Document M No.: 102807832

**PATENTS ONLY** 

03-02-2005



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	Name of party or parties conveying an atterest:  2. Name and address of party or parties receiving an interest:				
	Jae-Suk LEE	Name: Donbu Electronics Co., Ltd. 838, Yeoksam 1-dong, Kangnam-ku Seoul, 135-080, Korea			
	3. Description of the interest conveyed:	Other:			
}	X Assignment	NA NA			
}	Merger	NC <sub>I</sub>			
Ì	Change of Name	S S S			
1	Security Agreement	PH			
	Execution Date: July 22, 2004	Other:			
० पतः	4. Application number(s) or patent number(s). Additional sheet attached?  YES NO_X	If the document is being filed together with a new application, the execution date of the application is:			
	A. Patent Application no.(s): 10/902,903 filed July 30, 2004	B. Patent no.(s):			
]	5. Name and address of party to whom correspondence concerning this cover sheet should be mailed:	6. Number of applications and/or patents identified on this cover sheet: 1			
	Name: Mark G. Hanley Reg. No. 44,736	7. Amount of fee enclosed or authorized to be charged:			
}	HANLEY, FLIGHT & ZIMMERMAN, LLC	\$40.00			
	Street Address: 20 North Wacker Drive Suite 4220 City: Chicago	8. Any additional required fee may be charged, or any overpayment credited to our deposit			
	State: Illinois Zip: 60606	account: 50-2455			

To the best of my knowledge and belief, the information contained on this cover sheet is true and correct and any copy submitted is a true copy of the original document.

Date: February 17, 2005

Mark G. Hanley

Registration No. 44,736

Total number of pages including cover sheet, attachments, and document: 11

03/01/2005 GTDN11 00000147 10902903 01 FC:8021

### PATENT APPLICATION

### **EMARK OFFICE**

cet No: 20067/OPP041612US

## PATENT APPLICATION TRANSMITTAL UNDER 37 C.F.R. 1.53

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

IN THE UNIT!

Sir:

7-30-04

Transmitted herewith for filing is the patent application of

Inventor:

Jae-Suk LEE

Title:

"Method for Fabricating Metal Wiring and Semiconductor Device Having the

Same"

1.	Type	of.	Applicat	ion
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This is a new application for a

utility patent.

## 2. Application Papers Enclosed

- 1 Title Page
- 6 Pages of Specification (excluding Claims, Abstract, Sequence Listing & Drawings)
- 2 Pages of Claims
- 1 Page of Abstract
- 2 Sheets of Drawings (FIGS. 1 to 2C)

Informal

#### **CERTIFICATION UNDER 37 CFR 1.10**

I hereby certify that this Patent Application Transmittal and the documents referred to as enclosed therewith are being deposited with the United States Postal Service on July 30, 2004 in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 utilizing the "Express Mail Post Office to Addressee" service of the United States Postal Service under Maling Label No. EV/532956811 US.

38/03/2004 SZEWDIE1 00000022 10992903

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40.00 DE

Sarah Southcott

PATENT REEL: 016305 FRAME: 0220

10/902903 10/902903

		Enclo	sed	
		$\boxtimes$	Execu	ted by (check all applicable boxes)
			$\boxtimes$	Inventor(s)
				Legal representative of inventor(s) (37 CFR 1.42 or 1.43)
				Joint inventor or person showing a proprietary interest on behalf of inventor who refused to sign or cannot be reached.
				The petition required by 37 CFR 1.47 and the statement required by 37 CFR 1.47 are enclosed. See Item 5D below for fee.
				- the undersigned attorney or agent is authorized to file this n behalf of the applicant(s). An executed declaration will follow.
<b>4</b> .	Small	Entity	Status	
		Appli	icant cla	nims small entity status. See 37 CFR 1.27.
		A sm	all entit	y statement is(are) attached.
5.	Addi	tional I	Papers 1	Enclosed
		Prelin	ninary A	Amendment
		Infor	mation 1	Disclosure Statement
		Decla	aration o	of Biological Deposit
				adable copy of sequence listing ucleotide and/or amino acid sequence
		Micro	ofiche c	omputer program
		Asso	ciate Po	ower of Attorney
		Verif	ied tran	slation of a non-English patent application
	$\boxtimes$	An a	ssignme	ent of the invention
		Requ	est and	Certification Under 35 U.S.C. 122(b)(2)(B)(i)
	$\boxtimes$	Retu	rn receij	pt postcard
		Othe	r	

3.

**Declaration or Oath** 

# 6. Priority Applications Under 35 USC 119

	Certified copies of applications from	n which priority	under 35	USC 119	is claimed	are
listed 1	helosy and					

are attached.
will follow.

COUNTRY	APPLICATION NO.	FILED
Korea	10-2003-0053016	July 31, 2003

# 7. Filing Fee Calculation (37 CFR 1.16)

# A. 🗵 Utility Application

CLA	IMS AS FILED -	INCLUDING P	RELIMINAR	Y AMENDMI	ENT(S) (IF AN	Y)
			SMALL ENTITY		OTHER THAN A SMALL ENTITY	
	NO. FILED	NO. EXTRA	RATE	FEE	RATE	FEE
BASIC FEE				\$385.00		\$770.00
TOTAL	9 - 20	= 0	X 9=	s	X 18 =	\$0.00
INDEP.	2 - 3	= 0	X 43 =	s	X 86 =	\$0.00
First Presentation of Multiple Dependent Claim  Filing Fee:		+ 145 =	s	+ 290 =	s	
			s	OR	\$770.00	
					_	

В.		Design Application (\$170.00/\$340.00)	Filing Fee:	\$0.00
C		Plant Application (\$265.00/\$530.00)	Filing Fee:	\$0.00
D.	Other	r Fees		
	$\boxtimes$	Recording Assignment		
		[Fee — \$40.00 per assignment]		\$40.00
		Petition fee for filing by other than all the inventor or person on behalf of the inventor where inventor refused to sign	s	
		or cannot be reached [Fee — \$130.00]		\$0.00
		Other		\$0.00

Total Fees Enclosed \$810.00

$\boxtimes$	Encl	osed check in the amount of:	\$810.00
		Charge Deposit Account No. 50-2455 in the amount of: A copy of this Transmittal is enclosed.	\$0.00
		Not enclosed	

## 9. Deposit Account and Refund Authorization

Method of Payment of Fees

The Commissioner is hereby authorized to charge any deficiency in the amount enclosed or any additional fees which may be required during the pendency of this application under 37 CFR 1.16 or 37 CFR 1.17 or under other applicable rules (except payment of issue fees), to Deposit Account No. 50-2455. A copy of this Transmittal is enclosed.

Please refund any overpayment to Grossman & Flight LLC at the address below.

## 10. Correspondence Address

Respectfully submitted,

GROSSMAN & FLIGHT LLC 20 North Wacker Drive Suite 4220 Chicago, Illinois 60606-6357 (312) 580-1020 (312) 580-9696 (Telefacsimile)

By:

Mark G. Hanley

Registration No.: 44,736

July 30, 2004

8.

## ASSIGNMENT

Serial No:

10/902,903

Filed:

July 30, 2004

Title:

METHOD FOR FABRICATING METAL WIRING AND

SEMICONDUCTOR DEVICE HAVING THE SAME

For good and valuable consideration, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assigns to <u>DONGBU ELECTRONICS CO., LTD. of 838, Yeoksam 1-dong, Kangnam-ku. Seoul. 135-080, Korea.</u> (hereinafter "Assignee"), its successors and assigns, the entire right, title and interest in the invention or improvements of the undersigned disclosed in an application for Letters Patent of the United States, and in said application and any and all other applications, which the undersigned may file, either solely or jointly with others, on said invention or improvements, and in any and all Letters Patent of the United States, which may be obtained on any of said applications, and in any reissue or extension thereof.

The undersigned hereby authorizes and requests the Commissioner of Patents and Trademarks to issue said Letters Patent to said assignee.

The undersigned hereby authorizes and requests the attorneys of record in said application to insert in this assignment the execution date and/or filing date and serial number of said application when officially known.

The undersigned warrants himself to be the owner of the interest herein assigned and to have the right to make this assignment and further warrants that there are no outstanding prior assignments, licenses, or other rights in the interest herein assigned.

For said consideration the undersigned hereby agrees, upon the request and at the expense of said assignee, its successors and assigns, to execute any and all divisional, continuation, continuation-in-part and substitute applications for said invention or improvements, and any necessary oath or affidavit relating thereto, and any application for the reissue or extension of any Letters Patent that may be granted upon said application, that said assignee, its successors or assigns, may deem necessary or expedient, and for said consideration the undersigned further agrees upon the request of said assignee, its successors or assigns, in the event of any application or Letters Patent assigned herein becoming involved in Interference, to cooperate to the best of the ability of the undersigned with said assignee, its successors or assigns, in the matters of preparing and executing the preliminary statement and giving and producing evidence in support thereof, the undersigned hereby agreeing to perform, upon request, any and all affirmative acts to obtain said Letters Patent, and vest all rights therein hereby conveyed in said assignee, its successors and assigns, whereby said Letters Patent will be held and enjoyed by said assignee, its successors and assigns, to the full end of

the term for which said Letters Patent may be granted as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment and sale had not been made.

Date: July 22, 2004

Signature

Lee Jae Suk

Name

LEE, Jae-Suk

\* \* \* \* \*

## ASSIGNMENT

Serial No:

Filed:

July 30, 2004

Title:

METHOD FOR FABRICATING METAL WIRING AND

SEMICONDUCTOR DEVICE HAVING THE SAME

For good and valuable consideration, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assigns to **DONGBU ELECTRONICS CO., LTD. of 838, Yeoksam 1-dong, Kangnam-ku, Seoul, 135-080, Korea,** (hereinafter "Assignee"), its successors and assigns, the entire right, title and interest in the invention or improvements of the undersigned disclosed in an application for Letters Patent of the United States, and in said application and any and all other applications, which the undersigned may file, either solely or jointly with others, on said invention or improvements, and in any and all Letters Patent of the United States, which may be obtained on any of said applications, and in any reissue or extension thereof.

The undersigned hereby authorizes and requests the Commissioner of Patents and Trademarks to issue said Letters Patent to said assignee.

The undersigned hereby authorizes and requests the attorneys of record in said application to insert in this assignment the execution date and/or filing date and serial number of said application when officially known.

The undersigned warrants himself to be the owner of the interest herein assigned and to have the right to make this assignment and further warrants that there are no outstanding prior assignments, licenses, or other rights in the interest herein assigned.

For said consideration the undersigned hereby agrees, upon the request and at the expense of said assignee, its successors and assigns, to execute any and all divisional, continuation, continuation-in-part and substitute applications for said invention or improvements, and any necessary oath or affidavit relating thereto, and any application for the reissue or extension of any Letters Patent that may be granted upon said application, that said assignee, its successors or assigns, may deem necessary or expedient, and for said consideration the undersigned further agrees upon the request of said assignee, its successors or assigns, in the event of any application or Letters Patent assigned herein becoming involved in Interference, to cooperate to the best of the ability of the undersigned with said assignee, its successors or assigns, in the matters of preparing and executing the preliminary statement and giving and producing evidence in support thereof, the undersigned hereby agreeing to perform, upon request, any and all affirmative acts to obtain said Letters Patent, and vest all rights therein hereby conveyed in said assignee, its successors and assigns, whereby said Letters Patent will be held and enjoyed by said assignee, its successors and assigns, to the full end of

the term for which said Letters Patent may be granted as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment and sale had not been made.

Date: July 22, 2004

Signature

Lee Jae Sick

Name

LEE, Jae-Suk

\* \* \* \* \*

PATENT REEL: 016305 FRAME: 0227

**RECORDED: 07/30/2004**