# 00 12376567

# PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

# **CONVEYING PARTY DATA**

Name	Execution Date
Kwang-Jae LIM	02/03/2009
Chul-Sik YOON	02/03/2009
Jee-Hwan AHN	02/03/2009

# **RECEIVING PARTY DATA**

Name:	Electronics and Telecommunications Research Institute
Street Address:	161, Gajeong-dong, Yuseong-gu
City:	Daejeon
State/Country:	REPUBLIC OF KOREA
Postal Code:	305-350

Name:	Samsung Electronics Co., Ltd.	
Street Address:	416, Maetan-dong, Yeongtong-gu	
City:	Suwon-si, Gyeonggi-do	
State/Country:	REPUBLIC OF KOREA	
Postal Code:	442-742	

# PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12376567

## **CORRESPONDENCE DATA**

Fax Number: (202)403-3587

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 202-293-0804

Email: usdocketing@jeffersonip.com

Correspondent Name: Jefferson IP Law, LLP Address Line 1: 1730 M Street, NW

Address Line 2: Suite 807

PATENT REEL: 022215 FRAME: 0536

500773835

Address Line 4: Washington, DISTRICT OF COLUMBIA 20036		
ATTORNEY DOCKET NUMBER:	0204-0075	
NAME OF SUBMITTER:	Raymond B. PERSINO	
Total Attachments: 4 source=0204-0075AssignmentAsFiled#page1.tif source=0204-0075AssignmentAsFiled#page2.tif source=0204-0075AssignmentAsFiled#page3.tif source=0204-0075AssignmentAsFiled#page4.tif		

PATENT REEL: 022215 FRAME: 0537

U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office

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) Kwang-Jae LIM, 2) Chul-Sik YOON, and 3) Jee-Hwan AHN	Name: Electronics and Telecommunications Research Inst.			
	Internal Address:			
Additional name(s) of conveying party(ies) attached? Yes Mo  3. Nature of conveyance/Execution Date(s):	Street Address: 161, Gajeong-dong, Yuseong-gu			
Execution Date(s) February 3, 2009	011 COLT / (Carlotte) - 10 11 Carlotte   10 11 Carlotte			
✓ Assignment Merger				
Security Agreement Change of Name	City: Daejeon			
Joint Research Agreement	State:			
Government Interest Assignment				
Executive Order 9424, Confirmatory License	Country: Republic of Korea Zip: 305-350			
Other	Additional name(s) & address(es) attached? ✓ Yes ☐ No			
A. Patent Application No.(s) 12/376,567 Additional numbers att	B. Patent No.(s) ached? ☐Yes ✓ 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	7. Total fee (37 CFR 1.21(h) & 3.41) \$			
Internal Address:Raymond B. PERSINO	Authorized to be charged by credit card			
	Authorized to be charged to deposit account			
Street Address: 1730 M Street, NW, Suite 807	Enclosed			
	None required (government interest not affecting title)			
City: Washington	8. Payment Information			
State: District of Columbia Zip:20036	a. Credit Card Last 4 Numbers			
Phone Number:202-293-0804	Expiration Date			
Fax Number: 202-403-3587	b. Deposit Account Number			
Email Address: usdocketing@jeffersonip.com	Authorized User Name			
9 Signature				
/Raymond B. PERSINO/ Reg. Signature	#58,082 February 3, 2009  Date			
Raymond B. PERSINO	Total number of pages including cover 4			
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

Page 2 Recordation of assignment

Additional name and address of receiving parties:

Name: SAMSUNG ELECTRONICS CO., LTD.

Address: 416, Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do 442-742,

Republic of Korea

PATENT REEL: 022215 FRAME: 0539

2/5/09

Attorney Docket No.:

# Assignment

WHEREAS, the following inventors, namely LIM, Kwang-Jae of Sangyong Apt. 403-201, Gyuanpyung-dong, Yuseong-gu, Daejeon 305-509, Republic of Korea; YOON, Chul-Sik of 4-402, Samik Sunkyung Apt., Hagyel-dong, Nowon-gu, Seoul 139-777, Republic of Korea; and AHN, Jee-Hwan of Dulae Apt. 102-305, Sinseong-dong, Yuseong-gu, Daejeon 305-720, 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:

### METHOD AND APPARATUS FOR TRANSMITTING FEEDBACK INFORMATION,

for which a United States Patent Application is being filed concurrently herewith or, if not being concurrently filed, was filed on **February 5**, 2009, and assigned Serial No. 12/376, 567; and,

WHEREAS, Electronics and Telecommunications Research Institute, a research institute duly organized under the laws of the Republic of Korea, located and doing business at 161, Gajeong-dong, Yuseong-gu, Daejeon 305-350, Republic of Korea; and Samsung Electronics Co., Ltd., a corporation duly organized under the laws of the Republic of Korea, located and doing business at 416, Maetan-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do 442-742, Republic of Korea, (hereinafter called "Assignees"), 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 Assignees 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 provisions of any international treaty or convention arising from this application or any divisional, 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 Assignees' expense:

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

PATENT REEL: 022215 FRAME: 0540 Attorney Docket No.: Client Docket No.:

- 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 Assignees the complete title to the inventions and discoveries and Letters Patent hereby conveyed and to enable Assignees 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 Assignees, their legal representatives, successors and assigns.

Assignors each hereby represent, covenant and warrant 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 each 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 their 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 First Inventor:	Kwany Ine	Feb. 3, 2009
	LIM, Kwang-Jae	Date
Signature of Second Inventor:	YOON, Chulsit	Feb. 3, 2009 Date
Signature of Third Inventor:	Ahn, Jeeflwan	Feb. 3, 2009
	AHN. Jee-Hwan	Date