FORM PTO-1595 (Modified) (Rev. 6-93) OME No. 0651-0011 (exp. 4/94) Copyright 1994-97 LegalStar POB/REV02 Tab settings + + + To the Honorable Commissioner of Patents and Trademarks: 1. Name of conveying party(ies): Yohji Watanabe	29-1998       ket No.: HQ9-97-057       U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office         0843477       ▼       ▼         Please record the attached original documents or copy thereof.       2. Name and address of receiving party(ies):       Name: Kabushiki Kaisha Toshiba         Internal Address:       72, Horikawa-Cho
Additional names(s) of conveying party(ies) Yes No     3. Nature of conveyance:   Image: Assignment   Image: Security Agreement   Image: Other   Image: Other   Execution Date: 02/05/98	Street Address: Saiwai-Ku   Kawasaki-Shi   City: Kanagawa-Ken, JAPAN   State: ZIP:   Additional name(s) & address(es) attached?   Yes No
<ul> <li>4. Application number(s) or registration numbers(s): <u>09/047,086</u></li> <li>If this document is being filed together with a new application, the execution date of the application is:</li> <li>A. Patent Application No.(s)</li> <li>B. Patent No.(s)</li> <li>HQ9-97-057</li> </ul> Additional numbers attached?  Yes X No	
<ul> <li>5. Name and address of party to whom correspondence concerning document should be mailed:</li> <li>Name: <u>Kiyoshi Tanabe</u></li> <li>Internal Address: <u>TOSHIBA AMERICA, INC.</u></li> <li><u>Intellectual Property Law Dept.</u></li> </ul>	<ul> <li>6. Total number of applications and patents involved: 1</li> <li>7. Total fee (37 CFR 3.41):\$ 40.00</li> <li>□ Enclosed</li> <li>☑ Authorized to be charged to deposit account</li> </ul>
Street Address:         1300 I Street, N.W., Suite 800           09/28/1998         DHGUYEN         00000091         090458         09047086           01         FC:581         Washington 40.00 CH         State:         DC         ZIP:         20005           DO NOT	8. Deposit account number: 09-0458 (FI-390) 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.         H. Daniel Schnurmann, Reg. #35,791         Name of Person Signing         Total number of pages including cover sheet, attachments, and document:	

## REEL: 9473 FRAME: 0459

## ASSIGNMENT

IN CONSIDERATION of the sum of One Dollar (\$1.00) or the equivalent thereof, and other good and valuable consideration paid to Yohji Watanabe, subject(s) of Japan, by Kabushiki Kaisha Toshiba, a corporation organized under the laws of Japan, located at 72, Horikawa-Cho, Saiwai-Ku, Kawasaki-Shi, Kanagawa-Ken, Japan, receipt of which is hereby acknowledged, the said Yohji Watanabe hereby sell(s) and assign(s) to said Kabushiki Kaisha Toshiba, and their successors and assigns, all their (his) right(s), title and interest in and to a Letters Patent for the United States of America, in and for the invention of

## METHOD AND APPARATUS FOR REDUNDANCY WORD LINE REPLACEMENT IN A REPAIRABLE SEMICONDUCTOR MEMORY DEVICE

invented by us (me) and described in the application for United States Letter Patent, executed separately herefrom, and all United States Letters Patent which may be granted therefor, and all divisions, reissues, continuations and extensions thereof, the said interest being the entire ownership of said Letters Patent when granted to be held and enjoyed by said Kabushiki Kaisha Toshiba, their successors, assigns or other legal representatives, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by us (me) if this assignment and sale had not been made.

AND WE (I) hereby agree to sign and execute any further documents or instruments which may be necessary, lawful and proper in the prosecution of said above named application or in the preparation and prosecution of any continuing, continuation-inpart, substitute, divisional, renewal or reissue application, or in any amendment, extension or interference proceeding, or otherwise to secure the title thereto said assignee.

AND WE (I) hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to said Kabushiki Kaisha Toshiba.

Johji Watanabe 2/5/98 Yohji Watanabe Date

Docket No. HQ9-97-057

**RECORDED: 09/11/1998**