10-09-2002 U.S. DEPARTMENT OF COMMERCE FORM PTO-1595 EET RE Patent and Trademark Office (REV 6-93) EATNP124US OMB No. 0651-011 (exp.4/94) 102245021 To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. Name and address of receiving party(ies): 1. Name of conveying party(ies): Axcelis Technologies, Inc. Name: Yong Liu Jeff P. Hebb Internal Address: \_\_\_ Additional name(s) of conveying party(ies) attached? [ ] Yes Street Address: 55 Cherry Hill Drive 3. Nature of conveyance: [X] Assignment Merger Security Agreement [ ] Change of Name \_\_\_\_ ZIP: 01915-1053 Other State/Country: Execution Date: Sept. 30 & Sept. 30, 2002 Additional name(s) & address(es) attached? [ Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: Sept. 30 & Sept. 30, A. Patent Application No.(s) B. Patent No.(s) 10/04 2002 MBIZUNES 00000046 10261907 40.00 OP 04 FC 581 Additional Numbers attached? [ ] Yes 6. Total number of applications and patents involved [ 1 ] 5. Name and address of party to whom correspondence concerning document should be mailed: 7. Total fee (37 CFR 3.41) .....\$ Thomas G. Eschweiler Name: Internal Address: \_\_ [X] Enclosed Eschweiler & Associates, LLC [ X ] Authorized to be charged to deposit account Street Address: 629 Euclid Avenue, Suite 1210 8. Deposit account number: Cleveland 50-1733 City: \_\_\_ ZIP: 44114 State:

DO NOT USE THIS SPACE

9. Statement and signature.

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

Thomas G. Eschweiler

Name of Person Signing

September 30, 2002

Date

Reg. No. Total number of pages including cover sheet attachments, and document: [ 3 ]

(Attach duplicate copy of this page if paying by deposit account)

## **ASSIGNMENT**

For good and valuable consideration received of the hereinafter named assignee, receipt of which is hereby acknowledged, the undersigned

Yong Liu

57 Charter Street, Apt. 1A

Lynnfield, Massachusetts 01940 Boston, Massachusetts 02113

NOW, THEREFORE, for and in consideration of our employment and the salary or wages paid to us by Axcelis Technologies, Inc., we, Yong Liu and Jeff P. Hebb, by these present do sell, assign, and transfer unto said Axcelis Technologies, Inc., a corporation organized and existing under the laws of the State of Delaware, having its principal place of business at 55 Cherry Hill Drive, Beverly, Massachusetts 01915-1053, is desirous of acquiring an interest therein, its successors and assigns, the entire right, title and interest, so far as concerns the United States and the Territories and Possessions thereof and all foreign countries, in and to the inventions entitled

## ADVANCED RAPID THERMAL PROCESSING (RTP) USING A LINEARLY-MOVING HEATING ASSEMBLY WITH AN AXISYMMETRIC AND RADIALLY-TUNABLE THERMAL RADIATION PROFILE

for which application for United States Letters Patent has been filed on under
Serial No, or was executed by the undersigned on the date below and is being filed
concurrently herewith, said application for United States Letters Patent, any and all other applications
for Letters Patent on said inventions in countries foreign to the United States, including all divisional,
renewal, substitute, continuation and Convention applications based in whole or in part upon said
inventions or upon said applications, and any and all Letters Patent and reissues and extensions of
Letters Patent granted for said inventions or upon said applications, and every priority right that is
or may be predicated upon or arise from said inventions, said applications and said Letters Patent;
said assignee being hereby authorized to file patent applications in any or all countries on any or all
said inventions in the name of the undersigned or in the name of said assignee or otherwise as said
assignee may deem advisable, under the International Convention or otherwise; the Commissioner
of Patents and Trademarks of the United States of America and the empowered officials of all other
governments being hereby authorized to issue or transfer all said Letters Patent to said assignee in
accordance herewith; this assignment being under covenant, not only that full power to make the
same is had by the undersigned, but also that such assigned right is not encumbered by any grant,
license, or other right heretofore given, and that the undersigned will do all acts reasonably serving
to assure that said inventions, patent applications and Letters Patent shall be held and enjoyed by said
assignee as fully and entirely as the same could have been held and enjoyed by the undersigned if this
assignment had not been made, and particularly to execute and deliver to said assignee all lawful
documents including petitions, specifications, oaths, assignments, invention disclaimers, and lawful
affidavits in form and substance which may be requested by said assignee, to furnish said assignee

Page 1 of 2

PATENT REEL: 013355 FRAME: 0997 with all facts relating to said inventions or the history thereof and any and all documents, photographs, models, samples or other physical exhibits which may be useful for establishing the facts of conception, disclosure and reduction to practice of said inventions, and to testify in any proceedings relating to said inventions, patent applications and Letters Patent.

Signed:

Date

Yong Liu

7

Signed:

Date:

Jeff P. Hebb

**RECORDED: 09/30/2002** 

9-30-2002

Witnes

Date

Page 2 of 2