### 507055140 01/03/2022

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7101976

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
IOANNIS PEFKIANAKIS	12/10/2021
MADHUSUDAN CHAUDHARY	12/11/2021
MUTHUKUMARAN DHANAPAL	12/11/2021
LAKSHMI N. KAVURI	12/10/2021
THANIGAIVELU ELANGOVAN	12/10/2021
AJAY SINGH	12/17/2021
DEEPANKAR BHATTACHARJEE	12/20/2021
GAURAV PATHAK	12/17/2021
CAROLA FARONIUS	12/14/2021
FRANCO TRAVOSTINO	12/14/2021
RAGHUVEER MALLIKARJUNAN	12/10/2021
HARSHIT CHUTTANI	12/10/2021
SREEVALSAN VALLATH	12/10/2021
RAJESH AMBATI	12/10/2021
JIA TANG	12/10/2021
ISHWINDER SINGH	12/17/2021

#### **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:	17567743

#### **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.

507055140 PATENT REEL: 058531 FRAME: 0429

**Phone:** 5128538800

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Correspondent Name: KOWERT HOOD MUNYON RANKIN & GOETZEL

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ATTORNEY DOCKET NUMBER:	2888-27001
NAME OF SUBMITTER:	JEFFREY C. HOOD
SIGNATURE:	/Jeffrey C. Hood/
DATE SIGNED:	01/03/2022

#### **Total Attachments: 15**

source=P52001US1\_Assignment\_010322\_2888-27001#page1.tif source=P52001US1\_Assignment\_010322\_2888-27001#page2.tif source=P52001US1\_Assignment\_010322\_2888-27001#page3.tif source=P52001US1\_Assignment\_010322\_2888-27001#page4.tif source=P52001US1\_Assignment\_010322\_2888-27001#page5.tif source=P52001US1\_Assignment\_010322\_2888-27001#page6.tif source=P52001US1\_Assignment\_010322\_2888-27001#page7.tif source=P52001US1\_Assignment\_010322\_2888-27001#page8.tif source=P52001US1\_Assignment\_010322\_2888-27001#page9.tif source=P52001US1\_Assignment\_010322\_2888-27001#page10.tif source=P52001US1\_Assignment\_010322\_2888-27001#page11.tif source=P52001US1\_Assignment\_010322\_2888-27001#page12.tif source=P52001US1\_Assignment\_010322\_2888-27001#page13.tif source=P52001US1\_Assignment\_010322\_2888-27001#page13.tif source=P52001US1\_Assignment\_010322\_2888-27001#page14.tif source=P52001US1\_Assignment\_010322\_2888-27001#page15.tif

PATENT REEL: 058531 FRAME: 0430

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

SELL, ASSIGN AND TRANSFER to <u>Apple Inc.</u> (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 <u>One Apple Park Way, Cupertino, CA 95014</u>, 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 <u>Detecting Cellular Network Bottlenecks Using Data Allocation Patterns</u>, such application and all regional, national, provisional, divisional, continuing, substitute, renewal, reissue, international (including international PCT applications), and all other applications for patent which have been or shall be filed internationally, in the United States and/or 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 national and foreign applications under the provisions of any convention or treaty and claim priority based on such application;

To the extent enforceable, this Assignment shall be deemed to have come into effect on the earlier of either: 1) the signature date below or 2) as of the earliest priority date of the present application, and where priority is not claimed to an earlier application, then from the filing date of the present application.

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;

(Signature)	Zanelles	/	Date:	10-Dec-2021
Name:			Bute.	
(Signature) _ Name:	<b>6)</b>	/	Date:	11-Dec-2021
(Signature)	Dhedha Kumeran	/	Date:	11-Dec-2021
Name:		· · · · · · · · · · · · · · · · · · ·		
(Signature) _	Lakshmi N. Kavuri	/	Date:	10-Dec-2021
Name:	Lakshmi N. Kavuri			
(Signature) _		/	Date:	10-Dec-2021
Name:	Thanigaivelu Elangovan			
(Signature) _	/ Ajay Singh	/	Date:	
Name:				20 Dec 2021
(Signature)	<b>%</b>	/	Date:	20-Dec-2021
Name:	/ Deepankar Bhattacharjee			
(Signature)	/	/	Date:	
Name:				
(Signature) _	/	/	Date:	
Name:	Carola Faronius			
(Signature) _	Franco Travostino	/	Date:	14-Dec-2021
Name:	Franco Travostino			
(Signature) _	Pylmen	/	Date:	10-Dec-2021
Name:	Raghuveer Mallikarjunan			
(Signature) _	<b>@#**</b>	/	Date:	10-Dec-2021
Name:	Harshit Chuttani			
(Signature) _	<b>/</b>	/	Date:	10-Dec-2021
Name:	Sreevalsan Vallath			

(Signature) _	<b>(4)</b>	/	Date: 10-Dec-2021
Name:	Rajesh Ambati		10.0
(Signature) _	1	/	Date:
Name:	Jia Tang		
(Signature) _	/	/	Date:
	Ishwinder Singh		

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(Signature) _	/		Date:
Name:	Ioannis Pefkianakis		
(Signature) _	/ Madhusudan Chaudhary	/	Date:
Name:	Madhusudan Chaudhary		
(Signature) _	/	/	Date:
Name:	Muthukumaran Dhanapal		
(Signature) _	/ Lakshmi N. Kavuri	/	Date:
Name:	Lakshmi N. Kavuri		
(Signature) _	/		Date:
Name:	Thanigaivelu Elangovan		17 Dec 2021
(Signature) _	/ Ajay Singh	/	Date: 17-Dec-2021
Name:	Ajay Singh		
(Signature) _	/	/	Date:
Name:	Deepankar Bhattacharjee		
(Signature) _	/	/	Date:
Name:	Gaurav Pathak		
(Signature) _	Carola Faronius	/	Date:
Name:	Carola Faronius		
(Signature) _	Franco Travostino	/	Date:
Name:	Franco Travostino		
(Signature) _	/ Raghuveer Mallikarjunan	/	Date:
Name:	Raghuveer Mallikarjunan		
(Signature) _	/ Harshit Chuttani	/	Date:
Name:	Harshit Chuttani		
(Signature) _	/ Sreevalsan Vallath	/	Date:
Name:	Sreevalsan Vallath		

(Signature) _	/	/	Date:	
Name:	Rajesh Ambati			
(Signature) _ Name:	/ Jia Tang	/	Date:	
(Signature) _ Name:	/ Ishwinder Singh	/	Date:	

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Name:	Ioannis Pefkianakis		
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	-		
(Signature) _ Name:	/ Muthukumaran Dhanapal		Date:
(Signature) _	/ Lakshmi N. Kavuri	/	Date:
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(Signature) _	/ Ajay Singh	/	Date:
(Signature) _	Deepankar Bhattacharjee		Date:
Name:	Deepankar Bhattacharjee		17-Dec-2021
(Signature) _	Gaurav Pathak	/	Date:
(Signature) _	/ Carola Faronius		Date:
(Signature) _	Franco Travostino		Date:
(Signature) _	/ Raghuveer Mallikarjunan		Date:
(Signature) _	/ Harshit Chuttani		Date:
(Signature) _ Name:	/ Sreevalsan Vallath		Date:

(Signature) _	/	/	Date:	
	Rajesh Ambati			
(Signature) _ Name:	/ Jia Tang	/	Date:	
(Signature) _	/	/	Date:	
Name <sup>.</sup>	Ishwinder Singh			

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(Signature) _	/	/	Date:
Name:	Rajesh Ambati		
(Signature) _	/	/	Date:
	Jia Tang		
	<b>24.</b> L		17-Dec-2021
(Signature) _	/	/	Date:
Name:	Ishwinder Singh		