PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

| Name | Execution Date |
|---------------------|----------------|
| Noritsugu Yoshimura | 02/25/2011 |

RECEIVING PARTY DATA

| Name: | Kabushiki Kaisha Toshiba |
|-----------------|----------------------------------|
| Street Address: | 1-1, Shibaura 1-chome, Minato-ku |
| City: | Tokyo |
| State/Country: | JAPAN |
| Postal Code: | 105-8001 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 13100047 |

CORRESPONDENCE DATA

Fax Number: (713)623-4846

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 713-623-4844

Email: mdiodato@pattersonsheridan.com
Correspondent Name: PATTERSON & SHERIDAN, L.L.P.
Address Line 1: 3040 POST OAK BOULEVARD

Address Line 2: SUITE 1500

Address Line 4: HOUSTON, TEXAS 77056

ATTORNEY DOCKET NUMBER: TOSH/0232US

NAME OF SUBMITTER: Keith P. Taboada

Total Attachments: 2

source=tosh0232assign#page1.tif source=tosh0232assign#page2.tif OF \$40.00 1310004

PATENT REEL: 026219 FRAME: 0429 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:

BUFFER MANAGEMENT DEVICE WHICH MANAGES BUFFER TRANSFER, STORAGE APPARATUS COMPRISING THE SAME DEVICE, AND BUFFER 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 | ; |
| | | Application No. | , filed |

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.

Patterson & Sheridan, LLP., 3040 Post Oak Blvd, Suite 1500 Houston, TX 77056-6582

PATENT REEL: 026219 FRAME: 0430

ASSIGNMENT

[1st Inventor]

Residence Address: Fuchu-shi, Japan

Mailing Address: c/o Intellectual Property Division, Toshiba Corporation, 1-1, Shibaura 1 chome,

Minato-ku, Tokyo 105-8001, Japan

Citizenship: Japan

Nortsugu Yoshinusu Noritsugu Yoshimura

Date:

PATENT REEL: 026219 FRAME: 0431

RECORDED: 05/03/2011