

07-24-2003



102504799

U.S. Department of Commerce Patent and Trademark Office

To the Commis	sioner for Patents. Please record the attached origin	nal documents or copie	s thereof.	
1. Name of Conv	reying Party(ies):	2. Name and Address of	of Receiving Pa	rty(ies):
	Chien-Chung HUNG Ming-Jer KAO	Name:	Industrial ' Institute	Technology Research
	Tsung-Ming PAN	Internal Address:		
<u>□</u> Additi	onal names of conveying parties attached.	Street Address:	No. 195,	Sec. 4, Chung Hsing Rd.
3. Nature of Con	veyance:			
⊠As	signment 🗆 Merger	City, State, Zip:		Hsinchu, Taiwan 310,
□S∈	ecurity Agreement   Change of Name		R.O.C.	
□ 0	ther:			
Execution Da	ate: August 26, 2002	□ Additional n	ame(s) and	address(es) attached.
4. (A) Patent App	olication Number(s):	4. (B) Patent Number(s	,	
10/421,893				
If this document	is being filed together with a new			
51	execution date of the application is:			
	☐ Additional Num	bers Attached		
5. Name and Add	dress of Party to whom Correspondence Concerning this	Total Number of App	olications and	_
Document Should	d be Mailed:	Pate	ents Involved:	1
Name:	Eugene Mar	7. Total Fee: (37 CFR 3.41)		\$40.00
Address:	Bacon & Thomas, PLLC	☐ Enclosed		
	625 Slaters Lane Fourth Floor Alexandria, VA 22314	☐ Authorized to be charged to deposit account		
	Alloxariana, VIC 22011	8. Deposit Account Nu	mber:	02-0200
			DPY OF THIS PAGE	IF PAYING BY DEPOSIT ACCOUNT
	DO NOT USE	THIS SPACE		
9. Statement and			· · · · ·	
	ne best of my knowledge and belief, the forego	oing is true and corre	ct and any	attached copy is
a tru	e copy of the original document.			
	Eugene Mar			July 18, 2003
Nam	e of Person Signing	Signature		Date
	Total number of pages including cover sheet, att.	achments and document:	3	

21/2003 57[NDIE] 00000136 10421893

56:0023

40.00

S:\Producer\em\Clients\CHIAO\HUNG3035.Assignment cover 2.wpd

## ASSIGNMENT

WHEREAS, I (we), Hung, Chien-Chung; Kao, Ming-Jer; Pan, Tsung-Ming

whose post office address(es) appear(s) below, hereinafter referred to as Assignor, is(are) the owner of certain new and useful improvements

in	High	Density	Magnetic	Random.	Access	Memory
----	------	---------	----------	---------	--------	--------

	• •	
executed on even date herewith		
executed on:		
filed on:	Serial No.:	
a established by PCT International Pate	ent Application No.:	filed:
designating the United States of	f America	

(hereinafter referred to as the INVENTION) for which an application for United States Letters Patent was

## WHEREAS, Industrial Technology Research Institute

whose post office address is No. 195, Sec. 4, Chung Hsing Rd., Chutung Hsinchu, Taiwan 310, R.O.C. hereinafter referred to as Assignee, is desirous of acquiring the entire right, title and interest in and to the same in the United States;

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, I (we), ASSIGNOR, by these presents do sell, assign and transfer unto said ASSIGNEE, the entire right, title, and interest in and to said INVENTION and application throughout the United States of America, including any and all Letters Patent granted on any division, continuation, continuation-in-part and reissue of said application.

ALSO, ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution and maintenance of said application or any other patent application(s) in the United States for said INVENTION, including additional documents that may be required to affirm the rights of ASSIGNEE in and to said INVENTION, all without further consideration. ASSIGNOR also agrees, without further consideration and at ASSIGNEE'S expense, to identify and communicate to ASSIGNEE at ASSIGNEE'S request documents and information concerning the INVENTION that are within ASSIGNOR'S possession or control, and to provide further assurances and testimony on behalf of ASSIGNEE that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. ASSIGNOR'S obligations under this instrument shall extend to ASSIGNOR'S heirs, executors, administrators and other legal representatives.

ALSO, ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all Letters Patent referred to above to ASSIGNEE, as the ASSIGNEE of the entire right, title and interest in and to the same, for ASSIGNEE'S sole use and behoof; and for the use and behoof of ASSIGNEE'S legal representatives and successors, to the full end of the term for which such Letters Patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR had this assignment and sale not been made.

ASSIGNOR authorizes any member of the firm of *Bacon & Thomas, PLLC* to insert or complete any information in this document needed to effect its recordal in the U.S. Patent and Trademark Office.

Assignor Name Hung, Chien-Chung	Address
Where Signed HSINCHU, TAIWAN R.O.C.	2Fl., No. 11, Alley 10, Lane 207, Sec. 3, Shinglung Rd., Wenshan Chiu, Taipei, Taiwan116 R.O.C.
Date Aug. > 6 2002	Signature Hung Chien-Chang
Witness (optional)	Witness (optional)
Print/Type Name	Print/Type Name
Signature	Signatur

☑Continued on Next Page

JOINT ASSIGNMENT - WITNESS

PATENT REEL: 014295 FRAME: 0630

## **ASSIGNMENT**

Page:	2
-------	---

Assignor Name  Where Signed HSINCHU, TAIWAN R.O.C.  Date Aug, 16, 2002  Witness (optional)  Print/Type Name  Signature  Where Signed HSINCHU, TAIWAN R.O.C.  Print/Type Name  Pan, Tsung-Ming  Where Signed HSINCHU, TAIWAN R.O.C.  Date Aug 1, 16, 2002  Witness (optional)  Print/Type Name  Signature  Address  Address  Address  Pan, Tsung-Ming  Where Signed HSINCHU, TAIWAN R.O.C.  Date Aug 1, 10, 20, 20, 20  Signature  Signature  Fint/Type Name  Print/Type Name  Signature  Assignor Name  Witness (optional)  Print/Type Name  Signature  Assignor Name  Where Signed  Date  Witness (optional)  Print/Type Name  Signature  Signature  Signature  Signature  Signature  Signature  Fint/Type Name  Signature  Signature  Signature  Signature			
Where Signed HSINCHU, TAIWAN R.O.C.  Date  [Aug, 26, 2002] Witness (optional) Witness (optional)  Print/Type Name  Assignor Name Pan, Tsung-Ming Where Signed HSINCHU, TAIWAN R.O.C.  Date Aug 26, 2002  Witness (optional)  Print/Type Name  Signature  Address  2F1., No. 34, Dalian Rd. Pingtung City, Pingtung, Taiwan 900, R.O.C.  Date Aug 26, 2002  Witness (optional)  Witness (optional)  Witness (optional)  Print/Type Name  Signature  Address  Where Signed  Address  Witness (optional)  Print/Type Name  Signature  Signature  Witness (optional)  Print/Type Name  Witness (optional)  Print/Type Name  Print/Type Name	Assignor Name  Kao, Ming-Jer	Address	
Date   Aug. 26, 2002   Signature   Kao, Ming - Jey		No. 21, Alley323, Lane12, Sec2, Changhe, St.,	
Witness (optional)  Witness (optional)  Print/Type Name  Pan, Tsung-Ming  Where Signed HSINCHU, TAIWAN R.O.C.  Date Aug V , W L  Witness (optional)  Witness (optional)  Print/Type Name  Assignor Name  Assignor Name  Where Signed Print/Type Name  Signature  Assignor Name  Where Signed  Print/Type Name  Signature  Signature  Assignor Name  Where Signed  Print/Type Name  Signature  Signature  Witness (optional)  Print/Type Name  Print/Type Name  Print/Type Name  Print/Type Name  Print/Type Name  Print/Type Name  Witness (optional)  Print/Type Name  Print/Type Name  Print/Type Name			
Witness (optional)  Print/Type Name  Print/Type Name  Signature  Assignor Name  Pan, Tsung-Ming  Where Signed  Assignor Name  Pan, Tsung-Ming  Pan, Tsung-Ming  2FL, No. 34, Dalian Rd. Pingtung City, Pingtung, Taiwan 900, R.O.C.  Signature  Witness (optional)  Print/Type Name  Signature  Assignor Name  Where Signed  Assignor Name  Where Signed  Signature  Witness (optional)  Print/Type Name		Signature Kao, MIM-Jer	
Signature  Signature e  Assignor Name Pan, Tsung-Ming Where Signed HSINCHU, TAIWAN R.O.C. Date Aug V, Aud V Witness (optional) Witness (optional) Print/Type Name  Assignor Name Where Signed  Address  Assignor Name Where Signature  Signature  Address  Where Signature  Print/Type Name  Signature  Witness (optional)  Print/Type Name	Witness (optional)	Witness (optional)	
Assignor Name Pan, Tsung-Ming Where Signed HSINCHU, TAIWAN R.O.C. Date Aug 76, 2002 Witness (optional) Witness (optional) Print/Type Name Signature  Assignor Name Where Signed  Date Witness (optional)  Witness (optional)  Address  Where Signed  Date Witness (optional)  Print/Type Name  Signature  Signature  Witness (optional)  Print/Type Name  Print/Type Name  Print/Type Name  Print/Type Name  Print/Type Name	Print/Type Name	Print/Type Name	
## Pan, Tsung-Ming  Where Signed	Signature	Signature e	
Where Signed  HSINCHU, TAIWAN R.O.C.  Date  Aug 26, 2002  Witness (optional)  Print/Type Name  Assignor Name  Where Signed  Date  Witness (optional)  Witness (optional)  Print/Type Name  Signature  Signature  Address  Where Signed  Witness (optional)  Print/Type Name		Address	
HSINCHU, TAIWAN R.O.C.  Date Aug 76, 2002 Signature Pau (sury - Mingling City, Pingtung, Taiwan 900, R.O.C.  Witness (optional) Witness (optional)  Print/Type Name  Signature  Signature  Assignor Name  Where Signed  Date  Witness (optional)  Witness (optional)  Print/Type Name  Print/Type Name  Print/Type Name  Witness (optional)  Print/Type Name			
Witness (optional)  Print/Type Name  Signature  Signature  Assignor Name  Where Signed  Date  Witness (optional)  Witness (optional)  Witness (optional)  Print/Type Name  Print/Type Name  Print/Type Name	_	2Fl., No. 34, Dalian Rd. Pingtung City, Pingtung, Taiwan 900, R.O.C.	
Witness (optional)  Print/Type Name  Signature  Signature  Assignor Name  Where Signed  Date  Witness (optional)  Witness (optional)  Witness (optional)  Print/Type Name  Print/Type Name  Print/Type Name	Date Aug 26, 2002	Signature Pan, Tsung Ming	
Signature  Signature  Assignor Name  Address  Where Signed  Date  Signature  Witness (optional)  Print/Type Name  Print/Type Name	Witness (optional)		
Assignor Name  Address  Where Signed  Date  Signature  Witness (optional)  Print/Type Name  Print/Type Name	Print/Type Name	Print/Type Name	
Where Signed  Date Signature  Witness (optional) Witness (optional)  Print/Type Name Print/Type Name	Signature	Signature	
Where Signed  Date Signature  Witness (optional) Witness (optional)  Print/Type Name Print/Type Name	Assignor Name	Address	
Date Signature Witness (optional) Witness (optional) Print/Type Name Print/Type Name			
Witness (optional)  Print/Type Name  Print/Type Name  Print/Type Name	Where Signed		
Print/Type Name  Print/Type Name	Date	Signature	
	Witness (optional)	Witness (optional)	
Signature Signature	Print/Type Name	Print/Type Name	
	Signature	Signature	

Continued on Next Page

PATENT
RECORDED: 07/18/2003 REEL: 014295 FRAME: 0631