PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4924225

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
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JIAN CHEN	04/15/2002

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PROPERTY NUMBERS Total: 14

Application Number:	15645182
Patent Number:	9734899
Patent Number:	9508422
Patent Number:	9257189
Patent Number:	8929135
Patent Number:	8605511
Patent Number:	8208311
Patent Number:	7864591
Patent Number:	7672168
Patent Number:	7405970
Patent Number:	7286404
Patent Number:	7088616
Patent Number:	6990019
Patent Number:	6643188

PATENT REEL: 045592 FRAME: 0624

504877485

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ATTORNEY DOCKET NUMBER: 001701.00397

NAME OF SUBMITTER: CHRISTOPHER R. GLEMBOCKI

SIGNATURE: /Christopher R. Glembocki/

DATE SIGNED: 04/19/2018

Total Attachments: 2

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> PATENT REEL: 045592 FRAME: 0625

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:

NON-VOLATILE SEMICONDUCTOR MEMORY DEVICE ADAPTED TO STORE A MULTI-VALUED DATA IN A SINGLE MEMORY CELL

sell and assign to

- (1) KABUSHIKI KAISHA TOSHIBA, a Japanese corporation, having a place of business at 1-1, Shibaura 1-chome, Minato-ku, Tokyo, Japan; and
- (2) SanDisk Corporation, a U.S. corporation, having a place of business at 140 Caspian Court, Sunnyvale, CA 94089, U.S.A.

their successors, and 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.

Banner & Witcoff, Ltd., 11th Floor, 1001 G Street, N.W., Washington, D.C. 20001-4597

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_____ + Table Callet.

APR. 22. 2002

Tomoharu Tanaka

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[2nd Inventor]

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APR. 15. 2002

Date:

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