	bstitute Form PTO-1595	07-31-		Attorney Docket No.: 06618/11000	
Ass	sistant Commissioner for Pater	100782	263	Jocument.	
1.	Name of conveying party(ies): Gang He and Harry A. Atwater	7-27-	98 2.	Name and address of receiving party(ies): California Institute of Technology 201 E. California Boulevard	
	Additional name(s) attached?	∕es ■ No		Pasadena, CA 91125	
3.	Nature of conveyance: ■ Assignment □ Merger □ Security Agreement □ Change of Name □ Other:			Additional names/addresses attached? ☐ Yes ■ No	
	Execution Date: 7/14/98 and 7/10	/98			
4.	Application number(s) or patent n If this document is being filed with A. Patent Application No.(s): 09/036,182	• •		ution date of the application is: Patent No.(s):	
		Additional numb	ers attached	? □ Yes ■ No	
5.	Name/address of party to whom concerning document should be n		6.	Total number of applications/patents involved: 1	
	Scott C. Harris, Esq. Fish & Richardson P.C. 4225 Executive Square Suite 1400		7.	Total fee (37 CFR 3.41): \$40 ■ Enclosed □ Authorized to charge deposit account	
	La Jolla, CA 92037		8.	Deposit account number: 06-1050 If the fee above is being charged to deposit account, a duplicate copy of this cover sheet is attached. Please apply any additional charges, or any credits, to our Deposit Account No. 06-1050.	
-		DO NO	T USE THIS	SPACE	
9.	Statement and signature: To the best of my knowledge and belief, the foregoing information is true and correct and the attached is the original document.				
	Allison A. Johnson	14%	aven Jest	Proces Sugar, 1998	
	Name of Person Signing			Date Date , attachments, and document: 3	
	98 TTON11 00000061 09036182		Date of I		
C:58	1 40.00 DP		deposited with suff	d with the United States Postal Service as first class mail ficient postage on the date indicated above and is addressed to tant Commissioner for Patents, Washington, D.C. 20231.	

ASSIGNMENT

For valuable consideration, we. Gang He, of Colorado Springs, CO; and Harry A. Atwater of S. Pasadena, CA; hereby assign to California Institute of Technology, a California corporation having a place of business at 201 E. California Boulevard, Pasadena, CA 91125, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by us, entitled METHODS FOR MANUFACTURING GROUP IV ALLOY SEMICONDUCTOR MATERIALS AND DEVICES THAT INCLUDE SUCH MATERIALS, filed March 6, 1998, and assigned U.S. Serial Number 09/036,182, and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, and design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs. legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment. IN WITNESS WHEREOF, I hereto set my hand and seal at Colorado Springs this 14 h day of July, 19 18

GANG HE STATE OF <u>Colorado</u>:

COUNTY OF <u>El Paso</u>:

> PATENT REEL: 9346 FRAME: 0204

IN WITNESS WHEREOF, I hereto set my hand and seal at Passage A	
this oth day of July, 1995	
HARRY A. ATWATER	L.S
STATE OF College Colle	
COUNTY OF Lis Angells:	

PATENT REEL: 9346 FRAME: 0205

RECORDED: 07/27/1998