ASSI To the Honorable Commissioner of Pate 101016270 Please record the attached original documents or copy thereof.

April 9, 1999

Attorney Dkt: 5649-732 1. Name of conveying party(ies): 2. Name and address of receiving party(ies): Kwang-Youl Chun Samsung Electronics Co., Ltd. Young-Woo Park 416 Maetan-dong, Paldal-gu Yong-Jin Kim Suwon-City, Kyungki-do Republic of Korea Additional name(s) of conveying party(ies) attached? 3. Nature of conveyance: X Assignment Merger Security Agreement Change of Name Other Execution Date: April 6, 1999 Additional name(s) & address(es) attached? Yes X No 4. Application Serial No. Patent No. If this document is being filed together with a new application, the execution date of the application is: April 6, 1999 Additional numbers attached? Yes X No 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: 1 concerning document should be mailed: 7. Total fee (37 CFR 3.41) \$ 40.00 Mitchell S. Bigel X Enclosed Myers Bigel Sibley & Sajovec Authorized to be charged to deposit account P.O. Box 37428 Raleigh, North Carolina 27627 8. Deposit account number: 50-0220 (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. Mitchell S. Bigel, #29,614 April 9, 1999 Date Total number of pages including cover seet, attachments and document: 3

PATENT

REEL: 9894 FRAME: 0179

ASSIGNMENT

THIS ASSIGNMENT, made by us, **Kwang-Youl Chun**, a citizen of the Republic of Korea, residing at 916-202, Keonyoung Villa, Maehwa Town, 265, Yatap-dong, Bundang-ku, Sungnam-shi, Kyunggi-do, Republic of Korea; **Young-Woo Park**, a citizen of the Republic of Korea, residing at 818-1903, Suri Hanyang Apt., Sanbon-dong, Kunpo-shi, Kyunggi-do, Republic of Korea; and **Yong-Jin Kim**, a citizen of the Republic of Korea, residing at 2-202. Balhae Villa, 1076-24. Namhyun-dong, Kwanak-ku, Seoul, Republic of Korea;

WITNESSETH: That,

WHEREAS, Samsung Electronics Co., Ltd., a Korean corporation having a principal place of business at 416 Maetan-dong, Paldal-gu, Suwon-City, Kyungki-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 thereof which may be granted therefor or thereon, for the full end of the term for which said Letters Patent may be granted, 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.

PATENT REEL: 9894 FRAME: 0180 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 bind our heirs, legal representatives and assigns, promptly to 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.

IN WITNESS WHEREOF, we have hereunto set our hands and seals on this 6th day of April . 1999.

Kwang - Youl Chun Kwang-Youl Chun

Young - Woo Park

Yong fir Lin Yong-Jin Kim

Witnessed by:

Byung-Yoon Kim

Date: 06 - 04 - 1999

Ji- Yung Lee

Date: April 6, 1999

Date: 4.6.98

RECORDED: 04/09/1999