PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT4784676

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JOSEPH A. YEDINAK	02/16/2016
ASHOK CHALLA	02/16/2016
DEAN PROBST	02/15/2016
DANIEL KINZER	01/15/2018

RECEIVING PARTY DATA

Name:	FAIRCHILD SEMICONDUCTOR CORPORATION
Street Address:	1272 BORREGAS AVENUE
City:	SUNNYVALE
State/Country:	CALIFORNIA
Postal Code:	94089

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15688833

CORRESPONDENCE DATA

Fax Number: (602)244-3169

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: 6022443574

Email: patents@onsemi.com

Correspondent Name: SEMICONDUCTOR COMPONENTS INDUSTRIES, LLC

Address Line 1: 5005 E. MCDOWELL ROAD

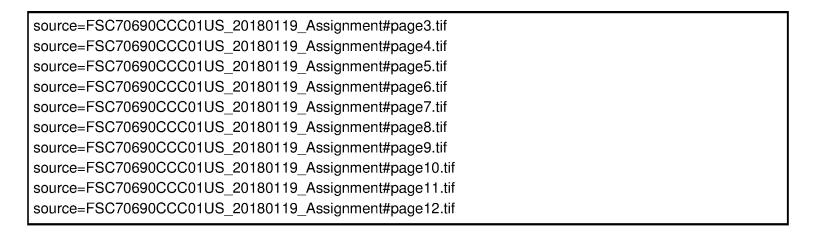
Address Line 2: MAILDROP A700

Address Line 4: PHOENIX, ARIZONA 85008

ATTORNEY DOCKET NUMBER:	FSC70690CCC01US
NAME OF SUBMITTER:	SHARRON CASTILLO
SIGNATURE:	/Sharron Castillo/
DATE SIGNED:	01/19/2018

Total Attachments: 12

source=FSC70690CCC01US 20180119 Assignment#page1.tif source=FSC70690CCC01US 20180119 Assignment#page2.tif



ASSIGNMENT

JOSEPH A. YEDINAK, residing at Mountain Top, PA, ASHOK CHALLA, residing at Milpital', CA Gandy, DT, and DEAN PROBST, residing at West Jordan, UT, (each referred to as "Assignor") have made an invention(s) (the "Invention(s)") set forth in an application for patent of the United States, entitled TRENCH-BASED POWER SEMICONDUCTOR DEVICES WITH INCREASED BREAKDOWN VOLTAGE CHARACTERISTICS, and which is a:

(1)	[] provisional application	
	(a) to be filed herewith; or	
	(b) bearing Application No	, filed on
	, and Attorney Docket No	; or
(2)	[X] non-provisional application	
	(a) to be filed herewith; or	

(b) bearing Application No. <u>13/667,319</u>, filed on <u>November 2, 2012</u>, and Attorney Docket No. <u>0088-109002-70690US02</u>.

WHEREAS, Fairchild Semiconductor Corporation, a corporation duly organized under and pursuant to the laws of <u>Delaware</u>, and having its principal place of business at 3030 Orchard Parkway, San Jose, CA 95134 (the "Assignee"), is desirous of acquiring the entire right, title, and interest in: the Invention(s); the application for patent identified in paragraph (1) or (2); the right to file applications for patent of the United States or other countries on the Invention(s); any application(s) for patent of the United States or other countries claiming priority to these application(s); any provisional or other right to recover damages, including royalties, for prior infringements of these applications; and any patent(s) of the United States or other countries that may be granted therefor or thereon.

NOW, THEREFORE, for good and sufficient consideration, the receipt of which is hereby acknowledged, and to the extent that the Assignor has not done so already via a prior agreement with the Assignee, or if the Assignor has already done so via a prior agreement with the Assignee then in confirmation of any obligation to do so in said prior agreement, the Assignor has sold, assigned, transferred, and set over, and by these presents does sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns, the Assignor's entire right, title, and interest in:

- (a) the Invention(s);
- (b) the application for patent identified in paragraph (1) or (2);
- (c) the right to file applications for patent of the United States or other countries on the Invention(s), including all rights under the Paris Convention for the Protection of Industrial Property and under the Patent Cooperation Treaty;

- (d) any application(s) for patent of the United States or other countries claiming the Invention(s);
- (e) any application(s) for patent of the United States or other countries claiming priority to the application for patent identified in paragraph (1) or (2) or any application(s) for patent claiming the Invention(s), including any division(s), continuation(s), and continuation(s)-in-part; and
- (f) any provisional or other right to recover damages, including royalties, for prior infringements of any application for patent identified in the preceding paragraphs (b)-(e); and
- (g) any patent(s) of the United States or other countries that may be granted for or on any application for patent identified in the preceding paragraphs (b) (e), including any reissue(s) and extension(s) of said patent(s).

The above-granted rights, titles, and interests are to be held and enjoyed by the Assignce, for its own use and behalf and the use and behalf of its successors, legal representatives, and assigns, as fully and entirely as the same would have been held and enjoyed by the Assignor had this sale and assignment not been made.

The Assignor hereby represents to the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, or if applicable, at such time said prior agreement was executed, the Assignor is a lawful owner of an undivided interest in the entire right, title, and interest in and to the Invention(s), that the Invention(s) are unencumbered, except, if applicable, by obligation to assign in accordance with said prior agreement, and that the Assignor has good and full right and lawful authority to sell and convey the same in the manner set forth herein.

The Assignor hereby covenants and agrees to and with the Assignee, its successors, legal representatives, and assigns, that the Assignor will sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done in connection with any and all proceedings for the procurement, maintenance, enforcement and defense of the Invention(s), said applications, and said patents, including interference proceedings, without charge to the Assignor, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns.

The Assignor hereby authorizes and requests the attorneys of BRAKE HUGHES BELLERMANN LLP to insert in the spaces provided above the filing date, the application number, and the attorney docket number of the application identified in paragraph (1) or (2) when known.

Attorney Docket No. 0088-109002-70690US02 Page 3 of 3

The Assignor hereby requests the Commissioner of Patents to issue said patents of the United States to the Assignee for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.

Date: 02/16/2016	By: Joseph A. YEDINAK
Date:	By:ASHOK CHALLA
Date:	By: DEAN PROBST

ASSIGNMENT

JOSEPH A. YEDINAK, residing at Mountain Top, PA, ASHOK CHALLA, residing at Milpital, CA Gandy, UT, and DEAN PROBST, residing at West Jordan, UT, (each referred to as "Assignor") have made an invention(s) (the "Invention(s)") set forth in an application for patent of the United States, entitled TRENCH-BASED POWER SEMICONDUCTOR DEVICES WITH INCREASED BREAKDOWN VOLTAGE CHARACTERISTICS, and which is a:

(1)	[] provisional application	
	(a) to be filed herewith; or	
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	, and Attorney Docket No	; or
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(a) to be filed herewith; or

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NOW, THEREFORE, for good and sufficient consideration, the receipt of which is hereby acknowledged, and to the extent that the Assignor has not done so already via a prior agreement with the Assignee, or if the Assignor has already done so via a prior agreement with the Assignee then in confirmation of any obligation to do so in said prior agreement, the Assignor has sold, assigned, transferred, and set over, and by these presents does sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns, the Assignor's entire right, title, and interest in:

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- (c) the right to file applications for patent of the United States or other countries on the Invention(s), including all rights under the Paris Convention for the Protection of Industrial Property and under the Patent Cooperation Treaty;

- (d) any application(s) for patent of the United States or other countries claiming the Invention(s);
- (e) any application(s) for patent of the United States or other countries claiming priority to the application for patent identified in paragraph (1) or (2) or any application(s) for patent claiming the Invention(s), including any division(s), continuation(s), and continuation(s)-in-part; and
- (f) any provisional or other right to recover damages, including royalties, for prior infringements of any application for patent identified in the preceding paragraphs (b)-(e); and
- (g) any patent(s) of the United States or other countries that may be granted for or on any application for patent identified in the preceding paragraphs (b) (e), including any reissue(s) and extension(s) of said patent(s).

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Attorney Docket No. 0088-109002-70690US02 Page 3 of 3

The Assignor hereby requests the Commissioner of Patents to issue said patents of the United States to the Assignee for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.

Date:	Ву:
Date: 02 16 2016	JOSEPH A. YEDINAK By: ASHOK CHALLA
Date:	By:

ASSIGNMENT

JOSEPH A. YEDINAK, residing at Mountain Top, PA, ASHOK CHALLA, residing at Sandy, UT, and DEAN PROBST, residing at West Jordan, UT, (each referred to as "Assignor") have made an invention(s) (the "Invention(s)") set forth in an application for patent of the United States, entitled TRENCH-BASED POWER SEMICONDUCTOR DEVICES WITH INCREASED BREAKDOWN VOLTAGE CHARACTERISTICS, and which is a:

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	(a) to be filed herewith; or
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Attorney Docket No. 0088-109002-70690US02 Page 3 of 3

DEAN PROBST

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Date:	Ву:
	JOSEPH A. YEDINAK
Date:	By:
	ASHOK CHALLA
Date: 2/15/16	By: (Least)

ASSIGNMENT & AGREEMENT

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

Name	of (City and State OR Country)

DANIEL KINZER

EL SEGUNDO, CALIFORNIA US

agree to sell, assign, and transfer, and do hereby sell, assign, and transfer to Fairchild Semiconductor Corporation, a corporation of the State of Delaware, having its principal office in Sunnyvale, State of California, United States of America, and its successors, assigns, and legal representatives ("FSC"), the entire right, title, and interest in and to the inventions and discoveries as described, illustrated, and/or claimed in

Title: TRENCH-BASED POWER SEMICONDUCTOR DEVICES WITH INCREASED BREAKDOWN VOLTAGE CHARACTERISTICS

Attorney Docket No.: FSC70690CCC01US

Serial No.: <u>15/688833</u>

Filing Date: August 28, 2017

together with the entire right, title, and interest in and to the above listed application(s), and in and to any and all provisional, non-provisional, divisional, continuation, continuation-in-part, international, foreign, and any and all other applications related thereto, and also including any and all grants, issuances, letters patent, reissues, reexaminations, renewals, priority rights, and priority claims related to any of the foregoing, and any and all rights to collect past damages for infringement of any of the foregoing (the "Patent Rights").

I further authorize FSC to apply for and hold and maintain the Patent Rights throughout the world directly in its own name or any other name which FSC deems appropriate in its sole discretion, and to claim the priority of the filing date of the above listed application(s).

I agree that, when requested, I will, without charge to FSC, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable, or convenient for securing, maintaining, and enforcing the Patent Rights in any and all countries and for vesting title thereto in FSC or its nominees.

I represent and warrant that I have full right to convey the entire right, title and interest herein sold, assigned, and transferred, and that the Patent Rights hereby conveyed are free from all prior assignment, grant, mortgage, license, or other encumbrance to anyone other than FSC. I covenant and further warrant that I will not convey hereafter any part of the Patent Rights to anyone other than FSC or do any act whatsoever conflicting with this ASSIGNMENT & AGREEMENT.

I hereby authorize FSC or anyone it may properly designate to insert in this ASSIGNMENT & AGREEMENT the filing date and serial number of the above listed application(s) when ascertained. More than one counterpart of this ASSIGNMENT & AGREEMENT may be executed, each of which will be deemed an original.

ASSIGNMENT & AGREEMENT FSC70690CCC01US

Daniel Kinzer

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California	
County of <u>CA</u>)	
On January 15th 2018 before me,	BRYAN ANDREW COPRADO, NOTARY FABLIC. (insert name and title of the officer)
V .	(insert name and title of the officer)
personally appeared	
the same in his/her/their authorized capacity(evidence to the be person(s) whose name(s) dacknowledge to me that he/she/they executed (ies), and that by his/her/their signature(s) on the pehalf of which the person(s) acted, executed the
I certify under PENALTY OF PERJURY under the paragraph is true and correct.	e laws of the State of California that the foregoing
WITNESS my hand and official seal.	
Signature	SRYAN ANDREW CORRADO COMM. #2058280 COMM. #2058280 Notary Public - California LOS ANGELES COUNTY & LOS ANGELES COUNTY & Me Comm. Esp. 78b. 17. 2018

PATENT REEL: 044673 FRAME: 0860

RECORDED: 01/19/2018