PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Mitsuhiko KITAGAWA	02/17/2011

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:	13034443

CORRESPONDENCE DATA

Fax Number: (713)623-4846

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

Email: mdiodato@pattersonsheridan.com

Correspondent Name: Frederick D. Kim

Address Line 1: 3040 Post Oak Boulevard

Address Line 2: Suite 1500

Address Line 4: Houston, TEXAS 77056

ATTORNEY DOCKET NUMBER: TOSH/0219US

NAME OF SUBMITTER: Frederick D. Kim

Total Attachments: 2

source=TOSH0219ASSIGN#page1.tif source=TOSH0219ASSIGN#page2.tif

OP \$40.00 130

PATENT REEL: 025861 FRAME: 0407

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names	and	Addresses	of	Inventors:
-------	-----	-----------	----	------------

1)	Mitsuhiko KITAGAWA	7	
,	Tokyo, Japan		11 大学工学

(hereinafter referred to as Assignors), have invented a certain invention entitled:

"SEMICONDUCTOR DEVICE"

for which an application for Letters Patent in the United States:

\boxtimes	is executed concurrently her	ewith.
	was executed on	
	was filed on, un	der Serial No

WHEREAS, Kabushiki Kaisha Toshiba, a Japanese corporation, having a business address at 1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001 JAPAN (hereinafter referred to as Assignee), are desirous of acquiring the entire right, title and interest in and to said application (hereinafter referred to as Application), and the invention disclosed therein (hereinafter referred to as Invention), and in and to all embodiments of the Invention, heretofore conceived, made or discovered by said Assignors, and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter referred to as Patents) thereon granted in any and all countries and groups of countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Assignors to have been received in full from said Assignee:

- 1. Said Assignors hereby sell, assign, transfer and convey to Assignee the full and exclusive right, title and interest (a) in and to said Application and said Invention; (b) in and to all rights to apply for patents on said Invention in any and all countries pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all Applications filled and any and all Patents granted on said Invention in any and all countries and groups of countries, including each and every Application filled and each and every Patent granted on any application which is a conventional, division, substitution, continuation or continuation-in-part of said Application; and (d) in and to each and every reissue or extension of any of said Patents.
- 2. Said Assignors hereby covenant and agree to cooperate with said Assignee to enable sald Assignee to enjoy to the fullest extent the right, title and interest to said invention herein conveyed in any and all countries and groups of countries. Such cooperation by said Assignors shall include prompt production of pertinent facts and documents, giving testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filling and prosecuting substitute, conventional, divisional, continuing, continuation-in-part or additional applications covering said Invention; (d) for filling and prosecuting applications for reissuance of any of said Patents; (e) for interference or other priority proceedings involving said Invention; and (f) for legal proceedings involving said invention and any application therefore and any Patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Assignors in providing such cooperation shall be paid for by said Assignee.
- 3. The term and covenants of this agreement shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Assignors, their respective heirs, legal representatives and assigns.

PATENT REEL: 025861 FRAME: 0408

ADG054449-USA-A

Said Assignors hereby warrant and represent that they have not entered and will not enter into any assignment, contract or understanding in conflict herewith.

IN WITNESS WHEREOF, the said Assignors have executed and delivered this instrument to said Assignee on the dates indicated below.

PATENT

REEL: 025861 FRAME: 0409

RECORDED: 02/24/2011