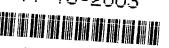
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Yes No 3. Nature of Conveyance: Assignment ☐ Merger ☐ Security Agreement ☐ Change of Name ☐ Other Execution Date: July 14, 2003 Additional name(s) and address(es) attached?

Yes No 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: A. Patent Application No.(s) B. Patent No.(s) 10/617,046 Additional numbers attached?

Yes No 5. Name and address of party to whom correspondence 6. Total applications and patents involved: 1 concerning document should be mailed: 7. Total fee (37 CFR 3.41): \$40.00 Customer Number Enclosed ☐ Authorized to be charged to deposit account Tel. (703) 413-3000 8. Deposit account number: 15-0030 Fax. (703) 413-2220 (Attach duplicate copy of this page if paying by deposit account) 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. Eckhard H. Kuesters Name of Person Signing Joseph A. Scafetta, Jr. Registration Number: 28,870 Registration No. 26.803 Total number of pages including this cover sheet: 3 11/17/2003 LNUELLER 00000062 10617046 01 FC:8021 40.00 OP Do not detach this portion Mail documents to be recorded with required cover sheet information to:

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Assignment of Application

Page 1 of 2

JULY 18 442 55 1 A

	WHEREAS, I (WE)	Tamio IKEHASHI c/o Intellectual Property Division, Toshiba Corporation, 1-1,		
SERT NAMES ID RESIDENCE		Shibaura 1-chome, Minato-ku, Tokyo 105-8001, JAPAN; Takashi OHSAWA		
DRESS OF E INVENTORS:		c/o Intellectual Property Division, Toshiba Corporation, 1-1, Shibaura 1-chome, N	Minato-ku,	
		Tokyo 105-8001, JAPAN; and Katsuyuki FUJITA c/o Intellectual Property Divis	ion,	
		Toshiba Corporation, 1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001, JAPA	N	
		, res	spectively,	
ERT TITLE INVENTION:	have invented certain new and useful improvements in:			
	SEMICONDUCTOR	MEMORY DEVICE		
ERT DATE IN- NTORS SIGNED CLARATION:	for which an application for Letters Patent was executed on			
ERT NAME	(Application No 1	0/617,046 , filed July 11, 2003), and	
D ADDRESS OF MPANY OR HER ASSIGNEE	WHEREAS, KA	ABUSHIKI KAISHA TOSHIBA		
	(hereinafter referred to as "ASSIGNEE") having a place of business at:			
	1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001, JAPAN			
	is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that			

NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I (WE), by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial

possessions and in all foreign countries and the entire right, title and interest in and to any and all Letters Patent

may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;

which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.

I (WE) hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my (our) entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its (his) successors and assigns, 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 by me (us) had this Assignment and sale not been made.

10/01

Further, I (WE) agree that I (WE) will communicate to said ASSIGNEE or its (his) representatives any facts known to me (us) respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letter Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.

The undersigned hereby grant(s) the firm of Oblon, Spivak, McClelland, Maier & Neustadt, P.C. of 1940 Duke Street Alexandria, Virginia 22314 the power to insert on this assignment any further identification, including the application number and filing date, which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Date: July 14, 2003	T. Ilahashi	
· ·	(Signature of Inventor) Tamio IKEHASHI	
Date: July 14, 2003	Takashi Ohsawa	
	(Signature of Inventor) Takashi OHSAWA	
Date: July 14, 2003	Katsuyaki Fujita	
	(Signature of Inventor) Katsuyuki FUJITA	
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	(Signature of Inventor)	
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OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C.

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