12.23.05

Docket No.: SEC.1547

FORM PTO-1595 (Modified) (Rev. 03-01) OMB No. 0651-0027 (exp.5/31/2002)	01-05-20	006	HEET	U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office			
Tab settings → → → ▼							
To the Director of the United States	1031517	42	d the attached of	riginal documents or copy thereof.			
1. Name of conveying party(ies): CHO, Beak-hyung KIM, Du-eung		2. Name	and address of rece	iving party(ies):			
CHOI, Byung-gil		rianio.					
KWAK, Choong-keun		Address:	416, Maetan-dong,	, Yeongtong-gu, Suwon-si,			
Additional names(s) of conveying party(ies)	☐ Yes ☒ No			5.1			
3. Nature of conveyance:							
☑ Assignment □	Merger						
☐ Security Agreement ☐	Change of Name	City: Gy	eonggi-do S	tate/Prov.:			
Othor	-	Carreterin	Republic of Korea	710.			
Other		Country:	Republic of Rorea	ZIP:			
Execution Date: December 19, 2005		Additional r	name(s) & address(es)	☐ Yes ☒ No			
4. Application number(s) or patent number	rs(s):						
If this document is being filed together with	n a new application, the	ne executi	on date of the applic	cation is: December 19, 2005			
				December 19, 2003			
Patent Application No. Filing da	ate	i	B. Patent No.(s)				
NEW DECEM	BER 23, 2005						
DECENT	DEIR 25, 2005						
Additional numbers							
Name and address of party to whom correspondence concerning document should be mailed:		6. Total n	umber of application	ns and patents involved:			
Name: ADAM C. VOLENTINE		7. Total fee (37 CFR 3.41):\$ 40.00					
	*	7. Total it	se (37 CFR 3.41)	\$ 40.00			
Registration No. 33289	Registration No. 33289		☑ Enclosed - Any excess or insufficiency should be				
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11951 FREEDOM DRIVE, SUITE 1260		☐ Au	thorized to be charg	ed to deposit account			
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To the best of my knowledge and belief.	the foregoing inform	ation is tru	µe and correct and a	ny attached copy is a true copy			
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ADAM C. VOLENTINE				DEC. 23, 2005			
Name of Person Signing		Signa	ture	□ □ Date			
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PATENT REEL: 017409 FRAME: 0647 **VOLENTINE FRANCOS & WHITT, P.L.L.C. (9/2004)**

ATTORNEY DOCKET NO. SEC. 1547

	ASSIGN	MENT					
Yanana	In consideration of the sum of One Deconsideration paid to each of the undersi	offar (\$1.00) and other good and valuable gned					
Insert Name(s) of Inventor(s)	I. Beak-hyung CHO	5.					
	2. Du-eung KIM	6.					
	3. Byung-gil CHOI	7					
	4. Choong-keun Kwak	8.					
Insert Name(s) of	the undersigned hereby sell(s) and assign(s) to						
Assignee(s) &	SAMSUNG ELECTRONICS CO., LTD.						
	416, Maetan-dong, Yeongtong-gu,						
Address(cs)		onggi-do, Republic of Korea					
Title of	(hereinafter designated as the Assignce) the entire right, title and interest for the United States as defined in 35 USC 100, in the invention known as						
Invention	PHASE CHANGE RANDOM ACCESS	MEMORY (PRAM) DEVICE					
Date of Signing of	for which an application for patent in the United States of America has been executed by						
Application	the undersigned on December 1	9, 2005					
	The undersigned agrec(s) to execute all papers necessary in connection with this application and any continuing, divisional or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.						
	The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuing, division or reissue thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.						
		papers and documents and perform any act which tims or provisions of the International Convention similar agreements.					
	The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.						
	any and all Letters Patents of the United division or divisions or continuing or re- Assignee of the entire interest, and here	d request(s) the Commissioner of Patents to issue is States resulting from said application or any issue applications thereof to the said Assignee, as by covenants that he has (they have) full right to ed, and that he has (they have) not executed, and lict herewith.					

Page I of 2

PATENT REEL: 017409 FRAME: 0648 VOLENTINE FRANCOS & WHITT, P.L.L.C. (9/2004)

ATTORNEY DOCKET NO. SEC. 1547

The undersigned hereby grant(s) the practitioners associated with the <u>CUSTOMER NUMBER 20987</u> the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent Office for recordation of this document.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned

name(s).					
Date De 19. 20.5	Signature of Inventor	Bruk hang tho Book-nyung tho			
Date Dec. 19, 2005	_ Signature of Inventor	Du- Lunh Krm Du-sung KIM			
Date <u>Pec. 19-2005</u>	Signature of Inventor	Byung - gil Choi Byung gil Choi			
Date Dec 19 2005	Signature of Inventor	Chang-Ken, KWAK			
Date	Signature of Inventor				
Date	_ Signature of Inventor				
Date	_ Signature of Inventor				
Date	Signature of Inventor				
(Note regarding Witnessing: It is recommended that the execution by the Inventor(s) be witnessed by at least two witnesses who sign here. However, the current practice of the U.S. Patent and Trademark Office is to record an Assignment even it has not been witnessed.) Witness					
Witness-					
Applicant Reference No. \$\$-24842-US					

Page 2 of 2

PATENT REEL: 017409 FRAME: 0649