PATENT ASSIGNMENT

Electronic Version v1.1

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| SUBMISSION TYPE | E: NEW ASSIGNMENT | | | |
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| NATURE OF CONV | 'EYANCE: | ASSIGNMENT | ASSIGNMENT | |
| CONVEYING PART | Y DATA | | | |
| | | Name | Execution Date | |
| Alan T. Y. Cheng | | | 09/20/2012 | |
| Ying Zhou | | | 09/20/2012 | |
| Amitabh Gupta | | | 09/21/2012 | |
| Balazs Hunek | | | 09/20/2012 | |
| Nigel Grinter | | | 09/11/2012 | |
| | / DATA | | | |
| Name: | | CHNOLOGY, INC. | | |
| Street Address: | 39 Old Ridge | 39 Old Ridgebury Road | | |
| City: | Danbury | | | |
| State/Country: | | ONNECTICUT | | |
| Postal Code: | 06810 | | | |
| PROPERTY NUMB Property | | Numb | Der | |
| Application Numbe | lication Number: 13559957 | | | |
| CORRESPONDENC Fax Number: <i>Correspondence wi</i> Phone: Email: Correspondent Nan | 203837/ <i>Il be sent via US</i> 203-837 Praxair_ ne: PRAXA | <i>Mail when the fax attempt is unsuccess</i> -2292 IP@Praxair.com R, INC. LAW DEPARTMENT RIDGEBURY ROAD | ful. | |
| Address Line 1: Address Line 4: | | RY, CONNECTICUT 06810 | | |
| Address Line 1: | DANBU | RY, CONNECTICUT 06810 083030-CIP1-US | | |
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ASSIGNMENT OF INVENTION, PRIORITY RIGHTS AND RIGHTS TO APPLY FOR PATENTS

We, the undersigned,

| NAME | RESIDING AT | OCCUPATION | <u>CITIZENSHIP</u> |
|------------------|---|---------------------------------------|--------------------|
| ALAN T. Y. CHENG | 2519 Bangert Lane Naperville, IL 60564 | Senior Development Associate | US |
| YING ZHOU | 2043 Spice Circle Naperville, IL 60565 | Development Spec. II | US |
| AMITABH GUPTA | 2215 Sisters Avenue Naperville, IL 60564 | Director R&D | US |
| BALAZS HUNEK | 4600 Woodland Avenue Western Springs, IL 60558 | R&D Director | US |
| NIGEL GRINTER | 470 Trinity Court Buffalo Grove, IL 60089 | BioPharm. Program Development Mgr. | US |

believing that we are the original, first and true inventors of an invention for:

BIOREACTOR WITH UPWARD FLOWING IMPELLER SYSTEM FOR USE IN A MAMMALIAN CELL CULTURE PROCESS

as described and/or claimed in our application for Letters Patent in the United States of America, filed on July 27, 2012, Serial No. 13/559.957, Attorney Docket No. 083030-CIP1-US, (claiming priority to U.S. Patent Application Serial No. 12/536,559, filed on August 6, 2009, Attorney Docket No. 083030 which claims priority to Provisional Patent Application Serial Nos. 61/086,665 and 61/086,685, both filed August 6, 2008).

NOW, THEREFORE, for good and valuable consideration, the receipt of which is acknowledged and in fulfillment of our pre-existing obligations of assignment;

WE DO HEREBY ASSIGN AND TRANSFER our entire right, title, and interest in and to said invention and application unto

PRAXAIR TECHNOLOGY, INC.

a corporation organized and existing under the laws of the State of Delaware, United States of America, its successors and nominees, having an office at 39 Old Ridgebury Road, Danbury, Connecticut 06810, United States of America, as the Assignee, without any restrictions, reservations or limitations, the entire right, title and interest in and to the aforesaid application for Letters Patent and all patents which may be granted thereon, and all applications claiming priority thereof including all divisions, continuations, continuations, in-part, reissues and extension thereof;

PATENT REEL: 029034 FRAME: 0925

1

INCLUDING ALL RIGHTS in and to said invention in any country of the world, including, but not limited to, all priority rights derived from the aforesaid application for Letters Patent by virtue of the International Convention for the Protection of Industrial Property and for any and all member countries of the aforesaid International Convention;

AND FURTHER INCLUDING THE SOLE RIGHT to file such applications under the Patent Laws of any country of the world in its name and/or ours, and the sole right to have patents granted on said applications in its name and/or ours to the full end of the term for which said patents may be granted as fully and entirely as the same would have been held by us had this assignment not been made, and to enforce said patents with our right to sue in any court of competent jurisdiction and obtain all remedies available, including but not limited to injunctions and to recover lost profits or compensatory and enhanced damages and attorneys fee for any and all infringements thereof;

AND we authorize insertion of the appropriate identification information above and agree that we will communicate to said PRAXAIR TECHNOLOGY, INC. or its representatives any facts known to us respecting said invention and testify in legal proceedings, sign all lawful papers, execute all divisional, continuing, continuation-in-part, extensions and reissue applications, make all rightful oaths and generally do everything possible to aid said PRAXAIR TECHNOLOGY, INC. its successors, assigns, or nominees, to obtain and enforce proper protection for said invention in all countries.

| Praxair, Inc. 7000 High Grove Boulevard Burr Ridge, IL 60527-7595 this 20 this | |
|--|----------|
| day of <u>Saptambar</u> , 2012. ALANT. V/CHENG | telani). |
| State of <u>Jupage</u> County of <u>Jupage</u> This <u>A040</u> day of <u>Sophembac</u> , 2012, before me personally came the above-named <u>Alan T. Y. Cheng</u> to me personally known as the individual who executed the foregoing assignment, who has acknowledged to me that he/she executed the same of his/her own free will for the purposes therein set forth. | |

Tonya Y Sonnier Notary Public Seat State of Indiana Leke County My Commission Expires 06/07/2013

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Praxair, Inc. 7000 High Grove Boulevard Burr Ridge, IL 60527-7595

this

day of Saptambar, 2012.

SIGNED AND SEALED AT

lou 9/20/2

YING ZHOU

| State of <u>JIIInOiS</u> |) |
|--------------------------|-------|
| County of Du Page |) ss: |
| | |

This <u> 30^{th} </u> day of <u>Sapharybay</u>, 2012, before me personally came the above-named <u>Ving Zhou</u> to me personally known as the individual who executed the foregoing assignment, who has acknowledged to me that he/she executed the same of his/her own free will for the purposes therein set forth.

> Tonya Y Sonnier Notary Public Seal State of Indiana Lake Coumy My Commission Expires 08/07/2013

9/20/10 Notary Public

| SIGNED AND SEALED AT _ | Shenghii, Raxar, | <u>China</u> this <u>21</u> ⁵⁺ |
|-------------------------|------------------|---|
| day of <u>Ceptember</u> | , 2012. | A the Gt |
| | | AMIŤABH GUPTA |

| State of |) | |
|-----------|---|-----|
| |) | SS: |
| County of |) | |

This ______ day of ______, 2012, before me personally came the above-named **Amitabh Gupta** to me personally known as the individual who executed the foregoing assignment, who has acknowledged to me that he/she executed the same of his/her own free will for the purposes therein set forth.

4

Notary Public

PATENT REEL: 029034 FRAME: 0928

Praxair, Inc. 7000 High Grove Boulevard Burr Ridge, IL 60527-7595

20th this

day of Saptambar, 2012.

SIGNED AND SEALED AT ___

BALAZS HUNEK

| State of $\underline{\Box}$ 110015 | |
|------------------------------------|-------------|
| Contract Dis Doce | SS : |
| County of <u>Julaqe</u>) | |

This $\underline{\partial O^{+}}$ day of $\underline{\partial D_{+}}$, 2012, before me personally came the above-named <u>Balazs Hunek</u> to me personally known as the individual who executed the foregoing assignment, who has acknowledged to me that he/she executed the same of his/her own free will for the purposes therein set forth.

Tonya Y Sonnier Notary Public Seal State of Indiana Lake County My Commission Expires 06/07/2013

Honne 9/20/12 Notary Public Jon

| SIGNED AND SEALED A | | this 11 A | |
|-------------------------|---------|--|---------------|
| day of <u>Ceptember</u> | , 2012. | Real and the second sec | Ronger " |
| | | NIGEL GRINTER | Manufacture . |
| State of | × | | |
| County of |) ss: | | |
| (11) · · · | ×ر ۲ | A010 1 C 11 | |

This ______ day of ______, 2012, before me personally came the above-named <u>Nigel Grinter</u> to me personally known as the individual who executed the foregoing assignment, who has acknowledged to me that he/she executed the same of his/her own free will for the purposes therein set forth.

Notary Public

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PATENT REEL: 029034 FRAME: 0930

RECORDED: 09/25/2012