

## PATENT ASSIGNMENT COVER SHEET

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<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
MIESZKO CHMIEL	01/02/2017
MARTIN KOLLAR	12/28/2016
YIZHI YAO	01/05/2017
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	NOKIA SOLUTIONS AND NETWORKS OY
<b>Street Address:</b>	KARAPORTTI 3
<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>
<b>Application Number:</b>	15326617
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(408)737-0908
<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>Phone:</b>	650-868-6292
<b>Email:</b>	Sandy.fong-Hou@nokia.com
<b>Correspondent Name:</b>	NOKIA USA INC. ATTN: INTELLECTUAL PROPE
<b>Address Line 1:</b>	200 SOUTH MATHILDA AVE
<b>Address Line 4:</b>	SUNNYVALE, CALIFORNIA 94086
<b>ATTORNEY DOCKET NUMBER:</b>	88817US INV TO NSN
<b>NAME OF SUBMITTER:</b>	SANDY FONG-HOU
<b>SIGNATURE:</b>	/Sandy Fong-Hou/
<b>DATE SIGNED:</b>	01/16/2017
<b>Total Attachments: 4</b>	
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source=88817US_ExecutedAssign#page4.tif	

**ASSIGNMENT**

I/we, (The ASSIGNOR(S)):

**Mieszko Chmiel**  
**Martin Kollar**  
**Yizhi Yao**

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, hereby assign to (hereafter referred to as The ASSIGNEE):

Nokia Solutions and Networks Oy  
 Karaportti 3  
 02610 Espoo  
 Finland

An invention entitled (invention Title):

**MONITORING AND OPTIMIZING OF CONTROL CHANNEL USAGE**

The PATENT RIGHTS referred to in this agreement are:

a national Patent Application No. \_\_\_\_\_ filed on \_\_\_\_\_  
 European Patent Application No. \_\_\_\_\_ filed on \_\_\_\_\_  
 PCT application No. PCT/CN2014/082527 filed on July 18, 2014.

for this invention, executed by the ASSIGNOR(S)

U.S. Patent Application Serial No. \_\_\_\_\_, filed \_\_\_\_\_  
 U.S. Patent No. \_\_\_\_\_, issued \_\_\_\_\_

The PATENT RIGHTS assigned under this agreement are:

U.S. Patent rights  
 worldwide Patent rights. In this case, the assignee shall have the right to claim the benefit of the filing date of any Patent Application identified above.  
 the full and exclusive right to the invention;

The ASSIGNOR(S) do hereby assign the following to each ASSIGNEE; their successors and assigns:

an equal interest in and to the entire right, title and interest in and to the PATENT RIGHTS in the invention, all continuations, continuations-in-part, divisionals, re-issues, and re-examination patents and patent applications; and

the right to claim priority under 35 U.S.C. § 119, based on any earlier foreign applications for this invention.

As to all U.S. Patent Applications assigned under this Agreement, the ASSIGNOR(S) hereby authorize(s) and request(s) the Commissioner of Patents and Trademarks to issue all Letters Patent to the ASSIGNEE(S) as the ASSIGNEE(S) of an equal interest in the entire right, title and interest, for the sole use and enjoyment of said ASSIGNEE(S), their successors and assigns.

Further, the ASSIGNOR(S) agree(s) to communicate to said ASSIGNEE(S), or their representatives, any facts known to the ASSIGNOR(S) respecting said invention, and testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, substitute, renewal, reexamination and reissue applications, execute all necessary assignment papers to cause any and all Letters Patent to be issued to said ASSIGNEE(S), make all rightful oaths and generally do everything necessary or desirable to aid said ASSIGNEE(S), their successors and assigns, to obtain and enforced proper protection for said invention.

Further, I/We authorize the attorney of record to update this document to include Patent Office information as deemed necessary (i.e., filing date, serial number, etc.);

Each Inventor: Please sign and date below:

NC88817

M Chmiel

[Mieszko Chmiel]

02.01.2017

Date

Lechowicz

Witness Signature

Printed Name

LECHOWICZ

PIOTR

02.01.2017

Date

NC88817

Martin Kollar

[Martin Kollar]

28.12.2016

Date

[Signature]

Witness Signature

Printed Name KANKA KOLLAROVA

28.12.2016

Date

NC88817

Yao Yizhi

[Yizhi Yao]

Jan. 5, 2017

Date

Zhao Dongmei

Witness Signature

Printed Name Zhao Dongmei

Jan. 05, 2017

Date