506821405 08/17/2021

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
NOKIA SHANGHAI BELL CO., LTD.	07/28/2021
NOKIA SOLUTIONS AND NETWORKS OY	07/28/2021

RECEIVING PARTY DATA

Name:	NOKIA SOLUTIONS AND NETWORKS OY	
Street Address:	KARAKAARI 7	
City:	ESPOO	
State/Country:	FINLAND	
Postal Code:	02610	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17043901

CORRESPONDENCE DATA

Fax Number: (703)668-8200

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.

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Email: jevensen@hdp.com **Correspondent Name:** GARY D. YACURA

Address Line 1: 11730 PLAZA AMERICA DR., STE. 600 Address Line 2: HARNESS, DICKEY & PIERCE, P.L.C.

Address Line 4: RESTON, VIRGINIA 20190

ATTORNEY DOCKET NUMBER:	29250H-000104-US-NP	
AME OF SUBMITTER: EVAN F. LIEBOVITZ		
SIGNATURE:	/Evan Liebovitz/	
DATE SIGNED:	08/17/2021	

Total Attachments: 4

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PATENT 506821405 REEL: 057201 FRAME: 0291

ASSIGNMENT

This Assignment is made by and between **Nokia Shanghai Bell Co., Ltd.,** a company established and existing under the laws of **the People's Republic of China** and having its registered office at **388 Ningqiao Road, Shanghai, 201206, People's Republic of China**, 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** (the two aforesaid entities hereafter 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** ("Assignee"). The Assignor and Assignee together are hereafter referred to as "Parties".

WHEREAS Assignor owns an interest in and to the invention or inventions described in the Appendix (collectively, "Inventions"), as well as the patent application(s) filed with respect to said Inventions and listed in the Appendix;

WHEREAS Assignee wants to acquire the entire right, title and interest in and to the rights listed below outside of the People's Republic of China (excluding Taiwan, Hong Kong SAR and Macau SAR), 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 and sufficiency of which from Assignee is hereby acknowledged, Assignor hereby acknowledges that Assignor has sold, assigned, transferred, conveyed, granted, and set over, and by these presents does hereby sell, assign, 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 outside of the People's Republic of China (excluding Taiwan, Hong Kong SAR and Macau SAR), in and to any and all of the following (collectively, "Rights"):

- (a) The Inventions
 - and all the intellectual property rights and privileges under any and all forms of protection:
- (b) The right to claim any and all priority rights deriving or arising from the patent applications listed in the Appendix filed before the State Intellectual Property Office of the People's Republic of China on the filing dates listed below in the Appendix ("Original Applications") and any 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 Inventions, which use the Original Application as a priority document (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 Inventions or the Applications (collectively, "Patents");
- (d) All patents and patent applications for which any of these Applications or Patents directly or indirectly form a basis for priority;
- (e) 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), (c), or (d);

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- (f) The right to claim priority rights deriving or arising from any of the foregoing categories (b), (c), (d), or (e) and for Assignee to otherwise avail itself of the provisions of the international conventions governing the protection of inventions;
- (g) All causes of action and enforcement rights related to any of the foregoing categories (a), (b), (c), (d), or (e) (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);
- (h) All rights to license and to collect royalties and other payments under or on account of any of the foregoing categories (a), (b), (c), (d), or (e); and
- (i) 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), (d), or (e),

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

Nothing in this Assignment shall sell, assign, transfer, convey, set over, grant, affect or limit, in any way, any of Assignor's rights within the People's Republic of China (excluding Taiwan, Hong Kong SAR and Macau SAR).

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 intergovernmental 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 as of the latest date of signature below (Effective Date).

ASSIGNOR:

NOKIA SHANGHAI BELL CO., LTD.

By:

Name: Edward Zhang

Title: Authorized Signatory

Date: Jul 28, 2021

ASSIGNOR, ASSIGNEE:

NOKIA SOLUTIONS AND NETWORKS OY

By: Ari Aarnio

_{Name:} Ari Aarnio

Title: Authorized Signatory

Date: Jul 28, 2021

ASSIGNOR, ASSIGNEE:

NOKIA SOLUTIONS AND NETWORKS OY

By: Anno Morphological 28, 2022, 11:25 GMT+3)

Name: Anna Haipola

Title: <u>Authorized Signatory</u>

Date: Jul 28, 2021

Appendix

Reference Number	Title	Application Number	Filing Date
104375-WO-PCT	WIRELESS DATA TRANSMISSION	PCT/CN2018/082137	08 Apr 2018