 08	3-15-2000
FORM PTO-1595 (Rev. 6-93) OMB No. 0651-0011 (exp. 4/94)	EET U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office
To the Honorable Commissioner of Paten.	01432748 ed original documents or copy thereof.
1. Name of conveying party(ies):	2. Name and address of receiving party(ies):
Soon-moon Jung Sun-cheol Hong Sang-eun Lee	Name: Samsung Electronics, Co., Ltd. Internal Address:
Additional name(s) of conveying party(ies) attached? □ Yes ⊠	No Zo
3. Nature of conveyance:	Street Address: 416, Maetan-dong, Paldal-gu, Suwon-city, Kyungki-do, Republic of Korea
☐ Security Agreement ☐ Change of No.	ame City: State ZIP
Execution Date: July 25, July 25, and July 26, 2000, respective	ly Additional name(s) & address attached? ☐ Yes ☒ No
If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) B. Patent No.(s) Additional numbers attached? □ Yes ⋈ No	
5. Name and address of party to whom correspondence concern document should be mailed:	6. Total number of applications and registrations involved
Name: Steven M. Mills	
Internal Address: Samuels, Gauthier & Stevens LLP	7. Total fee (37 CFR 3.41) \$40.00 ☐ Enclosed ☐ Authorized to be charged to deposit account
Street Address: 225 Franklin Street, Suite 3300	8. Deposit Account Number:
City: Boston State MA ZIP 02	(Attach duplicate copy of this page if paying by deposit account)
DO NOT USE THIS SPACE	
9. Statement and signature: To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. 08/i1/2000 MGORDON 00000012 09630292 01 FStaten M. Mills, Reg.No. 36,6400 00 Name of Person Signing Signature	
Total number of pages including cover sheet, attachments, and document 3	

Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks, Box Assignments

> PATENT REEL: 010985 FRAME: 0936

Docket No.: SAM-111

ASSIGNMENT

We, Soon-moon Jung, of 416-702, Lotte Apt., Kachi Maeul, Kumi-dong, Bundang-gu, Sungnamcity, Kyungki-do, Republic of Korea, Sun-cheol Hong of 101-205, Wooju Apt., 535-2, Yeonsoo 1-dong, Yeonsoo-gu, Incheon-city, Republic of Korea and Sang-eun Lee of San 24, Nongseo-ri, Kiheung-eub, Yongin-city, Kyungki-do, Republic of Korea, having invented improvements in METHOD OF FORMING CONTACT STRUCTURE IN A SEMICONDUCTOR DEVICE described in an application for Letters Patent of the United States, executed by us on even date herewith, for good and valuable consideration, receipt of which is hereby acknowledged from Samsung Electronics Co., Ltd., a Korean corporation having a place of business at 416, Mactan-dong, Paldal-gu, Suwon-city, Kyungki-do, Republic of Korea (and hereinafter called the Assignee, which term shall include its successors and assigns), do hereby sell, assign and transfer unto the Assignee our entire right, title, and interest in and throughout the United States of America (including its territories and dependencies) and all countries foreign thereto, in and to and under said application (which term shall include hereinafter where the context so admits all divisional, continuing, reissue and other patent applications based thereon) and the inventions (which term shall include each and every such invention, or part thereof) therein described, and any and all patents and like rights of exclusion (including extensions thereof) of any country which may be granted on or for said inventions or on said application;

And for the same consideration We do also hereby sell, assign, and transfer unto the Assignee, all our rights under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, and all other treaties of like purpose in respect of said inventions and said application, and We do hereby authorize the Assignee to apply in our name or its own name or its designee for patents and like rights of exclusion on or for said inventions in all countries, claiming (if the Assignee so desires) the priority of the filing date of said application under the provisions of said Convention, Treaty or any such other Convention or Treaty;

And for the same consideration, We do hereby agree for ourselves and for our heirs, executors, and administrators, promptly upon request of the Assignee to execute and deliver without further compensation any power of attorney, assignment, original, divisional, continuing, reissue or other application or applications for patent or patents or like rights of exclusion of any country, or other lawful documents and any further assurances that may be deemed necessary or desirable by the Assignee, fully to secure to it said right, title, and interest as aforesaid in and to said inventions, applications, and said several patents and like rights of exclusion (including extensions thereof) or any of them, all, however, at the expense of the Assignee, its successors, or assigns:

And We do hereby authorize and request the Commissioner of Patents and Trademarks of the United States of America and the corresponding Official of each country foreign thereto to issue to the Assignee, any and all patents and like rights of exclusion which may be granted in any country upon said United States application on or for said inventions;

And We do hereby covenant for ourselves and our legal representatives and agree with the Assignee, that We have granted no right or license to make, use, or sell said inventions to anyone except the Assignee, that prior to the execution of this deed our right, title, and interest in and to said inventions has not been otherwise encumbered by us, and that We have not executed and will not execute any instruments in conflict herewith.

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First or Sole Inventor:

Signature:

Soon-model Jung

Date: 25 July, 2000

Second Joint Inventor:

Signature:

Sun-cheol Hong Date: 25. July , 2000

Third Joint Inventor:

Signature:

Lee Sang-eun
Sang-eun Lee

Date: 26 My 2000

RECORDED: 08/01/2000