PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Tatsuya NISHIWAKI	02/21/2013
Akira YOSHIOKA	02/27/2013
Yasunobu SAITO	02/28/2013
Masatoshi ARAI	02/22/2013

RECEIVING PARTY DATA

Name:	KABUSHIKI KAISHA TOSHIBA	
Street Address:	1-1, Shibaura 1-Chome	
Internal Address:	Minato-ku	
City:	Tokyo	
State/Country:	JAPAN	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13780444

CORRESPONDENCE DATA

Fax Number: 2123195101

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

Phone: 2123194900

Email: rlevinsohn@hhpatent.com

Correspondent Name: HOLTZ, HOLTZ, GOODMAN & CHICK PC

Address Line 1: 220 Fifth Avenue
Address Line 2: 16TH Floor

Address Line 4: NEW YORK, NEW YORK 10001-7708

ATTORNEY DOCKET NUMBER:	13159
NAME OF SUBMITTER:	Ryan Levinsohn
	This document serves as an Oath/Declaration (37 CFR 1.63).

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OP \$40.00 13780444

Total Attachments: 4

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> PATENT REEL: 029896 FRAME: 0236

Combined Declaration and Assignment for Utility or Design Application Title of RECTIFIER CIRCUIT Invention As the below named inventor, I hereby declare that: IVI The attached application, or This declaration is directed to: [] United States application or PCT International application _____filed on __ The above-identified application was made or authorized to be made by me, I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. In consideration of value received, I sell and assign to KABUSHIKI KAISHA TOSHIBA, having a business address at 1-1, Shibaura 1-Chome, Minato-Ku, Tokyo, Japan, its successors, assigns or nominees, hereinafter referred to as "Assignee", my entire right, title and interest in and to said invention, and in and to all applications for patent and patents for said invention, in all countries of the world, including all divisions, relasues, continuations, substitutions and extensions thereof and all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of intellectual property, including rights of priority, resulting from the filing of any of said applications. I authorize said Assignee to file and prosecute an application or applications for patent for said invention as the applicant, and I request any official whose duty it is to issue patents, to issue any patent on said invention to said Assignee. 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 proceeding, sign all lawful papers, execute all divisional, continuing, reissue, or other applications, make all rightful caths and declarations, and generally do everything possible to aid said Assignee to obtain and enforce proper patent protection for said invention in all countries. I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both. LEGAL NAME OF INVENTOR 120/3 Tatsuva NISHIWAKI

Holtz, Holtz, Goodman & Chick PC 220 Fifth Avenue, 16th Floor, New York, NY 10001-7708 Tel. (212) 319-4900 Fax. (212) 319-5101

Signature

Inventor (printed name)

PATENT REEL: 029896 FRAME: 0237

Date

Combined Declaration and Assignment for Utility or Design Application						
Title of Invention	RECTIFIER CIRCUIT				ebolociologicoscorrecturas	можения выполнять подверждений выполнять выполнять выполнять выполнять выполнять выполнять выполнять выполнять
As the below	w named inventor, I he	reby declare th	at:			
This declaration [V] The attached application, or is directed to:				POINTERPROP		
			itlon or PCT internatio			
The above-	identified application w	as made or aut	horized to be made by	y me.	•	
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.				he		
In consideration of value received, I sell and assign to KABUSHIKI KAISHA TOSHIBA, having a business address at 1-1, Shibaura 1-Chorne, Minato-Ku, Tokyo, Japan, its successors, assigns or nominees, hereinafter referred to as "Assignee", my entire right, title and interest in and to said invention, and in and to all applications for patent and patents for said invention, in all countries of the world, including all divisions, relissues, continuations, substitutions and extensions thereof and all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of intellectual property, including rights of priority, resulting from the filing of any of said applications. I authorize said Assignee to file and prosecute an application or applications for patent for said invention						
as the appli- invention to	cant, and I request any said Assignes.	official whose	duty it is to issue pate	nts, to issue	any pate	ant on said
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 proceeding, eign all lawful papers, execute all divisional, continuing, 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 in all countries.						
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.						
LEGAL NAME OF INVENTOR						
Aki	ra YOSHIOKA	Mniss	Tohirha	Feb.	27,	2013
invento	r (printed name)	S	innatura		Date	

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> PATENT REEL: 029896 FRAME: 0238

vombined becausion and Assignment for Utility of Design Application				
Title of invention	RECTIFIER CIRCUIT			
As the belo	As the below named inventor, I hereby declare that:			
	This declaration [V] The attached application, or is directed to:			
		States application or PCT internation		
	numbe	r filed on	**************************************	
The above-	identified application wa	as made or authorized to be made by	[,] me.	
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.				
In consideration of value received, I sell and assign to KABUSHIKI KAISHA TOSHIBA, having a business address at 1-1, Shibaura 1-Chome, Minato-Ku, Tokyo, Japan, its successors, assigns or nominees, hereinafter referred to as "Assignee", my entire right, title and interest in and to said invention, and in and to all applications for patent and patents for said invention, in all countries of the world, including all divisions, relessues, continuations, substitutions and extensions thereof and all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of intellectual property, including rights of priority, resulting from the filling of any of said applications.				
	cent, and I request any said Assignee.	official whose duty it is to Issue pate	nts, to issue any patent on said	
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 proceeding, sign all lawful papers, execute all divisional, continuing, 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 in all countries.				
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.				
LEGAL NAME OF INVENTOR				
Yas	sunobu SAITO	Yannolu Sails	Feb. 28 , 2013	
Invent	or (printed name)			

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Combined Declaration and Assignment for Utility or Design Application Title of RECTIFIER CIRCUIT Invention As the below named inventor, I hereby declare that: [VI The attached application, or This declaration is directed to: [] United States application or PCT international application number______filed on_____ The above-identified application was made or authorized to be made by me. I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. In consideration of value received, I sell and assign to KABUSHIKI KAISHA TOSHIBA, having a business address at 1-1, Shibaura 1-Chome, Minato-Ku, Tokyo, Japan, its successors, assigns or nominees, hereinafter referred to as "Assignee", my entire right, title and interest in and to said invention, and in and to all applications for patent and patents for said invention, in all countries of the world, including all divisions, reissues, continuations, substitutions and extensions thereof and all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of intellectual property, including rights of priority, resulting from the filing of any of said applications. I authorize said Assignee to file and prosecute an application or applications for patent for said invention as the applicant, and I request any official whose duty it is to issue patents, to issue any patent on said invention to said Assignee. 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 proceeding, sign all lewful papers, execute all divisional, continuing, relssue, 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 in all countries. I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both. LEGAL NAME OF INVENTOR

Holtz, Holtz, Goodman & Chick PC 220 Fifth Avenue, 16th Floor, New York, NY 10001-7708 Tel. (212) 319-4900 Fax. (212) 319-5101

Signature

Masatoshi Arai

Masatoshi ARAI

Inventor (printed name)

RECORDED: 02/28/2013

PATENT REEL: 029896 FRAME: 0240

Feb. 22, 20/3