505487386 05/21/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5534190

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HARSHAVARDHAN KAUSHIKKAR	03/28/2019
PER H. HAMMARLUND	02/15/2019
BRIAN P. LILLY	04/24/2019
MICHAEL BEKERMAN	04/23/2019
JAMES VASH	03/01/2019
MANU GULATI	04/28/2019
BENJAMIN K. DODGE	03/12/2019

RECEIVING PARTY DATA

Name:	APPLE INC.
Street Address:	ONE APPLE PARK WAY
City:	CUPERTINO
State/Country:	CALIFORNIA
Postal Code:	95014

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16418811

CORRESPONDENCE DATA

Fax Number: (512)853-8801

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: 512 853 8800

Email: dbeasley@intprop.com

Correspondent Name: MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C.

Address Line 1: P.O. BOX 398

Address Line 4: AUSTIN, TEXAS 78767-0398

ATTORNEY DOCKET NUMBER:	1888-43601
NAME OF SUBMITTER:	ERIK A. HETER
SIGNATURE:	/Erik A. Heter/
DATE SIGNED:	05/21/2019

PATENT 505487386 REEL: 049247 FRAME: 0281

Total Attachments: 14 source=P38885US1_ASSIGN_052119#page1.tif source=P38885US1_ASSIGN_052119#page2.tif source=P38885US1_ASSIGN_052119#page3.tif source=P38885US1_ASSIGN_052119#page4.tif source=P38885US1_ASSIGN_052119#page5.tif source=P38885US1_ASSIGN_052119#page6.tif source=P38885US1_ASSIGN_052119#page7.tif source=P38885US1_ASSIGN_052119#page8.tif source=P38885US1_ASSIGN_052119#page9.tif source=P38885US1_ASSIGN_052119#page10.tif source=P38885US1_ASSIGN_052119#page11.tif source=P38885US1_ASSIGN_052119#page11.tif source=P38885US1_ASSIGN_052119#page12.tif source=P38885US1_ASSIGN_052119#page13.tif source=P38885US1_ASSIGN_052119#page13.tif source=P38885US1_ASSIGN_052119#page14.tif

<u>ASSIGNMENT</u>

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, the undersigned does hereby:

SELL, ASSIGN AND TRANSFER to Apple Inc. (the "Assignee"), a corporation organized and existing under and by virtue of the laws of the State of California, and having its principal place of business at Infinite Loop, Cupertino, CA 95014, the entire right, title and interest for the United States and all foreign countries, in and to any and all improvements which are disclosed in the application for United States Letters Patent, which has been executed by the undersigned concurrently herewith, and is entitled Method and Apparatus for Ensuring Real-Time Snoop Latency, such application and all divisional, continuing, substitute, renewal, reissue and all other applications for patent which have been or shall be filed in the United States and all foreign countries on any of such improvements; all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such improvements; and specifically including the right to file foreign applications under the provisions of any convention or treaty and claim priority based on such application in the United States;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such improvements to the Assignee;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

COVENANT that, when requested and at the expense of the Assignee, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such improvements; execute all rightful oaths, declarations, assignments, powers of attorney and other papers; communicate to the Assignee all facts known to the undersigned relating to such improvements and the history thereof; and generally do everything possible which the Assignee shall consider desirable for securing, maintaining and enforcing proper patent protection for such improvements and for vesting title to such improvements in the Assignee;

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(Signature) _ Name:	Harshavardhan Kaushikkar	
(Signature) _ Name:	Per H. Hammarlund	Date:
(Signature) _ Name:	Brian P. Lilly	Date:
(Signature) Name:	Michael Bekerman	Date:
(Signature) Name:	James Vash	Date:
(Signature) _ Name:	Manu Gulati	Date:
(Signature) _ Name:	Benjamin K. Dodge	Date:

Customer No. 81310

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(Signature)		Date
Name:	Harshavardhan Kaushikkar	
žov	$\sim 1 M \sim$	Date: 2/15/19
(Signature)_		Date:
Name:	Per H. Hammarlund	
	당하는 문화를 되어 하면 차게 하는 것은	
(Signature)		Date:
Name:	Brian P. Lilly	
(Signature)		Date:
Name:	Michael Bekerman	
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		Date:
Name:	James Vash	
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(Signature)		
	Manu Gulati	
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(Signature)		Date:
Name:		

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(Signature)	Harshavardhan Kaushikkar	Date:
Name:	Harshavardhan Kaushikkar	
(Signature) Name:	Per H. Hammarlund	Date:
(Signature) Name:	Brian P. Lilly	Date: 4/24/2019
	Michael Bekerman	Date:
(Signature) _ Name:	James Vash	Date:
(Signature) Name:	Manu Gulati	Date:
(Signature) Name:	Benjamin K. Dodge	Date:

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(Signature)	Harshavardhan Kaushikkar	Date:
Name:	Harshavardhan Kaushikkar	
(Signature) Name:	Per H. Hammarlund	Date:
(Signature) Name:	Brian P. Lilly	Date:
(Signature) <u>/</u> Name:	Michael Bekerman	Date: Apr 23, 2019
(Signature) _ Name:	James Vash	Date:
(Signature) Name:	Manu Gulati	Date:
(Signature) Name:	Benjamin K. Dodge	Date:

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PATENT

REEL: 049247 FRAME: 0291

(Signature)_		Date:
Name:	Harshavardhan Kaushikkar	_
(Signature) _	Per H. Hammarlund	Date:
name.	rer H. Hammariund	
(Signature)_	D. (D. (())	Date:
Name:	Brian P. Lilly	
(Signature)	Michael Bekerman	Date:
Name:	Michael Bekerman	
(Signature)	James Vash	_ Date: <u>3/1/2019</u>
Name:	James Vash	
(Signature)_	Manu Gulati	Date:
Name:	Manu Gulati	
(Signature)_		Date:
Name:	Benjamin K. Dodge	

Customer No. 81310
Dean M. Munyon

Meyertons, Hood, Kivlin, Kowert & Goetzel, P.C. P.O. Box 398

Austin, TX 78767-0398

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(Signature) . Name:	James Vash	Date:
(Signature) _ Name:	Manu Gwlati	Date: 09/28/19
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Name:	Harshavardhan Kaushikkar	
(Signature)_	Per H. Hammarlund	Date:
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(Signature) _		Date:
Name:	Brian P. Lilly	
(Signature)		Date:
Name:	Michael Bekerman	
(Signature)	James Vash	Date:
Name:	James Vash	
(Signature)_		Date:
Name:	Manu Gulati	
(Signature)_		
Name:	Beyla <u>mia K-D</u> odge	and the second

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