

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT7406514

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
QINGDA LU	06/08/2021
RUI WANG	06/04/2021
ZHU PANG	06/01/2021
JIESHENG WU	06/18/2021
SHUO CHEN	06/01/2021
RECEIVING PARTY DATA	
Name:	ALIBABA SINGAPORE HOLDING PRIVATE LIMITED
Street Address:	8 SHENTON WAY
Internal Address:	#45-01 AXA TOWER
City:	SINGAPORE
State/Country:	SINGAPORE
Postal Code:	068811
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	17335728
CORRESPONDENCE DATA	
Fax Number:	(509)323-8979
<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>	
Phone:	5093249256
Email:	cathy.wang@leehayes.com
Correspondent Name:	LEE&HAYES, PC
Address Line 1:	601 W RIVERSIDE AVE
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ATTORNEY DOCKET NUMBER:	AB1-0995US
NAME OF SUBMITTER:	CATHY WANG
SIGNATURE:	/Cathy Wang/
DATE SIGNED:	06/28/2022

Total Attachments: 9

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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	FAST RECOVERY AND REPLICATION OF KEY-VALUE STORES		
This statement is directed to:			
<input type="checkbox"/> The attached application,			
OR			
<input checked="" type="checkbox"/> United States application or PCT international application number <u>17/335,728</u> filed on <u>6/1/2021</u> .			
LEGAL NAME of inventor to whom this substitute statement applies:			
(E.g., Given Name (first and middle (if any)) and Family Name or Surname)			
Shuo Chen			
Residence (except for a deceased or legally incapacitated inventor):			
Bellevue City	WA State	US Country	
Mailing Address (except for a deceased or legally incapacitated inventor):			
C/o Alibaba Group Legal Department, #45-01 AXA Tower, 8 Shenton Way			
Singapore City	State	068811 Zip	SG 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-identified application was made or authorized 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:			
<input type="checkbox"/> Legal Representative (for deceased or legally incapacitated inventor only),			
<input type="checkbox"/> Assignee,			
<input checked="" type="checkbox"/> Person to whom the inventor is under an obligation to assign,			
<input type="checkbox"/> Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or			
<input type="checkbox"/> Joint Inventor.			

[Page 1 of 2]

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.

SUBSTITUTE STATEMENT

Circumstances permitting execution of this substitute statement:

- Inventor is deceased,
- Inventor is under legal incapacity,
- Inventor cannot be found or reached after diligent effort, or
- Inventor has refused to execute the oath or declaration under 37 CFR 1.63.

If there are joint inventors, please check the appropriate box below:

- An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been or is currently submitted.

OR

- An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) has not been submitted. Thus, a Substitute Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming the entire inventive entity and providing inventor information is attached. See 37 CFR 1.64(b).

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 STATEMENT:

Name: Roger Shang

Date (Optional):

Signature:

Roger Shang

APPLICANT NAME AND TITLE OF PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

If the applicant is a juristic entity, list the applicant name and the title of the signer:

Alibaba Singapore Holding Private Limited

Applicant Name:

Title of Person Executing This Substitute Statement: Senior Legal Director

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):

Sunnyvale
City

CA
State

US
Country

Mailing Address of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent)

525 Almanor Ave, 4th Floor, Sunnyvale, CA 94085

Sunnyvale
City

CA
State

94085
Zip

US
Country

Note: Use an additional PTO/AIA/02 form for each inventor who is deceased, legally incapacitated, cannot be found or reached after diligent effort, or has refused to execute the oath or declaration under 37 CFR 1.63.

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:

1. 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.
3. 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.
9. 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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial Number17/335,728
Filing Date 06/01/2021
InventorshipLu et al.
Assignee Alibaba Singapore Holding Private Limited
Attorney's Docket No.AB1-0995US
Client Docket No. A32476US
Title: FAST RECOVERY AND REPLICATION OF KEY-VALUE STORES

PATENT ASSIGNMENT

PARTIES TO THE ASSIGNMENT

Assignor(s):

Qingda Lu
c/o Alibaba Group Legal Department
5/F, Building 3, No.969 West Wen Yi Road,
Yu Hang District, Hangzhou, China. 311121

Rui Wang
c/o Alibaba Group Legal Department
5/F, Building 3, No.969 West Wen Yi Road,
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Zhu Pang
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Yu Hang District, Hangzhou, China. 311121

Jiesheng Wu
c/o Alibaba Group Legal Department
5/F, Building 3, No.969 West Wen Yi Road,
Yu Hang District, Hangzhou, China. 311121

Assignee:

Alibaba Singapore Holding Private Limited
8 Shenton Way, #45-01 AXA Tower
Singapore 068811
SG

AGREEMENT

WHEREAS, ASSIGNOR(S) (listed above) are inventor(s) of an invention entitled
“ FAST RECOVERY AND REPLICATION OF KEY-VALUE STORES ” for which:

a provisional application for United States Letters Patent was filed on _____ and
was given U.S. Serial No. _____ and/or

a foreign priority Chinese patent application was filed on _____ and was given
CN Patent Application Serial No. _____ and/or

a PCT international application for was filed on _____ and was given PCT
Serial No. _____ and/or

a non-provisional application for United States Letters Patent was:

filed on 06/01/2021 and was given U.S. Serial No. 17/335,728; 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 Singapore Holding Private Limited (hereinafter referred to as
ASSIGNEE), having a place of business at 8 Shenton Way, #45-01 AXA Tower, Singapore 068811,
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) 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.

<u>06/08/2021</u> Date (mm/dd/yyyy)	 _____ Qingda Lu
<u> </u> Date (mm/dd/yyyy)	<u> </u> Rui Wang
<u> </u> Date (mm/dd/yyyy)	<u> </u> Zhu Pang
<u> </u> Date (mm/dd/yyyy)	<u> </u> Shuo Chen
<u> </u> Date (mm/dd/yyyy)	<u> </u> Jiesheng Wu

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) 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.

Date (mm/dd/yyyy)

Qingda Lu

06/04/2021
Date (mm/dd/yyyy)


Rui Wang

Date (mm/dd/yyyy)

Zhu Pang

Date (mm/dd/yyyy)

Shuo Chen

Date (mm/dd/yyyy)

Jiesheng Wu

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Date (mm/dd/yyyy)

Qingda Lu

Date (mm/dd/yyyy)

Rui Wang

06/01/2021

Date (mm/dd/yyyy)



Zhu Pang

Date (mm/dd/yyyy)

Shuo Chen

Date (mm/dd/yyyy)

Jiesheng Wu

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Date (mm/dd/yyyy)

Qingda Lu

Date (mm/dd/yyyy)

Rui Wang

Date (mm/dd/yyyy)

Zhu Pang

Date (mm/dd/yyyy)

Shuo Chen

06/18/2021

Date (mm/dd/yyyy)



Jiesheng Wu