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SUBMISSION TYPE	:	NEW ASSIGNMENT		_
NATURE OF CONV	EYANCE:			
CONVEYING PART	Y DATA			
		Name	Execution Date	
Matthew J. Breitwise	ch		02/15/2008	
Chung H. Lam			02/15/2008	
Simone Raoux			02/15/2008	
Chieh-Fang Chen			02/15/2008	
Yi-Chou Chen			02/20/2008	
RECEIVING PARTY				
Name:		Business Machines Corporation		
Street Address:	New Orchard Road			
City:	Armonk	Armonk		
State/Country:	NEW YORK			
Postal Code:	10504			
Name:	Maaranix Int	arrational Co. 1 td		
Street Address:	Macronix International Co., Ltd.			
Internal Address:	No. 16, Li-Hsin Road			
City:	Science-Based Industrial Park			
State/Country:	Hsinchu TAIWAN			
otate/Country.				
PROPERTY NUMBE	RS Total: 1			
Property	Туре	Number		
Application Number		12036215		
CORRESPONDENC				
Fax Number:	(866)60			
-		Mail when the fax attempt is unsuccessful.		
Phone: Email:	718-544-1110 ITUCHMAN@TUCHMANLAW.COM			
Correspondent Nam		FFICE OF IDO TUCHMAN (YOR)		
Conceptingent Main				

500470800

Address Line 1: 82-70 BEVERL Address Line 4: KEW GARDEN	Y ROAD IS, NEW YORK 11415
ATTORNEY DOCKET NUMBER:	YOR920080014US1
NAME OF SUBMITTER:	Ido Tuchman
Total Attachments: 6 source=FiledAssignments#page1.tif source=FiledAssignments#page2.tif source=FiledAssignments#page3.tif source=FiledAssignments#page4.tif source=FiledAssignments#page5.tif source=FiledAssignments#page6.tif	

ASSIGNMENT

INVENTOR		
AND CITY	 Matthew J. Breitwisch 1870 Baldwin Rd. Unit 2, Yorktown Heights, New York, USA, 	of
	(2) Chung H. Lam 184 Benefield Boulevard, Peekskill, New York, USA,	to
	(3) Simone Raoux 2058 Calabazas Boulevard, Santa Clara, California, USA,	of
	have invented certain improvements in	
TITLE	PHASE CHANGE MEMORY RANDOM ACCESS DEVICE USING CHANGE MATERIAL	SINGLE-ELEMENT PHASE
DATES THAT INVENTORS SIGNED THE DECLARATION	and executed, respectively, a United States patent application therefor on $ \begin{array}{c} (1) & 2 - 15 \\ (3) & 2008, (2) & 2 - 15 \\ (3) & 2008. \end{array} $	

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 in all foreign countries, and all rights of priority resulting from the filling 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.

Signed and sealed

Whereas, we

Mallhew J. Breitwisch

Chung H. Lam

.....

on_____2-/5____2008

 $(2-1) \leq .2008$

on _____, 2008

Simone Raoux

Whereas, we

INVENTOR			
AND CITY	(1) Matthew J. Breitwisch	of	
	1870 Baldwin Rd. Unit 2, Yorktown Heights, New York, USA, (2) Chung H. Lam	of	
	184 Benefield Boulevard, Peekskill, New York, USA,	00	
	(3) Simone Raoux	of	
	2058 Calabazas Boulevard, Santa Clara, California, USA,		
	have invented certain improvements in		
TITLE	PHASE CHANGE MEMORY RANDOM ACCESS DEVICE USING CHANGE MATERIAL	G SINGLE-ELEMENT PHASE	
DATES THAT	and executed, respectively, a United States patent application therefor on		
SIGNED THE	(1), 2008, (2), 2008,		
DECLARATION	(3), 2008.		

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 in all 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.

Signed and sealed

Matthew J. Breitwisch	on	_, 2008
Chung H. Lam	on	, 2008
<u>friie</u> <u>fan x</u> Simone Raoux	on_02/15/22	_, 2008

ASSIGNMENT

WHEREAS, the undersigned,

 Chich-Fang Chen No.4-3, Alley 89 Chung-Cheng Road Panchiao City Taipei County, Taiwan 2)

Yi-Chou Chen 247 Puding Road HsinChu City, Taiwan

hereinafter termed "Inventors", have invented certain new and useful improvements in

PHASE CHANGE MEMORY RANDOM ACCESS DEVICE USING SINGLE-ELEMENT PHASE CHANGE MATERIAL

and have filed an application for a United States patent disclosing and identifying the above invention on ______as Application No._____. OR are filing such an application herewith, and have executed an oath or declaration of inventorship for such application on:

(1) the <u>15</u> day of <u>Feb</u>	2008;
(2) the day of	2008;

(hereinafter termed "application"); and

WHEREAS, Macronix International Co., Ltd., a corporation of Taiwan, having a place of business at No. 16, Li-Hsin Road, Science-Based Industrial Park, Hsinchu, Taiwan R.O.C. (hereinafter termed "Assignce"), is desirous of acquiring the entire right, title and interest in and to said application and the invention disclosed therein, and in and to all embodiments of the invention, heretofore conceived, made or discovered jointly or severally by said Inventors (all collectively hereinafter termed "said invention"), and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter termed "patents") thereon granted in the United States and foreign countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Inventors to have been received in full from said Assignee:

1. Said Inventors do hereby sell, assign, transfer and convey unto said Assignee the entire right, title and interest (a) in and to said application and said invention; (b) in and to all rights to apply for foreign patents on said invention pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all applications filed and any and all patents granted on said invention in the United States or any foreign country, including each and every application filed and each and every patent granted on any application which is a divisional, substitution, continuation, or continuation-in-part of any of said applications; and (d) in and to each and every reissue or extensions of any of said patents.

2. Said Inventors hereby jointly and severally covenant and agree to cooperate with said Assignce to enable said Assignce to enjoy to the fullest extent the right, title and interest herein conveyed in the United States and foreign countries. Such cooperation by said Inventors shall include prompt production of pertinent facts and documents, giving of testimony, execution

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Attorney Docket No. YOR920080014US1 (PCM- 0335)

of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, divisional, continuing or additional applications covering said invention; (d) for filing and prosecuting applications for reissuance of any said patents; (e) for interference or other priority proceedings involving said invention; and (f) for legal proceedings involving said invention reissues and reexaminations, opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Inventors in providing such cooperation shall be paid for by said Assignee.

3. The terms and covenants of this assignment shall inure to the benefit of said Assignce, its successors, assigns and other legal representatives, and shall be binding upon said Inventors, their respective heirs, legal representatives and assigns.

4. Said Inventors hereby jointly and severally warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, said Inventors have executed and delivered this instrument to said Assignee as of the dates written below.

Dated: Lo h & 2008

Signed: Chieh-Fang Chen

Dated:

Signed:

Yi-Chou Chen

Attorney Docket No. YOR920080014US1 (PCM- 0335)

ASSIGNMENT

WHEREAS, the undersigned,

 Chieh-Fang Chen No.4-3, Alley 89 Chung-Cheng Road Panchiao City Taipei County, Taiwan 2)

Yi-Chou Chen 247 Puding Road HsinChu City, Taiwan

hereinafter termed "Inventors", have invented certain new and useful improvements in

PHASE CHANGE MEMORY RANDOM ACCESS DEVICE USING SINGLE-ELEMENT PHASE CHANGE MATERIAL

and have filed an application for a United States patent disclosing and identifying the above invention on ______as Application No._____, OR are filing such an application herewith, and have executed an oath or declaration of inventorship for such application on:

(1) the _____ day of _____, 2008; (2) the _____ day of _____, 2008;

(hereinafter termed "application"); and

WHEREAS, Macronix International Co., Ltd., a corporation of Taiwan, having a place of business at No. 16, Li-Hsin Road, Science-Based Industrial Park, Hsinchu, Taiwan R.O.C. (hereinafter termed "Assignee"), is desirous of acquiring the entire right, title and interest in and to said application and the invention disclosed therein, and in and to all embodiments of the invention, heretofore conceived, made or discovered jointly or severally by said Inventors (all collectively hereinafter termed "said invention"), and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter termed "patents") thereon granted in the United States and foreign countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Inventors to have been received in full from said Assignce:

1. Said Inventors do hereby sell, assign, transfer and convey unto said Assignee the entire right, title and interest (a) in and to said application and said invention; (b) in and to all rights to apply for foreign patents on said invention pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all applications filed and any and all patents granted on said invention in the United States or any foreign country, including each and every application filed and each and every patent granted on any application which is a divisional, substitution, continuation, or continuation-in-part of any of said applications; and (d) in and to each and every reissue or extensions of any of said patents.

2. Said Inventors hereby jointly and severally covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest herein conveyed in the United States and foreign countries. Such cooperation by said Inventors shall include prompt production of pertinent facts and documents, giving of testimony, execution

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Attorney Docket No. YOR920080014US1 (PCM-0335)

of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, divisional, continuing or additional applications covering said invention; (d) for filing and prosecuting applications for reissuance of any said patents; (c) for interference or other priority proceedings involving said invention; and (f) for legal proceedings involving said invention and any applications therefor and any patents granted thereon, including without limitation reissues and reexaminations, opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Inventors in providing such cooperation shall be paid for by said Assignee.

3. The terms and covenants of this assignment shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Inventors, their respective heirs, legal representatives and assigns.

4. Said Inventors hereby jointly and severally warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, said Inventors have executed and delivered this instrument to said Assignee as of the dates written below.

Dated: _____

Signed: _______Chieh-Fang Chen

Dated: _____

Signed:	Ji-Chon Chen
	Yi-Chon Chen