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To the Honorable Commissioner of Patents and Trademarks:	Please record the attached original documents or copy thereof.
1. Name of conveying party(ies): Ralph Albano, Ivan L. Berry, III., Orlando Escorcia, Qingyuan Han, Nick Sbrockey and Carlo Waldfried	2. Name and address of receiving party(ies)  Name: Axcelis Technologies, Inc.  Internal Address:
Additional name(s) of conveying party(ies) attached? Tay Yes Xan No	
3. Nature of conveyance:  ☐ Assignment ☐ Merger ☐ Security Agreement ☐ Change of Name ☐ Other Corrective Assignment to add inventors	Street Address: 55 Cherry Hill Drive
name previously recorded at Reel/Frame 012718/0575  Execution Date:	City: Beverly State: MA Zip: 01915
Execution Date.	Additional name(s) & address(es) attached?  Yes No
A. Patent Application No.(s) 09/952,649	B. Patent No.(s)    Control of the application is:
Street Address: One Dayton Centre  One South Main Street, Suite 500	8. Deposit account number:
City: Dayton State: OH Zip: 45402	(Attach duplicate copy of this page if paying by deposit account)
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9. Statement and signature.  To the best of my knowledge and belief, the foregoing i is a true copy of the original document.  Brian L. Smiler  Name of Person Signing  Total number of pages including cover	05/30/2002  Signature  Date

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PATENT REEL: 012981 FRAME: 0684

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(Rev. 03/01) ∩MB No. 0651-0027 (exp. 5/31/2002)	U.S. Patent and Trademark Office
Tab settings ⇔ ⇔ ▼	_(/ \
	Please record the attached original documents or copy thereof.
Name of conveying party(ies):	Name and address of receiving party(ies)
Ralph Albano	Name: Axcelis Technologies, Inc.
Ivan L. Berry, III Orlando Escorcia	
Qingyuan Han	Internal Address:
Carlo Waldfried	
Additional name(s) of conveying party(ies) attached? The Yes No	
3. Nature of conveyance:	
🖫 Assignment 🖵 Merger	Street Address: 55 Cherry Hill Drive
☐ Security Agreement ☐ Change of Name	Street Address: 33 Charly Thin Drive
-	
Gther	
	City: Beverly State: MA Zip: 01915
Execution Date: November 7, 2001	Additional name(s) & address(es) attached? 📮 Yes 🏻 No
4. Application number(s) or patent number(s):	
If this document is being filed together with a new appli	cation, the execution date of the application is:
A. Patent Application No.(s)	B. Patent No.(s)
	, ,
09/952,649	
	tached? 📮 Yes 🔼 No
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:
•	7. Total fee (37 CFR 3.41)\$40.00
Name: Killworth, Gottman, Hagan & Schaeff, LLP	
Internal Address:	<b>™</b> Enclosed
	Authorized to be charged to deposit accounts
	8. Deposit account number:
One Dayton Centre	S. Doposit assessment and a second
Street Address: One Dayton Centre	35 8 38
One South Main Street, Suite 500	
OH - 45402	(Attach duplicate copy of this page if paying by deposit account)
City: <u>Dayton</u> State: <u>OH</u> Zip: <u>45402</u>	<b>₹</b> 10 R
DO NOT USE THIS SPACE	
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.	2 / / / / Name & 2002
Brian L. Smiler	March 8, 2002 Signature Date
Name of Person Signing	[ ]
Total number of pages including cover	er sheet, attachments, and documents:

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## **ASSIGNMENT**

WHEREAS, we, RALPH ALBANO of Columbia, MID, IVAN L. BERRY, III of Ellicott City, MD, ORLANDO ESCORCIA of Falls Church, VA, QINGYUAN HAN of Columbia, MD, NICK SBROCKEY of Gaithersburg, MD and CARLO WALDFRIED of Falls Church VA, invented certain new and useful PLASMA CURING PROCESS FOR POROUS LOW-K MATERIALS for which we executed an application for a United States Patent and for which said application for United States Patent was filed on September 14, 2001, under

☑ Patent Application Serial No. 09/952,649

WHEREAS, we hereby authorize and request the attorney(s) and/or agent(s) empowered to act on our behalf in the aforementioned application, to insert above the filing date and application number of said application, when known;

AND WHEREAS, Axcelis Technologies, Inc., a corporation of the State of Delaware, with a place of business at 55 Cherry Hill Drive, Beverly, MA 01915, hereinafter called the Assignee, is desirous of acquiring the entire right, title and interest in and to said application and the inventions therein disclosed and any letters patent that may issue thereon;

NOW, THEREFORE, for good and valuable consideration, receipt whereof is hereby acknowledged, we hereby sell, assign and transfer unto said Assignee, its successors and assigns, the entire right, title and interest in and to said application and any divisions or continuations thereof, and the inventions therein disclosed, and any improvements thereon, and any patent or patents that may be issued or reissued thereon, and we hereby authorize and request the Commissioner of Patents and Trademarks to issue any letters patent thereon, and reissues thereof, to said Assignee, its successors and assigns; and we hereby authorize said Assignee, its successors and assigns, to file in its own name applications for patent in foreign countries in connection with the inventions hereby transferred, under the International Convention claiming the priority of said United States application or otherwise, and to secure in its own name the patent or patents issued thereon; and we hereby agree that, upon request, we will sign all papers, and make all rightful oaths, and do all acts which said Assignee, its successors or assigns, may consider necessary in connection with said United States application, and in connection with any other United States or foreign applications that may be filed in connection with said inventions, and with any improvements thereon, and in connection with any patents issued or reissued thereon.

-1-

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 7th day of November, 2001.		
RALPH ALBANO		
State of <u>Meniformery</u> ) ss County of <u>Wentgomery</u> )		
On this		
Haray Faeth Herreman Notary Public		
IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 14. day of, 2001.		
IVAN L. BERRY, III		
State of Many and )		
State of Montgomen ) ss County of Montgomen )		
On this '1th day of November 2001 before me a Notary Public in and for		
the above County and State, personally appeared the above named IVAN L. BERRY, III		
personally known to me, and acknowledged the execution of the foregoing assignment as a free		

act and deed for the purpose herein set forth.

\*\*Notary Public\*\*

\*\*N

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 7th day of Visuember, 2001.
ORLANDO ESCORCIA
State of Montgomon )  County of Montgomon )
On this
Notary Public
IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 7th, day of November, 2001.  One Manual Constitution of the Constit
State of Manyana) ) ss County of Montgomery)
On this the above County and State, personally appeared the above named QINGYUAN HAN personally known to me, and acknowledged the execution of the foregoing assignment as a free act and deed for the purpose herein set forth.
, )

Notary Public

IN TESTIMONY WHEREOF, I here 2001.	eunto set my hand and seal this 13 th day of
	NICK SBROCKEY
State of	
IN TESTIMONY WHEREOF, I here	Notary Public eunto set my hand and seal this 7th day of
, 2001.	CARLO WALDFRIED
State of	ecution of the foregoing assignment as a free
	Harry Public Horrence

-4-

**RECORDED: 06/11/2002** 

PATENT REEL: 012981 FRAME: 0689