PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3447996

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the ASSIGNEE NAME previously recorded on Reel 035901 Frame 0638. Assignor(s) hereby confirms the ASSIGNEE NAME SHOULD BE "IO SEMICONDUCTOR INCORPORATED".

CONVEYING PARTY DATA

Name	Execution Date
ANTON ARRIAGADA	07/14/2015
CHRIS BRINDLE	07/14/2015
MICHAEL A. STUBER	07/14/2015

RECEIVING PARTY DATA

Name:	IO SEMICONDUCTOR INCORPORATED		
Street Address:	4350 EXECUTIVE DRIVE, SUITE 200		
City:	SAN DIEGO		
State/Country:	CALIFORNIA		
Postal Code:	92121		

PROPERTY NUMBERS Total: 2

Property Type	Number
Application Number:	13762257
Application Number:	14043764

CORRESPONDENCE DATA

	ent to the	794-1496 e-mail address first; if that is unsuccessful, it will be sent nat is unsuccessful, it will be sent via US Mail.
Phone:	8584	811883
Email:	eric@	Othemuellerlawoffice.com
Correspondent Name:	ERIC	SCHEUERLEIN
Address Line 1:	THE	MUELLER LAW OFFICE
Address Line 2:	1270	7 HIGH BLUFF DR STE 200
Address Line 4:	SAN	DIEGO, CALIFORNIA 92130
ATTORNEY DOCKET NUM	BER:	IOSEP009CIP1C1+C2
NAME OF SUBMITTER:		ERIC SCHEUERLEIN
SIGNATURE:		/Eric Scheuerlein/
DATE SIGNED:		07/21/2015

Total Attachments: 9

source=20150721_IOSEP009CIP1C1+C2_corrective_assignment_with_old_cover_sheet#page1.tif source=20150721_IOSEP009CIP1C1+C2_corrective_assignment_with_old_cover_sheet#page3.tif source=20150721_IOSEP009CIP1C1+C2_corrective_assignment_with_old_cover_sheet#page4.tif source=20150721_IOSEP009CIP1C1+C2_corrective_assignment_with_old_cover_sheet#page5.tif source=20150721_IOSEP009CIP1C1+C2_corrective_assignment_with_old_cover_sheet#page6.tif source=20150721_IOSEP009CIP1C1+C2_corrective_assignment_with_old_cover_sheet#page6.tif source=20150721_IOSEP009CIP1C1+C2_corrective_assignment_with_old_cover_sheet#page7.tif source=20150721_IOSEP009CIP1C1+C2_corrective_assignment_with_old_cover_sheet#page8.tif source=20150721_IOSEP009CIP1C1+C2_corrective_assignment_with_old_cover_sheet#page8.tif source=20150721_IOSEP009CIP1C1+C2_corrective_assignment_with_old_cover_sheet#page8.tif

10000700407

p.z

Attomey Docket No.: loseP009CIP

ASSIGNMENT

For good and valuable consideration, we, Anton Arriagada, residing at 5252 Balboa Arms Dr. Unit 242, San Diego, CA 92117; Chris Brindle residing at 13351 Silver Lake Drive, Poway, CA 92064, and Michael A. Stuber residing at 7905 Vista Canela, Carlsbad, CA 92009; Intials

Hereby sell, assign and transfer to IO-Semisonductor, Inc., 4350 Executive Drive, Suite 200, San Diego, California 92191, hereinafter "Assignee", its successors, assigns and legal representatives, the entire right, title and interest in and for the United States and all foreign countries, in and to any and all improvements which are disclosed in the application for a United States Patent, which has been executed by the undersigned concurrently herewith, and is entitled:

Trap Rich Layer with Through-Silicon-Vias in Semiconductor Devices

and in and to said application and all divisional, continuing, substitute, renewal, reissue, and all other applications for Letters Patent which have been or shall be filed in the United States and all foreign countries on any of said improvements; and in and to all original and reissued patents which have been or shall be filed in the United States and all foreign countries on said improvements;

Agree that said Assignee may apply for and receive Letters Patent for said improvements in its own name; and that, when requested, without charge to but at the expense of said Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all said improvements; execute all rightful caths, assignments, powers of attorney and other papers; communicate to said Assignee, its successors, assigns, and legal representatives, all facts known to the undersigned relating to said improvements and the history thereof; and generally do everything possible which said Assignee, its successors, assigns or legal representatives shell consider desirable for aiding in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns and all patents on said improvements, in said Assignee, its successors, assigns and legal representatives; and

Covenant with said Assignee, its successors, assigns and 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.

Anton Arriagada

Witness

Witness

10/15/2012

Date

Date

2012

Date

Page 1 of 2

PATENT REEL: 036148 FRAME: 0361

Attorney Docket No.: IoseP009CIP

Chris Brindle

Witness

L C~~

Witness

Michael A. Stuber

TRADTHY Witness

Witness

666

16/15 2012

Date

10/15/2012

Date

2012 15 10

Date

2

Date

10

Date

2/12

Date

Page 2 of 2

18583730437

p.2

Attomey Docket No.: IoseP009CIP

ASSIGNMENT

For good and valuable consideration, we, Anton Arriagada, residing at 5252 Balboa Arms Dr. Unit 242, San Diego, CA 92117; Chris Brindle residing at 13351 Silver Lake Drive, Poway, CA 92064, and Michael A. Stuber residing at 7905 Vista Canela, Carlsbad, CA 92009; IO Semiconductor Incorporated Hereby sell, assign and transfer to IO Somiconductor, Inc., 4350 Executive Drive, Suite 200, San Diego, California 92191, hereinafter "Assignee", its successors, assigns and legal

representatives, the entire right, title and interest in and for the United States and all foreign countries, in and to any and all improvements which are disclosed in the application for a United States Patent, which has been executed by the undersigned concurrently herewith, and is entitled:

Trap Rich Layer with Through-Salcon-Vias in Semiconductor Devices

and in and to said application and all divisional, continuing, substitute, renewal, reissue, and all other applications for Letters Patent which have been or shall be filed in the United States and all foreign countries on any of said improvements; and in and to all original and reissued patents which have been or shall be filed in the United States and all foreign countries on said improvements;

Agree that said Assignee may apply for and receive Letters Patent for said improvements in its own name; and that, when requested, without charge to but at the expense of said Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all said improvements; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee, its successors, assigns, and legal representatives, all facts known to the undersigned relating to said improvements 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 and maintaining proper patent protection for said improvements and for vesting title to said improvements and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns and all patents on said improvements, in said Assignee, its successors, assigns and legal representatives; and

Covenant with said Assignee, its successors, assigns and 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.

Anton Amiagada

Witness

Witness

10/15/2012

Date

Date

2012

Date

Page 1 of 2

Chris Brindle

Witness

ta.

Witness

Michael A. Stuber

se.

Tracothy Witness

Witness

46

Attorney Docket No.: IoseP009CIP

16 2012 5

Date

la[15[2012

Date

10 2012

Date

12 e la companya da companya d

Date

10 511

Date

Date

Page 2 of 2

Oct 15 12 12:06p losemi

18583730437

5.0

Attomey Docket No.: IoseP009CIP

ASSIGNMENT

For good and valuable consideration, we, Anton Arriagada, residing at 5252 Balboa Arms Dr. Unit 242, San Diego, CA 92117; Chris Brindle residing at 13351 Silver Lake Drive, Poway, CA 92064, and Michael A. Stuber residing at 7905 Vista Canela, Carlsbad, CA 92009; IO Semiconductor Incorporated

Hereby sell, assign and transfer to IO Semisonductor, Inc., 4350 Executive Drive, Suite 200, San Diego, California 92191, hereinafter "Assignee", its successors, assigns and legal representatives, the entire right, title and interest in and for the United States and all foreign countries, in and to any and all improvements which are disclosed in the application for a United States Patent, which has been executed by the undersigned concurrently herewith, and is entitled:

Trap Rich Layer with Through-Silicon-Vias in Semiconductor Devices

and in and to said application and all divisional, continuing, substitute, renewal, reissue, and all other applications for Letters Patent which have been or shall be filed in the United States and all foreign countries on any of said improvements; and in and to all original and reissued patents which have been or shall be filed in the United States and all foreign countries on said improvements;

Agree that said Assignee may apply for and receive Letters Patent for said improvements in its own name; and that, when requested, without charge to but at the expense of said Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all said improvements; execute all rightful oaths, assignments, powers of altorney and other papers; communicate to said Assignee, its successors, assigns, and legal representatives, all facts known to the undersigned relating to said improvements and the history thereof; and generally do everything possible which said Assignee, its successors, assigns or legal representatives shell consider desirable for aiding in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns and and patents on said improvements, in said Assignee, its successors, assigns and legal representatives; and

Covenant with said Assignee, its successors, assigns and 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.

Anton Amiagada

Witness

10/15/2012

Date

Date

2012

Date

Witness

Page 1 of 2

18583730437

Chris Brindle

Witness

Witness

Michael A. Stuber

Witness TTwo They

Witness

666

Attorney Docket No.: IoseP009CIP

161 15 2012

Date

1<u>a/15/2012</u>

Date

2012

Date

12 21

Oate

10 2112

Date

Date

Page 2 of 2

APPLICATION NUMBER: 14043764 PATENT NUMBER: I4043764 FILING DATE: 10/01/2013 ISSUE DATE: TITLE: TRAP RICH LAYER WITH THROUGH-SILICON-VIAS IN SEMICONDUCTOR DEVICES

ASSIGNMENT RECORDATION BRANCH PUBLIC RECORDS DIVISION

503365536 06/24/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3412158

SUBMISSION TYPE:		NEW ASSIGNMENT		
		ASSIGNMENT		
CONVEYING PARTY DA	ATA			
Name		Name	Execution Date	
ANTON ARRIAGADA			10/15/2012	
CHRIS BRINDLE			10/15/2012	
MICHAEL A. STUBER			10/12/2012	
	ΤΛ			
RECEIVING PARTY DATA Name: IO SEMICONDUCTOR INCORPORATED				
Street Address:	4350 EXECUTIVE DRIVE			
Internal Address:	SUITE 20			
City:	SAN DIE			
State/Country:	CALIFOF			
Postal Code:	92121			
PROPERTY NUMBERS	Total: 2			
Property Type		Number		
Application Number: 1376		3762257		
Application Number:	14	1043764		
	·			
CORRESPONDENCE D	ΑΤΑ			
Fax Number:	(8	58)794-1496		
Correspondence will be	e sent to t	ha a-mail addraec firet: if that is uns	waaaaful it will be eest	
using a tay number it r				
	provided;	if that is unsuccessful, it will be sen		
• •	p rovided; 85			
Phone:	p rovided; 85 er	if that is unsuccessful, it will be sen 584811883		
Phone: Email:	p rovided; 85 er El	if that is unsuccessful, it will be sen 584811883 ic@themuellerlawoffice.com		
Phone: Email: Correspondent Name:	p rovided; 85 er EI TI	if that is unsuccessful, it will be sen 584811883 ic@themuellerlawoffice.com RIC SCHEUERLEIN		
Phone: Email: Correspondent Name: Address Line 1:	p rovided; 85 er El TI 12	<i>if that is unsuccessful, it will be sen</i> 584811883 ic@themuellerlawoffice.com RIC SCHEUERLEIN HE MUELLER LAW OFFICE		
Phone: Email: Correspondent Name: Address Line 1: Address Line 2:	o rovided; 85 er El TI 12 S/	<i>if that is unsuccessful, it will be sen</i> 584811883 ic@themuellerlawoffice.com RIC SCHEUERLEIN HE MUELLER LAW OFFICE 2707 HIGH BLUFF DR STE 200		
Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4:	o rovided; 85 er El TI 12 S/	if that is unsuccessful, it will be sen 584811883 ic@themuellerlawoffice.com RIC SCHEUERLEIN HE MUELLER LAW OFFICE 2707 HIGH BLUFF DR STE 200 AN DIEGO, CALIFORNIA 92130		
Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4:	o rovided; 85 er El TI 12 S/	if that is unsuccessful, it will be sen 584811883 ic@themuellerlawoffice.com RIC SCHEUERLEIN HE MUELLER LAW OFFICE 2707 HIGH BLUFF DR STE 200 AN DIEGO, CALIFORNIA 92130		
Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4: ATTORNEY DOCKET NU	o rovided; 85 er El TI 12 S/	if that is unsuccessful, it will be sen 584811883 ic@themuellerlawoffice.com RIC SCHEUERLEIN HE MUELLER LAW OFFICE 2707 HIGH BLUFF DR STE 200 AN DIEGO, CALIFORNIA 92130 IOSEP009CIP1C1+C2 ERIC SCHEUERLEIN		
Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4: ATTORNEY DOCKET NU IAME OF SUBMITTER:	o rovided; 85 er El TI 12 S/	if that is unsuccessful, it will be sen 584811883 ic@themuellerlawoffice.com RIC SCHEUERLEIN HE MUELLER LAW OFFICE 2707 HIGH BLUFF DR STE 200 AN DIEGO, CALIFORNIA 92130 IOSEP009CIP1C1+C2 ERIC SCHEUERLEIN /Eric Scheuerlein/		