506828749 08/20/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT6875569

CONVEYING PARTY DATA	Name	Execution Date
CONVEYING PARTY DATA		
SEQUENCE:	2	
NATURE OF CONVEYANCE:	ASSIGNMENT	
SUBMISSION TYPE:	NEW ASSIGNMENT	

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17407698

CORRESPONDENCE DATA

Fax Number:	(216)363-9001
	o the e-mail address first; if that is unsuccessful, it will be sent d; if that is unsuccessful, it will be sent via US Mail.
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ATTORNEY DOCKET NUMBER:	LUTZ 202410US01 / 320199
NAME OF SUBMITTER:	JOSEPH D. DREHER
SIGNATURE:	/Joseph D. Dreher/
DATE SIGNED:	08/20/2021

Total Attachments: 3

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ASSIGNMENT

This Assignment ("Assignment") shall be effective as of 20-Aug-2020 (the "Effective Date").

WHEREAS, Nokia Solutions and Networks Oy, a corporation established and existing under the laws of **Finland** and having its principal place of business at **Karakaari 7, 02610 Espoo**, **Finland** (hereafter, together with any successors, legal representatives or assigns thereof, called "Assignor") owns an interest in the invention identified below by the invention docket reference number, title, and inventors' names ("Invention"), as well as the patent application(s) filed with respect to said Invention and listed below.

AND WHEREAS, Nokia Technologies Oy, a corporation established and existing under the laws of **Finland** and having its principal place of business at **Karakaari 7, 02610 Espoo, Finland** (hereafter, together with any successors, legal representatives or assigns thereof, called "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. The Assignor and Assignee together are hereafter referred to as "Parties".

NOW, THEREFORE, in consideration of the promises herein and for good and valuable consideration in the sum of one Dollar (\$1.00), the receipt of which from Assignee is hereby acknowledged and confirmed, Assignor has assigned, sold, transferred and set over, and does hereby assign, sell, transfer and set over, subject to any existing rights, licenses and/or obligations of or to third parties, 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 or inventions (collectively, "Inventions") described in

Invention Docket Reference Number	Title	Inventor(s)
NC320199	SUBSPACE LEGALIZATION AND EIGENVALUE DECOMPOSITION	Piirainen, Olli Juhani Vihriälä, Jaakko Eino Ilmari Shental, Ori Venkatesan, Sivarama Myllylä, Markus

and all the Intellectual Property rights and privileges under any and all forms of protection, including:

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

20205815 filed in Finland on 21-Aug-2020

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 Inventions, (collectively, "Applications") including all rights to file and prosecute such Applications directly in the name of Assignee;

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- (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 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 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.

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IN WITNESS WHEREOF, each of the Parties has caused this Assignment to be executed by its duly authorized representatives **as of the Effective Date**.

ASSIGNOR:

|--|

	Solutions and Networks Oy r Möllar
By: Per Ma	r <u>Möller</u> siler (Aug 26, 2020 08:59 GMT+3)
Name:	Per Möller
Title: <u>A</u>	Authorized Signatory
Date:	Aug 26, 2020

Nokia Solutions and Networks Oy	
Arí Aarnio By: An Aarnio (Aug 26, 2020 08:03 GMT+3)	
_{Name:} Ari Aarnio	
Title: Authorized Signatory	
Date: Aug 26, 2020	

ASSIGNEE:

Nokia T	echnologies Oy
By: Kari Puri	K. B
Name: _	Kari Puranen
Title: <u>Au</u>	thorized Signatory
Date: A	ug 26, 2020

ASSIGNEE:

Nokia Technologies Oy	
By: Kalle Mollanen (Aug 26, 2020 07:37 GMT+3)	
Name: Kalle Moilanen	
Title: Authorized Signatory	
Date: Aug 26, 2020	