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PATENT

9-30-03

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Byung-Sung Kwak, Jayanthi Pallinti, and William Barth

Assignee:

LSI Logic Corporation

Title:

PROCESS FOR REDUCING IMPURITY LEVELS, STRESS, AND RESISTIVITY, AND INCREASING GRAIN SIZE OF COPPER FILLER IN TRENCHES AND VIAS OF INTEGRATED CIRCUIT STRUCTURES TO ENHANCE ELECTRICAL PERFORMANCE OF

COPPER FILLER

Serial No.:

Unknown

10676934

Filed:

Herewith

Group Art Unit: Unknown

Attorney Docket No. 02-5624

Examiner: Unknown

Septembe 30, 2003

RECORDATION FORM COVER SHEET PATENTS ONLY

To the Honorable Commissioner of Patents and Trademarks Post Office Box 1450 Alexandria, VA 22313-1450

Sir:

Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Byung-Sung Kwak

Date of Execution: September 23, 2003

Jayanthi Pallinti

Date of Execution: September 23, 2003

William Barth

Date of Execution: September 23, 2003

10/16/2003 ECDOPER 00000012 122252 10676934 01 FC:8021

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PATENT REEL: 014590 FRAME: 0216

2.	Name and address of receiving party(ices):				
	LSI Logic Corporation 1551 McCarthy Boulevard Milpitas, California 95035 U.S.A.				
3.	Nature of conveyance: Assignment				
4.	Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: September 23 , 2003 .				
	A. Patent Application Serial Number: B. Patent Number:				
5.	Name and address of party to whom correspondence concerning document should mailed:				
	Sandeep Jaggi, Chief Intellectual Property Counsel LSI Logic Corporation Legal Department - IP 1621 Barber Lane, MS D-106 Milpitas, CA 95035 U.S.A.				
6.	Total number of applications and patents involved: 1.				
7.	Total fee (37 CFR 3.41): <u>\$40.00.</u>				
8.	Attached is a check in the amount of \$				
	Charge Deposit Account No. 12-2252 in the amount of \$ 40.00 . (A duplicate copy of this document is enclosed.)				
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 origin document.				
	John P. Taylor Reg. No. 22,369				
10.	Total number of pages including cover sheet, attachments and document:5 Cover Sheet (in duplicate)4 _ Pages Assignment1 Page				

Docket No.: 02-5624

ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/WE, the undersigned, Byung-Sung Kwak, Jayanthi Pallinti, and William Barth, do hereby sell, assign, and transfer to: LSI LOGIC CORPORATION, a corporation of Delaware, having a place of business at 1551 McCarthy Boulevard, Milpitas, California 95035, ("Assignee"), its successors, assigns, and legal representatives, the entire right, title and interest for the United States and all foreign countries, in and to any and all inventions and improvements which are disclosed in the application for United States Letters Patent,

(X)	which has been executed by	y the undersigned concurrently herewith,	
()	which was filed on	20 and assigned Serial No	 -

and is entitled: "PROCESS FOR REDUCING IMPURITY LEVELS, STRESS, AND RESISTIVITY, AND INCREASING GRAIN SIZE OF COPPER FILLER IN TRENCHES AND VIAS OF INTEGRATED CIRCUIT STRUCTURES TO ENHANCE ELECTRICAL PERFORMANCE OF COPPER FILLER" and in and to said application and all divisional, continuing, substitute, renewal, reissue, and all other applications for Letters Patent which have been or shall be filed in the United States and all foreign countries on any of said improvements; and in and to all original and reissued patents which have been or shall be issued in the United States and all foreign countries on said improvements; and in and to all rights of priority resulting from the filing of said United States application; and

Agree that said Assignee may apply for and receive Letters Patent for said improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all said improvements; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee, its successors, assigns, and representatives, all facts known to the undersigned relating to said improvements and the history thereof; and generally do everything possible which said Assignee, its successors, assigns or representatives shall consider desirable for aiding in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements and all applications to patents and all patents on said improvements, in said Assignee, its successors, assigns and legal representatives; and

Covenant with said Assignee, its successors, assigns and legal representatives that no assignment, grant mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Name:	Ros While	Date: 9/23/03	, 2003	Witness: 507 9/22/03
	Byung-Sung Kwak	<i>i</i>		Witness: SEY-SHING SUN Printed
Name:	P. Jayanthi	Date: 9/23/03	, 2003	Witness: Dar on Charles of
	Jayanthi Pallinti			Witness: OHARONG, HAYOUT Printed
Name:_	Thomas Buth	Date: 9/23/03	, 2003	Witness: Werker
	William Barth			Witness: JENNIGER FRUKET Printed 923-03
Name:		Date:	, 2003	Witness:
				Witness:
				Printed

Assignment (Rev. 111494)

PATENT
RECORDED: 09/30/2003 REEL: 014590 FRAME: 0218