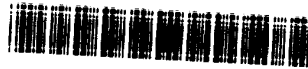


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U.S. Dept. of Commerce
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Our Reference: E-1455CIP



100748613

To the Honorable Commissioner of Patents and Trademarks

attached original document or copy thereof.

1. Name of conveying party(ies):

Gregory C. Eiden, Charles J. Barinaga,
and David W. Koppenaal

6-16-98

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

2. Name and Address of receiving party(ies):

Name: Battelle Memorial Institute K1-53
Internal Address: K1-53
P.O. Box 999
Intellectual Property Services
Street Address: 902 Battelle Blvd.
Intellectual Property Services

City: Richland State: WA Zip: 99352

Additional name(s) & addresses attached? Yes No

3. Nature of conveyance:

- Assignment Merger
- Security Agreement Change of Name
- Other

Execution Date: June 15, 1998

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

09 097995

If this document is being filed together with a new application, the execution date of the application is: June 15, 1998

A. Patent Application No.(s): _____

B. Patent No.(s): _____

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

Name: Paul W. Zimmerman
Internal Address: K1-53
P.O. Box 999
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Street Address: 902 Battelle Blvd.
City: Richland State: WA Zip: 99352

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41).....\$ 40.00

- Enclosed
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8. Deposit account number:

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9. Statement and signature:

To the best of my knowledge and belief, the foregoing information is true and correct, any attached copy is a true copy of the original document.

Paul W. Zimmerman
Name of person signing

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A S S I G N M E N T

Gregory C. Eiden
Charles J. Barinaga
David W. Koppenaar

to

Battelle Memorial Institute

WHEREAS we, Gregory C. Eiden, of Richland, in the County of Benton, and State of Washington; Charles J. Barinaga, of Richland, in the County of Benton, and State of Washington; and David W. Koppenaar, of Richland, in the County of Benton, and State of Washington, have made certain inventions in AN APPARATUS FOR REDUCTION OF SELECTED ION INTENSITIES IN CONFINED ION BEAMS, for which we are about to make application for Letters Patent of the United States; and

WHEREAS Battelle Memorial Institute, a corporation of Ohio, organized and existing under the laws of the State of Ohio, and having a place of business in the City of Richland, Washington, is desirous of acquiring an interest in the said invention and in any patent or patents to be obtained therefor;

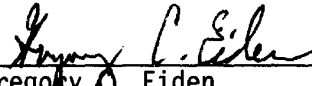
NOW, THEREFORE, To All Whom It May Concern, be it known that, for and in consideration of the sum of One Dollar (\$1.00) each, and other good and valuable considerations, the receipt of which is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto the said Battelle Memorial Institute, the entire right, title, and interest in and to the invention shown, described, or claimed therein, and the full and exclusive right and title to the said application, executed by me on the 15th day of June, 1998, preparatory to obtaining Letters Patent of the United States therefor; and in and to any extensions, reissues, divisions, or renewals thereof; and we do hereby authorize and request the Commissioner of Patents or other proper Officer, to issue such Letters Patent, or any of them, to the said Battelle Memorial Institute, as the assignee of our entire right, title, and interest in and to the same for the sole use and benefit of the said Battelle Memorial Institute, and its successors or assigns.

And we further covenant and agree that we will, at the request and expense of the said Battelle Memorial Institute, execute such other and

further assurances of title as may be necessary or proper to fully convey the interest herein sought to be conveyed; that we will, at the request and expense of the said Battelle Memorial Institute, execute such application papers as may be desired by the said Battelle Memorial Institute, for the filing of any division or renewal of the application herein conveyed, or for reissues or extensions, of any Letters Patent that may be granted upon said application, and will execute such Supplemental Oaths and Preliminary Statements, or other papers as desired by the said Battelle Memorial Institute.

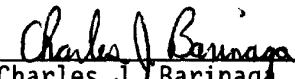
And we further assign unto the said Battelle Memorial Institute, the whole right, title, and interest to the invention disclosed in the application throughout all countries foreign to the United States, and do hereby authorize the said Battelle Memorial Institute to apply for patents therefor in its own name in countries where such procedure is proper and to claim the benefit of the International Convention and do agree to execute applications for the said invention in the several countries where it is necessary that the same be executed by the inventors, and to execute assignments of such applications and the patents to be obtained therefor to the said Battelle Memorial Institute, the assignee herein, as well as all other necessary papers.

IN TESTIMONY WHEREOF I have hereunto set my hand and affixed my seal at Richland, Washington, this 12 day of June, 1998.



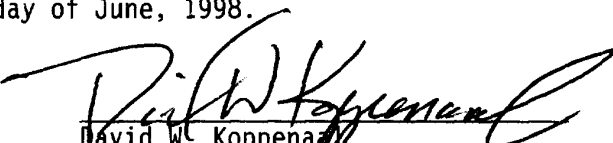
Gregory G. Eiden

IN TESTIMONY WHEREOF I have hereunto set my hand and affixed my seal at Richland, Washington, this 15 day of June, 1998.



Charles J. Barinaga

IN TESTIMONY WHEREOF I have hereunto set my hand and affixed my seal at Richland, Washington, this 12 day of June, 1998.



David W. Koppena