

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

Assignment ID: PATI329228

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
Shu Wang	10/25/2022
Wenliang Li	10/25/2022
Qin Xu	10/28/2022
Yishu Liang	10/25/2022
Yanan Hao	10/25/2022
Na An	10/25/2022
Hao Chen	11/02/2022
Xiang Duan	10/28/2022
Zhou Yang	10/25/2022
Yueshan Zhang	03/31/2023
RECEIVING PARTY DATA	
Company Name:	Alibaba Group Holding Limited
Street Address:	Fourth Floor, One Capital Place
Internal Address:	P.O.Box 847
City:	Grand Cayman
State/Country:	CAYMAN ISLANDS
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	17990594
CORRESPONDENCE DATA	
Fax Number:	5093249256
<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:	Cathy Wang
Address Line 1:	601 W Riverside Ave
Address Line 2:	suite 1400
Address Line 4:	Spokane, WASHINGTON 99201
ATTORNEY DOCKET NUMBER:	AB1-1039US

NAME OF SUBMITTER:	Cathy Wang
SIGNATURE:	Cathy Wang
DATE SIGNED:	06/27/2024
Total Attachments: 15 source=39B4010#page13.tiff source=39B4010#page12.tiff source=39B4010#page8.tiff source=39B4010#page1.tiff source=39B4010#page9.tiff source=39B4010#page14.tiff source=39B4010#page15.tiff source=39B4010#page5.tiff source=39B4010#page10.tiff source=39B4010#page11.tiff source=39B4010#page7.tiff source=39B4010#page6.tiff source=39B4010#page4.tiff source=39B4010#page3.tiff source=39B4010#page2.tiff	

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial Number 17/990,594
Filing Date 11/18/2022
Inventorship Wang et al.
Assignee Alibaba Group Holding Limited
Attorney's Docket No. AB1-1039US
Client Docket No. PCT28931US
Title:Product Object Information Providing Method, Apparatus, and Electronic Device

PATENT ASSIGNMENT

PARTIES TO THE ASSIGNMENT

Assignor(s):

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

Wenliang LI
c/o Alibaba Group Legal Department
5/F, Building 3, No.969 West Wen Yi Road,
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Na AN
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Xiang DUAN
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Yu Hang District, Hangzhou, China. 311121

Zhou YANG
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

WHEREAS, ASSIGNOR(S) (listed above) are inventor(s) of an invention entitled
“ Product Object Information Providing Method, Apparatus, and Electronic Device ” for which:

☐ a provisional application for United States Letters Patent was filed on _____ and
was given U.S. Serial No. 202010427361.X and/or

☒ a foreign priority Chinese patent application was filed on 05/19/2020 and was given
CN Patent Application Serial No. CN 202010427361.X and/or

☒ a PCT international application for was filed on 05/17/2021 and was given PCT
Serial No. PCT/CN2021/094095 and/or

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

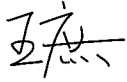
☒ filed on 11/18/2022 and was given U.S. Serial No. 17/990,594;

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) 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.



Shu Wang

10/25/2022

Date (mm/dd/yyyy)

Wenliang Li

Date (mm/dd/yyyy)

Qin XU

Date (mm/dd/yyyy)

Yishu LIANG

Date (mm/dd/yyyy)

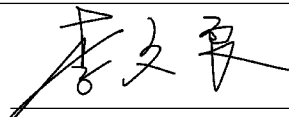
Yanan Hao

Date (mm/dd/yyyy)

patent on said invention, for litigation regarding said letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

Shu Wang

Date (mm/dd/yyyy)



Wenliang Li

2022.10.25

Date (mm/dd/yyyy)

Qin XU

Date (mm/dd/yyyy)

Yishu LIANG

Date (mm/dd/yyyy)

Yanan Hao

Date (mm/dd/yyyy)

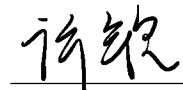
patent on said invention, for litigation regarding said letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

Shu Wang

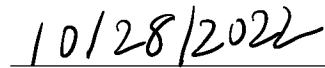
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Wenliang Li

Date (mm/dd/yyyy)



Qin XU



Date (mm/dd/yyyy)

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Wenliang Li

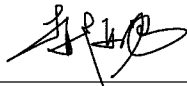
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Qin XU

Date (mm/dd/yyyy)

Yishu LIANG

Date (mm/dd/yyyy)



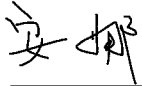
Yanan Hao

10/25/2022

Date (mm/dd/yyyy)

Yueshan ZHANG

Date (mm/dd/yyyy)



Na AN

2022.10.25

Date (mm/dd/yyyy)

Hao CHEN

Date (mm/dd/yyyy)

Xiang DUAN

Date (mm/dd/yyyy)

Zhou YANG

Date (mm/dd/yyyy)

Yueshan ZHANG

Date (mm/dd/yyyy)

Na AN

Date (mm/dd/yyyy)

HaoChen

Hao CHEN

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Date (mm/dd/yyyy)

Zhou YANG

Date (mm/dd/yyyy)

Yueshan ZHANG

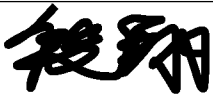
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Na AN

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Date (mm/dd/yyyy)



Xiang DUAN
10/28/2022

Date (mm/dd/yyyy)

Zhou YANG

Date (mm/dd/yyyy)

Yueshan ZHANG

Date (mm/dd/yyyy)

Na AN

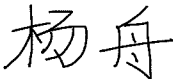
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Hao CHEN

Date (mm/dd/yyyy)

Xiang DUAN

Date (mm/dd/yyyy)



Zhou YANG

10/25/2022

Date (mm/dd/yyyy)

**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	Product Object Information Providing Method, Apparatus, and Electronic Device		
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>17/990,594</u> filed on <u>11/18/2022</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)			
Yueshan Zhang			
Residence (except for a deceased or legally incapacitated inventor):			
City		State	Country
Mailing Address (except for a deceased or legally incapacitated inventor):			
City		State	Zip
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-9195

PATENT
REEL: 067863 FRAME: 0662

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

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: KE XIAOPENG	Date (Optional):
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Signature: 
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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 Group Holding Limited

Applicant Name:

Title of Person Executing This Substitute Statement: Patent Legal Director of the Applicant who is authorized to sign on behalf of the Applicant

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):

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

Fourth Floor, One Capital Place

City	State	Zip	Country
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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.

PATENT

RECORDED: 06/27/2024

REEL: 067863 FRAME: 0664