©2005 Staas & Halsey LLP

To the Director of the U.S. Patent an



103456644

ocument.			

U.S. DEPARTMENT OF COMMERCE

Name of conveying party(ies): Sumio HOSAKA Hayato SONE

Masaki YOSHIMARU

Takashi ONO

Mayumi NAKASATO

Name and Address of receiving party(ies):

SEMICONDUCTOR TECHNOLOGY ACADEMIC

RESEARCH CENTER

17-2, Shin Yokohama 3-chome Kouhoku-ku, Yokohama-shi Kanagawa 222-0022

JAPAN

J. Hatare of conveyance.	3.	Nature	of	conveyance:
--------------------------	----	--------	----	-------------

Assignment Security Agreement Merger Change of Name

Other: Execution Date(s): July 9, 2007

Application number(s) or patent number(s): 4.

This document is being filed together with a new application.

☐ This document is being filed after filing of the application:

Patent Application No(s). 11/882,582, filed August 2, 2007; or (a)

Patent No(s), issued. (b)

5. Name and address of party to whom correspondence concerning document should be mailed:

STAAS & HALSEY LLP

Our Docket: 1687.1018 Attention: H. J. Staas

1201 New York Ave., N.W., 7th Floor Washington, D.C. 20005

Total number of applications and patents involved: __1

6.

Total fee (37 CFR 3.41)..... (\$ 40.00 per Patent or Application in Assignment) 7.

Enclosed

Authorized to be charged to deposit account.

Deposit Account No.: 19-3935 (Any underpayment is authorized to be charged to this Deposit 8.

(Attach duplicate copy of this page if paying by deposit account)

H. J. Staas, Reg. No. 22,010

Name of Person Signing

Total number of pages including cover sheet: 2

10/25/2007 DBYRME 00000048 193935 11882582

©2005 40.00 DA 01 FC:8021

Revised January, 2005

REEL: 020032 FRAME: 0720

U.S. ASSIGNMENT

	IN CONSIDERATION of the sum of the undersigned inventor(s) (hereinafter "ASSI		good and valuable consideration paid to				
insert ASSIGNEE's Jame(s)	Semiconductor Technology Academic Research Center						
(ddress(es	17-2, Shin Yokohama 3-chome, Kouhoku-ku, Yokohama-shi, Kanagawa 222-0033, Japan						
	(hereinafter "ASSIGNEE") the receipt of which	is hereby acknowledged, the lin	dersigned ASSIGNOR hereby sells, assigns and				
T: 1 6	transfers to ASSIGNEE the entire and exclusive PHASE—CHANGE MEMORY DEV.	ve right, title and interest to the i	nvention entitled				
Title of nvention)	AND MEMORY CELL ARRAY						
	relating to International Patent Application PC of the United States was executed on even dat		and/or for which application for Letters Patent was:				
Insert date of execution of application, oncurrent)	(a) executed on	(by authorized to insert in (b) the specified				
	and to said application and all Letters Patent(s) of the United States granted on said application and any continuation, division, renewal, substitute, reissue or reexamination application based thereon, for the full term or terms for which the said Letters Patent(s) may be granted and including any extensions thereof (collectively, hereinafter, "said application(s) and Letters Patent(s)").						
	ASSIGNEE, to do all acts which the ASSIGNE enforcing protection for said invention, includ said Letters Patent(s), in any interference, reis	E may deem necessary, desirable ing in the preparation and prosec ssue, reexamination, or public us relation to same, such acts to inc	cution of said application(s) and the issuance of e proceeding, and in any litigation or other legal clude but not be limited to executing all papers,				
	IN WITNESS WHEREOF, the under	rsigned inventor(s) has (have) affin	xed his/her/their signature(s).				
Signatures)	Sumio Hosaka	Sumio Hosaka	July 9, 2007 (DATE)				
	2) Hayato Sone (SIGNATURE) My Line My 1971	Hayato Sone	July 9_2007				
	3) Masaki Joshmaru_ (SIGNATURE)	Masaki Yoshimaru (TYPE NAME)	July 9, 2007				
	4) Takami Oho (SIGNATURE) 5) Mayer hakasato	Takashi Ono	July 9 2007				
	(SIGNATURE)	(TYPE NAME) Majrumi M. M. A. Mayrumi Nakazata					
	5) Mayen Makasalo (SIGNATURE)	(TYPE NAME)	July 9, 2007 (DATE)				
	6)(SIGNATURE)	(TYPE NAME)	(DATE)				
	7)(SIGNATURE)	(TYPE NAME)	(DATE)				
	8)(SIGNATURE)	(TYPE NAME)	(DATE)				

PATENT REEL: 020032 FRAME: 0721

RECORDED: 10/23/2007