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Takuya FUTATSUYAMA, Kenichi IMAMIYA, Koji HOSOI and Noboru SHIBATA	Name: KABUS	HIKI KAISHA TOSHIBA
		aura 1-chome, Minato-ku, 05-8001, JAPAN
Additional name(s) of conveying party(ies) attached? Yes	•	05-0001, 9711 7111
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Assignment		
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Execution Date: October 20, 27, 27 and 20, 2003	Additional name(s)	and address(es) attached? ☐ Yes ■ No
4. Application number(s) or patent number(s):		
If this document is being filed together with a new application,	, the execution date of the a	application is:
A. Patent Application No.(s)	B. Patent No.(s)	
10/678,179		
Additional numbers	attached? 🗆 Yes 🔳 No	
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total application	ns and patents involved: 1
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PATENT REEL: 015023 FRAME: 0952

Assignment of Application

Page 1 of 2

	WHEREAS, I (WE)	Takuya FUTATSUYAMA of c/o Intellectual Property Division, Toshiba Corporation,			
SERT NAMES		1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001, JAPAN; Kenichi IMAMIYA of			
ODRESS OF HE INVENTORS:		c/o Intellectual Property Division, Toshiba Corporation, 1-1, Shibaura 1-chome, Minato-	ku,		
		Tokyo 105-8001, JAPAN; Koji HOSONO of c/o Intellectual Property Division, Toshiba	1		
		Corporation, 1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001, JAPAN; and Noboru			
		SHIBATA of c/o Intellectual Property Division, Toshiba Corporation, 1-1, Shibaura			
		1-chome, Minato-ku, Tokyo 105-8001, JAPAN			
		, respective	ly,		
SERT TITLE INVENTION:	have invented certain	new and useful improvements in: NON-VOLATILE SEMICONDUCTOR MEMORY	•		
		FOR SUB-BLOCK ERASE AND ELECTRIC DEVICE WITH THE SAME			
SERT DATE IN- INTORS SIGNED ICLARATION:		ion for Letters Patent was executed on			
	(Application No.	10/678,179 , filed October 6, 2003), a	and		
SERT NAME ID ADDRESS OF MPANY OR HER ASSIGNEE		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 may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;

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 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.

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PATENT REEL: 015023 FRAME: 0953 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.

*** **********************************

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C.

ATTORNEYS AT LAW 1940 DUKE STREET ALEXANDRIA, VIRGINIA 22314

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PATENT
RECORDED: 03/01/2004 REEL: 015023 FRAME: 0954