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. Name of conveying party(ies) Atsushi Kunimatsu Hiroto Nakai Hiroyuki Sakamoto Kenichi Maeda	2. Name and address of receiving purry (1007 Name: <u>Kabushiki Kaisha Toshiba</u> Internal Address:
dditional name(s) of conveying party(ies) attached? Yes 🗙 No	
Nature of conveyance/Execution Date(s):	Street Address: <u>1-1 Shibaura 1-chome</u>
Execution Date(s) <u>11/27/08,12/1/08 and 12/2/08</u>	Minato-ku City: Tokyo
Security Agreement Change of Name Joint Research Agreement Government Interest Assignment	State:
Executive Order 9424, Confirmatory License	Country: <u>JP</u> Zip: <u>105-8001</u>
Other	Additional name(s) & address(es) attached? Yes X No s document is being filed together with a new application.
12/236,880 SUZU1920-1 (Attorney Docket No.) Additional numbers a	attached? Yes XNo
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: <u>1</u>
Name: Ari G, Akmal (Cust. No. 44654)	7. Total fee (37 CFR 1.21(h) & 3.41) \$_40.00
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Street Address: 1301 W. 25th Street, Suite 408	Enclosed None required (government interest not affecting title)
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State: Texas Zip: 78705	_
Phone Number: <u>512-637-9220</u>	Deposit Account Number _50-3183
Fax Number:	Authorized User Name_Ari G. Akmal
Email Address:	
9. Signature:	<u> /2-/2-2008</u> Date
Ari G. Akmal, Reg. 51388 Name of Person Signing	Total number of pages including cover 3 sheet, attachments, and documents:

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PATENT REEL: 021975 FRAME: 0609

ASSIGNMENT

ASG046259-USA-B (08S0041-I)

In consideration of value received, I, having a residence as stated below above 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:

INTEGRATED MEMORY MANAGEMENT AND MEMORY MANAGEMENT METHOD

have sold and assigned and do hereby sell and assign to KABUSHIKI KAISHA TOSHIBA a Japanese corporation, having a business address at 1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001, 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 United States patent application:

(check one) [X] executed concurrently herewith [] executed on ; [X] Application No. 12/236,880, filed September 24,2008;

and in and to all applications for patent and patents for invention including all divisions, reissues, continuations, substitutes 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 proceedings, sign all lawful papers, execute all divisional, continuing, continued prosecution, 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 invention.

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.

Sprinkle IP Law Group, 1301 W. 25th Street, Suite 408, Austin, TX 78705

PATENT REEL: 021975 FRAME: 0610

ASSIGNMENT

ASG046259-USA-B $(08S0041 \cdot I)$

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Pec Z. 2008 Date:

PATENT REEL: 021975 FRAME: 0611

RECORDED: 12/12/2008