

10-01-1999



FORM PTO-1595

U.S. Department of Commerce  
Patent and Trademark Office

TI-27138

101160764

To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

1) Yoshihiro Ogata

*mrd*  
*9-22-99*

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:

Assignment  Merger  
 Security Agreement  Change of Name  
 Other \_\_\_\_\_

Execution Date: **September 28, 1998**

4. Application number(s) or patent number(s).

This document is being filed together with a new application.

Execution date of the application: **September 28, 1998**

Title: **SEMICONDUCTOR DEVICE ARRAY HAVING DENSE MEMORY CELL  
ARRAY AND HEIRARCHICAL BIT LINE SCHEME**

Docket No: TI-27138

A. Patent Application No.(s)  
S.N.

Additional numbers attached? \_\_\_ Yes \_\_\_X\_\_\_ No

B. Patent No.(s)

*09/400,968*

Additional numbers attached? \_\_\_ Yes \_\_\_X\_\_\_ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Robby T. Holland  
Texas Instruments Incorporated  
Address: P.O. Box 655474, MS 3999  
City: Dallas  
State: TX Zip: 75265

6. Number of applications and patents involved: \_\_\_(1)\_\_\_

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.*

09/22/99

Date

*[Signature]*  
Robby T. Holland Reg. No. 33,304

10675 U.S. PTO  
09/400968  
09/22/99

**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

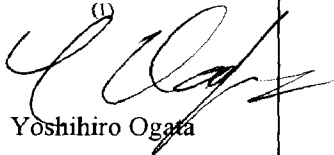
WHEREAS, TEXAS INSTRUMENTS INCORPORATED, a corporation organized and existing under the laws of the State of Delaware, having a place of business at 7839 Churchill Way, MS 3999, Dallas, Texas 75251, P.O. Box 655474, MS 3999, Dallas, Texas 75265, is desirous of acquiring my entire right, title and interest 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 my hand and seal this day and year;

TITLE OF INVENTION	<u>SEMICONDUCTOR DEVICE ARRAY HAVING DENSE MEMORY CELL ARRAY AND HEIRARCHICAL BIT LINE SCHEME</u>		
SIGNATURE OF INVENTOR AND NAME	(1)  Yoshihiro Ogata	(2)	(3)
DATE	9-28-98		
RESIDENCE (City, County, State)	Plano, Collin, Texas		
DATE APPLICATION EXECUTED	9-28-98		

After recordation, please return Assignment to:

Robby T. Holland  
Texas Instruments Incorporated  
P.O. Box 655474, M/S 3999  
Dallas, TX 75265