503968655 08/19/2016 PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:		NEW ASSIGNMENT			
NATURE OF CONVEYANCE:		ASSIGNMENT	ASSIGNMENT		
CONVEYING PARTY D	ΑΤΑ				
		Name		Execution Date	
JIN HO HAN				07/22/2016	
YOUNG-SU KWON				08/03/2016	
KYUNG JIN BYUN				07/22/2016	
NAK WOONG EUM				07/22/2016	
RECEIVING PARTY DA	ТА				
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City:	DAEJE	NC			
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Postal Code:	34129				
PROPERTY NUMBERS Property Type	Total: 1	Number			
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		Number 15241902			
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Property Type Application Number: CORRESPONDENCE D Fax Number: Correspondence will b using a fax number, if Phone: Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET NUMARE OF SUBMITTER:	ATA e sent to provided f	202)408-0924 the e-mail address first; if that is ; if that is unsuccessful, it will be 202-371-8976 irm@rabinberdo.com RABIN & BERDO, P.C. 1101 14TH ST., N.W., SUITE 500 WASHINGTON, D.C. 20005 KOR-591 STEVEN M. RABIN			

PATENT REEL: 039486 FRAME: 0989

ASSIGNMENT OF AND DECLARATION FOR APPLICATION FOR UNITED STATES LETTERS PATENT

WHEREAS Jin Ho HAN, Young-Su KWON, Kyung Jin BYUN, Nak Woong EUM of Republic of Korea hereinafter referred to collectively as the assignor and inventor, has invented a certain improvement relating to

CACHE MEMORY AND OPERATION METHOD THEREOF

[X] said application being attached hereto:

[] said application having been filed in the United States Patent and Trademark Office on

_____, as Application Serial No. ______, and was amended

on	(if applicable);
[]]	the specification of which was filed under the Patent Cooperation Treaty on
Se	ial No the United States of America being designated.

AND WHEREAS Electronics and Telecommunications Research Institute of 161, Gajeong-dong,

Yuseong-gu, Daejeon 305-700, Republic of Korea, hereinafter referred to as the assignee or applicant, is desirous of acquiring the entire right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof;

NOW THIS WITNESSETH, that for and in consideration of One Dollar (\$1.00), and other good and valuable consideration paid by said assignee to said assigner, the receipt of which is hereby acknowledged, said assigner hereby assigns, sells and transfers to said assignee, and said assignee's successors and assigns, the full and exclusive right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof; said assignee, and said assignee's successors and assigns, to have, hold, exercise and enjoy the said application, including any and all divisions and continuations thereof, and the said invention and any and all patents which may be granted therefor, including any and all divisions and continuations thereof, and the said invention and any and all patents which may be granted therefor, including any and all divisions and continuations thereof, and the said invention and any and all patents which may be granted therefor, including any and all divisions and continuations thereof, and the said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any and all such patents when granted, including any and all renewals, reissues and prolongations thereof, for the use and benefit of said assignee, and said assignee's successors and assigns, in as ample and beneficial a manner as the said assigner might or could have held and enjoyed the same, if this assignment had not been made.

AND said assignor hereby agrees to perform, upon the request of said assignee, or said assignee's successors or assigns, any and all acts relating to the obtaining or to the asserting of said patents, including any and all renewals, reissues and prolongations thereof.

AND said assignor authorizes and requests the Commissioner of Patents and Trademarks to issue Letters Patent on said application, and on any and all divisions and continuations thereof, to said assignee, and said assignee's successors and assigns, in accordance herewith.

As an above-named inventor, I hereby declare that the above-identified application was made or authorized to be made by me, and that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18. U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

Address all correspondence and telephone calls to Rabin & Berdo, P.C., 1101 14th Street, N.W., Suite 500, Washington, D.C. 20005, Telephone: (202) 371-8976; Fax: (202) 408-0924, Customer No. 23995.

PATENT REEL: 039486 FRAME: 0990

Continued --Page 2 ASSIGNMENT OF AND DECLARATION FOR APPLICATION FOR UNITED STATES LETTERS PATENT

WITNESS:	ASSIGNOR (THE FIRST INVENTOR):
Signature:	that is a first start of the st
Name:	
Address:	Date:July / 22/ 2-0/6.
WITNESS:	ASSIGNOR (THE SECOND INVENTOR):
Signature:	Signature:
Name:	
Address:	
WITNESS:	ASSIGNOR (THE THIRD INVENTOR):
Signature:	Signature: <u>Kyung Tim Byum</u> Legal Name: <u>Kyung Jin BYUN</u>
Name:	Legal Name:Kyung Jin BYUN
Address:	Date: July 22, 2016
WITNESS:	ASSIGNOR (THE FOURTH INVENTOR):
Signature:	Signature: <u>Nde Worseng</u> Curren
Name:	Legal Name: <u>Nak Woong EUM</u>
Address	Date: July 22, 2016

RECORDED: 08/19/2016