FORM PTO-1595

OVER SHEET

U.S. Department of Commerce Patent and Trademark Office

101044188 TI-21810 ιLY To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof. 1. Name of conveying party(ies): 2. Name and Address of receiving party(ies): 1) Ching-Hao Shaw 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 09306184 Other Execution Date: May 18, 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: May 18, 1998 Title: APPARATUS AND METHOD FOR HIGH DENSITY CMOS GATE ARRAYS Docket No: TI-21810 A. Patent Application No.(s) B. Patent No.(s) S.N. Additional numbers attached? Yes X No Additional numbers attached? 6. Number of applications and patents involved: ____(1)___ 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Jacqueline J. Garner Texas Instruments Incorporated Address: P.O. Box 655474, MS 3999 City: Dallas Zip: 75265 State: TX 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 Jacqueline J. Garner Reg. No.36,144

05/17/1999 KHARLING 00000044 200668 09306184 40.00 CH 02 66:581

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 its principal office at 7839 Churchill Way, 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	APPARATUS AND METHOD FOR HIGH DENSITY CMOS GATE ARRAYS
SIGNATURE OF INVENTOR AND NAME DATE	Ching-Hao/Shaw
RESIDENCE (CITY AND STATE)	Plano, Texas
DATE APPLICATION EXECUTED	3/14/98

After recording, return Assignment to:

RECORDED: 05/06/1999

William W. Holloway Texas Instruments Incorporated P.O. Box 655474, M/S 3999 Dallas, TX 75265

> PATENT REEL: 009954 FRAME: 0965