Client Code: SAMINF.118A

## RECORDATION FORM COVER SHEET **PATENTS ONLY**

To the Director, U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof,

1. Name of conveying party(ies): (List using letters or numbers for multiple parties)  Huai-Rong Shao Chiu Ngo  Additional name(s) of conveying party(ies) attached?  () Yes (X) No  3. Nature of conveyance: (X) Assignment () Security Agreement () Merger () Change of Name () Other:  Execution Date: (List as in section 1 if multiple signatures) February 13, 2008 February 13, 2008 February 13, 2008  5. Party to whom correspondence concerning document should be mailed:  Customer No. 70,590	<ol> <li>Name and address of receiving party(ies):         <ul> <li>Name: Samsung Electronics Co., Ltd</li> <li>Street Address: 416 Maetan-3 Dong, Yeongtong-Gu</li> <li>City: Suwon City, Kyungki-Do Country: Korea</li> <li>ZIP: 443-742</li> </ul> </li> <li>Additional name(s) of receiving party(ies) attached?         <ul> <li>() Yes</li> <li>(X) No</li> </ul> </li> <li>US or PCT Application number(s) or US Patent number(s):         <ul> <li>(X) Patent Application No.: 12/032,505</li> <li>Filing Date: February 15, 2008</li> </ul> </li> <li>Additional numbers attached?         <ul> <li>() Yes</li> <li>(X) No</li> </ul> </li> <li>Total number of applications and patents involved: 1</li> </ol>
Address: Knobbe, Martens, Olson & Bear, LLP 2040 Main Street, 14 <sup>th</sup> Floor Irvine, CA 92614 Return Fax: (949) 760-9502 Attorney's Docket No.: SAMINF 118A	
7. Total fee (37 CFR 1.21(h)): \$40	8. Deposit account number: 11-1410
(X) Authorized to be charged to deposit account	Please charge this account for any additional fees which may be required, or credit any overpayment to this account.
is a true copy of the original document.  John M. Carson	g information is true and correct, and any attached copy  2/15/08  Date
Total number of pages including cover sheet, attachments and document: 3	

Documents transmitted via Facsimile to be recorded with required cover sheet information to:

## **Mail Stop Assignment Recordation Services**

Director, U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

Facsimile Number: (571) 273-0140

4891113/vcl/021508

**PATENT REEL: 020526 FRAME: 0609** 

700360835

PATENT

Client Code: SAMINF.118A

Page 1

No.: Unknown Date: Herewith

## **ASSIGNMENT**

WHEREAS, We, Huai-Rong Shao, a Chinese citizen, residing at 1135 Harrison St. Apt. 6, Santa Clara, CA 95050 and Chiu Ngo, a U.S. citizen, residing at 227 Monticello Street, San Francisco, CA 94132 have invented certain new and useful improvements in a SYSTEM AND METHOD FOR WIRELESS COMMUNICATION NETWORK USING BEAMFORMING AND HAVING A MULTI-CAST CAPABILITY for which we have executed an application for Letters Patent in the United States, on even date herewith;

AND WHEREAS, Samsung Electronics Co., Ltd. (hereinafter "ASSIGNEE"), a Korea Corporation, with its principal place of business at 416 Maetan-3Dong, Yeongtong-Gu, Suwon City, Kyungki-Do, 443-742 Korea, desires to acquire the entire right, title, and interest in and to said improvements and said Application:

NOW, THEREFORE, in consideration of good and valuable consideration, the receipt of which is hereby acknowledged, we, said inventors, do hereby acknowledge that we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title, and interest throughout the world in, to and under said improvements, and said application and all provisional applications relating thereto, and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, renewals and reissues thereof, and we hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements to said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE DO HEREBY sell, assign, transfer, and convey to ASSIGNEE, its successors, legal representatives, and assigns all claims for damages and all remedies arising out of any violation of the rights assigned hereby that may have accrued prior to the date of assignment to ASSIGNEE, or may accrue hereafter, including, but not limited to, the right to sue for, collect, and retain damages for past infringements of said Letters Patent before or after issuance.

AND WE HEREBY covenant and agree that we will communicate to said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said improvements in all countries.

PATENT

REEL: 020526 FRAME: 0610

No.: Unknown Date: Herewith

IN TESTIMONY WHEREOF, I hereunto set my

IN TESTIMONY WHEREOF, I hereunto set my

PATENT Client Code: SAMINF.118A Page 2
hand and seal this 13rd day of
MERS
ng Shao
hand and seal this 13th day of

4862053/vcl 020808

> PATENT REEL: 020526 FRAME: 0611

**RECORDED: 02/15/2008**