorize said Assignee(s) to file in my own name or in its own name applications for patent in any country that are predicated upon or arise from said invention, said applications and said patents.

I appoint said Assignee(s) as my common representative to represent me before all competent International authorities in connection with any international application predicated upon or arising from said invention, said applications and said patents.

I further covenant that Assignee(s) will, upon request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent as may be known and accessible to me and will testify as to the same in any proceeding related thereto and will promptly execute and deliver to Assignee(s), or the legal representative thereof, any and all papers, instruments or affidavits required to apply for, obtain, maintain and enforce said application, said invention and said Letters Patent which may be necessary or desirable to carry out the purposes hereof

I agree to perform all affirmative acts which may be necessary to obtain a grant of a valid U.S. patent and any foreign patents to the Assignee(s) and to vest all rights hereby conveyed to the Assignee(s) as fully and entirely as the same would have been held by me if this Assignment had not been made.

I agree that this assignment shall be construed in accordance with the law of the state/country in which the first above-listed Assignee is located as above indicated, and without regard to its conflicts of laws provisions.

| Legal Name of In | ventor: | Anna Lee Tonkovich | | | *************************************** |
|---|--------------|------------------------|--------------|---------|---|
| Inventor's signature: | an | - Ru Tout | Date | 6/19/14 | |
| Residence: (City & Sta | te/Country): | Gilbert, Arizona 85297 | Citizenship; | USA | |
| Post Office Address: 4086 E. Claxton Avenue, Gilbert, Arizona 85297 3509 S. Swan Dr | | | | | |

| Legal Name of in | ventor: | Ravi Arora | | | |
|--------------------------------------|---|--|-------|----|---------|
| Inventor's signature: | R | Act | Date: | 7 | 10/2014 |
| Residence: (City & State/Country): N | | ew Albany, Ohio 43054 USA Citizenship: USA | | SA | |
| Post Office Address: | 7043 Cunningham Drive, New Albany, Ohio 43054 USA | | | | |

| Legal Name of Inventor: | | | John Brophy | | |
|--|--|----------|--|---|-------------|
| Inventor's signature: | 1 da | | Rugany | Date: | 6-6-14 |
| Residence: (City & Stat | tate/Country): Ba | | nth, United Kingdon | Citizenship: | GB |
| Post Office Address: | Post Office Address: Eagle Farmhouse, Northend, Bath BA1 8EW, United Kingdom | | | | |
| | | _ | | | |
| Legal Name of Inv | rentor: | | Francis P. Daly | | |
| Inventor's signature: | | | | Date: | |
| Residence: (City & Stat | e/Country): | De | laware, Ohio 43015 | Citizenship: | US |
| Post Office Address: | 188 North I | Fra | nklin Street, Delaware, Ohio 43015 | · | |
| | | | | *************************************** | |
| Legal Name of Inv | rentor: | _ | Soumitra Deshmukh | | |
| inventor's signature: | | <u>S</u> | RDeshauph | Date: | 7/10/2014 |
| Residence: (City & Stat | e/Country): | D | ublin, Ohio 43016 | Citizenship: | IN |
| Post Office Address: | | | flew Drive, Dublin, Ohio 43016 TTLES GROVE BLVD BROUGHT | upl. | |
| | | | | | |
| Legal Name of Inv | entor: | | Maddalena Fanelli | | |
| Inventor's signature: | | | | Date: | |
| Residence: (City & Stat | e/Country): | Co | lumbus, Ohio 43220 | Citizenship: | US |
| Post Office Address: 5535 Esplanade Street, Columbus, Ohio 43220 | | | | | |
| | | | | | |
| Legal Name of Inv | rentor: | | Kai Tod Paul Jarosch | | |
| Inventor's signature: | K | 6 | favol | Date: | TJ1-10-2014 |
| Residence: (City & Stat | e/Country): | Be | xley, Ohio 43209 | Citizenship: | CA |
| Post Office Address: 839 Vernon Road, Bexley, Ohio 43209 | | | | | |
| | · · | | | | |
| Legal Name of Inventor: Timothy J. LaPlante | | | | | |
| Inventor's signature: | '/-D. | 4 | luto | Date: | 7/28/2014 |
| Residence: (City & Stat | e/Country): | Po | well, Ohio 43065 | Citizenship: | US |
| Post Office Address: 8305 Tricia Price Drive, Powell, Ohio 43065 | | | | | |

| Legal Name of In | ventor: | | Richard Q. Long | · · · · · · · · · · · · · · · · · · · | |
|---|------------------|------|--------------------------------------|---------------------------------------|---|
| Inventor's signature: | T | | | | <i>(11)</i> |
| | Rret | T | Max | Date: | 6/6/2014 |
| Residence: (City & Sta | te/Country): | \\ | ew Albany, Ohio 43054 | Citizenship: | US |
| Post Office Address: | 7375 Tun | nble | ebrook Drive, New Albany, Ohio 43054 | | |
| | <u></u> | | | | |
| Legal Name of In | ventor: | | Terry Mazanec | | |
| Inventor's signature: | | | | Date: | |
| Residence: (City & Star | te/Country): | S | olon, Ohio 44139 | Citizenship: | us |
| Post Office Address: | 7168 Selv | vort | hy Lane, Solon, Ohio 44139 | • | |
| | | | | | |
| Legal Name of Inv | ventor: | | Daniel Francis Ryan | | |
| Inventor's signature: | | | | Date: | |
| Residence: (City & Stat | e/Country): | В | rewster, Massachusetts 02631 | Citizenship: | us |
| Post Office Address: | 245 Old L | ong | Pond Road, Brewster, Massachusetts | 02631 | |
| | | | | | |
| Legal Name of Inventor: Laura J. Silva | | | | | |
| Inventor's signature: Zama Jollen Date: 7-10- | | | 7-10-14 | | |
| Residence: (City & Stat | ate/Country): Dt | | ublin, Ohio 43017 | Citizenship: | US |
| Post Office Address: 5583 Dumfries Court West, Dublin, Ohio 43017 | | | | | , |
| | | | | | |
| Legal Name of Inv | entor: | | Wayne W. Simmons | | |
| Inventor's signature: | | | | Date: | |
| Residence: (City & State | e/Country): | D | ublin, Ohio 43017 | Citizenship: | us |
| Post Office Address: 8870 Tartan Fields Drive, Dublin, Ohio 43017 | | | | | |
| | | | | | |
| Legal Name of Inv | entor: | | Bruce Strangeland | | |
| Inventor's signature: | | | | Date: | |
| Residence: (City & State | e/Country): | Вє | erkeley, California 94708 | Citizenship: | us |
| Post Office Address: | 691 Cragn | non | t Avenue, Berkeley, California 94708 | | |
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|--------------------------|-------------------------------|--|-----------------------------|----------------------|
| Legal Name of In | ventor: | Yong Wang | | |
| Inventor's signature: | 1 | y Wy | Date: | 6/10/2014 |
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| Post Office Address: | 2004 Tro 2866 H | on Gt., Richland, Washington 99352 AwKSTone Ct. | 99354 | |
| Legal Name of In | ventor: | Thomas Yuschak | | |
| Inventor's signature: | 1/ | Dah | Date: | 7/0/14 |
| Residence: (City & Sta | te/Country): | Lewis Center, Ohio 43035 | Citizenship: | US |
| Post Office Address: | 2792 Bold | d Venture Drive, Lewis Center, Ohio 4 | 13035 | |
| Legal Name of In | ventor: | Steven T Perry | | |
| Inventor's signature: | \mathcal{L} | Even T. | Date: | 19 July 2014 |
| Residence: (City & Sta | te/Country): | Galloway, Ohio 43119 | Citizenship: | us |
| Post Office Address: | 8458 Squ 854 Ca | ad Drive, Galloway, Ohio 43119 noe Ln, | | |
| Legal Name of In | ventor: | Jeffrey Dale Marco | | |
| Inventor's signature: | Follo | n Tale Marie | Date: | 7/15/14 |
| Residence: (City & S | te/Country): | South Charleston, Ohio 45368 | Citizenship: | US |
| Post Office Address: | 1 0008 30 | uth Charleston Pike, South Charleston | n, Ohio 15368: don, Ohio | 43140 |
| Legal Name of Inv | /entor: | Michael Alan Marchiando | | |
| Inventor's signature: | · 1/2 | Wilchder Alah Walchiando | Date: | Thank! |
| Residence: (City & Star | e/Country): | London, Ohio 43140 | | <i>9/10/19</i> US |
| Post Office Address: | [| ert Road, London, Ohio 43140 | Citizenship: | 03 |
| r cot office / traineds. | Digg | | | |
| Legal Name of Inv | /entor: | Robert Lewis Litt Robert | - Dwayne | Litt /ROL |
| Inventor's signature: | Robert | Dwayne Litt | Date: | 7/15/14 |
| Residence: (City & Stat | e/Country): | Westerville, Ohio 43081 | Citizenship: | US |
| Post Office Address: | 728 Collin | gwood Drive, Westerville, Ohio 4308 | 1 | |
| | | | | |

Page **6** of **6**

PATENT

| · · · · · · · · · · · · · · · · · · · | | |
|---------------------------------------|--------------|-------------|
| Renner Otto Docket No. | VELOP0112USD | PATENT (US) |
| Treffile Otto Docket No. | VELOPUTIZUSD | PATENT |

COMBINED DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN PATENT APPLICATION

| Title of Invention: | PROCESS AND APPARATUS EMPLOYING MICROCHANNEL PROCESS TECHNOLOGY |
|---------------------|---|
|---------------------|---|

As a below named inventor, I hereby declare that this declaration and assignment are directed to:

| Application No. (Express Mail Label No.) | |
|--|--|
| Filing Date (Deposit Date) | |
| Amended on (if applicable) | |

or, if no application is identified above, the attached application.

DECLARATION

The above application was made or authorized to be made by me.

I believe that I am the original or an original joint inventor of a claimed invention in the application.

My residence, mailing address and citizenship are as stated below next to my name.

I have reviewed and understand the contents of the application, including the claims.

I hereby acknowledge that any willful false statement made in this declaration is punishable under Section 1001 of Title 18 of the United States Code by fine or imprisonment of not more than five (5) year, or both.

DOMESTIC PRIORITY CLAIM FOR BENEFIT OF EARLIER U.S./PCT APPLICATION(S) UNDER 35 U.S.C. § 120

I hereby claim, on my behalf or on behalf of the below-identified Assignee(s), the benefit under 35 U.S.C. § 120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose material information as defined in 37 C.F.R. § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

| U.S. APPLICATION NUMBER | DATE OF FILING (day, month, year) | PATENT NUMBER |
|-------------------------|--------------------------------------|---------------|
| 12/576,458 | 09/10/2009 | |
| | | |

CLAIM FOR BENEFIT OF EARLIER U.S. PROVISIONAL APPLICATION(S) UNDER 35 U.S.C. § 119(e)

I hereby claim, on my behalf or on behalf of the below-identified Assignee(s), the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) that is/are listed below.

Page 1 of 6

| U.S. PROVISIONAL APPLICATION NUMBER | DATE OF FILING (day, month, year) |
|-------------------------------------|--------------------------------------|
| 61/104,432 | 10/10/2008 |
| 61/171,884 | 23/04/2009 |
| 61/234,453 | 17/08/2009 |

I hereby claim, on my behalf or on behalf of the below-identified Assignee(s), priority benefits under 35 U.S.C. § 119 (a)-(d) or (f), § 172 or § 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or § 365(a) of any PCT international application(s) which designated at least one country other than the United States of America, that is/are listed below, and have also identified below any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s) or any PCT international application(s) having a filing date before that of the application(s) on which priority is claimed.

| COUNTRY | APPLICATION NUMBER | DATE OF FILING (day, month, year) | PRIORITY NOT CLAIMED |
|---------|--------------------|--------------------------------------|-------------------------|
| | | | |
| | | | |

DUTY OF DISCLOSURE

I hereby acknowledge the duty to disclose to the Patent and Trademark Office all information known to me to be material to patentability as defined in 37 C.F.R. § 1.56, which in pertinent part states that information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and (1) it establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or (2) it refutes, or is inconsistent with, a position the applicant takes in: (i) opposing an argument of unpatentability relied on by the Office, or (ii) asserting an argument of patentability. A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

ASSIGNMENT

For good and valuable consideration, receipt of which is hereby acknowledged, I have sold and assigned and hereby sell and assign to:

| Assignee(s) | Address |
|---------------|--|
| Velocys, Inc. | 7950 Corporate Blvd. Plain City, Ohio 43064 |

[If more than one assignee is listed, each owns an undivided equal share in the application and underlying invention so far as concerns the United States unless otherwise indicated or agreed to by the assignees.]

and the successors and assigns thereof, the entire right, title and interest to (i) said invention, (ii) said application, (iii) any and all provisional applications on which priority is claimed, any and all related patent applications in the United States or a country foreign thereto, including continuations, continuations-in-part, divisionals, renewals, conversions, substitutes, reexaminations, reissues, convention, international (PCT) and other applications based in whole or in part upon said invention or upon said applications, (iv) any and all patents, including renewals, reissues, certificates of reexamination and extensions thereof granted for said invention or upon said applications, for the full term or terms for which the same may be granted, and (v) all priority rights that are or may be predicated upon or arise from said invention, said applications and said patents.

Page 2 of 6 PATENT

If the application number and filing date are not set forth above, authorization is hereby given for any attorney of record in the subject patent application to insert below the application number and filing date information for this application when that information becomes available.

| 1 | | |
|---|--|--|
| - | Application No. | |
| 1 | | |
| 1 | Filing Date | * |
| | The state of the s | Control of the Contro |

I hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into that would conflict with this assignment and sale

I authorize said Assignee(s) to file in my own name or in its own name applications for patent in any country that are predicated upon or arise from said invention, said applications and said patents.

I appoint said Assignee(s) as my common representative to represent me before all competent International authorities in connection with any international application predicated upon or arising from said invention, said applications and said patents.

I further covenant that Assignee(s) will, upon request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent as may be known and accessible to me and will testify as to the same in any proceeding related thereto and will promptly execute and deliver to Assignee(s), or the legal representative thereof, any and all papers, instruments or affidavits required to apply for, obtain, maintain and enforce said application, said invention and said Letters Patent which may be necessary or desirable to carry out the purposes hereof

I agree to perform all affirmative acts which may be necessary to obtain a grant of a valid U.S. patent and any foreign patents to the Assignee(s) and to vest all rights hereby conveyed to the Assignee(s) as fully and entirely as the same would have been held by me if this Assignment had not been made.

I agree that this assignment shall be construed in accordance with the law of the state/country in which the first above-listed Assignee is located as above indicated, and without regard to its conflicts of laws provisions.

| Legal Name of In | ventor: | Anna Lee Tonkovich | | | ., |
|-------------------------|--------------|---|-------------|---------|---|
| Inventor's signature: | an | - he tout | Date | 6/19/14 | *************************************** |
| Residence: (City & Stal | te/Country): | Gilbert, Arizona 85297 | Cdizenship; | USA | |
| Post Office Address: | | laxton Avenue, Gilbert, Arizona 85297 S. Sພລມ Dr | 7 | | |

| Legal Name of In | ventor: | Ravi Arora | | | |
|------------------------|--------------|-------------------------------------|--------------|---|---------|
| Inventor's signature: | 8 | | Date | 7 | 10/2014 |
| Residence: (City & Sta | te/Country): | New Albany, Ohio 43054 USA | Citizenship: | U | SA |
| Post Office Address: | 7043 Cun | ningham Drive, New Albany, Ohio 430 | 054 USA | | |

| Legal Name of Inv | ventor: | John Brophy | r*· | |
|--|--------------|--|--------------|-------------|
| Inventor's signature: | 4 | ARmy | Date: | 6-6-14 |
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| Post Office Address: | Eagle Farm | nhouse, Northend, Bath BA1 8EW, United | Kingdom | |
| | | | | |
| Legal Name of Inv | ventor: | Francis P. Daly | | |
| Inventor's signature: | Dian | en Voly | Date: | 7-28-2014 |
| Residence: (City & Stat | e/Country): | Waldo Soron Maine 04572 Delaware, Ohio 1301 | Citizenship: | US |
| Post Office Address: | | ranklin Street, Delaware, Ohio 43015 | | |
| <u> </u> | 10100 | Hugusta Rd. | | |
| Legal Name of Inv | entor: | Soumitra Deshmukh | | |
| Inventor's signature: | | 5-RDeshmuph | Date: | 7/10/2014 |
| Residence: (City & Stat | e/Country): | Dublin, Ohio 43016 | Citizenship: | IN |
| Post Office Address: | | | | |
| | | | | |
| Legal Name of Inv | entor: | Maddalena Fanelli | | |
| Inventor's signature: | | | Date: | |
| Residence: (City & Stat | e/Country): | Columbus, Ohio 43220 | Citizenship: | US |
| Post Office Address: | 5535 Espla | nade Street, Columbus, Ohio 43220 | | |
| | | | | |
| Legal Name of Inv | entor: | Kai Jod Paul Jarosch | | |
| Inventor's signature: | fa | Javal | Date: | TJ1-10-2014 |
| Residence: (City & Stat | e/Country): | Bexley, Ohio 43209 | Citizenship: | CA |
| Post Office Address: | 839 Vernor | Road, Bexley, Ohio 43209 | | |
| No. | | | | |
| Legal Name of Inv | ventor: | Timothy J. LaPlante | | |
| Inventor's signature: | | | Date: | |
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| Post Office Address: 8305 Tricia Price Drive, Powell, Ohio 43065 | | | | |

| Legal Name of Inv | entor: | Richard Q. Long | | |
|--------------------------|----------------|--|--------------|----------|
| Inventor's signature: | Rrebo | hos | Date: | 6/6/2014 |
| Residence: (City & State | e/Country): N | ew Albany, Ohio 43054 | Citizenship: | us |
| Post Office Address: | 7375 Tumble | brook Drive, New Albany, Ohio 43054 | | |
| Legal Name of Inv | rentor: | Terry Mazanec | | |
| Inventor's signature: | | | Date: | |
| Residence: (City & State | e/Country): So | olon, Ohio 44139 | Citizenship: | US |
| Post Office Address: | 7168 Selwort | hy Lane, Solon, Ohio 44139 | | |
| 1 1 11 51 | | | | |
| Legal Name of Inv | entor: | Daniel Francis Ryan | | |
| Inventor's signature: | | | Date: | |
| Residence: (City & State | | ewster, Massachusetts 02631 | Citizenship: | US |
| Post Office Address: | 245 Old Long | Pond Road, Brewster, Massachusetts | 02631 | |
| Logol Nome of law | | I and the second | | |
| Legal Name of Inve | | Laura J. Silva | Г | 0 /./ |
| Inventor's signature: | Zam | | Date: | 7-10-14 |
| Residence: (City & State | | ıblin, Ohio 43017 | Citizenship: | US |
| Post Office Address: | 5583 Dumfrie | s Court West, Dublin, Ohio 43017 | | |
| Legal Name of Inve | ontor: | Marra M. Cinna | | |
| | entor. | Wayne W. Simmons | | |
| Inventor's signature: | <u> </u> | ALL OLIVERS | Date: | |
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| Post Office Address: | 8870 Tartan F | Fields Drive, Dublin, Ohio 43017 | | |
| Legal Name of Inve | ontor: | Pruso Strongeland | | |
| | entor. | Bruce Strangeland | | |
| Inventor's signature: | | wholes Oelifere's 04700 | Date: | |
| Residence: (City & State | | rkeley, California 94708 | Citizenship: | US |
| Post Office Address: | 691 Cragmon | t Avenue, Berkeley, California 94708 | | |

| | nventor: | Yong Wang | | |
|---|------------------------------|--|--|------------------------|
| Inventor's signature: | 3 | 2/2 | Date: | 6/10/2011 |
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| Post Office Address: | 2884 Troc 2866 H | on G., Richland, Washington 99352 4 AwK57on | 19354 | |
| Legal Name of In | | Thomas Yuschak | | |
| Inventor's signature: | 1/6 | Dah | Date: | 7/0/14 |
| Residence: (City & Sta | ate/Country): | Lewis Center, Ohio 43035 | Citizenship: | US |
| Post Office Address: | 2792 Bold | Venture Drive, Lewis Center, Ohio 43 | 3035 | |
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| Legal Name of In | ventor: | Steven T, Perry | | |
| Inventor's signature: | 1 /4 | | Date: | 18 Only 2014 |
| Residence: (City & Sta | ate/Country): | Galloway, Ohio 43119 | Citizenship: | Tus Tus |
| Post Office Address: | | a d Drive, Galloway, Ohio 43119 | Charles | 50 |
| | | | | |
| Legal Name of In | ventor: | Jeffrey Dale Marco | | |
| Legal Name of In | ventor: | Jeffrey Dale Marco | Date: | 7/15/14 |
| Inventor's signature: | Toffe | Jeffrey Dale Marco South Charleston, Ohio 45368 | Date: Citizenship: | 7/15/14 US |
| Inventor's signature: | ate/Country): | Tale Marco | Citizenship: | 7/15/14 US |
| Inventor's signature: | ate/Country): | Bouth Charleston, Ohio 45368 Th Charleston Pike, South Charleston | Citizenship: | .1 |
| Inventor's signature: Residence: (City & Sta | 10008 Sou 1855 | Bouth Charleston, Ohio 45368 13140 1th Charleston Pike, South Charleston | Citizenship: | .1 |
| Inventor's signature: Residence: (City & State Post Office Address: Legal Name of Inv | 10008 Sou 1855 | Bouth Charleston, Ohio 45368 Th Charleston Pike, South Charleston | Citizenship: O, Ohio 45368 don, Ohio | .1 |
| Inventor's signature: Residence: (City & State Post Office Address: Legal Name of Inventor's signature: | 10008 Sou 1855 S | Bouth Charleston, Ohio 45368 Oth Charleston Pike, South Charleston Fring Valley Kd., Lone Michael Alan Marchiando | Citizenship: O, Ohio 45368: den, Ohio Date: | 43140 7/10/14 |
| Inventor's signature: Residence: (City & State Post Office Address: Legal Name of Inventor's signature: Residence: (City & State Post Office Address) | te/Country): 10008 Sou 1855 | South Charleston, Ohio 45368 Oth Charleston Pike, South Charleston Michael Alan Marchiando London, Ohio 43140 | Citizenship: O, Ohio 45368 don, Ohio | .1 |
| Inventor's signature: Residence: (City & State Post Office Address: Legal Name of Inventor's signature: | te/Country): 10008 Sou 1855 | Bouth Charleston, Ohio 45368 Oth Charleston Pike, South Charleston Fring Valley Kd., Lone Michael Alan Marchiando | Citizenship: O, Ohio 45368: den, Ohio Date: | 43140 7/10/14 |
| Inventor's signature: Residence: (City & State Post Office Address: Legal Name of Inventor's signature: Residence: (City & State Post Office Address: | ventor: 6009 Bigg | Michael Alan Marchiando London, Ohio 43140 ert Road, London, Ohio 43140 | Citizenship: 1. Ohio 45368: don, Ohio Date: Citizenship: | 43140 7/10/4/ US |
| Inventor's signature: Residence: (City & State Post Office Address: Legal Name of Inventor's signature: Residence: (City & State Post Office Address: Legal Name of Inventor's State Post Office Address: | ventor: 6009 Bigg | Michael Alan Marchiando London, Ohio 43140 ert Road, London, Ohio 43140 | Citizenship: O, Ohio 45368: den, Ohio Date: | 43140 7/10/14 |
| Inventor's signature: Residence: (City & State Post Office Address: Legal Name of Inventor's signature: Residence: (City & State Post Office Address: | ventor: 6009 Bigg | Michael Alan Marchiando London, Ohio 43140 ert Road, London, Ohio 43140 | Citizenship: 1. Ohio 45368: don, Ohio Date: Citizenship: | 43140 7/10/4/ US |

Page 6 of 6

PATENT

| | | • |
|------------------------|--------------|-------------|
| Renner Otto Docket No. | VELOP0112USD | PATENT (US) |

COMBINED DECLARATION AND ASSIGNMENT FOR UTILITY OR DESIGN PATENT APPLICATION

| Title of Invention: | PROCESS AND APPARATUS EMPLOYING MICROCHANNEL PROCESS TECHNOLOGY |
|---------------------|---|
|---------------------|---|

As a below named inventor, I hereby declare that this declaration and assignment are directed to:

| Application No. (Express Mail Label No.) | |
|--|--|
| Filing Date (Deposit Date) | |
| Amended on (if applicable) | |

or, if no application is identified above, the attached application.

DECLARATION

The above application was made or authorized to be made by me.

I believe that I am the original or an original joint inventor of a claimed invention in the application.

My residence, mailing address and citizenship are as stated below next to my name.

I have reviewed and understand the contents of the application, including the claims.

I hereby acknowledge that any willful false statement made in this declaration is punishable under Section 1001 of Title 18 of the United States Code by fine or imprisonment of not more than five (5) year, or both.

DOMESTIC PRIORITY CLAIM FOR BENEFIT OF EARLIER U.S./PCT APPLICATION(S) UNDER 35 U.S.C. § 120

I hereby claim, on my behalf or on behalf of the below-identified Assignee(s), the benefit under 35 U.S.C. § 120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose material information as defined in 37 C.F.R. § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

| U.S. APPLICATION NUMBER | DATE OF FILING (day, month, year) | PATENT NUMBER |
|-------------------------|--------------------------------------|---------------|
| 12/576,458 | 09/10/2009 | |
| | | |

CLAIM FOR BENEFIT OF EARLIER U.S. PROVISIONAL APPLICATION(S) UNDER 35 U.S.C. § 119(e)

I hereby claim, on my behalf or on behalf of the below-identified Assignee(s), the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) that is/are listed below.

| U.S. PROVISIONAL APPLICATION NUMBER | DATE OF FILING (day, month, year) |
|-------------------------------------|--------------------------------------|
| 61/104,432 | 10/10/2008 |
| 61/171,884 | 23/04/2009 |
| 61/234,453 | 17/08/2009 |

I hereby claim, on my behalf or on behalf of the below-identified Assignee(s), priority benefits under 35 U.S.C. § 119 (a)-(d) or (f), § 172 or § 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or § 365(a) of any PCT international application(s) which designated at least one country other than the United States of America, that is/are listed below, and have also identified below any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s) or any PCT international application(s) having a filing date before that of the application(s) on which priority is claimed.

| COUNTRY | APPLICATION NUMBER | DATE OF FILING (day, month, year) | PRIORITY NOT CLAIMED |
|---------|--------------------|--------------------------------------|-------------------------|
| | | | |
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DUTY OF DISCLOSURE

I hereby acknowledge the duty to disclose to the Patent and Trademark Office all information known to me to be material to patentability as defined in 37 C.F.R. § 1.56, which in pertinent part states that information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and (1) it establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or (2) it refutes, or is inconsistent with, a position the applicant takes in: (i) opposing an argument of unpatentability relied on by the Office, or (ii) asserting an argument of patentability. A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

ASSIGNMENT

For good and valuable consideration, receipt of which is hereby acknowledged, I have sold and assigned and hereby sell and assign to:

| Assignee(s) | Address |
|---------------|--|
| Velocys, Inc. | 7950 Corporate Blvd. Plain City, Ohio 43064 |

[If more than one assignee is listed, each owns an undivided equal share in the application and underlying invention so far as concerns the United States unless otherwise indicated or agreed to by the assignees.]

and the successors and assigns thereof, the entire right, title and interest to (i) said invention, (ii) said application, (iii) any and all provisional applications on which priority is claimed, any and all related patent applications in the United States or a country foreign thereto, including continuations, continuations-in-part, divisionals, renewals, conversions, substitutes, reexaminations, reissues, convention, international (PCT) and other applications based in whole or in part upon said invention or upon said applications, (iv) any and all patents, including renewals, reissues, certificates of reexamination and extensions thereof granted for said invention or upon said applications, for the full term or terms for which the same may be granted, and (v) all priority rights that are or may be predicated upon or arise from said invention, said applications and said patents.

Page 2 of 6

If the application number and filing date are not set forth above, authorization is hereby given for any attorney of record in the subject patent application to insert below the application number and filing date information for this application when that information becomes available.

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I hereby coverant that no assignment, sale, agreement or encumbrance has been or will be made or entered into that would conflict with this assignment and sale

I authorize said Assignee(s) to file in my own name or in its own name applications for patent in any country that are predicated upon or arise from said invention, said applications and said patents.

I appoint said Assignee(s) as my common representative to represent me before all competent International authorities in connection with any international application predicated upon or arising from said invention, said applications and said patents.

I further covenant that Assignee(s) will, upon request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent as may be known and accessible to me and will testify as to the same in any proceeding related thereto and will promptly execute and deliver to Assignee(s), or the legal representative thereof, any and all papers, instruments or affidavits required to apply for, obtain, maintain and enforce said application, said invention and said Letters Patent which may be necessary or desirable to carry out the purposes hereof

I agree to perform all affirmative acts which may be necessary to obtain a grant of a valid U.S. patent and any foreign patents to the Assignee(s) and to vest all rights hereby conveyed to the Assignee(s) as fully and entirely as the same would have been held by me if this Assignment had not been made.

I agree that this assignment shall be construed in accordance with the law of the state/country in which the first above-listed Assignee is located as above indicated, and without regard to its conflicts of laws provisions.

| Legal Name of In | ventor: | Anna Lee Tonkovich | | |
|------------------------|--------------|---|-------------|---------|
| Inventor's signature: | an | - he tout | Date | 6/19/14 |
| Residence: (City & Sta | te/Country): | Gilbert, Arizona 85297 | Cdizenship: | USA |
| Post Office Address: | | laxton Avenue, Gilbert, Arizona 8529 5. Swall Dr | 97 | |

| Legal Name of In | ventor: | Ravi Arora | | | |
|------------------------|--------------|------------------------------------|--------------|-----------|--|
| Inventor's signature: | X | Act | Date: | 7/10/2014 | |
| Residence: (City & Sta | te/Country): | New Albany, Ohio 43054 USA | Citizenship: | USA | |
| Post Office Address: | 7043 Cun | ningham Drive, New Albany, Ohio 43 | 054 USA | | |

| Legal Name of Inv | entor: | John Brophy | | |
|--------------------------|---------------|---|--------------|--|
| Inventor's signature: | | Rugary | Date: | 6-6-14 |
| Residence: (City & State | e/Country): B | ath, United Kingdon | Citizenship: | GB |
| Post Office Address: | Eagle Farmh | ouse, Northend, Bath BA1 8EW, United | d Kingdom | |
| Legal Name of Inv | | Face 25 D.D.I. | | |
| | entor: | Francis P. Daly | T T | |
| Inventor's signature: | | | Date: | |
| Residence: (City & State | | elaware, Ohio 43015 | Citizenship: | US |
| Post Office Address: | 188 North Fr | anklin Street, Delaware, Ohio 43015 | | |
| Logol Name of Inv | | O | | |
| Legal Name of Inv | | Soumitra Deshmukh | T T | |
| Inventor's signature: | 1 | RDeshnuph | Date: | 7/10/2014 |
| Residence: (City & State | | Oublin, Ohio 43016 | Citizenship: | IN |
| Post Office Address: | | View Drive, Dublin, Ohio 43016 DITLES GROVE BLVD BROUGHT | upl | |
| | | OTTLES GROVE BLYD GROWN | | , |
| Legal Name of Inv | entor: | Maddalena Fanelli | | |
| Inventor's signature: | | | Date: | |
| Residence: (City & State | e/Country): C | olumbus, Ohio 43220 | Citizenship: | US |
| Post Office Address: | 5535 Esplana | ade Street, Columbus, Ohio 43220 | | |
| | | | | The second state of the second |
| Legal Name of Inv | entor: | Kai Tod Paul Jarosch | | |
| Inventor's signature: | K | Twood | Date: | JJ1-10-2014 |
| Residence: (City & State | e/Country): B | exley, Ohio 43209 | Citizenship: | CA |
| Post Office Address: | 839 Vernon F | Road, Bexley, Ohio 43209 | | |
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| Legal Name of Inv | entor: | Timothy J. LaPlante | | |
| Inventor's signature: | | | Date: | |
| Residence: (City & State | e/Country): P | owell, Ohio 43065 | Citizenship: | US |
| Post Office Address: | 8305 Tricia F | rice Drive, Powell, Ohio 43065 | 1 | |

| / | | | | | |
|--------------------------|---------------------------------------|-------------|-------------------------------------|--------------|----------|
| Legal Name of In | ventor: | | Richard Q. Long | | |
| Inventor's signature: | Rreto | | hos | Date; | 6/6/2014 |
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| Legal Name of In | ventor: | | Terry Mazanec | | |
| Inventor's signature: | | | | Date: | |
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| Post Office Address: | 7168 Selw | orti | ny Lane, Solon, Ohio 44139 | 1 | |
| Legal Name of Inv | ventor: | | Daniel Francis Ryan | | |
| Inventor's signature: | | | | Date: | |
| Residence: (City & Stat | te/Country): | Br | ewster, Massachusetts 02631 | Citizenship: | US |
| Post Office Address: | 245 Old Lo | ng | Pond Road, Brewster, Massachusetts | 02631 | |
| | · · · · · · · · · · · · · · · · · · · | | | | |
| Legal Name of Inv | entor: | | Laura J. Silva | | |
| Inventor's signature: | Zau | 4 | a Jolen | Date: | 7-10-14 |
| Residence: (City & Stat | e/Country): | Du | blin, Ohio 43017 | Citizenship: | us |
| Post Office Address: | 5583 Dum | fries | S Court West, Dublin, Ohio 43017 | | |
| | , | - | | | |
| Legal Name of Inv | 1/2 | | Wayne W. Simmons | | |
| Inventor's signature: | Way | U | V. Simmon | Date: | 8-22-14 |
| Residence: (City & Stat | e/Country/. | Dι | ublin, Ohio 43017 | Citizenship: | us |
| Post Office Address: | 8870 Tarta | n F | ields Drive, Dublin, Ohio 43017 | | |
| 1 1 N | | 1 | | | |
| Legal Name of Inv | rentor: | | Bruce Strangeland | | |
| Inventor's signature: | - 1 | | | Date: | |
| Residence: (City & State | | | keley, California 94708 | Citizenship: | US |
| Post Office Address: | 691 Cragm | ont | Avenue, Berkeley, California 94708 | | |
| | | | | | |

| Legal Name of In | ventor: | Yong Wang | | |
|--|---|--|---|------------------------|
| Inventor's signature: | 3 | 2/2 | Date: | 6/10/201 |
| Residence: (City & Sta | ite/Country): | Richland, Washington 99352 | Citizenship: | US |
| Post Office Address: | 2864 Troc | on Gt., Richland, Washington 99352 Aw Kstone Ct | 19354 | |
| Legal Name of In | ventor: | Thomas Yuschak | | |
| Inventor's signature: | 1/2 | Dah | Date: | 7/0/14 |
| Residence: (City & Sta | te/Country): | Lewis Center, Ohio 43035 | Citizenship: | US |
| Post Office Address: | 2792 Bold | Venture Drive, Lewis Center, Ohio 43 | 3035 | |
| Legal Name of Inv | ventor: | Steven T, Perry | | |
| Inventor's signature: | B | even T. D | Date: | 18 July 2014 |
| Residence: (City & Stat | te/Country): | Galloway, Ohio 43119 | Citizenship: | Tus |
| | I | | ·· | |
| Post Office Address: | 8458 Sque 854 Can | ad Drive, Galloway, Ohio 43119 noe Ln, | | |
| Post Office Address: Legal Name of Inv | 854 Can | Jeffrey Dale Marco | | |
| | 854 Can | noe Ln, St. | Date: | 7/15/14 |
| Legal Name of Inv | ventor: | noe Ln, St. | Date: Citizenship: | 7/15/14 US |
| Legal Name of Inv | ventor: | Jeffrey Dale Marco South Charleston, Ohio 45368 Th Charleston Pike, South Charleston | Citizenship: | |
| Legal Name of Inv Inventor's signature: Residence: (City & Stat | /entor: //e/Country): 10008 Soci | Jeffrey Dale Marco South Charleston, Ohio 45368 Th Charleston Pike, South Charleston | Citizenship: | |
| Legal Name of Invalidation Inventor's signature: Residence: (City & State Post Office Address: | /entor: //e/Country): 10008 Soci | Jeffrey Dale Marco South Charleston, Ohio 45368 Oth Charleston Pike, South Charleston Pring Valley Ld., Long | Citizenship: | |
| Legal Name of Inventor's signature: Residence: (City & State Post Office Address: Legal Name of Inv | /entor: 10008 Society: | Jeffrey Dale Marco South Charleston, Ohio 45368 Oth Charleston Pike, South Charleston Pring Valley Ld., Long | Citizenship: 1, Ohio 45368 2001, Ohio | |
| Legal Name of Invalidation Inventor's signature: Residence: (City & State Post Office Address: Legal Name of Inventor's signature: | ventor: 10008 Society (Country): 10008 Society (Country): | Jeffrey Dale Marco South Charleston, Ohio 45368 Oth Charleston Pike, South Charleston Michael Alan Marchiando | Citizenship: 1, Ohio 45368 2 on , Ohio Date: | 43140 7/10/14 |
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