

11-03-2000



101505780

RECORDATION FORM COVER SHEET
PATENTS ONLY

TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).

Submission Type

9.29.00

Conveyance Type

New

Resubmission (Non-Recordation)
Document ID#

Correction of PTO Error
Reel # Frame #

Corrective Document
Reel # Frame #

Assignment Security Agreement

License Change of Name

Merger Other

U.S. Government
(For Use ONLY by U.S. Government Agencies)

Departmental File Secret File

U.S. PTO
09/16/99
101505780

Conveying Party(ies)

Mark if additional names of conveying parties attached

Name (line 1) Johnson, Mark C.

Execution Date
Month Day Year
09 28 2000

Name (line 2)

Second Party

Name (line 1) Russel, Eric R.

Execution Date
Month Day Year
09 28 2000

Name (line 2)

Receiving Party

Mark if additional names of receiving parties attached

Name (line 1) Phoenix Analysis and Design Technologies

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 2)

Address (line 1) 1465 N. Fiesta Blvd., Suite 107

Address (line 2)

Address (line 3) Gilbert Arizona 85233
City State/Country Zip Code

Domestic Representative Name and Address

Enter for the first Receiving Party only.

Name

Address (line 1)

Address (line 2)

Address (line 3)

Address (line 4)

FOR OFFICE USE ONLY

Correspondent Name and Address

Area Code and Telephone Number

(480) 894-2517

Name Farmer, James L.

Address (line 1) 511 E. Concorda

Address (line 2) Tempe, AZ 85282

Address (line 3)

Address (line 4)

Pages

Enter the total number of pages of the attached conveyance document including any attachments.

2

Application Number(s) or Patent Number(s)

Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

Patent Number(s)

If this document is being filed together with a new Patent Application, enter the date the patent application was

Month Day Year
09 29 2000

Patent Cooperation Treaty (PCT)

Enter PCT application number only if a U.S. Application Number has not been assigned.

PCT		PCT		PCT	
PCT		PCT		PCT	

Number of Properties

Enter the total number of properties involved.

1

Fee Amount

Fee Amount for Properties Listed (37 CFR 3.41): \$

40.00

Method of Payment:
Deposit Account

Enclosed Deposit Account

(Enter for payment by deposit account or if additional fees can be charged to the account.)

Deposit Account Number:

#

Authorization to charge additional fees:

Yes No

Statement and Signature

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. Charges to deposit account are authorized, as indicated herein.

James L. Farmer

Name of Person Signing



Signature

September 29, 2000

Date

RECORDATION FORM COVER SHEET
CONTINUATION
PATENTS ONLY

Conveying Party(ies)

Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Name (line 1) Addink, Jason L.

Execution Date
Month Day Year
09/28/2000

Name (line 2)

Name (line 1) Rosales, Jorge L.

Execution Date
Month Day Year
09/28/2000

Name (line 2)

Name (line 1) Rogers, Bradley B.

Execution Date
Month Day Year
09/28/2000

Name (line 2)

U.S. PTO
09/28/00
09/28/00

Receiving Party

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Name (line 1)

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Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3) City State/Country Zip Code

Name (line 1)

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Address (line 2)

Address (line 3) City State/Country Zip Code

Application Number(s) or Patent Number(s)

Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

Patent Number(s)

**Assignment of Rights, Title and Interest in Invention
(Multiple inventors; single assignee)**

Docket No.
1003

This is an Assignment of the following rights, title and interest: (check all that apply):

United States of America rights, title and interest in the invention

Foreign rights, title and interest in the invention

United States Patent Application Serial No. _____

Date of Execution: _____ *Date of Filing:* _____

United States Provisional Patent Application Serial No. _____

United States Patent No(s). _____

International (PCT) Patent Application Serial No. _____

Other (specify) _____

Title of the Invention

UNITARY SLIDING VANE COMPRESSOR-EXPANDER AND ELECTRICAL GENERATION SYSTEM

Inventors (assignors)

<i>Name</i>	<i>Address</i>
Mark C. Johnson	4123 E. Coolidge, Phoenix, AZ 85018
Eric R. Miller	4114 E. San Gabriel, Phoenix, AZ
Jason L. Addink	13625 S. 48th St., #2064, Phoenix, AZ 85044
Jorge L. Rosales	7772 W. Marlette, Glendale, AZ 85303
Bradley B. Rogers	704 N. Dean, Chandler, AZ 85226

Assignee

<i>Name</i>	<i>Address</i>
Phoenix Analysis and Design Technologies	1465 N. Fiesta Blvd., Suite 107 Gilbert, AZ 85233

**Assignment of Rights, Title and Interest in Invention
(Multiple inventors; single assignee)**

Docket No.
1003

Whereas, we, the above-identified Inventors, have invented certain new and useful improvements in the Invention identified above and described in the above-identified patent application(s) and/or patent(s) (hereinafter referred to as "Invention");

And, whereas we desire to assign our above-identified rights, title and interest in the Invention to the above-identified Assignee;

Now, this indenture witnesseth, that for good and valuable consideration, the receipt whereof is hereby acknowledged;

We hereby assign, sell and transfer our above-identified rights, title and interest in said Invention, said application(s) as identified above, including any divisions, continuations, and continuations-in-part thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted or have granted for said Invention, and in and to any and all reissues and reexaminations thereof, and in and to any and all priority rights, Convention rights, and other benefits accruing or to accrue to us with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto, unto said Assignee;

And we hereby authorize and request the Commissioner of Patents and Trademarks to issue any United States Letters Patent which may issue for said Invention to said Assignee, as assignee of the whole right, title and interest thereto;

And we further agree to sign and execute all necessary and lawful future documents, including applications for foreign patents, for filing divisions, continuations and continuations-in-part of said application for patent, and/or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid Invention, as the Assignee or its Designee(s) may from time to time require and prepare at its own expense.

Inventors' Signatures (if Notarization is desired, do not sign here and proceed to next page)

<i>Name</i>	<i>Signature/Date</i>
Mark C. Johnson	
Eric R. Miller	
Jason L. Addink	
Jorge L. Rosales	
Bradley B. Rogers	

Assignment of Rights, Title and Interest in Invention
(Multiple inventors; single assignee)

Docket No.
1003

Notarization

(Although notarization is not necessary, it will be considered prima facie evidence of execution pursuant to 35 U.S.C. 261.)

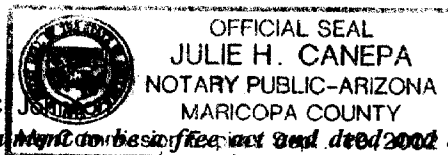
Executed this 28th day of September, in the year 2000

at Phoenix Analysis & Design, Inc.

Mark C. Johnson
(Signature of Inventor)

State of Arizona

County of Maricopa



Before me personally appeared Mark C. Johnson who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authorized to execute the same this 28th day of September, in the year 2000

Julie H. Canepa
(Notary Public)

Executed this 28th day of September, in the year 2000

at Phoenix Analysis & Design, Inc.

Eric R. Miller
(Signature of Inventor)

State of Arizona

County of Maricopa



Before me personally appeared Eric R. Miller who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authorized to execute the same this 28th day of September, in the year 2000

Julie H. Canepa
(Notary Public)

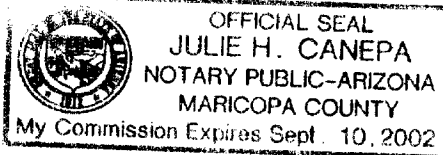
Executed this 28th day of September, in the year 2000

at Phoenix Analysis & Design, Inc.

Jason L. Addink
(Signature of Inventor)

State of Arizona

County of Maricopa



Before me personally appeared Jason L. Addink who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authorized to execute the same this 28th day of September, in the year 2000

Julie H. Canepa
(Notary Public)

Assignment of Rights, Title and Interest in Invention
(Multiple inventors; single assignee)

Docket No.
1003

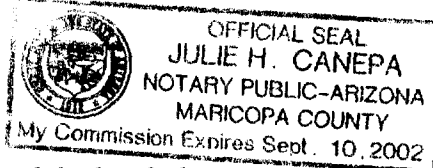
Notarization

(Although notarization is not necessary, it will be considered prima facie evidence of execution pursuant to 35 U.S.C. 261.)

Executed this 28th day of September, in the year 2000
at Phoenix Analysis & Design Tech

Jorge L. Rosales
(Signature of Inventor)

State of Arizona
County of Maricopa



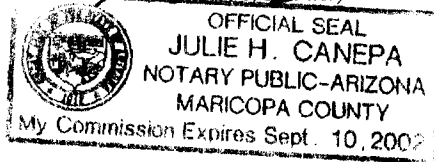
Before me personally appeared Jorge L. Rosales
who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authorized to
execute the same this 28th day of September in the year 2000

Julie H. Canepa
(Notary Public)

Executed this 28th day of September, in the year 2000
at Phoenix Analysis & Design Tech

Bradley B. Rogers
(Signature of Inventor)

State of
County of



Before me personally appeared Bradley B. Rogers
who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authorized to
execute the same this 28th day of September in the year 2000

Julie H. Canepa
(Notary Public)

Executed this _____ day of _____, in the year _____
at _____

State of
County of

(Signature of Inventor)

Before me personally appeared
who acknowledged the foregoing instrument to be a free act and deed and also represented that he or she is authorized to
execute the same this _____ day of _____ in the year _____

(Notary Public)