PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6544145

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MINKYU KIM	02/09/2021
ALFRED YEUNG	02/09/2021
PINGCHUN CHIANG	02/10/2021
SURESH SUBRAMANIAM	02/09/2021
PRAVIN CHINGUDI	02/10/2021

RECEIVING PARTY DATA

Name:	APEX SEMICONDUCTOR
Street Address:	960 SARATOGA AVENUE, SUITE 206
City:	SAN JOSE
State/Country:	CALIFORNIA
Postal Code:	95129

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17172200

CORRESPONDENCE DATA

Fax Number: (216)696-8731

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: 216-696-8730

Email: epas@thepatentattorneys.com **Correspondent Name:** AMIN, TUROCY & WATSON, LLP

Address Line 1: 200 PARK AVENUE

Address Line 2: SUITE 300

Address Line 4: BEACHWOOD, OHIO 44122

ATTORNEY DOCKET NUMBER:	APEXP104US
NAME OF SUBMITTER:	GREGORY TUROCY
SIGNATURE:	/GREG TUROCY/
DATE SIGNED:	02/10/2021
This document serves as an Oath/Declaration (37 CFR 1.63).	

Total Attachments: 15
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(5) years, or both.

COMBINED OATH/DECLARATION AND ASSIGNMENT FOR U.S. PATENT APPLICATION USING AN APPLICATION DATA SHEET

As a below named inventor, I hereby declare that:

I believe I am the original inventor or an original joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Title: <u>CONTINUOUS AND DISCRETE CORNER REGULARIZATION IN MULTI-</u> PVT TIMING PREDICTION

the applic	ation of which is att	ached hereto u	unless the follo	wing is che	cked	
described	iled on and claimed in PCT ded on	'International	Application N	o		, or as filed on
The above	e-identified applicati	on was made	or authorized t	o be made l	by me.	
Please dir	ect all communication	ons to the follo	owing address:			
the add	dress associated with	n Customer N	umber 23623 , a	and direct te	elephone o	calls to
	Gregory Turocy of	Amin, Turocy	y & Watson, L	LP at 216-6	96-8730.	
I hereby	acknowledge that	any willful f	false statemen	t made in	this decl	aration is

ASSIGNMENT

punishable under 18 U.S.C. Section 1001 by fine or imprisonment of not more than five

For good and valuable consideration received of the hereinafter named assignee, receipt of which is hereby acknowledged, the undersigned

- (1) Minkyu Kim
- (2) Alfred Yeung
- (3) Pingchun Chiang
- (4) Suresh Subramaniam
- (5) Pravin Chingudi

c/o Apex Semiconductor Inc. 960 Saratoga Avenue, Suite 206 San Jose, CA 95129 USA

hereby sells and assign to Apex Semiconductor, 960 Saratoga Avenue, Suite 206, San Jose, CA 95129, U.S.A, its successors and assigns, the entire right, title and interest, so far as concerns the United States and the Territories and Possessions thereof and all foreign countries, in and to the inventions titled above for which application for United

States Letters Patent is executed by the undersigned on the date below and is being filed concurrently herewith, said application for United States Letters Patent, any and all other applications for Letters Patent on said inventions in countries foreign to the United States, including all divisional, renewal, substitute, continuation, Convention applications, reissue, reexamination, supplemental examination, inter partes review, post grant review, or other procedures thereof for the full term or terms for which the same may be granted based in whole or in part upon said inventions or upon said applications, and any and all Letters Patent and reissues and extensions of Letters Patent granted for said inventions or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said applications and said Letters Patent; said assignee being hereby authorized to file patent applications in any or all countries on any or all said inventions in the name of the undersigned or in the name of said assignee or otherwise as said assignee may deem advisable, under the International Convention or otherwise; the Commissioner of Patents and Trademarks of the United States of America and the empowered officials of all other governments being hereby authorized to issue or transfer all said Letters Patent to said assignee in accordance herewith; this assignment being under covenant, not only that full power to make the same is had by the undersigned, but also that such assigned right is not encumbered by any grant, license, or other right heretofore given, and that the undersigned will do all acts reasonably serving to assure that said inventions, patent applications and Letters Patent shall be held and enjoyed by said assignee as fully and entirely as the same could have been held and enjoyed by the undersigned if this assignment had not been made, and particularly to execute and deliver to said assignee all lawful documents including petitions, specifications, oaths, assignments, invention disclaimers, and lawful affidavits in form and substance which may be requested by said assignee, to furnish said assignee with all facts relating to said inventions or the history thereof and any and all documents, photographs, models, samples or other physical exhibits which may be useful for establishing the facts of conception, disclosure and reduction to practice of said inventions, and to testify in any proceedings relating to said inventions, patent applications and Letters Patent.

The undersigned hereby appoint, request, and grant power to the following law firm to insert on this Assignment further identification which may be necessary or desirable in order to comply with the Rules of the U.S. Patent and Trademark Office for recordation of this document, for example, the U.S. Serial No. and filing date.

Amin, Turocy & Watson, LLP, 200 Park Avenue, Suite 300, Beachwood, Ohio 44122.

Legal name of first inventor: Minkyu Kim	
Inventor's signature: Wirkyn Krun	Date: 2/09/21
Legal name of second inventor: Alfred Yeung	
Inventor's signature:	Date:
Legal name of third inventor: Pingchun Chiang	
Inventor's signature:	Date:

Legal name of fourth inventor: <u>Suresh Subramaniam</u>	
Inventor's signature:	Date:
Legal name of fifth inventor: Pravin Chingudi	

Inventor's signature: _____ Date: _____

Amin, Turocy & Watson, LLP

Docket No. APEXP104US

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I believe I am the original inventor or an original joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Title: <u>CONTINUOUS AND DISCRETE CORNER REGULARIZATION IN MULTI-</u> PVT TIMING PREDICTION

the application of which is attached hereto unless the following is checked	
was filed on as United States application Serial No described and claimed in PCT International Application No and amended on (if any).	
The above-identified application was made or authorized to be made by me.	
Please direct all communications to the following address:	
the address associated with Customer Number 23623, and direct telephone c	alls to
Gregory Turocy of Amin, Turocy & Watson, LLP at 216-696-8730.	
T. 1 1 1 1	

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. Section 1001 by fine or imprisonment of not more than five (5) years, or both.

ASSIGNMENT

For good and valuable consideration received of the hereinafter named assignee, receipt of which is hereby acknowledged, the undersigned

- (1) Minkyu Kim
- (2) Alfred Yeung
- (3) Pingchun Chiang
- (4) Suresh Subramaniam
- (5) Pravin Chingudi

c/o Apex Semiconductor Inc. 960 Saratoga Avenue, Suite 206 San Jose, CA 95129 USA

hereby sells and assign to Apex Semiconductor, 960 Saratoga Avenue, Suite 206, San Jose, CA 95129, U.S.A, its successors and assigns, the entire right, title and interest, so far as concerns the United States and the Territories and Possessions thereof and all foreign countries, in and to the inventions titled above for which application for United

States Letters Patent is executed by the undersigned on the date below and is being filed concurrently herewith, said application for United States Letters Patent, any and all other applications for Letters Patent on said inventions in countries foreign to the United States, including all divisional, renewal, substitute, continuation, Convention applications, reissue, reexamination, supplemental examination, inter partee review, post grant review, or other procedures thereof for the full term or terms for which the same may be granted based in whole or in part upon said inventions or upon said applications, and any and all Letters Patent and reissues and extensions of Letters Patent granted for said inventions or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said applications and said Letters Patent; said assignee being hereby authorized to file patent applications in any or all countries on any or all said inventions in the name of the undersigned or in the name of said assignee or otherwise as said assignee may deem advisable, under the International Convention or otherwise; the Commissioner of Patents and Trademarks of the United States of America and the empowered officials of all other governments being hereby authorized to issue or transfer all said Letters Patent to said assignee in accordance herewith; this assignment being under covenant, not only that full power to make the same is had by the undersigned, but also that such assigned right is not encumbered by any grant, license, or other right heretofore given, and that the undersigned will do all acts reasonably serving to assure that said inventions, patent applications and Letters Patent shall be held and enjoyed by said assignee as fully and entirely as the same could have been held and enjoyed by the undersigned if this assignment had not been made, and particularly to execute and deliver to said assignee all lawful documents including petitions, specifications, oaths, assignments, invention disclaimers, and lawful affidavits in form and substance which may be requested by said assignee, to furnish said assignee with all facts relating to said inventions or the history thereof and any and all documents, photographs, models, samples or other physical exhibits which may be useful for establishing the facts of conception, disclosure and reduction to practice of said inventions, and to testify in any proceedings relating to said inventions, patent applications and Letters Patent.

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Amin, Turocy & Watson, LLP, 200 Park Avenue, Suite 300, Beachwood, Ohio 44122.

Legal name of first inventor: Minkvu Kim	
Inventor's signature:	Date:
Legal name of second inventor: Alfred Yeung	
Inventor's signature:	Date: 2/9/2021
Legal name of third inventor: Pingchan Chiang	
Inventor's signature:	Date:
Page 2	

~

Legal name of fourth inventor: <u>Suresh Subramaniam</u>	
Inventor's signature:	Date:
Legal name of fifth inventor: Pravin Chingudi	

Inventor's signature: _____ Date: _____

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Gregory Turocy of A	Amin, Turocy & Watson, LLP at 216-696-8730).
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- (2) Alfred Yeung
- (3) Pingchun Chiang
- (4) Suresh Subramaniam
- (5) Pravin Chingudi

c/o Apex Semiconductor Inc. 960 Saratoga Avenue, Suite 206 San Jose, CA 95129 USA

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States Letters Patent is executed by the undersigned on the date below and is being filed concurrently herewith, said application for United States Letters Patent, any and all other applications for Letters Patent on said inventions in countries foreign to the United States, including all divisional, renewal, substitute, continuation, Convention applications, reissue, reexamination, supplemental examination, inter partes review, post grant review, or other procedures thereof for the full term or terms for which the same may be granted based in whole or in part upon said inventions or upon said applications. and any and all Letters Patent and reissues and extensions of Letters Patent granted for said inventions or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said applications and said Letters Patent; said assignee being hereby authorized to file patent applications in any or all countries on any or all said inventions in the name of the undersigned or in the name of said assignce or otherwise as said assigner may deem advisable, under the International Convention or otherwise: the Commissioner of Patents and Trademarks of the United States of America and the empowered officials of all other governments being hereby authorized to issue or transfer all said Letters Patent to said assignee in accordance herewith; this assignment being under covenant, not only that full power to make the same is had by the undersigned, but also that such assigned right is not encumbered by any grant, license, or other right heretofore given, and that the undersigned will do all acts reasonably serving to assure that said inventions, patent applications and Letters Patent shall be held and enjoyed by said assignee as fully and entirely as the same could have been held and enjoyed by the undersigned if this assignment had not been made. and particularly to execute and deliver to said assignee all lawful documents including petitions, specifications, oaths, assignments, invention disclaimers, and lawful affidavits in form and substance which may be requested by said assignee, to furnish said assignee with all facts relating to said inventions or the history thereof and any and all documents, photographs, models, samples or other physical exhibits which may be useful for establishing the facts of conception, disclosure and reduction to practice of said inventions, and to testify in any proceedings relating to said inventions, patent applications and Letters Patent.

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Amin, Turocy & Watson, LLP, 200 Park Avenue, Suite 300, Beachwood, Ohio 44122.

Legal name of first ins	centor: Minky	u Kim		mana mananananananananananananananananan
Inventor's signature:			Date	······································
Legal name of second	inventor: <u>Aifr</u>	ed Yeung		
Inventor's signature:	<u></u>		Date: _	
Legal name of third in	ventor: <u>Pingcl</u>	un Chiang	patituaetee	
Inventor's signature:	Papaka	Ching.	Date:	02/10/2021
	A.	Page 2		

Legal name of fourth inventor: <u>Suresh Subramaniam</u>	
Inventor's signature:	Date:
Legal name of fifth inventor: Pravin Chingudi	

Inventor's signature: _____ Date: _____

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- (2) Alfred Yeung
- (3) Pingchun Chiang
- (4) Suresh Subramaniam
- (5) Pravin Chingudi

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Legal name of first inventor: Minkyu Kim	
Inventor's signature:	Date:
Legal name of second inventor: Alfred Yeung	
Inventor's signature:	Date:
Legal name of third inventor: Pingchun Chiang	
Inventor's signature:	Date:

Page 2

Legal name of fourth inventor: <u>Suresh Subramaniam</u> Inventor's signature:	Date: 02/09/20
Legal name of fifth inventor: Pravin Chingudi	
Inventor's signature:	Date:

Amin, Turocy & Watson, LLP

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- (2) Alfred Yeung
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- (4) Suresh Subramaniam
- (5) Pravin Chingudi

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Amin, Turocy & Watson, LLP, 200 Park Avenue, Suite 300, Beachwood, Ohio 44122.

Legal name of first inventor: Minkyu Kim	
Inventor's signature:	Date:
Legal name of second inventor: Alfred Yeung	
Inventor's signature:	Date:
Legal name of third inventor: Pingchun Chiang	
Inventor's signature:	Date:

Page 2

Docket No. APEXP104US	Amin, Turocy & Watson, LLP
Legal name of fourth inventor: Suresh Subramaniam	
Inventor's signature	Date:
Legal name of fifth inventor: Prayin Chingudi	
Inventor's signature: XChinaged	Date: <u>02/10/2021</u>

Page 3

PATENT REEL: 055210 FRAME: 0679

RECORDED: 02/10/2021