	4-2001			
FORM PTO-1595		HEET U.S.	DEPARTMENT OF COMMERCE Patent and Trademark Office	
To the Honorable Commissioner of Pat 1034	le Commissioner of Pat. 103468899		ned original documents or copy thereof.	
1. Name of conveying party(ies):	2. Name and addr	ess of receiving party(	ies):	
1) ZHOUYUE PI  Additional name(s) of conveying party(ies) attached? □ Yes  No	SAMSUNG ELECTRONICS CO., LTD., a corporation chartered in and existing under the laws of the Republic of Korea 416 Maetan-dong, Yeongtong-gu Suwon-si, Gyeonggi-do 442-370 Republic of KOREA  Additional name(s) & addresses attached? □ Yes ■ No			
3. Nature of conveyance  ■ Assignment □ Merger □ Security Agreement □ Change of Name □ Other				
Execution Date: 26 October 2007				
<ol> <li>Application number(s) or Patent number(s):</li> <li>If this document is being filed together with a new application.</li> </ol>	cation, the execution of	f the application is:	1 1 2007	
A. Patent Application No.(s) 11/979,829	B. Patent No.(s)			
Additional number	er(s) attached?	Yes ■ No		
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total Number	of applications and p	patents involved: ONE	
Name: Robert E. Bushnell Attorney at Law Suite 300, 1522 "K" Street, N.W. Washington, D.C. 20005-1202 (202) 408-9040	7. Total fee (37 CFR § 3.41)			
	8. Deposit Account Number:			
	(Attach duplicate copy of this page if paying by deposit account)			
DO NOT	Γ USE THIS SPACE			
9. Statement and Signature. To the best of my knowledge and belief, the foregoing in original document.  ROBERT E. BUSHNELL  Name of Person Signing  Signs	us prell	11 December 20 Date		
OMB No. 0651-0011 (exp. 4/94)				
	atents and 1100			
REB/rd (Attorney's Docket No.: P58438)		12/13/2007 MGETACH 01 FC:6021	_ <b>0040402</b> 5 11973623 40.80 UF	

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## ASSIGNMENT

AS A BELOW NAMED INVENTOR, I, and each of us, individually hereby declare that:

IN CONSIDERATION of the sum of TEN (\$10.00) dollars or the equivalent thereof, and other good and valuable consideration, the receipt of which from the hereinafter named Assignee is hereby acknowledged, I do hereby sell, assign and forever grant and convey unto:

ASSIGNEE:

SAMSUNG ELECTRONICS CO., LTD.,

a corporation chartered in and existing under the laws of the Republic of Korea,

ADDRESS:

executed on even date herewith, or

Δ 4/10/1996 R.E. BUSHNELL

416 Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, 442-370, Republic of Korea

Who is my Assignee, and to the successors and assigns of my Assignee, all my right, title and interest, in and for the United States of America and all other countries, including all rights of priority, in and to the invention entitled:

## TITLE: METHODS AND APPARATUS FOR MAPPING CONTROL CHANNELS TO RESOURCES IN OFDM SYSTEMS

invented by me (if only one inventor is named below) or us (if more than one inventor is named below) and described in an application for a United States patent the specification of which is either attached hereto or otherwise accompanies this Assignment, or is more particularly identified as:

and in and to all United States patents which may be granted thereon and therefore, and in and to all certificates of corrections, divisions, continuations, continuations-in-part, reissued and re-examined patents, and to any extensions thereof, said interest being the entire ownership of the patent when granted, to be held and enjoyed by said SAMSUNG ELECTRONICS CO., LTD., my Assignee, its successors, assigns or other legal representatives, to the full end of the term, terms, or any extension or renewal thereof, for which said patent or patents may be granted, as fully and entirely as the same would have been held and enjoyed by me or us if this assignment, sale and conveyance had not been made;

instruments which may from time-to-time be either necessary, lawful, proper or requested by the Assignee, in the prosecution of the above-named application or in the preparation and prosecution of all substitute applications, certificate of correction, division, continuation, continuation-in-

Serial No. 11/979,829 filed in the U.S. Patent & Trademark Office on 8 November 2007, or

Additional inventors are being named on separately numbered sheets attached hereto.

part, reissue, re-examination, in any amendmenthe title hereto in said Assignee, together with Inter-American Convention Relating to Patents United States of America adheres;	the right of priority un	ider the International Convention for the	he Protection of Industrial Property,			
I hereby appoint as my, or our attorney, and a identification or to complete such identification Patent & Trademark Office for recordation of the	authorize and request I on which may be either his document.	r necessary or desirable in order to co	mply the rules of the United States			
IN WITNESS WHEREOF, I and we have set our hands and seals on the dates written beside my and our respective names:						
INVENTOR(s)		Date Signed	Witness(es)			
1) 3/2Pi	(Seal)	10/26/2007	LORI L. JENINGER MY COMMISSION EXPIRED June 14, 2010			
ZHOUYUE PI			Jone L Dreig			
2)	(Seal)		10/26/04			

AND I hereby covenant and agree to sign and execute, without receiving any money or other consideration, any further documents or

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Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE 0002/PTO U.S. Department of Commerce COMPLETE IF KNOWN Patent and Trademark Office 11/979,829 **Application** Number DEC 11 2007 11/8/2007 Filing Date FEE TRANSMITTAL First Named Zhouyue Pi, et al. Inventor 2616 Group Art Unit **Examiner Name** TOTAL AMOUNT OF PAYMENT \$40.00 P58438 Attorney Docket Number METHOD OF PAYMENT (check one) ■ Payment enclosed: ☑ Check #53456 FEE CALCULATION Fee Code Fee(s) Fee Description 8021 40.00 Assignment Recordation Fee Paid ..... \$40.00 TOTAL \$40.00 submitted by: Robert E. Bushnell, Esq. Suite 300, 1522 "K" Street, N.W. Washington, D.C. 20005-1202 Registration No. 27,774 Robert E. Bushnell Printed Name December 11, 2007 Date Che Technell Signature

**RECORDED: 12/11/2007** 

REB/rd

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