## 505957853 03/09/2020

## PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

#### **CONVEYING PARTY DATA**

Name	Execution Date	
SHIVA KRISHNA NARRA	03/09/2020	
MADHUKAR K. SHANBHAG	03/09/2020	
PENGKAI ZHAO	03/07/2020	
SAMI M. ALMALFOUH	03/06/2020	
SANJEEVI BALASUBRAMANIAN	03/09/2020	
SRIRAM SUBRAMANIAN	03/09/2020	
WEI ZHANG	03/04/2020	
YI SU	03/04/2020	

### **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:	16813264

#### **CORRESPONDENCE DATA**

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ATTORNEY DOCKET NUMBER:	30134/28902	
NAME OF SUBMITTER:	MICHAEL J. MARCIN	
SIGNATURE:	/Michael J. Marcin/	

DATE SIGNED:	03/09/2020
Total Attachments: 10	
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## **ASSIGNMENT**

WHEREAS, I/We,

Shiva Krishna NARRA.

Madhukar K. SHANBHAG,

Pengkai ZHAO,

Sami M. ALMALFOUH,

Sanjeevi BALASUBRAMANIAN,

Sriram SUBRAMANIAN,

Wei ZHANG,

and

Yi SU

(hereinafter also referred to as "ASSIGNOR"); have invented new and useful inventions and discoveries in "**Dynamic Antenna Selection and Beam Steering**", for which U.S. Provisional Patent Application Serial No. 62/817,960 was filed on March 13, 2019 and for which a U.S. Non-Provisional Patent Application is filed herewith; and

WHEREAS, **APPLE Inc.**, a California Corporation having an office at One Apple Park Way, Cupertino, CA 95014, (hereinafter referred to as "ASSIGNEE"), is desirous of acquiring the entire right, title and interest in and to the application and invention therein described and claimed and any Letters Patent that may be issued upon the application or for the improvements therein contained.

NOW, THEREFORE, in consideration of One U.S. Dollar (U.S. \$1.00) and other valuable consideration furnished by Assignee to me, receipt and sufficiency of which I hereby acknowledge, I hereby, without reservations:

1. Assign, transfer, and convey to Assignee the entire right, title, and interest in and to said inventions and discoveries, said application, any and all other applications for Letters Patent on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation, reissue, reexamination and Convention applications based in whole or in

part upon said inventions or discoveries, or upon said applications, and any and all Letters Patent, reissues, and extensions of Letters Patent granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said discoveries, said applications, and said Letters Patent.

- 2. Authorize Assignee to file patent applications in any or all countries for any or all of said inventions and discoveries in my name or in the name of Assignee or otherwise as Assignee may deem advisable, under the International Convention or otherwise.
- 3. Authorize and request the Commissioner for Patents of the United States of America and the empowered officials of all other governments to issue or transfer all said Letters Patent to Assignee, as assignee of the entire right, title, and interest therein or otherwise as Assignee may direct.
- 4. Warrant that I have not knowingly conveyed to others any right in said inventions, discoveries, applications, or patents or any license to use the same or to make, use, or sell anything embodying or utilizing any of said inventions or discoveries; and that I have good right to assign the same to Assignee without encumbrance.
- 5. Bind my heirs, legal representatives, and assigns, as well as myself, to do, upon Assignee's request and at Assignee's expense, but without additional consideration to me or them, all acts reasonably serving to assure that the said inventions and discoveries, the said patent applications, and the said Letters Patent shall be held and enjoyed by Assignee as fully and entirely as the same could have been held and enjoyed by me, my heirs, legal representatives, and assigns if this assignment had not been made; and particularly to execute and deliver to Assignee all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by Assignee; to communicate to Assignee all facts known to us relating to said inventions and discoveries or the history thereof; and to furnish Assignee with any and all documents, photographs, models, samples, and other physical exhibits in my control or in the control of my heirs, legal representatives, or assigns which may be useful for establishing the facts of my conceptions, disclosures, and reduction to practice of said inventions and discoveries.

IN TESTIMONY WHEREOF, I have hereunto set my hands and seals this graded day of

March , 2020.

M. Kin denishus

3

IN TESTIMONY WHEREOF, I have hereunto set my hands and seals this  $\underline{69}$  day of

. 2020.

Madhukar K. SHANBHAG

4

IN TESTIMONY WHEREOF, I have hereunto set my hands and seals this 7th day of

March, 2020.

Lengka Hoo

Pengkai ZHAO

IN TESTIMONY WHEREOF, I have hereunto set my hands and seals this \_\_\_\_\_\_\_ day of

MAYCH, 2020

Sami M. ALMALFOUH

Attorney	Docket	No.	30134/28902(P41324US1)

IN TESTIMONY	WHEREOF, I have hereunto set my hands and seals this	9	day of

MARCH , 2020.

Sanjeevi BALASUBRAMANIAN

7

IN TESTIMONY WHEREOF, I have hereunto set my hands and seals this $\frac{Q^{Tl_1}}{2}$ day of
March, 2020.
Gina"
Sriram SUBRAMANIAN

8

IN TESTIMONY WHEREOF, I have hereunto set my hands and seals this \_\_\_\_\_ day of

, 202

Wei ZHANG

9

IN TESTIMONY WHEREOF, I have hereunto set my hands and seals this Weekday of

Mar 4th , 2020.

Yi SU