PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 **EPAS ID: PAT7787358**

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
LI ZHANG	05/06/2020
KAI ZHANG	05/06/2020

RECEIVING PARTY DATA

Name:	BYTEDANCE INC.
Street Address:	12655 WEST JEFFERSON BOULEVARD
Internal Address:	SIXTH FLOOR, SUITE NO. 137
City:	LOS ANGELES
State/Country:	CALIFORNIA
Postal Code:	90066

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17895490

CORRESPONDENCE DATA

Fax Number: (972)731-2289

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.

Phone: 9727312288

Email: dallaspatents@dfw.conleyrose.com

BRANDT D. HOWELL C/O CONLEY ROSE, P.C. **Correspondent Name:**

Address Line 1: 4965 PRESTON PARK BLVD.

Address Line 2: SUITE 195E

Address Line 4: PLANO, TEXAS 75093

ATTORNEY DOCKET NUMBER:	4824-15900
NAME OF SUBMITTER:	BRANDT D. HOWELL
SIGNATURE:	/BRANDT D. HOWELL/
DATE SIGNED:	02/08/2023

Total Attachments: 4

source=4824-15900 ASSIGNMENT US INV#page1.tif source=4824-15900 ASSIGNMENT US INV#page2.tif source=4824-15900 ASSIGNMENT US INV#page3.tif

source=4824-15900 ASSIGNMENT US INV#page4.tif

Attorney Docket No.: C20W6712 130408-8637.WO01 P1905294801WO1

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: INTERACTIONS AMONG MULTIPLE INTRA

CODING METHODS

INVENTOR DECLARATION AND ASSIGNMENT TO BYTEDANCE INC.

I hereby declare that:

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

INTERACTIONS AMONG MULTIPLE INTRA CODING METHODS

which is filed on May 11, 2020, as PCT Application No.

PCT/CN2020/089559, which, under the Paris Convention, claims the priority to and benefits of

(2) PCT patent application entitled "INTERACTIONS AMONG MULTIPLE INTRA-CODING METHODS" filed as International Patent Application No. PCT/CN2019/086489 on May 11, 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;

Kai ZHANG, San Diego, CA, USA;

Hongbin LIU, Beijing, China; and

Yue WANG, Beijing, China;

Attorney Docket No.: C20W6712 130408-8637.WO01 P1905294801WO1

I made, authorized to make, or hereby make or authorize to make the above-identified 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 BYTEDANCE INC.

As a named inventor, I hereby assign to BYTEDANCE INC., a corporation, having a place of business at 12655 West Jefferson Boulevard, Sixth Floor, Suite No. 137, Los Angeles, California 90066, United States, 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 "INTERACTIONS AMONG MULTIPLE INTRA CODING METHODS" filed as PCT Application No. PCT/CN2020/089559 on May 11, 2020 ;

(2) PCT patent application entitled "INTERACTIONS AMONG MULTIPLE INTRA-CODING METHODS" filed as International Patent Application No. PCT/CN2019/086489 on May 11, 2019.

I authorize and request an attorney appointed by an applicant or assignee 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, continuations, reissues, reexamination certificates, any and all certificates issued in any post-grant 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. Ittigation, 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 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: Li ZHANG
Inventor's signature:
Date: May 6, 2020
Full name of inventor: Kai ZHANG
Inventor's signature:
Date: May 6, 2020
1740, 03, 2020

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

Assignee: BYTEDANCE INC.

Attorney Docket No.: C20W6712 130408-8637.WO01 P1905294801WO1

Authorized officer's legal name; Meixin Li		
Authorized officer's title: Authorized Legal Counsel	- A	
Authorized officer's signature:	Merxon Li	
Date: May 7, 2020		

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

> PATENT REEL: 062633 FRAME: 0667

RECORDED: 02/08/2023