505127531 10/04/2018

PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT5174293

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
FANGXING WEI	09/19/2018
DAN SHI	09/24/2018
MICHAEL ALLEN	09/24/2018

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:	15477078

CORRESPONDENCE DATA

Fax Number: (801)566-0750

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: 801-566-6633 Email: valentine@tnw.com DAVID W. OSBORNE **Correspondent Name:** Address Line 1: P.O. BOX 1219

Address Line 4: SANDY, UTAH 84091-1219

ATTORNEY DOCKET NUMBER: P112575 NAME OF SUBMITTER: DAVID W. OSBORNE SIGNATURE: /David W. Osborne/

DATE SIGNED: 10/04/2018

Total Attachments: 3

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> **PATENT** REEL: 047073 FRAME: 0312 505127531

Attorney Docket No.: P112575

<u>ASSIGNMENT</u>

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

FANGXING WEI; DAN SHI; MICHAEL ALLEN

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 and all other countries, in and to any and all inventions and improvements that are disclosed in the application for the patent entitled:

PHASE DETECTOR IN A DELAY LOCKED LOOP

(I hereby authorize and request any attorney having appropriate authority from the assignee to insert on the designated lines below, the filing date and application number of said application when known.)				
which was filed on	April 1, 2017			
<u>United States</u> COUNTRY or International Office	Application Number	15/477,078and		

which has been executed by the undersigned prior hereto or concurrently herewith on the date(s) indicated below,

and in and to said application and all Additional Applications, and all other patent applications that have been or shall be filed in the United States and all other countries and international filing offices on any of said inventions and improvements; and in and to all original and reissued patents that have been or shall be issued in the United States and all other countries and international filing offices on said inventions and improvements; and in and to all rights of priority resulting from the filing of said applications; as used herein "Additional Applications" includes but is not limited to design, utility, utility model, divisional, continuing, continuation-in-part, substitute, renewal, reissue, and national phase applications on said inventions and improvements;

and agree that said Assignee may apply for and receive a patent or patents for said inventions and 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 Additional Applications, and all other patent applications on any and all said inventions and 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 and improvements and the history thereof, and generally assist said Assignee, its successors, assigns, or legal representatives in securing and

Attorney Docket No.: P112575

maintaining proper patent protection for said inventions and improvements and for vesting title to said inventions and improvements, and all applications for patents 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.

West Leter	9/19/2018
 Fangxing Wei	Date signed
 Dan Shi	Date signed
Michael Allen	Date signed

Attorney Docket No.: P112575

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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.

Fangxing Wei Date signed

OP/24/20/8

Dan Shi Date signed

Michael Allen Date signed