

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT6600077

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT	
<b>CONVEYING PARTY DATA</b>		
	<b>Name</b>	<b>Execution Date</b>
	NOKIA OF AMERICA CORPORATION	03/13/2021
<b>RECEIVING PARTY DATA</b>		
<b>Name:</b>	NOKIA SOLUTIONS AND NETWORKS OY	
<b>Street Address:</b>	KARAKAARI 7	
<b>City:</b>	ESPOO	
<b>State/Country:</b>	FINLAND	
<b>Postal Code:</b>	02610	
<b>PROPERTY NUMBERS Total: 1</b>		
	<b>Property Type</b>	<b>Number</b>
	Application Number:	16311544
<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>Email:</b>	ipr.assignments@nokia.com	
<b>Correspondent Name:</b>	TAMMY HOBBS	
<b>Address Line 1:</b>	200 SOUTH MATHILDA AVE	
<b>Address Line 4:</b>	SUNNYVALE, CALIFORNIA 94086	
<b>ATTORNEY DOCKET NUMBER:</b>	900658-US-PCT[1] (TDH)	
<b>NAME OF SUBMITTER:</b>	TAMMY HOBBS	
<b>SIGNATURE:</b>	/Tammy Hobbs/	
<b>DATE SIGNED:</b>	03/15/2021	
<b>Total Attachments: 3</b>		
source=NC900658 Co-to-Co Assignment NOAC to NSNOY#page1.tif		
source=NC900658 Co-to-Co Assignment NOAC to NSNOY#page2.tif		
source=NC900658 Co-to-Co Assignment NOAC to NSNOY#page3.tif		

## ASSIGNMENT

This assignment ("Assignment") is made by and between **Nokia of America Corporation**, a company established and existing under the laws of **United States Of America** and having its registered office at **600-700 Mountain Avenue, Murray Hill, New Jersey 07974-0636, United States Of America** (hereafter, together with any successors, legal representatives or assigns thereof, called "Assignor") and **Nokia Solutions and Networks Oy**, a company established and existing under the laws of **Finland** and having its registered office at **Karakaari 7, 02610 Espoo, Finland** (hereafter, together with any successors, legal representatives or assigns thereof, called "Assignee"). The Assignor and Assignee together are hereafter referred to as "Parties".

**WHEREAS**, Assignor owns an interest in and to the invention or inventions identified below by the invention docket reference number and title ("Invention(s)"), as well as the patent application(s) filed with respect to said Invention(s) and listed below;

**WHEREAS**, Assignee wants to acquire the entire right, title and interest in and to the rights listed below, and Assignor is willing to enter into such assignment;

**NOW, THEREFORE**, in consideration of the promises herein and for good and valuable consideration, the receipt of which from Assignee is hereby acknowledged and confirmed, Assignor hereby acknowledges that Assignor has assigned, sold, transferred, conveyed, granted, and set over, and by these presents does hereby assign, sell, transfer, convey, grant, and set over, subject to existing rights, licenses and/or obligations of or to third parties, if any, unto Assignee, all of Assignor's right, title and interest, for all countries, jurisdictions and political entities of the world, in and to any and all of the following (collectively, "Rights"):

(a) The Invention(s)

<b>Invention Docket Reference Number</b>	<b>Title</b>
<b>NC900658</b>	<b>Duplex distance modification and blank NB-IoT subcarriers</b>

and all the intellectual property rights and privileges under any and all forms of protection, including but not limited to;

(b) The patent application(s) filed with respect to said Invention(s)

201680087216.3 filed in China on 01-Sep-2016  
202110213654.2 filed in China on 26-Feb-2021  
16907656.9 filed in Europe on 01-Sep-2016  
201847048607 filed in India on 01-Sep-2016  
16/311544 filed in United States Of America on 01-Sep-2016  
PCT/US2016/039580 filed in United States of America Receiving Office on 27-Jun-2016  
PCT/US2016/049969 filed in United States of America Receiving Office on 01-Sep-2016

and patent applications, foreign patent applications, or other applications that may be filed for protection including, without limitation, applications for certificates of invention, utility models, industrial design protection, design patent protection, and provisional patent applications

wherever filed, with respect to the Invention(s), (collectively, "Applications") including all rights to file and prosecute such Applications directly in the name of Assignee;

- (c) All patents including, without limitation, foreign patents, certificates of invention, utility models, industrial design protection, design patent protection, that may be granted, registered, or issued with respect to the Invention(s) or the Applications (collectively, "Patents");
- (d) All renewals, reissues, requests for continuing examinations, re-examinations, extensions, continuations, continuations-in-part, continuing prosecution applications, divisions, divisionals, or registrations of, any item in any of the foregoing categories (b) or (c);
- (e) The right to claim priority rights deriving or arising from any of the foregoing categories (b), (c) or (d) and for Assignee to otherwise avail itself of the provisions of the international conventions governing the protection of inventions;
- (f) All causes of action and enforcement rights related to any of the foregoing categories (a), (b), (c) or (d) (including, without limitation, the right to sue and to pursue damages, settlements, injunctive relief, or other remedies for past, present, or future infringement, misappropriation, or violation of rights related thereto);
- (g) All rights to license and to collect royalties and other payments under or on account of any of the foregoing categories (a), (b), (c) or (d); and
- (h) Any and all other rights and interests arising out of, in connection with, or in relation to any of the foregoing categories (a), (b), (c) or (d),

with respect to which, and to the extent to which, Assignor had or has acquired the right to so assign, convey, transfer and deliver.

Assignor hereby authorizes a representative of the Assignee to insert the application title, application number and filing date for any Applications or Patents when known/received, after the execution of this document.

Assignor requests the respective patent office or governmental agency in each jurisdiction to grant or issue any and all letters patents, certificates of invention, utility models or other governmental or inter-governmental grants or issuances that may be granted upon any of the Rights in the name of the Assignee, as the Assignee to the Assignor's entire interest therein.

The terms and conditions of this Assignment will inure to the benefit of Assignee, its successors or assigns, and anyone properly designated by them and will be binding upon Assignor, its successors or assigns, and anyone properly designated by them.

In the event that a clause or term of this Assignment is regarded invalid, illegal or unenforceable, such invalidity shall not affect the validity of the remaining clauses or terms. The Parties must replace such invalid, illegal or unenforceable clauses or terms with valid clauses or terms that best express the Parties' intent at the time of signing the Assignment.

This Assignment may be executed by either handwritten signatures, including the exchange of scanned representations of handwritten signatures, or e-signatures. By using e-signature to sign this Assignment, the Parties acknowledge that execution in this manner creates a binding contract between the Parties.

**IN WITNESS WHEREOF**, each of the Parties has caused this Assignment to be executed by its duly authorized representatives on the respective dates entered below.

**ASSIGNOR:**

**Nokia of America Corporation**

By: 

Name: Louis Diep

Title: Authorized Signatory

Date: Mar 12, 2021

**ASSIGNOR:**

**Nokia of America Corporation**

By: 

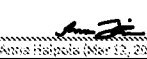
Name: Nico van Waes

Title: Authorized Signatory

Date: Mar 12, 2021

**ASSIGNEE:**

**Nokia Solutions and Networks Oy**

By:   
Anna Haipola (Mar 12, 2021 12:58 GMT+2)

Name: Anna Haipola

Title: Authorized Signatory

Date: Mar 12, 2021

**ASSIGNEE:**

**Nokia Solutions and Networks Oy**

By:   
Per Möller (Mar 13, 2021 12:58 GMT+2)

Name: Per Möller

Title: Authorized Signatory

Date: Mar 13, 2021