505789128 11/22/2019

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
TRAVIS W. LAJOIE	06/26/2019
ABHISHEK A. SHARMA	06/26/2019
VAN H. LE	06/26/2019
CHIEH-JEN KU	06/22/2019
PEI-HUA WANG	06/20/2019
JACK T. KAVALIEROS	06/26/2019
BERNHARD SELL	06/26/2019
TAHIR GHANI	06/29/2019
GREGORY GEORGE	06/26/2019
AKASH GARG	06/24/2019
ALLEN B. GARDINER	06/21/2019
SHEM OGADHOH	06/20/2019
JUAN G. ALZATE VINASCO	06/20/2019
UMUT ARSLAN	06/26/2019
FATIH HAMZAOGLU	06/20/2019
NIKHIL MEHTA	06/26/2019
JARED STOEGER	07/16/2019
YU-WEN HUANG	06/26/2019
SHU ZHOU	06/26/2019

RECEIVING PARTY DATA

Name:	Intel Corporation		
Street Address:	2200 MIssion College Boulevard		
City:	Santa Clara		
State/Country:	CALIFORNIA		
Postal Code:	95054		

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	16457634	

PATENT REEL: 051093 FRAME: 0325

505789128

CORRESPONDENCE DATA

Fax Number: (503)796-2900

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: (503) 222-9981

Email: svillarreal@schwabe.com

Correspondent Name: JUSTIN K. BRASK

Address Line 1: 1211 SW 5TH AVENUE, STE. 1600

Address Line 4: PORTLAND, OREGON 97204

ATTORNEY DOCKET NUMBER:	AB9989-US 111548-246786
NAME OF SUBMITTER:	JUSTIN K. BRASK
SIGNATURE:	/Justin K. Brask/
DATE SIGNED:	11/22/2019

Total Attachments: 6

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> PATENT REEL: 051093 FRAME: 0326

Attorney's Docket No.: AB9989-US 111548-246786

ASSIGNMENT

In consideration of good and valuable consideration, the receipt of which is hereby acknowledged, we, the undersigned:

Travis W. LAJOIE, Abhishek A. SHARMA, Van H. LE, Chieh-Jen KU, Pel-Hua WANG, Jack T. KAVALIEROS, Bernhard SELL, Tahir GHANI, Gregory GEORGE, Akash GARG, Allen B. GARDINER, Shem OGADHOH, Juan G. ALZATE VINASCO, Umut ARSLAN, Fatih HAMZAOGLU, Nikhil MEHTA, Jared STOEGER, Yu-Wen HUANG, Shu ZHOU

hereby sell, assign, and transfer to

Intel Corporation

a Corporation of Delaware , having a principal place of business at:

2200 Mission College Boulevard, Santa Clara, California, 95054 USA ("Assignee") and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States a nd all foreign countries, in and to any and all inventions or improvements that are disclosed in the application (provisional or non-provisional) for the United States patent which may have a declaration executed by the undersigned prior hereto or concurrently herewith and is entitled

CAPACITOR CONNECTIONS IN DIELECTRIC LAYERS

said patent application also identified as follows (when known):

[I/we hereby authorize an attorney or agent for said Assignee to insert below the application number and filing date of said patent application when known.]

US or International Application Number	16/457,634	filed	June 28, 2019

and in and to said application (provisional or non-provisional) and all provisional applications, non-provisional applications, utility applications, design applications, divisional applications, continuation applications, continuation prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications that have been or shall be filed in the United States and all foreign countries on any of said inventions or improvements; and in and to all original patents, reissued patents, reexamination certificates, and extensions, that have been or shall be issued in the United States and all foreign countries on said inventions or improvements; and in and to all rights of priority resulting from the filing of said United States application;

agree that said Assignee may apply for and receive a patent or patents for said inventions or 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 provisional applications, non-provisional applications, utility applications, design applications, divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications on any and all said inventions or 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 inventions or improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or legal representatives in securing and maintaining proper patent protection for said inventions or improvements and for vesting title to said inventions or improvements, and all applications for patents and all patents on said inventions or improvements, in said Assignee, its successors, assigns, and legal representatives; and

AB9989-US 111548-246786

Page 1 of 3

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.

Rach Inventor: Please Sign and Date Below:	
6/26/14	Type -
Date	Name: Travis W. LAJOIE
6 26 19	
Date	Name: Abhishek A. SHARMA
06/26/19	
Date /	Name: Van H. LE
06/20/2019	<u>alea</u>
Date	Name: Chieh-Jen KU
612019	<u> </u>
Date	Name: Pei-Hua WANG
6/26/2019	Jack T. Famleys
Date	Name: Jack T. KAVALIEROS
6/26/2019	
Date	Name: Bernhard SELL.
6-29-2019	
Date	Name: Daffir GHANI
6/2015	1
Date	Name: Gregory GEORGE
06/24/2019	Morflon
Date	Name: Akash GARG
06/21/2015	all S. Fea.
Date	Name: Aften B. GARDINER
DELOCIO	<u>(L)</u>
Date	Name: Shem OGADHOH
	Assignment Document Return Address: Schwabe, Williamson & Wyatt P.C. 1211 SW 5th Avenue, Suite 1900

Portland, OR 97204 Telephone: (503) 222-9981

Page 2 of 3

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Each Inventor: Please Sign and Date Below:

Date

Name: Juan G. Alzate

Name: Juan G. Alzate

6/26/2019

Date

Name: Grout ARSLAN

6/20/2019

Date

Name: Fatil, HAMZAGGLU

Name: Nikhil MEHTA

Date

Name: Jared STOEGER

6/26/2019

Name: Yu-Wen HUANG

6/12019

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Assignment Document Return Address: Schwabe, Williamson & Wyatt P.C. 1211 SW 5th Avenue, Suite 1900 Portland, OR 97204

Telephone: (503) 222-9981

REEL: 051093 FRAME: 0329

Attorney's Docket No.: AB9989-US 111548-246786

<u>ASSIGNMENT</u>

In consideration of good and valuable consideration, the receipt of which is hereby acknowledged, we, the undersigned:

Travis W. LAJOIE, Abhishek A. SHARMA, Van H. LE, Chieh-Jen KU, Pei-Hua WANG, Jack T. KAVALIEROS, Bernhard SELL, Tahir GHANI, Gregory GEORGE, Akash GARG, Allen B. GARDINER, Shem OGADHOH, Juan G. ALZATE VINASCO, Umut ARSLAN, Fatih HAMZAOGLU, Nikhil MEHTA, Jared STOEGER, Yu-Wen HUANG, Shu ZHOU

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Intel Corporation

a Corporation of Delaware , having a principal place of business at:

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[I/we hereby authorize an attorney or agent for said Assignee to insert below the application number and filing date of said patent application when known.]

US	or	International	A	oplication	Number	16/457,634	filed	June 28, 2019
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and in and to said application (provisional or non-provisional) and all provisional applications, non-provisional applications, utility applications, design applications, divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications that have been or shall be filed in the United States and all foreign countries on any of said inventions or improvements; and in and to all original patents, reissued patents, reexamination certificates, and extensions, that have been or shall be issued in the United States and all foreign countries on said inventions or improvements; and in and to all rights of priority resulting from the filing of said United States application;

agree that said Assignee may apply for and receive a patent or patents for said inventions or 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 provisional applications, non-provisional applications, utility applications, design applications, divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications on any and all said inventions or 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 inventions or improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or legal representatives in securing and maintaining proper patent protection for said inventions or improvements and for vesting title to said inventions or improvements, and all applications for patents and all patents on said inventions or improvements, in said Assignee, its successors, assigns, and legal representatives; and

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Page 1 of 3

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Each Inventor: Please Sign and Date Below:

Date	Name: Travis W. LAJOIE
Date	Name: Abhishek A. SHARMA
Date	Name: Van H. LE
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Date	Name: Pei-Hua WANG
Date	Name: Jack T. KAVALIEROS
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Date	Name: Akash GARG
Date	Name: Allen B. GARDINER
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Date	Name:	Juan G. ALZATE VINASCO
Date	Name:	Umut ARSLAN
Date	Name:	Fatih HAMZAOGLU
Date	Name:	Nikhii MEHTA
Date /	Name:	Jared STOEGER
Date	Name:	Yu-Wen HUANG

Name:

Shu ZHOU

Date

Assignment Document Return Address: Schwabe, Williamson & Wyatt P.C. 1211 SW 5th Avenue, Suite 1900 Portland, OR 97204 Telephone: (503) 222-9981

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PATENT REEL: 051093 FRAME: 0332

RECORDED: 11/22/2019