

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT3063299

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
TARIK TABET	10/10/2014
FAROUK BELGHOUL	10/10/2014
RAFAEL RIVERA-BARRETO	10/10/2014
SAMY KHAY-IBBAT	10/10/2014
SREE RAM KODALI	10/10/2014
SARMA V. VANGALA	10/10/2014
SYED A. MUJTABA	10/10/2014
SWAMINATHAN BALAKRISHNAN	10/10/2014
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	APPLE INC.
<b>Street Address:</b>	1 INFINITE LOOP
<b>City:</b>	CUPERTINO
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	95014
<b>PROPERTY NUMBERS Total: 2</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	14503202
Application Number:	61919987
<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>	
<b>Phone:</b>	858 792 3404
<b>Email:</b>	docketing@paradigmiplaw.com
<b>Correspondent Name:</b>	PARADIGM IP LAW - 27701
<b>Address Line 1:</b>	PO BOX 675981
<b>Address Line 4:</b>	RANCHO SANTA FE, CALIFORNIA 92067-5981
<b>ATTORNEY DOCKET NUMBER:</b>	27701-021981/P1
<b>NAME OF SUBMITTER:</b>	ROSS L. FRANKS
<b>SIGNATURE:</b>	/Ross L. Franks/

PATENT

<b>DATE SIGNED:</b>	10/13/2014
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**Total Attachments: 3**

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PO Box 675981  
Rancho Santa Fe, CA 92067-5981

Attorney Docket: 27701-021981  
Client Reference: P21981US1

**INVENTION ASSIGNMENT AND INVENTOR DECLARATION**  
**for U.S. Patent Application**

WHEREAS, the undersigned Inventor(s), **Tarik Tabet, Farouk Belghoul, Rafael Rivera-Barreto, Samy Khay-Ibbat, Sree Ram Kodali, Sarma V. Vangala, Syed A. Mujtaba and Swaminathan Balakrishnan** (hereinafter ASSIGNOR), have made the following invention(s):

U.S. Provisional Patent Application Serial Number 61/919,987 filed on December 23, 2013 and entitled *Call Establishment Time Reduction and Redirection for VoLTE Calls in Networks Supporting TD and FDD LTE*;

U.S. Patent Application Serial Number 14/503,202 filed on September 30, 2014 and entitled *ESR Extension for VoLTE Call Establishment in TD and FDD LTE Networks*; and

WHEREAS, **Apple Inc.**, ASSIGNEE, a corporation duly organized and existing under the laws of the State of California and having its principal office and place of business at 1 Infinite Loop, Cupertino, CA 95014 desires to acquire an interest therein;

\* \* \*

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNOR does hereby sell, assign and transfer unto ASSIGNEE, its successors, assigns and legal representatives, the full and exclusive right, title and interest to the above-referenced invention(s) in the United States and all foreign countries or regional jurisdictions, as described in the above-referenced application(s), and to all continuations, divisions, reissues, reexaminations and substitutes of the above-referenced application(s), together with the right of priority and right to claim priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements or treaties to which the United States of America adheres, now and in the future, and ASSIGNOR hereby authorizes and requests the Commissioner of Patents of all jurisdictions to issue said Letters Patent to ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives.

AND ASSIGNOR hereby agrees, without further remuneration, to execute any papers requested by ASSIGNEE, its successors, assigns and legal representatives, deemed essential to ASSIGNEE's full protection and title in and to the invention(s) hereby transferred, including, but not limited to: executing any and all papers desired by ASSIGNEE for the filing and granting of

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foreign patent applications, and for filing all continuations, divisions, reissues, reexaminations and substitutes of the above-referenced application(s), and for perfecting title(s) thereto in ASSIGNEE.

\*\*\*

I DECLARE that each of the following statements is true for all applications identified in this Invention Assignment and Inventor Declaration.

- 1) Each application was made, or was authorized to be made, by me.
- 2) I believe that I am the original inventor, or an original joint inventor, of a claimed invention in each application.
- 3) I understand and acknowledge my duty of candor and good faith in dealing with the U.S. Patent and Trademark Office, which includes a continuing duty to disclose all information I know that may be material to patentability of the claims in each application per 37 CFR §1.56.
- 4) I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

\*\*\*

NOTE: The undersigned hereby authorize(s) Paradigm IP Law, PC, being counsel for ASSIGNEE and having the above mailing address, to insert further identification necessary or desirable for recordation of this document, including, but not limited to, adding serial number(s) and filing date(s) for the application(s) covered by this Invention Assignment and Inventor Declaration.

Executed on the date below indicated

Inventor Signature:

Date Signed:

Witness' Signature:



Name: **Tarik Tabef**

10/10/2014

Date

Konstantinos Sarrigeorgidis

Name:



Name: **Farouk Belghoul**

10/6/2014

Date

Vinny Mojzisi

Name:



Name: **Rafael Rivera-Barreto**

10/10/14

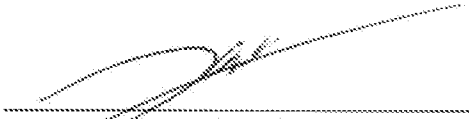
Date

Monstafa Espey


Name:


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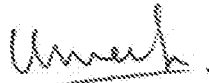
  
Name: **Samy Khay-Ibbat**


10/10/14  
Date

CHIRAG SHROFF  
Name: 

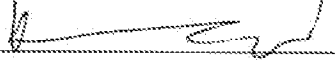
  
Name: **Sree Ram Kodali**

10/10/14  
Date

UMESH SHUKLA   
Name:

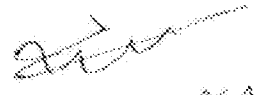
  
Name: **Sarma V. Vangala**

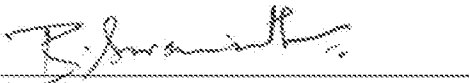
10/10/14  
Date

NAVEEN KOMMARLEDDI  
  
Name:

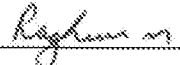
  
Name: **Syed A. Mujtaba**

10/10/14  
Date

  
AWAIS HUSSAIN  
Name:

  
Name: **Swaminathan Balakrishnan**

10/10/14  
Date

RASHMEE MAHADEWAN  
  
Name: