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(Rev. 5/39) OMB No. 0651-0011 (exp. 4/94) 12 · 4 3	01-27-2	2004 	10/4 PSOFFARTING OF COMMERCE	
1. Name of conveying party(ies):	102730 ₄	141	ess of receiving party(ies) NEC Electronics Corporation	
Hiroyuki TAKAHASHI; Atsushi NAKAC Additional name(s) of conveying part	GAWA; Hideo INABA		ss:	
YesNo <u>X</u>				
Nature of conveyance:		Street Address	: 1753 Shimonumabe, Nakahara-ku	
(X) Assignment () Merger () Security Agreement () Change of Name () Other:		A ddieionol non	Kawasaki, Kanagawa 211-8668, Japan	
Execution Date: December 2, 2003		Additional name(s) & address(es) attached? Yes $\underline{\hspace{0.2cm}}$ No (\underline{X})		
3. Application number(s) or patent num	ber(s)			
If this document is being filed togeth. A. Patent Application No.(s) 4. Name and address of party to whom concerning document should be mailed: Name: Patent Group Internal Address: Choate, Hall & Stewa Street Address: Exchange Place, 53 S City: Boston State: MA ZIP: 0210	Additional numbers attack a correspondence 10479635 art tate Street	B. Paten hed? Yes No. 5. Total number of the control of the contro	o X of applications and patents involved: 1 CFR 3.41)	
			licate copy of this page if paying by deposit	
		account)	neare copy of this page it paying by deposit	
DO NOT USE THIS SPACE				
8. 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. Donald W. Muirhead; 33,978 Name of Person Signing Total number of pages including cover sheet, attachments, and document: 2				
Mail documents to be recorded with required covered sheet information to: Commissioner of Patents & Trademarks, Box Assignments Washington, D.C. 20231				

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PATENT REEL: 015249 FRAME: 0228

ASSIGNMENT

WHEREAS, each of the undersigned has developed certain inventions described in a U.S. patent application entitled: semiconductor memory device

(x) executed on even date herewith,		
() executed on	ے	
() now U.S Patent No	filed on	

and has full right to convey their entire interest both legal and equitable in and to said inventions free from all prior assignments, agreements, licenses, mortgages, security interests, or other encumbrances whatsoever, and

WHEREAS, NEC Electronics Corporation ("ASSIGNEE"), a Japanese corporation having executive offices at 1753, Shimonumabe, Nakahara-ku, Kawasaki, Kanagawa, 211-8668, Japan is desirous of acquiring the entire right, title and interest in and to said invention or inventions and any and all patents to be obtained therefor,

NOW, THERBFORE, in consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged by each of the undersigned, each of the undersigned hereby sells, assigns, transfers and sets over unto said ASSIGNEE, its successors and assigns, the entire right, title and interest throughout the world in and to said invention or inventions, as described in the aforesaid application, and all applications resulting therefrom, including any and all divisionals, continuations, continuations-in-part, substitute applications, and reissues or extensions thereof; and all resulting patents;

AND, each of the undersigned hereby authorizes and requests the issuing authority to issue any and all patents on said application or applications to said ASSIGNEE or its successors and assigns, each of the undersigned agrees that the attorney of record shall heremafter act on behalf of said ASSIGNEE;

AND, each of the undersigned further agrees, without any further payment or compensation by said ASSIGNEE or its successors and assigns, to communicate to said ASSIGNEE, its representatives or agents or its successors and assigns, any facts relating to said invention or inventions including evidence for interference purposes or for other legal proceedings whenever requested, to testify in any interference or other legal proceedings, whenever requested; execute and deliver, on request, all lawful papers required to make any of the foregoing provisions effective, and generally to do everything possible to aid said ASSIGNEE, its successors or assigns and nominees to secure, obtain and enforce proper patent protection for said invention or inventions in this or any foreign country,

Bach of the undersigned hereby authorizes Choate, Hall & Stewart of Exchange Place, 53 State Street, Boston Ma. 02109, to insert hereon any further identification information necessary or desirable for recordation of this document

Inventor(s)	Date Signed	Witness
1. 7 dirogaki Takahash	Dec.2,2003	Ditali Clai
Name, Hiroyuki TAKAHASHI	· · · · · · · · · · · · · · · · · · ·	Alleras merter
2 Atrushi Rakagan	~a(;; pec. 2.2003.	States Clkai
Name Atsushi NAKAĞAW	A	Attrice must
3 Hideo Inaba	Dec.2,2003	Adelseli Clai
Name. Hideo INABA	413	10 to Dund
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Name		

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PATENT
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