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PATENT ASSIGNMENT

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| SUBMISSION TYPE: | NEW ASSIGNMENT |
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| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|-------------|----------------|
| Jean Berney | 07/26/2013 |

RECEIVING PARTY DATA

| Name: | Ecole Polytechnique Federale De Lausanne (EPFL) | |
|-----------------|---|--|
| Street Address: | Quartier de l'innovation J CH-1015 | |
| City: | Lausanne | |
| State/Country: | SWITZERLAND | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 14003030 |

CORRESPONDENCE DATA

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| ATTORNEY DOCKET NUMBER: | P&TS-51441 |
|-------------------------|-------------------|
| NAME OF SUBMITTER: | Michael W. Garvey |
| Signature: | /michaelwgarvey/ |
| Date: | 09/04/2013 |

Total Attachments: 2

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PATENT REEL: 031133 FRAME: 0834

ASSIGNMENT

WHEREAS, new and useful improvements have been made by the undersigned in

Electron Beam Apparatus

and are the subject of a patent application prepared for filing in the United States Patent and Trademark Office, and executed by the undersigned on the date(s) indicated on the Declaration by the same, which application is further identified as Pearne & Gordon LLP Docket No. P&TS-51441

WHEREAS, Ecole Polytechnique Federale De Lausanne (EPFL) having a place of business at Quartier de l'innovation –J, CH-1015 Lausanne, Switzerland, hereinafter referred to as "assignee", is desirous of acquiring all right, title, and interest throughout the world in, to, and under said improvements and inventions and patent rights therefor.

NOW, THEREFORE, be it known that, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, all right, title, and interest, in the United States and throughout the world, in, to and under said improvements and inventions and all patents, patent applications, patent rights, and inventors' certificates thereof, therefor, and therein, including without limitation said application for patent in the United States, all divisions and continuations thereof, all patents which may be granted thereon, all reissues and extensions thereof, all right to sue for past infringement thereunder, all patents which may be granted for said improvements and inventions by states or nations other than the United States, or by other authority, entity, or organization, and all applications therefor, have been and are hereby sold, assigned, transferred, and delivered unto assignee, its successors and assigns by the undersigned; and it is covenanted and agreed by the undersigned, and for executors, administrators, and legal representatives of the undersigned, that at assignee's request any and all applications, affidavits, assignments, and other instruments will be made, executed, and delivered as may be necessary, or desirable to secure for or vest in assignee, its successors or assigns, any improvement, inventions, right, title, interest, application, patent, patent right or other right or property covered by this assignment, and the United States Commissioner of Patents and Trademarks is hereby requested and authorized to issue any and all United States patents granted on any of said applications to assignee as owner of the entire right, title, and interest in, to, and under the same, and appropriately empowered officials of foreign countries are hereby authorized to issue any letters patent granted on any of said applications to assignee as owner of the entire right, title and interest in, to, and under the same.

The undersigned hereby grant the firm of Pearne & Gordon LLP the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

PATENT REEL: 031133 FRAME: 0835 IN WITNESS WHEREOF, this assignment has been executed below by the undersigned:

| (1) | Inventor Name | | | | |
|-----|---------------|----------|---------|---------|--------|
| | Signature: | | | | |
| | Today's Date: | John | 264, 2° | . 3 7 | |
| | Witness: | 24 | G.Clerc | lead of | EM-770 |
| | Witness | ille ook | Herry | | |

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