

## PATENT ASSIGNMENT COVER SHEET

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|                                                                                                                                                                                                 |                                          |
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| <b>SUBMISSION TYPE:</b>                                                                                                                                                                         | NEW ASSIGNMENT                           |
| <b>NATURE OF CONVEYANCE:</b>                                                                                                                                                                    | ASSIGNMENT                               |
| <b>CONVEYING PARTY DATA</b>                                                                                                                                                                     |                                          |
| <b>Name</b>                                                                                                                                                                                     | <b>Execution Date</b>                    |
| YING CHEN                                                                                                                                                                                       | 04/17/2011                               |
| MISKA HANNUKSELA                                                                                                                                                                                | 04/15/2011                               |
| <b>RECEIVING PARTY DATA</b>                                                                                                                                                                     |                                          |
| <b>Name:</b>                                                                                                                                                                                    | NOKIA CORPORATION                        |
| <b>Street Address:</b>                                                                                                                                                                          | KARAPORTTI 3                             |
| <b>City:</b>                                                                                                                                                                                    | ESPOO                                    |
| <b>State/Country:</b>                                                                                                                                                                           | FINLAND                                  |
| <b>Postal Code:</b>                                                                                                                                                                             | FIN-02150                                |
| <b>PROPERTY NUMBERS Total: 1</b>                                                                                                                                                                |                                          |
| <b>Property Type</b>                                                                                                                                                                            | <b>Number</b>                            |
| <b>Application Number:</b>                                                                                                                                                                      | 15979121                                 |
| <b>CORRESPONDENCE DATA</b>                                                                                                                                                                      |                                          |
| <b>Fax Number:</b>                                                                                                                                                                              | (704)444-1111                            |
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| <b>Correspondent Name:</b>                                                                                                                                                                      | NOKIA CORPORATION AND ALSTON & BIRD LLP  |
| <b>Address Line 1:</b>                                                                                                                                                                          | BANK OF AMERICA PLAZA, 101 SOUTH TRYON S |
| <b>Address Line 2:</b>                                                                                                                                                                          | SUITE 4000                               |
| <b>Address Line 4:</b>                                                                                                                                                                          | CHARLOTTE, NORTH CAROLINA 28280-4000     |
| <b>ATTORNEY DOCKET NUMBER:</b>                                                                                                                                                                  | 042933/514743                            |
| <b>NAME OF SUBMITTER:</b>                                                                                                                                                                       | GUY R. GOSNELL                           |
| <b>SIGNATURE:</b>                                                                                                                                                                               | /Guy R. Gosnell/                         |
| <b>DATE SIGNED:</b>                                                                                                                                                                             | 05/14/2018                               |
| <b>Total Attachments: 3</b>                                                                                                                                                                     |                                          |
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| source=514743_Assignment_Inventors-Corp#page3.tif                                                                                                                                               |                                          |

**ASSIGNMENT**

WHEREAS, we,

- |     |                  |    |                           |
|-----|------------------|----|---------------------------|
| (1) | Ying Chen        | of | San Diego, California USA |
| (2) | Miska Hannuksela | of | Ruutana, Finland          |

have invented certain improvements in

**SHARING OF MOTION VECTOR IN 3D VIDEO CODING**

For which we have executed an application for Letters Patent of the United States of America, filed on October 17, 2008 and assigned application no. 61/106,503 and filed on 04/15/2011 and assigned application no. 13/124641; and

WHEREAS, 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.);

WHEREAS, NOKIA CORPORATION, a corporation organized under the laws of Finland, having its principal office in Espoo, Finland (hereinafter referred to as "ASSIGNEE"), is desirous of acquiring the entire right, title and interest in and under the said invention and the said application, and in and to any and all Letters Patent which shall be granted therefore in the United States of America and in any and all foreign countries;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we have sold and do hereby sell, assign, transfer and convey unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and to said invention and application, and in all divisionals, reissues, substitutions, continuations, continuation-in-part and, in any and all Letters Patents of the United States of America and all foreign countries or reissues, reexaminations, or extensions thereof which may be granted therefore or thereon, for the full end of the term for which said Letters Patent may be granted, together with the right to claim the priority of said application in all foreign countries in accordance with the International Convention, the same to be held and enjoyed by said ASSIGNEE, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by me if this assignment and sale had not been made.

WE ALSO HEREBY authorize and request the Commissioner of Patents and Trademarks to issue all patents for said invention, or patents resulting therefrom to the said ASSIGNEE of my entire right, title and interest.

WE FURTHER HEREBY sell and assign to said ASSIGNEE, its successors, assigns and legal representatives the full and exclusive rights, title and interest to the invention disclosed in said application throughout the world, including, without limitation, the right to file applications and obtain patents, utility models, industrial models and designs for said invention in its own name throughout the world including all rights of priority, all rights to publish cautionary notices reserving ownership of said invention and all rights to register said invention in appropriate registries. We further agree to execute any and all powers of attorney, applications, assignments, declarations, affidavits, and any other papers in connection therewith necessary to perfect such rights, title and interest in ASSIGNEE, its successors, assigns and legal representatives.

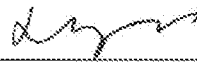
WE HEREBY covenant that we have not and we will not execute any agreement in conflict herewith.

WE HEREBY further covenant, and agree to bind our heirs, legal representatives, and assigns, promptly to communicate to said ASSIGNEE or its representatives any facts known to us relating to said invention, to testify in any interference or legal proceedings involving said invention, to execute any additional papers which may be requested to confirm the right of the assignee, its representatives, successors, or assigns to secure patent or similar protection for the said invention in all countries and to vest in the assignee complete title to the said invention and Letters Patent, without further compensation, but at the expense of said ASSIGNEE, its successors, assigns, and other legal representatives.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the date indicated below.

  
\_\_\_\_\_  
Ying Chen

04/17/2011  
\_\_\_\_\_  
Date

  
\_\_\_\_\_  
Witness Signature  
Printed Name Jing Xu

04.17.2011  
\_\_\_\_\_  
Date

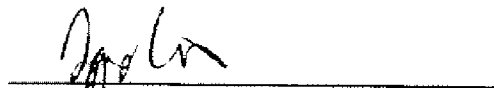
IN WITNESS WHEREOF, I have hereunto set my hand and seal on the date indicated below.



Miska Hannuksela

15 APRIL, 2011

Date



Witness Signature

Printed Name IGOR CURCIO

15 APRIL 2011

Date