OP \$115.00 374139

TRADEMARK ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|-------------------|
| NATURE OF CONVEYANCE: | SECURITY INTEREST |

CONVEYING PARTY DATA

| Name | Formerly | Execution Date | Entity Type |
|-------------------------------|----------|----------------|-----------------------|
| Advanced Electron Beams, Inc. | | 04/28/2010 | CORPORATION: DELAWARE |

RECEIVING PARTY DATA

| Name: | Comerica Bank |
|-------------------|------------------------------------|
| Street Address: | 39200 Six Mile Road |
| Internal Address: | M/C 7578 |
| City: | Livonia |
| State/Country: | MICHIGAN |
| Postal Code: | 48152 |
| Entity Type: | a Texas banking association: TEXAS |

PROPERTY NUMBERS Total: 4

| Property Type | Number | Word Mark |
|----------------------|----------|---------------------------|
| Registration Number: | 3741396 | ADVANCED ELECTRON BEAMS |
| Serial Number: | 77799290 | E ADVANCED ELECTRON BEAMS |
| Serial Number: | 77799288 | E |
| Serial Number: | 77799293 | AEB |

CORRESPONDENCE DATA

Fax Number: (734)930-2494

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 734-761-3780

Email: asujek@bodmanllp.com

Correspondent Name: Angela Alvarez Sujek - Bodman LLP

Address Line 1: 201 South Division, Ste 400
Address Line 4: Ann Arbor, MICHIGAN 48104

NAME OF SUBMITTER:

Angela Alvarez Sujek

Signature:

/Angela Alvarez Sujek/

TRADEMARK

900161497 REEL: 004200 FRAME: 0299

| Date: | 05/05/2010 | | | |
|---|------------|--|--|--|
| Total Attachments: 6 | | | | |
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| source=Advanced Electron Beams Inc Intellectual Property Security Agreement#page2.tif | | | | |
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TRADEMARK REEL: 004200 FRAME: 0300

INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement is entered into as of April 28, 2010 by and between COMERICA BANK ("Bank") and ADVANCED ELECTRON BEAMS, INC., a Delaware corporation ("Grantor").

RECITALS

- A. Bank has agreed to make certain advances of money and to extend certain financial accommodation to Grantor (the "Loans") in the amounts and manner set forth in that certain Loan and Security Agreement by and between Bank and Grantor dated of even date herewith (as the same may be amended, modified or supplemented from time to time, the "Loan Agreement"). Capitalized terms used herein are used as defined in the Loan Agreement.
- B. Bank is willing to make the Loans to Grantor, but only upon the condition, among others, that Grantor shall grant to Bank a security interest in certain Copyrights, Trademarks and Patents to secure the obligations of Grantor under the Loan Agreement.
- C. Pursuant to the terms of the Loan Agreement, Grantor has granted to Bank a security interest in all of Grantor's right, title and interest, whether presently existing or hereafter acquired, in, to and under all of the Collateral.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, and intending to be legally bound, as collateral security for the prompt and complete payment when due of its obligations under the Loan Agreement and all other agreements now existing or hereafter arising between Grantor and Bank, Grantor hereby represents, warrants, covenants and agrees as follows:

AGREEMENT

To secure its obligations under the Loan Agreement and under any other agreement now existing or hereafter arising between Bank and Grantor, Grantor grants and pledges to Bank a security interest in all of Grantor's right, title and interest in, to and under its Intellectual Property Collateral (including without limitation those Copyrights, Patents and Trademarks listed on Exhibits A, B and C hereto), and including without limitation all proceeds thereof (such as, by way of example but not by way of limitation, license royalties and proceeds of infringement suits), the right to sue for past, present and future infringements, all rights corresponding thereto throughout the world and all re-issues, divisions continuations, renewals, extensions and continuations-in-part thereof.

This security interest is granted in conjunction with the security interest granted to Bank under the Loan Agreement. The rights and remedies of Bank with respect to the security interest granted hereby are in addition to those set forth in the Loan Agreement and the other Loan Documents, and those which are now or hereafter available to Bank as a matter of law or equity. Each right, power and remedy of Bank provided for herein or in the Loan Agreement or any of the Loan Documents, or now or hereafter existing at law or in equity shall be cumulative and concurrent and shall be in addition to every right, power or remedy provided for herein and the exercise by Bank of any one or more of the rights, powers or remedies provided for in this Intellectual Property Security Agreement, the Loan Agreement or any of the other Loan Documents, or now or hereafter existing at law or in equity, shall not preclude the simultaneous or later exercise by any person, including Bank, of any or all other rights, powers or remedies.

Grantor represents and warrants that Exhibits A, B, and C attached hereto set forth any and all intellectual property rights in connection to which Grantor has registered or filed an application with either the United States Patent and Trademark Office or the United States Copyright Office, as applicable.

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IN WITNESS WHEREOF, the parties have caused this Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.

Address of Grantor:

FAX: (978) 658-7999

Advanced Electron Beams, Inc. 301 Ballardvale Street Wilmington, MA 01887 Attn: Larry Mihalchik

Address of Bank:

Comerica Bank 39200 Six Mile Road Mail Code 7578 Livonia, MI 48152 GRANTOR:

ADVANCED ELECTRON BEAMS, INC.

Title: (PO & TheASJAD

BANK:

COMERICA BANK

Title: VP

EXHIBIT A

Copyrights

None.

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TRADEMARK
REEL: 004200 FRAME: 0303

EXHIBIT B

Patents

| Title | App. No. | Filing Date | Reg. No. | Date Granted |
|--------------------------------|--|-------------|-----------|--------------|
| | State of the state | | | |
| Fluid sterilization apparatus | 10/005194 | 12/4/01 | 6,756,597 | 6/29/04 |
| Electron beam accelerator | 09/349592 | 7/9/99 | 6,407,492 | 6/18/02 |
| Electron beam accelerator | 08/778037 | 1/27/97 | 5,962,995 | 10/5/99 |
| X-ray irradiation apparatus | 10/848553 | 5/17/04 | 7,133,493 | 11/7/06 |
| Electron beam sensor | 10/326923 | 12/19/02 | 6,919,570 | 7/19/05 |
| Irradiation apparatus | 10/796796 | 3/8/04 | 7,183,563 | 2/27/07 |
| X-ray irradiation apparatus | 10/102509 | 3/19/02 | 6,738,451 | 5/18/04 |
| Decontamination apparatus | 10/021827 | 12/13/01 | 6,702,984 | 3/9/04 |
| Electron beam emitter | 10/103539 | 3/20/02 | 6,674,229 | 1/6/04 |
| Electron beam emitter | 09/813928 | 3/21/01 | 6,630,774 | 10/7/03 |
| Air sterilizing system | 09/883861 | 6/18/01 | 6,623,706 | 9/23/03 |
| Gas conversion system | 09/883853 | 6/18/01 | 6,623,705 | 9/23/03 |
| Gas separation device | 10/768968 | 1/30/04 | n/a | n/a |
| Electron beam emitter | 09/813929 | 3/21/01 | n/a | n/a |
| Air sterifizing system | 10/666380 | 9/19/03 | 7,323,137 | 1/29/08 |
| X-ray irradiation apparatus | 11/584166 | 10/20/06 | 7,324,630 | 1/29/08 |

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TRADEMARK
REEL: 004200 FRAME: 0304

| Title | App. No. | Filing Date | Reg. No. | Date Granted |
|---|-----------|-------------|-----------|--------------|
| Electron accelerator having a wide electron beam | 10/364295 | 2/10/03 | 6,882,095 | 4/19/05 |
| Electron beam emitter | 10/957841 | 10/4/04 | 7,180,231 | 2/20/07 |
| Method of forming filament for electron beam emitter | 10/679033 | 10/3/03 | 6,800,989 | 10/5/04 |
| Electron accelerator having a wide electron beam that extends further out and is wider that the outer periphery of the device | 09/209024 | 12/10/98 | 6,545,398 | 4/8/03 |
| Electron beam emitter with slotted gun | 12/469123 | 5/20/09 | n/a | 11/a |
| Gas conversion system | 10/666982 | 9/19/03 | n/a | n/a |
| Air sterilizing system | 11/703620 | 2/7/07 | 7,547,892 | 6/16/09 |
| Air sterilizing system | 11/122334 | 5/4/05 | 7,189,978 | 3/13/07 |
| Electron beam irradiation apparatus | 10/097192 | 3/12/02 | 6,833,551 | 12/21/04 |
| Electron beam emitter | 11/706075 | 2/13/07 | n/a | n/a |
| Electron beam emitter | 11/964273 | 12/26/07 | n/a | n/a |
| Electron beam emitter | 10/751676 | 1/5/04 | 7,265,367 | 9/4/07 |
| Electron beam emitter | 11/879674 | 7/18/07 | 7,329,885 | 2/12/08 |

EXHIBIT C

Trademarks

| Mark | App. No. | Filing Date | Reg. No. | Reg. Date |
|---|-----------|-------------|-----------|-----------|
| ADVANCED ELECTRON BEAMS | 77/799292 | 8/7/09 | 3,741,396 | 1/19/10 |
| E ADVANCED ELECTRON BEAMS (and Design) | 77/799290 | 8/7/09 | n/a | n/a |
| E (and Design) | 77/799288 | 8/7/09 | n/a | n/a |
| AEB | 77/799293 | 8/7/09 | n/a | n/a |

RECORDED: 05/06/2010

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