503008236 10/07/2014

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3054836

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
CHARLES PANDANA	10/29/2013
MATS OBERG	10/29/2013

### **RECEIVING PARTY DATA**

Name:	MARVELL SEMICONDUCTOR, INC.	
Street Address:	5488 MARVELL LANE	
City:	SANTA CLARA	
State/Country:	CALIFORNIA	
Postal Code:	95054	

## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	14068963

#### **CORRESPONDENCE DATA**

**Fax Number:** (408)222-2755

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 408-222-2500 Email: sherir@marvell.com

Correspondent Name: HORACE NG

Address Line 1: 5488 MARVELL LANE

Address Line 4: SANTA CLARA, CALIFORNIA 95054

ATTORNEY DOCKET NUMBER:	MP5022
NAME OF SUBMITTER:	HORACE NG
SIGNATURE:	/Horace Ng/
DATE SIGNED:	10/07/2014

### **Total Attachments: 4**

source=MP5022 Executed Assignment INV-MSI#page1.tif source=MP5022 Executed Assignment INV-MSI#page2.tif source=MP5022 Executed Assignment INV-MSI#page3.tif source=MP5022 Executed Assignment INV-MSI#page4.tif

PATENT 503008236 REEL: 033901 FRAME: 0044

### **ASSIGNMENT**

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned,

#### CHARLES PANDANA, MATS OBERG

who have created a certain invention for which an application for United States Letters Patent was executed by me concurrently herewith and entitled:

#### OPTICAL DISC DRIVE HIGH FREQUENCY MODULATION SIGNAL DETECTION

Do hereby sell, assign and transfer to Marvell Semiconductor, Inc., a corporation of California, having a place of business at 5488 Marvell Lane, Santa Clara, CA 95054, its successors, assigns, and legal representatives, the full and exclusive right to said invention and said application and to any and all inventions described in said application for the United States, its territorial possessions and all foreign countries, and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States, its territorial possessions and all foreign countries; and in and to any and all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, and all other applications for Letters Patent relating thereto which have been or shall be filed in the United States, its territorial possessions and/or any foreign countries, and all rights, together with all priority rights, under any of the international conventions, unions, agreements, acts, and treaties;

Do hereby further sell, assign and transfer to Marvell Semiconductor, Inc., its successors, assigns, and legal representatives, the full and exclusive right to United States Provisional Patent Application No. 61/720,759, filed October 31, 2012, entitled "HFM Detection Circuit for Low NA Fixed Collimator System" and to any and all inventions described in said provisional patent application for the United States, its territorial possessions and all foreign countries, and the entire right, title and interest in and to any and all Letters Patent which may be entitled to the benefit thereof in the United States, its territorial possessions and all foreign countries; and in and to any and all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, and all other applications for Letters Patent relating thereto which have been or shall be filed in the United States, its territorial possessions and/or any foreign countries, and all rights, together with all priority rights, under any of the international conventions, unions, agreements, acts, and treaties;

Agree that Marvell Semiconductor, Inc., hereinafter referred to as Assignee, may apply for and receive Letters Patent for said invention and said inventions, hereinafter referred to as said invention, in its own name, in the United States, its territorial possessions, and all foreign countries; and that, when requested to carry out in good faith the intent and purpose of this assignment, at the expense of said Assignee, its successors, assigns and legal representatives, the undersigned will execute all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, execute all rightful oaths, assignments, powers of attorney and other papers, testify in any legal or quasi legal proceedings; communicate to said Assignee, its successors, assigns or legal representatives all facts known to the undersigned relating to said invention and the history thereof; and generally do everything possible which said Assignee, its successors, assigns, or legal representatives shall consider desirable for aiding in securing, maintaining and enforcing proper patent protection for said invention and for vesting title to said invention and all applications for patents on said invention in said Assignee, its successors, assigns, or legal representatives; and

Covenant with said Assignce, its successors, assigns, or legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

PATENT REEL: 033901 FRAME: 0045

IN TESTIMONY WHEREOF I have hereunto set MY signature on the date indicated below.

Full Name of Sole/Firs	t Inventor:		
Charles Pandana	1000		
Inventor's Signature:	The state of the s	Date: Month/Day/Year 10/29/2013	
	, AND 1	, ,	

Full Name of Second Inventor:

Mats Oberg

Inventor's Signature:

Date: Month/Day/Year

#### ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned,

### CHARLES PANDANA, MATS OBERG

who have created a certain invention for which an application for United States Letters Patent was executed by me concurrently herewith and entitled:

### OPTICAL DISC DRIVE HIGH FREQUENCY MODULATION SIGNAL DETECTION

Do hereby sell, assign and transfer to Marvell Semiconductor, Inc., a corporation of California, having a place of business at 5488 Marvell Lane, Santa Clara, CA 95054, its successors, assigns, and legal representatives, the full and exclusive right to said invention and said application and to any and all inventions described in said application for the United States, its territorial possessions and all foreign countries, and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States, its territorial possessions and all foreign countries; and in and to any and all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, and all other applications for Letters Patent relating thereto which have been or shall be filled in the United States, its territorial possessions and/or any foreign countries, and all rights, together with all priority rights, under any of the international conventions, unions, agreements, acts, and treaties, including all future conventions, unions, agreements, acts, and treaties;

Do hereby further sell, assign and transfer to Marvell Semiconductor, Inc., its successors, assigns, and legal representatives, the full and exclusive right to United States Provisional Patent Application No. 61/720,759, filed October 31, 2012, entitled "HFM Detection Circuit for Low NA Fixed Collimator System" and to any and all inventions described in said provisional patent application for the United States, its territorial possessions and all foreign countries, and the entire right, title and interest in and to any and all Letters Patent which may be entitled to the benefit thereof in the United States, its territorial possessions and all foreign countries; and in and to any and all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, and all other applications for Letters Patent relating thereto which have been or shall be filed in the United States, its territorial possessions and/or any foreign countries, and all rights, together with all priority rights, under any of the international conventions, unions, agreements, acts, and treaties;

Agree that Marvell Semiconductor, Inc., hereinafter referred to as Assignee, may apply for and receive Letters Patent for said invention and said inventions, hereinafter referred to as said invention, in its own name, in the United States, its territorial possessions, and all foreign countries; and that, when requested to carry out in good faith the intent and purpose of this assignment, at the expense of said Assignee, its successors, assigns and legal representatives, the undersigned will execute all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, execute all rightful oaths, assignments, powers of attorney and other papers, testify in any legal or quasi legal proceedings; communicate to said Assignee, its successors, assigns or legal representatives all facts known to the undersigned relating to said invention and the history thereof; and generally do everything possible which said Assignee, its successors, assigns, or legal representatives shall consider desirable for aiding in securing, maintaining and enforcing proper patent protection for said invention and for vesting title to said invention and all applications for patents on said invention in said Assignee, its successors, assigns, or legal representatives; and

Covenant with said Assignee, its successors, assigns, or legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

PATENT REEL: 033901 FRAME: 0047

IN TESTIMONY WHEREOF I have hereunto set MY signature on the date indicated below.

Full Name of Sole/First Inventor:	
Charles Pandana	
Inventor's Signature:	Date: Month/Day/Year

Full Name of Second Inventor:

Mats Oberg

Inventor's Signature:

Date: Month/Day/Year

10/79/13