IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of: Chang-bon KANG; Chang-soo PARK; Yun-sook CHAE, Sang-in LEE

Serial No. 09/156,724

Filed September 18, 1998

For: METHOD OF FORMING METAL NITRIDE FILM BY CHEMICAL VAPOR DEPOSITION AND METHOD OF FORMING METAL CONTACT OF SEMICONDUCTOR DEVICE USING THE SAME

Box Assignment
Commissioner of Patents and Trademarks
Washington, D.C. 20231

ASSIGNMENT TRANSMITTAL COVER SHEET

Please record the attached original document or copy thereof and return the recorded instrument to the undersigned.

1. Name of party conveying an interest: (1) Chang-bon KANG
   (2) Chang-soo PARK
   (3) Yun-sook CHAE
   (4) Sang-in LEE

2. Name and address of party(ies) receiving an interest: Samsung Electronics Co., Ltd.
   416 Maetan-Dong, Palkal-Ku
   Suwon-City, Kyungki-Do
   Republic of Korea

3. Description of the interest conveyed:

   x Assignment  __ Change of Name  __ Security Agreement  __ Merger  Other:

   Date of execution of attached document:
   (1) November 24, 1998
   (2) November 28, 1998
   (3) November 24, 1998
   (4) November 24, 1998

1
4. Application number(s) or patent number(s). Additional sheet attached? Yes _ No x
If this document is being filed together with a new application, the execution date of the application is.

A. Patent Application No. 09/156,724  
B. Patent No.

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

Alan T. McCollom  
MARGER, JOHNSON, & McCOLLOM, P.C.  
1030 S.W. Morrison Street  
Portland, Oregon 97205  
Telephone: (503) 222-3613

6. Number of applications and patents involved: 1

7. Enclosed is our check for $40.00 (check no. 02 ).

8. Any deficiency or overpayment should be charged or credited to deposit account number 13-1703.

9. 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.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Box Assignment, Commissioner of Patents and Trademarks, Washington D.C. 20231, on December 10, 1998

Respectfully submitted,

[Signature]

Alan T. McCollom  
Reg. No. 28,881

Signature

[Signature]

Derek S. Watson

Total number of pages comprising cover sheet and attached assignment: 4

MARGER, JOHNSON, & McCOLLOM, P.C.  
1030 S.W. Morrison Street Portland, Oregon 97205  
(503) 222-3613
ASSIGNMENT

U.S.A. Patent Application
Sole or Joint
For Inventions Made Outside U.S.A.
Executed With Application

In consideration of the sum of Ten Dollars (10.00) and other good and valuable considerations paid to each of the undersigned, to wit:

(1) Sang-bom KANG
(2) Chang-soo PARK
(3) Yun-sook CHAE
(4) Sang-in LEE

[ ] X if continued on separate page

the receipt and sufficiency of which are hereby acknowledged by the undersigned who hereby sell(s), assign(s) and transfer(s) unto:

SAMSUNG ELECTRONICS CO., LTD.
416 MAETAN-DONG, PALDAL-KU
SUWON-CITY, KYUNGKI-DO
REPUBLIC OF KOREA

(herinafter designated "ASSIGNEE") the entire right, title and interest for the United States Of America as defined in 35 U.S.C. §100, in and to the invention known as:

METHOD OF FORMING METAL NITRIDE FILM BY CHEMICAL VAPOR DEPOSITION AND METHOD OF FORMING METAL CONTACT OF SEMICONDUCTOR DEVICE USING THE SAME

for which an application for Letters Patent of the United States of America filed on September 18, 1998, Serial Number 09/156,724 has been executed herewith by the undersigned, and in and to any and all divisionals, continuations, substitutes, and reissues thereof; and all resulting patents and the undersigned hereby authorizes and requests the United States Assistant Commissioner of Patents to issue said Letters Patent to the said ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives; the undersigned agrees that the attorneys of record in said application shall hereafter act on behalf of said ASSIGNEE;

And the undersigned hereby agrees to testify and execute any papers for ASSIGNEE, its successors, assigns and legal representatives, deemed essential by ASSIGNEE to ASSIGNEE'S full protection and title in and to the invention hereby transferred.
Please sign concurrently with Oath or Declaration and Power of Attorney

SIGNED ON THE DATE(S) INDICATED BESIDE MY/OUR SIGNATURE(S):

<table>
<thead>
<tr>
<th>INVENTOR(S)</th>
<th>DATE SIGNED</th>
<th>WITNESSED</th>
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<tbody>
<tr>
<td>(1) Sang-bom KANG</td>
<td>24/11/98</td>
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<td>(2) Chang-soo PARK</td>
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<td>(3) Yun-sook CHAE</td>
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<td>(4) Sang-in LEE</td>
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FOR ADDITIONAL INVENTORS, "X" BOX [ ] AND CONTINUE ON SEC- 2.005

PLEASE RETURN RECORDED ASSIGNMENT TO:

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Marger Johnson & McCollom
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RECORDED: 12/14/1998
PATENT REEL: 9641 FRAME: 0298