	FORM COVER SHEET NTS ONLY U.S. DEFARTMENT OF COMMERCE Patent and Trademark Office	
To the Honorable Commissioner of Patents and Tradem	arks: Please record the attached original documents or copy thereof.	
Name of conveying party(ies): Louis L.C. Hsu, Brian L. Ji, Chung Hon Lam and Hon-Sum Philip Wong	Name and address of receiving party(ies) Name: International Business Machines Corporation	
Additional name(s) of conveying party(ies) attached? Yes X No 3. Nature of conveyance: X Assignment _ Merger Security Agreement _ Change of Name Other Execution Date(s): 8/1/05, 8/2/05, 8/2/05, 8/2/05 4. Application number(s) or patent number(s): If this document is being filed together with a new application No.(s) A. Patent Application No.(s) B. Patent No.(s) Additional number		
5. Name and address of party to whom correspondence concerning document should be mailed: Name: William E. Lewis Internal Address: Ryan, Mason & Lewis, LLP Street Address: 90 Forest Avenue City: Locust Valley State: NY ZIP: 11560		
DO NOT	USE THIS SPACE	
9. 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. William E. Lewis Reg. No. 39,274 Total number of pages including cover sheet, attachments, and document; Do not detach this portion Mail documents to be recorded with required cover sheet information to: Mail Stop Assignment Recordation Services Director of the U.S. Patent and Trademark Office Public burden, reporting for this sample cover sheet is estimated to average about 30 minutes per document to be recorded, including time for reviewing the document and gathering the data receded, and completing and reviewing the sample cover sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office. Office of Information Systems, PK2-1000C, Washington, DC, 20231, and to the Office of Management and Budget, Paperwork Reduction Project (0651-0011), Washington, DC 20303.		

YOR920050141US1

Attorney Docket No. YOR920050141US1

ASSIGNMENT

Whereas, we

Inventor and City

(1) Louis L.C. Hsu

County of Dutchess

(2) Brian L. Ji

County of Dutchess

(3) Chung Hon Lam County of Westchester

and (4) Hon-Sum Philip Wong County of Santa Clara

of Fishkill

and State of New York

of Fishkilll

and State of New York

of Peekskill

and State of New York

of Palo Alto and State of California

have invented certain improvements in

NON-VOLATILE CONTENT ADDRESSABLE MEMORY USING PHASE-CHANGE-TITLE MATERIAL MEMORY ELEMENTS

described in United States patent application Serial No. 11/172,473, filed on June 30, 2005 and executed on

DATE THAT (1) 8/1/2005 (2) 8/2/2005 (3) 8/2/2005 and (4) INVENTORS SIGNED THE DECLARATION

Whereas, INTERNATIONAL BUSINESS MACHINES CORPORATION, a corporation of New York, having a place of business at New Orchard Road, 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

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 application 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 1 of 2

PATENT REEL: 016624 FRAME: 0272

		Attorney Docket No. YOR920050141US1
CITY DATE	Signed /ct (1) at Hopewell , NY on Aug / 2005,	(Louis L.C. Hsu) INVENTOR FIRST NAME MIDDLE INITIAL LAST NAME
CITY DATE	Signed (2) at York town Height Kry on <u>Aug</u> 2005,	Brian L. JI) INVENTOR FIRST NAME MIDDLE INITIAL LAST NAME
CITY DATE	Signed (3) at york hunten 19 2005,	(Chung Hon Lam) INVENTOR FIRST NAME MIDDLE INITIAL LAST NAME
CITY and DATE	Signed (4) at , NY on 2005,	SIGNATURE (Hou-Sum Philip Wong) INVENTOR FIRST NAME MIDDLE INITIAL LAST NAME

Ryan, Mason & Lewis, LLP 90 Forest Avenue Locust Valley, New York 11560 (516) 759-2722

Page 2 of 2

Attorney Docket No. YOR920050141US1

ASSIGNMENT

Whereas, we

Inventor and City

(1) Louis L.C. Hsu County of Dutchess of Fishkill

and State of New York

(2) Brian L. Ji County of Dutchess of Fishkilll

and State of New York

(3) Chung Hon Lam County of Westchester of Peckskill

and State of New York

and (4) Hon-Sum Philip Wong

County of Santa Clara

of Palo Alto

and State of California

have invented certain improvements in

TITLE NON-VOLATILE CONTENT ADDRESSABLE MEMORY USING PHASE-CHANGE-MATERIAL MEMORY ELEMENTS

described in United States patent application Serial No. 11/172,473, filed on June 30, 2005 and executed on

DATE THAT (1)	2005 (2)	2005 (3)	2005 and (4) Aug 2 . 2	005.
INVENTORS				
SIGNED THE		•		
DECLARATION				

Whereas, INTERNATIONAL BUSINESS MACHINES CORPORATION, a corporation of New York, having a place of business at New Orchard Road, 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 application 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 1 of 2

PATENT REEL: 016624 FRAME: 0274

Attorney Docket No. YOR920050141US1

CITY DATE	Signed (1) at , NY on 2009	\ D. T.
CITY DATE	Signed (2) at , N' on 200	
CITY DATE	Signed (3) at , N' on 200	
Palo MITO CITY and DATE	Signed (4) at Pa (6 Alla, Dr on <u>Ang 2</u> , 200	5, (Hon-Sum Philip Wong) INVENTIOR FIRST NAME MIDDLE INITIAL LAST NAME

Ryan, Mason & Lewis, LLP 90 Forest Avenue Locust Valley, New York 11560 (516) 759-2722

Page 2 of 2

PATENT REEL: 016624 FRAME: 0275