Form PTO-1595 (Rev. 06/04) OMB No. 0651-0027 (exp. 6/30/2005)



U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office

102806010					
To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.					
1. Name of conveying party(ies)/Execution Date(s):	2. Name and address of receiving party(ies)				
Kang Yong Kim	Name: Micron Technology, Inc.				
4.3.07	Internal Address:				
,					
Execution Date(s) 07/28/04	Street Address: 8000 S. Federal Way				
Additional name(s) of conveying party(ies) attached? Yes V No					
3. Nature of conveyance:					
Assignment Merger	City: Boise				
Security Agreement Change of Name	State: Idaho				
Government Interest Assignment	Country: United States Zip: 83707-0006				
Executive Order 9424, Confirmatory License	Courtilly. United States Zip. 65767-6666				
Other	Additional name(s) & address(es) attached? Yes V No				
	document is being filed together with a new application.				
A. Patent Application No.(s) 10/848,261	B. Patent No.(s)				
10/040,201					
Additional numbers att	tached? Yes No				
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:				
Name: Abhijat Parikh, Esg.					
	7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40				
Internal Address: Thorp Reed & Armstrong, LLP	Authorized to be charged by credit card				
	Authorized to be charged to deposit account				
Street Address: One Oxford Centre, 14th Floor	Venctored None required (government interest nations till)				
301 Grant Street	None required (government interest not affecting title)				
City: Pittsburgh	8. Payment Information				
State: PA Zip: 15219-1425	a. Credit Card Last 4 Numbers 5 1 1 2 Expiration Date 5 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2				
Phone Number: <u>412-394-2478</u>	10 19 5				
Fax Number: <u>412-394-2555</u>	b. Deposit Account Number 20-0888				
Email Address: aparikh@thorpreed.com	Authorized User Name S S S				
9. Signature: A	30 July 2004				
Signature	Date Date				
Abhijat Parikh	Total number of pages including cover 5				
Name of Person Signing	sheet, attachments, and documents:				

Documents to be recorded (including cover sheet) should be faxed to (703) 306-5995, or mailed to:

Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

08/04/2004 LNUFLLER 00000011 10848251

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PATENT

Attorney's Docket No	DB001114-000)			
		For: 図し 口 For: 口U For: 図 F	J.S. Applic .S. Provisi .S. Patent PCT Applic	onal Applicatio	ក
	ASSIGNMENT OF	INVENTIO	ON		
In consideration of the (\$1.00), the receipt of which is consideration,	payment by ASSIGNE hereby acknowledged	EE to ASS d, and for	SIGNOR of other goo	f the sum of Oi d and valuable	ne Dollar
ASSIGNOR (Inventor):					
Kang Yong Kim (type or print name of inventors)	· .		pple St., #E D 8370	E204 06-5187 S.Ko Nationali	
hereby sells, assigns and trans	sfers to				
Micron Technology, Inc.			. Federal 1 ID 83707-		
(type or print name(s) of ASSIGNED	E(S))	Address	<u>ID 63707</u> .	-0000	
Nationality					
and the successors, assigns a	nd legal representative	es of the	ASSIGNE	E	
	(complete one of the	following)		
■ the entire	e right, title and intere	st			
□ an undiv	rided		: (%) interest	
for the United States and its te	rritorial possession			-	
(check the follo	wing box, if foreign rig	hts are a	lso to be a	ssigned)	

00550176.DOC

and in all foreign countries, including all rights to claim priority, in and to any and all improvements which are disclosed in the invention entitled:

DLL PHASE DETECTION USING ADVANCED PHASE EQUAL

(check and complete (a), (b), (c), (d), (e), (f) or (g))

and whi	ich is	found i	in .
((a)		U.S. patent application executed on even date herewith
	(b)		U.S. patent application executed on
((c)	0	U.S. provisional application naming the above inventor(s) for the above- entitled invention.
			Express mail label no
			Mailed:
			☐ To comply with 37 CFR 3.21 for recordal of this
			assignment, I, an ASSIGNOR signing below,
			hereby authorize and request my attorney to
			insert below the filing date and application
•			number when they become known.
((d)	×	U.S. application no. <u>10/848,261</u> filed on <u>18 May 2004</u>
((e)		International application no. PCT//
			filed on
((f)		U.S. patent noissued
			☐ A change of address to which correspondence is to be sent
			regarding patent maintenance fees is being sent separately.
		((also check (g), if foreign application(s) is also being assigned)
((g)	×	and any legal equivalent thereof in a foreign country, including the right to claim priority

and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, renewal, or substitute thereof, and as to letters patent any reissue or re-examination thereof

ASSIGNOR hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;

ASSIGNOR further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letter Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

IN WITNES	7/28/04	
		Date of Signing
WARNING:	The date of signing must be the same as the date of execution of the was checked above.	e application, if item (a)
Kang Yong	Kim Kanglyone	Lin
(type name of invent		7-7

☑ Notarization or Legalization Page Added.

Note: No witnessing, notarization or legalization is necessary. If the assignment is notarized or legalized, then it will only be prima facie evidence of execution. 35 USC 261. Use next page if notarization is desired.

NOTARIZATION OR LEGALIZATION ACCOMPANYING ASSIGNMENT

NOTE: Executing this page is not required for assignment, and is only prima facie evidence of execution, 35 USC 261.

Detail	s of Cou	untryUh	ited States of C	Lmuric	a
And p	lace of	signing of assi	gnment 8000 S. Boise, Jo	Judesa 1 83	1 Way 3707
	ared the	above named	day of	to be the	20_ 0U , personally person(s) who is are nent and acknowledged to me
	文	he		X	his
		she	executed the same of		her
		they		- 0	their
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Notary Public or Consular Officer of the United States of America

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FEE TRANSMITTAL		Complete if Known			
FEE IRANS	WILLIAL	Application Number	10/848,261		
for EV 2	004	Filing Date	18 May 2004		
for FY 2004		First Named Inventor	Kang Yong Kim		
Effective 10/01/2003. Patent fees are sub		Examiner Name	Not Yet Assigned		
Applicant claims small entity status. S	See 37 CFR 1.27	Art Unit	2116		
TOTAL AMOUNT OF PAYMENT (\$) 40.00		Attorney Docket No.	DB001114-000		

METHOD OF PAYMENT (check all that apply)	METHOD OF PAYMENT (check all that apply) FEE CALCULATION (continued)					
Check Credit card Money Other None	ne 3. ADDITIONAL FEES					
C Descrit Associati	<u>Large</u>	Entity	Small	Entity		
Deposit Account:	Fee Code	Fee	Fee Code	Fee	Fee Description	5 D
Account 20-0888	1051	(\$) 130	2051	(\$) 65	Surcharge - late filing fee or oath	Fee Paid
Number Deposit TL Deposit Deposit	1052	50	2052		Surcharge - late provisional filing fee or	
Account Name Thorp Reed & Armstrong	1032	50	2002	20	cover sheet	
The Director is authorized to: (check all that apply)	1053	130	1053	-	Non-English specification	
Charge fee(s) indicated below Credit any overpayments	l .	2,520	1812	•	For filing a request for ex parte reexamination	
Charge any additional fee(s) or any underpayment of fee(s)	1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
Charge fee(s) indicated below, except for the filing fee	1805	1,840*	1805	1,840*	Requesting publication of SIR after	[1
to the above-identified deposit account.					Examiner action	
FEE CALCULATION	1251	110	2251	55	Extension for reply within first month	
1. BASIC FILING FEE	1252	420	2252	210		
Large Entity Small Entity Fee Fee Fee Fee Paid	1253	950	2253		Extension for reply within third month	
Fee Fee Fee Fee Description Fee Paid Code (\$)	1254	1,480	2254	740		
1001 770 2001 385 Utility filing fee	1255	2,010	2255	1,005	Extension for reply within fifth month	
1002 340 2002 170 Design filing fee	1401	330	2401	165	Notice of Appeal	
1003 530 2003 265 Plant filing fee	1402	330	2402	165	Filing a brief in support of an appeal	
1004 770 2004 385 Reissue filing fee	1403	290	2403	145	Request for oral hearing	
1005 160 2005 80 Provisional filing fee	1451	1,510	1451	1,510	Petition to institute a public use proceeding	
SUBTOTAL (1) (\$) 0	1452	110	2452	55	Petition to revive - unavoidable	
	1453	1,330	2453	665	Petition to revive - unintentional	
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE	1501	1,330	2501	665	Utility issue fee (or reissue)	
Extra Claims below Fee Paid	1502	480	2502	240	Design issue fee	
Total Claims20** = X =	1503	640	2503	320	Plant issue fee	
Claims Multiple Dependent	1460	130	1460	130	Petitions to the Commissioner	
Multiple Departuent	1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
Large Entity Small Entity Fee Fee Fee Fee Fee Description	1806	180	1806		Submission of Information Disclosure Stmt	
Code (\$) Code (\$)	8021	40	8021	40	Recording each patent assignment per	40
1202 18 2202 9 Claims in excess of 20	1809	770	2809	385	property (times number of properties) Filing a submission after final rejection	
1201 86 2201 43 Independent claims in excess of 3	.000		2000	000	(37 CFR 1.129(a))	
1203 290 2203 145 Multiple dependent claim, if not paid	1810	770	2810	385	For each additional invention to be	
1204 86 2204 43 ** Reissue independent claims over original patent	1901	770	2004	205	examined (37 CFR 1.129(b))	
1205 18 2205 9 ** Reissue claims in excess of 20	1801 1802	770 900	2801 1802	385 900	Request for Continued Examination (RCE) Request for expedited examination	
and over original patent	1002	300	1002	300	of a design application	
SUBTOTAL (2) (\$) 0	Other	fee (sp	ecify) _			
**or number previously paid, if greater; For Reissues, see above *Reduced by Basic Filing Fee Paid *SUBTOTAL (3) (\$)					ee Paid SUBTOTAL (3) (\$) 40	
SUBMITTED BY			===		(Complete (if applicable))	
	T	ogietra	tion No		(*************************************	

Name (Print/Type) Abhijat Parikh Registration No. (Altornev/Agent) 49,086 Telephone 412-394-2478
Signature Date 30 July 2004

WARNING: Information of this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PATENT

REEL: 015632 FRAME: 0888

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Mail Stop Assignment Recordation Services
Director of the US Patent and Trademark Office

P. O. Box 1450

Alexandria, 322313-1450

Atterney for Applicant

Date: July 30, 2004

Attorney Docket No.: DB001114-000

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

 Applicant:
 Kang Yong Kim
)
 Examiner:
 Not yet assigned

 Serial No.:
 10/848,261
)
 Art Unit:
 2116

 Filed:
 18 May 2004
)

Entitled: DLL PHASE DETECTION USING ADVANCED PHASE EQUAL

TRANSMITTAL LETTER

Mail Stop Assignment Recordation Services Director of the US Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Enclosed for filing in the above-referenced patent application are the following:

- Recordation Form Cover Sheet (PTO-1595) ×2;
- copy of executed Assignment of Invention, four (4) pages, including 1 notarization sheet;
- Fee Transmittal form (PTO/SB/17): x2; and
- a check in the amount of \$40 to cover the fee for recordation of the Assignment.

Also enclosed is a return postcard. Please date stamp the postcard and return it to us to acknowledge receipt of these documents. The Commissioner is hereby authorized to charge any underpayment or credit any overpayment to our Deposit Account No. 20-0888. A duplicate copy of this transmittal letter is enclosed.

Respectfully submitted,

Abhijat Parikh Reg. No. 49,086

THORP REED & ARMSTRONG One Oxford Centre, 14th Floor Pittsburgh, PA 15219-1425

(412) 394-2478

Attorneys for Applicant

Dated: 30 July 2004

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P. O. Box 1450

Alexandria, V

Date: July 30, 2004

Attorney Docket No.: DB001114-000

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Kang Yong Kim Examiner: Not yet assigned Serial No.: 10/848,261 **Art Unit:** 2116 Filed: 18 May 2004

Entitled:

DLL PHASE DETECTION USING ADVANCED PHASE EQUAL

TRANSMITTAL LETTER

Mail Stop Assignment Recordation Services Director of the US Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

RECORDED: 08/03/2004

Dear Sir:

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- copy of executed Assignment of Invention, four (4) pages, including 1 notarization sheet;
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(412) 394-2478

Attorneys for Applicant

Dated: 30 July 2004

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