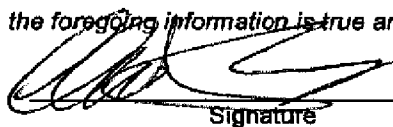


Form PTO-1595 (Rev. 10/02) OMB No. 0651-0027 (exp. 6/30/2005)	RECORDATION FORM COVER SHEET PATENTS ONLY	U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office
Tab settings ⇌ ⇌ ⇌ ↓ ↓ ↓ ↓ ↓ ↓ ↓		
To the honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.		
1. Name of conveying party(ies): Syed M. Alam Prabhakar N. Kudva Ibrahim M. Elfadhel David S. Kung Kathryn W. Guarini Mark A. Lavin Meikei leong Arifur Rahman Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. Name and address of receiving party(ies) Name: <u>International Business Machines Corporation</u> Internal Address: _____ _____ Street Address: <u>New Orchard Road</u> _____ City: <u>Armonk</u> State: <u>NY</u> Zip: <u>10504</u> Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other _____ Execution Date: <u>August 4, 6, 10 and October 6, 2004</u>		
4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: _____ A. Patent Application No.(s) <u>10/919,121</u> B. Patent No.(s) _____ Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Name and address of party to whom correspondence concerning document should be mailed: Name: <u>Charles W. Peterson, Jr.</u> <u>Law Office of Charles W. Peterson, Jr.</u> Internal Address: _____ _____ Street Address: <u>Suite 100</u> <u>11703 Bowman Green Dr.</u> City: <u>Reston</u> State: <u>Virginia</u> Zip: <u>20190</u>	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 3.41). \$ <u>40.00</u> <input type="checkbox"/> Enclosed <input checked="" type="checkbox"/> Authorized to be charged to deposit account 8. Deposit account number: <u>50-0510</u> (Attach duplicate copy of this page if paying by deposit account)	
DO NOT USE THIS SPACE		
9. Statement and signature. <i>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.</i> <u>Charles W. Peterson, Jr.</u>  <u>October 25, 2004</u> Name of Person Signing Signature Date Total number of pages including cover sheet, attachments, and documents: 15		

Mail documents to be recorded with required cover sheet information to:
 Commissioner of Patents & Trademarks, Box Assignments
 Washington, D.C. 20231

CH \$40.00 500510 10919121

700125710

 PATENT
 REEL: 015287 FRAME: 0496

IBM Docket No: YOR920030608US1

Assignment

INVENTOR	Whereas, I/WE	
AND CITY	Syed M. Alam	of Cambridge
	County of Middlesex	and State of MA
	Ibrahim M. Elfadel	of Ossining
	County of Westchester	and State of NY
	Kathryn W. Guarini	of Yorktown Heights
	County of Westchester	and State of NY
	Meikei Jeong	of Wappingers Falls
	County of Dutchess	and State of NY
	Prabhakar N. Kudva	of New York
	County of New York	and State of NY
	David S. Kung	of Chappaqua
	County of Westchester	and State of NY
	Mark A. Lavin	of Katonah
	County of Westchester	and State of NY
	Arifur Rahman	of Freemont
	County of Alameda	and State of CA
	have invented certain improvements in	
TITLE	THREE DIMENSIONAL INTEGRATED CIRCUIT AND METHOD OF DESIGN	
	and executed herewith, a United States patent application therefor;	

Whereas, INTERNATIONAL BUSINESS MACHINES CORPORATION, a corporation of New York, having a place of business at Armonk, New York 10504, (hereinafter called IBM), desires to acquire the entire right, title and interest in the said application and invention, and to any United States and foreign patents to be obtained therefor;

Now therefore, for a valuable consideration, receipt whereof is hereby acknowledged, we, the above named, hereby sell, assign, and transfer to IBM, its successors and assigns, the entire right, title and interest in the said application and invention therein disclosed for the United States and foreign countries, and all rights of priority resulting from the filing of said United States application, and we request the Commissioner of Patents to issue any Letters Patent granted upon the inventions set forth in said applications to IBM, its successors and assigns; and we hereby agree that IBM may apply for foreign Letters Patent on said invention and we will execute all papers necessary in connection with the United States and foreign applications when called upon to do so by IBM.

Signed and sealed

CITY AND DATE at _____
on _____, 2004,

Syed M. Alam
FIRST NAME MIDDLE INITIAL LAST NAME SIGNATURE

Signed and sealed

CITY AND DATE at _____
on _____, 2004,

Ibrahim M. Elfadel
FIRST NAME MIDDLE INITIAL LAST NAME SIGNATURE

Signed and sealed

CITY AND DATE at _____
on _____, 2004,

Kathryn W. Guarini
FIRST NAME MIDDLE INITIAL LAST NAME SIGNATURE

Signed and sealed

CITY AND DATE at _____
on _____, 2004,

Meikei _____ leong
FIRST NAME MIDDLE INITIAL LAST NAME SIGNATURE

Signed and sealed

CITY AND DATE at _____
on _____, 2004,

Prabhakar N. Kudva
FIRST NAME MIDDLE INITIAL LAST NAME SIGNATURE

Signed and sealed

CITY AND DATE at _____
on _____, 2004,

David S. Kung
FIRST NAME MIDDLE INITIAL LAST NAME SIGNATURE

Signed and sealed

CITY AND DATE at _____
on _____, 2004,

Mark A. Lavin
FIRST NAME MIDDLE INITIAL LAST NAME SIGNATURE

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California

County of

Santa Clara

} ss.

On

Aug. 10, 2004

Date

before me,

Nuria Rusch Notary Public

Name and Title of Officer (e.g., "Jane Doe, Notary Public")

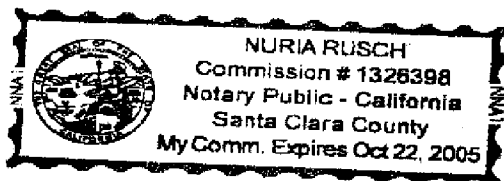
personally appeared

Arifur Rahman

Name(s) of Signer(s)

☐ personally known to me☒ proved to me on the basis of satisfactory evidence

to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies); and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



WITNESS my hand and official seal.

Nuria Rusch
Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

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Signer's Name: _____

- ☐ Individual
☐ Corporate Officer — Title(s): _____
☐ Partner — ☐ Limited ☐ General
☐ Attorney-in-Fact
☐ Trustee
☐ Guardian or Conservator
☐ Other: _____

Signer Is Representing: _____

**RIGHT THUMBPRINT
OF SIGNER**

Top of thumb here

Page 3 of 3

IBM Docket: YOR920030608US1

Signed and sealed

CITY AND
DATE

at August 10
on , 2004,

Arifur Rahman

SIGNATURE

Arifur

Rahman

FIRST NAME

MIDDLE INITIAL

LAST NAME



Nuria Rusch, Notary Public
Exp. 10-22-05

IBM Docket No: YOR920030608US1

Assignment

INVENTOR AND CITY	Whereas, I/WE	
	Syed M. Alam	of Cambridge
	County of Middlesex	and State of MA
	Ibrahim M. Elfadel	of Ossining
	County of Westchester	and State of NY
	Kathryn W. Guarini	of Yorktown Heights
	County of Westchester	and State of NY
	Meikei Ieong	of Wappingers Falls
	County of Dutchess	and State of NY
	Prabhakar N. Kudva	of New York
	County of New York	and State of NY
	David S. Kung	of Chappaqua
	County of Westchester	and State of NY
	Mark A. Lavin	of Katonah
	County of Westchester	and State of NY
	Arifur Rahman	of Freemont
	County of Alameda	and State of CA

have invented certain improvements in

TITLE **THREE DIMENSIONAL INTEGRATED CIRCUIT AND METHOD OF DESIGN**

and executed herewith, a United States patent application therefor;

Whereas, INTERNATIONAL BUSINESS MACHINES CORPORATION, a corporation of New York, having a place of business at Armonk, New York 10504, (hereinafter called IBM), desires to acquire the entire right, title and interest in the said application and invention, and to any United States and foreign patents to be obtained therefor;

Now therefore, for a valuable consideration, receipt whereof is hereby acknowledged, we, the above named, hereby sell, assign, and transfer to IBM, its successors and assigns, the entire right, title and interest in the said application and invention therein disclosed for the United States and foreign countries, and all rights of priority resulting from the filing of said United States application, and we request the Commissioner of Patents to issue any Letters Patent granted upon the inventions set forth in said applications to IBM, its successors and assigns; and we hereby agree that IBM may apply for foreign Letters Patent on said invention and we will execute all papers necessary in connection with the United States and foreign applications when called upon to do so by IBM.

Page 2 of 3

IBM Docket: YOR920030608US1

Signed and sealed

CITY AND
DATEat _____
on _____, 2004,

Syed M. Alam
FIRST NAME MIDDLE INITIAL LAST NAME

SIGNATURE

Signed and sealed

CITY AND
DATEat Yorktown Heights, NY
on Aug 6, 2004,

Ibrahim M. Elfadel
FIRST NAME MIDDLE INITIAL LAST NAME

SIGNATURE

Signed and sealed

CITY AND
DATEat Yorktown Heights, NY
on Aug 6, 2004,

Kathryn W. Guarini
FIRST NAME MIDDLE INITIAL LAST NAME

SIGNATURE

Signed and sealed

CITY AND
DATEat _____
on _____, 2004,

Meikei _____ Ieong
FIRST NAME MIDDLE INITIAL LAST NAME

SIGNATURE

Signed and sealed

CITY AND
DATEat Yorktown Heights, NY
on Aug 6, 2004,

Prabhakar N. Kudva
FIRST NAME MIDDLE INITIAL LAST NAME

SIGNATURE

Signed and sealed

CITY AND
DATEat Yorktown Heights, NY
on 4th Aug 2004,

David S. Kung
FIRST NAME MIDDLE INITIAL LAST NAME

SIGNATURE

Signed and sealed

CITY AND
DATEat YORKTOWN HTS, NY
on 6th Aug 2004,

Mark A. Lavin
FIRST NAME MIDDLE INITIAL LAST NAME

SIGNATURE

Page 3 of 3

IBM Docket: YOR920030608US1

Signed and sealed

CITY AND
DATE

at _____
on _____, 2004,

Arifur

FIRST NAME

Rahman

MIDDLE INITIAL

SIGNATURE

LAST NAME

IBM Docket No: YOR920030608US1

Assignment

INVENTOR
AND CITY

Whereas, I/WE

Syed M. Alam
County of Middlesex

of Cambridge
and State of MA

Ibrahim M. Elfadel
County of Westchester

of Ossining
and State of NY

Kathryn W. Guarini
County of Westchester

of Yorktown Heights
and State of NY

Meikei Jeong
County of Dutchess

of Wappingers Falls
and State of NY

Prabhakar N. Kudva
County of New York

of New York
and State of NY

David S. Kung
County of Westchester

of Chappaqua
and State of NY

Mark A. Lavin
County of Westchester

of Katonah
and State of NY

Arifur Rahman
County of Alameda

of Fremont
and State of CA

have invented certain improvements in

TITLE

THREE DIMENSIONAL INTEGRATED CIRCUIT AND METHOD OF DESIGN

and executed herewith, a United States patent application therefor;

Whereas, INTERNATIONAL BUSINESS MACHINES CORPORATION, a corporation of New York, having a place of business at Armonk, New York 10504, (hereinafter called IBM), desires to acquire the entire right, title and interest in the said application and invention, and to any United States and foreign patents to be obtained therefor;

Now therefore, for a valuable consideration, receipt whereof is hereby acknowledged, we, the above named, hereby sell, assign, and transfer to IBM, its successors and assigns, the entire right, title and interest in the said application and invention therein disclosed for the United States and foreign countries, and all rights of priority resulting from the filing of said United States application, and we request the Commissioner of Patents to issue any Letters Patent granted upon the inventions set forth in said applications to IBM, its successors and assigns; and we hereby agree that IBM may apply for foreign Letters Patent on said invention and we will execute all papers necessary in connection with the United States and foreign applications when called upon to do so by IBM.

Page 2 of 3

IBM Docket: YOR920030608US1

Signed and sealed

CITY AND
DATEat Cambridge
on 8/6, 2004,

SIGNATURE

Syed	M.	Alam
FIRST NAME	MIDDLE INITIAL	LAST NAME

Signed and sealed

CITY AND
DATEat _____
on _____, 2004,

SIGNATURE

Ibrahim	M.	Elfadel
FIRST NAME	MIDDLE INITIAL	LAST NAME

Signed and sealed

CITY AND
DATEat _____
on _____, 2004,

SIGNATURE

Kathryn	W.	Guarini
FIRST NAME	MIDDLE INITIAL	LAST NAME

Signed and sealed

CITY AND
DATEat _____
on _____, 2004,

SIGNATURE

Meikei		Ieong
FIRST NAME	MIDDLE INITIAL	LAST NAME

Signed and sealed

CITY AND
DATEat _____
on _____, 2004,

SIGNATURE

Prabhakar	N.	Kudva
FIRST NAME	MIDDLE INITIAL	LAST NAME

Signed and sealed

CITY AND
DATEat _____
on _____, 2004,

SIGNATURE

David	S.	Kung
FIRST NAME	MIDDLE INITIAL	LAST NAME

Signed and sealed

CITY AND
DATEat _____
on _____, 2004,

SIGNATURE

Mark	A.	Lavin
FIRST NAME	MIDDLE INITIAL	LAST NAME

Page 3 of 3

IBM Docket: YOR920030608US1

Signed and sealed

CITY AND
DATE

at
on

_____, 2004,

SIGNATURE

Arifur

Rahman

FIRST NAME

MIDDLE INITIAL

LAST NAME

IBM Docket No: YOR920030608US1

Assignment

INVENTOR AND CITY	Whereas, I/WE Syed M. Alam County of Middlesex Ibrahim M. Elfadel County of Westchester Kathryn W. Guarini County of Westchester Meikei Jeong County of Dutchess Prabhakar N. Kudva County of New York David S. Kung County of Westchester Mark A. Lavin County of Westchester Arifur Rahman County of Alameda	of Cambridge and State of MA of Ossining and State of NY of Yorktown Heights and State of NY of Wappingers Falls and State of NY of New York and State of NY of Chappaqua and State of NY of Katonah and State of NY of Freemont and State of CA
----------------------	--	---

have invented certain improvements in

TITLE THREE DIMENSIONAL INTEGRATED CIRCUIT AND METHOD OF DESIGN

and executed herewith, a United States patent application therefor;

Whereas, INTERNATIONAL BUSINESS MACHINES CORPORATION, a corporation of New York, having a place of business at Armonk, New York 10504, (hereinafter called IBM), desires to acquire the entire right, title and interest in the said application and invention, and to any United States and foreign patents to be obtained therefor;

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Signed and sealed

CITY AND at _____
DATE on _____, 2004,

Syed M. Alam
FIRST NAME MIDDLE INITIAL LAST NAME SIGNATURE

Signed and sealed

CITY AND at _____
DATE on _____, 2004,

Ibrahim M. Elfadel
FIRST NAME MIDDLE INITIAL LAST NAME SIGNATURE

Signed and sealed

CITY AND at _____
DATE on _____, 2004,

Kathryn W. Guarini
FIRST NAME MIDDLE INITIAL LAST NAME SIGNATURE

Signed and sealed

CITY AND at HOPEWELL JUNCTION, NY
DATE on 10/6, 2004,

Meikei Jeong
FIRST NAME MIDDLE INITIAL LAST NAME SIGNATURE

Signed and sealed

CITY AND at _____
DATE on _____, 2004,

Prabhakar N. Kudva
FIRST NAME MIDDLE INITIAL LAST NAME SIGNATURE

Signed and sealed

~~CITY AND~~ at _____
~~DATE~~ on _____, 2004,

David S. Kung
FIRST NAME MIDDLE INITIAL LAST NAME SIGNATURE

Signed and sealed

CITY AND at _____
DATE on _____, 2004,

Mark A. Lavin
FIRST NAME MIDDLE INITIAL LAST NAME SIGNATURE

Page 3 of 3

IBM Docket: YOR920030608US1

Signed and sealed

CITY AND
DATE

at _____
on _____, 2004,

Arifur

FIRST NAME

MIDDLE INITIAL

Rahman

SIGNATURE

LAST NAME