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To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

<div>1. Name of conveying party(ies): Arun Acharya, Bayram Arman, Richard C. Fitzgerald, James J. Volk, John Henri Royal</div> <div>Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</div> <div>3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other</div> <div>Execution Date: <u>March 5 & 8, 2004</u></div>	<div>2. Name and address of receiving party(ies) Name: <u>PRAXAIR TECHNOLOGY, INC.</u> Internal Address: _____ _____ _____ Street Address: <u>39 Old Ridgebury Road</u> _____ _____ City: <u>Danbury</u> State: <u>CT</u> Zip: <u>06810</u> Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</div>
<div>4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: _____ A. Patent Application No.(s) Serial No. <u>10/796,112</u> Filed: <u>3/10/04</u> Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</div>	
<div>5. Name and address of party to whom correspondence concerning document should be mailed: Name: <u>Joann M. Jelsa</u> Internal Address: _____ <u>Praxair, Inc.</u> <u>Law Department - M1 557</u> Street Address: <u>39 Old Ridgebury Road</u> _____ _____ City: <u>Danbury</u> State: <u>CT</u> Zip: <u>06810</u></div>	<div>6. Total number of applications and patents involved: <input checked="" type="checkbox"/> 1</div> <div>7. Total fee (37 CFR 3.41).....\$ <u>40.00</u> <input type="checkbox"/> Enclosed <input checked="" type="checkbox"/> Authorized to be charged to deposit account</div> <div>8. Deposit account number: <u>16-2440</u> (Attach duplicate copy of this page if paying by deposit account)</div>
<div>9. Statement and signature. <i>To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</i> <u>Stanley Ktorides, Reg. No. 29,399</u> Name of Person Signing <u>Stanley Ktorides</u> Signature <u>3-22-04</u> Date Total number of pages including cover sheet, attachments, and documents: <input checked="" type="checkbox"/> 6</div>	

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Mail documents to be recorded with required cover sheet information to:
Commissioner of Patents & Trademarks, Box Assignments
Washington, D.C. 20231

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

We, the undersigned, Arun Acharya, Engineer and Citizen of the United States of America,
residing at 85 Twilight Lane, East Amherst, New York 14051; Bayram Arman, Engineer and Citizen of
the United States of America, residing at 16 The Commons, Grand Island, New York 14072;
Richard C. Fitzgerald, Engineer and Citizen of the United States of America, residing at 5221 East
Park Drive, Grand Island, New York 14072; James J. Volk, Engineer and Citizen of the United States
of America, residing at 4384 Homestead Lane, Clarence, New York 14031 and John Henri Royal,
Engineer and Citizen of the United States of America, residing at 102 Settlers Row, Grand Island,
New York 14072,

HEREBY STATE UNDER OATH that we are the original, first and true inventors of an invention
 for LOW FREQUENCY PULSE TUBE SYSTEM WITH OIL-FREE DRIVE
 as described and/or claimed in our application for Letters Patent in the United States of America,

executed on the 5+8 day of March, 2004, (Docket No. D-21396).

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;

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 Tonawanda, NY this 8
day of March, 2004.

WITNESSES: Julie A. Demmin
1. ~~Arun Acharya~~
2. Nancy J Haywood

Arun Acharya
ARUN ACHARYA

State New York)
County of Erie) ss:

This 8 day of March, 2004, before me personally

came the above-named Arun Acharya
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.

(Seal)

Julie A. Demmin
Notary Public
JULIE A. DEMMIN
Notary Public, State of New York
Qualified in Erie County
My Commission Expires 4/5/07

SIGNED AND SEALED AT Tonawanda, NY this 5

day of March, 2004.

WITNESSES:

1. Julie A. Demmin
2. Greg W. Hengst

Bayram Arman
BAYRAM ARMAN

State of New York)
County of Erie) ss:

This 5 day of March, 2004, before me personally came the

above-named Bayram Arman
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.

(Seal)

Julie A. Demmin
Notary Public
JULIE A. DEMMIN
Notary Public, State of New York
Qualified in Erie County
My Commission Expires 4/5/07

SIGNED AND SEALED AT Tonawanda, NY this 5

day of March, 2004.

WITNESSES:

1. Julie A. Demmin
2. Greg W. Hengst

Richard C. Fitzgerald
RICHARD C. FITZGERALD

State of New York)
County of Erie) ss:

This 5 day of March, 2004, before me personally came the

above-named Richard C. Fitzgerald
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.

(Seal)

Julie A. Demmin
Notary Public
JULIE A. DEMMIN
Notary Public, State of New York
Qualified in Erie County
My Commission Expires 4/5/07

SIGNED AND SEALED AT Tonawanda, NY this 5

day of March, 2004.

WITNESSES:

1. Julie A. Demmin

2. Greg W. Henry

James J. Volk
JAMES J. VOLK

State of New York)
County of Erie) ss:

This 5 day of March, 2004, before me personally came the

above-named James J. Volk

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.

(Seal)

Julie A. Demmin
Notary Public
JULIE A. DEMMIN
Notary Public, State of New York
Qualified in Erie County
My Commission Expires 4/5/07

SIGNED AND SEALED AT Tonawanda, NY this 5

day of March, 2004.

WITNESSES:

1. Julie A. Demmin

2. Greg W. Henry

John Henri Royal
JOHN HENRI ROYAL

State of New York)
County of Erie) ss:

This 5 day of March, 2004, before me personally came the

above-named John Henri Royal

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.

(Seal)

Julie A. Demmin
Notary Public
JULIE A. DEMMIN
Notary Public, State of New York
Qualified in Erie County
My Commission Expires 4/5/07

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. March 22, 2004

(Seal).

PRAXAIR TECHNOLOGY, INC.

Isabella K. Giacalone
Witness:

By: Joann M. Jelsa
Joann M. Jelsa
Authorized Agent

Christina Monro
Witness:

The application identified above as Docket No. D-21396 was filed in the United States Patent and Trademark Office on March 10, 2004 and was given Serial Number 10/796,112.

This insertion was made by me this 22nd day of March, 2004.

Stanley Klorides
Stanley Klorides
Reg. No. 29,399
Attorney For Applicants

AssignmentPTI.doc