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PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7332261

	SUBMISSION TYPE:		NEW ASSIGNMENT				
NATURE OF CONVEYANCE:		ASSIGNMENT					
CONVEYING PARTY	DATA						
	Name	Execution Date					
NA ZHANG				10/30/2019			
RECEIVING PARTY [ΔΤΑ						
Name:		BEIJING BYTEDANCE NETWORK TECHNOLOGY CO., LTD.					
Street Address:			35, 2/F, NO.3 BUILDING, NO.30	,			
Internal Address:			DAD, SHIJINGSHAN DISTRICT				
City:	BEIJIN						
State/Country:	CHINA	-					
Postal Code:	10004						
PROPERTY NUMBER	RS Total: 1						
Property Typ	е		Number				
Application Number:		1708	7154				
CORRESPONDENCE Fax Number:	DATA	(206)	359-9000				
	be sent t	• /	e-mail address first; if that is unsucc	essful. it will be sent			
using a fax number,		d; if tl	hat is unsuccessful, it will be sent via				
Phone:		(206)	250 2000				
			359-8000				
		mcop	pp@perkinscoie.com				
•	e :	mcop PERI	pp@perkinscoie.com <ins coie="" llp="" sathe<="" td="" vinay=""><td></td></ins>				
Address Line 1:	9:	mcop PERI P.O.	pp@perkinscoie.com <ins coie="" llp="" sathe<br="" vinay="">BOX 1247</ins>				
Address Line 1: Address Line 4:		mcop PERI P.O. SEAT	pp@perkinscoie.com KINS COIE LLP / VINAY SATHE BOX 1247 ITLE, WASHINGTON 98111-1247				
Address Line 1: Address Line 4:	NUMBER:	mcop PERI P.O. SEAT	pp@perkinscoie.com KINS COIE LLP / VINAY SATHE BOX 1247 ITLE, WASHINGTON 98111-1247 130408-8563.US01				
NAME OF SUBMITTER	NUMBER:	mcop PERI P.O. SEAT	pp@perkinscoie.com KINS COIE LLP / VINAY SATHE BOX 1247 ITLE, WASHINGTON 98111-1247 130408-8563.US01 MICHAIAH COPP				
Address Line 1: Address Line 4: ATTORNEY DOCKET IAME OF SUBMITTER	NUMBER:	mcop PERI P.O. SEAT	pp@perkinscoie.com <ins coie="" llp="" sathe<br="" vinay="">BOX 1247 ITLE, WASHINGTON 98111-1247 130408-8563.US01 MICHAIAH COPP /Michaiah Copp/</ins>				
Address Line 1: Address Line 4: ATTORNEY DOCKET IAME OF SUBMITTER	NUMBER:	mcop PERI P.O. SEAT	pp@perkinscoie.com KINS COIE LLP / VINAY SATHE BOX 1247 ITLE, WASHINGTON 98111-1247 130408-8563.US01 MICHAIAH COPP				
Address Line 1:	NUMBER:	mcop PERI P.O. SEAT	pp@perkinscoie.com <ins coie="" llp="" sathe<br="" vinay="">BOX 1247 ITLE, WASHINGTON 98111-1247 130408-8563.US01 MICHAIAH COPP /Michaiah Copp/</ins>	laration (37 CFR 1.63).			
Address Line 1: Address Line 4: ATTORNEY DOCKET NAME OF SUBMITTER SIGNATURE: DATE SIGNED:	NUMBER:	mcop PERI P.O. SEAT	pp@perkinscoie.com <ins coie="" llp="" sathe<br="" vinay="">BOX 1247 ITLE, WASHINGTON 98111-1247 130408-8563.US01 MICHAIAH COPP /Michaiah Copp/ 05/16/2022</ins>	laration (37 CFR 1.63).			
Address Line 1: Address Line 4: ATTORNEY DOCKET NAME OF SUBMITTER SIGNATURE: DATE SIGNED: Total Attachments: 5 source=Dec_Assign_Re	NUMBER: R:	mcop PERI P.O. SEAT	pp@perkinscoie.com <ins coie="" llp="" sathe<br="" vinay="">BOX 1247 ITLE, WASHINGTON 98111-1247 130408-8563.US01 MICHAIAH COPP /Michaiah Copp/ 05/16/2022 This document serves as an Oath/Dec g_130408-8563.US01#page6.tif</ins>	laration (37 CFR 1.63).			
Address Line 1: Address Line 4: ATTORNEY DOCKET NAME OF SUBMITTER SIGNATURE: DATE SIGNED: Fotal Attachments: 5 source=Dec_Assign_Re source=Dec_Assign_Re	NUMBER: R: ecord_Na_ ecord_Na_	mcop PERI P.O. SEAT	pp@perkinscoie.com <ins coie="" llp="" sathe<br="" vinay="">BOX 1247 ITLE, WASHINGTON 98111-1247 130408-8563.US01 MICHAIAH COPP /Michaiah Copp/ 05/16/2022 This document serves as an Oath/Dec g_130408-8563.US01#page6.tif g_130408-8563.US01#page7.tif</ins>	laration (37 CFR 1.63).			
Address Line 1: Address Line 4: ATTORNEY DOCKET NAME OF SUBMITTER SIGNATURE: DATE SIGNED: Fotal Attachments: 5 source=Dec_Assign_Re source=Dec_Assign_Re	NUMBER: R: ecord_Na_ ecord_Na_ ecord_Na_	Zhang Zhang Zhang	pp@perkinscoie.com <ins coie="" llp="" sathe<br="" vinay="">BOX 1247 ITLE, WASHINGTON 98111-1247 130408-8563.US01 MICHAIAH COPP /Michaiah Copp/ 05/16/2022 This document serves as an Oath/Dec g_130408-8563.US01#page6.tif</ins>	laration (37 CFR 1.63).			

PATENT REEL: 059919 FRAME: 0246

In re Patent Application of:

Applicants: BEIJING BYTEDANCE NETWORK TECHNOLOGY CO., LTD. (北京字节跳动网络技术 有限公司) and BYTEDANCE INC.

Inventors: Li ZHANG, et al.

Application No.: TBD

Confirmation No.: TBD

Filing Date: TBD

Title: MOTION CANDIDATES FOR INTER PREDICTION

INVENTOR DECLARATION AND ASSIGNMENT TO BELJING BYTEDANCE NETWORK TECHNOLOGY CO., LTD.

I hereby declare that:

I believe I am an original joint inventor of a claimed invention in (1) a patent application entitled:

MOTION CANDIDATES FOR INTER PREDICTION

which is filed on _____ November 6, 2019 , as PCT Application No.

PCT/CN2019/116073, which, under the Paris Convention, claims the priority to and benefits of

(2) PCT patent application entitled "MOTION VECTOR PREDICTION OF GEOMETRY PARTITIONS" filed as International Patent Application No. PCT/CN2018/114057 on November 06, 2018.

(3) PCT patent application entitled "MOTION VECTOR PREDICTION OF GEOMETRY PARTITIONS" filed as International Patent Application No. PCT/CN2019/087372 on May 17, 2019.

(4) PCT patent application entitled "MOTION VECTOR PREDICTION OF GEOMETRY PARTITIONS" filed as International Patent Application No. PCT/CN2019/090127 on June 05, 2019.

(5) PCT patent application entitled "MOTION VECTOR PREDICTION OF GEOMETRY PARTITIONS" filed as International Patent Application No. PCT/CN2019/092151 on June 20, 2019.

I authorize and request an attorney appointed by an applicant or assignee to hereafter insert above the filing date and application number of each application when known.

I believe the following persons are original joint inventors of the above-identified patent application(s):

Li ZHANG, San Diego, CA, USA; Kal ZHANG, San Diego, CA, USA; Honghin LIU, Beijing, China; Yue WANG, Beijing, China; and Na ZHANG, Beijing, China.

I made, authorized to make, or hereby make or authorize to make the aboveidentified patent application at the U.S. Patent and Trademark Office or other patent offices.

I have reviewed and understand the contents of the above-identified patent application(s) including the claims.

I am aware of the duty to disclose to the U.S. Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR §1.56.

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

INVENTOR ASSIGNMENT TO BELIING BYTEDANCE NETWORK TECHNOLOGY CO., LTD.

As a named inventor, I hereby assign to BEIJING BYTEDANCE NETWORK TECHNOLOGY CO., LTD. (北京字节跳动网络技术有限公司), a corporation having a place of business at Room B-0035, 2/F, No.3 Building, No.30, Shixing Road, Shijingshan District, Beijing 100041, China (中国北京市石景山区实兴大街 30 号院 3 号楼 2 层 B-0035 房间), and its successors and assigns (collectively "the Assignee"), the entire right, title and interest throughout the world in any and all inventions and improvements which are described in the each and all of the following applications:

(1) PCT patent application entitled "MOTION CANDIDATES FOR INTER PREDICTION" filed as PCT Application No.PCT/CN2019/116073 on

November 6, 2019

(2) PCT patent application entitled "MOTION VECTOR PREDICTION OF GEOMETRY PARTITIONS" filed as International Patent Application No. PCT/CN2018/114057 on November 06, 2018.

(3) PCT patent application entitled "MOTION VECTOR PREDICTION OF GEOMETRY PARTITIONS" filed as International Patent Application No. PCT/CN2019/087372 on May 17, 2019.

(4) PCT patent application entitled "MOTION VECTOR PREDICTION OF GEOMETRY PARTITIONS" filed as International Patent Application No. PCT/CN2019/090127 on June 05, 2019.

(5) PCT patent application entitled "MOTION VECTOR PREDICTION OF GEOMETRY PARTITIONS" filed as International Patent Application No. PCT/CN2019/092151 on June 20, 2019.

I authorize and request an attorney appointed by an applicant or assignce to hereafter insert above the filing date and application number of said application(s) when known.

This assignment includes the entire right, title and interest in the above-identified patent applications, all legal equivalents thereof in any country, any and all United States, Patent Cooperation Treaty, Chinese and other foreign patents, utility models, and design registrations granted for any of said inventions and improvements, including, but not limited to, all divisions,

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continuations, reissues, reexamination certificates, any and all certificates issued in any postgrant proceeding, and extensions of said applications and patents of the United States, Patent Cooperation Treaty, Chinese and all other foreign patents, utility models, and design registrations, and the right to claim priority based on the filing dates of the above-identified patent applications under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes, and the right to seek relief and recover all damages, including, but not limited to, a reasonable royalty, by reason of infringement or any other violation of patent or patent application rights. I authorize the Assignee to apply in all countries in the name of the Assignee for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements.

In addition, I hereby confirm the sale, assignment, and transfer to the Assignee of the entire right, title and interest throughout the world in said inventions and improvements by operation of an employment agreement between me and the Assignee existing at the time said inventions and improvements were made. Should I have any remaining interest, I hereby sell, assign, and transfer to the Assignee any right, title and interest I may have in said inventions and improvements anywhere in the world.

The foregoing assignments, sale and transfer have been made for good and valuable consideration, the receipt of which is hereby acknowledged by me.

I hereby represent and covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into that would conflict with the assignment of said inventions and improvements to the Assignee.

I further covenant for myself and my respective heirs, legal representatives and assigns, to assist the Assignee in handling various procedures, tasks and documentation in connection with this assignment, including, but not limited to, providing to the Assignee promptly upon the request of the Assignee all pertinent facts and documents relating to said invention and improvements, and said patents, said legal equivalents or other legal instrument as may be known and accessible to me and testifying as to the same in any interference, litigation, or proceeding relating thereto, and promptly executing and delivering to the Assignee or its legal representative any and all papers, documents, instruments or affidavits in connection with

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obtaining, maintaining, issuing or enforcing said application, said inventions and improvements, and said patents, said equivalents and other legal instrument which may be necessary or desirable to carry out the purposes thereof.

I am competent to execute the above declaration and assignment. I hereby have duly executed the declaration and assignment below with my name.

Full name of inventor:	Hongbin LIU
Inventor's signature;	Hongbin Lili
Date:	2019/10/30

Full name of inventor:	Yue WANG	1	21
Inventor's signature:		yes war	1
Date:	7419	lo.30 ~	
10	1	<u> </u>	

Full name of inventor: Na ZHANG
Inventor's signature: Na Zhang_
Date: 7010.10-20
3000 1 ()

The Assignce hereby acknowledges the assignment. The undersigned is authorized to act on behalf of the Assignce.

Assignce: BEUING BYTEDANCE NETWORK TECHNOLOGY CO., LTD. (北京子节 跳动网络技术有限公司)

Authorized officer's legal name: Me	ixin Li		
Authorized officer's title: Authorize	d Legal Counsel		
Authorized officer's signature:	Aleirin	<u></u>	
Date:	2019	10.31	
	1		

Perkins Cole LLP P.O. Box 1247 Seattle, Washington 98111-1247 Telephone: (858) 720-5700 Facsimile: (206) 359-7198

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