### 504223773 02/10/2017

## PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

#### **CONVEYING PARTY DATA**

Name	Execution Date
LI GUO	02/08/2017
BOON LOONG NG	02/06/2017
YOUNG-HAN NAM	02/06/2017
EKO ONGGOSANUS	01/30/2017
JIANZHONG ZHANG	02/10/2017

#### **RECEIVING PARTY DATA**

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Postal Code:	16677

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15430338

#### **CORRESPONDENCE DATA**

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ATTORNEY DOCKET NUMBER:	2016.03.005.SR0	
NAME OF SUBMITTER:	JACOB L. LACOMBE	
SIGNATURE:	/Jacob L. LaCombe/	
DATE SIGNED:	02/10/2017	

**Total Attachments: 5** 

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PATENT REEL: 041230 FRAME: 0637



PATENT REEL: 041230 FRAME: 0638

# DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT

Title of Invention	Method and Apparatus a Multi-Cell Full-Dimension MIMO System		
As the undersigned inventor, I hereby declare that:			
This combined	declaration and Mine attached application, or		
assignment is o	lirected to:		
The above-ide	ntified application was made or authorized to be made by me.		
I believe that I	am the original inventor or an original joint inventor of a claimed invention in the application.		
	d and understand the contents of the application including the claims, for which this combined declaration and being submitted.		
I am aware of 1,56.	the duty to disclose to the Office all information known to me to be material to patentability as defined in 37 CFR		
Suwon-si, Gye	amsung Electronics Co., Ltd., a Korean corporation, having a place of business at 129, Samsung-ro, Yeongtong-gu songgi-do, 16677, Korea (hereinafter referred to as "ASSIGNEE"), desires to acquire the entire right, title and invention and to any patent that may be granted thereon in the United States and foreign countries;		
inventors, here above-identifica applications, a Convention of	EFORE, for good and valuable consideration, the receipt whereof is hereby acknowledged. We, the below named oby sell, assign and transfer to said ASSIGNEE, its successors and assigns, the entire right, title and interest in the ed application and the invention disclosed therein in all countries, including all divisional applications, continuation and corresponding priority applications including those to which priority is claimed under the International Paris including under 35 U.S.C. 119, substitutions, and renewals thereof, and to all patents that may be granted I reissues thereof.		
granted, to said apply for pater papers and ger	horize and request the Patent Office Officials in the United States and all foreign countries to issue patents, when I ASSIGNEE, its successors and assigns. Further, We agree that said ASSIGNEE, its successors and assigns, may not for the invention in foreign countries without further authorization from us. Also, We agree to execute all herally to do everything possible to aid said ASSIGNEE, its successors and assigns, in obtaining and enforcing invention in all countries.		
I hereby acknowledge that any willful false statement made in this combined declaration and assignment is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.			
LEGAL NAM	E OF FIRST INVENTOR (e.g., full first name, middle initial, last name)		
inventor:	Li Guo Date: 07/08/2017		
Signature:			

1

2016.03.005.SR0

LEGAL NAME OF SECOND INVENTOR	(e.g., full first name, middle initial, last name)
inventor: Boon Loong Ng	Date: 2/6/2017
Signature:	

LEGAL NAME OF THIRD INVENTOR (e.g., full first name, middle in	itial, last name)
Invenior: Young-Han Nam	Date: 2/6/2017
Signature: // /22 - 2 - 2	

LEGAL NAME OF FOURTH INVENTOR (e.g., full first name, middle initial, last name)			
Inventor: Eko Onggosanusi	<u> </u>	Date:	01/30/2017
C1	Community of Management	annum annum	
Signature:			

LEGAL NAME OF FIFTH INVENTOR (e.g., full first	name, middle initial, last	t name)	
Inventor: Jianzhong Zhang	Date:	2/0/17	
Signature:			

S

2016.03.005.SR0

**RECORDED: 02/10/2017** 

PATENT REEL: 041230 FRAME: 0643