501957638 06/15/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SU JIN LEE	09/15/2011
HYE IN KIM	09/15/2011
YOUNG KWAN LEE	09/15/2011
CHANG KYUNG WOO	09/15/2011
JE KYOUNG KIM	09/15/2011

RECEIVING PARTY DATA

Name:	SAMSUNG ELECTRO-MECHANICS CO., LTD.	
Street Address:	314 Maetan 3-Dong, Yeongtong-Gu, Suwon	
City:	Gyunggi-Do	
State/Country:	KOREA, REPUBLIC OF	
Postal Code:	443-743	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13524701

CORRESPONDENCE DATA

Fax Number: (202)756-8087 Phone: 202-756-8000

Email: mweipdocket@mwe.com

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US

Mail.

Correspondent Name: MCDERMOTT WILL & EMERY LLP

Address Line 1: 600 13TH STREET, N.W.

Address Line 4: WASHINGTON, DISTRICT OF COLUMBIA 20005-3096

ATTORNEY DOCKET NUMBER: 085946-0118

NAME OF SUBMITTER: Stephen A. Becker 26527 (mjb)

Total Attachments: 3

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> PATENT REEL: 028386 FRAME: 0401

13524701

	A	ASSIGNMENT
In consideration of the premises a of which is hereby acknowledged, the und	nd other goo lersigned,	d and valuable consideration in hand paid, the receipt and sufficiency
(1) LEE, Su Jin (2) KIM, Hye In (3) LEE, Young Kwan (4) WOO, Chang Kyung	(5) (6) (7)	KIM, Je Kyoung
who have made a certain new and useful in SAMSUNG Electro-Mechanics Co., Ltd 314 Maetan 3-Dong, Yeongtong-Gu, Suwon, Gyunggi-Do	nvention, her	eby sell, assign and transfer unto
Postal Code: 443-743		
its successors and assigns (hereinafter des America as defined in 35 U.S.C. 100 in the		SIGNEE") the entire right, title and interest for the United States of ntitled
METHOD FOR SURFACE-TREA		NTED CIRCUIT BOARD AND PRINTED CIRCUIT BOARD
(a) for which an application for United Sta	ates Letters P	
identified by United States Serial No.	Les Letters 1	atent was filed on, and, and
		atent was filed on, and; or, and,
(b) for which an application for United States and the undersigned hereby authorize and and all United States Letters Patent whis substitutes, renewals, continuations, or co Convention for the Protection of Industrial	request the lich may be ntinuations-il	
(b) for which an application for United States and the undersigned hereby authorize and and all United States Letters Patent whis substitutes, renewals, continuations, or convention for the Protection of Industrial assigns and legal representatives; the under behalf of said ASSIGNEE; AND the undersigned hereby agreapplication for and obtaining original, divide said ASSIGNEE, its successors, assig mprovements, and applications for patent by	request the Use have been to transfe sional, reissums and legal based thereons assign.	United States Commissioner of Patents and Trademarks to issue any granted therefor and any and all extensions, divisions, reissues, n-part thereof, and the right to all benefits under the International the said ASSIGNEE, for its interest as ASSIGNEE, its successors, that the attorneys of record in said application shall hereafter act on r a like interest, and to render all necessary assistance in making and or extended Letters Patent of the United States, upon request of representatives, and without further remuneration, in and to any n, growing out of or related to the said invention; and to execute any s and legal representatives, deemed essential to ASSIGNEE's full
(b) for which an application for United States and the undersigned hereby authorize and and all United States Letters Patent whis substitutes, renewals, continuations, or convention for the Protection of Industrial assigns and legal representatives; the under behalf of said ASSIGNEE; AND the undersigned hereby agrapplication for and obtaining original, divide said ASSIGNEE, its successors, assig mprovements, and applications for patent between the said ASSIGNEE, its successors by the said ASSIGNEE, its successors	request the Use have been transfer as and legal based thereous sors, assignments of the series of th	Jnited States Commissioner of Patents and Trademarks to issue any granted therefor and any and all extensions, divisions, reissues, n-part thereof, and the right to all benefits under the International the said ASSIGNEE, for its interest as ASSIGNEE, its successors, that the attorneys of record in said application shall hereafter act on r a like interest, and to render all necessary assistance in making and or extended Letters Patent of the United States, upon request of representatives, and without further remuneration, in and to any an growing out of or related to the said invention; and to execute any and legal representatives, deemed essential to ASSIGNEE's full
and the undersigned hereby authorize and and all United States Letters Patent whis substitutes, renewals, continuations, or convention for the Protection of Industrial assigns and legal representatives; the under behalf of said ASSIGNEE; AND the undersigned hereby agree application for and obtaining original, divide said ASSIGNEE, its successors, assignerovements, and applications for patent by apers by the said ASSIGNEE, its successors or of the invention of	request the Use have been transfer as and legal based thereous sors, assignments of the series of th	Jnited States Commissioner of Patents and Trademarks to issue any granted therefor and any and all extensions, divisions, reissues, n-part thereof, and the right to all benefits under the International the said ASSIGNEE, for its interest as ASSIGNEE, its successors, that the attorneys of record in said application shall hereafter act on r a like interest, and to render all necessary assistance in making and or extended Letters Patent of the United States, upon request of representatives, and without further remuneration, in and to any n, growing out of or related to the said invention; and to execute any s and legal representatives, deemed essential to ASSIGNEE's full
and the undersigned hereby authorize and and all United States Letters Patent whis substitutes, renewals, continuations, or convention for the Protection of Industrial assigns and legal representatives; the under behalf of said ASSIGNEE; AND the undersigned hereby agrapplication for and obtaining original, divides asid ASSIGNEE, its successors, assig improvements, and applications for patent leapers by the said ASSIGNEE, its successor or otection and title in and to the invention of INVENTORS Summary Lee	request the Use have been transfer as and legal based thereous sors, assignments of the series of th	Jnited States Commissioner of Patents and Trademarks to issue any granted therefor and any and all extensions, divisions, reissues, n-part thereof, and the right to all benefits under the International the said ASSIGNEE, for its interest as ASSIGNEE, its successors, that the attorneys of record in said application shall hereafter act on r a like interest, and to render all necessary assistance in making and or extended Letters Patent of the United States, upon request of representatives, and without further remuneration, in and to any n, growing out of or related to the said invention; and to execute any s and legal representatives, deemed essential to ASSIGNEE's full erred.
and the undersigned hereby authorize and and all United States Letters Patent whis substitutes, renewals, continuations, or co Convention for the Protection of Industrial assigns and legal representatives; the under behalf of said ASSIGNEE; AND the undersigned hereby agrapplication for and obtaining original, divide said ASSIGNEE, its successors, assignerovements, and applications for patent becapers by the said ASSIGNEE, its successor by the said ASSIGNEE,	request the Use have been transfer as and legal based thereous sors, assignments of the series of th	Jnited States Commissioner of Patents and Trademarks to issue any granted therefor and any and all extensions, divisions, reissues, n-part thereof, and the right to all benefits under the International the said ASSIGNEE, for its interest as ASSIGNEE, its successors, that the attorneys of record in said application shall hereafter act on r a like interest, and to render all necessary assistance in making and or extended Letters Patent of the United States, upon request of representatives, and without further remuneration, in and to any and, growing out of or related to the said invention; and to execute any and legal representatives, deemed essential to ASSIGNEE's full terred. DATE SIGNED

PATENT REEL: 028386 FRAME: 0402

3)	Young Kwan, Lee	2011.9.15
4)	Name: LEE, Young Kwan Chang kyung Wov Name: WOO, Chang Kyung	2011. 9. 15
5)	Name: WOO, Chang Kyung Je Kunj Kim	2011.9.15.
	Name: KIM, Je Kyoung	

RECORDATION FORM COVER SHEET				
Docket No.: 085946-0118 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)			
Su Jin LEE, Hye In KIM, Young Kwan LEE, Chang Kyung	Name: SAMSUNG ELECTRO-MECHANICS CO.,			
WOO, Je Kyoung KIM	LTD.			
	Internal Address:			
Additional name(s) of conveying party(ies) attached? \(\subseteq \text{Yes} \subseteq \text{No} \)				
3. Nature of Conveyance/Execution Date(s)	Address: 314 Maetan 3-Dong, Yeongtong-Gu, Suwon,			
•	Gyunggi-Do, REPUBLIC OF KOREA, 443-743			
Execution Date(s): September 15, 2011	Sywinggi bo, KDI Obbie Of ROKEA, 443-743			
☐ Security Agreement ☐ Change of Name				
Joint Research Agreement				
Government Interest Assignment				
Executive Order 9424, Confirmatory License				
Other	Additional name(s) & address(es) attached? Yes No			
4. Application or patent number(s):	☐ This document is being filed together with a new application.			
A. Patent Application No(s).	B. Patent No(s).			
Additional numbers attacl				
5. Name and address to whom correspondence concerning	6. Total number of applications and patents			
document should be mailed:	involved:			
Name: MCDERMOTT WILL & EMERY LLP	7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00			
Internal Address:	Authorized to be charged by credit card			
	Authorized to be charged to deposit account			
Street Address: 600 13th Street, N.W.	Enclosed			
	None required (government interest not affecting title)			
City: Washington, State: DC Zip: 20005-3096				
D.C.				
Phone Number: 202.756.8000	8. Payment Information:			
Fax Number: 202.756.8087				
Email Address: mweipdocket@mwe.com	a. Credit Card Last 4 Numbers			
	Expiration Date			
	b. Deposit Account Number 500417 Authorized User Name			
	Addiofized Oser Name			
9. Signature.	0/11/0 11/00			
Stephen A. Becker 26527 Demand	Cold (Key Na 46, 429) June 15, 2012			
Name and Registration No. of Person Signing	Signature Date			
Total number of pages including cover sheet, attachments and documents: 3				
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PATENT REEL: 028386 FRAME: 0404

RECORDED: 06/15/2012