

# RECORDATION FORM COVER SHEET PATENTS ONLY

Docket No.: 2251.2013-001

To the Director of the U S Patent and Trademark Office. Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)/Execution Date(s).

TZVI AVNERY  
JONATHAN NORD

Execution Date: 04/12/2005; 05/12/2005

Additional name(s) of conveying party(ies) attached?  Yes  No

2. Name and address of receiving party(ies)

Name: ADVANCED ELECTRON BEAMS, INC.

Internal Address: \_\_\_\_\_

Street Address: 10 UPTON DRIVE

City: WILMINGTON

State: MASSACHUSETTS

Country: USA Zip: 01887

Additional name(s) & address(es) attached?  Yes  No

3. Nature of conveyance:

- Assignment  Merger
- Security Agreement  Change of Name
- Other \_\_\_\_\_

4. Application number(s) or patent number(s).

A Patent Application No.(s)  
10/768,968

This document is being filed together with a new application.

B Patent No.(s)

Additional numbers attached?  Yes  No

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

Name: JAMES M. SMITH, ESQ.

Internal Address \_\_\_\_\_

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

Street Address: 530 VIRGINIA ROAD, P.O. BOX 9133

City: CONCORD State: MA ZIP: 01742-9133

Phone No. 978-341-0036 Fax No. 978-341-0136

Email Address: JIM.SMITH@HBSR.COM

6 Total number of applications and patents involved:  1

7 Total Fee (37 C.F.R. 3.41)..... \$ 40

Enclosed

Authorization to charge deposit account number 08-0380

Previously submitted - Doc. ID No. [ ]

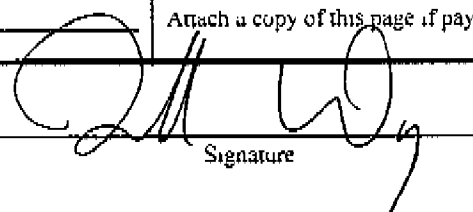
Authorized to charge any deficiencies or credit any overpayment to deposit account number 08-0380

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8. DARRELL L. WONG

Name of Person Signing



Signature

5/12/2005

Date

Total number of pages including cover sheet, attachments, and document. [ 7 ]

CH \$40.00 080380 10768968

Docket No. 2251.2013-001

JointASSIGNMENT

WHEREAS, we, **Tzvi Avnery and Jonathan Nord**, have invented a certain improvement in **Gas Separation Device** described in an application for Patent,

- the specification of which is about to be filed in the United States Patent Office (*use for utility (37 CFR § 1.53(b)) and design filings only*);
- is about to be filed in the United States Patent Office as a Provisional Application;
- the specification of which is United States Application No. **10/768,968**, filed **January 30, 2004**;
- the specification of which is a Patent Cooperation Treaty Application, International Application No. [ ], which designates the United States of America;
- which was patented under United States Patent No. [ ].

WHEREAS, **Advanced Electron Beams, Inc.** (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the **Commonwealth of Massachusetts**, and having a usual place of business at **10 Upton Drive, Wilmington, Massachusetts, 01887**, desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue on said invention; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the

**PATENT**  
**REEL: 016215 FRAME: 0749**

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execution of applications for patents in foreign countries, and the execution of any future applications including substitution, reissue, divisional or continuation applications, and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request each Patent Office and the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said invention to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

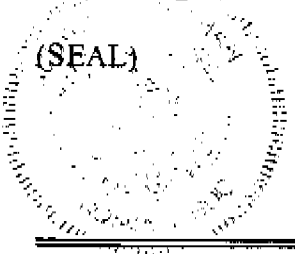
\_\_\_\_\_  
Inventor's Signature: Tzvi Avnery

State Commonwealth  
of Massachusetts  
County of Middlesex

On this 12th day of April, 2005, before me, the undersigned notary public, personally appeared Tzvi Avnery.

- personally known to me, or
- proved to me through satisfactory evidence of identification, which was

to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he/she signed the foregoing instrument as his/her free act and deed.



Judith K. Sherman Notary Public  
Judith K. Sherman (print name)  
My Commission expires 08/23/07

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Inventor's Signature: \_\_\_\_\_

**Jonathan Nord**

State/Commonwealth

of \_\_\_\_\_

County of \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me, the undersigned notary public, personally appeared **Jonathan Nord**,

personally known to me, or

proved to me through satisfactory evidence of identification, which was

\_\_\_\_\_ to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

(SEAL)

\_\_\_\_\_ Notary Public

\_\_\_\_\_ (print name)

My Commission expires \_\_\_\_/\_\_\_\_/\_\_\_\_

Docket No. 2251.2013-001

JointASSIGNMENT

WHEREAS, we, **Tzvi Avnery and Jonathan Nord**, have invented a certain improvement in **Gas Separation Device** described in an application for Patent,

- the specification of which is about to be filed in the United States Patent Office (use for utility (37 CFR § 1.53(b)) and design filings only);
- is about to be filed in the United States Patent Office as a Provisional Application;
- the specification of which is United States Application No. **10/768,968**, filed **January 30, 2004**;
- the specification of which is a Patent Cooperation Treaty Application, International Application No. [ ], which designates the United States of America;
- which was patented under United States Patent No. [ ].

WHEREAS, **Advanced Electron Beams, Inc.** (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the **Commonwealth of Massachusetts**, and having a usual place of business at **10 Upton Drive, Wilmington, Massachusetts, 01887**, desires to acquire an interest therein in accordance with agreements duly entered into with us:

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue on said invention; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the

**PATENT**  
**REEL: 016215 FRAME: 0752**

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execution of applications for patents in foreign countries, and the execution of any future applications including substitution, reissue, divisional or continuation applications, and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request each Patent Office and the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said invention to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor's Signature: \_\_\_\_\_

**Tzvi Avnery**

State/Commonwealth \_\_\_\_\_

of \_\_\_\_\_

County of \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me, the undersigned notary public, personally appeared **Tzvi Avnery**,

personally known to me, or

proved to me through satisfactory evidence of identification, which was \_\_\_\_\_

to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

(SEAL)

\_\_\_\_\_  
Notary Public

\_\_\_\_\_  
(print name)

My Commission expires \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_

Docket No. 2251 2013-001

Inventor's Signature:

*Jonathan Nord*

Jonathan Nord

State/Commonwealth

of PENNSYLVANIA

County of DAUPHIN

On this 12<sup>th</sup> day of May, 2005, before me, the undersigned notary public, personally appeared Jonathan Nord,

personally known to me, or

proved to me through satisfactory evidence of identification, which was

to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

COMMONWEALTH OF PENNSYLVANIA  
NOTARIAL SEAL  
GAIL P. STRICKLER, Notary Public  
Derry Township, Dauphin County  
My Commission Expires Feb. 5, 2007

*Gail P. Strickler* Notary Public

GAIL P. STRICKLER (print name)

My Commission expires 02/05/07

@PFD:\smp\LODM\UM\JODN\HBSR05\Manage\_782823:1