## PATENT ASSIGNMENT

## Electronic Version v1.1

Stylesheet Vers	sion v1.1

SUBMISSION TYPE:		NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		ASSIGNMENT		
CONVEYING PARTY DATA		·		
Name Execution Date			Execution Date	
In-Tae KANG		09/20/2012		
Sang-Min BAE		09/20/2012		
Jong-Han LIM	ong-Han LIM 09/20/2012			
RECEIVING PARTY DATA				
Name: SAMSUI	NG ELECTR	ONICS CO., LTD.		
Street Address: 129, Sar	129, Samsung-ro, Yeongtong-gu			
City: Suwon-s	Suwon-si, Gyeonggi-do			
State/Country: KOREA,	OREA, REPUBLIC OF			
Application Number:	13624	3624358		
Property Type		Number		
CORRESPONDENCE DATA				
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Correspondence will be sent via US Mail when the fax attempt is unsuccessful.				
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Email:       usdocketing@jeffersonip.com         Correspondent Name:       Jefferson IP Law, LLP				
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ATTORNEY DOCKET NUMBER:	Y DOCKET NUMBER: 0202-0720			
NAME OF SUBMITTER: George C. Eckert				
Total Attachments: 4 source=0202-0720AssignmentAs source=0202-0720AssignmentAs source=0202-0720AssignmentAs source=0202-0720AssignmentAs	Filed#page2 Filed#page3	tif tif		

RECORDATION FORM COVER SHEET PATENTS ONLY				
To the Director of the U.S. Patent and Trademark Office:	Please record the attached documents or the new address(es) below.			
1. Name of conveying party(ies)	2. Name and address of receiving party(ies)			
1) In-Tae KANG, 2) Sang-Min BAE and 3) Jong-Han LIM	Name: Samsung Electronics Co., Ltd.			
	Internal Address:			
Additional name(s) of conveying party(ies) attached?				
3. Nature of conveyance/Execution Date(s):	Street Address: <u>129, Samsung-ro, Yeongtong-gu</u>			
Execution Date(s) <u>September 20, 2012</u>	—			
	City: Suwon-si, Gyeonggi-do			
Security Agreement Change of Nam				
Joint Research Agreement	State:			
Government Interest Assignment	Country: Republic of Korea Zip:			
Executive Order 9424, Confirmatory License				
4. Application or patent number(s):	Additional name(s) & address(es) attached? Yes 🖌 No			
A. Patent Application No.(s) 13/624,358	This document is being filed together with a new application. B. Patent No.(s)			
	ers attached? Yes V No			
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: One			
Name:Jefferson IP Law, LLP				
Internal Address:George Eckert	7. Total fee (37 CFR 1.21(h) & 3.41) \$			
Internal Address. <u>Geolge Loven</u>	Authorized to be charged by credit card			
	Authorized to be charged to deposit account     Enclosed			
Street Address: 1130 Connecticut Ave., NW, Suite 420	None required (government interest not affecting title)			
City: Washington	8. Payment Information			
State: DC Zip:20036	a. Credit Card Last 4 Numbers Expiration Date			
Phone Number: <u>202-293-0804</u>				
Fax Number: 202-403-3587	b. Deposit Account Number			
Email Address: usdocketing@jeffersonip.com	Authorized User Name			
9 Signature				
/George C. ECKERT/ Re Signature	eg. No. 58,892 September 21, 2012 Date			
	Total number of pages including cover			
George C. Eckert Name of Person Signing	sheet, attachments, and documents:			
Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450				

PATENT REEL: 029005 FRAME: 0261

## Assignment

WHEREAS, the following inventors, namely 1) In-Tae KANG, 2) Sang-In BAE, and 3) Jong-Han LIM, all, citizens of the Republic of Korea (hereinafter called "Assignors"), having made or discovered certain new, useful and non-obvious improvements in an invention having a working title of:

## APPARATUS AND METHOD FOR PROCESSING REDUCED BANDWIDTH ENVELOPE TRACKING AND DIGITAL PRE-DISTORTION,

for which a United States Patent Application is being filed concurrently herewith or, if not being concurrently filed, was filed on <u>September 21, 2012</u>, and assigned Serial No. <u>13/624,358</u>; and,

WHEREAS, Samsung Electronics Co., Ltd., a corporation duly organized under the laws of the Republic of Korea, located and doing business at 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea, 443-742 (hereinafter called "Assignee"), is desirous of acquiring the entire right, title and interest therein;

NOW, THEREFORE, BE IT KNOWN that for and in good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignors do hereby sell, assign and transfer unto said Assignee the entire and exclusive worldwide right, title and interest in and to all said inventions and discoveries disclosed in said application, and in and to said application, any and all substitutions, divisions, provisionals, conversions of provisionals and continuations thereof, and in and to all Letters Patent, United States and foreign, that may be granted for said inventions and discoveries, and in and to all extensions, renewals and reissues thereof; and the right to file any foreign application and/or claim priority under the provisional, continuing, substitute or reissue application therefrom. The aforesaid assignment includes the right in and to all income, royalties, damages and payments, now or hereafter due or payable with respect to any Letters Patent which may be granted, and in and to all causes of action (either in law or in equity), and the right to sue, counterclaim, and recover for past, present and future infringement of the rights assigned or to be assigned under this Assignment, as fully and entirely as the same would have been held and enjoyed by Assignors if this sale, assignment and transfer had not been made.

Assignors covenant and agree, without further compensation to said Assignors but at Assignce's expense:

- a. to execute:
  - i. all papers to be used in connection with this application and any divisional, continuing, substitute or reissue application thereof, as the Assignee may deem necessary or expedient, and

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- ii. all papers in connection with any interference, litigation, mediation, arbitration or other proceeding relating to this application or any divisional, continuing, substitute or reissue application thereof, as may be necessary or expedient;
- b. to cooperate with the Assignee in every way possible in obtaining evidence and going forward in any interference, litigation, mediation, arbitration or other proceeding relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof;
- c. to communicate to the Assignee any facts relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof, including evidence for any interference, litigation, mediation, arbitration or other proceeding relating to said invention, whenever requested;
- d. to testify in any interference, litigation, mediation, arbitration or other proceeding relating to said invention, said application and any divisional, continuing, substitute or reissue application thereof whenever requested; and
- e. to perform all other affirmative acts which may be necessary or desirable to secure full and complete protection of the inventions and discoveries or that may be necessary or desirable to vest in Assignee the complete title to the inventions and discoveries and Letters Patent hereby conveyed and to enable Assignee to record title.

Assignors hereby authorize and request the United States Patent and Trademark Office or any other issuing authority to issue any and all Letters Patent that may be granted upon this invention and/or this application or any divisional, continuing, substitute or reissue application thereof to the Assignee, its legal representatives, successors and assigns.

Assignors each hereby represents, covenants and warrants that he or she has the full right to convey the entire right, title and interest by this instrument, free of any encumbrances and that no other agreement has been or will be executed in conflict herewith.

The provisions of this Assignment are binding upon Assignors' heirs, legal representatives and/or administrators and assigns.

Assignors hereby grant to the law firm of Jefferson IP Law, LLP of Washington, DC and its attorneys and agents as associated with **Customer No. 68103** the authority and power to insert on this instrument any further identification which may be necessary or desirable for purposes of recordation in the United States Patent and Trademark Office or a Patent Office of any foreign country.

Signature of Inventor:

To-Tae KANG

Sep. 20, 20 Date

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Signature of Inventor:

Sang-Min BAE

Sep. 20, 2012 Date

Signature of Inventor:

y dr

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Jong-Han LIM

Sep. 20, 2012 Date