506882574 09/22/2021

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
NOKIA BELL NV	10/10/2020

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:	17481389

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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ATTORNEY DOCKET NUMBER:	29250S-000161-US
NAME OF SUBMITTER:	GARY D. YACURA, REG NO. 35,416
SIGNATURE:	/Gary D. Yacura/
DATE SIGNED:	09/22/2021

Total Attachments: 3

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PATENT 506882574 REEL: 057561 FRAME: 0047

ASSIGNMENT ("ASSIGNMENT")

WHEREAS, Nokia Bell NV, a corporation established and existing under the laws of Belgium and having its principal place of business at CopernicusIaan 50, B-2018 Antwerpen, Belgium (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, if any.

AND 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 "Assignee"), wants to acquire the entire right, title and interest in and to 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)
NC321012	UPSTREAM FRAGMENTATION CONTROL ON A SHARED COMMUNICATION MEDIUM	Pauwels, Bart Van Hoof, Werner Mertens, Carl Schelfhout, Koenraad Fivez, Michaël

and all the Intellectual Property rights and privileges under any and all forms of protection;

- (b) 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;
- (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);

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- (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.

Application Number	Application Title	Filing Date

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 on the respective dates entered below.

<u>ASSIGNOR</u> :	<u>ASSIGNOR</u> :
Nokia Bell NV By:	Nokia Bell NV <u>Anne Cianperä</u> By: Anne Geografia (Color La Color
_{Name:} Huw Edwards	Name: Anne Ojanperä
Title: <u>Authorized Signatory</u>	Title: <u>Authorized Signatory</u>
Date: Oct 10, 2020	Oct 14, 2020
ASSIGNEE:	ASSIGNEE:
Nokia Solutions and Networks Oy	Nokia Solutions and Networks Oy
By: Anna Magoda (Oct. 12, 2020 Metto GMT-3)	Per Möller By: %- %-18-10-12, 2020 08-24-6001-11
_{Name:} Anna Haipola	Name: Per Möller
Title: Authorized Signatory	Title: <u>Authorized Signatory</u>
Date: Oct 12, 2020	Oct 12, 2020

RECORDED: 09/22/2021