

FORM PTO-1619A  
Expires 06/30/99  
OMB 0651-0027

U.S. Department of Commerce  
Patent and Trademark Office  
PATENT

S-102,584

### RECORDATION FORM COVER SHEET PATENTS ONLY

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#### Submission Type

New

Resubmission (Non-Recordation)  
Document ID#

Correction of PTO Error  
Reel #  Frame #

Corrective Document  
Reel #  Frame #

#### Conveyance Type

Assignment  Security Agreement

License  Change of Name

Merger  Other

**U.S. Government**  
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#### Conveying Party(ies)

Mark if additional names of conveying parties attached

Name (line 1)  Execution Date: Month , Day , Year

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**Second Party**

Name (line 1)  Execution Date: Month , Day , Year

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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.)

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Name

Address (line 1)

Address (line 2)

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Address (line 4)

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Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief Information Officer, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20503. See OMB information Collection Budget Package 0651-0027, Patent and Trademark Assignment Practice. DO NOT SEND REQUESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS

Mail documents to be recorded with required cover sheet(s) information to:  
Mail Stop Assignment Recordation Services, Director of the United States Patent and Trademark Office,  
P.O. Box 1450, Alexandria, VA 22313-1450 **PATENT**

CH \$40.00 012752 10997090

FORM PTO-1619B

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OMB 0651-0027

Page 2

U.S. Department of Commerce  
Patent and Trademark Office  
PATENT

**Correspondent Name and Address**

Area Code and Telephone Number

202-586-2810

Name Betty Winchester

Address (line 1) United States Department of Energy

Address (line 2) GC-62, MS 6F-067 (FORSTL)

Address (line 3) 1000 Independence Avenue, S.W.

Address (line 4) Washington, D.C. 20585-0162

**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)

<u>10/997090</u>						

Month Day Year

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

                    

**Patent Cooperation Treaty (PCT)**

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

PCT <u>                    </u>	PCT <u>                    </u>	PCT <u>                    </u>
PCT <u>                    </u>	PCT <u>                    </u>	PCT <u>                    </u>

**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

Deposit Account Number: # 01-2752

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.

Katherine Baldwin

*Katherine Baldwin*

MAY 12 2005

Name of Person Signing

Signature

Date

# RECORDATION FORM COVER SHEET CONTINUATION PATENTS ONLY

U.S. Department of Commerce  
Patent and Trademark Office  
PATENT

FORM PTO-1619C  
Expires 06/30/99  
OMB 0651-0027

## Conveying Party(ies)

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Enter additional Conveying Parties

Name (line 1)

Name (line 2)

Name (line 1)

Name (line 2)

Name (line 1)

Name (line 2)

Execution Date  
Month Day Year

Execution Date  
Month Day Year

Execution Date  
Month Day Year

## Receiving Party

Mark if additional names of receiving parties attached

Name (line 1)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)

Name (line 1)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)

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## Application Number(s) or Patent Number(s)

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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)

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Joint

**U.S. Department of Energy**  
**PATENT ASSIGNMENT FORM**

10/997,090

WHEREAS, we, Benjamin T. Chorpening, Jimmy Thornton, E. David Huckaby  
and George A. Richards citizens of the United States residing  
in Morgantown, County of Monongalia, State of West Virginia  
in Morgantown, County of Monongalia, State of West Virginia  
in Morgantown, County of Monongalia, State of West Virginia.  
in Morgantown, County of Monongalia, State of West Virginia;  
have invented certain new and useful improvements in REAL-TIME COMBUSTION  
CONTROL AND DIAGNOSTICS SENSOR - PRESSURE OSCILLATION MONITOR, for which we  
are about to file an application for United States Letters Patent, identified  
as S-102,584 and executed by us on the 27th day of October 20<sup>04</sup>; and on  
the \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_; and on the 27th day of October  
20<sup>04</sup>; and on the 21st day of September 2004;

WHEREAS, the Government of the United States desires to acquire the entire  
right, title, and interest in and to said invention and in and to any Letters Patent  
wherever they may be issued thereon;

NOW, THEREFORE, to all whom it may concern, be it known that for and in  
consideration of the sum of One Dollar to us in hand paid by the Government of the  
United States, and for other good and valuable consideration, the receipt of which  
is hereby acknowledged, we by these presents do sell, assign, and transfer unto the  
said Government of the United States, as represented by the United States Department  
of Energy, and/or its assigns, the entire right, title, and interest in and to the  
said invention and in and to any and all Letters Patent wherever they may be granted  
thereon as well as reissues and extensions of said Letters Patent are or may be  
granted, reissued, or extended, as fully and entirely as the same would have been  
held or enjoyed by us had this assignment not been made.

We agree to make, execute, and deliver unto the Government of the United  
States, or to the United States Department of Energy, any and all papers, documents,  
affidavits, renewal, divisional and reissue applications, statements, or other  
instruments in such usual or other forms, terms and contents as may be required by  
the United States Department of Energy, or its duly authorized representative, in or  
incident to the prosecution or conduct of any and all applications, before as well  
as after the issuance of any Letters thereon, or in the adjustment or settlement of  
any interferences or other actions or proceedings that said applications may  
encounter or in which they may become involved and we agree that we will encounter  
or in which they may become involved and we agree that we will aid the Government of  
the United States in every way in protecting the inventions as may be requested by  
the United States Department of Energy or its assigns, except that any expenses  
arising through extending such assistance will be paid for by proper arrangement  
with the Government of the United States.

PATENT

REEL: 016215 FRAME: 0355

WITNESS:

Lisa A. Jan  
(SEAL)

INVENTORS:

Benjamin J Choying

Date 10/27/2004

WITNESS:

\_\_\_\_\_  
(SEAL)

INVENTORS:

\_\_\_\_\_  
Date \_\_\_\_\_

WITNESS:

Lisa A. Jan  
(SEAL)

INVENTORS:

D. D. Huby

Date 10/27/2004

WITNESS:

Lisa A. Jan  
(SEAL)

INVENTORS:

George A. Roberts

Date 9/21/04

Approved and consented to this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

ATTEST:

\_\_\_\_\_  
(SEAL)

By \_\_\_\_\_

Its \_\_\_\_\_

Accepted for the Benefit of the Government of the United States.

UNITED STATES DEPARTMENT OF ENERGY

WITNESS:

Kathleen Balch

By D. J. A. [Signature]  
Assistant General Counsel for Patents