

<b>PATENT ASSIGNMENT COVER SHEET</b>
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EPAS ID: PAT4724350

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT

**CONVEYING PARTY DATA**

Name	Execution Date
NOKIA SOLUTIONS AND NETWORKS GMBH & CO. KG	11/17/2017

**RECEIVING PARTY DATA**

<b>Name:</b>	NOKIA SOLUTIONS AND NETWORKS OY
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<b>City:</b>	ESPOO
<b>State/Country:</b>	FINLAND
<b>Postal Code:</b>	02610

**PROPERTY NUMBERS Total: 28**

Property Type	Number
Patent Number:	6917818
Patent Number:	6907450
Patent Number:	6343329
Patent Number:	6958974
Patent Number:	7068625
Patent Number:	7016443
Patent Number:	7058045
Patent Number:	7221683
Patent Number:	7564807
Patent Number:	7885389
Patent Number:	7411938
Patent Number:	7362746
Patent Number:	9060060
Patent Number:	7132969
Patent Number:	8175062
Patent Number:	7054650
Patent Number:	7668543
Patent Number:	7987288
Patent Number:	7321583
Patent Number:	8223746

PATENT

Property Type	Number
Patent Number:	7680103
Patent Number:	7742465
Patent Number:	8295447
Patent Number:	9549076
Patent Number:	8260303
Patent Number:	8275987
Patent Number:	8605664
Application Number:	12226184

**CORRESPONDENCE DATA**

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**ATTORNEY DOCKET NUMBER:** 30100-103753TT-1

**NAME OF SUBMITTER:** ROXANA A. SULLIVAN

**SIGNATURE:** /ras/

**DATE SIGNED:** 12/08/2017

**Total Attachments: 3**

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## Assignment

We, **Nokia Solutions and Networks GmbH & Co. KG**. (hereinafter called "the Assignor")  
having a principal place of business  
at

**St.-Martin-Strasse76, 81541 Munich, Germany (Assignor)**

do hereby declare that we are the proprietor of the following Patent for US:

**see enclosed Annex**

and in consideration of the sum of One US Dollar (\$1.00) in hand paid and other good and valuable consideration the receipt of which from ASSIGNEE is hereby acknowledged, Assignor has sold, assigned, transferred and set over, and does hereby sell, assign, transfer and set over to ASSIGNEE any and all right, title and interest that it has or may have in and to Patent No./ Application no.: **see enclosed Annex** and all patents, patent applications, foreign patents, foreign patent applications, continuations, continuations-in-part, divisionals, extensions, renewals, reissues and re-examinations related to all inventions thereof, including without limitation, all rights to claim priority on the basis thereof, all rights to sue for past, present and future infringement, including the right to collect and receive any damages, royalties, or settlements for such infringements, all rights to sue for injunctive or other equitable relief, and any and all causes of action relating to any of the inventions or discoveries thereof to the Assignee

**Nokia Solutions and Networks Oy, (hereinafter called "the Assignee")**

**at Karaportti 3, Espoo 02610, Finland (Assignee)**

and agree that the assignment is recorded with the Patent Office.

We, the Assignee, hereby agree to the afore-mentioned assignment and apply for recording of the assignment in the registers of the Patent Office.

Place/Date, *Munich, 17.11.2017*

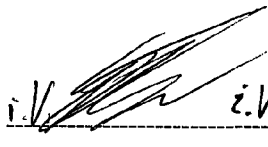
Place/Date, *Munich, 17.11.2017*

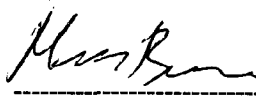
Assignor:

Assignee:

**Nokia Solutions and Networks  
GmbH & Co. KG.**

**Nokia Solutions and Networks Oy,**

 *i.V. W. Meyer*

 *Manfred Goretzki*

Bernd Schaar      Walter Meyer

Markus Borgström      Manfred Goretzki

both authorized officers

both authorized officers

Annex to Assignment Nokia Solutions and Networks GmbH & Co. KG ./.. Nokia Solutions and Networks Oy

U.S. Patent Nos.	TITLE
6917818	METHOD FOR CONTROLLING SWITCHING-ORIENTED ACTIONS IN A MOBILE RADIO TELEPHONE SYSTEM AND SUCH A MOBILE RADIO TELEPHONE SYSTEM
6907450	METHOD AND APPARATUS FOR THE SYNCHRONIZED REPRESENTATION OF NETWORK CONTENTS
6343329	TELECOMMUNICATION SYSTEM AND METHOD FOR EXCHANGING INFORMATION BETWEEN AN E-MAIL SERVICE AND A SUBSCRIBER IN A TELECOMMUNICATION NETWORK
6958974	METHOD FOR PROVIDING A STABLE QUALITY OF DATA SERVICES WITHIN A PACKET-SWITCHING NETWORK
7068625	METHOD FOR SWITCHING A COMMUNICATIONS LINK TO ANOTHER CHANNEL (HANDOVER)
7016443	SYNCHRONISATION METHOD AND SYSTEM FOR CLOCK SIGNAL SOURCES, IN PARTICULAR IN PACKET TRANSMISSION COMMUNICATION SYSTEMS
7058045	METHOD AND NETWORK ELEMENT FOR PROCESSING SIGNALING DATA AND FOR CONTROLLING CONNECTIONS OF SUBSCRIBERS OF A PACKET-SWITCHING COMMUNICATIONS NETWORK
7221683	TELECOMMUNICATIONS SYSTEM HAVING A PACKET-SWITCHING COMMUNICATIONS NETWORK AND METHOD FOR OPERATING SUCH A TELECOMMUNICATIONS SYSTEM
7564807	METHOD FOR CONTROLLING RECORDED ANNOUNCEMENT AND INTERACTIVE VOICE RESPONSES IN PACKET NETWORKS
7885389	METHOD FOR CONTROLLING ANNOUNCEMENTS AND INTERACTIVE RESPONSES IN AN EXCHANGE
7411938	SPLITTING UP THE HANDLING OF-VOICE CHANNEL-RELATED FUNCTIONS IN A TELECOMMUNICATIONS NETWORK, WHEREBY ONLY THE LEAST USED FUNCTIONS ARE CENTRALLY PROVIDED
7362746	PROVISION OF IVR RESOURCES IN BICC NETWORKS
9060060	EFFICIENT UTILIZATION OF IVR RESOURCES SUPPLIED TO SWITCHING SYSTEMS
7132969	CONFIGURATION FOR DIGITAL-ANALOG CONVERSION OF HIGH-FREQUENCY DIGITAL INPUT SIGNAL INTO CARRIER-FREQUENCY ANALOG OUTPUT SIGNAL
8175062	METHOD AND STATION FOR TRANSMITTING DATA IN A RADIO COMMUNICATION SYSTEM
7054650	METHOD FOR OBTAINING PRESENCE DATA
7668543	TREATMENT OF A LOCATION REQUEST BY A FIRST LOCATION REQUEST TREATMENT DEVICE (A GATEWAY MOBILE LOCATION CENTRE) IN A HOME REGISTER (HLR) FOR RETRANSMISSION TO A SECOND LOCATION REQUEST TREATMENT DEVICE
7987288	METHOD AND ARRANGEMENT FOR ROUTING DATA PACKETS IN A PACKET-SWITCHING DATA NETWORK
7321583	DATA TRAFFIC SEPARATION METHOD FOR USE IN A PACKET-ORIENTED MOBILE RADIO NETWORK

Annex to Assignment Nokia Solutions and Networks GmbH & Co. KG ./, Nokia Solutions and Networks Oy

8223746	MORE ECONOMICAL RESOURCE APPLICATION ON THE USER INTERACTION WITHIN A SPEECH DIALOGUE SYSTEM IN A PACKET NETWORK BY MEANS OF A SIMPLIFYING PROCESSING OF SIGNALLING INFORMATION
7680103	DEVICE AND METHOD FOR BILLING CONNECTIONS THAT ARE ROUTED VIA A PACKET NETWORK
7742465	METHOD AND DEVICE FOR TAPPING THE PAYLOAD DATA OF MULTIMEDIA CONNECTIONS IN A PACKET NETWORK
8295447	METHOD FOR STORING AND FORWARDING MULTIMEDIA MESSAGES FOR MULTIMEDIA CALLS
9549076	METHOD FOR LAWFUL INTERCEPTION DURING CALL FORWARDING IN A PACKET-ORIENTED TELECOMMUNICATIONS NETWORK
8260303	INDICATION OF CONTENT OF MESSAGE ELEMENT
8275987	METHOD FOR TRANSMISSION OF DHCP MESSAGES
8605664	ADAPTIVE MODULATION AND CODING IN A SC-FDMA SYSTEM
<b>U.S. Patent Application No.</b>	<b>TITLE</b>
12/226184	METHOD OF OPERATION IN A DUAL CARRIER COMMUNICATION SYSTEM