505879338 01/23/2020

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Hao Wu	08/24/2018

RECEIVING PARTY DATA

Name:	ALIBABA GROUP HOLDING LIMITED
Street Address:	FOURTH FLOOR, ONE CAPITAL PLACE, P.O. BOX 847
City:	GEORGE TOWN, GRAND CAYMAN
State/Country:	CAYMAN ISLANDS
Postal Code:	KY1-1103

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16719762

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	44892-0142002/A11928USC1
NAME OF SUBMITTER:	SARAH NAGLE
SIGNATURE:	/Sarah Nagle/
DATE SIGNED:	01/23/2020

Total Attachments: 2

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PATENT 505879338 REEL: 051601 FRAME: 0861

Attorney Docket No.: 44892-0142001 / A11928US

ASSIGNMENT

For valuable consideration, the receipt of which I acknowledge, and intending to be bound legally, I, HAO WU, assigns to ALIBABA GROUP HOLDING LIMITED, a corporation formed under the laws of Cayman Islands and having a principal place of business at Fourth Floor, One Capital Place, P.O. Box 847, George Town, Grand Cayman, Cayman Islands, KY1-1103, and its successors, transferees, and assignees (collectively the "Assignee"), all of my right, title, and interest throughout the world in the invention(s) (the "Subject Matter") of Chinese Patent Application, Serial No. 201710747807.5, filed August 28, 2017 that names me as inventor (the "Chinese Patent Application") and of a patent application titled "KEY DATA PROCESSING METHOD AND APPARATUS, AND SERVER," that claims priority to the Chinese Patent Application and was or will be filed in the United States Patent and Trademark Office on August 27, 2018, as application 16/113,722 (the "Application") which also names meus as inventor. I authorize the insertion of the filing date and application number above.

This Assignment assigns, in addition to the Subject Matter of the Application, (a) the Application and all other applications that may be made for, and all patents, utility models, design registrations, and other rights of exclusion and inventors' certificates for, any of the Subject Matter (collectively the "Applications and Granted Rights") in every country or region and under every treaty or convention, (b) the right to claim priority based on and the benefit of the filing date of any of the Applications and Granted Rights under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other applicable treaties or conventions, and (c) the right to pursue, collect, and retain in the Assignee's name or otherwise, damages and any other remedies arising from any past, present, or future infringement of the Subject Matter, the Applications and Granted Rights, and any other rights assigned by this Assignment.

I authorize the Assignee to apply for and pursue protection for any or all of the Subject Matter, the Applications and Granted Rights, and any other rights assigned by this Assignment in all countries, regions, and territories of the world, in my name or in the Assignee's name.

I represent and warrant that I have the right and power to make this Assignment and that I have not made and will not make any other assignment that conflicts with this Assignment.

Assignment Page 1 of 2

Attorney Docket No.: 44892-0142001 / A11928US

I will communicate to the Assignee (or, at the request of the Assignee to other parties) all known facts in any form relating to the Subject Matter; will execute and provide all oaths and declarations, statements, testimony, assignments, powers of attorney, applications, and documents; and will perform all other lawful acts necessary or desirable to secure fully to the Assignee the rights, titles, and interests assigned by this Assignment.

مناجد	***	Part .	
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Hao Wu

Witnessed by:

Signature:

Print Name: Tenq Chen

Date: 2018.8.24

Date: 2018 824

Assignment Page 2 of 2