

Docket No.: SEC.2615

FORM PTO-1595 (Modified)

(Rev. 03-01)

OMB No. 0651-0027 (exp.5/31/2002)

P05A/REV03

RECORDATION FORM COVER SHEET

U.S. DEPARTMENT OF COMMERCE

Patent and Trademark Office

PATENTS ONLY

Tab settings → → → ▼ ▼ ▼ ▼ ▼ ▼ ▼

To the Director of the United States Patent and Trademark Office: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Gyu-Hwan OH Chang-Su KIM
 Young-Lim PARK
 Soon-Oh PARK
 Jin-II LEE

2. Name and address of receiving party(ies):

Name: Samsung Electronics Co., Ltd.Address: 416, Maetan-dong, Yeongtong-gu

Additional names(s) of conveying party(ies)

☐ Yes ☒ No

3. Nature of conveyance:

☒ Assignment☐ Merger☐ Security Agreement☐ Change of Name☐ OtherCity: Suwon-si State/Prov.: Gyeonggi-doCountry: Republic of Korea ZIP: 442-742Execution Date: October 28, 2009

Additional name(s) & address(es)

☐ Yes ☒ No

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

If this document is being filed together with a new application, the execution date of the application is: _____

Patent Application No.

Filing date

B. Patent No.(s)

12/623,513

November 23, 2009

Additional numbers

☐ Yes ☒ No

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

Name: STEPHEN R. WHITTRegistration No. 34,753Address: VOLENTINE & WHITT, PLLCONE FREEDOM SQUARE11951 FREEDOM DRIVE, SUITE 1260City: RESTON State/Prov.: VACountry: U.S.A. ZIP: 20190

6. Total number of applications and patents involved:

1

7. Total fee (37 CFR 3.41):.....\$ 40.00☐ Enclosed - Any excess or insufficiency should be credited or debited to deposit account☒ Authorized to be charged to deposit account

8. Deposit account number:

50-0238

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

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.*Stephen R. Whitt

Name of Person Signing



Signature

November 25, 2009

Date

Total number of pages including cover sheet, attachments, and document:

4

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

Mail Stop Assignment Recordation Services

Director of the United States Patent and Trademark Office

P.O. Box 1450, Alexandria, VA 22313-1450

700423738

PATENT
 REEL: 023570 FRAME: 0924

CH \$40.00 500238 12623513

VOLENTINE & WHITT, P.L.L.C. (01/2007)

ATTORNEY DOCKET NO. SEC2615**ASSIGNMENT**

In consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned

Insert
Name(s) of
Inventor(s)

1. Gyu-Hwan OH 7. _____
2. Young-Lim PARK 8. _____
3. Soon-Oh PARK 9. _____
4. Jin-Il LEE 10. _____
5. Chang-Su KIM 11. _____
6. _____ 12. _____

Insert
Name(s) of
Assignee(s) &

the undersigned hereby sell(s) and assign(s) to

Address(es)

SAMSUNG ELECTRONICS CO., LTD.
416, Maetan-dong, Yeongtong-gu,
Suwon-si, Gyeonggi-do, Republic of Korea

Title of
Invention

(hereinafter designated as the Assignee) the entire right, title and interest for the United States as defined in 35 USC 100, in the invention known as

METHOD OF FABRICATING PHASE-CHANGE MEMORY DEVICE HAVING TiC
LAYER

Date of
Signing of
Application

for which an application for patent in the United States of America has been executed by
the undersigned on October 28, 2009

The undersigned agree(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.

The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or 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.

VOLENTINE & WHITT, P.L.L.C. (01/2007)

ATTORNEY DOCKET NO. SEC.2615

The undersigned hereby grant(s) the practitioners associated with the CUSTOMER NUMBER 20987 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.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any division or divisions or continuing or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

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

Date 28/10/09 Signature of Inventor Gyu-hwan Oh
Gyu-Hwan OH

Date 28/10/09 Signature of Inventor Young-Lim Park
Young-Lim PARK

Date 28/10/09 Signature of Inventor Sooh-Oh Park
Sooh-Oh PARK

Date 28/10/09 Signature of Inventor Jin-Il Lee
Jin-Il LEE

Date 28/10/09 Signature of Inventor Chang-Su Kim
Chang-Su KIM

Date 28/10/09 Signature of Inventor Chang-Su Kim
Chang-Su KIM

(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. SPX200811-0006US