PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6577435

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
LI HAN	05/04/2020
GANG CHENG	03/17/2020
WEI ZHAO	04/02/2020

RECEIVING PARTY DATA

Name:	ALIBABA GROUP HOLDING LIMITED	
Street Address:	P.O. BOX 847	
Internal Address:	FOURTH FLOOR, ONE CAPITAL PLACE	
City:	GRAND CAYMAN	
State/Country:	CAYMAN ISLANDS	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16236335

CORRESPONDENCE DATA

Fax Number: (509)944-4692

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: 509-324-9256

Email: alexisc@leehayes.com Correspondent Name: LEE & HAYES, P.C.

Address Line 1: 601 W. RIVERSIDE AVE, SUITE 1400 Address Line 4: SPOKANE, WASHINGTON 99201

ATTORNEY DOCKET NUMBER:	AB1-0684US
NAME OF SUBMITTER:	ALEXIS COLLINS
SIGNATURE:	/Alexis Collins/
DATE SIGNED:	03/01/2021

Total Attachments: 7

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial Number	
Filing Date	
InventorshipHan et al.	
Assignee	
Attorney's Docket NoAB1-0684US	
Client Docket No	
Title: OVERLAY NETWORK ROUTING USING A PROGRAMMABLE SWITCH	
PATENT ASSIGNMENT	
PARTIES TO THE ASSIGNMENT	
Assignor(s):	
Li Han	
c/o Alibaba Group Legal Department	
5/F, Building 3, No.969 West Wen Yi Road,	
Yu Hang District, Hangzhou, China. 311121	
Cong Chong	
Gang Cheng	
c/o Alibaba Group Legal Department	
5/F, Building 3, No.969 West Wen Yi Road,	
Yu Hang District, Hangzhou, China. 311121	
Wei Zhao	
c/o Alibaba Group Legal Department	
5/F, Building 3, No.969 West Wen Yi Road,	
Yu Hang District, Hangzhou, China. 311121	
Assignee:	
Alibaba Group Holding Limited	
Fourth Floor, One Capital Place	
P.O. Box 847	
Grand Cayman	
Cayman Islands	
AGREEMENT	
TORDENIENT	
WHEREAS, ASSIGNOR(S) (listed above) are inventor(s) of an invention entitled	
"OVERLAY NETWORK ROUTING USING A PROGRAMMABLE SWITCH" for which:	
a provisional application for United States Letters Patent was filed on and	nd
was given U.S. Serial Noand/or	

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Attorney Docket No. AB1-0684US Client Docket No. A16579US

a foreign priority Chinese patent application was filed on and was given
CN Patent Application Serial Noand/or
a PCT international application for was filed on and was given PCT
Serial Noand/or
a non-provisional application for United States Letters Patent was:
☑ filed on December 28, 2018 and was given U.S. Serial No. 16/236,335; or filed
concurrently herewith. Assignors hereby authorize and request ASSIGNEE's legal
representatives, of Lee & Hayes, P.C., 601 W Riverside Ave, Suite 1400, Spokane, Washington
99201, who are associated with customer number 29150, to insert in the caption above the serial
number and filing date of the patent application when known.

WHEREAS, Alibaba Group Holding Limited (hereinafter referred to as ASSIGNEE), a corporation of Cayman Islands having a place of business at Fourth Floor, One Capital Place, P.O. Box 847, Grand Cayman, Cayman Islands, is desirous of acquiring the entire right, title and interest in and to the invention and in and to any letters patent that may be granted therefore in the United States and in any and all foreign countries;

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S) hereby sell, assign and transfer unto ASSIGNEE, the entire right, title and interest in and to said invention, said application and any and all letters patent which may be granted for said invention in the United States of America and its territorial possessions and in any and all foreign countries, and in any and all divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States application to which said foreign applications are entitled by virtue of international convention, treaty or otherwise, said invention, application and all letters patent on said invention to be held and enjoyed by ASSIGNEE and its successors and assigns for their use and benefit and of their successors and assigns as fully and entirely as the same would have been held and enjoyed by ASSIGNOR(S)

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had the asciption transfer and sale not been made. (CSIC) CIC(S) hereby authorize and request the Communication of Patents and Trademarks to page all latters patent on auditorisms to ASSIC(CIC). (ASSIC) CIC) agree to execute all materials and documents required for the making and procedure of applications for United States and foreign letters. Patent on said diversion, for integration regarding and letters patent or for the purpose of Protecting this to said invention or letters patent therefore.

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Date (mm/ dd/ sysy)	Vanerprinali
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Gang Cheng C 5 / / / 2020 Date (mail did vivy)	Control Control State from the very
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PATENT

had this assignment, transfer and sale not been made. ASSIGNOR(S) hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR(S) agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding said letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

Li Han Date (mm/dd/yyyy)	Witness Signature Name (printed) Date (mm/dd/yyyy)
Gang Cheng Date (mm/dd/yyyy)	Witness Signature Name (printed) Date (mm/dd/yyyy)
Wei Zhao OGAZIZOZO Date (mm/dd/yyyy)	Witness Signature Vi Qiu Name (printed) O4 /02/2020 Date (mm/dd/yyyy)

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Doc code: Oath Document Description: Oath or declaration filed

AB1 - 0684US

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)

Title of Invention	OVERLAY NETWORK ROUTING	USING A PROGRAMMA	₹BLE	SWITCH	
This stateme	ent is directed to:				
The atta	ached application,				
OR					
✓ United S	States application or PCT international	application number 16/236	,335	filed on _	12/28/2018
LEGAL NA	ME of inventor to whom this sub	ostitute statement appli	es:		
` •	Name (first and middle (if any)) and Fa	amily Name or Surname)			
Li Han		_			
Residence (e	except for a deceased or legally incapa	acitated inventor):			
Bellevu City	е	WA State	Cour	US ntry	
C/O Alibaba	ss (except for a deceased or legally incapa a Group Legal Department, 5/F Bui st Wen Yi Road, Yu Hang District	•			
Hangz City	hou	State	-	311121 Zip	CN Country
I believe the above-named inventor or joint inventor to be the original inventor or an original joint inventor of a claimed invention in the application.					
The above-i	dentified application was made or auth	orized to be made by me.			
I hereby acknowledge that any willful false statement made in this statement is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.					
Relationship to the inventor to whom this substitute statement applies:					
Legal Representative (for deceased or legally incapacitated inventor only),					
Assignee,					
Person to whom the inventor is under an obligation to assign,					
Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or Joint Inventor.					

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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.

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SUBSTITUTE STATEMENT

Circumstances permitting execution of this substi	tute statement:		
Inventor is deceased,			
Inventor is under legal incapacity,			
Inventor cannot be found or reached aft	er diligent effort, or		
Inventor has refused to execute the oath	n or declaration under 37 CF	R 1.63.	
If there are joint inventors, please check the appl	opriate box below:		
An application data sheet under 37 CFF or is currently submitted.	R 1.76 (PTO/AIA/14 or equiv	alent) naming the entir	e inventive entity has been
OR			
An application data sheet under 37 CFF Statement Supplemental Sheet (PTO/A information is attached. See 37 CFR 1.6	IA/11 or equivalent) naming		
	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.			
PERSON EXECUTING THIS SUBSTITUTE STAT	EMENT:		
. Roger Shang			
Name:			Date (Optional):
Signature: Roser Shang			
APPLICANT NAME AND TITLE OF PERSON EX			
If the applicant is a juristic entity, list the applicant i	g .	ner:	
Alibaba Group Holding Limite Applicant Name:	od		
Title of Person Executing This Substitute Statement: Senior Legal Direct	or		
The signer, whose title is supplied above, is authorized to act on behalf of the applicant.			
Residence of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent):			
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Mailing Address of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent)			
400 South El Camino Real, Suite 400			
San Mateo	CA	94402	US
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Note: Use an additional PTO/AIA/02 form for each after diligent effort, or has refused to execute the control of the control o		• •	annot be found or reached
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Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

PATENT REEL: 055449 FRAME: 0403

RECORDED: 03/01/2021