

## PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT																																
NATURE OF CONVEYANCE:	RELEASE AND REASSIGNMENT OF PATENTS AND PATENT APPLICATIONS																																
CONVEYING PARTY DATA																																	
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Patent Number:	7180231
Patent Number:	6800989
Patent Number:	6545398
Patent Number:	7547892
Patent Number:	7189978
Patent Number:	6833551
Patent Number:	7265367
Patent Number:	7329885
Application Number:	10768968
Application Number:	09813929
Application Number:	12469123
Application Number:	10666982
Application Number:	11706075
Application Number:	11964273

#### CORRESPONDENCE DATA

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C5709-0072

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Total Attachments: 3

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**RELEASE AND REASSIGNMENT OF  
PATENTS AND PATENT APPLICATIONS**

May 15, 2012

Reference is hereby made to that certain Intellectual Property Security Agreement (the "Agreement"), dated as of April 28, 2010, executed by Advanced Electron Beams, Inc., a Delaware corporation ("Assignor"), whose address is 301 Ballardvale Street, Wilmington, MA 01887, in favor of Comerica Bank ("Assignee"), whose address is 39200 Six Mile Road, Mail Code 7578, Livonia, Michigan 48152, which was recorded in the United States Patent and Trademark Office ("USPTO") on May 6, 2010, at Reel 024342 Frame 0354, and re-recorded with the USPTO on May 6, 2010, at Reel 024358 Frame 0415, and pursuant to which the Assignor assigned and granted to Assignee, a security interest in and to all of Assignor's right, title and interest in and to certain patents, including those patents specifically listed on Schedule 1 attached hereto (the "Patents"); and

WHEREAS, Assignee wishes to terminate the Agreement and release, retransfer and reassign to Assignor, without representation or warranty, all of Assignee's right, title and interest in and to the Patents;

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, Assignee hereby terminates the Agreement and releases, retransfers and reassigns to Assignor, without representation or warranty, all of Assignee's right, title and interest in and to the Patents.

IN WITNESS WHEREOF, Assignee has executed this Release and Reassignment of Patents and Patent Applications as of the date first above written.

COMERICA BANK  
("Assignee")

By: Judith A. Sanchez  
Name: Judith A Sanchez  
Title: SVP

Schedule 1  
Patents

Title	App. No.	Filing Date	Reg. No.	Date Granted
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 sterilizing 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

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 than 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	n/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