

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT3916580

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|---|----------------------------------|
| SUBMISSION TYPE: | NEW ASSIGNMENT |
| NATURE OF CONVEYANCE: | ASSIGNMENT |
| CONVEYING PARTY DATA | |
| Name | Execution Date |
| JIAO WANG | 04/13/2016 |
| MOHAMED K CHERIF | 05/28/2016 |
| RECEIVING PARTY DATA | |
| Name: | ATI TECHNOLOGIES ULC |
| Street Address: | ONE COMMERCE VALLEY DRIVE EAST |
| City: | MARKHAM |
| State/Country: | CANADA |
| Postal Code: | L3T 7X6 |
| PROPERTY NUMBERS Total: 1 | |
| Property Type | Number |
| Application Number: | 15099247 |
| CORRESPONDENCE DATA | |
| Fax Number: | (215)568-6499 |
| <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> | |
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| Correspondent Name: | TASHA ALBERT |
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| ATTORNEY DOCKET NUMBER: | ATI-110072-US-DIV |
| NAME OF SUBMITTER: | DENNIS F. DEFINO, JR. |
| SIGNATURE: | /DENNIS F. DEFINO, JR./ |
| DATE SIGNED: | 06/14/2016 |
| Total Attachments: 11 | |
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ASSIGNMENT OF PATENT RIGHTS

This is an assignment of patent rights between inventor(s) **Jiao WANG and Mohamed K. CHERIF** (hereinafter referred to as the "Inventor") and ATI Technologies ULC, having a place of business at One Commerce Valley Drive East, Markham, Ontario, Canada (hereinafter referred to as the "Assignee").

WHEREAS, Inventor is named as an inventor(s) in the patent application filed in **the United States of America** on _____, entitled **AN EFFICIENT MODE DECISION METHOD FOR MULTIVIEW VIDEO CODING**, having application no. _____, and having a docket number of **ATI-110072-US-DIV** (hereinafter referred to as the "Application"); and

WHEREAS, Assignee has a desire to acquire all rights, title, and interest in the invention(s) disclosed in the Application (hereinafter referred to as the "Invention(s)"), including any rights, title, and interest in the Invention(s) not previously transferred to Assignee through prior agreement.

NOW, THEREFORE, the parties agree as follows:

1. To the extent that Inventor is subject to a prior agreement transferring rights, title, and/or interest in the Invention(s) to the Assignee, Inventor hereby confirms such transfer.
2. To the extent that Inventor retains any rights, title, or interest in the Invention(s) not vested in the Assignee on the date(s) of execution of this Assignment, Inventor hereby assigns and otherwise transfers to the Assignee Inventor's entire right, title, and interest, throughout the world, in and to: the Invention(s), including any patent applications, patents, invention registrations, and equivalents thereof (including any and all provisional, international, regional, and national patents and patent applications, and all divisional applications, continuation applications, continuation-in-part applications, renewals, reissue applications, reexamination applications, substitutes, and extensions thereof), for the Invention(s) and all rights to claim priority thereto. Inventor further assigns and otherwise transfers to Assignee all causes of action and remedies arising under any patent or patent application for the

Invention(s) prior to, on, or after the date(s) of execution of this Assignment. Inventor shall not be entitled to an accounting for any causes of action or remedies pursued by Assignee.

3. To the extent not covered by Paragraph 2, Inventor hereby assigns and transfers to the Assignee, all right, title, and interest, design and patent rights and all causes of action and remedies arising therefrom, that Inventor may have acquired during Inventor's employment/engagement with the Assignee, in and to all ideas, inventions, and works of authorship, including, without limitation, computer programs, software and documentation, improvements, or discoveries which Inventor conceived, made, developed, or worked on (whether solely or jointly with others, and whether or not copyrightable or patentable or reduced to drawings, written description, documentation, models, or other tangible form) during the term of Inventor's employment/engagement and that relate either to Assignee's products, manufacturing processes, manufacturing equipment, process controls, services, or research and development, or to Inventor's employment/engagement activities (collectively "Work Product"). Inventor hereby waives, in favor of the Assignee, all moral rights arising under the *Copyright Act* (Canada) as amended (or any successor legislation of similar effect) or similar legislation in any applicable jurisdiction, or at common law, to the full extent that such rights may be waived in each respective jurisdiction, that Inventor may have now or in the future with respect to the Work Product.
4. The transfers set forth in Paragraphs 1, 2, and 3 above are in consideration for the sum of at least one U.S. dollar (US\$1) (or its equivalent) and/or other consideration for which both parties acknowledge to be valuable. Such consideration includes but is not limited to at least one of the following: continued employment/engagement, monetary payment (including the one specifically referenced herein), or other benefit hereby acknowledged as received.
5. During and after Inventor's employment/engagement with the Assignee, Inventor will assist the Assignee in every reasonable way to obtain and maintain, for the use and benefit of the Assignee or its nominees, patents, copyrights, or other protection for

any ideas, inventions, works of authorship, improvements, or discoveries, including (without limitation) by signing any papers, authorizations, applications, or assignments, making and keeping proper records, and providing evidence or testimony. Assignee will pay for any actual and reasonable expenses Inventor incurs in providing such assistance. If Assignee is unable for any reason to secure Inventor's signature to apply for or to pursue any application for any Canadian or foreign patents or copyright, trademark, or other registrations covering the Work Products as assigned to the Assignee above, then Inventor hereby irrevocably appoint the Assignee as Inventor's lawful attorney and agent, to act for and on Inventor's behalf and stead to execute and file any such applications and to do all other lawfully permitted acts to further the prosecution and issuance of letters patent, copyright, trademark, or other registrations thereon with the same legal force and effect as if executed by Inventor, and Inventor declares that this power of attorney shall be deemed to be coupled with an interest and irrevocable, and may be exercised during any subsequent legal incapacity.

6. Inventor hereby authorizes and requests the Commissioner of Patents and Trademarks, or equivalent thereof, to issue the patent for the Invention, and all resulting patents therefrom, insofar as the Inventor's interest is concerned, to the Assignee.
7. Inventor further agrees to execute any and all powers of attorney, applications, assignments, declarations, affidavits, and any other papers in connection therewith necessary to perfect Assignee's rights, title, and interest in the Invention(s).
8. Inventor hereby authorizes Assignee, its successors and assigns, its legal representatives, or anyone the Assignee may properly designate, to insert in this Assignment of Patent Rights the filing date and/or application number of the Application when ascertained.
9. Inventor hereby further agrees to, with respect to any patent application or patent for the Invention(s), at the expense of the Assignee:
 - i) testify in any legal proceedings,
 - ii) sign all lawful papers,

- iii) execute all divisional, continuation, continuation-in-part, reissue, reexamination, and substitute applications,
- iv) make all lawful oaths, and assist in vesting title in the Assignee and to aid the Assignee to obtain and enforce proper protection for the subject matter of the Invention(s) in all countries and regions, and
- v) notify Assignee promptly (by facsimile or first class mail) of any subpoena or contact by any person other than Assignee or its agents regarding the Invention or resultant patent(s) issuing therefrom, and in any event at least one week prior to any deposition, legal inquiry or legal proceeding relating to the above identified invention.

This assignment is executed on the date of which the Inventor has signed.

Inventor:

Jiao Wang (Signature) April 13, 2016 (Date)
JIAO WANG (Print Name)

Province of: Ontario (Seal):
 Regional Municipality of: Markham

Before me personally appeared said Jiao Wang and acknowledged the foregoing instrument to be his/her free act and deed this 13th day of April 2016.

Sord Bosan (Notary)
 (Sord Bosan)

Inventor:

..... (Signature) (Date)
..... (Print Name)

Witness # 1:

..... (Signature) (Date)
..... (Print Name)

Witness # 2:

..... (Signature) (Date)
..... (Print Name)

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

| | |
|---------------------------|---|
| Title of Invention | AN EFFICIENT MODE DECISION METHOD FOR MULTIVIEW VIDEO CODING |
|---------------------------|---|

As the below named inventor, I hereby declare that:

This declaration is directed to: The attached application, or
 United States application or PCT international application number _____
filed on _____.

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

LEGAL NAME OF INVENTOR

Inventor: Jiao WANG Date (Optional): April 13, 2016
Signature: Jiao Wang

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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WHEREAS, Inventor is named as an inventor(s) in the patent application filed in the **United States of America** on **April 14, 2016**, entitled **AN EFFICIENT MODE DECISION METHOD FOR MULTIVIEW VIDEO CODING**, having Application No. **15/099,247**, and having a docket number of **ATI-110072-US-DIV** (hereinafter referred to as the "Application"); and

WHEREAS, Assignee has a desire to acquire all rights, title, and interest in the invention(s) disclosed in the Application (hereinafter referred to as the "Invention(s)"), including any rights, title, and interest in the Invention(s) not previously transferred to Assignee through prior agreement.

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2. To the extent that Inventor retains any rights, title, or interest in the Invention(s) not vested in the Assignee on the date(s) of execution of this Assignment, Inventor hereby assigns and otherwise transfers to the Assignee Inventor's entire right, title, and interest, throughout the world, in and to: the Invention(s), including any patent applications, patents, invention registrations, and equivalents thereof (including any and all provisional, international, regional, and national patents and patent applications, and all divisional applications, continuation applications, continuation-in-part applications, renewals, reissue applications, reexamination applications, substitutes, and extensions thereof), for the Invention(s) and all rights to claim priority thereto. Inventor further assigns and otherwise transfers to Assignee all causes of action and remedies arising under any patent or patent application for the

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any ideas, inventions, works of authorship, improvements, or discoveries, including (without limitation) by signing any papers, authorizations, applications, or assignments, making and keeping proper records, and providing evidence or testimony. Assignee will pay for any actual and reasonable expenses Inventor incurs in providing such assistance. If Assignee is unable for any reason to secure Inventor's signature to apply for or to pursue any application for any Canadian or foreign patents or copyright, trademark, or other registrations covering the Work Products as assigned to the Assignee above, then Inventor hereby irrevocably appoint the Assignee as Inventor's lawful attorney and agent, to act for and on Inventor's behalf and stead to execute and file any such applications and to do all other lawfully permitted acts to further the prosecution and issuance of letters patent, copyright, trademark, or other registrations thereon with the same legal force and effect as if executed by Inventor, and Inventor declares that this power of attorney shall be deemed to be coupled with an interest and irrevocable, and may be exercised during any subsequent legal incapacity.

6. Inventor hereby authorizes and requests the Commissioner of Patents and Trademarks, or equivalent thereof, to issue the patent for the Invention, and all resulting patents therefrom, insofar as the Inventor's interest is concerned, to the Assignee.
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 - ii) sign all lawful papers,

- iii) execute all divisional, continuation, continuation-in-part, reissue, reexamination, and substitute applications,
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This assignment is executed on the date of which the Inventor has signed.

Inventor:

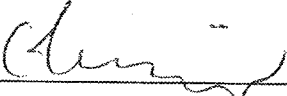
_____ (Signature) _____ (Date)
 _____ (Print Name)

Province of: _____ (Seal):
 Regional Municipality of: _____


Before me personally appeared said _____ and acknowledged the foregoing instrument to be his/her free act and deed this _____ day of _____ 20__.

_____ (Notary)

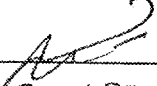
Inventor:

 (Signature) 28 MAY 2016 (Date)
MOHAMED KHALED CHERIF (Print Name)

Witness # 1:

 (Signature) 28 MAY 2016 (Date)
RIMANE LAHMAR (Print Name)

Witness # 2:

 (Signature) 28/MAY 2016 (Date)
YOUNES GUESNI (Print Name)