

DOCKET NUMBER: AMPC 5272

## RECORDATION FORM COVER SHEET PATENTS ONLY

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

## 1. Name of conveying party(ies):

1) Daryoush M. Salehi  
date of assignment: Nov. 30, 2010  
2) Roger P. Berry  
date of assignment: Nov. 29, 2010  
3) Nathan P. Mathis  
date of assignment: May 14, 2013  
4) Robert S. Michaels  
date of assignment: May 14, 2013

## 2. Name and address of receiving party(ies):

United States of America, as  
represented by the Secretary of the Army  
101 Army Pentagon  
Washington, DC 20310-0101

3. Nature of conveyance: **ASSIGNMENT**

## 4A. Patent Application Number(s):

12/927,951

## 4B. Patent Number(s):

---

5. Name and address of party to whom  
correspondence concerning document should be mailed:

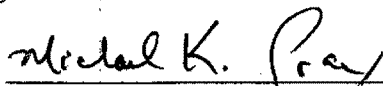
Commander  
Legal Office  
(AMSAM-LI, Michael Gray)  
US Army Aviation and Missile Command  
Redstone Arsenal, AL 35898-5000

6. Total number of applications and patents involved: 17. Total Fee (37 CFR 3.41): \$40.008. Please charge the required fee and any additional required fees to deposit account number 19-2201

DO NOT USE THIS SPACE

## 9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached  
copies are true copies of the original document.



Michael K. Gray, Reg. No. 33,703  
Telephone Number (256) 842-0639

May 14, 2013

Date

Faxed to US Patent and Trademark Office Assignment  
Division at 571-273-0140

5 pages total including this sheet.

CH \$40.00 192201 12927951

AMPC 5272

### ASSIGNMENT OF INVENTION Government-Employee Inventor Assignment to Government

Title of Invention: Pnumatically Actuated Bi-Propellant Valve (PABV)  
System for a Throttling Vortex Engine

Government Inventor: Daryoush M. Salehi

\*Application Serial No.:

\*Filing Date:

I, **Daryoush M. Salehi**, in consideration of the rights of the Government of the United States acquired by virtue of the circumstances under which the above-entitled invention was made, hereby:

1. Assign to the Government of the United States, as represented by the Secretary of the Army, the entire right, title and interest throughout the United States, its Territories, Possessions, and Puerto Rico, in and to the above-entitled invention and application for patent and all Letters Patent issuing thereon, and any continuation, continuation-in-part, substitution or division of said application and any reissue or extension of said Letters Patent.

2. Agree to assign to the Government upon its request, title and interest in the invention in those foreign countries in which the Government, within eight months of the filing of the United States application for patent, determines to cause an application to be filed; provided that if the Government determines not to cause an application to be filed in any particular foreign country or fails to make such a determination, within the said eight months, all right, title and interest in the invention in such foreign country shall remain in me (us), subject to a nonexclusive, irrevocable, royalty-free license to the Government in any patent which may issue on the invention in such foreign country, including the power to issue sublicenses for use in behalf of the Government and/or furtherance of the foreign policies of the Government.

3. Agree to provide any further information within my (our) knowledge and to execute any further documents necessary to the prosecution of patent applications on the invention, the prosecution and settlement of interferences and recording of title to patent applications and patents issuing thereon.

Signature of Inventor:   
**Daryoush M. Salehi**

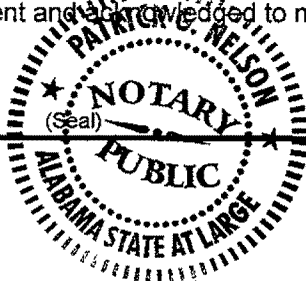
Inventor's Address: 2400 Magna Carta Place  
Huntsville, AL 35803

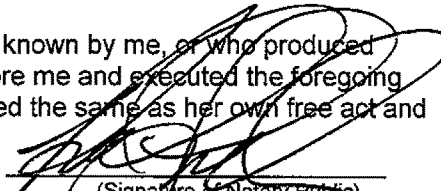
State of Alabama )  
 ) ss.

County of Madison )

Date: Nov. 30, 2010

On **30 November 2010**, Daryoush M. Salehi, who is known by me, or who produced driver's license as identification, duly appeared before me and executed the foregoing instrument and acknowledged to me that she executed the same as her own free act and deed.



  
(Signature of Notary Public)  
Gordon Kemp 7-11-11

AMPC 5272

ASSIGNMENT OF INVENTION  
Government-Employee Inventor Assignment to Government

Title of Invention: Pnumatically Actuated Bi-Propellant Valve (PABV)  
System for a Throttling Vortex Engine

Government Inventor: Roger P. Berry

\*Application Serial No.:

\*Filing Date:

I, Roger P. Berry, in consideration of the rights of the Government of the United States acquired by virtue of the circumstances under which the above-entitled invention was made, hereby:

- 1. Assign to the Government of the United States, as represented by the Secretary of the Army, the entire right, title and interest throughout the United States, its Territories, Possessions, and Puerto Rico, in and to the above-entitled invention and application for patent and all Letters Patent issuing thereon, and any continuation, continuation-in-part, substitution or division of said application and any reissue or extension of said Letters Patent.
- 2. Agree to assign to the Government upon its request, title and interest in the invention in those foreign countries in which the Government, within eight months of the filing of the United States application for patent, determines to cause an application to be filed; provided that if the Government determines not to cause an application to be filed in any particular foreign country or fails to make such a determination, within the said eight months, all right, title and interest in the invention in such foreign country shall remain in me (us), subject to a nonexclusive, irrevocable, royalty-free license to the Government in any patent which may issue on the invention in such foreign country, including the power to issue sublicenses for use in behalf of the Government and/or furtherance of the foreign policies of the Government.
- 3. Agree to provide any further information within my (our) knowledge and to execute any further documents necessary to the prosecution of patent applications on the invention, the prosecution and settlement of interferences and recording of title to patent applications and patents issuing thereon.

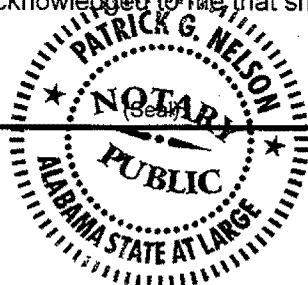
Signature of Inventor:   
Roger P. Berry

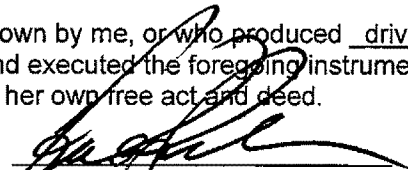
Inventor's Address: 109 Sunstone Terrace  
Huntsville, AL 35806

State of Alabama )  
 ) ss.  
County of Madison )

Date: Nov. 29, 2010

On 29 November 2010, Roger P. Berry, who is known by me, or who produced driver's license as identification, duly appeared before me and executed the foregoing instrument and acknowledged to me, that she executed the same as her own free act and deed.



  
(Signature of Notary Public)  
Nov. 29, 2010

AMPC 5272

**ASSIGNMENT OF INVENTION**  
**Government-Employee-Inventor Assignment to Government**

Title of Invention: Pnumatically Actuated Bi-Propellant Valve (PABV)  
 System for a Throttlng Vortex Engine

Government Inventor: **Nathan P. Mathis**

Application Serial No.: **12/927,951**

Filing Date: **November 30, 2010**

I, **Nathan P. Mathis**, in consideration of the rights of the Government of the United States acquired by virtue of the circumstances under which the above-entitled invention was made, hereby:

1. Assign to the Government of the United States, as represented by the Secretary of the Army, the entire right, title and interest throughout the United States, its Territories, Possessions, and Puerto Rico, in and to the above-entitled invention and application for patent and all Letters Patent issuing thereon, and any continuation, continuation-in-part, substitution or division of said application and any reissue or extension of said Letters Patent.
2. Agree to assign to the Government upon its request, title and interest in the invention in those foreign countries in which the Government, within eight months of the filing of the United States application for patent, determines to cause an application to be filed; provided that if the Government determines not to cause an application to be filed in any particular foreign country or fails to make such a determination, within the said eight months, all right, title and interest in the invention in such foreign country shall remain in me (us), subject to a nonexclusive, irrevocable, royalty-free license to the Government in any patent which may issue on the invention in such foreign country, including the power to issue sublicenses for use in behalf of the Government and/or furtherance of the foreign policies of the Government.
3. Agree to provide any further information within my (our) knowledge and to execute any further documents necessary to the prosecution of patent applications on the invention, the prosecution and settlement of interferences and recording of title to patent applications and patents issuing thereon.

Signature of Inventor: \_\_\_\_\_

Nathan P. Mathis  
 Nathan P. Mathis

Inventor's Address: **72 S. Lincoln Rd.**  
**Fayetteville, TN 37334**

State of Alabama )

) ss.

County of Madison )

Date: **May 14, 2013**

On **14 May 2013**, **Nathan P. Mathis**, who is known by me, or who produced driver's license as identification, duly appeared before me and executed the foregoing instrument and acknowledged to me that he executed the same as his own free act and deed.

Myria J. Chastain  
 (Signature of Notary Public)

(Seal)



**My Commission Expires**  
**09-14-2013**

**PATENT**

**REEL: 030407 FRAME: 0134**

AMPC 5272

**ASSIGNMENT OF INVENTION**  
Government-Employee Inventor Assignment to Government

Title of Invention: Pnumatically Actuated Bi-Propellant Valve (PABV)  
System for a Throttling Vortex Engine

Government Inventor: Robert S. Michaels

Application Serial No.: 12/927,951

Filing Date: November 30, 2010

I, Robert S. Michaels, in consideration of the rights of the Government of the United States acquired by virtue of the circumstances under which the above-entitled invention was made, hereby:

1. Assign to the Government of the United States, as represented by the Secretary of the Army, the entire right, title and interest throughout the United States, its Territories, Possessions, and Puerto Rico, in and to the above-entitled invention and application for patent and all Letters Patent issuing thereon, and any continuation, continuation-in-part, substitution or division of said application and any reissue or extension of said Letters Patent.

2. Agree to assign to the Government upon its request, title and interest in the invention in those foreign countries in which the Government, within eight months of the filing of the United States application for patent, determines to cause an application to be filed; provided that if the Government determines not to cause an application to be filed in any particular foreign country or fails to make such a determination, within the said eight months, all right, title and interest in the invention in such foreign country shall remain in me (us), subject to a nonexclusive, irrevocable, royalty-free license to the Government in any patent which may issue on the invention in such foreign country, including the power to issue sublicenses for use in behalf of the Government and/or furtherance of the foreign policies of the Government.

3. Agree to provide any further information within my (our) knowledge and to execute any further documents necessary to the prosecution of patent applications on the invention, the prosecution and settlement of interferences and recording of title to patent applications and patents issuing thereon.

Signature of Inventor: Robert S. Michaels  
Robert S. Michaels

Inventor's Address: 622 S. Scott Street  
Scottsboro, AL 35768

State of Alabama )

) ss.

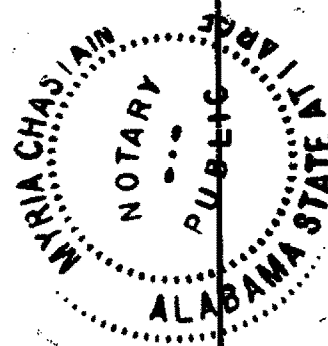
County of Madison )

Date: May 14, 2013

On 14 May 2013, Robert S. Michaels, who is known by me, or who produced driver's license as identification, duly appeared before me and executed the foregoing instrument and acknowledged to me that he executed the same as his own free act and deed.

Myria J. Chastain  
Signature of Notary Public

(Seal)



**My Commission Expires**  
**09-14-2013**

**PATENT**