MRO 10.28.98

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100867836 ....nts or copies thereof: To the Honorable Commissioner of Patents and Trade 1. Name of Conveying Party or Parties: 2. Name and address of receiving party or parties: Tsunco INABA KABUSHIKI KAISHA TOSHIBA Shinichiro SHIRATAKE Kenji TSUCHIDA 72 Horikawa-cho, Saiwa-ku Kawasaki-shi, Japan Additional Names of conveying party or parties attached? □ Yes ■ No 3. Nature of Conveyance: ☐ Merger Assignment Security Agreement Change of Name Additional Name(s) and address(es) attached? 

Ves No Other Execution Date: October 22, 1998 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: October 22, 1998 A. Patent Application Number(s): B. Patent Number(s): Additional Name(s) and address(es) attached? 

Yes No 6. Total Number of Applications and patents involved: 1 5. Name and address of party to whom correspondence concerning the document should be mailed: 7. Total fee (37 CFR 3.41) ..... \$ 40.00 £ Enclosed BANNER & WITCOFF, LTD. Authorized to be charged to deposit account 11th Floor Please charge or credit our deposit account for any additional or 1001 G Street, N.W. refunded fees associated with recording this assignment Washington, D.C. 20001-4597 8. Deposit Account No.: 19-0733 (in the event additional fees are required) (Duplicate copy of this page attached if paying by deposit account) Do Not Use this Space 11/02/1<mark>998 DBUTLEK 00000011 09179893</mark> 9. Statement and Signature: To the best of my knowlettle until belief, the foregoing information is true and correct and any attached copy is a true copy of the original Joseph M. Potenza, Reg. No. 28,175 Name of Person Signing Total Number of Pages including Cover Sheet: 3

REEL: 9551 FRAME: 0422

## ASSIGNMENT

In consideration of value received, I, having a post office address at c/o Intellectual Property Division, KABUSHIKI KAISHA TOSHIBA, 1 1 Shibaura 1-chome, Minato-ku, Tokyo 105-8001, Japan and a residence as stated below next to my name, the sole inventor (if only one name is listed below) or a joint inventor (if plural inventors are listed below) of an invention described in an application for United States patent entitled:

## SEMICONDUCTOR MEMORY DEVICE HAVING COLUMN REDUNDANCY FUNCTION

said application having been filed on and assigned Serial No. ; sell and assign to KABUSHIKI KAISHA TOSHIBA a corporation of Japan, having a business address at 72 Horikawa-cho, Saiwai-ku, Kawasaki-shi, Japan

its successors, assigns or nominees, hereinafter referred to as "Assignee", my entire right, title and interest in and to said invention as disclosed, shown and described in said application for United States patent: (check one)

- X executed concurrently herewith;
- executed separately herefrom;

and in and to all applications for patent and patents for said invention, in all countries of the world, including all divisions, reissues, continuations, substitutions and extensions thereof and all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property, including rights of priority, resulting from the filing of any of said applications; and I authorize and request any official whose duty is to issue patents, to issue any patent on said invention or resulting therefrom to said Assignee, and I agree that on request and without further consideration, but at the expense of said Assignee, I will communicate to said Assignee or its representatives all facts known to me respecting said invention and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue, or other applications, make all rightful oaths and declarations, and generally do everything possible to aid said Assignee to obtain and enforce proper patent protection for said invension in all countries.

I hereby grant the following law firm the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the Rules of the U.S. Patent and Trademark Office for recordation of this document.

Banner & Witcoff, Ltd., 11th Floor, 1001 G Street, N.W., Washington, D. C. 20001-4597

PATENT REEL: 9551 FRAME: 0423

## ASSIGNMENT

Inventor: (Signature)	Date	Residence
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