PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

| Name | Execution Date |
|-------------------------|----------------|
| John Fredric Billingham | 08/26/2002 |
| Jerry Michael Mahl | 09/09/2002 |

RECEIVING PARTY DATA

| Name: | Praxair Technology, Inc. |
|-----------------|--------------------------|
| Street Address: | 39 Old Ridgebury Road |
| City: | Danbury |
| State/Country: | CONNECTICUT |
| Postal Code: | 06810 |

PROPERTY NUMBERS Total: 1

| Property Type | Number | |
|---------------------|----------|--|
| Application Number: | 11483105 | |

CORRESPONDENCE DATA

 Fax Number:
 (203)837-2545

 Phone:
 203-837-2253

Email: Ruth_Schreiber@Praxair.com

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

US Mail.

Correspondent Name: Praxair, Inc.

Address Line 1: 39 Old Ridgebury Road

Address Line 4: Danbury, CONNECTICUT 06810

ATTORNEY DOCKET NUMBER: 21142-D1

NAME OF SUBMITTER: Ruth A. Schreiber

Total Attachments: 4

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> PATENT REEL: 027003 FRAME: 0825

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ASSIGNMENT OF INVENTION, PRIORITY RIGHTS AND RIGHTS TO APPLY FOR PATENTS

| We, the undersigned, , John Fredric Billingham, an Engineer and Citizen of the United Kingdom, |
|---|
| residing at 19 Daven Drive, Getzville, NY 14068 and Jerry Michael Mahl, a Technician and Citizen of |
| the United States of America, residing at 15 Porter Center Ext., Youngstown, Wilson, NY 14174 |
| |
| |
| HEREBY STATE UNDER OATH that we are the original, first and true inventors of an invention for PROCESS AND SYSTEM FOR PURIFYING GASES |
| |
| as described and/or claimed in our application for Letters Patent in the` United States of America, |
| executed on the 26 + 9 day of Oug. + Dept., 2001, (Docket No. D-21142). |
| |

NOW, THEREFORE, in consideration of our employment by Praxair, Inc. manufacturers, a corporation organized and existing under the laws of the State of Delaware, United States of America, having an office at 39 Old Ridgebury Road, Danbury, Connecticut 06810-5113, United States of America, and in fulfillment of our pre-existing obligation of assignment to our employer,

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

PRAXAIR TECHNOLOGY, INC.

technology licensors, 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 and being a wholly owned subsidiary of the said Praxair, Inc., 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 divisions, continuations, continuations-in-part, reissues and extension thereof;

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 AUTHORIZE our attorney of record to insert below in this instrument the serial number and filing date of said application;

PATENT REEL: 027003 FRAME: 0826 AND AUTHORIZE AND REQUEST the Commissioner of Patents and Trademarks to issue all patents on said invention resulting therefrom to said PRAXAIR TECHNOLOGY, INC. as Assignee of the entire right, title and interest, and covenant that we have the full right so to do, 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.

| SIGNED AND SEALED AT Tonework | la Ny this 26 |
|--|--|
| day of Cugust, 2002 | , |
| WITNESSES: | 1 |
| 1. Julie a. Dommin | John Fridand L |
| 2. Thun Achang | JOHN FREDRIC BILLING AM |
| State New York | |
| County of Eig.) ss: | |
| This 26 day of Oug | , 2001, before me personally |
| came the above-named <u>John Frederic Billingham</u> personally known as the individual who executed the facknowledged to me that he/she executed the same of forth. | to me foregoing assignment, who has his/her own free will for the purposes therein set |
| (Seai) | Notary Public Notary Public Notary Public, State of New York Qualified in Eria County My Commission Expires 4/5/03 |

PATENT REEL: 027003 FRAME: 0827

| SIGNED AND SEALED AT Tonow | canda, NY this 9 |
|--|---|
| day of <u>Sept</u> ., 2002. | |
| WITNESSES: | |
| 1. Julie a Demmin 2. Ann Achanga | JERRY MICHARL MAHL |
| State of New York) ss: County of Erie) | |
| This 9 day of Sept | 5. , 2002, before me personally came the |
| above-named <u>Jerry Michael Mahl</u> personally known as the individual who executed the me that he/she executed the same of his/her own free | to me foregoing assignment, who has acknowledged to |
| | Julia a. Dammin Notary Public |
| (Seal) SIGNED AND SEALED AT | HULIE A. DEMIMIN Otery Public, State of New York Qualified in Erie County My Commission Expires 4/5/03 this |
| | |
| day of, 200 2 | |
| WITNESSES: | |
| 1 | |
| 2 | |
| State of) ss: | |
| County of) | |
| This day of | , 200 2 before me personally came the |
| above-named | foregoing assignment, who has acknowledged to will for the purposes therein set forth. |
| | |
| | Notary Public |

(Seal)

PATENT

REEL: 027003 FRAME: 0828

ACCEPTANCE

WE, the undersigned, PRAXAIR TECHNOLOGY, INC. of 39 Old Ridgebury Road, Danbury, Connecticut 06810, United States of America, do hereby declare that we have accepted the foregoing assignment.

| Danbury, Connecticut, U.S.A. <u>September 17</u> , 2002 | | |
|--|--|--|
| (Seal) | PRAXAIR TECHNOLOGY, INC. | |
| Christina Monnon. Witnesso : La Carrella | By: | |
| Witness: Witness: | Robert G. Hohenstein Authorized Agent | |
| The application identified above as Docket No. <u>D-21</u> | | |
| and Trademark Office on June 20 | , 200 1 and was given Serial Number | |
| 10/174,819 | | |
| This insertion was made by me this17th day of | September, 2002. | |
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| | Valent 1 Goldet | |

Attorney for Applicants Reg. No. 39,566

Robert J. Follett

As signment PTI. doc

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RECORDED: 10/03/2011