505441565 04/23/2019

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DEVAKI CHANDRAMOULI	03/23/2019
CURT WONG	01/18/2019

RECEIVING PARTY DATA

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PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16322155

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NAME OF SUBMITTER:	DOUGLAS H. GOLDHUSH
SIGNATURE:	/DOUGLAS H. GOLDHUSH/
DATE SIGNED:	04/22/2019

Total Attachments: 3

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> **PATENT** REEL: 048972 FRAME: 0681 505441565

ASSIGNMENT - WORLDWIDE

ASSIGNOR(S)

Devaki Chandramouli, Plano, Texas, United States of America

<u>Curt Wong</u>, Bellevue, Washington, United States of America

ASSIGNEE

Nokia Solutions and Networks Oy

Karaportti 3, 02610 Espoo, Finland

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the ASSIGNOR(S) agree to assign and hereby assign, sell, transfer and set over to the ASSIGNEE and its successors, assigns and legal representatives, the entire right, title and interest, for United States of America and for all other countries in and to (1) the invention(s) identified by the following title or application number and filling date, and (2) any and all related inventions ("RELATED INVENTIONS" as defined below).

Title: PROVIDING VOICE CALL SUPPORT IN A NETWORK

Application number: US 62/370081 Filing date: 2016-08-02

(YYYY-MM-DD)

I/we, the ASSIGNOR(S), hereby authorize and request a representative of the ASSIGNEE to insert the application number and filing date when known/received, after the execution of this document. The ASSIGNOR(S) hereby acknowledge and agree that the ASSIGNEE shall have the right to claim priority, directly or through another patent application, to the application identified above in any and all related patent applications subsequently filed in all jurisdictions.

I/we the ASSIGNOR(S) hereby acknowledge and agree that RELATED INVENTIONS include all national, regional and international patent applications filed and to be filed in any and all jurisdictions, that claim priority to the invention(s) identified by the above title or application number and filing date, said patent applications include all divisionals, continuations, re-issues, re-examinations, and continuations-in-part applications, and RELATED INVENTIONS include all rights and privileges in said patent applications and under any and all letters patent that may be granted in the United States of America and in all other countries resulting from said patent applications.

The ASSIGNOR(S) authorize the ASSIGNEE to make applications for such protection in its own name and maintain such protection in any and all countries including the United States of America, and to invoke and claim for any application for patent or other form of protection for said invention(s), without further authorization from us, any and all benefits, including the rights of priority provided by any and all treaties, conventions, or agreements.

The ASSIGNOR(S) hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the

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v-14Dec18

PATENT REEL: 048972 FRAME: 0682 right of the ASSIGNEE to apply for patent or other form of protection for said invention(s) and to claim the aforesaid benefit of the right of priority.

The ASSIGNOR(S) request that any and all patents for said invention(s) be issued to the ASSIGNEE, its/their successors, assigns and legal representatives, in the United States of America and in all other countries, or to such nominees as the ASSIGNEE may designate.

The ASSIGNOR(S) agree that, when requested, we shall, without charge to the ASSIGNEE sign all papers, and do all acts which may be necessary, desirable or convenient in connection with said applications, patents, or other forms of protection.

In witness whereof, each inventor/assignor please sign and date below:		
Inventor (First Middle LAST) Signature	Date (YYYY-MM-00)	
omisi chandramosis — C.P.C.S.S.S.	2019-03-23	
	- Andrews Control of the Control of	
This assignment should preferably be signed by the inventor(s) before (a) at least two witnesses who also sign here, or (b) a Notary Public if within the U.S.A.:		
Witness Name (First Middle LAST) - Signature, ,	Oate (YYYY-MM-CD)	
KUTAYAN ANNAMANI CHUTTEYA	2019-07-23	
SHYAM ADDNAMALAS APLANE	7019-00-23	

	The ASSIGNEE accepts this assignment:	
Name	Yan Wang	5494098 <u>C. C. J</u>
Title	Manager, Patenting	Oate (7777-70-00) MAR 2 8 2019
Name_	Jarmo J. Kemppainen	Sgradue
Title	Senior IPR Specialist	OSES (CYY-MA-DO) MAR 2 8 2019
	**************************************	The same of the sa

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right of the ASSIGNEE to apply for patent or other form of protection for said invention(s) and to claim the aforesaid benefit of the right of priority.

The ASSIGNOR(S) request that any and all patents for said invention(s) be issued to the ASSIGNEE, its/their successors, assigns and legal representatives, in the United States of America and in all other countries, or to such nominees as the ASSIGNEE may designate.

The ASSIGNOR(S) agree that, when requested, we shall, without charge to the ASSIGNEE sign all papers, and do all acts which may be necessary, desirable or convenient in connection with said applications, patents, or other forms of protection.

In witness whereof, each inventor/assignor please sign and date below:		
Inventor (First Middle LAST)	Signature	Date (YYYY-MM-DD)
Devaki Chandramouli		·
Curt Wong		2019-01-18
This assignment should preferably be signed by the inventor(s) before (a) at least two witnesses who also sign here, or (b) a Notary Public if within the U.S.A.:		
Witness Name (First Middle LAST)	Signature	Date (YYYY-MM-DD)
YILDIRIM SAMO		2019-61-18
cyathin mash	Colore Management	2019-01-18

The ASSIGNEE accepts this assignment:	
Name	Signature
Title	Date (YYYY-MM-DD)
Name	Signature Date (YYYY-MM-DD)
	Duc (1717 787 00)

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PATENT REEL: 048972 FRAME: 0684