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To the Director of the United States Patent and Trademark Office. Please record the attached original documents or copy thereof. 2. Name and address of receiving party(ies): 1. Name of conveying party(ies): Atsushi NAKAYAMA KABUSHIKI KAISHA TOSHIBA Name: Toshimasa NAMEKAWA Address: 1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-Hiroaki NAKANO 8001, Japan Hiroshi ITO Osamu WADA Additional name(s) of conveying party(ies) attached?

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

Yes No Execution Date: October 12, 2005 4. Application number(s) or patent number(s): ☐ This document is being filed together with a new application B. Patent No.(s) A. Patent Application No.(s) 11/231,795 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 Scafetta, Jr. Registration Number: 28,870 Registration No. 26,803 Total number of pages including this cover sheet: 3 Do not detach this portion Mail documents to be recorded with required cover sheet information to: Director of the United States Patent and Trademark Office Mail Stop Assignment Recordation Services

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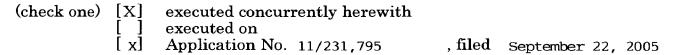
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In consideration of value received, I, having a residence as stated below above my name, the sole inventor (if only one name is listed below) or a joint inventor (if plural inventors are listed below) of an invention described in an application for United States patent entitled:

NONVOLATILE SEMICONDUCTOR MEMORY DEVICE USING IRREVERSIBLE STORAGE ELEMENTS

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:



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.

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