



To: Commissioner for Patents:

Date: September 15, 2005
Attorney Docket No. 5649-1567

103086523

Please record the attached original documents or copy thereof.

9-15-05

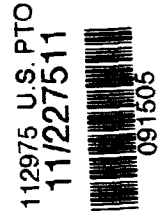
1. Name of conveying party(ies):

- [1.] Ui-hui Kwon
- [2.] Gyeong-su Keum
- [3.] Won-young Chung
- [4.] Kwang-ho Cha
- [5.] Young-tae Kim
- [6.] Seung-ki Chae
- [7.] Jai-hyung Won
- [8.] Young-kwan Park
- [9.] Tai-kyung Kim

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

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

Samsung Electronics Co., Ltd.
416 Maetan-dong, Yeongtong-gu
Suwon-si, Gyeonggi-do
Republic of Korea



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

3. Nature of conveyance:

- Assignment
- Merger
- Security Agreement
- Change of Name
- Other

Execution Date: [1.] September 2, 2005; [2.] September 2, 2005; [3.] September 2, 2005; [4.] September 2, 2005; [5.] September 2, 2005; [6.] September 2, 2005; [7.] September 2, 2005; [8.] September 2, 2005; [9.] September 2, 2005

4. Application Serial No. _____ Patent No. _____

If this document is being filed together with a new application, the execution date of the application is: [1.] September 2, 2005; [2.] September 2, 2005; [3.] September 2, 2005; [4.] September 2, 2005; [5.] September 2, 2005; [6.] September 2, 2005; [7.] September 2, 2005; [8.] September 2, 2005; [9.] September 2, 2005

Additional numbers attached? Yes No

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

Shawna Cannon Lemon
Myers Bigel Sibley & Sajovec
P. O. Box 37428
Raleigh NC 27627

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41) \$40.00
 Enclosed
 Authorized to be charged to deposit account

8. Deposit account number: 50-0220

09/20/2005 SHASSEM1 00000020 11227511
01 PC:8021 40.00 DP

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.

Shawna Cannon Lemon, #53,888
Name of Person Signing

Signature

September 15, 2005
Date

Total number of pages including cover sheet, attachments and document: 3

CERTIFICATE OF EXPRESS MAILING

Express Mail Label No. EV 674757125 US
Date of Deposit: September 15, 2005

I hereby certify that this correspondence is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR § 1.10 on the date indicated above and is addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Susan E. Freedman

ASSIGNMENT

THIS ASSIGNMENT, made by us, **Ui-hui Kwon**, citizen of the Republic of Korea, residing at Rm. 204, 214-7, Seochcon-ri, Giheung-eub, Yongin-si, Gyeonggi-do, Republic of Korea; **Gyeong-su Keum**, citizen of the Republic of Korea, residing at 614-205, Boseong Apt., 1265, Gwonseon-dong, Gwonseon-gu, Suwon-si, Gyeonggi-do, Republic of Korea; **Won-young Chung**, citizen of the Republic of Korea, residing at 402-201, Shinyeongtong Hyundai Apt., Banwol-ri, Tacan-eub, Hwaseong-si, Gyeonggi-do, Republic of Korea; **Kwang-ho Cha**, citizen of the Republic of Korea; residing at 107-1104, SK Apt., Seochcon-ri, Giheung-eub, Yongin-si, Gyeonggi-do, Republic of Korea; **Young-tae Kim**, citizen of the Republic of Korea, residing at 103-508, Dongsuwon LG Village, Mangpo-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea; **Seung-ki Chae**, citizen of the Republic of Korea; residing at 103-701, Daewoo Hyoryeong Apt., 1038, Bangbae-dong, Seocho-gu, Seoul, Republic of Korea; **Jai-hyung Won**, citizen of the Republic of Korea, residing at Rm. 501, 919-33, Daechi 4-dong, Gangnam-gu, Seoul, Republic of Korea; **Young-kwan Park**, citizen of the Republic of Korea, residing at 104-901, Kukdong Apt., Maetan 2-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea; and **Tai-kyung Kim**, citizen of the Republic of Korea, residing at 707-505, Mongnyeon Woosung Apt., Beomgye-dong, Dongan-gu, Anyang-si, Gyeonggi-do, Republic of Korea;

WITNESSETH: That,

WHEREAS, we are the joint inventors of certain new and useful improvements in **ION IMPLANTERS HAVING AN ARC CHAMBER THAT AFFECTS ION CURRENT DENSITY**, for which an application for United States Letters Patent has been filed, or is being filed concurrently, in the United States Patent and Trademark Office. We hereby authorize and request Myers Bigel Sibley & Sajovec, P.A., to insert here in parentheses (Application No. _____, filed _____) the filing date and application number of said application when known or to file this Assignment concurrently with the application; and

WHEREAS, **Samsung Electronics Co., Ltd.**, a Korean corporation having a principal place of business at 416 Mactan-dong, Ycongton-gu, Suwon-si, Gyeonggi-do, Republic of Korea, hereinafter referred to as assignee, is desirous of acquiring the entire right, title and interest in and to said invention as described in said application, and in and to any and all Letters Patent which shall be granted therefor in the United States of America and all foreign countries;

NOW, THEREFORE, To Whom It May Concern, be it known that for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we have sold and by these presents do hereby sell, assign, transfer, and convey unto the said assignee, its successors and assigns, the entire right, title, and interest in and to the said invention and application, and in and to any and all continuations, continuations-in-part, or divisions thereof, and in and to any and all Letters Patent of the United States of America and all foreign countries or reissues or other forms of protection thereof which may be granted therefor or thereon, for the full end of the term for which said Letters Patent may be granted along with any term extensions thereon or therefor, together with the right to claim the priority of said application in all foreign countries in accordance with the International Convention, the same to be held and enjoyed by said assignee, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by us if this assignment and sale had not been made.

We hereby request that said Letters Patent be issued in accordance with this assignment.

We further covenant and agree that, at the time of the execution and delivery of these presents, we possess full title to the invention and application above-mentioned, and that we have the unencumbered right and authority to make this assignment.

We further covenant and agree to promptly communicate to said assignee or its representatives any facts known to us relating to said invention, to testify in any interference or legal proceedings involving said invention, to execute any additional papers which may be requested to confirm the right of the assignee, its representatives, successors, or assigns to secure patent or similar protection for the said invention in all countries and to vest in the assignee complete title to the said invention and Letters Patent, without further compensation, but at the expense of said assignee, its successors, assigns, and other legal representatives; and we hereby instruct, and further covenant and agree to bind our heirs, legal representatives, and assigns, to do same, without further compensation, but at the expense of said assignee or its representatives.

IN WITNESS WHEREOF, we have hereunto set our hands and seals on this 2 day of

9, 2005

Ui hui Kwon (SEAL)
Ui-hui Kwon

Gyeong-su Keum (SEAL)
Gyeong-su Keum

Won-young Chung (SEAL)
Won-young Chung

Kwang-ho Cha (SEAL)
Kwang-ho Cha

Young-tae Kim (SEAL)
Young-tae Kim

Seung-ki Chae (SEAL)
Seung-ki Chae

Jai-hyung Won (SEAL)
Jai-hyung Won

Young-kwan Park (SEAL)
Young-kwan Park

Tai-kyung Kim (SEAL)
Tai-kyung Kim

Witnessed by:

Date: _____

Date: _____