03-08-2002



	PATENT AND TRADEMARK OFFICE	
(4 (3 ) <del>2</del>		
TO THE HONORABLE DIRECTOR OF THE ORIGINAL DOCUMENTS OR COPY THEREOF	NULL KADEMARK OFFICE. PLEASE RECORD THE ATTACHED	
Name of conveying party(ies):	Name and address of receiving party(ies):	
(a) Hiroshi Amano	Name: Hewlett-Packard Company	
(b) Tetsuya Takeuchi	Street Address: 3000 Hanover Street, MS 20BQ	
(c) Isamu Akasaki	City: Palo Alto State: California Zip: 94304-1112	
Additional name(s) of conveying party(ies) attached?	Country: USA	
Yes No		
3. Nature of Conveyance:	Name and address of receiving party(ies):	
Assignment Merger	Name:	
Security Agreement Change of Name	Street Address:	
Other	City: State: Zip:	
Execution Date: (a) 7/31/00; (b) 9/11/00; (c) 7/29/00	Country:	
	Additional name(s) & address(es) attached?	
	☐ Yes ⊠ No	
Application number(s) or patent number(s):		
If this document is being filed together with a new application, the	ne execution date of the application is: N/A	
A. Patent Application No.(s) – 09/562,978	B. Patent No.(s)	
Title: Semiconductor Substrate And Method For Making The Same	N/A	
Additional num	bers attached? Yes No	
Name and address of party to whom correspondence	Total number of applications and patents involved: 1	
concerning document should be mailed:		
Name: Rachel V. Leiterman		
Internal Address: SKJERVEN MORRILL MacPHERSON LLP		
Street Address: 25 METRO DRIVE, SUITE 700	7. Total fee (37 CFR 3.41): \$40.00	
City SAN JOSE State CA Zip 95110	Authorized to be charged to Deposit Account 19-2386	
	Charge Deposit Account 19-2386 for any additional fees	
	required for this conveyance and credit deposit account 19-2386 any amounts overpaid	
3/07/2002 LHUELLER 00000195 192386 09562978 DO NOT USE T	THIS SPACE	
21 FC::581 40.00 CH /		
8. 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.		
Dataton 1/2/2000		
Rachel V. Leiterman 46,868  Name of Person Signing  Signature  Date		
	umber of pages including cover sheet, attachments, and documents: 3	

Express Mail Label No.: EL 937 079 961 US

## ASSIGNMENT OF PATENT APPLICATION

I/we, the undersigned (each) have agreed and hereby agree to assign to HEWLETT-PACKARD COMPANY, a Delaware corporation having its principal place of business in Palo Alto, California, (hereinafter HP), for good and valuable consideration, receipt of which is hereby acknowledged, and do hereby sell, assign and transfer to HP, its successors and assigns, the entire right, title and interest, including the right of priority, in, to and under an application for Letters Patent of the United States entitled:

SEMICONDUCTOR SUBSTRATE AND METHOD FOR MAKING THE SAME

Filing date: April 27, 2000 Serial No.: 09/562,978

and the invention(s) and improvement(s) set forth therein, and any and all continuations, continuations-in-part (C-I-P's), divisionals, and renewals of and substitutes for said application for said Letters Patent, and any and all Letters Patent of the United States and of countries foreign thereto which may be granted thereon or therefor; and any reissues, or reexaminations, or extensions of said Letters Patent.

I/we additionally authorize HP to file applications in my/our name for Letters Patent in any country, to be held and enjoyed by HP, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by me/us had this assignment, sale and transfer not been made;

AND I/we hereby covenant that I/we have full right to convey the entire interest herein assigned, and that I/we have not executed and will not execute any agreement in conflict herewith, and I/we further covenant and agree that I/we, each time a request is made, and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said invention(s) or improvement(s), said application and said Letters Patent, to HP, its successors, assigns, nominees or legal representatives, and I/we agree to communicate to HP, or to its nominees, all known facts respecting said invention(s) or improvement(s), said application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers, to execute all disclaimers and divisionals, continuations, C-I-P's, reissue and foreign applications, to make all rightful oaths and declarations, and generally to do everything possible to aid HP, its successors, assigns, nominees and legal representatives to obtain and enforce, for its or their own benefit, proper patent protection for said inventions(s) or improvement(s) in any and all countries provided the expenses which may be incurred by me/us in lending such cooperation and assistance are paid by HP;

AND I/we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any country or countries foreign to the United States whose duty it is to issue patents on applications as aforesaid, to issue to HP, as assignee of the entire right, title and interest, any and all Letters Patent for said Invention(s) or improvement(s), including any and all Letters Patent of the United States which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this assignment.

I/we further authorize and direct HP attorneys to insert the serial number and filing date of said application now identified by the attorney docket number and title set forth above as soon as the same shall have been made known to them by the United States Patent and Trademark Office.

IN WITNESS WHEREOF, I/we hereunto s	set my/our hand(s) and seal(s):
Jeroshi Bucud nventor's Signature (Seal)	Date Assignment Signed: July 31, 2000
nventor's Typed Name: <u>Hiroshi Amano</u>	Date Application Signed: July 31, 2000
Vitness's Signature (Seal)	Date of Witness's Signature:
Vitness's Typed Name:	
(Use Page Two	For Additional Inventor(s) Signature(s))  Page 1 of 2

PATENT REEL: 012635 FRAME: 0686

IN WITNESS WHEREOF, I/we hereunto set my/out hand(s) and seal(s):	
Tetama Takuchi	Date Assignment Signed: 9/11/2000
Inventor's Signature (Seal)	•
Inventor's Typed Name: <u>Tetsuya Takeuchi</u>	Date Application Signed: 9/11/2000
	Date of Witness's Signature: ダケル/スのの
, , , , , , , , , , , , , , , , , , ,	
Witness's Typed Name:	
Inventor's Signature (Seal)	Date Assignment Signed: 7/29/00
Inner Annie Trong d Niemen - Taguna Alagada	Data Application Signals 7: 1 20 2000
inventor's Typed Name: <u>Isamu Akasaki</u>	Date Application Signed: July 29, 2000
Witness's Signature (Seal) Witness's Typed Name:	Date of Witness's Signature:
	Data Assissance of Cianada
Inventor's Signature (Seal)	Date Assignment Signed:
inventor s Signature (Sear)	
Inventor's Typed Name:	Date Application Signed:
	Data of Witness's Cimpatum.
Witness's Signature (Seal)	Date of Witness's Signature:
()	
Witness's Typed Name:	
	Data Assignment Signed
nventor's Signature (Seal)	Date Assignment Signed:
nventor's Typed Name:	Date Application Signed:
	Date of Witness's Signature:
Witness's Signature (Seal)	
Nister and The state of Nister and Nister an	

Page 2 of 2

PATENT **REEL: 012635 FRAME: 0687**