OMB No. 0651-0027 (exp. 6/30/2005) 06 - 22 -	AN RAW ADD AND AN ARE T	
6-16-05		
	5043 Jocuments or the new address(es) below.	
1. Name of conveying party(ies)	2. Name and address of receiving party(ies)	
Christine E. Richardson	Name: California Institute of Technology	
Harry A. Atwater	Internal Address:	
A 1/1/1		
Additional name(s) of conveying party(ies) attached?  Yes X N 3. Nature of conveyance/Execution Date(s):	Street Address: 1200 East California Bouldard 🛱 🗍	
Execution Date(s)02/03/05 and 06/02/05		
Assignment Derger	NA USA 16	
Security Agreement     Change of Name		
Joint Research Agreement	State: California	
Government Interest Assignment		
Executive Order 9424, Confirmatory License	Country: <u>USA</u> Zip: <u>91125</u> Zip: <u>91125</u>	
☐ Other	Additional name(s) & address(es) attached? 🗌 Yes 🖾 No	
A. Patent Application No.(s) 10/974,390	is document is being filed together with a new application. B. Patent No.(s)	
A. Patent Application No.(s) 10/974,390 Additional numbers 5. Name and address to whom correspondence	is document is being filed together with a new application. B. Patent No.(s) s attached? Yes К No 6. Total number of applications and patents	
A. Patent Application No.(s) 10/974,390 5. Name and address to whom correspondence concerning document should be mailed:	Is document is being filed together with a new application. B. Patent No.(s) s attached? ☐ Yes ⊠ No 6. Total number of applications and patents involved: _1	
A. Patent Application No.(s) 10/974,390 5. Name and address to whom correspondence concerning document should be mailed: Name:Lisa A. Haile, J.D., Ph.D.	is document is being filed together with a new application. B. Patent No.(s) s attached? ☐ Yes ⊠ No 6. Total number of applications and patents involved: _1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00	
A. Patent Application No.(s) 10/974,390 5. Name and address to whom correspondence concerning document should be mailed:	is document is being filed together with a new application. B. Patent No.(s) s attached? ☐ Yes ⊠ № 6. Total number of applications and patents involved: _1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 ☐ Authorized to be charged by credit card	
A. Patent Application No.(s) 10/974,390 <b>5. Name and address to whom correspondence</b> <b>concerning document should be mailed:</b> Name: <u>Lisa A. Haile, J.D., Ph.D.</u> Internal Address: <u>Suite 1100</u>	<ul> <li>bis document is being filed together with a new application.</li> <li>B. Patent No.(s)</li> <li>B. Patent No.(s)</li> <li>S attached? ☐ Yes ⊠ NO</li> <li>6. Total number of applications and patents involved: 1</li> <li>7. Total fee (37 CFR 1.21(h) &amp; 3.41) \$ 40.00</li> <li>☐ Authorized to be charged by credit card</li> <li>☐ Authorized to be charged to deposit account</li> </ul>	
A. Patent Application No.(s) 10/974,390 5. Name and address to whom correspondence concerning document should be mailed: Name:Lisa A. Haile, J.D., Ph.D.	is document is being filed together with a new application. B. Patent No.(s) s attached? ☐ Yes ⊠ № 6. Total number of applications and patents involved: _1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 ☐ Authorized to be charged by credit card	
A. Patent Application No.(s) 10/974,390 <b>5. Name and address to whom correspondence</b> <b>concerning document should be mailed:</b> Name:Lisa A. Haile, J.D., Ph.D. Internal Address:Suite 1100 Street Address:4365 Executive Drive	<ul> <li>bis document is being filed together with a new application.</li> <li>B. Patent No.(s)</li> <li>B. Patent No.(s)</li> <li>S attached? ☐ Yes ⊠ NO</li> <li>6. Total number of applications and patents involved: 1</li> <li>7. Total fee (37 CFR 1.21(h) &amp; 3.41) \$ 40.00</li> <li>☐ Authorized to be charged by credit card</li> <li>☐ Authorized to be charged to deposit account</li> <li>☑ Enclosed</li> </ul>	
A. Patent Application No.(s) 10/974,390 <b>5. Name and address to whom correspondence</b> <b>concerning document should be mailed:</b> Name: <u>Lisa A. Haile, J.D., Ph.D.</u> Internal Address: <u>Suite 1100</u>	is document is being filed together with a new application. B. Patent No.(s) s attached? ☐ Yes ⊠ NO 6. Total number of applications and patents involved: _1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 ☐ Authorized to be charged by credit card ☐ Authorized to be charged to deposit account ⊠ Enclosed ☐ None required (government interest not affecting title)	
A. Patent Application No.(s) 10/974,390 <b>5. Name and address to whom correspondence</b> <b>concerning document should be mailed:</b> Name:Lisa A. Haile, J.D., Ph.D. Internal Address:Suite 1100 Street Address:4365 Executive Drive	<ul> <li>bis document is being filed together with a new application.</li> <li>B. Patent No.(s)</li> <li>B. Patent No.(s)</li> <li>S attached? Yes ⊠ NO</li> <li>6. Total number of applications and patents involved: 1</li> <li>7. Total fee (37 CFR 1.21(h) &amp; 3.41) \$ 40.00</li> <li>☐ Authorized to be charged by credit card</li> <li>☐ Authorized to be charged to deposit account</li> <li>⊠ Enclosed</li> <li>☐ None required (government interest not affecting title)</li> <li>8. Payment Information</li> </ul>	
A. Patent Application No.(s) 10/974,390 5. Name and address to whom correspondence concerning document should be mailed: Name:Lisa A. Haile, J.D., Ph.D. Internal Address:Suite 1100 Street Address:4365 Executive Drive City: San Diego	<ul> <li>bis document is being filed together with a new application.</li> <li>B. Patent No.(s)</li> <li>s attached? ☐ Yes ⊠ NO</li> <li>6. Total number of applications and patents involved: 1</li> <li>7. Total fee (37 CFR 1.21(h) &amp; 3.41) \$ 40.00</li> <li>☐ Authorized to be charged by credit card</li> <li>☐ Authorized to be charged to deposit account</li> <li>⊠ Enclosed</li> <li>☐ None required (government interest not affecting title)</li> <li>8. Payment Information <ul> <li>a. Credit Card Last 4 Numbers</li> </ul> </li> </ul>	
A. Patent Application No.(s) 10/974,390 5. Name and address to whom correspondence concerning document should be mailed: Name:Lisa A. Haile, J.D., Ph.D. Internal Address:Suite 1100 Street Address:4365 Executive Drive City: San Diego State:California Zip: 92121 Phone Number: 858.677.1456 Fax Number: 858.677.1465	is document is being filed together with a new application. B. Patent No.(s) s attached? ☐ Yes ⊠ № 6. Total number of applications and patents involved: _1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 ☐ Authorized to be charged by credit card ☐ Authorized to be charged by credit card ☐ Authorized to be charged to deposit account ⊠ Enclosed ☐ None required (government interest not affecting title) 8. Payment Information a. Credit Card Last 4 Numbers Expiration Date b. Deposit Account Number	
A. Patent Application No.(s) 10/974,390 Additional numbers 5. Name and address to whom correspondence concerning document should be mailed: Name:Lisa A. Haile, J.D., Ph.D. Internal Address:Suite 1100 Street Address:4365 Executive Drive City: San Diego State:California Zip: 92121 Phone Number: 858.677.1456	is document is being filed together with a new application. B. Patent No.(s) s attached? ☐ Yes ⊠ No 6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 ☐ Authorized to be charged by credit card ☐ Authorized to be charged to deposit account ⊠ Enclosed ☐ None required (government interest not affecting title) 8. Payment Information a. Credit Card Last 4 Numbers Expiration Date	
A. Patent Application No.(s) 10/974,390 5. Name and address to whom correspondence concerning document should be mailed: Name: Lisa A. Haile, J.D., Ph.D. Internal Address: Suite 1100 Street Address: 4365 Executive Drive City: San Diego State: California Zip: 92121 Phone Number: 858.677.1456 Fax Number: 858.677.1465 Email Address: lisa.haile@dlapiper.com 9. Signature:	is document is being filed together with a new application. B. Patent No.(s) s attached? ☐ Yes ⊠ No 6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 ☐ Authorized to be charged by credit card ☐ Authorized to be charged by credit card ☐ Authorized to be charged to deposit account ⊠ Enclosed ☐ None required (government interest not affecting title) 8. Payment Information a. Credit Card Last 4 Numbers Expiration Date b. Deposit Account Number Authorized User Name 	
A. Patent Application No.(s) 10/974,390 5. Name and address to whom correspondence concerning document should be mailed: Name: Lisa A. Haile, J.D., Ph.D. Internal Address: Suite 1100 Street Address: 4365 Executive Drive City: San Diego State: California Zip: 92121 Phone Number: 858.677.1456 Fax Number: 858.677.1465 Email Address: lisa.haile@dlapiper.com	is document is being filed together with a new application. B. Patent No.(s) s attached? ☐ Yes ⊠ № 6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 ☐ Authorized to be charged by credit card ☐ Authorized to be charged by credit card ☐ Authorized to be charged to deposit account ⊠ Enclosed ☐ None required (government interest not affecting title) 8. Payment Information a. Credit Card Last 4 Numbers Expiration Date b. Deposit Account Number Authorized User Name	

06/21/2005 DBYRNE 00000084 10974390

01 FC:8021

40.00 OP

1

American	LegalNet,	Inc.
www.USC	ourtForms	.com

PATENT REEL: 016698 FRAME: 0374

## ASSIGNMENT (BY INVENTORS)

This assignment ("Assignment") is made by Christine E. Richardson of Pasadena, Calfornia and Harry A. Atwater of South Pasadena, California (collectively, the "Assignors") to CALIFORNIA INSTITUTE OF TECHNOLOGY, a California corporation ("Assignee"), having a place of business at 1200 East California Boulevard, Pasadena, California 91125.

### **Recitals**

A. Each of the Assignors has invented a new and useful invention entitled **METHOD FOR FABRICATING CRYSTALLINE SILICON** for which an provisional application for United States Letters Patent was filed on October 26, 2004 in the United States Patent and Trademark Office.

B. Each of the Assignors authorizes and requests insertion of the application number of the application when officially known:

The United States Application Serial No.: <u>10/974,390</u>.

C. Each of the Assignors believes the Assignors to be the original, first and joint inventors of the invention disclosed and/or claimed in the application for Letters Patent.

D. The parties desire to have a recordable instrument assigning from the Assignors to the Assignee the entire rights, title and interest in and to the invention, the application and all Letters Patent in the United States and throughout the world that may be granted or issued for the invention or that derive a right of priority from the application (including, without limitation, all divisional, continuation, continuation-in-part and continued

GT\6420238.1 104662-173

ı.

prosecution applications thereof, and all reissues and reexaminations thereof, and all foreign counterparts thereof) (collectively, the "Invention Patents").

#### Agreement

NOW, THEREFORE, in accordance with the obligations to assign the Invention Patents and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each of the Assignors agrees to the foregoing and as follows:

1. Each of the Assignors does and will sell, assign and transfer to Assignee, such Assignor's entire rights, title, and interest in and to each of the Invention Patents, including, without limitation, the rights to file foreign applications directly in the name of the Assignee and to claim for any such foreign applications any priority rights to which such applications are entitled under international conventions, treaties, or otherwise.

2. Each of the Assignors agrees that, upon request and without further compensation, but at no expense to such Assignor, such Assignor and such Assignor's legal representatives and assigns will do all lawful acts, including the execution of papers and the giving of testimony, that may be necessary or desirable for obtaining, sustaining, reissuing, or enforcing each of the Invention Patents in the United States and throughout the world, and for perfecting, recording, or maintaining the title of Assignee, and Assignee's successors and assigns, in and to each of the Invention Patents in the United States and throughout the world. In the event that Assignee is unable for any reason to secure any of the Assignors' signatures to any document that may be necessary or desirable for obtaining, sustaining, reissuing, or enforcing each of the Invention Patents in the United States and throughout the world, or for perfecting, recording, or maintaining the title of Assignee's successors and assigns, in and to each of the United States and throughout the world, or for perfecting, recording, or maintaining the title of Assignee, and Assignee's successors and assigns, in and to each of the Invention Patents in the United States and throughout the world, or for perfecting, recording, or maintaining the title of Assignee, and Assignee's successors and assigns, in and to each of the Invention Patents in the United States and throughout the world, each such Assignor hereby irrevocably designates and appoints Assignee and Assignee's duly authorized officers and agents as such Assignor's agents and attorneys-in-fact to act for and on such Assignor's

2

GT\6420238.1 104662-173

ı

behalf and instead of such Assignor to execute such document, all with the same legal force and effect as if executed by such Assignor.

3. Each of the Assignors represents and warrants that such Assignor has not granted and will not grant to others either (1) any rights, title or interest in and to any of the Invention Patents, or (2) any rights inconsistent with the rights granted herein.

4. Each of the Assignors authorizes and requests the Assistant Commissioner for Patents of the United States and the various counterparts thereof throughout the world to issue and/or grant any Letters Patent granted for each of the Invention Patents to Assignee, its successors and assigns, as the assignee of the entire interest in such Invention Patents.

5. This Assignment constitutes the entire agreement with respect to its subject matter and supersedes all prior or contemporaneous oral or written agreements concerning such subject matter. No waiver, amendment, or modification of this Assignment shall be effective against the Assignee, unless in writing executed by a duly authorized representative of the Assignee. This Assignment shall be governed in all respects by the laws of the United States and by the laws of the state/province of California, as such laws are applied to agreements entered into and to be performed entirely within California between California residents. Each of the parties irrevocably consents to the exclusive personal jurisdiction of the federal and state courts located in California, as applicable, for any matter arising out of or relating to this Assignment, except that in any action seeking to enforce any order or any judgment of such federal or state courts located in California, such personal jurisdiction shall be nonexclusive. A breach of any of the promises or agreements contained herein will result in irreparable and continuing damage to Assignee for which there will be no adequate remedy at law, and Assignee shall be entitled to injunctive relief and/or a decree of specific performance, and such other relief as may be proper.

3

GT\6420238.1 104662-173

÷

Т

IN WITNESS WHEREOF, each of the Assignors has executed this Assignment on the date(s) provided below.

4

1.

Assignor : Christine E. Richardson

Date:\_\_\_\_\_

Signature:

2.

Date: 6/2/03

Assignor :\_\_\_\_Harry A. Atwater Signature: Hun Abrict

GT\6420238.1 104662-173

1 1

1

IN WITNESS WHEREOF, each of the Assignors has executed this Assignment on the date(s) provided below.

1.	Assignor : <u>Christine E. Richardson</u>
Date: 213/05	Signature: Owster E R
2.	Assignor : <u>Harry A. Atwater</u>
Date:	Signature:

4

.

GT\6420238.1 104662-173

# RECORDED: 06/16/2005

## PATENT REEL: 016698 FRAME: 0379