10-05-1999



ORM PTO-1595	1 (2010) 1121
	4044600

CHEET

U.S. Department of Commerce

To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof. 1. Name of conveying party(ies): 1. Alwin J. Tsao 2. Name and Address of receiving party(ies): Name: TEXAS INSTRUMENTS INCORPORATED Address: P.O. Box 655474, MS 3999 City: Dallas State: TX Zip: 75265 Additional name(s) & address(es) attached?Yes _X_No 3. Nature of Conveyance: X_Assignment Merger Security Agreement Change of Name Other Execution Date: December 16, 1998 4. Application number(s) or patent number(s). Execution date of the application: December 16, 1998 Title: A METHOD TO OPTIMIZE COPPER CHEMICAL-MECHANICAL POLISHING IN A COPPER		
Name: TEXAS INSTRUMENTS INCORPORATED Address: P.O. Box 655474, MS 3999 City: Dallas State: TX Zip: 75265 Additional name(s) & address(es) attached? Yes _X_ No 3. Nature of Conveyance:X_ Assignment Merger Security Agreement Change of Name Other Execution Date: December 16, 1998 4. Application number(s) or patent number(s). Execution date of the application: December 16, 1998		
Address: P.O. Box 655474, MS 3999 City: Dallas State: TX Zip: 75265 Additional name(s) & address(es) attached?Yes _X_No 3. Nature of Conveyance:X_ Assignment Merger Security Agreement Change of Name Other Execution Date: December 16, 1998 4. Application number(s) or patent number(s). X_ This document is being filed together with a new application. Execution date of the application: December 16, 1998		
State: TX Zip: 75265 Additional name(s) & address(es) attached?Yes _X_No 3. Nature of Conveyance:XAssignmentMergerSecurity AgreementChange of NameOther Execution Date: December 16, 1998 4. Application number(s) or patent number(s)X_This document is being filed together with a new application. Execution date of the application: December 16, 1998		
Security Agreement Change of Name Other Execution Date: December 16, 1998 4. Application number(s) or patent number(s) Agreement is being filed together with a new application. Execution date of the application: December 16, 1998		
Security Agreement Change of Name Other Execution Date: December 16, 1998 4. Application number(s) or patent number(s) Agreement is being filed together with a new application. Execution date of the application: December 16, 1998		
Security Agreement Change of Name Other Execution Date: December 16, 1998 4. Application number(s) or patent number(s) X_ This document is being filed together with a new application. Execution date of the application: December 16, 1998		
Security Agreement Change of Name Other Execution Date: December 16, 1998 4. Application number(s) or patent number(s) X_ This document is being filed together with a new application. Execution date of the application: December 16, 1998		
Execution Date: December 16, 1998 4. Application number(s) or patent number(s). _X_This document is being filed together with a new application. Execution date of the application: December 16, 1998		
Execution Date: December 16, 1998 4. Application number(s) or patent number(s). _X_ This document is being filed together with a new application. Execution date of the application: December 16, 1998		
4. Application number(s) or patent number(s). Q/404,383 _X_ This document is being filed together with a new application. Execution date of the application: December 16, 1998		
X This document is being filed together with a new application. Execution date of the application: December 16, 1998		
Execution date of the application: December 16, 1998		
Title: A METHOD TO OPTIMIZE COPPER CHEMICAL-MECHANICAL POLISHING IN A COPPER		
Title: A METHOD TO OPTIMIZE COPPER CHEMICAL-MECHANICAL POLISHING IN A COPPER DAMASCENE INTERCONNECT PROCESS FOR INTEGRATED CIRCUIT APPLICATIONS		
Docket No: TI-25525		
A. Patent Application No.(s) B. Patent No.(s)		
S.N. Additional numbers attached? YesXNo Additional numbers attached? YesXNo		
Name and address of party to whom correspondence concerning document should be mailed: Name and address of party to whom correspondence concerning document should be mailed: 6. Number of applications and patents involved:(1)		
Name: Jacqueline J. Garner Texas Instruments Incorporated Address: P.O. Box 655474, MS 3999 City: Dallas State: TX Zip: 75265		
7. Amount of fee enclosed or authorized to be charged: \$40		
8. Deposit Account No: 20-0668 (Duplicate copies not required).		
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. 9 27 99 Date Jacqueline J. Gamer Reg. No.36,144		

40.00 CH 01 FC:581

PATENT

REEL: 010278 FRAME: 0063

ATTORNEY DOCKET NO.
TI-25525

ASSIGNMENT

WHEREAS, I, the undersigned inventor (or one of the undersigned joint inventors), of residence as listed, having invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made, the said application having been executed on the date set forth below; and

WHEREAS, TEXAS INSTRUMENTS INCORPORATED, a corporation organized and existing under the laws of the State of Delaware, with a place of business at 7839 Churchill Way, MS 3999, Dallas, Texas 75251, is desirous of acquiring my entire right, title and interest in and to the said invention, and to the said application and any Letters Patent that may issue thereon;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell and assign to the said TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, my entire right, title and interest in and to the said invention and in to the said application and all patents which may be granted therefor, and all divisions, reissues, substitutions, continuations, and extensions thereof; and I hereby authorize and request the Commissioner of Patents and Trademarks to issue all patents for said invention, or patent resulting therefrom, insofar as my interest is concerned, to the said TEXAS INSTRUMENTS INCORPORATED, as assignee of my entire right, title and interest.

I also hereby sell and assign to TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, my foreign rights to the invention disclosed in said application, in all countries of the world, including the right to file applications and obtain patents under the terms of the International Convention for the Protection of Industrial Property, and of the European Patent Convention, and further agree to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.

I hereby further agree that I will communicate to said TEXAS INSTRUMENTS INCORPORATED, or to its successors, assigns, and legal representatives, any facts known to me respecting said invention, and at the expense of said assignee company, testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, reissue and substitute applications, make all lawful oaths, and generally do everything possible to aid said TEXAS INSTRUMENTS INCORPORATED, its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

IN WITNESS WHEREOF, I hereunto set hand and seal this day and year;

TITLE OF INVENTION	A Method to Optimize Copper Chemical-Mechanical Polishing in a Copper Damascene Interconnect Process for Integrated Circuit Applications	
SIGNATURE OF INVENTOR AND NAME	Alwin J. Tsao	Paul M. Gillespie Paul M. Gillespie
DATE	12/16/98	12/16/98
RESIDENCE (City, County, State)	Garland, Dallas County, Texas	Allen, Collin County, Texas
DATE APPLICATION EXECUTED	12/16/98	12/16/98

After recording return Assignment to:

RECORDED: 09/27/1999

Jacqueline J. Garner Texas Instruments Incorporated P.O. Box 655474, MS 3999 Dallas, Texas 75265

> PATENT REEL: 010278 FRAME: 0064