

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
YING LI	06/29/2016
XIAOFEI LI	06/29/2016
YANJUAN ZHAN	06/29/2016
ZHEHONG QIAN	06/30/2016
BUYING DU	06/29/2016
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	CADENCE DESIGN SYSTEMS, INC.
<b>Street Address:</b>	2655 SEELY AVENUE
<b>City:</b>	SAN JOSE
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	95134
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15199951
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<i>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.</i>	
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<b>Correspondent Name:</b>	VISTA IP LAW GROUP, LLP (CADENCE)
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<b>ATTORNEY DOCKET NUMBER:</b>	16PA022US01
<b>NAME OF SUBMITTER:</b>	TONY NGUYEN
<b>SIGNATURE:</b>	/tony nguyen/
<b>DATE SIGNED:</b>	06/30/2016
<b>Total Attachments: 7</b>	
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## ASSIGNMENT OF PATENT APPLICATION

WHEREAS, WE, Ying Li, Xiaofei Li, Yanjuan Zhan, Zhehong Qian and Buying Du (hereinafter referred to as "ASSIGNORS"), have invented a certain invention entitled A NOVEL STRUCTURE OF A HIGH-BANDWIDTH-MEMORY COMMAND QUEUE OF A MEMORY CONTROLLER WITH EXTERNAL PER-BANK REFRESH AND BURST REORDERING for which Utility Application for Letters Patent of the United States of America is filed herewith, and

WHEREAS, Cadence Design Systems, Inc., a corporation organized and existing under and by virtue of the laws of the state of Delaware and having its principal place of business at 2655 Seely Avenue, San Jose, California 95134 (hereinafter referred to as "ASSIGNEE"), is desirous of acquiring the exclusive right, title and interest in, to and under said invention and in, to and under any Patent or similar legal protection to be obtained therefor in the United States of America, its territorial possessions and in any and all countries foreign thereto.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNORS hereby sell, assign, transfer and set over unto the said ASSIGNEE, its successors and assigns, the full and exclusive right, title and interest to said invention and to all Letters Patent or application or similar legal protection, not only in the United States and its territorial possessions, but in all countries foreign thereto to be obtained for said invention by said application, and to any provisional from which priority is claimed, continuation, division, renewal, substitute or reissue thereof or any legal equivalent thereof in the United States or a foreign country for the full term or terms for which the same may be granted, including all priority rights under any international conventions or treaties; and ASSIGNORS hereby authorize and request the United States Commissioner of Patents and Trademarks, and any officials of foreign countries whose duty it is to issue patents or any legal equivalent thereof, to issue said patents to ASSIGNEE, its successors and assigns, in accordance with this Assignment.

ASSIGNORS hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this Agreement;

ASSIGNORS further covenant that ASSIGNEE will, upon its request, be provided promptly with

ASSIGNMENT

Atty. Dkt. No.: 16PA022US01

all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNORS and will testify as to the same in any interference or litigation related thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents in the United States or in any foreign country, which may be necessary or desirable to carry out the purposes thereof.

ASSIGNMENT

Atty. Dkt. No.: 16PA922US01

(1) 2016.6.27  
Date

Ying Li  
Ying Li

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Atty. Dkt. No.: 16PA022US01

[2] 2016.6.29  
Date

Xiaofei Li  
Xiaofei Li

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Atty. Dkt. No.: 16PA022US01

(3) 2016-6-29  
Date

Yanjuan Zhan  
Yanjuan Zhan

[4] 06/30/2016  
Date

Zhehong Gao  
Zhehong Gao

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Atty. Dkt. No.: 18PA022US01

[8] 2016-1-27  
Date

Buying Du  
Buying Du