

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT7307956

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
JUSSI ARTTURI LEPPANEN	07/23/2019
TAPANI JOHANNES PIHLAJAKUJA	07/16/2019
ADRIANA VASILACHE	07/23/2019
KARI JUHANI JARVINEN	07/18/2019
RECEIVING PARTY DATA	
Name:	NOKIA TECHNOLOGIES OY
Street Address:	7 KARAKAARI
City:	ESPOO
State/Country:	FINLAND
Postal Code:	02610
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	17642500
CORRESPONDENCE DATA	
Fax Number:	
<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>	
Email:	staci.ruggiero@nokia.com
Correspondent Name:	NOKIA OF AMERICA CORPORATION
Address Line 1:	600 MOUNTAIN AVE
Address Line 4:	MURRAY HILL, NEW JERSEY 07974
ATTORNEY DOCKET NUMBER:	317508-US-NP
NAME OF SUBMITTER:	STACI RUGGIERO
SIGNATURE:	/Staci Ruggiero/
DATE SIGNED:	05/02/2022
Total Attachments: 5	
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source=NC317508-FI-NP_Executed Assignment (1)#page4.tif	

ASSIGNMENT - WORLDWIDE

ASSIGNOR(S)

Jussi Artturi Leppanen, Tampere, Finland**Tapani Johannes Pihlajakuja**, Vantaa, Finland**Adriana Vasilache**, Tampere, Finland**Kari Juhani Jarvinen**, Tampere, Finland

ASSIGNEE

Nokia Technologies Oy

Karakaari 7, 02610 Espoo, Finland

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the ASSIGNOR(S) agree to assign and hereby assign, sell, transfer and set over to the ASSIGNEE and its successors, assigns and legal representatives, the entire right, title and interest, for United States of America and for all other countries in and to (1) the invention(s) identified by the following title or application number and filing date, and (2) any and all related inventions ("RELATED INVENTIONS" as defined below).

Title of Invention: ENCODING OF COMBINED MASA AND OBJECT FORMAT DIRECTIONAL METADATA

Application Title: SPATIAL AUDIO PARAMETER ENCODING AND ASSOCIATED DECODING

Application number: FI 20195777

Filing date: 2019-09-17
(YYYY-MM-DD)

I/we, the ASSIGNOR(S), hereby authorize and request a representative of the ASSIGNEE to insert the application title, application number and filing date when known/received, after the execution of this document. The ASSIGNOR(S) hereby acknowledge and agree that the ASSIGNEE shall have the right to claim priority, directly or through another patent application, to the application identified above in any and all related patent applications subsequently filed in all jurisdictions.

I/we the ASSIGNOR(S) hereby acknowledge and agree that RELATED INVENTIONS include all national, regional and international patent applications filed and to be filed in any and all jurisdictions, that claim priority to the invention(s) identified by the above title or application number and filing date, said patent applications include all divisionals, continuations, re-issues, re-examinations, and continuations-in-part applications, and RELATED INVENTIONS include all rights and privileges in said patent applications and under any and all letters patent that may be granted in the United States of America and in all other countries resulting from said patent applications.

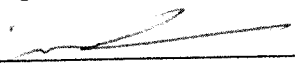
The ASSIGNOR(S) authorize the ASSIGNEE to make applications for such protection in its own name and maintain such protection in any and all countries including the United States of America, and to invoke and claim for any application for patent or other form of protection for said invention(s), without further authorization from us, any and all benefits, including the rights of priority provided by any and all treaties, conventions, or agreements.

The ASSIGNOR(S) hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of the ASSIGNEE to apply for patent or other form of protection for said invention(s) and to claim the aforesaid benefit of the right of priority.



The ASSIGNOR(S) request that any and all patents for said invention(s) be issued to the ASSIGNEE, its/their successors, assigns and legal representatives, in the United States of America and in all other countries, or to such nominees as the ASSIGNEE may designate.

The ASSIGNOR(S) agree that, when requested, we shall, without charge to the ASSIGNEE sign all papers, and do all acts which may be necessary, desirable or convenient in connection with said applications, patents, or other forms of protection.

In witness whereof, each inventor/assignor please sign and date below:

Inventor (First Middle LAST)	Signature	Date (YYYY-MM-DD)
<u>Jussi Artturi Leppanen</u>		<u>2019-07-23</u>
<u>Tapani Johannes Pihlajakujja</u>		
<u>Adriana Vasilache</u>	<u>Varloche</u>	<u>2019-07-23</u>
<u>Kari Juhani Jarvinen</u>		

This assignment should preferably be signed by the inventor(s) before (a) at least two witnesses who also sign here, or (b) a Notary Public if within the U.S.A.:

Witness Name (First Middle LAST)	Signature	Date (YYYY-MM-DD)
<u>Antti Johannes ERONEN</u>		<u>2019-07-23</u>
<u>SUJEET MATE</u>		<u>2019-07-23</u>

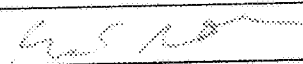
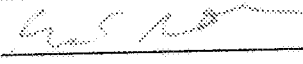
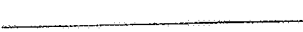

The ASSIGNOR(S) authorize the ASSIGNEE to make applications for such protection in its own name and maintain such protection in any and all countries including the United States of America, and to invoke and claim for any application for patent or other form of protection for said invention(s), without further authorization from us, any and all benefits, including the rights of priority provided by any and all treaties, conventions, or agreements.

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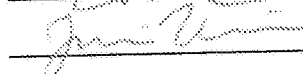
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In witness whereof, each inventor/assignor please sign and date below:

Inventor (First Middle LAST)	Signature	Date (YYYY-MM-DD)
<u>Jussi Artturi Leppanen</u>		<u>2019-07-16</u>
<u>Tapani Johannes Pihlajakujia</u>		<u>2019-07-16</u>
<u>Adriana Vasilache</u>		<u>2019-07-16</u>
<u>Kari Juhani Jarvinen</u>		<u>2019-07-16</u>

This assignment should preferably be signed by the inventor(s) before (a) at least two witnesses who also sign here, or (b) a Notary Public if within the U.S.A.:

Witness Name (First Middle LAST)	Signature	Date (YYYY-MM-DD)
<u>SAMPO VESA</u>		<u>2019-07-16</u>
<u>Jouko Virolainen</u>		<u>2019-08-05</u>

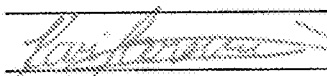
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The ASSIGNOR(S) hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of the ASSIGNEE to apply for patent or other form of protection for said invention(s) and to claim the aforesaid benefit of the right of priority.

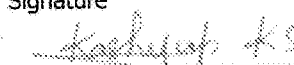
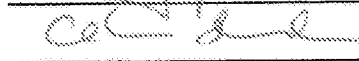
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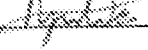

In witness whereof, each inventor/assignor please sign and date below:

Inventor (First Middle LAST)	Signature	Date (YYYY-MM-DD)
<u>Jussi Artturi Leppanen</u>	_____	_____
<u>Tapani Johannes Pihlajakula</u>	_____	_____
<u>Adriana Vasilache</u>	_____	_____
<u>Kari Juhani Jarvinen</u>		<u>2019-07-18</u>

This assignment should preferably be signed by the inventor(s) before (a) at least two witnesses who also sign here, or (b) a Notary Public if within the U.S.A.:

Witness Name (First Middle LAST)	Signature	Date (YYYY-MM-DD)
<u>Kashyap Kamnath Sreedhar</u>		<u>2019-07-18</u>
<u>ANNA HANNUSELA</u>		<u>2019-07-18</u>

The ASSIGNEE accepts this assignment:

Name	<u>Nico van Waes</u>	Signature	<u></u>
Title	<u>Head of Technology Area, Patenting</u>	Date (YYYY-MM-DD)	<u>AUG 28 2019</u>
Name	<u>Jarmo J. Kemppainen</u>	Signature	<u></u>
Title	<u>Senior IPR Specialist</u>	Date (YYYY-MM-DD)	<u>AUG 28 2019</u>