U.S. PTO 12/591006 11/04/2009

FORM PTO-1595 (modified)
Rev. 8-93)

RE

11-13-2009

HEET

U.S. DEPARTMENT OF COMMI
Patent and Trademark

DMB No. 0651-0011 (exp. 4/94)



To the Honorable Commissioner of Patents.

103580525

tached original documents or copy thereo

1. Name of conveying party(ies):

JOON-SANG PARK, CHUNG-KI MIN, DONG-KEUN KIM, YEOL JON, CHANG-SUN HWANG, TAE-EUN KIM

Additional name(s) of conveying party(ies) attached? No

Name and address of receiving party(ies):

Additional name(s) & address(es) attached? No

Name: Samsung Electronics Co., Ltd. Internal Address:

Street Address: 416 Maetan-dong, Yeongtong-gu,

City: Suwon-si, Gyeonggi-do, REPUBLIC OF KOREA

3. Nature of conveyance:

X Assignment

Merger

Security Agreement

Change of Name

Other

Execution Date: October 6, 2009, October 7, 2009

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

If this document is being filed together with a new application, the execution date of the application is: October 6, 2009 and October 7,

A. Patent Application No.(s)

B. Patent No.(s)

Additional numbers attached? No

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

Name: Eugene M. Lee

Internal Address: LEE & MORSE, P.C.

Street Address: 3141 Fairview Park Drive, Suite 500

City: Falls Church, State: VA ZIP: 22042

6. Total number of applications and patents involved: One

7. Total fee (37 C.F.R., 3.41)......\$40.00

X Enclosed (PTO-2038)

X Authorized to be charged to deposit account any addit fees

8. Deposit account number: 5-01645

(Attach duplicate copy of this page if paying by deposit ac-

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.

Susan S. Morse

Name of Person Signing

Attorney Docket No. 249/683

Signature

November 4, 2009

Date

Total number of pages including cover sheet, attachments, and document: 2 pages attached, incl. cover

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents & Trademarks, Box Assignments

Alexandria, VA. 223131/05/2009 SZEWDIE1 00000087 12591/06

04 FC:8021

48.88 OP

PATENT REEL: 023511 FRAME: 0993

ASSIGNMENT

Name and Address of Assignee	For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor has sold and assigned, and by these presents hereby sells and assigns, unto SAMSUNG ELECTRONICS CO., LTD., 416, Mactan-dong, Yeongtong-gu Suwon-si, Gyeonggi-do, Republic of Korea	
	(hereinafter ASSIGNEE) all right, title and interest for the United States, its territories and possessions in and to his invention relating to	
Title of Invention	CHEMICAL-MECHANICAL POLISHING METHOD FOR POLISHING PHASE-CHANGE MATERIAL AND METHOD OF FABRICATING PHASE-CHANGE MEMORY DEVICE USING THE SAME as set forth in this United States Patent Application	
Check One	□ executed concurrently herewith □ executed on □	

in and to said United States Patent Application including any and all divisions or continuations thereof and in and to any and all Letters Patent of the United States which may issue on any such application or for said invention, including any and all reissues or extensions thereof, to be held and enjoyed by said ASSIGNEE, its successors, legal representatives and assigns to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made;

Each of the undersigned hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all such Letters Patent to said ASSIGNEE, its successors or assigns in accordance herewith;

Each of the undersigned warrants and covenants that he has the full and unencumbered right to sell and assign the interests herein sold and assigned and that he has not executed and will not execute any document or instrument in conflict herewith;

Each of the undersigned further covenants and agrees he will communicate to said ASSIGNEE, its successors, legal representatives or assigns all information known to him relating to said invention or patent application and that he will execute and deliver any papers, make all rightful oaths, testify in any legal proceedings and perform all other lawful acts deemed necessary or desirable by said ASSIGNEE, its successors, legal representatives or assigns to perfect title to said invention, to said application including divisions and continuations thereof and to any and all Letters Patent which may be granted therefore or thereon, including reissues or extensions, in said ASSIGNEE, its successors, or assigns or to assist said ASSIGNEE, its successors, legal representatives or assigns in obtaining, reissuing or enforcing Letters Patent of the United States for said invention;

Each of the undersigned hereby grants the firm of LEE & MORSE, P.C. the power to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

NAMES AND SIGNATURES OF INVENTORS			
Name: Joon-sang PARK	Signature: JOON SANY PAPK	Date: # // / /sory	
Name: Chung-ki MIN	Signature: 1/1W OHUNTI-K-Z	Date: 01/10/200	
Name: Dong-keun KIM	Signature:	Date: 07/10/20	
Name: Yeol JON	Signature: About	Date: 01/10/2009	
Name: Chang-sun HWANG	Signature: 본 권 서	Date: 07/10/2-2	
Name: Tae-eun KIM	Signature: \(\square \)	Date: 0/1/0/200	

PATENT REEL: 023511 FRAME: 0994

RECORDED: 11/04/2009