504128831 12/08/2016 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4175502

SUBMISSION TYPE:		NEW ASSIGNMENT			
NATURE OF CONVEYANCE:		ASSIGNMENT			
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MIIKKA TAPANI VILERMO				11/03/2016	
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Application Number:		1534	1072		
PROPERTY NUMBERS Total: 1 Property Type			Number]	
Application Number:		1534	1072		
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otal Attachments: 4				nment#page1.tif	

ASSIGNMENT

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

Antero Tossavainen Miikka Tapani Vilermo Matti Kustaa Kajala

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

Nokia Technologies OY Karaportti 3 02610 Espoo Finland.

An invention entitled (invention Title):

VIRTUAL DUPLEX OPERATION

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.	filed on

PCT application No.

for this invention, executed by the ASSIGNOR(S)

- X U.S. Patent Application Serial No. <u>15/341072</u> filed November 02, 2016.
- U.S. Patent No. _____, issued

The PATENT RIGHTS assigned under this agreement are:

- X 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 reexamination 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 relissue 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:

PATENT REEL: 040596 FRAME: 0002 NC101785

dition. £.... Witness Signature-

Printed Name

[Antero Tossavainen]

oni

<u>Măkince</u>

 $\frac{3}{11} \frac{1}{2016}$ Date

Date

PATENT REEL: 040596 FRAME: 0003

Co. K. Miller É

[Miikka Tapani Vilermo]

- E

Witness Signature Printed Name Dhi Makhen

<u>3 NOVE MIER 20/6</u> Date

<u>3 November 2016</u> Date

/ and

[Matti Kustaá Kajala]

Witness Signature Milako Tarami

3. 11. 2016

Date

<u>ි. 11, 2016</u> Date