FORM PTO-1595 (REV 6-93) (1/5 0/1 RE(



EET

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

OMB No. 0651-011 (exp.4/94)	2726377	EATNP159US
To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.		
Name of conveying party(ies):	2. Name and address of receiving party(ies):	
Alfred M. Halling	Name: Axcelis Technologies, Inc.	<u> </u>
Leonard M. Rubin 4-15-04	Internal Address:	s. P.
,		825 825
Additional name(s) of conveying party(ies) attached? [ ] Yes [ X]No		15834 10/
3. Nature of conveyance:	Street Address: 108 Cherry Hill Drive	
[X] Assignment [ ] Merger		
[ ] Security Agreement [ ] Change of Name	City: Beverly	
[ ] Other	State/Country: Massachusetts ZIP:	01915-1053
Execution Date: April 14 and April 14, 2004	Additional name(s) & address(es) attached? [ ] Yes	s [X]No
4. Application number(s) or patent number(s): 1 0/825527		
If this document is being filed together with a new application, the execution date of the application is: April 14 and		
9/2004 LWAND Pretquotocophication 2050 (s)	B. Patent No.(s) April 1	4, 2004
€:8021 40. <b>0</b> 0 OP		
2004 LW0NDIN1 00000047 10825527 Additional Numbers attached? [ ] Yes [ x ] No		
5. Name and address of party to whom correspondence concerning document	6. Total number of applications and patents invo	olved:[1]
should be mailed:	7. Total fee (37 CFR 3.41)\$\$	
Name: Thomas G. Eschweiler		
Internal Address:	[X] Enclosed	
Eschweiler & Associates, LLC	[ X ] Authorized to be charged to deposit account	nt
Street Address: 629 Euclid Avenue, Suite 1210		
City: Cleveland	8. Deposit account number:	
City: Cleveland  State: Ohio ZIP: 44114	50-1733	
	(Attach duplicate copy of this page if paying by depos	it account)
DO NOT USE THIS SPACE		
<ol> <li>Statement and signature.</li> <li>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.</li> </ol>		
Thomas G. Eschweiler	April 15,	2004
Name of Person Signing Signature Date		
Reg. No36,981 Total number of pages including cover sheet attachments, and document: [ 3 ]		

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents & Trademarks, Box Assignments

Washington, D.C. 20231

## **ASSIGNMENT**

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

Alfred M. Halling
15 Juniper Street
Wenham, Massachusetts 01984

Leonard M. Rubin
4 Evergreen Way

Peabody, Massachusetts 01960

NOW, THEREFORE, for and in consideration of our employment and the salary or wages paid to us by Axcelis Technologies, Inc., we, Leonard M. Rubin and Alfred M. Halling 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 108 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

## BEAM ANGLE CONTROL IN A BATCH ION IMPLANTATION SYSTEM

under for which application for United States Letters Patent has been filed on \_\_\_\_\_ 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 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

Page 1 of 2

PATENT REEL: 015228 FRAME: 0270 Docket No. 03-IMP-031

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:

Alfred M. Halling

Witness:

Date:

Signed:

Date:

- AMM III

4/14/09

Witness:

Date:

Wendy a Mplaragni

**RECORDED: 04/15/2004** 

Page 2 of 2