#### 504600507 10/18/2017

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT4647219

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
OREN SHANI	05/15/2017
GUOQING LI	07/25/2017
JOONSUK KIM	08/13/2017
ASHOK RANGANATH	05/16/2016

### **RECEIVING PARTY DATA**

Name:	APPLE INC.
Street Address:	1 INFINITE LOOP
City:	CUPERTINO
State/Country:	CALIFORNIA
Postal Code:	95014

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15590960

### **CORRESPONDENCE DATA**

Fax Number: (408)701-6210

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: (408) 701-6200

ipdocketing@downeybrand.com, pbalero@downeybrand.comEmail:

DOWNEY BRAND LLP **Correspondent Name:** ATTN: IP DOCKETING Address Line 1:

Address Line 2: P.O. BOX 569

Address Line 4: CUPERTINO, CALIFORNIA 95015

ATTORNEY DOCKET NUMBER:	P30251US1/26140US.1	
NAME OF SUBMITTER:	THOMAS A. SEXTON	
SIGNATURE:	/Thomas A. Sexton/	
DATE SIGNED:	10/18/2017	

### **Total Attachments: 4**

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Whereas I, an undersigned inventor, have invented certain new and useful improvements as set forth in the patent application entitled:

# WIRELESS LOCAL AREA NETWORK SOUNDING PROTOCOL

(Atty, Docket No. P30251US1/26140US.1) for which I have executed an application on even date herewith.
which bears application No. 15/590,960 which is a U.S. provisional application.
For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, an undersigned inventor, hereby:
1) Sell, assign and transfer to Apple Inc., a California corporation having a place of business at 1 Infinite Loop, Cupertino, CA 95014 ("ASSIGNEE"), the entire right, title and interest to the above-referenced application, any and all improvements and inventions disclosed therein, as well as concurrent applications, applications having priority claims to/from, any derivative applications thereof, foreign or Patent Cooperation Treaty ("PCT") applications based in whole or at least in part thereon, and any and all patents resulting from such applications (including foreign patents and the right to claim priority).
2) Authorize and request the Commissioner of Patents to issue any and all United States Patents resulting from said application or any divisional, continuation, design application, substitute, renewal, re-examination or reissue thereof to the ASSIGNEE.
3) Agree to execute all papers and documents and, entirely at the ASSIGNEE's expense, perform any acts which are reasonably necessary in connection with the prosecution of said application, as well as any derivative applications thereof, foreign applications based thereon, and/or the enforcement of patents resulting from such applications.
4) Agree that the terms, covenants and conditions of this assignment shall inure to the benefit of the ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon the inventor, as well as the inventor's heirs, legal representatives and assigns.
5) Warrant and represent that I have not entered and will not enter into any assignment, contract, or understanding that conflicts with this assignment.
6) Authorize and request my attorney/agent to insert above the application No. in order to assist with recordal of this assignment.
Signed on the date indicated beside my signature.
Signature: 11/1/ic Date: 5/15/12
Typed Name: Oren SHANI

(Atty, Docket No. P30251US1/26140US,1)

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Signed on the date indicated beside my signature.
Signature:

(Atty. Docket No. P30251US1/26140US.1)

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6) Authorize and request my attorney/agent to insert above the application No. in order to assist with recordal of this assignment.
Signed on the date indicated beside my signature.
Signature, 7/1/ < Date: 8/13/19
Typed Name: J <sub>ramenik</sub> KIM

23.3

Whereas I, an undersigned inventor, have invented certain new and useful improvements as set forth in the patent application entitled:

### WIRELESS LOCAL AREA NETWORK SOUNDING PROTOCOL

(Atty, Docket No. 26140US.P1)
for which I have executed an application on even date herewith
which bears application No. 62/334,339
which is a U.S. provisional application.

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, an undersigned inventor, hereby:

- 1) Sell, assign and transfer to Apple Inc., a California corporation having a place of business at 1 Infinite Loop, Cupertino, CA 95014 ("ASSIGNEE"), the entire right, title and interest to the above-referenced application, any and all improvements and inventions disclosed therein, as well as concurrent applications, applications having priority claims to/from, any derivative applications thereof, foreign or Patent Cooperation Treat ("PCT") applications based in whole or at least in part thereon, and any and all patents resulting from such applications (including foreign patents and the right to claim priority).
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- 6) Authorize and request my attorney/agent to insert above the application No, in order to assist with recordal of this assignment.

Signed on the date indicated beside my signature.

**RECORDED: 10/18/2017** 

Signature: Date: 5/6/2016

Typed Name: Askok RANGANATH

(Atty, Docket No. 26140US.P1)