IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mail Stop Assignment Recordation Services
Director of the U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

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

1. Name of party(ies) conveying an interest: Min KIM, Ju-Bum LEE, Hyeon-Deok LEE and Seung-Jae LEE
   2. Name and address of party(ies) receiving an interest: Samsung Electronics Co., Ltd.
      416 Maetan-dong, Yeongtong-gu, Suwon-Si
      Gyeonggi-do, Republic of Korea

3. Description of the interest conveyed:
   Assignment  Change of Name  Security Agreement  Merger

Date of execution of attached document: September 6, 2004

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:

Patent Application No. 10/937,532, filed on 08 Sep 2004

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

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. PTO Form 2038 authorizing credit card payment ($40) is enclosed.

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.

Dated: November 30, 2004

Respectfully submitted,
MARGER JOHNSON & McCOLLOM, P.C.

MARGER JOHNSON & McCOLLOM, P.C.
1030 SW Morrison Street
Portland, OR 97205
(503) 222-3613

Total number of pages comprising
cover sheet and attached assignment
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) Min KIM
(2) Ju-Bum LEE
(3) Hycon-Deok LEE
(4) Seung-Jae 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, YEONGTONG-GU
SUWON-SI, GYEONGGI-DO
REPUBLIC OF KOREA

(hereinafter designated “ASSIGNEE”) the entire right, title and interest in and to the invention as defined in 35 USC §100, for the United States of America, the invention entitled:

METHOD MANUFACTURING TRANSISTOR HAVING RECESSED CHANNEL

for which an application for Letters Patent of the United States of America has been executed even date 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 DATES INDICATED Beside OUR SIGNATURES:

<table>
<thead>
<tr>
<th>INVENTOR(S)</th>
<th>DATE SIGNED</th>
<th>WITNESSED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min Kim</td>
<td>Sep. 6, 2004</td>
<td></td>
</tr>
<tr>
<td>Min KIM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ju-Bum Lee</td>
<td>Sep. 6, 2004</td>
<td></td>
</tr>
<tr>
<td>Ju-Bum LEE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hyeon-Deok Lee</td>
<td>Sep. 6, 2004</td>
<td></td>
</tr>
<tr>
<td>Hyeon-Deok LEE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seung-Jae Lee</td>
<td>Sep. 6, 2004</td>
<td></td>
</tr>
<tr>
<td>Seung-Jae LEE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PLEASE RETURN RECORDED ASSIGNMENT TO:

Alan T. McCollom
Marger Johnson & McCollom
1030 S.W. Morrison Street
Portland, OR 97205

RECORDED: 11/30/2004

PATENT
REEL: 015415 FRAME: 0415