orm PTO-1595 (Rev. 03/05) 01 - 03 - 21	006 U.S. DEPARTMENT OF COMMERC United States Patent and Trademark Offi
To the Director of the U.S. Patent and Trademark Office: Please	20 Be serving the service address(es) below.
1. Name of conveying party(ies)	2. Name and address of receiving party(ies)
Jin Yong Seong and Sam Kyu Won	Name: Hynix Semiconductor Inc.
	Internal Address:
Additional name(s) of conveying party(ies) attached? 🛄 Yes 🔀 No	San 136-1, Ami-ri, Bubal-eub, Street Address: Icheon-si
3. Nature of conveyance/Execution Date(s):	
Execution Date(s) December 8, 2005	City: Kyoungki-do
Assignment Merger	
Security Agreement Change of Name	State:
Joint Research Agreement	
Government Interest Assignment	Country: Republic of Korea Zip:
Executive Order 9424, Confirmatory License	
Other	Additional name(s) & address(es) attached? Yes X No
Additional numbers a	ttached? Yes No
Additional numbers a 5. Name and address to whom correspondence concerning document should be mailed:	ttached? Yes No 6. Total number of applications and patents involved: 1
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:1
5. Name and address to whom correspondence	6. Total number of applications and patents
5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Steve Y. Cho</u>	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00
5. Name and address to whom correspondence concerning document should be mailed: Name: Steve Y. Cho Internal Address:	6. Total number of applications and patents involved:
5. Name and address to whom correspondence concerning document should be mailed: Name: Steve Y. Cho Internal Address: TOWNSEND AND TOWNSEND AND CREW LLP Street Address: Two Embarcadero Center, Eighth Floor	6. Total number of applications and patents involved:
5. Name and address to whom correspondence concerning document should be mailed: Name: Steve Y. Cho Internal Address: TOWNSEND AND TOWNSEND AND CREW LLP Street Address: Two Embarcadero Center,	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card X Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information
5. Name and address to whom correspondence concerning document should be mailed: Name: Steve Y. Cho Internal Address: TOWNSEND AND TOWNSEND AND CREW LLP Street Address: Two Embarcadero Center, Eighth Floor	 6. Total number of applications and patents involved: 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information a. Credit Card Last 4 numbers
5. Name and address to whom correspondence concerning document should be mailed: Name: Steve Y. Cho Internal Address: TOWNSEND AND TOWNSEND AND CREW LLP Street Address: Two Embarcadero Center, Eighth Floor City: San Francisco	6. Total number of applications and patents involved:
5. Name and address to whom correspondence concerning document should be mailed: Name: Steve Y. Cho Internal Address: TOWNSEND AND TOWNSEND AND CREW LLP Street Address: Two Embarcadero Center, Eighth Floor City: San Francisco State: California Zip: 94111-3834	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card X Authorized to be charged by credit card Enclosed None required (government interest not affecting title) 8. Payment Information a. Credit Card Last 4 numbers Expiration Date b. Deposit Account Number 20-1430
5. Name and address to whom correspondence concerning document should be mailed: Name: Steve Y. Cho Internal Address: TOWNSEND AND TOWNSEND AND CREW LLP Street Address: Two Embarcadero Center, Eighth Floor City: San Francisco State: California Zip: 94111-3834 Phone Number: (415) 576-0200	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information a. Credit Card Last 4 numbers Expiration Date b. Deposit Account Number 20-1430 Authorized User Name
5. Name and address to whom correspondence concerning document should be mailed: Name: Steve Y. Cho Internal Address: TOWNSEND AND TOWNSEND AND CREW LLP Street Address: Two Embarcadero Center, Eighth Floor City: San Francisco State: California Zip: 94111-3834 Phone Number: (415) 576-0200 Fax Number: (415) 576-0300	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card Authorized to be charged by credit card Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information a. Credit Card Last 4 numbers Expiration Date b. Deposit Account Number 20-1430 Authorized User Name Townsend and Crew LL
5. Name and address to whom correspondence concerning document should be mailed: Name: Steve Y. Cho Internal Address: TOWNSEND AND TOWNSEND AND CREW LLP Street Address: Two Embarcadero Center, Eighth Floor City: San Francisco State: California Zip: 94111-3834 Phone Number: (415) 576-0200 Fax Number: (415) 576-0300 Email Address: scho@townsend.com 9. Signature:	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card Authorized to be charged by credit card Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information a. Credit Card Last 4 numbers Expiration Date b. Deposit Account Number 20-1430 Authorized User Name Townsend and Crew LL December 14, 2005 Date
5. Name and address to whom correspondence concerning document should be mailed: Name: Steve Y. Cho Internal Address: TOWNSEND AND TOWNSEND AND CREW LLP Street Address: Two Embarcadero Center, Eighth Floor City: San Francisco State: California Zip: 94111-3834 Phone Number: (415) 576-0200 Fax Number: (415) 576-0300 Email Address: scho@townsend.com 9. Signature: Christopher Li (for Steve Y. Cho 446)	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card Authorized to be charged by credit card Authorized to be charged to deposit account Enclosed None required (government interest not affecting title) 8. Payment Information a. Credit Card Last 4 numbers Expiration Date b. Deposit Account Number 20-1430 Authorized User Name Townsend and Crew LL December 14, 2005 Date

-

REEL: 017403 FRAME: 0256

ASSIGNMENT OF PATENT APPLICATION

SOLE

WHEREAS, the below-listed individual, herein referred to as "Assignor," is the inventor of the invention described and set forth in the following application for United States Letters Patent:

PAGE BUFFER CIRCUIT WITH REDUCED SIZE AND METHODS FOR READING AND PROGRAMMING DATA WITH THE SAME

Filed ______, as U.S. Application No. _____

WHEREAS, <u>Hynix Semiconductor Inc., of San 136-1, Ami-ri, Bubal-eub, Icheon-si, Kyoungki-do, Republic of Korea</u> hereinafter referred to as "Assignee," is desirous of acquiring an interest in the invention and application and in any U.S. Letters Patent and Registrations which may be granted on the same;

For good and valuable consideration, receipt of which is hereby acknowledged by Assignor, Assignor has assigned, and by these presents does assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on any patent application claiming priority from the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignor had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignor further agrees that Assignor will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

Assignor hereby authorizes and requests Townsend and Townsend and Crew LLP, Two Embarcadero Center, 8th Floor, San Francisco, California 94111-3834, to insert hereinabove the application number and filing date of said application when known.

IN TESTIMONY WHEREOF, Assignor has signed his/her name on the date indicated.

Date: December 8, 2005

Jinjont	Sam
Name: Jin Yong SEONG	.
Saynon	
Name: Sam Kyu WON	

Date: December 8, 2005