IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of: Yeong-kwan KIM et al.

Serial No. 09/371,709

Filed: August 9, 1999

For: METHOD FOR PRODUCING THIN FILM USING ATOMIC LAYER DEPOSITION

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) Yeong-kwan KIM
   (2) Sang-in LEE
   (3) Chang-soo PARK
   (4) Sang-min 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) August 24, 1999
   (2) August 24, 1999
   (3) October 10, 1999
   (4) August 26, 1999

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:

   (11/08/1994 WKN: 09/371,709)
   (01 C:581)

1
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. 028787).

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 **November 1, 1999**.

Respectfully submitted,

[Signature]

Derek S. Warner

[Signature]

Alan T. McCollom
Reg. No. 28,881

Total number of pages comprising cover sheet and attached assignment: 4
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) Yeong-kwan KIM
(2) Sang-in LEE
(3) Chang-soo PARK
(4) Sang-min 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

(hereinafter 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 FOR PRODUCING THIN FILM USING ATOMIC LAYER DEPOSITION

for which an application for Letters Patent of the United States of America filed on August 9, 1999, Serial Number 09/371,709 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>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Yeong-kwan Kim</td>
<td>9/24/99</td>
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<tr>
<td>(2) Sang-in Lee</td>
<td>5/16/99</td>
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<td>(3) Chang-soo Park</td>
<td>12/10/99</td>
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<td>(4) Sang-min Lee</td>
<td>8/30/95</td>
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FOR ADDITIONAL INVENTORS, "X" BOX [ ] AND CONTINUE ON SEC-2.005

PLEASE RETURN RECORDED ASSIGNMENT TO:

Alan T. McCollom
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